

Application of e-business strategy creates competitive advantage for airlines

[Environment](#), [Air](#)



Introduction The airline industry is an area facing immense competition and with high fuel and maintenance costs, the margins in this industry are proportionately very low. As a result of this it is an area undergoing constant consolidation through a number of mergers and acquisitions. This means every airline is fighting tooth and nail to stay afloat and not go bankrupt, yet at the same time they need to find a method to create competencies for itself. On the basis of this it would create competitive advantages for itself and become a market leader.

It is in this backdrop that the this paper tries to analyse whether evolving and adopting an e-business strategy helps an airline gain sufficient market advantage to prove beneficial for it. It was found that in order to provide an adequate answer to the research question “ Can an airline increase market share and customer loyalty by achieve competitive advantage utilising e-business models? ” One must fully understand the main features of E-commerce and their relevance to Airline competitive advantage. The features of an e-Business strategy have been outlined below. F1.

Online/immediate/24-hour availability, directly connect buyers and sellers A Web server is usually online 24 hours per day, and virtually immediately accessible (depending on line speed and network traffic, of course). This creates time independence and enables customer service to be decoupled from supplier availability.

Such 24-hour availability is a strong facilitator of a global presence, overcoming time differences. As the customer is in the first instance interacting with an automated system, there is a set of service requests that

can become 'self-service' F2. Ubiquity Global information networks (fixed and mobile, cable, satellite) promise to offer worldwide, large-scale and low-cost, access to electronic commerce. F3. Global It is often claimed that one of the largest changes brought about by the Internet is that it is global: companies get access to customers globally, customers get access to suppliers globally. F4.

Digitisation The Internet and the communication and computer systems connected to it are all processing digital and digitised information. Digital information can be easily stored, transmitted, processed, mixed, transformed, in short manipulated in many ways, independent of its source or carrier. F5.

Multimedia Closely related to digitisation is the aspect of multimedia, referring to the capability to deal with and deliver information in several ways: text, graphics, sounds, video, eventually tactile. F6. Interactivity As opposed to EDI, which is for application-to-application data exchange, the Internet offers person-to-person and person-to-application interactivity.

Even if one side of the interaction is automated, through a Web-server program, the interaction possibilities are wide ranging and can be extremely varied and engaging. F7. One-to-one The Internet makes customer profiling fairly easy, by capturing and analysing customer characteristics. Technically, this can consist of storing some information about the customer on the customer's computer (e. g. a 'cookie'), which is retrieved when the customer returns to the site.

This can be combined with more detailed information, partially solicited from the customer and partially collected by the merchant, e. . the pattern of purchases. Many sites encourage potential customers to provide an e-mail address, personal data etc. F8.

Integration Customer service is greatly enhanced by integrating the functionalities of the transaction parties on the basis of standardized information flows. One-stop integration of functions-that is, integrating all the necessary functions for a transaction at a single point of access and with seamless flow of information between them, as illustrated by this example is, however, only one aspect of integration. Information integration is another opportunity to extract additional value by analysing data from various steps of the transaction or across transactions. F9. Can be updated in real-time, therefore always up-to-date F10. Reduce costs F11.

Increase productivity Airline can gain significant productivity improvements by using business-to-business e-commerce to streamline and improve its supply chain processes. Airline can save time and money by purchasing supplies via the Web. Similarly, Airline can use e-commerce to communicate and transact with distributors and customers in a more cost-effective and timely manner than through traditional channels. F12. Improve level of customer service Airline can improve it's level of customer service by allowing customers to access “ help” information, complete application forms, pay invoices, or change their account details via it's Web site, at their own convenience.

F13. Strengthen customer relationships Airline can strengthen relationships with existing customers by allowing them to access - via it's Web site - previously inaccessible decision-support information, such as detailed research reports, product specifications and price comparisons. F14.

Enhance business intelligence Airline can use its Web site to collect valuable intelligence about customer needs, buying habits and preferences. This intelligence can be a valuable input to the development of new, profit-enhancing processes, products and services. Similarly, Airline can use the Web to research new markets and to gather valuable intelligence about its competitors.

F15. Increase direct sales of products or services The Web enables businesses to reach customers all over the world, 24-hours per day, 7-days per week. Airline can use the Web to create a " self-service" environment that allows Airline to offer lower prices and provide more detailed product information than that which Airline can offer in the real world. F16. Generate advertising, sponsorship or brokerage revenue Many " content" and " infomediary" sites generate revenue through advertising or sponsorship arrangements with other sites.

Infomediary sites provide useful information and act as springboard to sponsoring Web sites. Infomediary sites offer earn brokerage fees on transactions that result from the information or service they provide.

Linkages between these features and airline competitive advantage Airline industry is one of the most competitive industries within the economic environment. Within industry's boundaries actors have more or less recently

and with significantly different patterns of action undertaken efforts to achieve an integration of the internet platform and its applications. In this section, we explore the effects of electronic commerce and its potential for competitive advantage for airline industry by using Michael Porter's seminal work on industry analysis as a framework (Figure 11) Figure11. Sources of Competitive Advantage Airlines do conform to those which Porter describes: Cost Leadership, Differentiation and Focus.

The proposition is that airlines that can successfully work in one of these areas will be able to establish and sustain a competitive advantage. Cost Leadership (F10, F11, F15, F16) Airline can generate significant cost savings by sending tickets, newsletters, quotes, and other documents via Internet, rather than by post or facsimile. Airline can use Web site to publish – in a cost-effective way – public domain documents such as annual reports, product brochures, positions vacant, contact details and other important Airline information. Airline can save on the cost of running “ bricks and mortar” outlets and can reach global markets without having to develop a physical global distribution network.

Most importantly, Airline can save on customer service costs by enabling customers to serve themselves. American Southwest Airlines CEO, Gary Kelly said the Web site is playing a major role in mitigating the rise in unit costs affected by high fuel prices. It's 10 times cheaper to deliver to customers through the online service than through a travel agent, Kelly said, and costs 5 times less than using Southwest's own reservation staff. The booking cost per passenger online is “ well under \$1,” said Kelly, and is scaling down even

further. He said Internet use by passengers was helping the carrier keep fares at low discount levels [21]. Massive investment in both business-to-business (B2B) and business-to-customer (B2C) information systems is expected to translate into important cost savings in procurement, sales, billing and other support activities.

The airline's fully automatic ordering system, for example, should reduce order processing costs by 90%, according to Chairman/CEO Juergen Weber of Lufthansa Aviation Group [22]. Differentiation (F1, F2, F3, F4, F5, F6, F8, F9)E-ticketing, the issue of a booking code at the conclusion online transition that replaces the traditional airline ticket. E-ticketing seems to be a 'win-win' solution for the airline business. It offers the airline the chance to make considerable savings in both trade terms as well as in invoicing and internal accountancy procedures.

Moreover, it helps to fight the downward profit spiral that has affected the industry for years. Secondly, it is very attractive to customers, who may benefit from a service offer both technologically advanced and of high intrinsic value. Focus (F7, F12, F13, F14)-Case Study FedExThe airline industry gives us a perfect example of successful Focus strategies – that is the so-called “ Integrated Operators” of the air freight business. FedEx, the integrated cargo carrier, was the pioneer. Having developed a very efficient and fully computerised system for tracking individual parcels anywhere on its network it took the next logical step. In 1994, through its website, it allowed its customers to book and pay for its services without restriction via the Internet [23].

The e-Commerce infrastructure developed by airlines allows collection and central storage of sales and marketing data. Airlines use this data to drive decision support tools for planning and marketing. While travelling can be fun, the process of booking tickets is not. Electronic ticketing (e-ticketing) is transforming what used to be a tiresome task (given to the friendly neighbourhood travel agent) into a simple point-click-and-print affair. e-ticketing was given a push in the market by the International Air Transport Association (IATA) in 2004 when it announced its commitment to achieve 100 percent e-ticketing by the end of 2007 as a part of its initiative to e-engineer many air transport industry processes to simplify the airline business.

The biggest push for e-ticketing is coming from low-cost airlines. Observing this steady transformation of the airline ticketing industry in India, the Indian Railways and a few private travel agencies have followed suit. Large carriers such as Indian (earlier known as Indian Airlines), Air Sahara and Jet Airways have also jumped on this bandwagon. According to the Internet & Online Association of India, a non-profit industry organisation, e-ticketing has emerged as the definitive online trend in the country. Says Kashmira Irani, Senior Vice-president, Market Development, Kale Consultants, “ Changing lifestyles coupled with multiple Internet access points are expected to propel e-commerce transactions to Rs 2, 300 crore in 2006-07.

From 17 million users in 2003, the figure is estimated to reach 33 million by the end of 2006. ” The growth in Internet bookings of airline tickets can be attributed to the potential for savings, convenience, increased credit card

penetration, increased comfort levels vis-a-vis security on e-commerce Web sites, and the growing maturity of online consumers. Air-India, Jet Airways, Kingfisher Airlines and Air Deccan have implemented e-ticketing to fulfill IATA's mandate; the national carrier has implemented an e-ticketing solution from US-based Unisys. Kingfisher has deployed an Airline Inventory Reservation System (AIRS) from the Bird Group.

AIRS is a Web-based hosting system for low-cost carriers that assists domestic and regional airlines with limited operations to effectively market their services and control their seat inventory. Initial hiccups After a slow takeoff, e-ticketing is blooming into a technology with great promise. There were a few impediments that we faced while dealing with prospects. The major ones we encountered were security and government regulations about entry into the airport.

This was resolved after the civil aviation ministry ruling allowing passengers to enter airports with e-tickets backed by a proof of identity. Another problem is the mindset against conducting transactions on the Web. Indian travellers are quite sceptical of breakthrough technologies, which is a concern for companies operating in this space," says Irani. e-ticketing facts e-ticketing will save the industry up to \$3 billion per year •IATA processes 300 million paper tickets each year •To process an e-ticket it costs \$1 •To process a conventional ticket it costs up to \$10 Source: IATA Website At the same time, the industry is vast and highly disorganised, and hence it is difficult to implement paperless ticketing.

Only IATA agents can do e-ticketing, but in India there is a large segment of sub-agents who are not IATA-approved. Ankur Bhatia, Executive Director, Bird Group, also agrees that the acceptance of e-ticketing continues to be an issue. His company had to conduct educational seminars on e-ticketing for 8,000 CRPF personnel in the initial stages as customers with e-tickets were being inconvenienced at the airport and security personnel did not accept e-tickets. Nevertheless, this new system of e-ticketing has a lot of benefits for both customers and travel companies. Due to automation, companies are in a position to offer value-added features to customers.

For instance, earlier, passengers were required to visit the nearest reservation centre to purchase tickets. Indian Railways now offers online booking wherein passengers can check train fares, routes and availability in real-time and receive alerts about schedules. The benefits of e-ticketing extend to the aviation sector as well. “ e-ticketing is convenient, safe, offers instant delivery and reduces the hassle of carrying conventional tickets.

The principal advantage of e-ticketing is that it reduces booking expenses by eliminating the need for printing and mailing paper documents. The time spent with a customer on a booking is a direct cost that is included in the distribution cost of the airline,” Irani points out. -ticketing also enables travel agents to book tickets for clients closer to the departure date without having to fret about how they can get the ticket to the passenger. With photo-identity cards mandatory for e-tickets, they are more secure than conventional tickets. However, looking at the global scenario, “ India is lagging behind in the e-ticketing initiative. Industry experts attribute the

poor response in e-ticketing to poor infrastructure and the low Internet penetration in the country.

The investment required to implement the central reservation system is close to \$1 million per airline company," reveals Irani. To drive conventional tickets out of the system and reduce airline costs, travel companies now need to simplify their processes further. Passengers get better service and do not have to worry about holding paper, just as they with the paperless reservations made with hotels. And travel agents, which sell 75% of tickets, shed their paper burdens as well. The advantages of shifting to paperless travel are huge and widely spread.

E-tickets are a win-win for everybody E-ticketing at Singapore Airlines SIA started implementing e-ticketing from 1997 by implementing their own program called Kriscom. They have implemented e-ticketing progressively by channels within each station. SIA offers e-ticketing as a means for fulfillment through all major computer reservation systems in most markets. A major challenge has been to transform the paper ticketing environment to an e-ticketing environment. But once customers become aware of the ease and convenience of e-tickets, the usage picks up rapidly.

Conclusion This research revealed that the Internet contributes more to the core of business process and transformation than other comparable technologies such as the telephone. Whilst the source of competitive advantage is changing - with information becoming a key resource and electronic commerce a key facilitator. The success of airline applications and

the communications, data, and control afforded by the Internet are encouraging. This is also supported by The Wall Street Journal, it summarized the situation: “ Eventually, many suppliers are likely to use the Web’s fine-tuned interactivity to perfect yield management strategies similar to the way airline tickets are priced today, slashing prices to avoid surplus inventory or to quickly respond to changes in customer preferences. The researchers have found that the development of the information economy is as much about strategy as it is about technology.

The Internet is not just another medium or a distribution channel to reach customers. It is an important medium to find new customers and continue relationships with current customers. It is almost impossible for business and consumers to ignore this new technology. The users of Internet are not just so-called “ techi’s”.

They are people from all age group in many parts of the world. This work demonstrated that integrating key operations such as echnologies, marketing, and system solutions can assist the airline industry to achieve competitive advantages. Within turbulent, highly competitive marketplace, airlines are finding it increasingly important to respond both quickly and effectively to changing patterns of customer demand. Who are airlines’ customers and what are their needs and aspirations? If airlines don’t know the profitability by customer, how can airlines be sure airlines are serving their best customers and applying their value to all business decision? If airlines had the means to do both, profits would soar.

Not only would airlines become more efficient, the shareholders would see an investment in their only real source of revenue, the customer, and the meaningful profits that result. With so few new revenue opportunities, do airlines need more aircraft? Or instead should airlines consider a customer relationship management program that uncovers and maintains shareholder value. Airlines need to know and understand those customers who contribute the most to their bottom line. Airlines in today's global marketplace are faced with increased competition and shrinking profit margins. The challenge is sustaining and creating profits in the face of heavier competition and product homogenisation.

The opportunities are in managing customer relationships, controlling costs and applying customer profitability to the entire business. This paper begins to define customer, CRM and e-CRM; then identify the drivers for airline to adapt e-CRM strategy and its benefits to airlines; followed by the researcher's e-CRM business model for airline industry and discussion of "why and how" CRM; finally, the researcher addresses some issues of application e-CRM and draw a conclusion. How to e-CRM Four steps to e-CRM success e-CRM is a business strategy that should guide airlines to increased profitability by creating customer loyalty. In order to implement a true e-CRM strategy, airlines must have a vision and look at CRM as one holistic project - whether implemented all at once, or through a phased approach. First, an airline must commit to focus on the customer and create a complete vision that fosters a true customer-centric organisation. Once a clear vision is in place, developing a strategy and establishing goals are the next steps

toward effectively deploying e-CRM. The entire plan must align the airline's strategy, goals, and technology in order to achieve the objectives of the e-CRM project.

Airlines that make strategic e-CRM investments and align processes, strategies, and technology around customers are in a better position to deliver a seamless, high-quality customer experience across all channels. (Prete, 2001) 1. Airlines have a clear overall strategy to achieve enterprise-wide acceptance of a customer-focused culture. Without clear direction, resources are likely to be misdirected and return on investment sacrificed. Underpinning this must be senior management sponsorship of the complete culture, process and business change needed to successfully re-focus a business on its customers rather than its products.

2. Airlines have maximised value from their investment in technology to achieve the sought after 'single view' of each customer. Being customer-centric is not just about technology, however any airline considering using on-line channels to reach its customers knows it needs a clear vision of what it wants the technology to do. It is essential to have a coherent strategy for unifying multiple customer contact channels but ultimately, success lies in ensuring that the online customer experience is relevant, personalised, and supported with excellent customer service, support and fulfilment.

Done badly, e-business provides an open door for mass customer defection.

3. Airlines have united people and technology for outstanding performance.

It is essential to have staff able to proactively connect with the data and

create and sustain an appropriate relationship with the customer. Achieving this empathy requires defining new customer-focused, technology-enabled behaviours and delivering these through teamwork and aligning reward recognition with customer delivery.

Without proper staff training and motivation, companies will fall at the last hurdle. 4. Airlines use an accepted method of measuring success to justify initial and ongoing investment in customer-focused initiatives. They need to develop appraisal systems for enterprise customer management, which identify all likely costs (including people, technology and process change) and benefits before any investment is made.

The creation of robust measurement methods will be key to achieving board-level support. Web self-service solutions-key to better customer relationships
As customers become more sophisticated, expecting faster, more reliable service around-the-clock, it's no secret that giving them the power to help themselves is key in providing the availability and personalized service they demand. The Web is the perfect medium to find information quickly and securely-anytime. Start simple by letting customers use airline's website as a way to find out travel information. Book tickets on line; use e-tickets; Check-in through Internet by themselves; check cargo delivery status.

Find answers by putting frequently asked questions (FAQs) online. In addition, chat room and personalized Site on the Internet provide airline better customer service, attract new customers and increases customers' loyalty. When airlines give their customers self-service solutions, not only are

airlines managing relationships with them, airlines are giving customers the tools to manage their relationships with airlines. As airlines offer this ability to their customers, the Web provides airline with a cost-effective way to get valuable insight about them-allowing airlines to target individual customers with specific, relevant marketing information. There are three basic steps involved in establishing effective customer relationship management using the Web: 1.

Capture customer information, 2. Build a customer database and 3. Create personalized communication. Customers like to be recognized by name, and customized marketing increases the likelihood they'll buy from airline again. Capturing services purchases and related demographics helps airline build accurate and timely profiles about airline's customers.

Building a database from existing systems and information airline capture is key in its efforts to focus marketing resources on customers who are ready to buy. When customers look for a specific item, they don't want to wade through a mountain of irrelevant data-they want it now. Getting the right information quickly and easily is a reason for them to do business with an airline versus the competition. The essence of customer relationship management is to make every interaction with customer count. Using the Web to communicate through methods like e-mail and customized views of airline's Web site is an inexpensive way to build targeted campaigns with a limited amount of resources.

Airline e-CRM system model Airline's success depends heavily on its ability to intelligently manage sales, marketing, and service processes and to draw mutual advantages from understanding of airline's customers. To help airline maximise the strategic value of customer centric initiatives, Airline e-CRM model provides a comprehensive analytical solution, it can contribute toward improving the way that measure and optimize airline's relationships with customers. Figure 3 best illustrates Airline e-CRM model using system engineering methodology. Airline e-CRM model can be conceptualized as a system that is made up of components, linkages amongst the components, and dynamics-that takes advantage of the properties of the Internet to make money.

It takes advantage of the properties of the Internet in the way it builds each of the components-value, scope, revenue sources, pricing, connected activities, implementation, capabilities and sustainability-and crafts the linkages among these components. It is what, preferably, enables an airline to have a sustainable competitive advantage. It includes three components (subsystem): Web Basec Airline-Passenger Interaction subsystem; Airline Data Warehouse subsystem; and Airline e-CRM operation subsystem. Airline e-CRM model is an asset-based solution that includes best-of-breed components to build an e-CRM infrastructure and enable any-channel, any-time communication with customers.

At the heart of this offering is the CRM Foundation, which includes the CRM data model, starter set of CRM queries, reports and analysis, sample data, a demonstration prototype, data utilities and scripts, and comprehensive

documentation that covers implementation guidelines, business perspective and analysis guidelines, system components, data model descriptions, and use and customization guidelines. Since managing customer interactions is a vital piece of the e-CRM puzzle, planning and implementing a Multi-Channel Interaction Management solution with the other subsystems and enterprise solutions is crucial. Without Interaction Management, the puzzle remains incomplete. Interaction Management is the foundation for evolving customer service into customer satisfaction by tying together all customer data - no matter where it is located within the enterprise. Making this information easily and quickly accessible to the customer management process, and ensuring each customer is handled in the most efficient and effective way possible, is the ultimate result of a well-defined and deployed strategy and solution.

Airline e-CRM model also:

- Provides an understanding of customer behavior and enables airlines to measure results of marketing and merchandising changes.
- Supports more effective promotions through integration of data between marketing and merchandising users.
- Provides a single view of customers across the enterprise and across contact points. Gives airlines the ability to respond more dynamically and quickly to market demands.

Significance derived from airline-CRM implementation will allow for new e-business model, based on the wide availability of information and its direct distribution to end-customers.

- Directly connect airlines and passengers.
- Support fully digital information exchange between airlines and customers, reduced cost of a customer contact.
- Suppress time and place limits.

- Support interactivity and therefore can dynamically adapt to customer behaviour. To be able to satisfy customers' need, build customer confidence and retention.
- Can be updated in real-time, therefore always up-to-date.
- Enhance airlines competitive advantages over its rivals.
- Profitable and sustainable revenue growth. A recent study done by the International Air Transport Association (IATA) shows that during the second half of March this year, more than 20 per cent of tickets sold by airlines that are members of the global association were e-tickets, up from about 5 per cent during the same period in the previous year. Data compiled by IATA shows that close to 95 per cent of the tickets sold by the US carrier, Continental, were e-tickets, while in the case of German airline Lufthansa, close to 83 per cent of the tickets sold were e-tickets. Similarly, in the case of British Airways close to 92 per cent of tickets sold were e-tickets while more than 65 per cent of the tickets sold by Air France were e-tickets.

Among Indian carriers, while Jet Airways sold more than 37 per cent of its tickets as e-tickets, Air Sahara sold close to 28 per cent of its tickets as e-tickets. Summary Lufthansa //eCommerce GmbH was established in 2000 as an autonomous company of Lufthansa Commercial Holding and C&N Touristic AG in order to operate and expand online sales in the travel and tourist business. The mission of this expanding subsidiary, which currently has 60 employees, is to develop forward-looking, profitable e-commerce solutions for the Lufthansa Group, Lufthansa partners, C&N Group and other

companies in the tourism business. Lufthansa is by no means breaking new ground with its new subsidiary.

Back in 1996, the airline created a sales and service portal, InfoFlyway, and subsequently developed its online presence into one of the most successful travel sites in Europe. Sixty percent of its users access the site from Germany, and the remaining are international users located primarily in the European core markets, North America and Japan. The airline plans to augment the success of InfoFlyway, relying on the expertise provided by Lufthansa //eCommerce GmbH. In addition, the company has launched a Web site for students, [www. studentmiles.com](http://www.studentmiles.com).

com, in order to attract tomorrow's customers. Lufthansa Relies on Technology as a Crucial Success Factor in E-Commerce The key to success in e-commerce is the integration of communications, Internet, call centers, fixed sales locations, performance and logistics processes. Partnerships with other companies are another important aspect, and in this particular case they are directly or indirectly connected with the travel industry. However, the key element in successful e-commerce operations is flawless technology. As with all online business, the unvarying availability of all Web services and short response times are of strategic importance.

A sound Web infrastructure provides the foundation that enables a service provider to handle an increasing volume of traffic on its Web sites. This requires not only reliable hardware and robust applications, but also the perfect harmonization of all employed components. Performance assessment

should not be based on theoretical calculations, but instead, the guideline should be what the end user actually experiences, for example, when making an online booking for a rental car at the destination airport. This is precisely why team members responsible for Web performance at Lufthansa //eCommerce GmbH have decided to use a performance monitoring solution that was specifically designed for Web applications. In choosing Mercury's service, the team selected an innovative solution that provides the capability for continual monitoring of business transactions and response times as experienced by the user.

Securing a larger online audience and security concerns With an increasing number of people choosing to make their travel bookings online, more secure fraud management is critical. The added security of a password-protected system like Verified by Visa has helped to reassure the existing client base, and also attracted new customers to the site who may have been previously reluctant to shop online. Verified by Visa has also helped to widen the available customer base. Prior to signing up to the service, ba.com was unable to accept foreign i. e.

non-UK issued cards. With the added layer of security provided by Verified by Visa, the site is now able to authenticate all foreign cards allowing Visa cardholders from across Europe to access safer shopping on the site. Essentially, Verified by Visa gives British Airways' customers the online security and peace of mind while shopping on the Internet as well as being simple and easy for its customers to use. The service is provided to ba.

om by CyberSource, an electronic provider of risk management solutions and Streamline International which provides the processing services and has been available to BA customers since December 2003. Soaring profits Until the launch of authentication services like Verified by Visa, British Airways would have previously bore the cost of rising online fraud levels By using Verified by Visa, however, the airline is now no longer liable for disputed transactions that relate to customer repudiation, whether or not its customers have signed up to the service. By guaranteeing the cardholder's identity, Verified by Visa ensures the liability for such charge-backs is shifted from the online merchant, back to the card-issuing bank. " More and more travellers are looking to the convenience of the Internet to book their holidays and flights - making that process safer and more secure helps increase traffic to our site and ensure we remain competitive with other web providers.

By signing up to Verified by Visa, British Airways is able to offer customers the most secure method of payment urrently available on the Internet" said, Tim Arnold Boakes, Card Acceptance Manager, Treasury, British Airways. Aggregated online data on 8 airlines shows increase of 8% in online yield and over 30% in revenue in a few months e-Travel, the e-commerce division of Amadeus and the global leader in online travel solutions, today reported results on the performance of its online solution Amadeus e-Merchandise, the most widely adopted global merchandising solution for airlines, which includes Amadeus Flex Pricer. This analysis shows that Amadeus has been instrumental in supporting airlines' strategies to increase their profitability

levels by implementing fare shopping solutions that enhance online yield and grow online volume. Amadeus analysed aggregated online Passenger Name Record (PNR) and Fare Amount data¹ from 8 leading airlines - Air France, bmi, Finnair, Iberia, Icelandair, Luxair, Qantas, and Wideroe - which together carry more than 100 million passengers a year, and which have adopted Amadeus e-Merchandise. On a weighted basis, the Amadeus investigation showed: an 8 % increase in online yield² when comparing the consolidated online fare amount data in the three months before and in the three months after each airline's initial launch month of Amadeus e-Merchandise, •over 30% revenue increase over the same period resulting from the above yield improvement and online volume growth, which represented more than 100 million Euros in additional ticket sales for these airlines. Air France Vice President Distribution, Henri Hourcade, stated " We have seen an immediate and remarkable increase in sales revenues with the introduction of Amadeus Flex Pricer.

" Amadeus e-commerce technology continues to support our long term international strategy of increasing our online yield and profitability. " said Arni Sigurdsson, Director Distribution at Icelandair. " Our analysis on a non-weighted basis also showed increases in both online yield and revenues, which proves that our technology benefits all types of airlines", adds Jerome Destors, Commercial Director of Amadeus e-Travel. " We have noticed that leading airlines increasingly strive to not only save costs by outsourcing critical parts of their websites, but also improve their profits by adopting our on-demand e-Merchandising solutions. In parallel, a recent survey³

conducted by Amadeus among 85 executives from 35 airlines confirmed that online yield is a high business priority. The survey respondents outlined the most important objectives in e-commerce to be growing volume (97%), followed by increasing yield (92.

5%) In this survey, reducing costs was the lowest priority after ensuring reliable growth, enhancing competitiveness, and enhancing loyalty. From paper to e-tickets - still process heavy Airlines of different sizes have always relied on paper tickets, and most people who travel by air know first-hand what that entails. The passenger receives a physical ticket that is then presented upon check-in at the airline counter in exchange for a boarding card. Behind the scenes within airline administration, the use of paper tickets involves transferring the physical ticket coupon from department to department for registration of data - from booking to payment to revenue accounting and management information, and so on.

A very time-consuming and labor-intensive process. With more and more traditional and low-cost airlines using e-tickets, passengers are recognizing the convenience of not having a physical ticket: ticketing anytime and anywhere, instant confirmation over the Internet, self-service check-in at the airport, and no need to worry about lost, stolen or forgotten tickets. For airlines, there are also significant differences between paper tickets and e-tickets. E-ticketing gathers the same data as is used for paper tickets, but stores it all in a database.

Instead of physically transferring a ticket coupon from department to department, the database moves the data along. This has helped cut down on administration time and costs for airlines that offer an e-ticketing option, but still does not provide the wide range of benefits of totally ticketfree systems. This is because the use of e-tickets still requires an array of applications and significant handling time, since e-ticketing is built on the same displays, interactions and IT systems used to process paper tickets. For example, standard revenue applications receive compiled data once a flight has departed, showing who has actually flown on a flight, ticket prices and so on. Even if this ' flown' data is electronic, it still must be compiled, prepared and reported, a process that takes time and usually occurs only once a month. Ticketless travel – optimizing the travel process for passengers and airlines Ticketless travel, takes streamlining and savings to a new level.

Passengers get all the convenience of e-tickets, with the potential for even more check-in flexibility. And when it comes to airline administration, the differences compared with paper or e-ticketing are extensive. By eliminating the need to retrieve and flow information between administrative systems, ticketless travel radically cuts time, labor and cost for airlines, while increasing flexibility. The benefits of operating on a ticketless basis include:

- Slashed costs – Airlines can avoid all the handling associated with paper and e-tickets, while making use of the newest IT tools and processes in one system. This naturally reduces staff costs dramatically.
- Instant payment – Payment occurs at the time of booking, not at a later time once a ticket is issued.

Not only do airlines receive payment upfront, this also avoids problems with authorization.

- Better security – Since all booking and payment functions are web-based, ticketless travel provides all the security of the most stringent online payment tools. Additional, cutting-edge security measures can also be added at any time.
- Automated check-in – Departure control systems recognize when a booking is ticketless, automatically issue a boarding pass when needed, and instantly send check-in information back to the e-booking system.
- Same-day revenue reporting – There is no time delay for information reporting. As soon as a flight departs, ‘ flown’ data is available in an already compiled form, so revenue reporting, as well as all passenger details, are instantly at an airline’s fingertips.

Faster revenue data can also optimize revenue management.

- Flexibility – With all information available quickly and in one location, ticketless travel gives airlines a broad overview of data, decreasing time to market for new offerings and increasing corporate agility. Ticketless solutions also offer more flexibility by allowing airlines to decide whether or not they want to follow standard ticketing rules.

Integration with existing systems – Going ticketless does not mean airlines need to stop using older systems altogether.

Ticketless solutions can be deployed simultaneously with existing paper or e-ticket platforms, giving airlines a choice of ticketing offerings and transition options. Hassle-free deployment For airlines considering a ticketless solution, it is important to realize just how easy and convenient it is to implement ticket-free systems. Anki Ahlen, an airline industry specialist at CSC Airline

Solutions, describes how convenient deployment can be. Deploying a ticketless solution is really painless for the airline.

We go through a configuration of how the airline wants the solution to work in their booking flow. The airline can choose to go fully ticketless, or can have both a ticketless system and their existing paper or e-ticket infrastructure running together. There are very few configuration parameters, so the system design, implementation and transition are efficient. " Choosing the right solution Ease of use and getting the best solution are also important factors to consider. Jens Tjagvad, an airline e-commerce consultant at CSC Airline Solutions, explains what to look for in a ticketless solution.

" The more streamlined the solution, of course, the better. " " A ticketless solution can benefit any type of airline," Tjagvad continues. " If you're a larger airline, it's important to look for a provider with experience working with flag carriers, one that knows their needs and existing IT systems. We can help flag carriers with a smooth transition because CSC understands large airlines so well, and we also have experience with low-cost carriers.

The most important factor to remember is that ticketless is a full-circle process. From booking on the Internet to reporting - the entire process is taken care of on one system. " Case Study: Blue 1 - Success with ticketless travel Launched in 1988, Finnish airline Blue 1 is a Star Alliance member that offers new non-stop routes between Finland and major European cities. As an airline that provides full, free service onboard, yet has price levels

comparable to low cost carriers, Blue 1 wants to offer its customers the widest range of services and ticketing options possible through various ticketing channels.

One year ago, Blue 1 approached CSC Airline Solutions for a ticketless solution to cover all its Internet bookings. Jens Tjagvad explains why the airline chose CSC. " Blue 1 wanted a totally ticketless solution for its online booking. They came to us because they knew that we are a reliable, high-quality provider, who had the expertise and experience to develop their system, fast. " " We've had a lot of positive feedback from Blue 1," he continues. " After a year using our initial ticketless solution, they're now coming to us for additional development and further fine-tuning.

The future of airline technology Ticketless technology is emerging as the most cost-effective solution, with more and more airlines going totally ticket-free or adopting a ticket less option alongside existing ticketing systems. By automating every aspect of airline booking - from all stages of the passenger booking process to revenue analyses and compiling sales reports - this all-in-one system is helping revolutionize airline administration. Going ticketless means no ticket number or coupon - whether physical or electronic - and is based instead on totally automated electronic booking. When a passenger books a flight, all the same data is captured electronically as for an e-ticket, but there is never a need to pass that data around to different administrative systems. Everything is stored in one application that provides all booking, payment, revenue and reporting data in a single place. Conclusion Thus from the above research we can clearly conclude that the hypotheses stating "

Application Of E-Business Strategy Creates Competitive Advantage For Airlines.

is true and does help in not only reducing costs but also in helping achieve efficiency gains thereby resulting in creation of competitive advantage.

Bibliography 1)Business World: 23rd - 29th July, 2007 2)www. wikipedia. org
3)www.

economictimes. com 4)www. business-standard. com 5)Frontline: 18 - 24
June, 2007 6)India Today: 9 - 15 July, 2007 7)Business World: 18 - 24 June,
2007 8)www. financialtimes.

com www. csc-cycling. com. Team CSC on the right track from the beginning
of the season