Consumer Behaviour and Consumer Profile in the Use of Portal Destination Management Systems (DMS)

François Bédard[a]
Thaddée Biegala[a]

[a]International Centre for Education and Research in Tourism (CIFORT)
Université du Québec à Montréal (UQAM), Canada
{bedard.françois; biegala.thaddee }@uqam.ca

Abstract

Today's world has thousands of destinations that have a destination management system (DMS), the function of which is to oversee the entire offer of the local or regional destinations situated on their territory, to carry out promotion for these, and to serve as a distribution channel of reservable tourism products. Over a period of three years, the research of this article studied the behaviour and profile of users having effected more than one reservation of simple hotel products or hotel packages using a portal DMS, i.e., one overseeing regional destinations on its territory, even if regional DMSs were available. The results analysis shows that nearly two-thirds of users are residents from the territory. Among all users, 46.1% made their reservations for more than one destination. For accommodations located in the big cities, the majority of reservations were done using the Internet.

1   Introduction

Consumers have a vast choice of channels to obtain information on a destination and to eventually carry out a purchase transaction of a tourism service. Thanks to search engines, consumers today can easily enter in direct contact with service providers, who have, with some exceptions, a presence on the Internet, at least in the developed countries. Consumers can also do business with market intermediaries such as travel agencies or with destination management systems (DMSs). This article examines the latter type of intermediary. There is no list or register of the number of destinations worldwide at the subnational level (regions, states, provinces, counties, municipalities). However, their total is estimated at several dozens of thousands. In most of the 192 countries of the United Nations, local destinations are federated by one or more DMS, according to the number of political and administrative levels existing in each country and the role each level plays in tourism promotion. Based on the designations in usage in each country, the first subnational level is generally comprised of provinces, states, or regions; the second level of regions, departments, or counties; and the third of municipalities. In general, each level that is active in tourism promotion operates a DMS. Except for the local level, the DMSs of the upper levels are usually of a portal type, i.e., they bring together or oversee all destinations located on their territory (Figure 1).
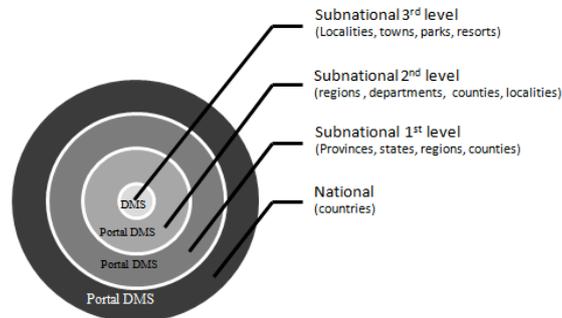
Fig. 1. The different levels of a DMS

A portal DMS is a destination management system administered by a destination management organization (DMO) that has the role of overseeing the entire offer of the local or regional destinations located on its territory, to do promotion for these, and to serve as a distribution channel for reservable products, mainly hotel rooms and hotel packages. The importance of having one portal DMS is defined by the need to simplify as much as possible the information search and the access to online transactions for users. A multitude of DMSs to promote the regions, provinces, and localities of various political or administrative levels would risk drowning clients in a mass of information and complicate the process of organizing a trip. A portal DMS, by contrast, would allow, all the while promoting all destinations on national territory, to centralize the clients' searches and the reservation process. The function of a portal DMS is thus to be accessible and user-friendly. According to DeLone and McLean (2003), the success of an information system, such as a DMS, depends on the degree of satisfaction its consumers draw from it, given that perceived benefits are based on usage. The examination of consumer behaviour here allows to better understand one of the key variables of success of a DMS (Buhalis & Spada, 2000; Mahadevan, 2000). What kind of experience do consumers have when using a portal DMS in the context of a trip requiring multiple reservations? Where do they come from? For what kinds of destinations do they make reservations? For how many different destinations do they make reservations? Telles sont les questions auxquelles s'intéresse cet article.

2 Methodology

To suggest answers to these questions, this article presents the results of an analysis performed on the basis of data on users of a subnational first level portal DMS overseeing all destinations located on its territory. The original database contains all entries on the consumers who effected more than one hotel room or hotel package reservation between January 1, 2006 and December 31, 2008. Although the exact number of entries cannot be divulged for reasons of confidentiality, their total amounts several ten thousand. Each entry contains the following information: the origin, i.e. place of residence, of the clients; the number of reservations and bed-nights per user; the name of the destination located on the territory covered by the portal DMS for which each reservation was made. The portal DMS offers three

distribution channels: the information centre with counters, the call centre, and the Internet. It allows making direct reservations for simple hotel products or packages.

3 Results

The origins of users of the portal DMS

For the purposes of this study, the places of residence of the DMS users were divided into three groups: Intra-territory, Neighbouring territories, and Rest of the world. The first group comprises residents living on the territory covered by the DMS; the second group comprises residents of the states, provinces, and regions located in proximity of the destination; and the third group comprises residents of all other parts of the world.

Table 1. Breakdown of DMS users based on origin

Intra-territory	Neighbouring territories	Rest of the world
64.4%	22.3%	13.3%

The results of Table 1 show that nearly two-thirds (64.4%) of users live on the territory served by the DMS; nearly one quarter (22.3%) in territories close to the destination; and the rest of the users, namely, 13.3%, in other parts of the world. This distribution of DMS users based on origin corresponds fairly well to what was observed for all visitors staying in the destination. Therefore, whatever their origin, visitors of a destination seem to be equally likely to use a DMS to book simple hotel products or hotel packages.

User groups based on type of reservation

Considering the context of the aforementioned study, it seemed appropriate to divide the users into two groups on the basis of the type of reservation. This allows to identify to what degree the users of a portal DMS serving many local and regional destinations reserve in more than one territory. The results obtained thus allow to define to what extent a portal DMS is used by users to reserve in more than one destination. The first group comprises those who made multiple reservations but in only one destination, while the second group comprises those who made reservations in more than one destination. As illustrated in Table 2, the two user groups are more or less the same size, with Group 1 being larger by a slight margin of 7.8%. These results show that consumers staying in only one destination during their trip are just as likely to reserve their accommodation through a portal DMS than those staying in more than one destination.

Table 2. Breakdown of DMS users based on type of reservation

User Group 1 Reservations in only one destination	User Group 2 Reservations in more than one destination
53.9%	46.1%

User groups and origin

Table 3 aims to highlight any significant gaps between the two user groups on the basis of origin.

Table 3. Breakdown of DMS users based on origin

Origin	All users	User Group 1 Reservations in only one destination	User Group 2 Reservations in more than one destination
Intra-territory	64.4%	66.1%	62.3%
Neighbouring territories	22.3%	22.6%	22.1%
Rest of the world	13.3%	11.3%	15.6%
Total	100%	100%	100%

The results show that users from neighbouring territories spread equally between the two groups (22.6% for Group 1 and 22.1% for Group 2). Those living on the territory covered by the DMS are somewhat more likely to belong to Group 1 (66.1% compared to 62.3%). And those coming from the rest of the world are somewhat more likely to belong to Group 2 (15.6% compared to 11.3%). Table 4 thus shows that users coming from the rest of the world are more likely to reserve in more than one destination than the two other user populations.

Reservations and bed-nights

Table 4 presents the breakdown of reservations based on type of destination, user group, and origin. The destinations were divided in two types: big cities of a half million or more inhabitants (of which there are two on the territory of the DMS) and the other destinations (of which there are 19). The results show that users of Group 1, of whatever origin, used the DMS predominantly to reserve accommodations in one of the two big cities. This represents 77.2%, 83.8%, and 81.6% of all reservations of visitors from within the territory, the neighbouring territories, and the rest of the world respectively.

Table 4. Breakdown of reservations based on type of destination, user group, and origin

Origin	User Group 1: Reservations in only one destination		User Group 2: Reservations in more than one destination	
	Big cities	Other destinations	Big cities	Other destinations
Intra-territory	77.2%	22.8%	51.4%	48.6%
Neighbouring territories	83.6%	16.4%	69.6%	30.4%
Rest of the world	81.6%	18.4%	67%	33%

Users of Group 2 residing on the territory used the DMS as much to reserve lodging in the big cities (51.4% of reservations) as in the rest of the destinations (48.6% of

reservations). Users of Group 2 coming from neighbouring territories and the rest of the world reserved predominantly in the big cities, similarly to Group 1 as a whole.

Number of different destinations for which reservations are made

Table 5 presents the breakdown of users of Group 2 based on the number of different destinations and origin. This group accounts for 46.1% of all users (see Table 2).

Table 5. Breakdown of users of the portal DMS (Group 2) based on number of different destinations and origin

Origin	Number of different destinations			
	2	3	4	5 and more
Intra-territory	79.1%	15.3%	4.0%	1.6%
Neighbouring territories	89.0%	9.0%	1.5%	0.5%
Rest of the world	84.7%	11.6%	2.0%	1.7%

The great majority of users of each population made their reservations for two different destinations. This represents 79.1%, 89%, and 84.7% of all reservations of visitors from within the territory, the neighbouring territories, and the rest of the world respectively. However, a non-negligible portion of the users from within the territory and the rest of the world also reserved for three different destinations: 15.3% and 11.6% respectively.

4   Conclusions and future research

This article presented an analysis of the behaviour and profile of the users of a portal DMS. This designation "portal DMS"—to our knowledge a first—was used to qualify a system the role of which is to oversee the entire offer of local or regional destinations situated on its territory, to do their promotion, and to serve as a distribution channel of reservable products.

The study examined the users who made more than one reservation of hotel products through a portal DMS serving 21 regional destinations. The results showed that half of the users used the DMS to make reservations in more than one regional destination. Moreover, despite the fact that each destination on the territory has its own DMS, dozens of thousands of visitors chose to use the portal DMS, which confirms the utility of such a system from the point of view of consumers. After having divided our base group into three distinct populations to better define the user profile, two thirds of all users were found to come from the territory covered by the DMS, 22% came from neighbouring territories, and 13% from the rest of the world. The latter two groups were even shown to be more likely to reserve, albeit to different degrees, in more than one destination. Moreover, DMS users tended to reserve mostly in the big cities. However, residents from within the territory reserved less in big cities than those of the other populations. This phenomenon is explained by the fact that most intra-territorial travellers come from the big cities themselves.

The Internet is the channel most commonly used by DMS users to carry out their reservations. Nevertheless, residents from neighbouring territories and from the rest of the world who made reservations in more than one destination used the Internet barely more than half of them. It appears that a significant number of these two populations find more convenient to use call centres and information counters to do their transactions. Finally, the analysis of the results shows that when users reserve in more than one destination, they limit themselves mostly to two destinations (about 80% of users of each population).

The results obtained in this article testify to the behaviour of the users of a portal DMS and, though to a lesser degree, their profile thanks to the classification of the population. However, the data gathered from the DMS does not allow to define the user profile in greater detail. It would be interesting for the DMS in question to review its data gathering strategy in order to enrich the information on the user profile.

References

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