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## QUESTIONING THE ETHICS OF USING OPAQUE WEB PRACTICES AMONG LOW-COST AIRLINE CARRIERS

### Abstract

*Modest attention has been given to the subtle ethical issues of 'best practice' on the Internet, such as the exploitation of Web technologies to inhibit or avoid customer service. Increasingly, some firms are using Websites to create distance between themselves and their consumers in specific areas of their operations, while simultaneously developing excellence in sales transaction completion via self-service. This paper examines findings from a study on the self-service Websites of low-cost airline carriers (LCCs) in Ireland. The LCCs' adoption of technology has meant more efficient flight options and enhanced price transparency within the industry. Yet despite advances, a number of LCCs use their information systems in a conflicting manner when managing customer interactions. The 'opaque' Web practices many LCCs employ appear to be intentional in design and are contrary to the ethos of designing a 'good system'. Accordingly, the LCC sector has come under greater scrutiny for engaging in 'unfair practices' and violating consumer protection law. The paper notes the teaching of information systems development (ISD) and marketing assumes ethicality in their practice. While these business disciplines are central to the success of self-service Websites, there is a gap between the disciplines' theoretical ideals and their practice.*

*Keywords: Self-Service Websites, Information Systems, Marketing, Ethics, Low-Cost Carriers*

## 1 INTRODUCTION

Ethics on the Internet has been a widely debated topic covering issues that range from privacy to security to fraud. However, little attention has been written on more subtle issues of ‘best practice’, such as the exploitation of Web technologies to inhibit or avoid customer service. Increasingly some firms are using Websites to create distance between themselves and their consumers in specific areas of their operations, while simultaneously developing excellence in sales transaction completion via self-service. Low-cost carriers (LCCs), with their orientation toward lean, cost efficient operations have transformed the vision of air passenger transportation. The LCCs’ adoption of technology has meant more efficient flight options and enhanced price transparency within the industry. Yet despite these advances, a number of LCCs use their information systems in a conflicting manner when managing customer interactions.

## 2 DEREGULATION AND THE ADVENT OF THE LCC

The airline industry has evolved through three “waves of dramatic change and restructuring that heavily affected consumers and their travel decision making” (Rubin & Joy 2005: 215). The first wave of change was brought about by the progressive economic deregulation of the airline industry from the late 1970s<sup>1</sup> through to 2000s (Graham & Vowles 2006). Deregulation’s goal was to promote competition within the airline industry, as ‘legacy carriers’<sup>2</sup> had flourished through the benefit of national government regulation. Without restrictions on price and destinations, intense fare competition ensued, accompanied by industry expansion. These developments spurred airlines to seek improvements in efficiency through the hub-and-spoke route system, creating the notion of the ‘full service network carrier’ (FSNC)<sup>3</sup>. In the later half of the 1980s, the heightened competitive conditions of a post-deregulation industry brought about the second wave of change; many airlines folded, merged, or were acquired through leveraged buyouts (Wagner & Zubey 2005).

Consumers are currently experiencing the third wave of change, which some believe to be the most radical, as it involves changes to long-term aspects of the airline industry: competitive structure, ticket purchasing and route patterns (Rubin et al. 2005). This current wave of change is evident by the market power wielded by low-cost carriers (LCCs). Although, the emergence of LCCs would not have been possible without deregulation, liberalisation of the aviation industry does not sufficiently explain the important changes that have recently occurred in the air transport sector (Domanico 2007). Advances in technology have revolutionised the marketing, selling and procurement of tickets through the Internet, rather than through travel agencies. This innovation in direct electronic sales, although introduced by LCCs, is now widely used by the majority of airline carriers. Electronic ticketing, oriented toward advance purchase, has increased price transparency allowing for easier comparison among carriers. Finally, the shift in route patterns brought about by the emergence of LCCs, which typically operate on point-to-point routes, means inventory management is simplified by the absence of feeder routes required for the hub-and-spoke systems favoured by FSNCs (Hunter 2006). These changes have resulted in a sharper focus on operational costs, an area in which LCCs have excelled.

Southwest Airlines based in Dallas, Texas, commenced flight operations in 1971 with a strict focus on cost leadership; it is recognised for pioneering the low cost model, which has since been widely emulated (Alamdari & Fagan 2005). Some LCCs rigidly follow Southwest’s low-cost principles, while

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<sup>1</sup> Deregulation of the US airline industry occurred in 1978 followed by the United Kingdom (1987), Canada (1988), Australia (1990), the European Union (1992) and Japan (2000).

<sup>2</sup> Legacy carriers are the ‘traditional’ airlines that have been in existence since deregulation, such as American Airlines, Delta Airlines and United Airlines in the US; British Airways, Lufthansa, SAS in Europe.

<sup>3</sup> Airlines availing of hub-and-spoke route system are also referred to as either ‘network’ or ‘incumbent’ carriers.

others pursue differentiation strategies as well as undercutting competitors' fares. Variations in strategy aside, LCCs share a commitment to reducing unit costs, while simultaneously increasing output and productivity (Dobruszkes 2006). Among the analyses of LCCs, a common theme emerges: "the focus on a particular route length (short-haul), itinerary (non-stop flights) and customer type (price-sensitive)" (Shumsky 2006: 84). Successful LCCs "avoid airports with congested airspace, runways, and taxiways and also avoid expensive capital projects" (de Neufville 2006: 349). Avoiding congestion permits LCCs to minimise unproductive time in the air and on the ground, thereby cutting turnaround time to a minimum, meaning LCCs may achieve productivity that is more than 50% greater than that of the FSNCs (Warnock-Smith & Potter 2005). To reduce costs further, LCCs seek less expensive ground facilities where they use their space more intensely and so require less of it. Additional operational reductions are attributed to LCCs' lower pay scales and their preference for non-unionised labour forces. Consequently, the LCCs' healthy financial performance over FSNCs is attributed to improved cost savings rather than differences in revenue management practices.

The LCCs' impact on the airline industry is significant, as they "have not just changed airline ticket pricing, but also consumer price expectations" (Graham et al. 2006: 106). Consumers have become "highly responsive to price changes, and most choose the lowest fare available, regardless of the airline. With the ability of price-discriminating consumers to compare fares, online purchasing of airline tickets increasingly resembles buying commodities" (Rubin et al.: 222-223).

### **3 ANCILLARY REVENUES AND OPAQUE WEB PRACTICES**

In Europe, the low-cost sector has become highly successful and has attracted numerous entrants. As of late 2007, it is estimated there are 60 European LCCs in operation; although, it is worth noting an additional 48 'graveyard' LCCs no longer operate (Low Cost Airlines Europe 2007). European LCCs are growing 20% to 40% annually (Alamdari et al. 2005) and hold 33% of the overall market (de Neufville 2006). Between 1999 and 2006, European LCCs gained more than a quarter of the market (AEA 2006). The most important European LCCs are Ryanair, which has 31% share of the European low-cost sector, easyJet (26%), TUIfly ( $\approx 9\%$ ), Air Berlin ( $\approx 7\%$ ), and Aer Lingus (6%) (AEA 2006; AEA 2007). To bolster profit, LCCs have become adept at generating ancillary revenues, which are the à la carte services and features passengers may purchase before or during their travel experience. Ancillary revenue is an increasingly important financial component for LCCs. During the 2006-2007 financial year, Ryanair increased its ancillary revenues by 40% to 362 million, or 16% of their total revenue (AEA 2007). Ancillary revenues for easyJet increased by 32% in the first half of the 2007 financial year, reaching £77 million or 11% of their total revenue (AEA 2007).

The LCCs' adoption of technology, in areas such as electronic ticketing and dynamic pricing services has become an important component in offering consumers more efficient flight options and enhanced price transparency. Yet, it increasingly appears a number of LCC use their information systems in a conflicting manner when managing customer interactions, particularly when selling ancillary services and managing complaints. The Websites for many LCCs smoothly engage and facilitate customers through the self-service process to commit users to purchase tickets. However, once users move beyond the 'committal' point, after they have chosen where and when they wish to travel and received an initial quote, the Websites appear more opaque. It becomes problematic in navigating towards a 'real' final price, necessitating the users to side-step a series of options. The eccentricities of LCC pricing may mean an advertised flight for 5 may cost as much as 175, once the extra charges are calculated and the booking process is complete, resulting in consumers feeling deceived. Moreover, the Websites seem awkward and sluggish in facilitating customer complaints and concerns, and make it challenging for the users to contact the airlines. These difficulties and omissions are contrary to the ethos of designing a 'good system' to facilitate the full spectrum of customer service. It appears that in the LCCs' focused pursuit towards lean, cost efficient operations customer service has declined in importance, whereby the justification given for neglecting meaningful customer service (i.e. managing complaints and concerns) are the low fares they offer customers.

## 4 IS AND MARKETING BUSINESS IDEALS

Information systems have for many years been developed and implemented using structured or object-oriented methods. Both methods are based on a systems development life cycle that contains a number of stages, checkpoints and tasks. Information systems development involves systems analysis, systems design, construction and implementation as major stages that are facilitated with a range of techniques from process modelling to data modelling to object-oriented modelling (Constantine & Yourdon 1979; DeMarco 1979; Martin & Finkelstein 1981; OMG 1998). The critical importance of the user and their interaction with the computer system has been recognised and great effort has been expended to ensure the experience is engaging and productive. This area, known as human computer interaction (HCI), has a long held goal to improve the interaction between users and computer systems by making systems more usable and amenable to the users' needs.

The fields of ISD and HCI are taught to students with the aid of popular texts on virtually every IS/IT college programme with a universal supposition that a central objective of systems development is to maximise usability and deliver a satisfying user experience. An examination of widely used texts on the principles of Web design (Nielsen 1999; Krug 2000; Nielsen & Tahir 2001; Sklar 2006; Sharp, Rogers & Preece 2007) supports the hypothesis that IS professionals adopt a benign and moral posture in designing and developing IS. No advice or guidance was discovered that there exist design strategies or instructions that set out to inhibit customer response or impede interaction. The authors would argue that amongst some practitioners, the supposition that they adopt a considerate and user-centred approach is no longer a central tenet.

The essential premise of marketing is to develop ways to satisfy customer needs and wants more effectively and efficiently than the competition, as a means to achieving organisational success (Kotler & Levy 1969; Hunt 1976; Trustrum 1989). This management philosophy, also known as the marketing concept, clearly distinguishes between those firms which merely have forms of marketing, such as the presence of a marketing or customer service department, from those firms which are market-focused and customer-driven in implementing their strategies. Firms successfully employing the marketing concept pursue a delicate balance between satisfying customers' needs by creating more value, while simultaneously achieving organisational objectives by accruing profits.

An effective interaction between a buyer and seller may result in a satisfied customer, but to retain customers over the long-term means managing customer relationships consistently. In today's technology rich environment, marketers facilitate their individual interactions with customers through customer relationship management (CRM) processes (Payne & Frow 2005; Jayachandran, Sharma, Kaufman, & Raman 2005; Srinivasan & Moorman 2005). Other terms for CRM are relationship marketing, real-time marketing, and customer intimacy, which reflect CRM's strategic intent of focusing on satisfying individual customers meaningfully as well as profitably for the firm (Wagner et al. 2007; Antón, Camarero & Carrero 2007). Through the systematic combination of people, process and technology, CRM techniques facilitate in enabling firms to acquire and retain customers. Finding and acquiring customers costs firms money, but retaining customers is substantially more profitable than seeking fresh customers for new transactions. The average cost of acquiring new customers is five times more than servicing existing customers (Keaveney 1995). Furthermore, the marginal cost of servicing existing clients declines over time, whereas the cost of attracting new customers increases over time.

In CRM meaningfully satisfying customers refers to facilitating the full spectrum of customer interactions, including complaints and concerns. Marketers view customer complaints as opportunities for service recovery that can turn angry, disgruntled customers into loyal, vocal advocates for the firm. Good service recovery typically translates into higher sales than if all had gone well in the first place (Smith & Hasnas 1999). Poor service recovery is an indication that a firm lacks commitment and diligence, which along with trust and earned reputation are indispensable to establishing enduring relationships in service and dot-com businesses (Murphy Lacznik, & Wood 2007). Ultimately, poor

service recovery translates into lost customers that migrate, often permanently, to competing firms (Keaveney 1995). Because many firms handle customer complaints poorly, those firms that do succeed in offering excellent service recovery may secure an unrivalled source of competitive advantage (Antón et al. 2007).

## **5 SOCIAL RESPONSIBILITY AND BUSINESS ETHICS**

Increasingly, social responsibility is viewed not just as a good idea, but as good business practice, which increases efficiency and translates into positive financial performance. A recent study conducted by the investment bank Goldman Sachs (Rominger 2007) found socially responsible firms out-performed a global stock index by 25%, indicating a positive correlation between social responsibility and earnings. Consequently, socially responsible investing (SRI), also known as environmental, social and governance (ESG), is gaining in momentum (Cohen 2006). Investors are seeking firms, which express core values beyond financial objectives, such as environmental responsibility, fair employment practices, and robust corporate governance that incorporate codes of conduct that espouse principles of transparency, integrity and ethical behaviour.

To what extent could opaque Website practices be considered unethical and thus indicative of a firm's diminished social responsibility? In employing opaque practices, it could reasonably be argued LCCs are displaying a conflict in values, where the pursuit of strong institutional performance conflicts with addressing meaningful customer complaints and concerns in a transparent and responsive manner. At its most basic level, ethics are meant to "support justice, rights, and duties. [One wants] others to keep their promises and agreements, to obey the law and to fulfill their duties" (Tavani 2007: 64). Thus, if an airline fails to provide a reliable and transparent service by knowingly designing opaque features in their Websites, in the absence of contravening considerations, it is acting unethically.

## **6 RESEARCH APPROACH: HEURISTIC EVALUATION**

This study assesses the proposition that certain features of low cost carriers LCCs' Websites are problematic in two key respects: navigating past the committal point to booking completion, and dealing with non-sales related activities. A study was conducted to evaluate the usability and functional design of four LCC Websites operating out of the Republic of Ireland: Aer Arann, Aer Lingus, bmibaby and Ryanair. The methodology was based on heuristic evaluation (Sharp et al. 2007), a usability inspection technique that systematically assesses a user interface design (Nielsen 1994). The heuristics, customised to consider Web-specific problems, were based partly on Nielsen's set, the authors' knowledge of relevant issues, and ethical problems emerging from the sector (Alter 2003; ECC Network 2006). The study, conducted in July 2007, involved a group of six expert evaluators who examined the interfaces and judged their compliance with usability principles. The heuristics used were: aesthetic and minimalist design; navigation design; internal consistency; depth of navigation menu; completion of tasks; clarity of feature functionality; minimising the user's memory load; and helping users recognise, diagnose and recover from errors or unintended actions. Experts were also given guidelines for evaluating the heuristics. To judge the effectiveness of each Website, the heuristics were evaluated against typical functionality users would expect as part of an online, self-service Website, specifically: finding and booking flights; identifying a cheap flight; finding and establish the nature of the airline's contact details; and reporting an unpleasant experience. Evaluations were comprehensive and extensive; the following analysis highlights features of interest.

## 7 EVALUATION ANALYSIS

### 7.1 Booking a Flight: Browsing Destinations and Getting an Initial Quote

For casual browsing of possible destinations and when users wish to quickly identify the carrier's destinations, the LCCs offer a high degree of usability through advanced design features such as 'hub and spoke' route maps. This particular feature uses a visualisation technique that superbly assists users in quickly interpreting what would otherwise be complex, flat information. Each airline conformed to a highly similar implementation, yielding excellent usability.

Getting an initial quote is achieved by using the booking systems of all airlines, making the process of moving from a quote to a booking seamless. Experts agreed the LCC Websites afford a high level of usability, assisting the user complete the activity effectively. There are many design features that accelerate the process, from giving users available flights around the preferred date, offering the closest available dates and retaining user details during an interaction. Generally, the depth of navigation is low for all Websites, reducing the memory load for users and facilitating rapid completion of tasks. LCCs use similar mechanisms to implement the functionality of pricing a flight. List boxes are used: to select airport departure and destination; select dates; choose the number of passengers; and to select 'return' or 'one way'. Pop-up calendars are used by three of the four airlines. Some features that afford exceptional usability during pricing warrant special mention:

- All airlines use breadcrumb-like indicators to make visible to users the system's status.
- Aer Lingus allows users with flexible dates to experiment with available priced flights for a two week period around the preferred date, over two consecutive screens. bmibaby go one step further by showing the information on just one screen.
- Internal consistency for this functionality was excellent for Aer Lingus, bmibaby and Ryanair.

### 7.2 Completing a Reservation

Once a user has decided to proceed with the reservation, they pass what might be described as a 'committal point'. While getting a quote was, for the most part, a smooth and pleasant experience for users, navigating a course to completion is peppered with gunshot. In this activity, each LCC have design features that adversely affect usability and trust. There is significant uncertainty in relation to: what constitutes a 'final price'; establishing baggage charges; understanding taxes and fees; avoiding a plethora of levied 'services'; and the automatic imposition of what should be opt-in choices.

The LCCs are guilty of unclear pricing. Only bmibaby include taxes and charges. However, their taxes and charges appear high and are not explained. Despite reassuring users, on six consecutive screens, that 'all prices now include taxes, fees and charges', bmibaby apply a charge of 5 for credit card payment at the final screen. The other airlines deconstruct the quoted flight price from their taxes and charges even though most of these are unavoidable, ill defined and inconsistently levied. Carriers use an inventive array of terms to describe charges: taxes, levies, charges, fees, handling fees, airport charges and even 'September 11th Security Fee for each enplanement at a U.S. airport'. As an illustration, a 2.00 return flight on Aer Lingus becomes 75.44; while the final cost is still reasonable, the user is misled about the real cost of the flight.

Ryanair, to their credit, have a clear message on the booking screen informing users that flight costs do not include taxes and charges. No other airline is as explicit and clear. They also provide some degree of explanation of their charges. However, it is made available in a pop-up alert box as a graphics image rather than text. This last point is quite troubling; the design feature means a customer cannot print or even highlight and copy the charges. Elsewhere it is discovered that a 'Passenger Service Charge/Airport Tax' is "a charge made by the airport authority to an airline for the use of the

terminal, runway, emergency services, security facilities etc.” One would wonder how fair it is to publish prices for flights that do not include the use of an airport terminal.

Aer Arann also uses pop-up alert boxes, to display different fare types denoted as ‘E’, ‘K’, ‘O’, ‘V’, ‘W’ and so on. However, far from differentiating fare types they are in fact in almost all cases identical. In one interaction it was discovered the conditions for the various fare types were exactly the same. For users to understand the terms of each fare type they must open and close each ‘fare type’ separately making it nigh impossible to remember any distinction between them. Such lack of clarity in design camouflages the real nature of the flight for users.

All airlines apply card charges after quoting final or total prices. If card processors treat LCCs similarly, then some carriers must be misleading customers. Each LCC applies charges to the user in a different manner: Aer Arann charges per transaction; Aer Lingus charges per passenger; bmibaby charges a percentage of the total amount payable; and Ryanair charges for each passenger for each flight segment. Some airlines are careful to cite the charges reflect the cost to them of administering charges from credit card processors, not the actual charge that is passed on to users, others offer no explanation.

All airlines quote a price that states it is either ‘Final’ or ‘Total’ whereas, in actuality, it is neither. Aer Arann and Ryanair display flights quoting a ‘regular fare’, but upon flight selection, hefty ‘Taxes and Fees’ or ‘Taxes, Fees & Charges’ are added that then make up the ‘Total Cost of Flight’. bmibaby, once a selection of flight appears for chosen dates, a message states (as noted above) the calculated price to be ‘total price now including taxes, fees and charges’, but neglects to mention card charges, which are added later. Finally, Aer Lingus, under ‘Booking Help’, explains what ‘Price’ means by stating: “Price Total includes all relevant taxes and charges.” However, on the page after a flight is selected a final ‘TOTAL’ price is given that then includes a specified ‘Handling Fee’.

### **7.3 Frills or No Frills: Opt-in and Opt-out Fee-Based Services**

Another opaque feature is fee-based services, which customers must negotiate throughout the reservation process. Typically, the onus is placed on customers to opt-out of fee-based services. Most airlines are guilty of using this feature, which is well known among commercial Websites and by no means exclusive to the LCC industry. To illustrate: Aer Lingus, bmibaby and Ryanair make users opt-out of travel insurance; Aer Lingus and Aer Arann force users to opt-out of the receipt of ‘occasional emails’ and to receive ‘special offers’; and Ryanair requires passengers without luggage to opt-out of priority boarding.

The feature that violates the most heuristics during the analysis was the process of specifying baggage with Ryanair and whether the user wished them checked-in online or not. Requested to select the number of bags from the drop down box, no option is given to choose ‘0’ bags without selecting ‘Online Check-in/Priority Boarding’ for 6.00, thus it is an unavoidable charge. However, if this option is chosen, text instantaneously appears beneath the drop down box allowing the user to ‘Remove’ the choice the system has led them to select. Users would need to be highly vigilant to notice the manoeuvre. This feature is not just misleading or vague; it is an intentional design feature to propel users into paid-for ‘Online Check-in’. On the same screen a somewhat similar stratagem is used to induce users to take out insurance.

### **7.4 Finding Cheap Flights**

In the past, many consumers have found some advertised cheap fare to be ‘elusive’. All LCCs have headline offers, some inclusive of charges, others not, although it is generally unclear if card charges are included. This evaluation discovered that many advertised ‘cheap’ flights could not be completed as one expert put it “...in a reasonable way”. Others complained of having to repeat the same steps a



number of times. Using trial and error to secure some advertised cheap flight generally took a considerable amount and in certain cases the advertised cheap flight could not be found.

For the most part, the advertised offers of Aer Lingus could be found, which went as far as creating a Webpage telling users how to secure the flight. Aer Arann does not make life easy for the user trying to secure a cheap flight. On its homepage advertised 'Daily Specials' leads to the normal booking page, albeit with the cities pre-entered, but with absolutely no indication of how the advertised cheap flight might be bought. Some experts found actually pinning down Ryanair's many offers impossible. Since the departing airport from Ireland was not specified, not only did it require trial and error with dates, but users would have to speculate as to which airports was hosting the cheap flight. bmibaby users are asked to 'click here to view our cheap flights', in doing so users find a page stating all flights have 40% off, but from only certain UK airports. However on the homepage it clearly states there is a sale on all flights of up to 40% off with date restrictions.

### **7.5 General Enquiries and Giving Feedback**

For the most part, experts found the functionality of contacting an airline highly problematic. For three of the LCCs (Aer Arann, Aer Lingus and bmibaby), there is a contact link at the homepage. Aer Lingus have two links: one through the 'About Us' at the top of the homepage's navigation bar, and 'Contact Aer Lingus' in a lower sidebar navigation panel. Ryanair proved to be the most challenging in locating a 'Contact Us' or equivalent link, as there is no such link on the homepage. The experts reported greatly differing experiences in their attempts to find relevant contact information. As one expert observed "the user is forced to navigate blindly" to find contact details. Only two of the six experts actually found Ryanair's contact information within an acceptable timeframe of a few minutes. It requires deep navigation and a great deal of trial and error to find a page where contact information is given. A wholly confusing dynamically-changing horizontal navigation bar, and two 'Contact Us' links on the same page that leads to different Webpages, are amongst the design constructs that make it either exceptionally poorly designed or deliberately opaque. The heuristic that Websites should be designed so they are shallow rather than deep (Larson & Czerwinski 1998; Shneiderman & Plaisant 2004) is clearly violated in this instance.

### **7.6 The Nature of Contact Information**

The Office of the Director of Consumer Affairs (ODCA 2006) advises that online firms provide comprehensive contact information on a variety of pre-sales, sales and post-sales topics like reservations, technical support and customer relations. The LCCs studied here take markedly different approach to this guidance. For Irish reservation enquiries, Aer Arann, Aer Lingus and bmibaby provide a low cost number, while Ryanair refer users to premium-rated numbers charging 1.75 per minute. On Aer Lingus, the range of contact details for different countries varies widely. Technical support is not visible for Aer Arann or Aer Lingus, while bmibaby offer FAQs and Ryanair refer users to premium-rated numbers. Among the four airlines reviewed, Aer Arann provided, by far, the most complete contact information: an address, phone number, fax number and email address. Moreover, Aer Arann uniquely facilitated post-flight assistance by offering email addresses for feedback, customer relations and refund queries. For baggage handling, Aer Lingus offer low-cost phone support and, oddly on a different page, an email address. In the case of bmibaby, there are phone numbers and postal addresses for damaged and lost bags. Despite Aer Arann's otherwise excellent contacts page, no reference was found to a specific contact point for baggage enquiries. Ryanair supply telephone numbers for missing baggage enquiries at local rates. On a different page altogether, they provide a postal address and a fax number to which claims are made.

## 7.7 Reporting an Unpleasant Experience

Experts broadly agreed that Aer Arann provided the best mechanism if they wished to make a specific complaint through the contacts page. When consumers want to complain about an Aer Lingus flight, (i.e. post-flight assistance), they are asked to write to the nearest Aer Lingus office and to include a copy of their ticket or boarding card. No telephone numbers or email addresses are provided for post-flight assistance, which would appear as an unhelpful manner in which to process a complaint. A similar mechanism is provided by bmibaby, for customers using UK airports only. The Ryanair Website provides a list of FAQ links and through links to premium telephone numbers. Complaints are to be written in English and provide full flight details (e.g. dates and routes) and passenger names. A link was eventually found to a page where a fax number is given for post-flight assistance. According to Ryanair's charter, they respond to written complaints via email to the address provided at the time of reservation. Astonishingly, it is expected that ordinary consumers have access at home to a fax machine to submit a complaint while the airline uses the convenience of email in return. In light of the fact that the facilitation of complaints is made so difficult, Ryanair's claim on its Website to have the fewest complaints in the industry, rings somewhat hollow.

# 8 DISCUSSION

## 8.1 Design Strategies

The evaluation discovered LCCs smoothly engage customers through the self-service process until they commit to purchase tickets. Thereafter, once psychologically pledged, customers must endure a frustratingly opaque passage. LCCs regularly feature in the top ten of Google's Zeitgeist, as their Websites are extensively used and it is to be expected that 'good' design practices would be well understood by them. The deficit is not explained by Ogburn's cultural lag thesis, which proposes material culture generally advances more rapidly than nonmaterial culture. Thus, physical and operational systems first appear while ethics, philosophy and belief systems surface much later (Marshall 1999).

Certain LCC Website design strategies are not accidental. Excellence in design features that commit users to sales, contrasts radically with strangely unorthodox, poorly accessible or completely missing functionality in other areas. Some firms are deliberately using Web technologies to design out features one might ordinarily expect to find and to obfuscate or complicate others. Leading from this, the self-service channel itself aids firms in creating distance between themselves and customers, as it is indirect, faceless and cedes primacy to technology. Managers can build practices that would never be tolerated in businesses that have face-to-face or even telephone-based interaction with customers. Conversely, within LCCs, some IS/IT practitioners must be acutely aware they are guilty of, at the very least, sins of omission in IS design practice. Undoubtedly, specifications must clearly have been designed that incorporated management policies that would violate the first principle of the Software Engineering Code of Ethics and Professional Practice, which state that "software engineers shall act consistently with the public interest" (Quinn 2006). The notion of emancipatory ideals (Hirschheim & Klein 1994), once feted in the IS literature, finding a role in the design of low-cost airline Websites, appears to have found little resonance in this area of practice.

Perhaps collusion is not only a phenomenon between managers and developers. Have the sector succeeded in convincing customers that they must expect some level of pain and suffering in exchange for 'cheap flights'? If desensitised users are expectant of poor customer service, devaluation of the currency of language, little transparency, hidden costs, considerable effort, and intense wariness, then LCCs have achieved a remarkable relationship with their customers, and all of it enabled without the exchange of conversation.

## 8.2 Regulatory Scrutiny of Unfair and Misleading Practices

Hidden costs and the exclusion of charges that are unavoidable is becoming an increasingly contentious issue that has attracted the attention of several bodies. Ireland's National Consumer Agency (NCA) requires firms trading online to comply with the EC Distance Communication Regulations, 2001 and the European Communities E-Commerce Regulations, 2000. The NCA states "Web traders are required under both sets of regulations to provide certain information to the consumer prior to an order being placed. The on-site requirements include information on the geographical address of the retailer, how the consumer may correct errors while making an order, the tax inclusive price of the product, arrangements for payment and delivery, the right to cancel the order, etc." (ODCA 2006:13). However, many LCCs operating out of Ireland do not comply substantially with these requirements, in particular the requirement for displaying a tax inclusive price.

Other jurisdictions are beginning to regulate as well. The UK's Office of Fair Trading (OFT) threatened to take legal action against airlines and travel agencies in an attempt to tackle misleading pricing practices. The OFT argue extras and surcharges can significantly change the price of travel for consumers and therefore they could be making the wrong choices. In February 2007, the OFT gave airline "carriers and travel agencies three months to include all fixed non-optional costs, [such as fuel charges and passenger taxes] in their basic advertised prices" throughout all media, including Websites (BBC News 2007). Similarly, the Consumers' Association of Ireland (CAI) has maintained airlines should be forced to quote fares on an all-inclusive basis.

Supporting OFT's and CAI's efforts, the European Commission co-ordinated the airline ticket selling investigation under the auspices of Consumer Protection Co-operation Regulation, which had come into force at the end of 2006. European Consumer Affairs Commissioner, Maglena Kuneva, cites the EU-wide investigation conducted by 15 national regulatory bodies, which found 'unfair and misleading' practices in more than 50% of the websites for LCCs and other carriers (Smyth 2007). The report, published in November 2007, identified the most common unfair practices related to price indications, availability of special offers, and contract terms. With respect to clear pricing, the Commissioner is directing airlines to give a clear indication of the total price, including taxes and booking/credit card fees in the headline price first advertised on a Website, rather than at a late stage in the booking process. Accessibility of special offers was of particular concern, as in many cases these offers were not available or extremely limited. Ms Kuneva is requiring airlines to indicate clearly any limitations associated with special offers. Other unfair practices were found to include mandatory insurance attached to an offer, or where consumers were required to explicitly opt-out of insurance or other optional services (e.g. priority boarding, baggage, seat selection). Finally, the Commissioner is obliging airlines to outline contract terms and conditions in a clear, fair and accessible manner. The airlines have four months to comply with the report recommendations, or they may face possible legal action or closure, as well as be 'named and shamed' for failing to bring their websites in line with EU law (Smyth 2007). The research reported here would appear to strongly support the investigation findings of the European Commission.

Despite such regulatory attention, in what would appear to be an escalation of the movement of flight prices into opaque or hidden charges, LCCs have many recent changes, including: the introduction of baggage charges; hefty excess baggage charges; non-transferable baggage allowances; upgrade charges; online check-in charges; seat selection charges (one airline, Are Lingus, even charges up to 30 per segment for increased leg room); and priority boarding. These changes may help to explain why the cost of flying seems to be rocketing in Ireland. The consumer price index for May 2007, which uses the final fare price rather than the quoted price, noted a 37% increase in airline fares over the past year. Overall, the opaque practices in the LCCs' reservation process leads to ambiguity and a lack of clarity for users. The booking process is now clustered with disaggregated products that users need to re-assemble themselves to construct a flight of infinite variety and all predicated on the user, by obligation and via self-service, spending time and money doing so.

## 9 CONCLUSIONS

There is an 'assumed ethicality' in how IS are designed and how marketing practice is conducted. This assumption is no longer safe and needs to be challenged. It is not only the weighty ethical issues such as privacy and fraud but also more subtle ethical questions that should concern us. It is timely to ask searching questions of educators, practitioners and managers. If business practice demands it, should we teach students how to design systems that cleverly lead users to make unintended choices or to keep customers distanced from service? Are lecturers advocates of entrepreneurs or consumers? Ethics in the IS and marketing curricula, needs to be re-visited.

While many business ethics issues are not manifestly new in Web-based IS, ethical dimensions of IS-related decisions cannot be ignored (Smith et al. 1999). In view of the capacity of new technologies to affect dubious practice, it is necessary: to modernise professional IS/IT and marketing codes of ethics; and to develop new ethical guidelines and frameworks in IS design and marketing practice. The Web may in its totality be no less ethical than practices elsewhere. However, social responsibility in corporate governance has become an imperative for many firms; part of this must include a corporate code of ethics.

Do LCCs using self-service delivery demand different standards because they are low-cost? Is there a layer of insulation that such operators enjoy because, to many non-technical observers, the nuances of intentional design practices remain unclear? The lowering of customer expectations that de-marketing has brought about, has lowered the threshold of systems design. Is this benchmark acceptable or is it a tolerable outcome of a Faustian-like bargain? While all these questions involve a much broader social discourse, it is timely to debate them.

## References

- AEA (2007). Association of European Airlines (AEA) Yearbook 2007. Bruxelles: AEA.
- AEA (2006). Association of European Airlines (AEA) Yearbook 2006. Bruxelles: AEA.
- Alamdari, F. & Fagan, S. (2005). Impact of the Adherence to the Original Low-cost Model on the Profitability of Low-Cost Airlines. *Transport Reviews*, 25(3), 377-392.
- Alter, S. (2003). Customer Service, Responsibility, and Systems in International E-Commerce: Should a Major Airline Reissue a Stolen Ticket? *Communications of the Association for Information Systems*, 12(10), 146-154.
- Antón, C., Camarero, C., & Carrero, M. (2007). Analysing Firms' Failures as Determinants of Consumer Switching Intentions: The Effect of Moderating Factors. *European Journal of Marketing*, 41(1/2), 135-158.
- BBC News (2007). Action Threatened over Air Fares. BBC News. URL: <http://news.bbc.co.uk/1/hi/uk/6759197.stm>, accessed 5/4/2007.
- Cohen, A.J. (2006). Capital Markets at the Crossroads - Sustainable Investing: Environmental Focus. Goldman Sachs Global Investment Research.
- Constantine, E. & Yourdon, E. (1979). *Structured Design*. Prentice-Hall, New York.
- DeMarco, T. (1979). *Structured Analysis and Systems Specification*. Yourdon Press, New York.
- de Neufville R. (2006). Planning Airport Access in an Era of Low-Cost Airlines. *Journal of American Planning Association*, 72(3), 347-356.
- Dobruszkes, F. (2006). An Analysis of European Low-cost Airlines and their Networks. *Journal of Transport Geography*, 14(4), 249-264.
- Domanico, F. (2007). The European Airline Industry: of Low Cost Carriers. *European Journal of Law and Economics*, 23(3), 199-221.
- ECC Network (2006). Report on Air Passenger Rights: Consumer Complaints 2005. Bruxelles: European Consumer Centre Network.
- Graham, B. & Vowles, T.M. (2006). Carriers within Carriers: A Strategic Response to Low-cost Airline Competition. *Transport Reviews*, 26(1), 105-126.
- Hirschheim, R. & Klein, H. (1994). Realizing Emancipatory Principles in Information Systems Development: the Case for Ethics. *MIS Quarterly*, 18(1), 83-109.
- Hunt, S.D. (1976). The Nature and Scope of Marketing. *Journal of Marketing*, 40(3) July, 17-28.

- Hunter, L. (2006). Low Cost Airlines: Business Model and Employment Relations. *European Management Journal*, 24(5), 315–321.
- Jayachandran, S., Sharma, S., Kaufman, P., & Raman, P. (2005). The Role of Relational Information Processes and Technology Use in Customer Relationship Management. *Journal of Marketing*, 69(4), 177-192.
- Keaveney, S. (1995). Customer Switching Behavior in Service Industries: An Exploratory Study. *Journal of Marketing*, 59(2), 71-82.
- Kotler, P. & Levy, S.J. (1969). Broadening the concept of marketing. *Journal of Marketing*, 33(1), 10-15.
- Krug, S. (2000). *Don't make Me Think - A Common Sense Approach to Web Usability*. New Riders Publishing, San Diego, CA.
- Larson, K. & Czerwinski, M. (1998). Web Page Design: Implications of Memory, Structure and Scent for Information Retrieval. ACM CHI 98 Conference on Human Factors in Computing Systems. Los Angeles, USA, April 21-23.
- LowCostAirlinesEurope.org (2007). URL: <http://www.etn.nl/lcoteur.htm>, accessed 25/11/2007.
- Marshall, K. P. (1999) Has Technology Introduced New Ethical Problems? *Journal of Business Ethics*, 19(1), 81-90.
- Martin, J. & Finkelstein, C. (1981). *Information Engineering*. Savant Institute.
- Murphy, P. E., Laczniak, G. R., & Wood, G. (2007). An Ethical Basis for Relationship Marketing: A Virtue ethics Perspective. *European Journal of Marketing*, 41(1/20), 37-57.
- Nielsen, J. (1994). Heuristic Evaluation. In Nielsen, J. and Mack, R. (eds.), *Usability Inspection Methods*, 25-64. John Wiley & Sons.
- Nielsen, J. (1999). *Designing Web Usability: The Practice of Simplicity*. New Riders Publishing.
- Nielsen, J. & Tahir, M. (2001). *Homepage Usability: 50 Websites Deconstructed*. New Riders Publishing, San Diego, CA.
- ODCA (2006). Office of the Director of Consumer Affairs Annual Report 2005, ODCA.
- OMG (1998). *Object Management Group: Unified Modeling Language Specification*. Framingham, Mass.
- Payne, A. & Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing*, 69(4), 167-176.
- Peattie, K. (1999). Trappings versus Substance in the Greening of Marketing Planning. *Journal of Strategic Marketing*, 7(2), 131-148.
- Rominger, E. (2007). Social Responsible Investing: Here to Stay? Goldman Sachs Global Investment Research.
- Rubin, R.M. & Joy, J.N. (2005). Where Are the Airlines Headed? Implications of Airline Industry Structure and Change for Consumers. *The Journal of Consumer Affairs*, 39(1), 215-228.
- Sharp, H., Rogers, Y. & Preece, J. (2007). *Interaction Design: Beyond Human-computer Interaction*. 2<sup>nd</sup> Edition. John Wiley & Sons.
- Shneiderman, B. & Plaisant, C. (2004). *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. Addison-Wesley Publishing, New York.
- Shumsky, R. (2006). The Southwest Effect, Airline Alliances and Revenue Management. *Journal of Revenue and Pricing Management*, 5(1), 83–89.
- Sklar, J. (2006). *Principles of Web Design*. Thomson Learning.
- Smith, H. J. & Hasnas, J. (1999). Ethics and Information Systems: The Corporate Domain. *MIS Quarterly*, 23(1), 109-127.
- Smith, A., Bolton R. & Wagner, J. (1999). A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery. *Journal of Marketing Research*, 36(3), 356-372.
- Smyth, J. (2007). Ryanair Could Face Action on Ticket Sales. *Irish Times*, November 13, 2007.
- Srinivasan, R. & Moorman, C. (2005). Strategic Firm Commitments and Rewards for Customer Relationship Management in Online Retailing. *Journal of Marketing*, 69 (4), 193-200.
- Tavani, H. T. (2007). *Ethics and Technology: Ethical Issues in an Age of Information and Communication Technology*. 2<sup>nd</sup> Edition. John Wiley & Sons, New York.
- Trustrum, L.B. (1989). Marketing: Concept and Function. *European Journal of Marketing*, 23(3), 48-56.
- Wagner, C.M., Huber, B., Sweeney, E. & Smyth, A. (2005). B2B e-Marketplaces in the Airline Industry: Process Drivers and Performance Indicators. *International Journal of Logistics: Research and Applications*, 8(4), 283-297.
- Wagner, W. & Zubey, M. (2007). *Customer Relationship Management: A People, Process and Technology Approach*. Thomson Course Technology.
- Warnock-Smith, D. & Potter, A. (2005). An Exploratory Study into Airport Choice Factors for European Low-cost Airlines. *Journal of Air Transport Management*, 11(6), 388-392.