

# **OUTSOURCING AS AN AIRLINE STRATEGY**

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## **ABSTRACT**

Since the deregulation of the airline industry, carriers have searched for any method to improve their competitive position. At the same time, there has been a growth in the use of Third Party Logistics throughout corporate America. This paper presents an overview of the Third Party Logistics system of outsourcing and insourcing within the airline industry. This discussion generated a number of propositions, possible future scenarios and opportunities for empirical testing.

## **INTRODUCTION**

Today's competitive business environment has forced companies to identify methods to improve efficiency. A common solution is to outsource certain non-strategic business functions. The company thus removes distractions and focuses managerial attention on operations within the scope of its core competencies.

The airline industry is a prime example of the stiffened competition as a result of deregulation.<sup>1</sup> Many airlines have used outsourcing as a method to control costs, improve efficiencies, and hopefully increase profitability.<sup>2</sup> While airlines continue to outsource, it is unclear what are the appropriate levels of outsourcing, or which functions should be maintained by the airline.

This article briefly reviews the benefits and costs of the outsourcing decision. Furthermore, it examines some of the areas that various airlines commonly outsource. Also, it presents possible scenarios of future outsourcing. Finally, the article discusses the relationship between airline characteristics and outsourcing.

## **LITERATURE REVIEW**

This section builds a foundation for the discussion by defining outsourcing and briefly discussing its benefits and weaknesses. It also identifies which of the various airline operations and services are outsourced and which are performed by the airline or insourced.

## Outsourcing Terminology and Strategies

Most business professionals are familiar with the concept of outsourcing. Leenders and Nollett define outsourcing as “the decision to buy goods and services from external sources rather than producing them in-house when internal provision is not justified in light of existing or anticipated business conditions.”<sup>3</sup> An airline industry definition of outsourcing mirrors the general definition by stating that outsourcing is “shedding non-core functions or spinning them off into semi-autonomous subsidiaries or profit centers.”<sup>4</sup>

McDonald’s provides an excellent example of outsourcing as a non-airline business practice. By employing Third Party Logistics (3PL) companies, McDonald’s focuses on its core competencies in providing fast-food services. Third Party Logistics companies support McDonald’s by performing the various non-core logistics functions.<sup>5</sup>

A common function outsourced by airlines is maintenance. By 1989, United States carriers outsourced 25 percent of their maintenance functions or approximately \$218 million to third party firms.<sup>6</sup> Maintenance provides a good example since it is a non-core activity. Non-core activities are items that may provide critical functions to the running of the business, but are “not a unique ingredient of the product.”<sup>7</sup> Maintenance is a necessity, but it should not be a unique product ingredient. Every airline must continuously maintain aircraft to provide safe operations, but maintenance is rarely seen as a unique part of the airline service.

By removing the non-core activities, the company should theoretically be able to focus on its five to six core competencies.<sup>8</sup> However, the implementation of this theory in actual business situations may be problematical. At least one recent study identified an increase in the use of outsourcing of activities that apparently included areas of competitive advantage or strategic significance.<sup>9</sup>

An overall goal of the outsourcing strategy is to form strong relationships between companies. Outsourcing can help to create strategic alliances between the two firms creating a stronger relationship base and increasing value throughout an entire supply chain.<sup>10</sup> The goal of this relationship is to create a source of competitive advantage for the company that outsources a service or part.<sup>11</sup>

Given these benefits, it would appear that outsourcing strategies ought to dominate the airline industry. While it is true there are many examples of outsourcing, there are examples of the opposite behavior as well. The practice of insourcing is gaining popularity in the airline industry. Insourcing is the process of providing non-core services or parts for other companies, often competitors, to increase revenue, minimize labor idle time and offset high domestic labor costs.<sup>12</sup> Insourcing permits airlines that practice it to achieve economies of scale; i.e. they are able to produce at a lower cost per unit. This allows both the insourcing firm and the buyers to benefit. An additional benefit of insourcing is the gains in goodwill with employees.<sup>13</sup>

There are a number of current examples in the airline industry of companies that are marketing their services to other carriers. Lufthansa,<sup>14</sup> American,<sup>15</sup> and

Delta<sup>16</sup> all insource various maintenance operations. American also provides 3PL services by maintaining a spare part inventory for its customers.<sup>17</sup>

### **Airline Operations and Services Typically Outsourced**

While there is a broad range of functions that are outsourced, the literature identifies various operations and services that are very likely to be outsourced. Various authors have compiled large amounts of anecdotal evidence to create groupings of various operations and services subject to outsourcing. The following table categorizes functions by the likelihood of an airline choosing outsourcing.

**Table 1**  
**Functions Likely to be Outsourced by Airlines**

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Very Likely	Ticket Sales and Distribution <sup>18</sup>
	Aircraft Leasing <sup>19</sup>
	Airport Gates <sup>20</sup>
	Complimentary Limousine Pick-Up <sup>21</sup>
	Food Services <sup>22</sup>
	Ticketing <sup>23</sup>
	Baggage Handlers <sup>24</sup>
	Aircraft Interior Cleaning <sup>25</sup>
Likely	Engine Overhaul or Rework <sup>26</sup>
	Maintenance Training <sup>27</sup>
	Information Systems and Technology <sup>28</sup>
	Pilot Training <sup>29</sup>
	Advertising <sup>30</sup>
Moderate	Counter personnel <sup>31</sup>
	Airframe Maintenance <sup>32</sup>
	Spare Parts Inventory <sup>33</sup>
	Feeder Operations <sup>34</sup>
	Gate Personnel <sup>35</sup>
	C and D Level Maintenance Checks <sup>36</sup>
Unlikely	Cargo Handling and Operations <sup>37</sup>
	Marketing <sup>38</sup>
	Human Resources Management and Recruitment <sup>39</sup>
Very Unlikely	Pilots <sup>40</sup>
	Strategic Management <sup>41</sup>
	Flight Attendants <sup>42</sup>
	Accounting <sup>43</sup>
	Routine Hanger Maintenance <sup>44</sup>

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An additional grouping of services are the items that are likely to be insourced by the airline. While this list is not as extensive as that of items outsourced, there are a number of areas that are consistently insourced by the companies.

The most common of these included highly intensive maintenance operations,<sup>45</sup> leasing of aircraft,<sup>46</sup> cargo operations,<sup>47</sup> and baggage handling.<sup>48</sup> The literature reviewed highlights the wide variety of operations and services that airlines are currently outsourcing. Furthermore, it shows that every major airline was outsourcing some areas. It does not categorize airlines as high or low users of outsourcing. Finally, it identified some exceptions to the general outsourcing trend by noting some functions that companies are insourcing.

## DISCUSSION

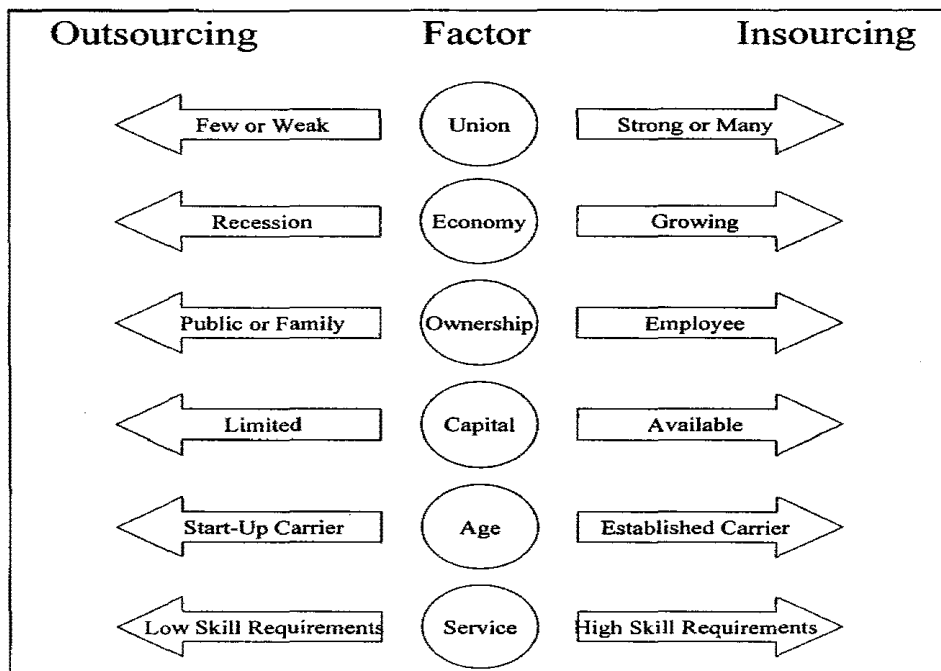
Given the vast array of services and operations that are outsourced, a number of important questions arise. The obvious question is "What factors cause an airline to choose outsourcing?" There are numerous forces both internal and external to the airline influencing this decision.

One factor that was universal to the outsourcing decision was cost. Every company considering outsourcing identified the idea of cost reduction as significant in their decision-making. All carriers are looking for any method to reduce costs in order to respond to competitive pressures. However, the idea of cost reduction as the sole driving force of outsourcing is too broad and simplistic. There are a number of additional factors that impact the outsourcing decision.

The literature and observation leads the authors to identify six primary factors that drove the outsourcing decision. In no particular order, these are 1) the level of unionization of the carrier, 2) the current state of the economy, 3) the ownership composition of the company, 4) the availability of and types of financing for the carrier, 5) the age of the company, and 6) the complexity of the service considered for outsourcing. These six factors determine the likelihood of outsourcing a given task.

A goal of this work is to develop a working model that helps to clarify some of these factors, and their impacts upon the outsourcing decision. Figure 1 provides a visual depiction of these six factors and how they influence the outsourcing/insourcing decision.

The age of the airline provides a good example. The start-up airlines appeared much more likely to outsource functions that established carriers either keep in-house or insourced. This appears logical given the established carrier may have developed skills or expertise in a specific area. For example, American Airlines insources complex maintenance tasks.<sup>49</sup> A two or three year old airline may not be able to achieve sufficient volume of these complex maintenance tasks to achieve economies of scale. Cost control will also be an important benefit of outsourcing for start-up airlines since their usual strategies involve offering budget fares. A particular benefit of outsourcing from the point of view of individual firms is that it reduces the fixed costs of the firm relative to its variable costs, which reduces breakeven level of output for the start-up.



**Figure 1. Impact of factors on outsourcing**

The ownership of the airline and its level of unionization are also important. The unions tend to reject the idea of outsourcing and prefer that the airline offer job security for their members.<sup>50</sup> Job security is also likely to be a strong motive for avoiding outsourcing if the company is employee owned. On the other hand, if management is strong with few or weak unions, it is very likely to use large levels of outsourcing to reduce costs.

Another critical factor is the complexity of the service or operation considered for outsourcing. The more complex the item, the less likely it is to be outsourced. This is true because as service become more complex, the contracts necessary to secure them also become more complex and difficult to negotiate and enforce. These high transaction costs mean that complex functions can be completed cheaper internally. For instance, pilots' skill sets are very complex. They are also specific to particular types of aircraft, so that there must be a good match between an airline's fleet and the skills of its pilots. While the training of the pilots is outsourced frequently,<sup>51</sup> there are very few examples of pilots being outsourced. Normally, the pilot is considered an integral part of the company and a core component to its success.

Other important considerations include the condition of the economy and the availability of capital. Airlines have always been very sensitive to the economic

cycle.<sup>52</sup> As noted above in the discussion of start-ups, an advantage of outsourcing is that it permits airlines to reduce the burden of fixed costs and thus the level of output at which they will breakeven. This is desirable in recessionary conditions when demand is depressed. Most of the literature identified that during the Gulf War and the 1992-1993 Recession, airlines had capital shortages and increased the number of aircraft they leased.<sup>53</sup> It may be that these two points are highly correlated, but only empirical testing can determine their relationship.

Finally, the age of the airline appears to have a direct impact on the likelihood to outsource. The established carriers appear more likely to insource some operations and outsource the most basic services. The start-up airlines tend to outsource more functions including more complex operations. While age was chosen to represent this factor, that may be an oversimplification. It is more likely a combination of factors that occur over time as an airline grows, formalizes process, changes management, etc. However, the relationship between age and outsourcing appears sound.

## CONCLUSIONS

The first conclusion is that the level of outsourcing has increased throughout the airline industry since deregulation. However, the growth of outsourcing has been erratic. During poor economic periods, outsourcing has grown rapidly. However, the opposite has not been true. During good economic periods, there has not been a dramatic shift towards insourcing.

Given this trend, it appears likely that over the next twenty years, the level of outsourcing will continue to grow in the airline industry. This has dramatic implications for both management and labor. Each must decide which functions remain core competencies that must be maintained by the firm. Areas that were considered integral to the airline ten years ago are now being outsourced (i.e., pilot training and maintenance). Much of the future relationship between management and labor will be based on the levels of outsourcing and which operations are chosen for outsourcing.

Another intriguing possibility is that the concept of a virtual airline may be becoming a realistic possibility in the industry. While a number of authors have hinted at this idea of the virtual airline<sup>54,55</sup> each increase in the use of outsourcing makes it seem more likely to occur. There may come a time when the only thing an airline truly owns is its brand name. A possible future scenario is an airline that leases aircraft, contracts crews (pilots and attendants), outsources maintenance, rents gates, relies on third-party reservation systems and electronic tickets, employs outside advertising and marketing firms, rents hangar and office spaces, as well as outsourcing all the typical operations of today (maintenance, baggage, food services, aircraft cleaning, etc.) This future firm would have little or no asset base and only a few managerial employees.

This mirrors the nature of a growing number of non-asset based 3PL companies. If this system works well in the cargo industry, it may be the next evolutionary step in the passenger airline industry. It appears that some airlines already outsource a large percentage of their total operations without any negative impact on customer service.<sup>56,57</sup> The virtual airline is the next logical step.

This implies a drastically different process of operating an airline. The implications for labor under this system are dramatic. Most workers would see this as a negative. The history of outsourcing has been one of replacing high cost labor with low cost labor. This need not be true under a virtual airline. The key is how labor unions, such as Airline Pilots Association (ALPA) react. ALPA could use the creation of virtual companies to provide a body of well-trained pilots for all the virtual airlines. This would have the effect of equalizing salaries across airlines and increasing security. No longer would a captain at one airline lose his seniority if that airline folds. Now, the ALPA seniority would remain as they worked for each carrier. The typical ALPA virtual pilot might bid on airlines as well as routes each month.

Regardless of which choices companies and labor make, there are tremendous opportunities as well as pitfalls with outsourcing. It is clear that outsourcing has become an accepted method of conducting business in the airline industry.

### **Limitations of the Current Research and Opportunities for Future Research**

Given the conceptual nature of this article, there are obvious shortcomings. First and foremost, is the use of large amounts of anecdotal evidence to develop the analytical framework. An obvious extension is to determine through empirical testing if the six factors do effect the outsourcing decision. One of the goals of the authors is to use this piece as a springboard to future research. An equally import opportunity is to invigorate discussion on the possibilities of outsourcing within the industry. There is an opportunity to identify other views and possibilities of this area. There are many benefits and costs to any change. However, change is inevitable. Perhaps this discussion can benefit those who must make and those who must live with outsourcing decisions.

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