The impact of deploying Internet on travel agencies’ Competitiveness - Sample study-

أثر استخدام الإنترنت على تنافسية الوكالات السياحية - دراسة عينة.

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Abstract:

Internet has transformed the Tourism sector which relies on information and information management. The majority of tourism agents are using Internet either for informational or transactional purposes, in this research we try to study the impact of deploying Internet as an informational tool and as a transactional means, on the competitiveness of Algerian travel agencies through the study of a sample of travel agencies in Algeria.

we have found that Web sites and E-commerce enable tourism firms to improve their competitiveness, and led to the restructuring of tourism industry and weakening the role of travel agencies, which are obliged to reinforce their electronic presence and boost their web investments.

Key words: Internet, Website, Tourism, Competitiveness, Travel Agencies.

ملخص:

أحدث إنتشار الأنتارنت وتوسع استخدامها شورة في القطاع السياحي باعتباره نشاطًا خدمتاً لا ماديًا، مستهلكاً للمعلومات. حيث أصبح معظم الفاعلين في مجال السياحة يستخدمون الأنترنت لعرض منتجاتهم وخدماتهم والترويج لعروضهم السياحية لجذب أكبر قدر من الزبائن حتى من خارج أسواقهم المعتادة.

والهدف من هذا البحث هو محاولة دراسة تأثير استخدام المؤسسات السياحية الجزائرية الأنترنت لأغراض معلوماتية وأخرى تجارية، تسويقية على تنافسيتها من خلال دراسة عينة من الوكالات السياحية. وقد توصلنا إلى أن استخدام الأنترنت والمواقع الإلكترونية يمكّن من الوكالات السياحية من تحسين تنافسيتها، كما أنه أدى إعادة هيكلة النشاط السياحي وتقليل دور الوساطة السياحية مما يحمى على الوكالات السياحية تفعيل حضورها الإلكتروني وزيادة استثماراتها في هذا المجال.

الكلمات المفتاحية: الأنترنت، الموقع الإلكتروني، النشاط السياحي، التنافسية، الوكالات السياحية.
Since its limited beginnings as a communication tool for use by scientists and academicians, the Internet has grown in a very rapid way in terms of both size and usage. While the growth of the Internet has already had an impact upon most sectors of the economy, for example, Services, banking, manufacturing, healthcare, and education, it is within Tourism that the most significant impact of the Internet is likely to be experienced. The deployment of Internet in Tourism activities is no more a choice for enterprises but a necessity.

Internet and Tourism fit perfectly together (Rival, 2005, p. 118); First, tourism is based on information and ideas exchange and Internet is the best enabler of information exchange, tourism process is totally immaterial starting with information searching, booking, payment and the provided services during the trip. Tourism is an international industry and the use of Internet could lift all time and space barriers, serving the exportation of tourism products through the world wide web.

In this research we'll try to examine four major research questions:
- To what extent and for what purposes do tourism enterprises utilize Internet,
- Is the role of travel agencies threatened by the emergence of E-tourism,
- What impact could the Informative use of Internet have on the competitiveness of travel agencies in Algeria,
- What impact could the Transactional use of Internet have on the competitiveness of travel agencies in Algeria.

As for the methodology adopted in carrying out this research, we start with the theoretical part speaking about tourism and E-tourism, while the empiric part is based on conducting a survey.

1 - Conceptual Framework:

1 – 1 Internet main uses in tourism enterprises: Internet can be used in different ways in enterprises, The two main uses of Internet in tourism enterprises are the informative use through Web sites, and the transactional use via e-commerce.

1. Web sites:

Definition: Web sites are virtual locations on the web, containing several subjects or company related webpages and data files accessible through a browser. Each web site has its unique web address which can be reached through an internet connection. The front page of the web site is the homepage, it contains hyperlinks to other pages (businessdictionary.com).

There are two main types of web sites, Static and dynamic web sites:
- Static website contains Web pages with fixed content. Each page is coded in HTML and displays the same information to every visitor. Static sites are the most basic type of website and are the easiest to create. Unlike dynamic websites, they do not require any Web programming or database design. A static site can be built by simply creating a few HTML pages and publishing them to a Web server.

- Dynamic websites are more functional and interactive, they can give the website owner the ability to simply update and add new content and information to the site, and enable clients or users to upload documents.

- **Web site importance**: The web site can play many major roles in the firm’s strategy. It can function as an information provider and/or as transactions enabler and new customers’ attractor.

- Providing information via a web site can help customers as they make decisions concerning what product brand, type and price they may wish to purchase. By providing information effectively, firms can help create and develop appropriate positioning and brand images for their products and services among targeted costumer groups in both B2B and B2C markets (MADILL and NEILSON, 2010, pp.489-507).

- Enabling transaction: the web site can be a very useful channel to sell goods and services online, but companies have to secure their electronic transactions and protect customer’s data from web hackers.

- Attracting new customers: A well designed and rich web site can attract new customers to the firm even customers who were out of reach using traditional channels.

- **Characteristics of a good web site:**

  To pull traffic to the web site, it is recommended for web sites designers to respect the following characteristics:

- The content should make sense to users, and there should be enough accurate and useful information for users.

- Design: Visual design characteristics include five aspects which contribute to the enhancement of the websites appearance. These aspects are: page layout, navigation, consistency, embedding pictures or flashes, and using appropriate colors.

- Readability: The designer should make the website readable for users.

- Usability: The well-structured web site is the one that is easy to manipulate and navigate and easy to retrieve through linking it with search engines.
- Reliability and commitment: Depending on the ability of the web site’s owner to keep his promises and respect schedules.
- Security and privacy protection: The web site’s users should be protected from any abuses or loses and their personal data have to be covered.

2. E-Commerce:

Electronic commerce is the use of electronic devices such as the Electronic data interchange and/or Internet to exchange information and to perform online activities and transactions.

E-commerce includes a large set of functions, such as the exchange of digital data, electronic funds transfers, electronic stock exchange activities, commercial auctions, co-operative design and engineering, electronic bidding, direct consumer sales, and after-sale services. (L. Lefebvre, E. Lefebvre, 2002, 313–323)

**Effects of conducting E-commerce on competitiveness:** Internet based E-commerce plays a significant role in promoting enterprises’ value and reducing costs, the main advantages of E-commerce are the followings (A. Gunasekaran et al., 2002, 185–197):

- shorten procurement cycles through the use of on-line catalogues, ordering, and payment;
- cut costs on both stock and manufactured part through competitive bidding;
- reduce development cycles and accelerate time to market through collaborative engineering, product, and process design, regardless the location of participants;
- gain access to worldwide markets at a fraction of traditional costs;
- ensure that the product, marketing information, and prices are always up to date;
- significantly increase the speed of communication, especially international communication;

-- Extensively reduce purchasing and production cycles;
- reduce the cost of communications directly (E-mail and EDI save on postage) and speed up communication can reduce inventory and related inventory and purchasing costs;
- promote closer relationship with customers and suppliers;
- provide a quick and easy way of exchanging information about the company and its products internally and externally;
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- take advantage of alternative sales channels and tap new markets or niche markets.
- Extended hours of work;
- Customization of products and services

By adopting Internet based E-commerce, Enterprises could take advantage and gain plus value.

**Barriers and limitations of E-commerce:** According to some studies (Walczuch et al pp. 561–572) the primary barriers of E-commerce adoption appear to be start-up costs, unfamiliarity with the web and lack of guidance about how to start the electronic process and security hazards.

In addition to these barriers we can add some other limitations such as lack of universal standards for quality, security and reliability, the telecommunication infrastructure is weak and bandwidth is insufficient in developing countries, the need to provide special web servers and special automated warehouses, security and privacy risks, and the lack of trust in E-sellers and faceless transactions;

**I.2 Travel Agencies in the era of Internet and E-commerce:**

Travel agencies are a part of tourism supply chain which includes the producers, the global distribution systems and intermediaries.

- **Tourism producers** are destinations, hotels, transport companies—airlines, railways, shipping lines, rental cars.
- **Global distribution systems** (GDS), have been originally created by the airlines companies to keep track of flight schedules, availability and prices, and to transform their reservation and distribution systems from cost to profit centers. The GDS have made available their proprietary internal reservation systems to the travel agencies worldwide.
- **Tourism intermediaries**: are Tour operators and Travel agencies. 
  - Tour operators, whose specific role is combining tour and travel components to create a package holiday. They advertise and produce brochures to promote their products, holidays and itineraries.
  - Travel agencies, which distribute the different products (from services providers and tour operators) to the consumer.

Travel agencies play a prominent role in tourism industry before the introduction of internet, the consumers (travelers) could not contact the producers to check the availabilities in planes and hotels directly, they have to pass through the travel agency and pay commissions. Suppliers also have to be
connected to global distribution systems to be visible to the market. as shown in figure 1 below:

Figure 1 : Tourism industry before Internet according to (Longhi,2008):

After the wide spread of internet in all economic sectors, and the deployment of the world wide web in tourism, this sector has been totally restructured: the intermediation has been disintermediated, E-tourism has emerged permitting closer interaction between tourism suppliers and consumers.

The disintermediation of tourism distribution: Disintermediation refers to the removal of intermediaries in tourism supply chain with increased consumer self service by searching, planning and booking travel himself online without the need of middle man aid.

So suppliers interact directly online with customers via their own web sites. and this may affect the role of travel agencies.

In table1 below, we’ll cite the most remarkable arguments for and against disintermediation of the tourism distribution channel:

Table 1: Arguments supporting and disproving tourism disintermediation according to (Buhalis,p.13)
<table>
<thead>
<tr>
<th>Arguments supporting disintermediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Travel agencies add little value to the tourism product, as they primarily act as booking offices.</td>
</tr>
<tr>
<td>✓ Travel agencies merely manage information and undertake reservations</td>
</tr>
<tr>
<td>✓ Travel agencies are biased, in favor of principals who offer override commissions and in-house partners.</td>
</tr>
<tr>
<td>✓ Experienced travelers are much more knowledgeable and could organize their travels and vacations on their own.</td>
</tr>
<tr>
<td>✓ Visiting travel agencies is inconvenient, time consuming and restricted to office hours.</td>
</tr>
<tr>
<td>✓ Commissions to travel agencies increase the total price of travel products ultimately.</td>
</tr>
<tr>
<td>✓ Personnel in travel agencies are often inadequately trained and experienced.</td>
</tr>
<tr>
<td>✓ There is an increase of independent holidays and a decrease of package holidays.</td>
</tr>
<tr>
<td>✓ Technology enables consumers to undertake most functions from the convenience of their armchair.</td>
</tr>
<tr>
<td>✓ Electronic travel intermediaries offer a great flexibility and more choice.</td>
</tr>
<tr>
<td>✓ The re-engineering of the tourism industry (e.g. electronic ticketing; now frills airlines.</td>
</tr>
<tr>
<td>✓ airline commission capping; loyalty schemes) facilitates disintermediation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arguments disproving disintermediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Travel agencies are professional travel advisers and they offer valuable services and advice.</td>
</tr>
<tr>
<td>✗ Travel agencies use expertise to save time for consumers.</td>
</tr>
<tr>
<td>✗ Technology is difficult to use and expensive to acquire for individuals.</td>
</tr>
<tr>
<td>✗ A large part of the market is computer illiterate.</td>
</tr>
<tr>
<td>✗ The more complex computers and the Internet become, the more people need experts to use them.</td>
</tr>
<tr>
<td>✗ Travel agencies offer free counselling services and add value by giving advice.</td>
</tr>
<tr>
<td>✗ Electronic intermediaries primarily serve the business market and are more expensive.</td>
</tr>
<tr>
<td>✗ Travel agencies can achieve better prices through the right channels and deals.</td>
</tr>
<tr>
<td>✗ Travel agencies offer a human touch and a human interface with the industry</td>
</tr>
<tr>
<td>✗ Travel agencies reduce the insecurity of travel, as they are responsible for all arrangements</td>
</tr>
<tr>
<td>✗ Travel agencies can offer better prices by buying in bulk or through consolidators</td>
</tr>
<tr>
<td>✗ Internet transactions are not secured and reliable yet</td>
</tr>
</tbody>
</table>
In order to survive, Travel agencies will have to reinvent themselves in order to adapt to the new Internet age, being subject of transformations in all areas of activity from ticketing to information management. Their products have to be valuable, distinctive and their services during and after transactions have to be well performed.

I.3 The emergence of E-Tourism: The use of internet and E-commerce in tourism has a great impact on this industry, which has been transformed into electronic tourism.

E-tourism reflects the digitisation of all processes and value chains in the tourism, travel, hospitality and catering industries.

By using electronic means, tourism enterprises gain distinct advantages in cost reduction, revenue growth, marketing research, database development, and customer retention (Buhalis, 2008, p19).

Reaching worldwide customers in a cost effective way, and effectively manage relationships with customers, eliminating the physical and time barriers.

E-tourism allows suppliers to customize their offers and directly selling them to consumers, it enables producers also to automate a large set of processes such as information searching, booking, selling, and paying.

Consumers also benefit from E-tourism, through their PC’s or laptops screens:
- They can get information from suppliers’ web sites and specialized portals such as Booking.com, Tripadvisor or Trivago.com,
- Compare offers and select the best one in terms of prices and quality,
- They can easily book Online in hotels, airlines and car rental services.
- They can also participate in the creation of trips and vacations by interacting with suppliers.
- They are able to perform Electronic payment via Their credit cards, electronic checks, or using digital cash.

In E-tourism the structure, relationships and interaction between tourism actors has been revolutionised as shown in the following figure.

Figure 2: The tourism industry in the age of E-tourism according to (WP3-guide-etourisme)
The new tourism structure gives consumers more choices; they can buy their needed products directly from the producers using web sites such as buying an electronic airline ticket from the web site of Ryanair or Easy jet company. They can also buy their products dealing with intermediaries such as travel agencies.

**Proportion of E-tourism in global tourism:**

E-tourism has gained place in the global tourism and here are some statistics *(Euro monitor international, 2014)*:

- Global online travel sales accounted for US$590 billion 2013, 25% of total sales. Air online sales accounted for US$360 billion, 46% of total air travel sales in 2013.
- Travel accommodation amounted to US$164 billion, with a 23% penetration rate.

**Situation of E-Tourism in Algeria:** In Algeria, the situation of tourism is paradoxical; tourism natural potentials are huge and varied but tourism infrastructures are weak as far as accommodation capacity, hotels, qualified human resources, transport...

The situation of e-commerce and e-tourism is not better due to the weakness of networks and shortcomings in Internet services and broadband connectivity.

The last statistics provided by the World Economic Forum in his annual report entitled “The Travel & Tourism Competitiveness Report 2015 (www3.weforum.org)” reflects the bad situation of both Tourism and Internet in this country.
The report on Travel & Tourism Competitiveness Index gives Algeria the score of 2.93 in a scale of 7 points which means the rank 123 out of 141 countries in the list.

In the same time the report on Information Technologies (ICT use for B2B transactions, Internet use for B2C transactions, Individuals using internet, Broadband internet, Mobile telephone, Mobile broadband, Mobile network coverage, Quality of electricity supply) gives Algeria 3.1 / 7 points which means the rank 105 out of 141 countries.

I.4 Competitiveness in Tourism enterprises: Corporate competitiveness is the ability to provide products and services as or more effectively and efficiently than the relevant competitors.

Competitiveness can be measured through the application of the following six items according to (N’emethn’e G’al, 2010, p.8):
- The improvement of enterprise’s turnover and net profit;
- Competitive offers and prices;
- Cost effectiveness;
- Quality of customer service;
- Flexible response to customer demands;
- Entry to new markets.

2. Methodological Framework:

1. The sample: The research has been aimed at revealing the impact of using Internet on the competitiveness of travel agencies. To get sufficient quantitative information on these variables. The chosen research method has been an Electronic survey questionnaire which we have made using Google Forms application. A list of 35 travel agencies questioned by sending them the survey using their Emails. The results were analysed with the SPSS (Statistical Package for Social Sciences) program to test the relationship between the study variables.

2. The independent variable: In this study the independent variable, Internet deployment, is measured through five scales Likert questions to verify the utilisation of websites and E-commerce in the travel agencies and these are the questions we have been using:

   The first indicator is: Using web sites for informative purposes, is measured through the following questions:
   - The travel agency is using its web site to Inform customers;
   - The travel agency uses its web site to advertise its offers and products;
   - The travel agency is using the web site to update information;
- The travel agency is using web sites to find new suppliers;
- The travel agency is using web sites to find new customers.
- The second indicator is: Using web sites for transactional purposes and E-tourism, is measured through the following questions:
  - In the travel agency, Orders and commands are managed online;
  - In the travel agency, buying and selling products happens through internet
  - Customers commands and orders are managed online;
  - Booking can be done online.

3. The dependent variable: is the competitiveness of travel agencies.
   All the answers are given scores (from 1 to 5) using Likert 5 scales as follows:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Study reliability: Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is most commonly used when we have multiple Likert questions in a questionnaire. It tells us if the scale is reliable.
   - Cronbach’s alpha of the independent variable (Internet use) which is composed of nine items.

Table 2: Reliability Statistics (SPSS Output)

<table>
<thead>
<tr>
<th>ReliabilityStatistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>0.866</td>
</tr>
</tbody>
</table>

The alpha coefficient for the nine items is 0.866 suggesting that the items have relatively high internal consistency. (Note that a reliability coefficient of 0.70 or higher is considered "acceptable").
   - Cronbach’s alpha of the dependent variable (competitiveness) which is composed of six items.

Table 3: Reliability Statistics (SPSS Output)

<table>
<thead>
<tr>
<th>ReliabilityStatistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>0.786</td>
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</tbody>
</table>
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The alpha coefficient for the nine items is .786 suggesting that the items have relatively high internal consistency.

5. Pearson’s correlation between study variables:

Pearson’s correlation is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale.

Table 4: Correlations (SPSS Output)

<table>
<thead>
<tr>
<th></th>
<th>Informative use Of Internet</th>
<th>Transactional use Of Internet</th>
<th>Competitiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informative Use of Internet</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.668**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Transactional Use of Internet</td>
<td>Pearson Correlation</td>
<td>.668**</td>
<td>1</td>
</tr>
<tr>
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<td>.000</td>
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</tr>
<tr>
<td>N</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

According to the correlation table above:

- The informative use of Internet through the travel agencies’ web sites is positively correlated with the competitiveness, Pearson correlation is 0.528 and Sig is 0.000 < 0.01.

- The transactional use of Internet through E-Commerce is positively correlated with the competitiveness, Pearson correlation is 0.676 and Sig is 0.000 < 0.01.

6. Linear regression: Linear regression is the next step up after correlation. It is used to what extent does the internet use influence the competitiveness of travel agencies through calculating the value of R square

Linear Regression between Informative use of Internet and Competitiveness:

Table 5: Regression (SPSS Output)

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
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<tr>
<td>-------</td>
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<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Informative use of Internet

Dependent Variable: Competitiveness
The table above indicates a positive relationship between Informative use of internet and the competitiveness in Travel agencies, the value of correlation coefficient \( R = 0.528 \), the value of \( R^2 = 0.279 \), this means that 27.9% of competitiveness is determined by the Informative use of Internet.

**Linear Regression between Transactional use of Internet and Competitiveness**

Table 6: Regression (SPSS Output)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.676 a</td>
<td>.456</td>
<td>.440</td>
<td>.60072</td>
</tr>
</tbody>
</table>

The table above indicates a positive relationship between Transactional use of internet and the competitiveness in Travel agencies, the value of correlation coefficient \( R = 0.676 \), the value of \( R^2 = 0.456 \), this means that 45.6% of competitiveness is determined by the Informative use of Internet.

**Conclusion:**

The use of internet in the Tourism industry has revolutionised the way of doing business and the management of relationships between producers and consumers

Disintermediation has emerged, threatening the role of travel agencies which are obliged to deploy Internet in their businesses by creating their own web sites, and conducting E-commerce.

Though this study we’ve found that using internet and web sites for informative purposes (to inform customers, to advertise the travel agencies offers and products and to find new suppliers and customers) has a positive impact on competitiveness by improving their turnover and profits, minimizing costs and gaining customers satisfaction.

The use of E-commerce, in travel agencies has a positive effect on competitiveness, it enables these enterprises to reach new markets and new customers and control their costs.

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