Winter 2006

Stuck in the Middle Revisited: The Case of the Airline Industry

Isabelle Dostaler
Triant Flouris

Follow this and additional works at: https://commons.erau.edu/jaaer

Scholarly Commons Citation

This Article is brought to you for free and open access by the Journals at Scholarly Commons. It has been accepted for inclusion in Journal of Aviation/Aerospace Education & Research by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu.
STUCK IN THE MIDDLE REVISITED: THE CASE OF THE AIRLINE INDUSTRY

Isabelle Dostaler and Triant Flouris

Abstract

When Porter (1980) introduced his typology of business strategies, he used Laker Airways’ as an example to illustrate the danger of being stuck in the middle between the two basic types of competitive advantage, namely low cost and differentiation. However, the changing nature of competitive pressure in many business sectors and the accompanying need to perform well simultaneously in several aspects of operations performance, have eventually lead Porter (1990) to revisit his early idea. When presenting Porter’s generic competitive strategies, most strategy textbooks now offer a new choice, namely the “integrated cost leadership/differentiation” strategy (Coulter, 2002; Hitt, Ireland, & Hoskisson, 2003), or the “best-cost provider” strategy (Thompson & Strickland, 2001). Given this background, the purpose of this theoretical paper is to build upon the strategic management and operations strategy literature to develop a conceptual framework that will subsequently be used to explore the extent that airline companies successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy, and how they manage to resolve the trade-off between low-cost and differentiation. We aim at revisiting the “stuck in the middle” prescription by demonstrating that a number of aviation strategic options exist between the “traditional” and “low-cost” model.

Introduction

In many industrial sectors, competitive pressure now requires companies to compete on several dimensions simultaneously. Rather than choosing between an ensemble of key performance criteria, companies should aim at achieving them all. Indeed, from a customer’s point of view, the obvious choice would be, for example, audio equipment offering both performance and ease of use, or cars offering both speed and safety. Similarly, when given a choice, a traveller will opt for a carrier that is able to offer high service quality, on-time arrival, and low fares. These examples illustrate the perspective that argues against Porter’s “stuck in the middle” prescription that inherent contradictions exist between the generic competitive strategies, namely the cost-leadership, cost-focus, differentiation, and focused differentiation strategies. This critique was echoed in the field of operations management where the traditional idea that the operations function should be designed to achieve a limited number of performance criteria, for example low-cost vs. flexibility, has been questioned.

The purpose of this theoretical paper is to build on the strategic management and operations strategy literature to develop a conceptual framework that will subsequently be used to explore the extent that airline companies will successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy and how they manage to resolve the trade-off between low-cost and differentiation.

Theoretical Background

Generic Competitive Strategies

Strategy can be formally envisioned as a hierarchy reflecting the organizational structure of multidivisional corporations (Grant, 1998) in which corporate strategy states the general direction that the organization will follow, while business strategy is a formulation of how the business unit intends to compete in its given business sector. The lower level of this hierarchy of plans reveals the instrumental character of functional strategies designed to support the
implementation of the business and corporate strategies. Strategists or dominant coalitions have a number of corporate strategic options such as concentration, vertical or horizontal integration, and diversification available to them, that can be realized through strategic alliances, mergers, acquisitions, or internal development.

Whereas the business sectors in which the firm will be active are selected at the corporate strategy level, business strategy decisions dictate how each business unit will compete in its specific business sector. In an attempt to explain and categorize specific competitive strategies that firms use, researchers have proposed typologies of business strategy. According to Miles and Snow (1978), four strategic postures are possible: prospector, defender, analyser, and reactor. Porter (1980) argued that two types of competitive advantage exist that can be combined with either a broad or limited competitive scope to create four well-known business strategies: cost leadership, differentiation, focused low-cost, and focused differentiation (Figure 1). After identifying an industry that is considered to be attractive, a firm will determine how to position itself within the industry. This explains why Mintzberg classified Porter's contribution in the "positioning" school of thought (Mintzberg, 1998).

![Figure 1. Four competitive strategies](Source: Porter, 1980).
Cost leadership is the typical business strategy pursued by companies in the consumer electronics or compact cars industries. Each one of the cost leader's value chain activities has to be conducted in the most efficient way in order to generate a profit margin despite the low price of the product or service offered. In contrast, differentiation is the business strategy of companies that offer a product or service that customers perceive as different and for which they are willing to pay a higher price. Selecting the bases of differentiation, in other words the features of the product or service offered or the way in which it is offered, and developing the organizational capabilities needed to achieve the bases of differentiation, is a key challenge for companies. Interestingly, in order to ensure offering acceptable value to customers, cost leaders must not ignore the bases of differentiation valued by customers and for which they are willing to pay a premium. However, cost leaders must not try to offer features that differentiated products or services possess, for fear of being "stuck in the middle". According to Porter (1980), this is what happened to Laker Airways in the 1970s. The British airline offered a successful no frill/low fare service but eventually started to add more destinations and fancier in-flight services. To maintain its profitability, Laker Airways had to raise its fares up to the point where travellers felt that they had more value for money when flying with traditional carriers. According to Porter, a firm that tries to pursue each generic strategy but fails to achieve any of them is 'stuck in the middle'. Porter (1990) saw such a position as "a manifestation of a firm's unwillingness to make choices about how to compete," (p. 69) and argued that being stuck in the middle was "a recipe for strategic mediocrity and below-average performance, because pursuing all the strategies simultaneously means that a firm is not able to achieve any of them because of their inherent contradictions" (Porter, 1990, p.40). More precisely, achieving both low cost and differentiation was thought to be "difficult because providing unique performance, quality, or service is inherently more costly, in most instances, to seeking only to be comparable to competitors on such attributes" (Porter, 1990, p.38).

**Operations Strategy**

The above discussion on generic competitive strategies seemed to imply that when formulating a business strategy, managers may choose from a "menu" of generic options. The literature on functional strategies is less centred around content and is therefore keeping with the Harvard approach to business policy that considers each company's situation as unique (Greiner, Bhambri, & Cummings, 2003). Combined to form what is fashionably referred to as a "business model", functional strategies are often defined as "patterns of decisions" (Wheelwright, 1984, p.79), putting in action the formulated corporate and business strategies. Marketing strategy, human resource strategy, research and development strategy, and operations strategy are examples of functional strategies. A human resource strategy will consist of a set of decisions regarding staffing, training, compensation, performance appraisal, etc. An airline operations strategy could include decisions regarding service design, demand forecasting, capacity management, service operations, planning schedule, and service quality management. Mintzberg (1987) has distinguished between intended and realized strategies, explaining that a company's actual strategies are a combination of intended and emergent strategies. Not all intentions are realized because some are discarded within the course of action. Since they are defined as decisions already taken, it could be argued that functional strategies go beyond strategic intent (Hamel & Prahalad, 1989) and are good indicators of a firm's realized business strategy.

The field of operations strategy was dominated by the trade-off model for a long time; The operations function should not try to be all things to all people and the functional decisions described above (capacity, equipment and processes, etc.) should be taken with a limited set of criteria in mind (Skinner, 1969). As a result, a factory or service delivery system, designed to achieve low cost, could not be flexible and lower quality could also be expected. The operations function should select one or two competitive priorities and develop manufacturing or service capabilities accordingly in order to support the choice between a cost and a differentiation strategy made at the business level. Indeed, the trade-off model is quite in line with Porter's "stuck in the middle" argument presented above. Now that the changing nature of the competitive pressure in many industrial sectors, and the accompanying need to perform well in several aspects of operations performance have become a global reality, some operations management authors have suggested adopting a cumulative viewpoint of operational performance (Ferdows & De Meyer, 1990). Interestingly, this has happened in a context where scholars in the field of strategic management were questioning the exclusivity of low cost and differentiation (Kotha & Vadlamani, 1995; Hayes & Pisano, 1996).

Ferdows and De Meyer's "sand cone model" is increasingly referred to as the first formal proposition of an alternative to the trade-off theory. Most authors in the field now recognize the trade-off model and the "cumulative" or "synergies" approach as two competing schools of thought (Corbett & Wassenhove, 1993; Noble 1995; Clark, 1996;
Collins, Cordon & Julien, 1998; Flynn, Schroeder & Flynn, 1999; Dostaler 2000). The notions of "sequence" and "lasting capabilities" are key elements in Ferdows and De Meyer's model which is illustrated by a sand cone; pouring sand to build a cone is like putting in managerial effort and resources. The authors argue that since improvements in quality precede successive improvements in dependability, speed of response, and, in the end, cost, all these improvements (or lasting capabilities) can last (Figure 2). Research conducted by others has confirmed this view of quality as being the basis of improvements in other performance areas (Noble, 1995; Flyhn et al., 1999; Dostaler 2000). However, as empirical evidence is scant for the remaining stages of the proposed sequence of improvements, one cannot but wonder if such a sequence really exists. It could be argued that improvements happen in a more disorganized manner, with various virtuous circles, and some vicious ones, at work, everywhere in the production or service delivery system. For example, the implementation of JIT in manufacturing companies may lead to improvements in quality because solutions to quality problems that appear suddenly must be found (Wilkinson & Oliver, 1989). Similarly, improvements in quality also increase productivity as less re-work is needed. The idea of the multiple impact of a given practice is hardly debatable. However, the hypothesis of a fixed sequence of improvements may be less convincing.
Figure 2. Sand cone model

(Source: Ferdows and De Meyer, 1990)
Stuck in the Middle Revisited

“Stuck in the Middle” Revisited

The "stuck in the middle" prescription, like the trade-off model, has generated much debate. We mentioned earlier that functional strategies are instrumental in character since they are designed to support the implementation of business and corporate strategies. Using Mintzberg’s (1987) concept of realized and intended strategies, we suggested that functional strategies constitute valid indicators of the actual business strategy pursued by a firm. The similarity between the debates on the trade-off model in the field of operations management and on the stuck in the middle prescription in the field of strategy is a further indication of the close relationships between levels of strategies. For example, Gilbert and Strebel (1988) did not consider cost leadership and differentiation as mutually exclusive and argued that companies in mature industries can rejuvenate themselves by shifting to product differentiation and innovation, whilst preserving strengths in cost reduction and process efficiency. Interestingly, this is reminiscent of Ferdows and De Meyer’s idea of lasting capabilities that pushed the operations management field to question the inescapability of operational performance trade-offs. Similar arguments could be found with Pettigrew and Whipp who observed that in many industrial sectors, bases of competition in one era became the essential prerequisites for new organizational capabilities in the next. They stated that "the popular notion of a single competitive edge appears at best wrong-headed and at worst downright alarming" and stressed the danger of "pinning all hopes and resources on one main ability" (Pettigrew & Whipp, 1991, p.289). This strong argument echoed the “value for money” paradigm introduced by Pitelis and Taylor (1996) who are considered as fervent advocates of the need for companies to try to achieve both cost leadership and differentiation (Kanitakis, 2002).

Contributing to the debate on whether cost leadership and differentiation can be combined, Cronshaw, Davis and Kay (1994) have proposed new interpretations of the “stuck in the middle” prescription. They suggested that firms that do not establish lower costs or better or differentiated products, overall rarely succeed. Interestingly, this interpretation suggested that “stuck in the middle” was less a prescription than a way to analyze strategic outcomes. Indeed, analyzing strategic outcomes is precisely what Porter does in his 1990 book The Competitive Advantage of Nations when he used the global shipbuilding industry to describe the generic strategies. He explained how Japan, Korea, Scandinavia, and China each have successfully pursued one of the four competitive strategies and argued that Spanish and British ship-building industries have declined because they were stuck in the middle (Porter, 1990, p.39). Interestingly, Cronshaw et al. argued in 1994 that the weaknesses of British yards "were in the implementation of the strategy":

British shipbuilders failed not because they pursued the wrong strategy, but because they were not very good at building ships. In this context, the claim that they were 'stuck in the middle' is best interpreted as meaning that they did not succeed in establishing any competitive advantage. We infer that they were 'stuck in the middle' from the evidence of their failure. In this case, we would not interpret the phrase 'stuck in the middle' as referring to strategies, intentions or goals, but to strategic outcomes. (pp.22-23).

The “stuck in the middle” prescription should, therefore, not be taken literally. As mentioned earlier, Porter insisted on pointing out the danger for a low-cost producer of not offering acceptable quality and service as well as the danger for a differentiator of having costs higher than its price premium. Moreover, Porter’s discussion about the sustainability of the competitive advantage is puzzling. The author claimed that whether a firm will be able to sustain its advantage depends on the source of the advantage, the number of distinct sources, and constant improvement and upgrading (Porter, 1990, pp.49-53). Porter made a distinction between lower-order advantages, such as low labor costs or cheap raw material, and higher-order advantages such as proprietary process technology or product differentiation based on unique products or services, arguing that pure cost advantages are often less sustainable than differentiation. In a sense, the author appeared to treat cost leadership like the poor cousin in the competitive strategy family. The underlying message seemed to be that differentiation is the best strategy. In keeping with Cronshaw et al. (1994), it could be argued that being able to successfully combine differentiation and cost leadership would be even better. Therefore, it is not surprising that most strategy textbooks now offer a fifth choice (Figure 3), namely the “integrated cost leadership/differentiation strategy” (Coulter, 2002; Hitt et al., 2003) or the “best-cost provider strategy” (Thompson & Strickland, 2001), a strategy “in which an organization develops a competitive advantage by simultaneously achieving low costs and high levels of differentiation (Coulter, 2002, p.228). Interestingly, while Southwest is widely recognized for having invented the low-cost carrier business model, Hitt et al. (2003) argued in the opening of their textbook that Southwest succeeded
Despite poor economic conditions "because of its integrated cost leadership/differentiation strategy" (p.6). The authors observed that Southwest offered low fares, like many other carriers, but also had fewer customer complaints than major carriers, were able to attract employees that treated customers well and had excellent on-time performance. Southwest therefore appeared to simultaneously achieve low costs and differentiation.

**Figure 3.** Five competitive strategies
(Source: Coulter, 2002)
Stuck in the Middle Revisited

Conceptual Framework

Given this background, this paper sets out to propose a conceptual framework that could be used to explore the extent to which airline companies successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy described above and how they manage to resolve the trade-off between low-cost and differentiation.

While cost leadership is self-explanatory – in the airline industry it translates into offering the lowest fares - the very concept of differentiation is much less precise. Differentiators need to be aware of the key success factors in their industry, namely “the product attributes, competencies, competitive capabilities, and market achievements with the greatest direct bearing on company profitability” (Thompson & Strickland, 2001, p.106) – in other words the bases on which customers choose between competing airlines - and select the key success factors that they will use as bases for differentiation. In the case of the airline industry, key success factors that carriers could use as bases of differentiation are in-flight comfort service, baggage handling, quality of airline employees, internet usage, airport proximity, additional services, number of destinations offered, and safety. Therefore, carriers pursuing a best-cost provider (or integrated cost leadership/differentiation) strategy would offer lower fares than their competitors, together with higher quality air travel services.

We are also interested in assessing the success of the business strategy. In order to do so, we will look at both financial and strategic performance. While financial performance translates into indicators such as profitability and stock price, strategic performance refers to the strength of a company business position reflected in the size of its market share and the power of its brand. We posit that:

(1) Airlines that offer lower fares than their competitors, together with higher quality air travel services and achieve higher financial and strategic performance than their rivals have successfully implemented the best-cost provider (or integrated cost leadership/differentiation) strategy.

(2) Airlines that offer lower fares than their competitors, together with higher quality air travel services but achieve lower financial and strategic performance than their rivals are stuck in the middle.

We now turn to the interesting question of how airlines can manage to successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy. This translates into operations management terms on how the trade-offs between low cost and high quality can be resolved. Moreover, according to the sand cone model reviewed earlier, operational performance trade-offs can be avoided by developing lasting capabilities. Discovering high performance, low cost/differentiation, carriers’ capabilities and competencies would therefore lead us to answer the second research question. It should be noted we do not make any a prior assumptions about the factors explaining successful achievement of the best-cost provider (or integrated cost leadership/differentiation) strategy. Indeed, as will be explained later on, our research design will allow us to compare, in an open-ended manner, the cases of airlines pursuing different business strategies and achieving different levels of financial and business performance. We hope to demonstrate that a number of aviation strategic options exist between the “traditional” and “low cost” models.

Research Design

In keeping with the above research framework, our proposed research design would first entail the identification of the business strategy that carriers actually pursue. As mentioned earlier, the typology of competitive strategies introduced by Porter can be used to compare how rivals in a given industrial sector position themselves. It would therefore be relevant to apply this tool to understand the positioning of a sample of airline carriers competing on the same routes (some could be traditional carriers and others could be so-called low cost carriers). Selecting airlines competing on same routes controls for travel distance. Indeed, it can be argued that what customers value depends considerably on the length of the flight.

After establishing a sample of airlines, objective measurement of costs and levels of differentiation will be taken. While airline fares can be used as indicators to the extent in which airlines are using low cost as a competitive advantage, the level of differentiation can be measured using indicators such as safety, in-flight services, and on-time arrivals. We can choose to concentrate on a single indicator of differentiation or create an index using various bases of differentiation. Published information on carrier performance can be used to evaluate the level of differentiation. Alternatively, direct measurement of customers’ evaluation of airline safety, and in-flight services can be taken, by conducting a survey of passengers travelling with the selected airlines. This approach, used by Kanitakis (2002), entails approaching passengers at the back of the check-in desks queue and interviewing them using a questionnaire designed to rate the airline on a number of differentiation indicators. In keeping with Porter’s typology of business strategies, this approach allows for the
identification of whether or not carriers offer air travel services that passengers value and for which they would be willing to pay a premium. Moreover, measuring the fares offered by the airlines will indicate whether passengers feel that they are being offered value without having to pay a premium. According to our conceptual framework, this means travelling with an airline pursuing a best-cost provider (or integrated cost leadership/differentiation) strategy.

The expected results of the above measurement will be plotted on a scattergram (Figure 4), composed of the following quadrants: a group of airlines pursuing a cost leadership strategy, a group of airlines pursuing a differentiation strategy, a group of airlines pursuing a best-cost provider (or integrated cost leadership/differentiation) strategy and, finally, a group unable to achieve either low cost or differentiation. In comparing airlines’ positioning on low cost and differentiation, we are making an implicit distinction between intended and realized business strategies. The intended business strategy could take the form of airline companies’ statements regarding their positioning, in their annual report or in the business press. However, beyond strategic intent, the measurement of fares and airline services quality that we plan to conduct will give a measure of the extent to which the intended business strategy was realized.

![Figure 4. Airlines realized business strategies](image-url)
In the next step of our analysis, we are going to concentrate on airlines located in the integrated cost leadership/differentiation quadrant of our scattergram. Depending on whether or not all airlines in the research sample are public companies, indicators such as profit margins, stock price and return on investment will be used to evaluate financial performance. Strategic performance will be measured with indicators such as market share and capacity utilization. In line with our conceptual framework, measuring financial and strategic performance will allow us to distinguish between airlines successfully pursuing the best-cost provider (or integrated cost leadership/differentiation) strategy, airlines that are stuck in the middle and do not fare better than those located in the bottom left quadrant of the Realized Business Strategies Scattergram.

In order to determine how airlines can manage to successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy, secondary data will be collected to compare airlines having successfully implemented the best-cost provider strategy and with airlines appearing to be stuck in the middle. In keeping with theory on operations strategy, the aim of this comparison is to identify airlines’ “lasting capabilities” (Ferdows & De Meyer, 1990) by analyzing business press articles and published case studies to assess how primary and support activities are conducted by each airline. This follows from Porter’s (1985) assertion that a network of discrete activities underlies any competitive advantage (p.1991). It is also in line with the resource-based view of the firm (Barney, 1991) which highlights the influence of organizational assets and capabilities, that are difficult to copy, in the creation of firm specific rents.

Conclusion
This paper builds on the strategic management and operations strategy literature to develop a conceptual framework that could be used to explore the extent to which airline companies successfully pursue the best-cost provider (or integrated cost leadership/differentiation) strategy, and how they manage to resolve the trade-off between low-cost and differentiation. Although a lot of work remains to be done to operationalize our framework and apply it to the airline industry, we believe that our approach could lead us to challenge the current dichotomy between so-called traditional and low cost carriers. We argue that it is only through objective comparison and positioning that definitive conclusions can be reached on the business strategies actually pursued by airlines competing on similar routes. Moreover, we believe that using an open-ended approach to understand how carriers operate, instead of trying to measure whether or not they are using the well-known low cost recipe, could lead to interesting discoveries.

The results of this objective comparison of airlines’ performance and activities will be most valuable, given that the airline industry is currently searching for new strategic avenues. Many so-called traditional carriers have chosen to create low-cost subsidiaries to try to compete with newly established low cost carriers. However, this strategy has not been successful and seems to further demonstrate the soundness of the “stuck in the middle” argument. Interestingly, the difficulty for traditional carriers to house low-cost subsidiaries questions the sequence of improvement (from quality to dependability to speed to cost efficiency) introduced by Ferdows and De Meyer (1990) in their sand cone model. Our proposed research could lead us to identifying a sequence of improvements specific to an airline. Perhaps it is more feasible to move away from a cost leadership to an integrated cost leadership/differentiation position than the other way around, which would mean succeeding where Laker Airways had failed a number of years ago. 

Page 42

JAAER, Winter 2006
Stuck in the Middle Revisited

Isabelle Dostaler is Associate Professor in the Department of Management and Director of the Aviation MBA Program, John Molson School of Business, Concordia University. She holds a B.A. and a M.Sc. in management from HEC Montréal and a Ph.D. in management studies from the University of Cambridge. She has teaching interest in Strategic Management, Operations Strategy and Technology Management. She has conducted research into new product development performance and practice, operations strategy and performance, and supplier-buyer relationships in the electronics, automotive and aerospace industries. Her research has been published in journals such as Canadian Journal of Administrative Sciences, Journal of High Technology Management Research, and Production and Operations Management.

Triant Flouris' research interests include low-cost and legacy airline financial and strategic analysis, aviation economics, strategic management and operations strategy, aviation business modeling, and international aviation governance. He is on the editorial board of the Journal of Air Transportation World Wide and the author of two books, one on EU industrial policy and one on aviation strategic management. He has also published numerous academic journal articles on several topics in aviation management, several book chapters, articles appearing in aviation encyclopedias, and several technical reports and short articles. He is a Commercial Pilot and Certified Flight Instructor with over 4,200 hours of total flight time. Triant Flouris, since September 2004, serves as alternate representative of the Republic of Cyprus to ICAO.
References


Stuck in the Middle Revisited


