The Determinants of Destination Management System (DMS) and CSFs Evaluation for Madagascar

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Abstract

Information and Communication Technology (ICT) has revolutionized the tourism industry. The rapid development of information and communication technology in the distribution and the intermediation of tourism products have a set new competitive environment for the tourism industry. This technological innovation has developed the destination management system. The DMS is the IT infrastructure used by a destination organization for the collect, the storage, the manipulation and the distribution of all kind of information in all its forms. It is also used for bookings and for other commercial activities.DMS is not yet implemented in Madagascar, but in the near future, the Malagasy tourist offices plan to adopt one. The goal of this study is to define the factors which allow the implementation and to evaluate the strength of each one of them through the CSFs system. The research will take the following three factors in consideration: environment, managerial, and technological. We will examine the influence of each factor according to the situation of the country. The CSFs will determine the interesting sub-factors which might have a significant impact on the success of the implementation of the device while the AHP analysis will evaluate the weight of each factor. The result will give the ranking in importance of the factors, in order to target political strategies. The 22 existing regional offices in Madagascar will be the population of the research; the study will mainly be qualitative and will be conducted through interviews. Besides, the research will suggest a policy on the implementation of the DMS in Madagascar, and the aim is to give a global vision in helping the tourist offices of Madagascar to successfully adopt the DMS. Therefore, this study will provide a new approach in the implementation of the DMS.

Keywords: Destination management system (DMS), determinants, Critical success factors (CSFs), Analytical hierarchy process (AHP), Madagascar

1. Introduction

Information and communication technologies (ICTs) and tourism are two of the most dynamic drives of our global economy. As many authors have claimed, tourism must be treated as an information-intensive industry (Poon 1993; Sheldon 1997). Travel and tourism can be defined as an information business; because information is one of the most important parameters which support actions in the tourism field such as the service industry. The technological innovation has facilitates the commercialization of tourism products (Sheldon & Haines, 1993).

In 2007, the World Tourism Organization (WTO) is trying to recognize the ICT as having a role to play in tourism, since then, e-tourism is defined as the act of choosing, organizing and booking holidays from the Internet. And according to the analysis of an e-Marketer expert firm, e-tourism has become the most sold product during the year, with a turnover exceeding 1000 billion.

With an amount close to $ 17 billion of Internet travel reservations, more than 33% of the business volume of e-commerce is from tourism according to the Federation of e-commerce and distance selling in France, with a growth of 9%. In China, travel expenses online business is 13 billion dollars, but should register a growth of 30% annually and reach $ 3.9 billion (PhoCusWright 2012).

This craze on current practices causes new approaches and new management techniques (Swarbrooke 1999; Gezici 2005; Saarinen 2006). ICT can play a valuable role in the efficiency and productivity of an organization (Buhalis 1998) and in the treatment of environmental sustainability (Erdmann & Goodman 2004)". The combination of these trends leads to the emergence of destination management system. This system is the application tools of the destination management organization. DMS (Destination management system) is then adopted by all worldwide destinations, which take advantage of the technological evolution and the customers behavior`s changes. It has become a standard for all destinations wishing to remain competitive.

For Madagascar, the tourism sector is the third largest provider of currency. The total Revenue is estimated to USD366, 651,047.85 in 2013 (Ministry of Tourism of Madagascar 2013) against USD261, 353,189.21 in 2012. In 2013, the number of international tourists is totaled 196,375 with an annual increase of 20%. The tourism industry is composed of 1,500 establishments employing more than 50,000 people (Malagasy Institute of Statistics 2012). The island dominates the niche market of ecotourism with a natural capital 90%

endemic (Christian et al. 2003); the potential is huge but the country is still under exploited, and the government is currently developing the tourism sector as a priority. Tourism development necessarily goes through massive use of ICT. The use of the internet sector is growing over the past decades. Today almost 50% of players in tourism have a website, and at the same time 70% of the Malagasy territory is covered by digital networks. In 2003, the number of Internet subscribers was approximately 60,000 (300% growth compared to 2001) with 49,800 Internet users in the capital Antananarivo and the rest is located in the other five provinces (Madagascar telecommunication office 2003). 80% of Internet users are private traders and the 35% are involved in activities directly related in tourism. Travel agents rely on information only because virtual transactions are still in its start; only 35% of transactions in tourism come from the internet. Actors, especially the private operators (travel agencies, hotels, tour operators, tourist facilities, etc.) are aware that the integration and use of ICT in the tourism industry is a prerequisite for its development, the same for the expansion of the access to the country and the tourism infrastructure.

Currently the national or regional tourism offices throughout Madagascar do not have yet any DMS. According to the Executive Head of the Malagasy National Office of Tourism, the creation project of this system is still in the assessment phase. Our research will therefore aim to suggest an evaluation of the influencing factors and determine the most important among them for the implementation of the DMS. We will suggest some policies corresponding to the actual situation. We hope, through our study, be able to help the Malagasy office of tourism and the government to have a database for the establishment of a feasible DMS creation project.

2. Literature review

In order to have good literary base, articles was selected in international refereed journals such as EBSCO, SCI, Springer and Elsevier. We have combined the essential data and theories that we have considered consistent with our research's field. In this selection, we can get some knowledge regarding the Destination Management System and its environment. When we talk about research done around the DMS, the first authors who were able to define the concept are Sheldon 1997; Ritchie 1993; Buhalis 1994. More details on the basic function of the structure are proposed by Buhalis, 2003; Pollock, 2001; O `Connor 1999; and the exploration roles by Getz, Anderson & Sheehan 2005. Some writers have focused their work on the study of the interior DMS Buhalis 1997, 2000, 2003, and their partners Frew & O `Connor 1999; Frew & Horan 2007; Sigala 2009, while the environment of the destination management system was explored by Kotler et al. 1999; Wethner & Klein 1999. Other authors have focused on the DMO without ignoring the system; they are Ritchie 1993; Sheehan & Ritchie 1997, 2005; Wang 2008).

2.1. The concept of destination management system

The DMS is a relatively new application of management. It has no universal definition, but only definitions which follow the view and opinion of some researchers, tourism stakeholders, and every country (Rew & O`connor 1999).

DMS is an ICT Infrastructure

DMS is the logical extension of the management destination. It's the central tool for the implementation of this strategy, then DMS could be defined as information technology and communication (ICT) infrastructure in the destination management organization (DMO), used for the collection, the storage, the handling and the distribution of tourist information. It is also used for the booking and other business activities (Sheldon 1997).

Initially, DMS can be described as "a collection of IT data interactively accessible on a destination" (Buhalis 1994), it`s also considered as the IT infrastructure DMO (Sheldon 1997), which should act as a mechanism to integrate different services and products of the tourism industry (Collins et al. 2003). DMS is the practical application of the destination organization; it includes all the work, its success and the evaluation of its effectiveness. The DMS is designed to facilitate vacation planning, travel arrangements, and the subsequent settlement of travel transactions (Sheldon & Haines. 1993).In those definitions, the DMS is seen as a structure and a virtual application of tourism.

DMS involved marketing and commercial activities

The definition offered by Pollock (2001) seems to be more or less complete: "*DMS is the IT infrastructure used by a destination organization for the collection, storage, manipulation and distribution of information in all its forms, and for the transaction of reservations and other commercial activities*". This definition focuses on the e-business action of DMS because it should also be able to perform operations, reservations and other commercial activities. Therefore DMS should be accessible to the entire world.   The DMS is the official website for the promotion of tourism, showing at the same time a large number of specific services (search for the best price, online reservations, etc.) that pure player in e-Mediation can also offer (G. Candela & P. Figini 2012). These definitions especially focus on the commercial activities of the web site. Chen & Sheldon (1997) defined the

DMS as an inter-organizational system that connects tourism products, suppliers, consumers and intermediaries in order to allow an easy access to complete and updated destination information, allow reservations and purchases. But researchers pointed out a more commercial definition with the marketing function.

DMS is about geographic area
Sussman & Baker (1996) "A DMS is essentially a marketing and promotion tool which aim to promote tourism products in a particular destination, which could be a nation, region, city or other geographic entity recognizable". This precision of the geographical location is also seen by other author such as Frew & Horan (2007): "DMS are systems that consolidate and distribute a full range of tourism products through a variety of channels and platforms, generally catering for a specific region, and support the activities of DMO in this region". DMS builds the National Tourism Authorities (NTAs) for a national level, regional for a local government or province and local for a smaller area or city/town

DMS is a part of the Destination management organization.
That is to say, a specifically defined place implies one specifically defined DMO. This brings us to the definition of Buhalis (2003):"DMS generally include information on attraction and services, incorporating the ability to make reservations, managed by Destination management Organizations (DMOs), which can be public, private or mixed organizations". Destination Management Organizations (DMOs) are the organizations responsible of the strategy, the product development and the marketing (Heath & Wall 1992). Seen through this angle, the DMS will make the shadow to the different tourism stakeholders, such as travel agencies and tour operators, leisure, airlines and hotels companies. The DMS must not only integrate the complete range of all services provided by traditional travel agency, but also to increase visitor traffic, attract true market segment (Sheldon 1997), and create internal networks and more effective external (Fisher 1998).

Figure 1: Structure of DMS (Buhalis 2003)

DMS acts as a link, binding all tourism stakeholders in one. It is in the middle and work together with all elements. The aim of the DMS is to facilitate the presentation of products on the market.

The activities of the DMS have 3 functions: information, transaction and strategy. Those 3 functions has become a basic structure.
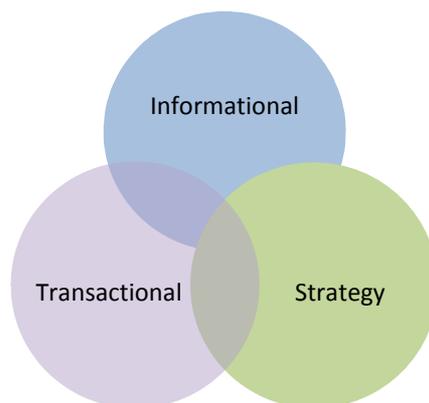
Figure 2: Base Function of Destination management system (Pollock 2001)

In this study to better identify the subject, we will combine the concept of DMS in three finalities. The first one is the informational objective; it aims to provide information to customers and to get some from them; this also involves the promotions and advertising. The second objective is transactional; it includes the booking and the online payment. Those two first objectives have already been confirmed as the basis of the DMS by Sussman & Baker (1996), Pollock (2001). In order to not encumber our research; the strategic objective is taken into account in the third position. It mainly refers to the implementation strategy of the e-business (Bloch et al. 1996) such as the search of new markets, the conservation and the development the current portfolio

The success of a DMS will inevitably go through the efficiency of its functions. Thus the process of implementation of a DMS requires knowledge of the relationships between environmental factors outside or inside the DMO and its functions. There is a large gap in the theoretical research on this problem, because this study will be carried around the determinants factors of implementation.

2.2 Conceptual framework

Three theories support our research model in this study: environmental, managerial and technological context.

Environmental context

Prescott & Conger (1992), Premkumar et al. (1995) had already highlighted the essential role of the environment for the IT adoption. In the implementation of technological innovations Iacovou et al. (1995) has defined the environment as one of the factors that influence enterprises.

What compose the environment are the government and the suppliers (Premkumar et al. 1995). And the most appropriate theory for the evaluation of the environment of a system is the "five competitive strengths model" by Porter, 1985. Brown & Kae Kitipong (2009) had used the theory to assess the environments in the adoption.

Porter's model describes five forces which must be examined for the development of the strategy in a company. Adapt Porter's model to e-business strategy can provide a useful framework in the electronic commerce.
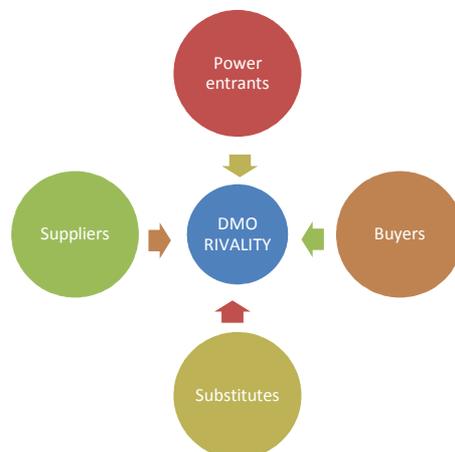

Figure 3: The Five Competitive Forces by Porter (1985)

- The power entrants: Economics scale: Knowledge of DMS is still approximate that the capacity evaluation

is unclear. The risks are enormous that it becomes a key factor. Capital requirement: the price of the access to the innovation, financial resources to invest (Gratzer 2003). Government policy: encouraging or blocking policy is limited to the adoption of DMS. (Neo et al., 1994)

- The power of suppliers: DMS is a system that is not intended to produce, or to store, but is only a virtual intermediary. The supplier has become unavoidable. This superior position gives him the occasion to fix his rules, his procedures and his systems of partnership.
- The power of buyers: consumers are seeking for services and distribution that suited them. The buyer power is high if the buyer has many alternatives.
- The power of substitute services: The existence of products outside of the realm of the common product boundaries increases the propensity of customers to switch to alternatives. A substitute already dominates the market. The strength of this conjecture may have impact on the assimilation of new systems.
- The power of concurrence: in the tourist destination, we no longer talk about competition between local operators but between destinations.

Managerial context

Kwon & Zmud (1987) certify that the experience of the users, his ability, and his level of education is important in the success of the IT implementation. Authors such as, Chu & Hui (2001), Cragg & King (1993), Tong et al. (1997) have considered the managerial context as the basic factor of the technology implementation.

Li et al. (2006) completed their study on the leaders 'intention to adopt a technological innovation. They have divided the planned behavior that comes from the experience and the education into two, followed by normative behavior which is personality.

After the survey of 89 executives, we could confirm the importance of the experience in the adoption of the innovation. Mola & Liker (2005) focuses on the study in South Africa, about how tourism SMEs adopts technology; in the details of this research, we could verify that the human resource and structure are two different elements which are very influent in the adaptation of the e-Commerce.

We are going to consider the McKinsey 7s model (1981), and our study will revolve around two sections: personal organizational and human resources.
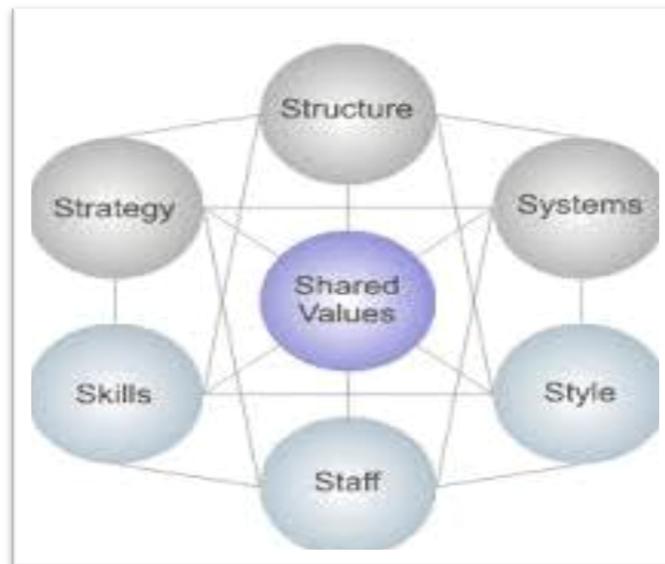

Figure 4: The Mckinsey 7S model (1981)

Among the organizational characteristics influencing the adoption of DMS:
• Structure: organizational structure, division of labor, vertical differentiation, the steering system, the flexibility of management (Damanpour 1991).
• Style: the importance of corporate culture often plays an important role (Kotter & Heskett 1992).Values as team spirit, types of governance, mode spirit and reputation are values which may require an organization to evolve. (Devillard 2008).
• The system procedures and processes of decision making is the central point of the system like the springs of information and communication channels (Ray 1995).

According to the classical theory of diffusion of innovations, some personal characteristics explain the propensity to adopt an innovation and to implement for its own needs (Rogers 1995). The human resource has a great importance in the origin of innovation projects.

- • The Staff: human resources in the company are heterogeneous. The leaders such as the executive committee and councils of administration will have the difficult task of defining strategies; therefore their personality will influence the decision to innovate.
- • The Skills: For a complex system such as DMS (Buhalis 2000) the level of competence of the staff has become determinant. Many authors have confirmed that the level of education and professionalism are the basis of the profile (Damanpour 1991; Fichman & Kemerer 1997; Grover et al. 1997). The expertise that they get from their experience and education will give them an advantage in the responsiveness to change and will already allow them to have the assimilation of innovations.

2.2.5. Technology context

Since the beginning of the research about considering IT as determinant factors, the characteristics of the technology itself are the basis of the proposed factors. Rogers (1995) in the classical model of diffusion of innovation has taken as a basis the characteristic that innovation can bring to its user. The characteristic of the Technological innovation influences the location and the adoption stipulate Chau & Hui, 2001.Tornazky & Klein (1982) focused on the relative advantage and Premakemar on the ease and the use of technology. Bakucz (2003) has taken the generic value chain theory of Porter (1985) to assess technology of the e-booking in hotels; in a survey conducted on 350 of them, it has been shown that the opportunity created by technology is crucial. The attitude of technology such as the usefulness and the ease of use are undeniable. Sigala (2003), in a comparison study between the U.S. and EU via the empirical data, has evaluated the e-tourism with the Generic Value of Porter. The study showed that users search much more opportunity to make more efficient use of the technology, but the basis of the value of an innovation is its potential utility.

Figure 7: Generic value chain (Porter, 1985)

3- Method

3.1. Research Target

The aim of this research is to:
- - Allow us to know the factors influencing the adoption of technologies, specifically the DMS. The study will give us an explanation of the involvement of each factor on the implementation process of the DMS in Madagascar. The knowledge of the details of the relationships among the factors and the DMS will support us in understanding and in the success of the implementation process.
- - Evaluate the factors by determining which is the most important for the implementation of the DMS in Madagascar. The analysis with the AHP defines the weight of each factor in relation to others; AHP ranks the factors by their degree of influence. Knowing the degree of importance of the factors will allow us to suggest policies for Madagascar.

The research will give another form of evaluation of the factors influencing the implementation of the DMS. The use of a wide theory allows a precise answer to facilitate the drive of the implementation process.

3.2. Research methods

In this study, we will use 2 methods:

Case study method

Our study mainly focuses on factors determination. In the case study of Madagascar, we will conduct qualitative analyzes. The interviews can be projected in its real life context (Soy 1997) with a rich depth reflection (Noor 2008). The empirical data, quantitative and qualitative results will be combined to meet the requirement of our theory. This methodology has double side not new to management: for the one or the other alone is not complete to respond to new theoretical exigency and developments (Fillis 2006). The qualitative data was obtained

through an interview with the staff of Malagasy tourist offices. Qualitative research will be completed with the collection of empirical data available to the same Malagasy tourist board. We will have a more subjective opinion which might be very hard to scan but it will be important for our research (Wahnich 2006). This is data will be analyzed and evaluated with AHP methods in order to answer to our objective based on the evaluation of the real determinants (Wahnich 2006).

AHP method
Applying the AHP procedure involves three basic steps (Harker & Vargas 1987):
* Decomposition or the hierarchy construction. The establishment of a list of options to evaluate and criteria to make

Table 3: The table of evaluation criteria

Factor	Attribute
Environmental context	Entrants
	Suppliers
	Consumer
	Competitor
Managerial context	Structure
	Human resource
Technological context	IT embedded value chain
	Attribute of IT

* Comparative judgments, or defining and executing data collection to obtain pair wise comparison data on elements of the hierarchical structure;

The decision maker can express his/her preference between every 2 elements verbally as equally important, moderately more important, strongly more important, very strongly more important, and extremely more important. These descriptive preferences would then be translated into numerical ratings 1, 3, 5, 7 and 9, respectively with 2, 4, 6, and 8 as intermediate values for compromising two successive qualitative judgments.

* Synthesis of priorities, or constructing an overall priority rating. It is based on the weighted sum of these options that are compared weight. That obtains the highest score is the preferred factor.

3.3. Data collection
The data will be obtained through interview performed within the 22 tourisms boards existing in Madagascar.
Qualitative data will be obtained through an interview. The interview will be semi-structured. Open questions will be made to guide the interview. We will establish the guide based on the 3 implementation factors of the DMS. The interview is to have accurate information on the actual situation. This reality is expressed with the impression of the population (Dubois & Gadde 2002). For simple question, we will use Likert's scales (Raymond & Blil 1997) especially for the environmental study, but for the strategic questions of the evaluation, the questions cannot be answered with the 5 Likerts scale with an answer going from 1 to 5. Therefore, we are obliged to modify the questions according to the requirements of the situation. This process won't take out any of the characteristics of the quantitative methods, it will bring more consistency to our results and will give us a concise and excellent results.

4- Discussion
To achieve the research objectives, we will define the research framework of the factor which affects the DMS followed by a CSFs evaluation using the AHP Model and finally policies will be suggested in order to ensure the success of the establishment of the DMS.

4.1. Research Framework of factor to influence DMS
According to the literature review, there are many and various determinants for the technology assimilation. We have divided the context in groups of 3 categories for the introduction of our determinants.
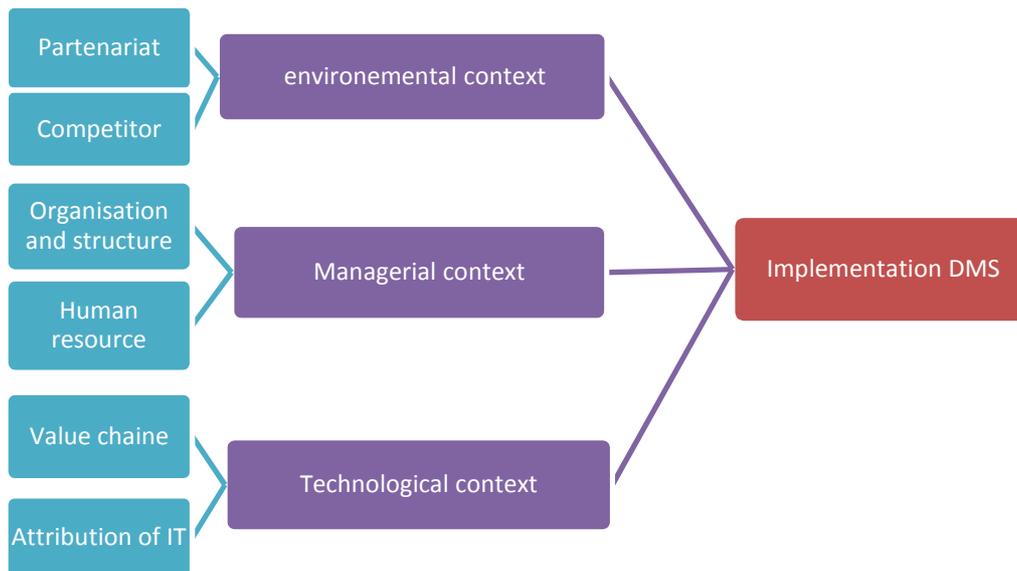
Figure 9: Framework of factor to influence DMS

This optical evaluation leads us to the following questions:

How the external environment of the tourism office influences the decision of implementing DMS?

The environment surrounding the DMO is constantly changing. Tourism industry is a very competitive market. The actors are constantly under pressure towards their partners (Eveland & Tornasty 1990; Robertsong & Gatignon 1989). The 5 forces of Porter (1985) give us the details on the kind of actors which are customers, suppliers, competitors, tourism industry and the government. This research will be established by the study empirical data.

The rapid growth of technology accentuates the change. To get the real impact, the impression of the DMO in its environment will be taken into account. The use of the five forces will allow us to have details on the weight of these external environments.

The volatility of the environment pushes all the actors to innovate in order to follow the trend of the market (Tornatsky 1990; Gatignon & Robertson 1989). The prompt knowledge of the environment has become a priority for tourism stakeholders (Julien et al. 1996). Measuring the influence of actions, demands and activities of its partners is done through data analyzing and the analysis of the respondents. The power of suppliers and customers is evaluated according to their standard and partnership requirements. The government and the industry will express themselves through actions which push to the adoption of the DMS.

The DMO is a multidisciplinary company with multiple actors (Buhalis 2000; Heath & Wall 1992). To equally play with its partners, customers and suppliers, the DMS is the right asset (Glazer 1991). Interviewing DMO allow us to know the details of theses setting.

Knowingly, executives will always take strategic decisions responding to various changes (Varadarajan & Jayachandarn 1999) and promoting innovation (Lukas & Ferrell 2000).

How the managerial potentialities influence the implementation of the DMS?

Knowledge and competence are crucial resources for a company (Grant 1996). This experience is the key to a successful development. The quality of the staff has an influence in the adoption of a new technological system. The evaluation of the human resource regarding the DMS is completed with a survey on the different levels of knowledge and skills of all the future users. The quality of experiences and the study level is highly important.

In DMO the human resources are the adopters of the technology, they won't act individually. Educational level, expertise, experiences will have an impact on the immediate adoption of the DMS (Raymond 1992).

The staff organization in the DMO may also influence the digital growth in DMO. Corporate culture formed by the staff will have an impact on the rapidity of their adaptation to the new technology. A survey among the leaders of the DMO can enlighten us on this subject. Executives with a pioneering spirit will always

favor the most recent means for a better accomplishment of the work, in that; they will invite their colleagues to the same spirit. The teams are mainly constituted by young people who are more passionate about new technologies. Qualified people flourish efficiently in a well-organized structure. The organization and staff can contribute to the application of DMS.

How the technologies itself influence its implementation?

Although the existence of the DMS for a long time now, the knowledge of the subject by tourism professionals is still vague. Competitive advantage can be the creation of the system such as the use of pricing strategy, product or distribution, or "opportunity capture-value" like the E-CRM, or also the product cycle management, or new market penetration and new customers. The exposure of these benefits within the DMOs allows us to know technology attractions that most interest the future users. More precisely, the responses of the respondents which mainly focus on the ease of use and DMS interest already give us an idea of the influence that it might have on the adoption the DMS.

The continuous evolution of DMS technology continues and provides new functions (Egger & Buhalis 2008). The attraction generated by the DMS promotes its use and promotes the benefits that we can get from its adoption. Rogers (1995) tells us that IT innovations are diffused and assimilated when they are perceived as providing a relative advantage or benefit to users and where their attributes are perceived favorably. Then, the DMO who are perfectly aware of the value of the DMS will decide to adopt it rapidly.

4.2. Policy suggestion

A policy suggestion in order to promote the implementation of DMS is the logical consequence of the knowledge of the most important factor. Tourist offices should focus on the reasons that propelled the key factor. We will therefore suggest short term, medium term and long term policies. As we talk about technology, adoption time is often short. The importance of the factors will change according to popularity and the technological changes. After the evaluation of the weight of the influence, we know the area where we should act in order to ensure the success in the implementation of the DMS.

We can suggest policies for each of the 3 settings. But the situation is confused; the emergence of a factor will lead us to choose a strategy based on an element.

In general, one of the 3 axes policies will be the most appropriate:

- Marketing policy: the national tourism office may revise its marketing perceptive to increase the efficiency of the implantation. Acting on the product, price, placement, positioning on the market, and also on the proposed distribution circuit promotes the advancement of the project. Redefining the adequate marketing strategy also include a new positioning with employees and the international organization.

-Alliance policy: it aims to regulate the relations of DMS with its environment. Suppliers, government, competitors and customers are parameters outside the DMS. In this context, the policy of alliance will be most appropriate. A new form of coalition will encompass the agreement with partners such as suppliers, government and customers, or competitors like other destinations, and substitute products.

- Managerial policy: the human resource of the national tourism offices acts actively in the efficiency of the DMS. Policy which aims to improve their performance will be appropriate. Staff training is a component of the implantation strategy. The better they know about technologies, the faster the staff will adopt it. Leaders who know properly the DMS may require the same for their employees. The company `s culture can even change depending on the skills of its employees. If we talk about competence, specialization will come naturally. Specialization in a field increases the relation inter-DMS in the tourism, obviously the link to a network.

The appropriate policy for the case of Madagascar is determined after the evaluation of the factors. The policy should be consistent with the most influential factors in their decision of adopting the DMS.

5- LIMITATIONS

The first limitation concerns the examination of the 3 factors. As we are going to process the interviews for the study case, answers will be subjective. They will be interfered by the own perception of the respondents, or precisely the leaders (Chan & Swatman 1998). The will talk on their own way but not for the entire organism. In most cases, those leaders will differently compare to the entire staff. However, the DMS is a complexes system requiring the collaboration of all the staff.

Secondly, the CSFs are imprecise because the results of the interview will be mainly qualitative. Non-measurable data will be underestimated or overestimated (Tamboura 2008). Consequently, there will be a significant impact on the outcome of the CSFs. The risk of choosing a poor policy can happen if we don `t tries to change those data in numbers and reduce the number of data.

6- CONCLUSION

The adoption of a Destination Management System (DMS) is a solution addressing the problem of disparity and

heterogeneity of tourism. These software tools will address two major functions [UNCTAD 2005]: first to provide rich, complete and quality information to visitors and simplify the procedures, including the booking section, and secondly to provide reliable and updated tourism services, promoting and integrating them in the world market. Nevertheless, a DMS must require the cooperation between the private sector and the government. The latter is to initiate a national strategy for the promotion of tourism and create fertile ground for the development of local initiatives, through financial support or a relevant business intelligence to effectively meet the goals of the DMS.

For Madagascar, one can say that DMS is not fully installed due to lack of financial resources, strategy or skills, for now it can be considered as a DMS at level 1, providing only information on the location and lists the benefits. Heterogeneity and diversity of tourism services in Madagascar, has often led to the exclusion of the traditional distribution channel of tourism products. However, the rise of e-tourism tends to open up new opportunities for both consumers and stakeholders upstream. By leaving the traditional distribution process or to bring it directly related to new opportunities, IT is today able to enhance the choices of the customer, in one hand, and the integration with the promotion of services for the provider. Exploiting this opportunity is crucial for Madagascar, for almost all visitors come from the countries of the North. Added to this is the growing interest of consumers to new forms of tourism, the environment which services are flexible and customizable. These are the reasons why we believe that the implementation of a destination management system in Madagascar is an essential tool for the development of a tourist image, promotion of tourism resources and the reinforcement of the attractiveness flow. The first result of this study is the evaluation of each of the five factors in the DMS implementation; this will allow us to know which will be the most influential factors. Then, policy suggestions will be set in accordance with the outcome of the evaluation. The result of the study will be part of the essential tools used by DMO's leaders in the decision making process, as well as their partners in the project of implementing a DMS.

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