



# What type of online sales promotion do airline users prefer? Analysis of the moderating role of users' online experience level

¿Qué tipo de promoción de ventas online prefiere el usuario de aerolíneas? Análisis del efecto moderador del nivel de experiencia online

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## Abstract

The aim of the present research is to assess which type of online promotional incentive (monetary or non-monetary) is the most effective at achieving purchase intention for airline tickets, depending on the user's level of Internet experience (characterized as novice, moderate, or expert user). A Univariate General Linear Model is conducted, using data obtained from an experimental design with two levels: monetary online sales promotion and non-monetary online sales promotion. The findings indicate that in the case of acquiring an airline ticket online, monetary incentives are more appealing to novice Web users, while non-monetary incentives are preferred by expert users. The present study breaks new ground in that it examines, in the travel sector, the effectiveness of online sales promotions at prompting the individual to purchase online, in a comparative analysis based on online sales incentive type (monetary vs. non-monetary). The work contributes to the literature on the online travel sector by analyzing how the user's level of Web experience affects the effectiveness of each type of online sales promotion.

**Keywords:** Airlines, sales promotion, price discount, free gift, Internet experience.

## Resumen

El objetivo de esta investigación es conocer qué tipo de incentivo promocional online (monetario o no monetario) es el más eficaz para incrementar la intención de compra de billetes aéreos, dependiendo del nivel de experiencia con Internet que presente el usuario (novel, moderado o experto). A través de un Modelo Lineal General Univariante se analizan los datos obtenidos en un diseño experimental de dos niveles: Promoción de ventas online monetaria y no monetaria. Los hallazgos indican que en el caso de compra de billetes aéreos online, las promociones monetarias son más eficaces para los usuarios noveles, mientras que las no monetarias son preferidas por los usuarios expertos. El presente estudio profundiza en el conocimiento del efecto de las promociones de ventas online en el sector viajes analizando comparativamente su eficacia en función del tipo de incentivo ofrecido (monetario vs no monetario). A su vez, contribuye a la literatura sobre sector de los viajes online investigando como el nivel de experiencia de uso web afecta a la eficacia de cada tipo de promoción ofrecida.

**Palabras clave:** Aerolíneas, promoción de ventas, descuento en precio, regalo, experiencia con Internet.

## 1. Introduction

When browsing on the Internet it is now virtually impossible to avoid exposure to some type of online sales promotion or other. The tourism sector is among the most active in terms of online sales promotion. A study by Pan and Fesenmaier (2006) found that among the most popular search words used on websites related to tourist information were 'free', 'discount', and 'price'. The sector is one of the key drivers of growth in the volume of e-commerce (puromarketing.com, 2014) and is known to be one of the most active users of online advertising (IAB, 2014). At the same time, tourism, the travel sector, and transport are virtually inseparable, particularly in the case of international travel, with airlines carrying a greater annual average volume of passengers than any other type of transport (Iñiguez, Plumez & Latorre, 2014). Airline tickets have been found to be one of the most widely purchased tourism services on the Internet. According to data provided by IAB Spain

(<http://www.slideshare.net/retelur/estudio-sobre-inversin-publicitaria-en-medios-digitales-primer-semester-2012-iab-spain-oct12>), the transportation, travel, and tourism industry ranked fourth in advertising investment in display ads in 2012 (9.6%). Most of these are direct response campaigns that include monetary promotion within the advertisement (Admetrics, 2013). Ever since airlines began implementing the online booking system, the majority have also been offering added benefits such as short-term sales promotions (Law & Leung, 2000). Law and Leung (2000) found that at least 61% of the websites of 30 airlines offered site visitors some kind of promotional offer online. Authors assert that that offering this kind of benefit helps improve company reputation and online sales volumes (Law & Leung, 2000).

However, despite the popularity of online sales promotion, few studies have been identified that analyze how this communication tool works on the Internet when applied to the travel industry. Notable exceptions include the works of



Christou (2011), Liang and Chen (2012), Sigala (2013), and Zhao, Liu, Bi and Law (2014). The majority of these works focus on analyzing the impact of coupons on behavior, satisfaction, or perceived consumer value, and conclude that online coupons increase customer satisfaction, perceived value, and online purchase intention. However, no studies have been identified that analyze how online promotional tools other than coupons affect online purchase intention. At a general level, numerous studies have demonstrated that online consumers increasingly favor this type of communication tool. One example of this trend in the United States (US) is the increase in the number of homes using online coupons. In 2005, 12% of US homes used online coupons, and by 2011 this had risen to 22% (Forrester, 2012). Meanwhile over 60% of US consumers use online coupons for over 25% of their Internet purchases (Forrester, 2012).

Online sales promotion, then, may constitute a valid and appropriate tool for generating online sales, as it facilitates the purchase decision-making process and also helps increase client satisfaction (Zhao et al., 2014). In this regard, Bai and Law (2008) find that among the reasons users state for making travel purchases online are convenience (88.3%) and price discounts (78.3%). Wong and Law (2005) found that 90% of users would consider making a booking online if the website offered a minimum discount of 6%. Other work, such as that of Law and Leung (2000) proposes that Internet security, price range, and user-friendliness are the most critical factors when choosing to purchase airline tickets online. Therefore the analysis of how this promotional tool may be used to good effect on the Internet is of particular relevance, particularly since – as asserted by Chu (2001) –airline/travel websites must start, or continue, to offer bonus mileage, souvenirs, gifts, coupons and cash rebates to reward travelers and encourage them to use online booking and payment.

However, not all sales promotions are equally effective, and not all consumers respond in the same way to promotional stimuli on the Internet. The effectiveness of a sales promotion will depend on, among other variables, the particular type of sales promotion used (Park, Choi & Moon, 2013), as its hedonic or utilitarian nature will be a determining factor in the consumer's reactions and selection processes (Palazón & Delgado-Ballester, 2009). It is possible, therefore, that not all online sales promotions will deliver the same impressive results as those achieved to date by online coupons.

Additionally, it is also accepted that the consumer's past experience of using the Internet is a major moderator of their response, affecting their decision-making and processing of online communications stimuli (Frias, Rodríguez & Castañeda, 2008; Pan & Fesenmaier, 2006; Thorbjornsen & Supphellen, 2004). This raises the question of whether all Internet users, regardless of the extent of their online experience, will respond equally to the same online promotional stimulus regarding an airline ticket, or whether in fact their past experience of using the Internet will determine their response when exposed to one or other stimulus. The present research therefore seeks to analyze

which types of sales promotions (monetary vs. non-monetary) are the most effective at leading novice, moderate and expert Internet users to purchase an airline ticket online.

The structure of the work is as follows. First, a literature review is presented, covering the influence of Internet use on online user behavior and how this type of promotional incentive can differentially affect that behavior. Second, the methodology used in the study is explained, together with the results of the research, followed by the conclusions and implications that can be derived.

## 2. Literature review

The evolution of the Internet and online search tools has had an influence on the number of travelers using ICTs to plan their trips. These technologies provide the consumer with access to up-to-date information and the option of making their booking in a matter of seconds, minimizing many of the costs and disadvantages of traditional methods. However, before a consumer can take advantage of these online tools they must have at least some prior experience of using the Internet, with their level of experience or skill affecting how they browse online.

Past experience of using the Internet is known to be one of the key moderators of online behavior (Frias et al., 2008; Kaplanidou & Vogt, 2006; Thorbjornsen & Supphellen, 2004) as it has a major impact on the consumer's preferences and evaluations of brands and products (Castañeda, Frias, Muñoz-Leiva & Rodríguez, 2007; Nysveen, 2003), and above all, on the perceived risk associated with online purchasing (Nysveen, 2003). According to Reisenwitz, Iyer, Kuhlmeier and Eastman (2007), for users who are more experienced in using the Internet their perception of the risk associated with this technology is lower than for those with less experience, hence they will make more use of this particular medium (Kah, Vogt & MacKay, 2008). Furthermore, for those who have only recently started to use the Internet, it is likely that they will undertake online activities more for the sheer experience of it, while those with a longer history of use will do so with specific aims in mind (Novak, Hoffman & Yung, 2000; Pedersen & Nysveen, 2005). This latter group responds less to unexpected stimuli (Dahlén, 1998) and is less easily swayed by competing stimuli (Bruner & Kumar, 2000). This being the case, their way of evaluating and processing information will be duly affected and this, in turn, will influence their purchase intention (Thorbjornsen & Supphellen, 2004). In this regard, Pedersen and Nysveen (2005) found that past experience of using the Internet had a direct influence on purchase intention. However, other authors consider that there is no such direct effect, but rather an indirect effect via attitudes towards the website and towards the advertisement (Bruner & Kumar, 2000).

This leads us to two key questions: Will novice, moderate and expert Web users present a different, or a similar, response when exposed to the same online sales promotion? And which type of online sales promotion is the most effective in each case?

Analyzing the findings emerging from academic research on these issues leads one to intuit that online sales promotion

will not affect novice, moderate and expert users in the same way, given its positive effect on online purchase intention, which is attributed to the fact that it reduces the perceived risk associated with using the Internet (So, Wong & Sculli, 2005). It is logical to assume, therefore, that the promotion will have a differential effect, depending on the level of risk perceived by the user.

Meanwhile, some authors assert that the effectiveness of a sales promotion depends on the type of benefit it offers (Mittal & Sethi, 2011). That is to say, each type of sales promotion is capable of satisfying different needs, as each one delivers a different benefit (Palazón & Delgado-Ballester, 2009; Hu et al., 2010). Such benefits may be utilitarian in nature or hedonic (Chandon, Wansink & Laurent, 2000). While the former help the consumer to maximize the utility, efficiency or value-for-money of their purchase, the latter provide intrinsic motivations such as fun, entertainment or self-esteem. Each type of sales promotion provides one or more of these benefits, although typically those that are monetary in nature or are based on price tend to deliver utilitarian benefits, while non-monetary promotions tend to provide hedonic benefits (Chandon et al., 2000).

The literature covering traditional media finds that monetary incentives are the more appropriate of the two approaches when the objectives in question are conative in nature (Park et al., 2013), except when the individual does not feel the need to justify their choice, in which case hedonic incentives are more efficient (Palazón & Delgado-Ballester, 2009). Monetary incentives, in the main, lead consumers to buy faster, buy more, and spend more, while the non-monetary type is more effective at encouraging consumers to try out the product for the first time (Mittal & Sethi, 2011). At the same time, it is important to note that, in Spain, according to the study undertaken by IAB Spain (2012) price is one of the determining factors for Spanish consumers in purchasing an airline ticket. It is therefore possible that, in the case of this product category, sales promotions based on monetary incentives will be particularly effective at triggering purchases.

On the other hand, according to Prospect Theory (Kahneman & Tversky, 1984), each kind of promotional incentive is assimilated by the consumer as a loss or a gain. Monetary sales promotions are generally seen as reducing losses, while non-monetary sales promotions are seen as gains (Diamond & Campbell, 1989). If novice Internet users perceive a greater risk in acquiring a product online than their expert counterparts, they are likely to prefer those sales promotions they regard as a reduction in the loss that the purchase will entail, as their sense of risk will decline. By contrast, expert and moderate Internet users will prefer those sales promotions they regard as an additional gain, as their confidence in their own ability to take decisions relating to online purchases is greater than that of the novices (Sánchez & Villarejo, 2004). This confidence enables them to dispense with the need to reduce the level of risk. However, as established by Han, Yoon and Cameron (2001), their need to put themselves to the test, to take on new challenges and to overcome them, will lead them to

prefer those sales promotions that are regarded as a gain and that consequently make them feel as if they have 'passed the test' and that they have the highest possible level of skill. In light of this, the following hypotheses are put forward:

**H1:** Among users exposed to a monetary online sales promotion, the less experience they have of the Internet, the greater their purchase intention regarding airline tickets.

**H2:** Among users exposed to a non-monetary online sales promotion, the greater their experience of the Internet, the greater their purchase intention regarding airline tickets.

### 3. Methodology

To test the hypotheses, an experimental design was carried out based on observing the behavior of subjects and implementing a computer-assisted survey. The independent variable was online sales promotion type (discount vs. gift).

Due to the particular choice of service (airline ticket), it was decided that the fieldwork should be conducted in two different geographical areas. The rationale for this was that the extent of subjects' prior knowledge of these categories could differ, depending on whether they came from provinces with large airports, small airports, or no airports; and this, in turn, could potentially affect their responses to the banner ad. To avoid this, the fieldwork was carried out in two locations – Madrid (home to Spain's largest airport) and Granada (the location of one of the lowest-ranking airports in Spain). In both instances the decision was informed by the volume of air passengers registered, according to the 2012 annual report of Spanish airport management company AENA (AENA, 2012).

The experiment itself was conducted at a number of Internet cafés that had been briefed previously on the process. For the purposes of the fieldwork, the research team contracted the services of an external company specializing in market research by means of personal surveys. Each of the interviewers was briefed in advance on the objectives of the research and the associated tasks. They were also assigned gender and age quotas that they had to respect during the data capturing process, so as to guarantee the representativeness of the sample, in line with the Spanish Internet user profile (bearing in mind that this medium has reached a penetration level of 57.6% in the Spanish population) (AIMC, 2012).

The interviewers were asked to build the sample by randomly stopping passers-by in the area surrounding the Internet cafés being used for the experiment. Once a subject was identified, before being invited to enter the café they were simply informed that they would be participating in a study by university researchers examining how people browse the Internet. Once inside, they were assigned a work station with a computer connected to a website with one of the two experimental treatments (that is, using one of two URLs), and they were invited to browse at leisure. The experiment was designed to match as closely as possible a real-life browsing situation; hence participants were left to choose how they wanted to browse and which pages within the site they wanted to visit. While visiting the



apparent *El Mundo* online newspaper, subjects were not aware that they were, in fact, browsing within an intranet. All the subjects participated freely without any type of incentive or subsequent compensation. After two minutes' browsing, one of the banner advertisements popped up. The display ad used was a layer banner that appeared in the upper right-hand corner of the screen and moved downwards in a straight line. Subjects were able to choose whether to simply close the banner or click on it. Eight

minutes after the banner appeared, whether the user had decided to click on it or not, an online questionnaire automatically appeared. This included the measures described in sections 3.2 and 4.1 and also covered the socio-demographic characteristics of the subject (that is, gender, age, income level, education level, and frequency of Internet use). The final sample comprised 450 people, most of whom (84%) had a monthly income of less than €1,500. The majority used the Internet several times a day (36.83%), or every day or almost every day (33.58%) (see Table 1).

**Table 1 - Statistical description of the sample**

		Sample	Spanish Internet user population
<b>GENDER</b>	Male	56.2%	55.3%
	Female	43.8%	44.7%
<b>AGE</b>	From 18 to 19	18.6%	11%
	From 20 to 44	64%	62%
	Over 45	18%	27%
<b>EMPLOYMENT STATUS</b>	Unemployed	6.0%	
	Student	47.0%	
	Employed	35.1%	
	Self-employed	7.3%	
	Housewife	2.2%	
	Retired	2.4%	
<b>EDUCATION</b>	Primary education only	6.1%	
	Secondary education	46.2%	
	Further education/diploma	19.1%	
	Degree	27.1%	
<b>MONTHLY INCOME</b>	No formal education	1.2%	
	Up to €499	56.7%	
	€500–€999	12.6%	
	€1,000–€1,499	15.0%	
	€1,500–€1,999	8.2%	
€2,000 and over	7.4%		

### 3.1. Brand selection and design of the promotional incentives

For the brand, it was decided that a very well-known brand should be selected for the experiment, so as to avoid possible bias in the results arising from consumer risk-aversion. The brand finally chosen was Iberia, a major European airline.

The incentive value was arrived-at by following the ratio – 20% to 50% off the service price – suggested by several authors (Nunes & Park, 2003; Tan & Chua, 2004). Once the monetary value had been established, the researchers selected incentives that they believed would be appealing to Internet users (due to a good match with the benefits users seek, be these monetary in nature, or non-monetary) and also in line with the service on offer. According to the

principle of compatibility (Tversky, Sattath & Slovic, 1988), complementarity between the chosen incentive and the service being promoted can affect user responses (Tversky et al., 1988; Palazón & Delgado-Ballester, 2009), making it important to select incentives that would be compatible with the service in terms of use. More specifically, a number of studies demonstrate that airline tickets and hotel accommodation are services that are typically purchased together (IAB Spain, 2012). By taking this approach the researchers hoped to maximize the chances of attracting the consumer's attention. The two specific incentives chosen for the experiment were therefore a discount of €120 on the flight (monetary sales promotion) and two free nights' accommodation with a national hotel chain (non-monetary sales promotion) (see figure 1 and 2).

**Figure 1 - Monetary promotional incentive banner**



This month, fly with us and you'll be on cloud nine ...  
A discount of up to €120\*  
\* on national flights  
More info

Figure 2 - Non-monetary promotional incentive banner



The researchers opted to use banners as the vehicle for conveying the promotional incentives to the experimental subjects and to place them on a news site. On this basis, the site finally chosen for the present study was that of the Spanish daily newspaper El Mundo ([www.elmundo.es](http://www.elmundo.es)), considered the leading digital daily in Spain.

As it was not possible to apply the experimental treatments to the real website of the electronic newspaper in question, an I.T. expert was briefed to create a Web application that could capture in real time the [elmundo.es](http://elmundo.es) website and link it to a dedicated URL on a server used for the purposes of the experiment. The Web application consisted of two frames; on one of these the real-time El Mundo webpage was uploaded, and on the other, ostensibly identical, page the promotional treatment was applied. By using this combination of frames it was possible to achieve the effect of the promotion appearing on the newspaper's actual website.

### 3.2 Pre-test

One of the pre-requisites that authors emphasize as needing to be verified a priori is that the selected service should not be perceived as either totally hedonic or utilitarian. Bearing in mind the Benefit Congruency Framework proposed by Chandon et al. (2000), it was important to control the effect of congruency between the service and the promotional incentives on the results obtained. The aim here was to avoid the congruence between the service and the promotional incentive having any influence on the results (Chandon et al., 2000; Nunes & Park, 2003). In accordance with the recommendations of Batra and Ahtola (1990), the nature of the service was measured in terms of its utilitarian and hedonic dimensions. Authors believe that consumers purchase goods and services and exhibit consumption behaviors for two basic reasons: (1) consummatory affective (hedonic) gratification (from sensory attributes); and (2) instrumental, utilitarian reasons concerned with "expectations of consequences" (of a means-ends variety, from functional and non-sensory attributes). In order to establish the hedonic/utilitarian components of the selected service (airline ticket) and of the incentive provided, a pre-test was conducted on 90 individuals who shared the same characteristics as the target group. The scale proposed by Batra and Ahtola (1990), and implemented by Chandon et al. (2000), was applied to measure the service's characteristics. This scale considers the items pertaining to the utilitarian component to be: 1. Practical/Impractical; 2. Essential/Non-essential; and those for the hedonic component: 1. Fun/Boring; 2. Pleasant/Unpleasant.

An index was determined by calculating the difference between the mean value of all utilitarian items and the mean of all hedonic items. A negative index score means

that the evaluation of the product is primarily hedonic, while if the index score is positive the product is qualified as utilitarian. The index obtained for the service 'airline ticket' was -0.1271, indicating that its utilitarian and hedonic elements were of similar entity despite the hedonic component seemingly being dominant.

The researchers took advantage of this same pre-test to ensure that the non-monetary sales promotion was indeed perceived to have a monetary value of approximately this amount, by using a One Sample t-test with a reference value of 120. The results indicated that there were no significant differences as regards the perception of a value of €120 for the non-monetary promotion (Non-Monetary:  $p > 0.5$ ).

### 3.3 Measures

To measure buying behavior, purchase intention was used, on a Likert-type scale from 1-7, based on the statement: I intend to purchase an Iberia-branded product the next time I contract a flight. This approach to measuring buying behavior has been extensively used by other researchers, as a good approximation of real online behavior (Chatterjee & McGinnis, 2010).

To measure Web experience, a combination of different objective measures (a priori variables) was chosen. Firstly, subjects were asked a series of questions regarding the number of hours per week spent browsing the Web, the frequency of Internet use, and the type of online tools used. The categories for each of these variables were chosen on the basis of those established by the Spanish Association of Communication Media Research in their reports entitled 'A General Study of Media' and 'Web User Survey'. Secondly, immediately following the experiment, subjects were asked to find the answer to the following question: What is the diameter of a CD? They were allowed to use any online tools and resources they wished - search engines, websites, and so on - and were given a maximum of six minutes for the task (a posteriori variable). In line with the recommendations of Yun and Lee (2001), the time (in seconds) that each individual took to find the correct response was taken as indicative of their level of skill in using the Internet. Using this approach, a new variable labeled 'Skill' was created, which captured how many seconds the subject had taken to provide a response to the question (see Table 2).

Table 2 - Descriptive statistics for the skill test

Test passed	Average (seconds)	n
No	161.35	54 (12.3%)
Yes	31.90	391 (87.7%)
n		445

Meanwhile, as various studies have demonstrated that brand familiarity and promotion proneness can influence



the results achieved by a sales promotion, the researchers decided to control these variables so as to ensure that there were no differences in the composition of the experimental groups. The 'brand familiarity' variable was measured using an adapted version of the scale proposed by Gefen (2000), consisting of a metric scale with a single-item Likert rating of 1-7: How familiar do you consider yourself to be with purchasing Iberia plane tickets?

To measure promotion-proneness the present study used the scale of general promotion-proneness proposed by Lichtenstein, Ridgway and Netemeyer (1993): I have a favorite brand, but most of the time I buy the brand that's on special offer; one should try to buy the brand that's on special offer; I am more likely to buy brands that are on special offer than those that are not; compared to most people, I am more likely to buy brands that are on special offer.

#### 4. Results

##### 4.1 Analysis of the psychometric properties of the scales

In order to test the proposed hypotheses it was necessary to first examine the psychometric properties (validity and reliability) of the multi-item measurement scales used, with a view to calculating an indicative variable as each individual's average scoring for each item on the scale. 'Promotion-proneness' scale had sound psychometric properties. All the parameters were significant, and composite reliability, variance extracted and Cronbach's alpha were all above the recommended values. The goodness-of-fit indicators were also within the recommended limits (Hair, Black, Babin & Anderson, 2010).

##### 4.2 Manipulation check and classification of users by extent of experience in Internet use

Prior to testing the hypotheses we tested to check whether, in the sample, the monetary value associated with both incentives was perceived to be the same, namely €120. Following the procedure applied by Nunes and Park (2003), as in the pre-test, we carried out a One Sample t-test, the results showing that there were no differences in the perceived value of the two incentives ( $t: -1.81; p > 0.05$ ).

The two groups of experimental subjects were distributed homogeneously both in terms of their composition and also their size (monetary incentive, 230 individuals; non-monetary incentive, 220 individuals). Using the Kruskal-Wallis test it was also shown that there were no significant differences between the two groups as regards the key socio-demographic variables (gender and age) used in calculating the quotas ( $p > 0.05$ ).

Prior to testing the hypotheses the researchers also checked that there were no differences between the two sample groups in terms of promotion-proneness and brand familiarity. The average promotion-proneness (discount: 3.89; free gift: 3.75) and brand familiarity (discount: 3.92; free gift: 3.82) of the two groups were fairly equal. Therefore, there were not found to be any significant differences in terms of the average obtained by the two groups in relation to promotion-proneness and brand familiarity (F-test,  $p > 0.10$ ).

Finally, we used a multidimensional technique to classify individuals according to their objective experience of using the Internet. As demonstrated by earlier studies (Emmanouilides & Hammond, 2000), experience of the Internet is a phenomenon that cannot be measured from a one-dimensional perspective or with one single variable from among those mentioned earlier (see section 3.2 Measures) as, regardless of the variable selected, its explanatory capacity will not be sufficient to entirely capture the level of browsing skills a user may present. Subjects in the present study were therefore classified into Experts and Novices, depending on how many years' experience they had of using the Internet. Hence those who had started using this medium a relatively long time ago were considered experts for the purpose of the study, while those who had been using it for a shorter time were categorized as novices. However, this approach could present a scenario in which some individuals, despite having spent many years using the Internet, had only acquired the skills necessary to consult their emails; or, conversely, individuals who, despite their lesser experience, were skilled enough to use file transfer systems, create their own Web pages, and so on. Indeed Emmanouilides and Hammond (2000) concluded that time, expressed in years, correlates negatively to the number of times per month an individual uses the Internet. It was therefore important to capture Internet experience as a multidimensional phenomenon, explained by several variables. To achieve this we also carried out a hierarchical segmentation analysis using the measurements of experience (a priori and a posteriori) with a view to classifying the sample in terms of the true level of experience in using the Internet. The dependent variable to be explained was the Internet user's skill, captured using the previously-defined a posteriori measurement (time taken to find the answer to the question). The independent variables were those specified as a priori measurements of Web experience. The segmentation algorithm used was Automatic Interaction Detection (AID), which is considered appropriate for continuous dependent variables and nominal or ordinal independent variables. The analysis revealed three groups, namely: high level of experience (56.6%); moderate level of experience (31%); and low level of experience (12.4%). In general there were no significant differences between the three segments ( $p > 0.01$ ) as regards the socio-demographic characteristics (gender, age, occupation and monthly income).

Segment 1 (low level of experience), labeled 'novice users', is characterized by individuals who did not achieve the correct answer to the question, who browse online for fewer than 10 hours per week, and who use only one or two applications - usually email only, or email and the Web. This group represented 12.4% of the sample.

Segment 2 (moderate level of experience), labeled 'moderate users', is characterized by individuals who arrived at the correct answer to the question in a mean of 37 seconds, although there was significant variance of around 30 seconds. As with the previous group, they browse for fewer than 10 hours per week in total, although they go online several times in this period. This group represented 31% of our sample.

Segment 3 (high level of experience), denominated 'expert users', is characterized by individuals who found the correct answer in the lowest average time of the three groups, at around 30 seconds. They browse online for over 10 hours per week, using the Web several times a day or every day, and unlike the other two groups they use more specialist services such as file transfer or IP calls. This segment represented 56.6% of the sample.

**4.2 Testing the hypotheses**

To test the proposed hypotheses a univariate general linear model was applied, using online purchase intention (PI) as

the dependent variable and sales promotion type (SPT) and level of user Web experience (WE) as independent variables:

$$PI = \beta_1 + \beta_2SPT + \beta_3WE + \beta_4(SPT*WE)$$

Prior to analysis the statistical assumptions behind this type of model were checked to ensure they were fulfilled (normality and heteroskedasticity).

The results revealed that the main effects of Web experience and promotion type were not significant ( $F_{SPT}: 0.034 p_{SPT} > 0.05$ ;  $F_{WE}: 0.19 p_{WE} > 0.05$ ) (see Table 3).

**Table 3 - ANOVA Results**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Intercept	5770.46	1	5770.47	1643.19	0.00
Sales promotion type	0.12	1	0.12	0.03	0.85
Web experience	1.39	2	0.69	0.19	0.82
Web experience *Sales promotion type	28.95	2	14.47	4.12	0.01
Error	1541.65	439	3.51		
Total	5770.47	1	5770.47	1643.19	0.00
Corrected Total	0.12	1	0.12	0.03	0.85

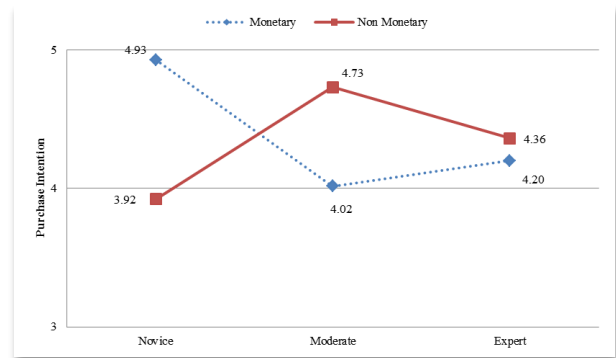
Leaving aside Web experience, the two types of online sales promotion achieved very similar average purchase intention values ( $PI_{Monetary}: 4.23$ ;  $PI_{Non-Monetary}: 4.43$ ). The same occurred for Web experience ( $PI_{Novice}: 4.43$ ;  $PI_{Moderate}: 4.40$ ;  $PI_{Expert}: 4.28$ ). However, the interaction effect between promotion type and Web experience on purchase intention was significant ( $F: 4.12$ ;  $p=0.01$ ) (see Table 3). Depending on their level of Web experience, users responded better to monetary or non-monetary online sales promotions. When exposed to a monetary online promotion, novice users presented a purchase intention that was significantly higher ( $mean_{PI_{Novice}}: 4.93$ ) than that of both moderate users ( $mean_{PI_{Moderate}}: 4.02$ ) and expert users ( $mean_{PI_{Expert}}: 4.20$ ). Hypothesis H1 therefore finds support.

Meanwhile moderate users ( $mean_{PI_{Moderate}}: 4.73$ ) and experts ( $mean_{PI_{Expert}}: 4.36$ ) presented a significantly higher purchase intention than novice users ( $mean_{PI_{Novice}}: 3.93$ ) when exposed to a non-monetary online sales promotion. Hypothesis H2 therefore also finds support.

When exposed to a monetary online sales promotion, moderate users presented the lowest purchase intention of all three groups. However, these users presented the greatest purchase intention of the three groups in the case of non-monetary online sales promotions.

In summary, then, we can say that monetary online sales promotion is the most effective approach for stimulating novice Internet users to make an online purchase. By contrast, for moderate Web users, non-monetary online sales promotion is the most effective, while for expert users there appears to be no difference in the effectiveness of monetary and non-monetary online sales promotions. To check this we undertook a Student's t-test, the results indicating that there were no differences in purchase intention among expert users when exposed to monetary and non-monetary online promotions ( $t: -0.71$ ;  $p > 0.05$ ) (see Figure 3).

**Figure 3 - Online purchase intention (promotion type x Internet experience)**



Therefore the most effective online sales promotions for generating purchase intention are monetary promotions aimed at novice Web users, and non-monetary promotions targeted at users with a moderate level of online experience.

**5. Conclusions and Implications**

The present work seeks to provide insights into online promotional effectiveness in the airline ticket sector. This service is considered by many to be one of the most key factors in tourism development; its study is thus of major importance. Identifying the most suitable promotional strategy for airlines will help them to improve the efficiency of their communications and achieve increased profits.

The findings derived from the present work lead us to conclude that online sales promotion is an effective tool for achieving online purchasing in the airline sector, thus confirming the findings of earlier studies (So et al., 2005). However, the user's level of past Internet experience alone cannot influence the online purchase intention directly. This result is congruent with that obtained by Bruner and Kumar (2000) but contradicts the findings of Pedersen and



Nysveen (2005). Nor does online sales promotion type have a direct influence on online purchase intention. The results obtained regarding acquisition of airline tickets online do not enable the results of studies into traditional media to be corroborated, as monetary incentives are not always better at incentivizing online purchasing for this type of product, but rather the purchase will depend on the characteristics of the consumer in question and, more specifically, on their experience of using the Internet.

The findings of the present work demonstrate that when the airline is seeking, via its online promotional campaign, to increase volumes of online sales, the most effective type of online sales promotion is that which is monetary in nature and designed for novice users of the Internet. However, for those users with a moderate level of Internet experience, online sales promotions that are non-monetary are the most influential, while for experts in the use of the Internet, the two types of incentives appear to be equally effective. Therefore, despite the findings of earlier studies on the acquisition of airline tickets online, which assert that the principal motive for acquisition is price (IAB Spain, 2012), the persuasion power of a price-based online sales promotion will vary, depending on the extent of the consumer's Internet experience. According to our results, the less experience of the Internet the user has, the more important or relevant the discount will be, in terms of encouraging them to acquire the airline ticket.

Our finding that there is overall preference for monetary online sales promotions is congruent with the work of Chandon et al. (2000). These authors submit that when the product is utilitarian in nature – as is the case here – the consumer will place greater importance on the utilitarian benefits derived from the sales promotion and hence will prefer those sales promotions that deliver this type of benefit. It should be borne in mind that the incentives offered in the present work were compatible and congruent with the chosen product, and thus the findings can be said to be in line with the compatibility principle (Tversky et al., 1988) that was later demonstrated by Palazón and Delgado-Ballester (2009) for traditional media.

On the other hand, and in keeping with the work of Dahlén (1998), it has been demonstrated that novice users of the Internet are more susceptible to online marketing than expert users in terms of being driven to make online purchases. It is highly likely that this result is due to what is established under Optimal Stimulation Level Theory (Steenkamp & Baumgartner, 1992). The degree of familiarity with the stimulus that expert Internet users have means that the stimulus is rendered 'routine' and does not arouse the level of surprise that it does among novice users, hence losing its effectiveness.

It can be concluded, then, that online sales promotions concerning an airline ticket are particularly appropriate when aimed at users who are relatively new to Internet browsing. For this group, monetary online sales promotions are the most appealing, while for those users with a moderate level of experience of the Internet, non-monetary online sales promotions will be the most effective. Lastly, it has been shown that both types of online sales promotion

are equally effective for expert users of the Internet. As outlined in the Literature Review, it may be that these effects are due to the way in which information on each type of sales promotion is integrated into the product information. That is, these findings are congruent with Prospect Theory (Kahneman & Tversky, 1984), which was subsequently demonstrated by Diamond and Campbell (1989).

In light of the above, it is recommended that when the airline is designing an online promotional campaign aimed at generating online sales, the potential consumers' degree of past experience in using the Internet should be analyzed. The different online sales promotions should be designed according to the level of experience. It is advisable to use non-monetary online sales promotions for expert Internet users or those with a moderate level of experience, and to use monetary online sales promotions exclusively for novice users.

In this respect, it is recommended that the simplest possible approach be taken when the online promotional campaign is aimed at novice Internet users. Specifically, animated banners are recommended, as they attract attention while being easy to interact with, thus helping the user to build their confidence in taking decisions online. The promotion also needs to be clear, concise and user-friendly, so as to ensure that the user feels safe and confident enough to acquire the product under promotion. By contrast, if the campaign is aimed at expert Internet users, more unusual or even challenging communication tools are required. This helps to put the skills of these users to the test, thus achieving greater involvement in the realization of the task and the acquisition of the promotional benefit. For expert users, then, the mechanics of the promotion need to be more complex and should include a skill-related component or some type of challenge, to enhance their desire to achieve the online incentive.

Finally, the recommended online promotional strategy for airlines is to start by launching monetary sales promotions, as these are found to achieve a higher level of purchase intention than non-monetary initiatives. As users build up their experience of using the Internet, of the airline website, and of the host website, communications should be channeled more towards non-monetary promotions that add a fun or leisure-related component to the acquisition of the airline ticket online.

As regards future lines of research that would be both relevant and of interest in this field, the following potential studies are worth noting:

- Analysis of how the particular vehicle employed to communicate the online sales promotion (such as the banner, the pop-up, layer, email, etc.) may affect online purchase intention.
- Analysis of how the user's past experience of the airline may affect their behavior relative to each type of online sales promotion.
- Analysis of whether promotional effectiveness depends on the type of service being promoted.

The possible limitations of the present study should also be noted. First, it may be that the subjects' general opinions



regarding banners as a communication vehicle are exercising some kind of moderating influence on the results obtained. Second, no consideration has been given to the effect that general opinions about the Internet and attitudes toward the website used in the experiment may have had on purchase intention. Finally, it is also important to consider that the present study is based on an analysis of online purchase intention as a measure of consumer behavior online; hence it is possible that the results obtained from the study are overestimated, compared to the real online behavior of Internet users when not subject to experimental conditions.

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