

The Intelligent Enterprise: The Case of the Lebanese Tour-operators

Nadine Sinno

Abstract—Transformations in environments push the company to design a change in its management concept. Enterprises today should follow unconventional managerial approaches to stand out of competition. An intelligent enterprise demonstrates special abilities of learning, innovation and flexibility. This type of enterprise is particularly adapted to face the unexpected and the permanent changes of its environment. Thus, the Intelligent Enterprise, in its concept of strategic activities, considers all political, economic or social events, properly analyzes the information provided by the internal and external environments, establishes a stronger loyalty relationship with its partners and understands what customers really expect. Intelligent management can be applied to all businesses including tourism enterprises. The case of the Lebanese tour operators is studied to deploy an effective information system that optimizes its innovation and employee contribution. AMADEUS global distribution system (GDS) is suggested at the end as a solution tool to enhance tour-operators' intelligence.

Keywords—Intelligent, Modern Management, Tourism, Enterprises.

I. INTRODUCTION

In this complex world, enterprises should adapt to face the unexpected and to deal with the permanent changes of the environment. The enterprises must convert their traditional managerial practices into intelligent managerial approaches.

An intelligent enterprise manifests collectively special abilities of learning, innovation and flexibility. It recognizes how to collect, categorize, disseminate and manage the knowledge acquired from different sources such as market research, individual experience and cultural study. The Intelligent Enterprise also knows how to integrate technology into the development of its activities. Evolving intelligently requires the ability to know and to want to integrate new technology, both in technical equipment and in communication, because today's technology is a factor of production, productivity and development. Comparing the intelligent management with the classical management, the former one uses the knowledge and experience of the individual or the team and makes it accessible and usable throughout the company, while the second one preserves the conservative managerial structures that prevent it from fully adhering to the changes of the current entrepreneurial world [1]- [2].

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The overall objectives of the Intelligent management are: increasing national and global market share, diversified activities, profitability of projects and increased total profits.

Thus, the Intelligent Enterprise, in its concept of strategic activities, will:

- Consider all political, economic or social events that emerge which may represent both benefits and obstacles.
- Properly analyze the information provided by the internal and external environments with which it interacts.
- Establish a stronger loyalty relationship with its general partners, which will consequently produce and maintain a first intangible capital: the loyalty of these partners.
- Understand what consumers and customers really expect.

The enterprise must consider another important capital: the fact that each individual or employee has one or more forms of intelligence that he or she can use at work. These forms of intelligence are often unusable in front of the work routine or in front of the pyramidal structure of the company. In this case, the employee's intelligence is only measured by obeying senior management or performing tasks quickly. Yet, employees' initiatives are not only beneficial to the personal competence and performance development, but, also to the growth of the company [3].

Unfortunately, it is difficult to know the different levels of intelligence existing in the company. It is certain that it exists individually, but, its intensity is stronger separately than collectively for the simple reason that it is difficult to make people work together, to share knowledge, specializations, information, etc. [4].

II. INTELLIGENCE IN MODERN MANAGEMENT

Intelligence in Management includes three main categories: Enterprise Intelligence, In company Intelligence and Business Intelligence.

- Enterprise Intelligence is the existence of different forms of Intelligence in the company.
- In-company intelligence is the ability of a group of individuals working in the same company to apprehend and organize the data of the situation.
- Business Intelligence is the ability of a company to understand, apply, act and react, analyze the information it collects in order to optimize its means of success and performance.

These three definitions will be used as background information for modern business management. The Intelligent

management could bring some organizational benefits such as increased creativity, personal initiative, internalizing values and corporate culture, total participation and personal commitment. Yet, its greatest success will be the implementation and the achievements of innovative products in terms of new lifestyles and of distinct lifestyle for each consumer. The company should manage to reconcile its strategic choices with the correct control of its turbulent environment on which its integration depends. This reconciliation can be done through the use of multiple managerial intelligences, namely:

- The use of economic intelligence (the collection of adequate information)
- The concept of integral intelligence (power and knowledge to integrate)
- The contribution of relational intelligence (accurately establishing appropriate links),
- The decision intelligence (choice, selection and decision)

Moreover, the management of a company assumes the following characteristics:

- It is realistic: it is on the basis of realistic intelligence that the company will have the capacity to succeed based on what it has, what it knows and what it can do.
- It is investigative: It searches for causes and facts, and will have reasons for actions, pre-action, and reaction. And it is the economic intelligence that will ensure the necessary investigative means.
- It is social: the company will have recourse to relational intelligence and its emotional intelligence, to be able to present a positive image of itself and gain the largest share of the market.
- It is conventional: the classical intelligence is used, so that the company conforms to what society accepts.
- It is enterprising: the creative intelligence will launch new ideas, in activities and products.

Consequently, any business needs a set of intelligences to achieve its objectives, because intelligence never acts alone but in association with others.

This spirit leads to a situation of total competitiveness. In this case, the collective intelligence as proposed by Olivier Zara [5] should be considered. Indeed, Intelligent Management relies mainly on collective intelligence (CI) and Knowledge Management (KM), which can not exist and function effectively without information technology. In most companies, collective intelligence is materialized on a day-to-day basis through intellectual co-operation, which is particularly evident in times of collective reflection. It is often weak for reasons of culture, managerial habits and deficient technologies. Managers think they will lose their power. In fact, CI does not induce a redistribution of power (each remains in its place, each retains the same amount of power) but a change in the exercise of power, in the modes of management. The CI thus implies a new governance of

organizations called collective intelligence management.

Collective intelligence management plays an essential role in the development of the performance of organizations at the individual and the collective levels. When collective performance develops, each individual improves his or her personal resources in order to achieve his or her personal and professional goals.

Collective Intelligence, knowledge management and information are the three pillars that make up the Intelligent Enterprise. These three pillars are fueled by the same energy of the intellectual cooperation. It is the sum of all the individuals' interactions between the members of an organization. Intellectual co-operation may be:

- Interpersonal (cooperation between 2 or more people)
- Intra-organizations (cooperation between teams, services, companies, countries, etc.).
- Inter-organizations (cooperation between organizations of the same or different types with a view to common benefits).

The concept of intelligent management is vast. However, in general, the intelligent company must have the knowledge and the know-how. It must first be a learner, in the sense that it must be able to collect enough information, know how to manage this knowledge and disseminate it so that the people constituting its internal environment (its social partners) and its external environment (its economic partners) become learners. Intelligent management can be applied to all businesses including tourism enterprises. Tourism is an amalgam of activities and services; Who are the tourism intermediaries and what is their role in the distribution of tourism services? how can the tourism intermediaries apply intelligent management?

III. TOURISM ENTERPRISES

Intermediaries working in the tourism sector are individuals or companies that maintain an economic relationship between service providers (accommodation, transport, catering, etc.) and clients.

Tourism intermediaries' activity consists mainly of the design and selling of services. These services can be sold either separately or as a package for a complete stay in a predefined destination.

The Intermediaries in the tourism sector are classified into five categories:

A. *Tour operators (wholesalers):*

These are wholesaler intermediaries, also known as tour operators. Their function is to create tourist packages, business trips, organize professional seminars both locally and internationally.

Tour Operators are not permitted by law to sell directly to the public, they resort to sub-intermediaries who have direct contact with individuals wishing to subscribe to a tourism service.

B. Retail Travel Agencies, or Retailers

These agencies market wholesalers' products and can also develop and sell their own services and packages directly to the customer. They can not offer their products to other agencies, except those that represent foreign agencies.

C. Professional Convention Organizers (OPC)

Professional congress organizers (OPCs) can fulfill either a transmitting (originally) or a receiving (destination) function. The organizing committee is usually composed of a chairman and the directors responsible of the subcommittees such as: program, accommodation, publicity and information, exhibition, secretarial, receptions, social activities, meals, transportation, cash and others if necessary.

D. Booking Centers

The reservation centers make it possible to quickly know the availability of a large number of lodging establishments or catering and address the final customer or the intermediaries.

These centers may be owned by destination promotion organizations, industry associations or intermediaries. Internet enabled the development of important reservations centers in rural tourism, active tourism and destinations. The income normally comes from the affiliation fee and a commission on reservations.

E. Specialized intermediaries

A new generation of tour operators and travel agencies has emerged to cover certain markets and segments of tourism demand that have grown steadily in recent years. Their way of doing things is different from the traditional tour operators of mass tourism.

Intermediaries that must be taken into account and considered as distributors of tourism products are: destination travel agencies, travel agencies and specialized tour operators and booking centers. The market is constantly more demanding, it seeks authentic experiences and requires increased personalization of travel.

In the last ten years or so, the tourism sector has undergone a profound change and continues to evolve continuously. The development of the Internet has enabled consumers to make, for the first time, online reservations, without the intervention of travel agencies, on the websites of airlines, hotels, tour operators and other sellers.

IV. THE TOURISM SECTOR IN LEBANON

A substantial effort has been made by the private sector and the public sector to promote Lebanon as a tourist destination and to develop tourism services offered in Lebanon. However, tourism potential is far from being fully exploited.

Tourism marketing in Lebanon is considered very weak, especially with regard to the dissemination of information about the various forms of tourism practiced in Lebanon. Similarly, the private sector does not provide tourism marketing at the necessary level.

Tourism marketing is an essential element in promoting a

destination, especially for Lebanon, which suffers from an image of war and conflict in the eyes of Western tourists. Marketing efforts can redress this image.

A. Tourism Enterprises in Lebanon

The private tourism sector in Lebanon is represented by private tourism enterprises. Its businesses can be divided into two categories:

1. Businesses operated by a single owner
2. International businesses operated by international franchises as the case of hotels.

Most of the Lebanese tour operators are family-owned and operated businesses.

Tour operators in Lebanon have been key players in the tourism sector for the last thirty years. Indeed, they control the sales of tourist services especially those of airlines and hotel chains.

Moreover, the Tour operators in Lebanon remain unknown today as there are only few studies on their characteristics and strategies. The following reasons are behind the ignorance of Lebanese tour operators:

- The lack of reliable data on tour operators. For example, it is not possible at this time to estimate the exact size of this sub-sector (number of enterprises and employees, turnover or value added) or to identify the most important Tour operator.

-The world of tour operators is an extremely secret world: there is little or no information available, and students or researchers are always very reluctant to disclose any aspect of their business. This paranoia is fueled by the highly competitive nature of the sector and the almost obsessive fear of industrial espionage by competitors.

Tour operators operate a fragile industry where the quality of service and customer satisfaction plays the most important role. From there, it can be seen that tour operators always remain discreet about their internal work for fear of losing their secrets and consequently their competitive advantages. One question, however, remains: how do tour operators prepare their services? And how do they organize the packages?

The purpose of this study is to identify the existence and application of Intelligence within the Lebanese tourism enterprises. In this study, the chosen sample concerns primarily the managers and the owners of tourism service agencies. It should be noted that in Lebanon, tour operators are also travel agencies. Therefore, the in-depth interviews were held with the tour operators that are at the same time travel agencies.

B. An Overview of the Lebanese Tour-operators and Travel Agencies

According to the Association of Travel Agents in Lebanon (ATTAL), there are 243 travel agency in Lebanon of which 23 dominate the market and the others are distributors of their tourist services. Due to their reduced number, a small sample was chosen: it was delimited to the tour operators who organize their own packages since the majority of the other tourist companies in Lebanon are travel agencies, resellers of the packages.

Thus, the sample consisted of 11 principal managers whom were interviewed without sending the questionnaire ahead. Respondents are involved in their job, specialty or experience in the management and design of tours and packages in their respective agencies.

Since most tourism enterprises in Lebanon are family-run businesses, the owner or the manager is the only one to take decisions about the management of the business.

The main technique used during these interviews was the laddering technique, starting with questions about the characteristics of Intelligence and gradually passing to questions that reveal the hidden management styles of the company.

These interviews provided a mean to discover the strategic, psychological and emotional reasons that affect management decisions. For example, fear of uncertainty about the future and fear of loss of power.

These interviews have enabled a deepen knowledge about the management methods of tourism enterprises in Lebanon in general. Finally, strengths and weaknesses in the management of Lebanese tourism companies were identified.

The qualitative data was analyzed in a systematic way. The texts were coded and the answers given by each interviewee were analyzed individually and the results were grouped by main themes.

C. The management of Lebanese enterprises

The political context in Lebanon and the strength of segmental solidarities influence the work and the economy of the country. Indeed, the directors of companies do not follow a rational economic approach. Political, family or even community situations largely influence the decisions of directors (recruitment decisions, managerial decisions, target clients).

Most Lebanese companies are still in the hands of family groups that have important traditional contacts with regional countries. However, with the current context of uncertainty and open markets, this is no longer enough. One of the major challenges is to improve the quality of production while remaining competitive.

An essential characteristic of small businesses is the very special role of its leader [6]. Several researchers affirm the very strong influence of the manager on the management system, the manager [7] :

- is often the founder of the company,
- has a strong tendency to personify the company according to his motivations and personal or professional background [8].

The decision-makers of small and medium-sized enterprises use their judgments, intuitions and experiences. They accept little to delegate their power and responsibility to other actors, and they do not use a formalized management information system. Thus, tourism businesses are mostly small or medium-sized family businesses, run by the owner or by a member of the family.

Family businesses have a simple, centralized structure with limited human and financial resources. The owner makes the latter give priority to the various operational tasks, which prevents a strategic vision in the medium or long term. Decisions are, in most of the time, taken for the short term.

According to a survey quoted by Duchéneaut more than 70% of medium-sized executives prefer intuition to prediction and consider it as very important in decision-making. Intuition - Decision – Action [9].

The main features of management control practice in the Lebanese companies identified in the exploratory phase of this research are the following:

- The management is reduced to the implementation of management control tools without any strategic or managerial vision;
- Management in companies is not used in its information system dimension, but rather in the sense of behavioral regulation and supervision;
- Companies develop control mechanisms that are close to intuitive control where informal control is promoted;
- Management practices in companies are heterogeneous, there is no universal model to apply. Important factors to consider are the size, structure of the business and the culture of its owner-manager.

In conclusion, Lebanese family tourism enterprises follow a traditional management system without taking into consideration corporate intelligence and collective intelligence.

D. Synthesis of the Study

The literature review revealed that an Intelligent enterprise is an organization that draws on the experience and expertise of its employees, creators of value to its customers. Moreover, an intelligent enterprise implements an agile organizational model that can dynamically reconfigure itself, adapt easily to changes, act and react quickly and remain constantly flexible. It deploys an information system that optimizes innovation and employee contributions to make its organization more flexible and efficient.

More specifically, intelligent management exists when a group of individuals working in the same company have the ability to:

- To apprehend and to organize the data of the situation,
- Link the processes to be used with the objective to be achieved,
- To choose the means or to discover the original solutions that allow adaptation to the demands.

This study indicated that the implementation of Intelligent management is an absent phenomenon in the Lebanese tourism enterprises.

The answers obtained by the directors of tourism enterprises, showed that the form of management is rather precautious in Lebanon. The management of these companies is non-scientific. In fact, the structure and the managerial action is more practical and less academic. It is a fact that what one learns in management courses, is practiced by intuition. This makes Lebanese companies quite successful in the concept of survival. The topic of intelligent management is not, for the players of the tourism industry in Lebanon, a major concern.

Tour operators do not consider a strategic management concept. This is a disadvantage in promoting and marketing their services. This is mainly due to the fact that these companies rely more on their results and failures and on what is successful in the market than on a search for innovative

means and tools to either stand out from the competition or offer something new. The question of the contribution of strategic research and marketing research arises.

It seems that the Lebanese tourism enterprises have not really understood what intelligent management could bring. These actors act by improvisation following the results of previous years and on what is constantly proposed by all these actors.

In conclusion, the concept of intelligence is NOT a characteristic of the performance of tourism enterprises in Lebanon. Indeed, the managers of the Lebanese tour operators rely on the competitiveness and financial results of previous years to determine their future strategy. Future strategies of tourism enterprises are short-term strategies to guarantee their temporary or annual survival in the Lebanese market. This strategy is associated to the existence of the political instability affecting the economy in the country.

Finally, it should be noted that Lebanese tour operators do not make any decisions based on market studies on the Lebanese population's choice and tourism behavior, as well as socio-styles. Tourism enterprises can rely on Global Distribution Systems such as Amadeus for creating IT solutions that suit their needs in extracting Data and meeting market needs.

V. AMADEUS: A SOLUTION FOR THE LEBANESE TOURISM ENTERPRISES

According to the World Travel Awards, Amadeus is the World's Leading Distribution System 2016 winner. It creates innovative customized software for the tourism enterprises to reach the desired market leadership. Amadeus helps tourism enterprises to transform the increasing amount of raw travel data into actionable measures and stand out from the competition.

AMADEUS divided its solutions into three main categories: Business Management, Distribution and Content, Sales and e-Commerce. Each of these categories includes a set of software.

The Business management category covers solutions for technical travel issues such as providing tailored content, sending and tracking documents efficiently to provide customers with a superior and more convenient travel experience and delivering fast, efficient incident management.

The Distribution and Content Category includes solutions that enables agents to issue documents for travel related services, including unbundled airline services, gives access to the low cost carriers, offers an integrated solution at the point-of-sale that provides booking access to the ancillary services of airlines, connecting more than 300 of the world's leading hotel providers.

Sales and E-commerce Category includes solutions such as retailing application for travel professionals, e-Travel Management that serves every aspect of corporations' travel needs, deploying online platform enabling to boost and drive business performance while servicing affiliated agencies, creating new revenue streams and use the same search and booking technology as the big online players. Building and updating customized travel booking applications at next to no

cost. Finding fares and availabilities efficiently, reducing both travel search company and airline website operation costs.

The classic management style adopted by tourism enterprises should be transformed from traditional decisions to creative decisions. Creative decisions are initiated by conducting an analysis of the trends in the market, consultation with customers and employees for ideas on improving processes, products and services both internally and externally. Tourism enterprises have to acknowledge that there is no continuity without the three pillars of Intelligent Management: Knowledge management, collective intelligence and information technology. Intelligent management approach should be supported by IT innovation [10].

VI. CONCLUSION

In the face of increasingly complex situations, knowledge has become, for the company, the best way to remain competitive. Economic intelligence will provide enough data on what is happening outside and the gathering of information will necessarily involve a situation of revision of internal forces, strategic concepts and necessarily introduce learning needs.

The company must therefore develop a learning culture in which each human element must create its accounts in terms of professional knowledge and understanding. In short, the enterprise will have to optimize its potential for knowledge and expertise thanks to new data.

The tour operator must be a learning organization that reflects an organizational culture, a way of being and operating in an environment where employees collaborate and think together so that the organization can constantly improve to become a healthy and agile organization.

The tour operator must promote the enrichment of experience and knowledge, openness, knowledge of the cultural environment, collaboration with all components of the organization and shared vision.

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