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BUILDING AIRLINE PASSENGER LOYALTY THROUGH AN UNDERSTANDING OF CUSTOMER VALUE: A Relationship Segmentation of Airline Passengers

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ABSTRACT

This thesis explores means of restoring profitability to the airline industry by cultivating intrinsically motivated brand loyalty between passengers and airlines in today's fragile environment. The air transport industry is caught up in traditional transaction-based strategies. Airlines rely on archaic frequent flyer programs (FFPs) to maintain loyalty which deter customers from choosing alternative airlines by increasing the cost associated with switching. In contrast, other industries foster loyalty through relationship marketing to increase the customer's value of the relationship.

The objectives of this thesis are to 1) establish the link, if any, between passenger value, loyalty and increased airline profitability as well as 2) develop a competitive strategy for relationship marketing in the airline industry. The methodology comprises a 'reverse value segmentation' of passengers on value data collected in the New York – London market. The result is a model which segments customers into value profiles characterised by attitudes and behaviours towards loyalty.

This dissertation extends the knowledge of passenger buying behaviour and choice as well as establishing passenger value as a foundation for strengthening industry structure. The results support a shift from the commoditized low-cost, no-frills model to a low-fare, 'high-value' model focusing on mass customization through CRM technologies.

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1 INTRODUCTION

The metric to measure success of a corporation in the past has simply been current cash flow; however, market valuation today has become more convoluted (2002). In today's 'Information Age', intellectual assets contribute to the majority of corporations' market value. For every $1 of tangible assets in the market valuation of the S&P 500, there are approximately $3 - $5 of intangible assets not on the balance sheet. Furthermore, less than 25 percent of the S&P 500's market capitalization is backed by cash flows derived in the impending five-year period. In 1996, Coca-Cola's book assets accounted for as low as 4 percent of their market valuation, Microsoft as low as 6 percent and in 2001, only 10 percent of GE's market value was covered by tangible assets (2002).

Intellectual capital includes assets such as trademarks, patents and copyrights; none of which are important as a firm's customer base (Galbreath, 2002). No asset is more vital to the financial vitality of corporations than the customer, without whom no business would prosper. As with any asset, the objective is to acquire as many as possible and utilise each asset to its full potential. Academics and practitioners agree the central role of marketing is shifting from pushing transactions towards managing customers as assets.

Competition is no longer on what is produced but what resulting benefit provided to the customer (Grönroos, 1997). Customers view product offerings in terms of augmented products; as a bundle of the core product and ancillary products and services (Levitt, 1981 in Payne and Holt, 2001). Customers' relationship with the firm and other intangible 'product features' are also thrown into the mix of the product and service bundle (Grönroos, 1997). The modern realisation is all businesses are in the service industry. Airlines must develop

actionable strategies to compete for customer assets rather than competing on price and product.

1.1 AIRLINE PROFITABILITY

The airline industry is historically low-margin and cyclically unprofitable. Airline profitability in the long run has constantly performed below that of most other industries, historically averaging a Price/Earnings ratio of 9 while the S&P Index average is around 32 (Skinner, Dichter, Langley, & Sabert, 1999). Airlines rarely achieve net profits exceeding 2 percent of revenues, yet industry suppliers continue to outperform airlines (Doganis, 2002). In addition, the international air transport industry is inherently vulnerable to fluctuations in the world economy and follows a very cyclical pattern every 7 – 10 years with 4 – 6 years of reasonable profit and 3 – 4 years of little profit or loss (2002). The figure from Morrell (2006) visualises this pattern.
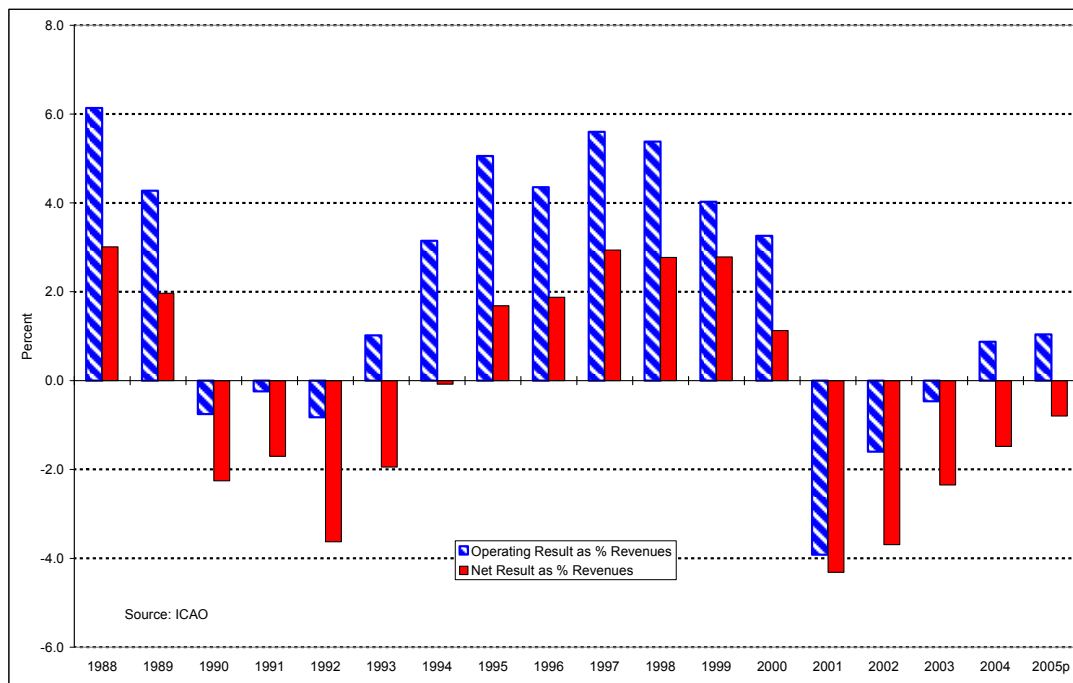
Figure 1. World scheduled airline financial results (Morrell, 2006).

The problem of airline profitability is well documented and has received much attention (Morrison and Winston, 1995, Holloway, 2002, Doganis, 2002, Doganis, 2001). The intent of this dissertation is to not further investigate the problem of airline profitability but to understand it and offer up potential solutions.

1.2 COMPETITIVE ENVIRONMENT

Porter studied competition and the elements which contribute to industry and firm profitability (1985). He states:

> "The crucial question in determining profitability is whether firms
> can capture the value they create for buyers, or whether this value
> is competed away to others." (Porter, 1985)

From Porter's work, two critical elements for industry, and ultimately firm profitability, are identified; industry structure and value creation through firms' competitive strategies. Industry structure determines the profitability of an industry while competitive strategies determine a firm's share of industry profitability.

1.2.1 Industry Structure

Porter describes competition as an 'arena' shaped by market forces and the competitive strategies of firms. The action of one firm affects all the rest in the industry. Firms often fail to anticipate the long-term effect of strategic actions. An individual firm may make a move they view to be a success, however the long-term effect of a strategic action is often over looked or ignored. The action of one firm may force the others to react in a way that is damaging to the industry as a whole. Porter emphasizes if firms are to produce retainable

profits, they must also establish and sustain a 'healthy' industry to capitalize on the benefits of value creation (1985).
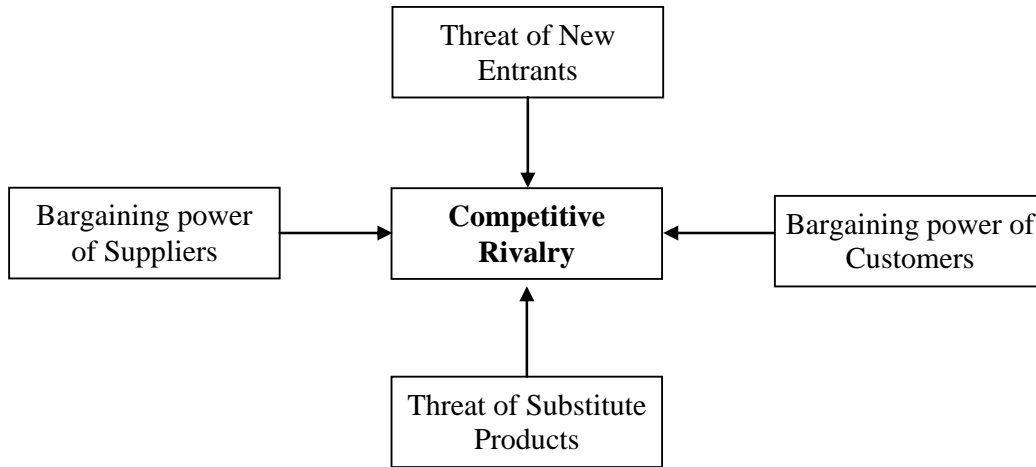
Figure 2. Porter's Five Forces Model (Porter, 1985).

Competition is just one of five forces identified by Porter which influence industry structure (1985). The threat of new entrants and substitute products influence competition as do the bargaining power of suppliers and customers. The five forces determine industry profitability, yet each is influenced by the competitive rivalry within an industry. This is evident in the airline industry where intense competition reduces the value of airfares and provides a healthy profit for suppliers (Doganis, 2002).

Intense industry competition and rivalry cause firms to compete away the value they create, in turn undermining industry structure. Extreme competition on price or product innovation exposes firms to increased costs to maintain status quo. In addition, a highly competitive market provides consumers power and the ability to demand value for themselves (Porter, 1985). In the airline industry, intense price competition presents a no-win situation (Chang and Yeh, 2002).

In addition, the airline industry receives significant political influence which makes establishing a healthy environment challenging (Doganis, 2002). Seemingly low entry barriers allow new entrants to add capacity to the industry,

applying downward pressure on airfares. However, high capital investment and low unit costs create exit barriers make it costly for existing firms to reduce capacity but easy to maintain or increase capacity (2002). As a result, industry capacity often is not in a natural equilibrium.

"Firms, through their strategies, can influence the five forces. If a firm can shape structure, it can fundamentally change an industry's structure" (Porter, 1985). For instance, Southwest Airlines created a new market of air travellers when they began going competing against car travel rather than other airlines. Today, when Southwest enters a market, the ensuing phenomena of fare correction has become known as the 'Southwest Effect'.

1.2.2 Value Creation and Competitive Strategies

Competitive strategies are the means to which firms go about creating value for customers and stakeholders, and in doing so, also influence the industry structure. Value is the exchange of benefits in consideration of sacrifices. In a typical transaction, the product represents the benefits received by the customer while the price or cost of the product is what is sacrificed in exchange. Porter explains value creation through the value chain concept. The value chain is a system of interdependent value activities connected by 'linkages.' Value activities are "the physically and technologically distinct activities a firm performs" (Porter, 1985). Value activities act as the 'building blocks' of the value chain. Linkages are the relationships between individual value activities and the way they are performed. Linkages can provide competitive advantage just as value activities do. The end result of the value chain is a 'total value' created for the consumer (1985).

Conversely, value created for the firm is represented by competitive advantage. Competitve advantage is a superior position in the marketplace relative to competitors. Porter discusses two basic types of competitive advantage; cost leadership and differentiation (1985). Cost leadership and differentiation are

broad strategies for competitive advantage. A third competitive strategy, the focus strategy, exists when cost leadership or differentiation is applied to a narrow market segment.

Cost leadership is a difficult strategy to pursue because only one cost leader the lowest cost operator can succeed. "Strategic logic of cost leadership usually requires that a firm be the cost leader, not one of several firms vying for this position" (1985). However, a differentiation strategy can exist for many different product features or market segments. Differentiation is creating value by enhancing the competitive advantage of the buyer. "A firm's differentiation stems from how its value chain relates to its buyer's chain" (1985). Porter offers the following steps towards achieving differentiation:

1. Determine who the real buyer is.
2. Identify the buyer's value chain and the firm's impact on it.
3. Determine ranked buyer purchasing criteria.
4. Assess the existing and potential sources of uniqueness in a firm's value chain.
5. Identify the cost of existing and potential sources of differentiation.
6. Choose the configuration of value activities that creates the most valuable differentiation for the buyer relative to cost of differentiating.
7. Test the chosen differentiation strategy for sustainability.
8. Reduce cost in activities that do not affect the chosen forms of differentiation (1985).

Firms strive to develop competitive advantage through their competitive strategies. Competitive advantage is key to establishing consistent profitability relative to industry competitors. Simply achieving competitive advantage is not enough; it must be sustainable as well. This is especially true for ultra-competitive industry environments, such as the conditions that exist in the air transport industry. Commoditization, over capacity and swift adoption of innovations make sustainable differentiation on price or product difficult. If

airlines are to begin competing for customer assets, they must first understand how to create value for their customers.

1.3 THE CURRENT AIRLINE INDUSTRY

In an overview of the changing trends in consumer air travel behaviour, Taneja notes consumers' needs and desires are becoming less homogenous as their expectations evolve. Technology has enabled consumers by providing more information and pricing transparency, shifting leverage in the consumers' favour. The increased access to information has provided an abundance of choices and has created higher expectations for suppliers to fulfil (2005).

At the same time, this same technology has also enabled suppliers to more effectively meet customer needs. Just in time inventory management, online distribution and product customisation are just a few examples of how firms have leveraged new technology to meet customers' demands. These productivity gains have lead customers to expect a solution which their exact needs, and in return, are willing to pay a premium for added value. However, higher expectations developed in one market spill over into all other consumption behaviour (2005). In the current marketplace, customers seek more than products, they expect results pine (Pine and Gilmore, 1999).

1.3.1 Competition

Regulation of the airline industry restricted consumers with few options to choose from in the products offered by airlines (Taneja, 2005). Following deregulation and liberalisation of air transport, more alternative product models are becoming available and passengers are growing increasingly unsatisfied with the product offerings of legacy carriers. The new competitive environment has allowed new entrants such as 'unconventional' low-cost airlines to emerge on the scene (2005).

The likes of jetBlue and AirTran offer a more logical, compelling product to leisure and cost conscious business passengers. Leisure traffic is becoming increasingly important to airlines as the mix of business passengers decline. Fractional ownership has made corporate business jets more affordable to high-end business passengers. The alternative air transportation means are cutting into legacy airlines' customer base on both ends of the spectrum (2005).

A common strategy to deter new entrants is for existing firms to aggressively add excess capacity, fuelling intense price competition in a ploy to drain out the new entrant's capital and resources. Legacy carriers unsuccessfully responded to low cost carrier (LCC) market penetration by resorting to price competition, allowing their lower cost competitors to shift market share away (Taneja, 2005). At the time of Taneja's book, approximately 30 percent of US capacity, 40 percent of UK capacity and 20 percent of capacity in Germany was supplied by LCC's (Taneja, 2005).

The increased competition from low-cost carriers and business customers flying economy (Morrison and Winston, 1995) has forced legacy carriers to focus their short term efforts on shedding costs as fast as possible while revenue generation has been overlooked (Taneja, 2005). While shedding excessive costs has allowed conventional airlines to survive in the short term, the long term goal of any business is to maximize profits. To do this, a customer orientation is necessary for airlines to produce consistent, profitable results (2005).

1.3.2 Strategy

A handful of carriers have been able to reach profitability by implementing unique, sustainable competitive strategies. Southwest, Ryanair, EasyJet, Virgin Blue and Air Asia have all successfully adapted the low-cost model in their

respective markets. Virgin Atlantic, Emirates Airlines and Singapore Airlines have all differentiated themselves as premium, long-haul carriers.

A common characteristic of all of these successful carriers is providing superior value to a select target market. The strategy of trying to be 'all things to all people' often leaves none satisfied (Taneja, 2005). Still, most legacy airlines continue to operate a 'one size fits all' product. The conventional airline's one-size fits all strategy cannot effectively compete in today's ultra competitive market against a broad range of more precisely targeted value propositions (2005).

Taneja states, "The key to long term survival for most conventional airlines is to simultaneously manage one or more independent airline operations serving unique niches matched to the airlines' competitive strengths" (2005). While Taneja's statement is directed towards finding strategies to satisfy the needs of unique, niche markets, the statement touches on one of many trends in airline strategy; the carrier within a carrier or airline subsidiaries.

Previous failure of legacy airlines' low-cost subsidiaries, such as Shuttle by United, Delta Express, MetroJet and Continental Lite in the 90's, and more recently Song, do not mean the model is flawed, merely the implementation and strategy (2005). Separate subsidiaries and brands can work in the airlines industry with persistent refinement. Taneja provides Air New Zealand operating Domestic Express and Qantas operating JetStar as examples of successful subsidiaries within the airline industry, just as Marriott Hotel chain operates Ritz Carleton, Renaissance, Courtyard, Residence Inn, etc. within the travel industry (2005). Just recently, the consortium bidding for a private takeover of Quantas "'expressed its support for Qantas' strategies' such as having a two-brand strategy, Qantas and Jetstar" (Newsflash, 12/14/2006). The result of this strategy has obviously paid off, with the consortium's bid currently valuing Quantas at a 33 percent premium over its market value (12/14/2006).

Innovating and renovating airline competitive strategies requires a better understanding of what airline passengers' find valuable. Taneja advocates customer engagement and maintains a better understanding of passenger behaviour based on customer research is necessary to satisfy passenger demands and enhance profitability (2005).

1.3.3 Relationship Marketing

Relationship marketing is viewed as the next paradigm shift in modern marketing and a potential source of creating sustainable competitive advantage (Payne and Holt, 2001)} . The principles of relationship marketing are to establish and develop value transactions into co-operative, profitable relationships sustained over the lifetime of a customer. Ravald and Grönroos suggest, "providing superior value…is one of the most successful competitive strategies" as well as "a means of differentiation and a key to the riddle of how to find a sustainable competitive advantage" (Ravald and Grönroos, 1996). Porter's (1985) previously discussed work on the value chain model is critical in understanding how relationship marketing creates competitive advantage (Ravald and Grönroos, 1996).

Establishing long-term relationships is viewed as a prerequisite for competitive advantage (Jüttner and Wehrli, 1994). Firms attempts to build interrelationships and create value through integration of value chains. Relationship marketing works to integrate customers into a firm's value chain by creating value linkages with firms' value activities. Providing value to the customer develops loyalty; a long-term commitment to the firm. Through loyalty customer relationships are developed into profitable assets of the firm.

The key to relationship marketing is selecting profitable customers to proactively maintain loyal relationships with the firm. Relationship marketing can deliver competitive advantage where differentiation on product and cost leadership on price cannot. This is because relationship marketing does not compete for

customers' business on each transaction, but instead competes for their business over the duration of customers' life cycle.

Just as customer assets add intangible value to firm's market value, so do the relationships add intangible emotional value to customer's value of the product offering. Providing value to the customer creates an emotional bond with the firm which customers consider in the transaction. As the relationship develops, this emotional bond grows in value, subsequently increasing the value of the firm's product. However, loyalty represents an idealistic goal more conceptual than operational.

1.3.4 Frequent Flyer Programs

Loyalty programs are and common practice in the airline industry. Frequent flyer programs (FFPs) are considered by some to be an example of relationship marketing (Gilbert, 1996) because they aim to retain high value customers and establish long-term loyalty. However, Gilbert refers to FFPs as a marketing tool or sales-promotion technique (1996), which more accurately reflects their role. FFPs provide valuable data but only act as a starting point for loyalty (Goebbels, 2003).

While demonstrating some qualities of relationship marketing, FFPs focus on the driving transactions rather than building customer relationship. FFPs offer rewards and financial incentives, such as those listed in Figure 2, in exchange for retention by erecting switching barriers. These switching barriers act to deter customers from choosing other airlines by increasing the opportunity costs of switching rather than increasing the value of the relationship. Switching costs restrict flexibility and alternatives, ultimately detracting value from the customer relationship.

FFPs may have acted as true relationship marketing tools in their initial introduction and up through their development given that the passenger placed

value in their benefits. Gilbert and Buttle (1996) define the objective of FFPs is to create 'biased behavioural responses' during the purchase process, establishing a 'preference buying behaviour' motivated by accumulating rewards. Gilbert suggests that FFP members would pay a price premium while remaining loyal, driven by the commitment to the program and further motivated by the fact that their employer pays the expense of the flight.

However, Gilbert also points out research has demonstrated superior value of an alternative product alone is enough to erode the competitive advantage provided by FFPs. In addition to this, FFPs likely reduce yield rather than generate a price premium as initially expected (1996). Airlines incur large costs to maintain FFPs only to sustain weak customer retention.

Feature	Importance of feature (%)
Waitlist priority	72
Mileage points	55
Lounge access	48
Upgrade availability	46
Recognize status	36
Points from other schemes	25
Luggage tracing	25
Other rewards	12
Insurance schemes	12
Newsletters	3

Figure 2. Important features of FFPs (OAG, 1992 in Gilbert, 1996).

Loyalty programs resemble relationship marketing when an emotional bond is developed to form intrinsic loyalty. Intrinsic loyalty is characterised by non-financial, attitude driven switching barriers through value creation. These emotional bonds are created, developed and sustained by consistently providing customer value. This research introduces the concept of intrinsic loyalty and will develop it further in subsequent chapters.

1.3.5 Value Leadership

This research also introduces the concept of Value Leadership. Value Leadership is a placebo concept for a relationship marketing strategy through value creation and intrinsic loyalty. However, as this dissertation progresses, findings from the literature and empirical research will be incorporated into the Value Leadership concept. The result will be a theoretically established strategy for competitive advantage in the airline industry.

The basis for Value Leadership is founded on several observations in the strategy research which suggest the viability of a hybrid competitive strategy. Porter notes differentiation and cost leadership strategies are not polar opposites, and in fact, price competition plays a critical role in differentiating the firm, just as cost leadership differentiates a firm. "Cost is also of vital importance to differentiation strategies because a differentiator must maintain cost proximity to competitors. Unless the resulting price premium exceeds the cost of differentiating, a differentiator will fail to achieve superior performance" (Porter, 1985).

Ravald and Grönroos concur that cost leadership does not have to be competing on price alone and recommend an optimal strategy of providing superior value to profitable customers at a competitive price (Ravald and Grönroos, 1996).

> "A cost leadership strategy does not necessarily mean that one has to compete with price only, rather it gives the company an opportunity to add extra value to the offering, still commanding a competitive price – and that might be the competitive advantage of the future" (1996).

This would suggest that both cost leadership and differentiation compete on customer value, defined either as low fares or superior products. However, this is disconnected from reality where customer value is unique to each individual

and defined in a seemingly endless combination of benefits and sacrifices. The position by Porter (Porter, 1985) and Ravald and Grönroos (1996) suggest competitive advantage is attained by competing on customer value. Therefore, Value Leadership is a strategy for maximising customer value.

Relationship marketing creates an "interactive value-generating process, based on interdependence and reciprocity" (Jüttner and Wehrli, 1994). Key to this research is the idea supported by Juttner and Wehrli that "relationship marketing provides a basis for the facilitation of individualized exchange processes on mass markets 'mass customization' and hence has the potential to combine advantages of large volume and differentiation" (1994). Value Leadership should also consider strategies for mass-customisation of customer value to address the dynamic aspect of customer value.

Taking into consideration these findings from the strategy literature, Value Leadership is defined as a relationship marketing strategy maximising customer value through mass-customisation. This being the case, value leadership provides the potential for many airlines to provide differentiated products meeting the desires of unique niche markets through customisation.

1.4 THE STUDY

This dissertation sets out to address the lack of profitability in the air transport industry. While it is clear industry structure plays a part in the problem, this dissertation will focus on the firm controllable aspect of competitive strategy. Several successful airlines have demonstrated how customer value oriented competitive strategies can overcome the challenges presented by the weak, hypercompetitive airline industry structure. Unfortunately, these strategies are based on continually providing the best product or the lowest cost, making them difficult to sustain in the long run. A strategy is required which seeks to capture

intrinsically loyal customers through value creation while leveraging value for the firm as well.

1.4.1 Aim

The aim of this research is to develop a strategy for competitive advantage in the airline industry which enhances firm profitability.

1.4.2 Objectives

The following objectives have been laid out for this research:

- □ Evaluate the effectiveness of relationship marketing to provide sustainable competitive advantage.
- □ Provide an understanding of how value creation and loyalty concepts function to add value in an exchange.
- □ Further understand how the relationship between customer value and loyalty create enduring value in a relationship.
- □ Develop a passenger value segmentation model to identify means of competing for unique customer groups.
- □ Incorporate the research findings into development of an operational value leadership strategy.

1.4.3 Structure

The structure of the thesis is composed of two sections. Section 1 presents an analysis of the key literature pertinent to the dissertation. Section 2 presents the research instrument to address the objectives identified in Section 1 and discusses findings.

Part 1 contains three chapters, the first of which review literature relevant to the study.

Chapter 2 continues the discussion on relationship marketing as a potential means of achieving sustainable competitive advantage. Customer Relationship Management (CRM) is found to be a popular tool for implementing relationship marketing in consumer markets. However, the investigation identifies the value creation process as a significant hole in the current literature on relationship marketing and competitive strategy.

Chapter 3 reviews the value literature and its relation to loyalty in the context of the purchase process. The literature review results in several findings that link the concepts of value and loyalty within the context of the purchase process.

Chapter 4 discusses the development of a theory that this research contributes. The 'Value Creation Framework' is presented to demonstrate the relationship between value and loyalty concepts. Challenges in measuring these ill-defined concepts are addressed and a methodology is constructed to gather the necessary data.

Part 2 consists of three chapters covering the empirical element of the research.

Chapter 5 addresses the construction of a research instrument to collect the data needs identified.

Chapter 6 reviews the characteristics of respondents to the research instrument and provides an analysis of the raw data. Factors are developed from value and loyalty concepts which are used to segments airline passengers.

Chapter 7 examines the findings and develops the value leadership strategy.

2 RELATIONSHIP MARKETING

The field of marketing developed in the 1960's and 1970's out of companies' inability to sell an abundance of mass-produced products in the market place. The same challenges which spurred the field of marketing nearly 50 years ago still exist today. In the airline industry for example, a seemingly constant flow of new entrants add capacity while established airlines further flood the market with growth resulting in excess capacity. This has made it more difficult for all airlines to sell a product which seemingly grows more commoditized as firms aggressively match product innovations and price to remain competitive in the mature, hyper-competitive air transport market.

Product competition leads to a fierce innovation battle that usually results in little differentiation at a very high cost. Airlines fought ruthlessly over market share in the 1990's, resulting in overcapacity, weak revenue and profitability (Gilbert, 1996). The focus on market share at any cost no longer provides the competitive advantage it once used to (Taneja, 2005). The use of FFP's to build loyalty is waning and providing value is the new source of loyalty (2005). Even the low-cost field has been inundated with copycats attempting to emulate the Southwest or Ryanair models. However, markets can logically only support one lowest cost competitor. New competitive strategies are needed for legacy carriers to compete against low cost carriers as well as for low cost carriers to compete against each other.

The focus of marketing is shifting from attracting customers to building a base of loyal customers and establishing a mutually profitable, relationship with them (Ravald and Grönroos, 1996). Loyalty management has evolved from a tactical marketing tool in the 80's, to a tool for competitive advantage in the 90's and is now recognized as a source of shareholder value through the management of customer assets (Saretsky, 2007). Customer assets have become increasingly important in today's 'information age' where the financial value of a corporation is largely based on intellectual capital (Galbreath, 2002).

In Chapter 1, relationship marketing was promoted as the next paradigm shift in modern marketing and a potential strategy for sustainable competitive advantage (Payne and Holt, 2001). The following chapter will discuss how relationship marketing can succeed where traditional practices fall short. Relationships are discussed in the context of transactional and the value creation potential of relationship marketing is demonstrated. Examples of successful relationship marketing are provided and Customer Relationship Management (CRM) is offered as a tool for consumer markets where large customer bases make RM difficult to implement. However, this chapter will demonstrate that even CRM has its shortfalls. A lack of understanding for the core principle of relationship marketing, value creation and its relationship with loyalty is to blame.

2.1 FROM TRANSACTIONAL MARKETING TO RELATIONSHIP MARKETING

Kotler's defines marketing as the science of "how transactions are created, stimulated, facilitated and valued" (Kotler, 1972). A transaction is an exchange of value between two parties. As Kotler's definition demonstrates, transactions form the core of marketing and, as a result, marketing strategy focuses on driving transactions. This strategy of pushing transactions developed into a philosophy known as transactional marketing.

Transactional marketing attempts to maximize revenue from each transaction, treating all customers as equals, regardless of past behaviour or future value, and focuses efforts on short-term customer acquisition (Stone and Mason, 1997, Jüttner and Wehrli, 1994). In the airline industry for example, many marketing practices focus on transactional marketing. None of these practices characterise transactional marketing more so than revenue management. Revenue management is used by airlines to extract the maximum price a

customer is willing to pay, given their circumstances. Many rules and restrictions are imposed by the airline to enforce strict adherence to these pricing policies. Many airline marketing practices tend to exhibit little examples of sacrifice and trust.

In contrast, relationship marketing is characterized by the firm's willingness to sacrifice short-term profits to establish long-term, committed, trusting and co-operative relationships with customers (Bennet, 1996A in Harker, 1999). For example, airline revenue management should instead seek to maximize the potential lifetime value of a customer and develop a profitable, long-term bond. This strategy motivates firms to focus on developing strong customer relationships in order to mitigate the increased risk of short-term sacrificed revenue. Figure 4 summarise contributions of Jüttner and Wehrli (1994) and (Martin et al. (1993) in Stone and Mason, 1997) identifying key differences between transactional and relationship marketing.

TRANSACTIONAL MARKETING	RELATIONSHIP MAKRETING
Measure of success is to make the sale	Measure of success is to create a customer, sale is only the beginning to a relationship
Objective is customer acquisition	Objective is maximizing customer lifetime value
Customer remains anonymous	Customer attitudes, preferences and behaviours tracked
Independent buyer and seller	Interdependent buyer and seller
Orientation on product features	Orientation on product benefits and customers' goal achievement
Moderate Customer Contact	High Customer Contact
Reliance on understanding the customer and managing behaviour	Reliance on interactive communication and taking leadership from the customer

Figure 4. Transactional Marketing versus Relationship Marketing (Jüttner and Wehrli, 1994, Martin et al., 1993 in Stone and Mason, 1997).

2.1.1 Relationships

Relationships always exist between customers and firms in one form or another. A transaction itself represents a limited relationship formed with the intent of exchanging value. Grönroos (1997) identifies relationships as active or passive. Passive or latent relationships are always present. Firms may choose a strategy seeking to activate latent relationships with customers and encourage

dialogue to establish an active relationship. However, this strategy may not be ideal for all products and market segments. Not all customers will desire to have an active relationship and even fewer will take action to engage in a relationship with the firm (1997).

Transactional strategies make sense when consumers desire passive relationships that do not complicate the purchase process for low involvement products or services. Airlines such as Ryanair continue to demonstrate the profitability that results from a purely transactional focus with customers. Relationship marketing initiatives would only add cost and detract from Ryanair's cost leadership competitive advantage.

Customers may also seek a simple relationship to reduce risk and provide security in case of service failure. Relationships can also act as a means of reducing the number of choices (Grönroos, 1997). On a very basic level, relationships provide trust and consistency in product selection, therefore reducing risk and the need for alternatives. Baggozzi (1995) suggests relationships fulfil abstract goals such as accomplishment, association or recognition (Baggozzi, 1995 in Grönroos, 1997). It is in this state that the relationship may provide intangible value to the customer itself (1997). Association with a brand is an example of intangible customer value. Luxury car owners and first class passengers pay a premium over the logical value of a product to identify with the status offered by the product.

Dwyer, Schurr & Oh demonstrate relationship marketing using the one of the most common and well established forms of human relationships; marriage (1987). Like marriage, customer-firm relationships satisfy deep human needs. The initial sale consummates the marriage, entering into a 'restrictive trade agreement'. Both the customer and firm benefit from reduced uncertainty, interdependence, familiarity and satisfaction derived from the relationship itself. This allows both parties to achieve common goals, which further strengthens the relationship and insolates it from competition (1987).

Relationships incur direct, indirect and psychological costs for both the customer and the firm (Grönroos, 1997). Maintenance of the relationship requires time and resources on both sides (Dwyer et al., 1987). Beyond the obvious direct firm expenses, customers also endure costs to maintain relationships. Consumers accept the possible opportunity cost to remaining monogamous in exchange for reduce search and product evaluation costs. However, if the customer perceives alternatives provide more benefit or less sacrifice relative to the existing relationship, the incentive to remain loyal degrades.

In all forms of customer relationships, the focus on transactional marketing continues to be critical (Treacy and Wiersema, 1995). After all, if relationships do not result in transactions they do not serve the purpose of sustainable competitive advantage. While the short-term goal of business is to drive transactions, the long-term objective should be to deliver on customers' needs, thus developing a relationship of many transactions (Kotler and Levy, 1969).

2.1.2 Relationship Marketing Defined

Relationship marketing is "the process of identifying and establishing, maintaining, enhancing, and when necessary terminating relationships…so that the objectives of all parties involved are met" (Grönroos, 1997). Payne, a leading academic in the field of relationship marketing, states, "Relationship marketing is concerned with the management and improvement of organisation's relationship with their customers and other key stakeholders" (Payne and Holt, 2001).

Payne (1995)further defines relationship marketing as:

"a deliberate emphasis on maximizing the lifetime value of profitable customers and segments; recognition that service

quality is the key to customer retention, that quality is defined by reference to customers' expectations and perceptions, and that delivering quality service is the responsibility of everybody in the airline; willingness to enter into a dialogue with customers to ensure that their expectations are understood; (and) a 'network' perspective, which sees the maintenance of relationships with other stakeholders as important to provisions of the quality of service required to maintain relationships with customers" (Payne, 1995).

As the definitions demonstrate, relationship marketing extends beyond the customer-firm relationship. For the purpose of this research however, only the principle relationship between customer and firm is examined. The definitions of relationship marketing also provide an understanding to the scope and philosophy of relationship marketing. Analysing the definitions, we find relationship marketing to be the management of four dimensions composing customer-firm relationships.

1. management of customer lifetime value
2. management of customer retention and loyalty
3. management of product quality and customer satisfaction
4. management of customer-firm communication

Customer lifetime value (CLV) forecasts value the financial worth of a customer over the expected lifetime of their relationship with the firm.   CLV is an assessment of the benefit and sacrifice of servicing a customer or a segment of customers. Retention and loyalty are concepts which represent the relationship benefit sought by firms.   Customer satisfaction and value represent the customer benefit, and therefore the firm's cost of meeting these desires. Communication between the customer and firm relays desired benefits sought and sacrifice or cost expectations.

The valuation of customer relationships is critical to relationship marketing. Competitive advantage of relationship marketing is based on maximising the net present value of long-term relationships. The value of maintaining, and ultimately growing, the cash flow from profitable, long-term customers is greater than the value of establishing or maintaining relationships with short-term or less profitable customers.

Customer retention and loyalty can not be accomplished without maximising customers' satisfaction and value. As with the firm, consumers will only tolerate so much sacrifice to maintain a relationship. Relationship marketing is a two way street; customer retention is established providing superior value while loyalty develops through consistent satisfaction. As loyalty develops, the relationship adds more value for the customer as well. The concepts of value and loyalty are introduced here to provide an understanding of relationship marketing's mechanisms, but will be discussed ad nauseum in the following chapter.

Many examples exist where relationship marketing has been successfully implemented to create a sustainable competitive advantage. Treacey and Wiersema (1995) provide the example of Airborne Express, who successfully utilized what they coin Customer Intimacy, a primitive form of B2C relationship marketing, to effectively establish sustainable competitive advantage. Airborne Express provides an example of successful relationship marketing in the air transport market. However, throughout the relationship management literature, success stories like these appear to be somewhat limited to the B2B market, where 'key customers' are limited to a manageable number of highly valuable accounts.

2.1.3 Key Customer Management and Customer Intimacy

Treacy and Wiersema (1995) build on Porter's (1985) value chain model by developing a strategy for achieving competitive advantage they refer to as

customer intimacy. Customer intimacy stresses value chain integration by understanding the customer, their processes, problems, needs and goals to provide solutions not products. Firms should work to become an expert in their customers' field and act more as a consultant than a supplier. Customer intimacy creates customised service, adding value to the relationship rather than financially incentivising 'transactional' loyalty. In exchange, the relationship with the customer itself becomes a valuable asset to the firm (1995).

However, customer intimacy is difficult to implement in consumer markets because of the large quantity of relationships that must be maintained. Relationship marketing has been successfully utilized in a business-to-business (B2B) context through customer intimacy and key account management. Consumer market application has been prohibitive until recent innovations in technological capabilities (Jüttner and Wehrli, 1994). Business-to-consumer (B2C) markets are characterised by many more customers, each with considerably smaller return on investment. Relationship marketing is more applicable to B2B markets given their more stable relationships. Contracts between vendor and customer form highly lucrative, long-term relationships, allowing for more time to be spent on developing relationships. In reality, consumer market relationships are much less stable and consistent. Customer Relationship Management (CRM) has become a popular tool for applying relationship marketing practices to large scale consumer markets by utilising technology to minimize resource investment in the long run.

2.2 CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Customer relationship management (CRM) technology enables the concurrent management of customers in a mass consumer market "utilising information technology (IT) to implement relationship marketing strategy" (Payne, CRM Reading List). Put succinctly, CRM is 'information-enabled relationship

marketing' (Payne, CRM Reading List). Payne's Framework for CRM (Figure 5) provides an understanding of how technology facilitates the management of customers through five processes: strategy development process, value creation process, multi-channel integration process, information management process and the performance assessment process (2006).
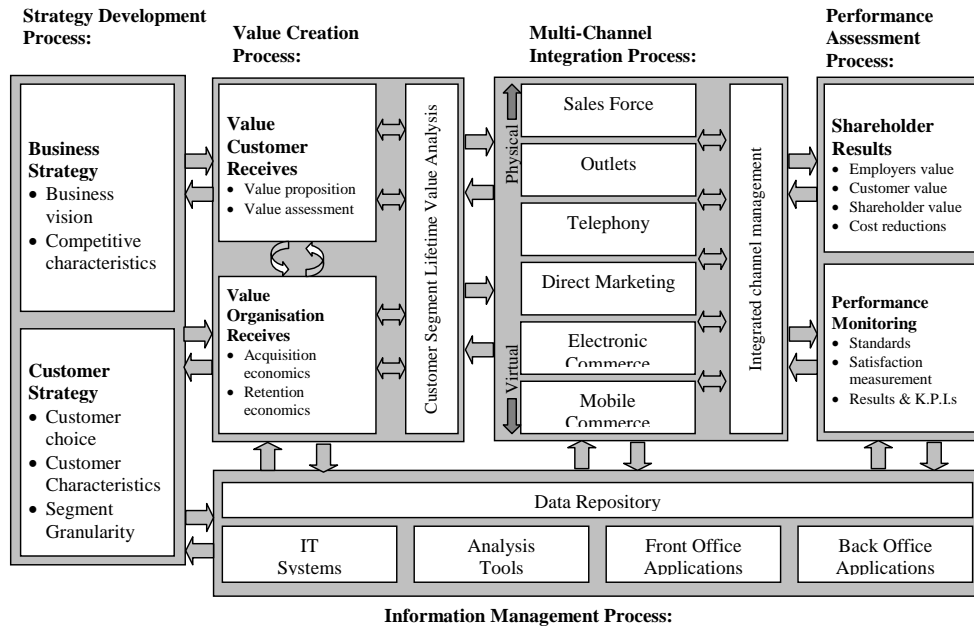
Figure 5. A Strategic Framework for CRM. (Payne, 2006)

Payne's strategic development process is basic management philosophy applied to relationship marketing; segment the market and identify your target customer then develop a business strategy to serve those customers profitably. Interestingly, Payne's framework for CRM resembles Porter's (1985) steps to the differentiation competitive strategy discussed in Chapter 1.

Customer and business strategies are enabled through the value creation process which aims to satisfy the desires of the market as well as those of the firm respectively (Payne, 2000). Value creation is communicated to the customer through the multi-channel integration process. This process does not deal solely with sale and distribution of the product, but also with maintenance

and enhancement of customer relationships. The information management process collects customer data throughout the CRM process for the performance assessment process (2000).

All of the CRM processes are also supported by the information management process. Utilizing data stored in the data repository, rich customer profiles are developed to track individual customer's behaviour and attitudes. These profiles provide firms with the ability to 'replicate' the mind of the customer. Segments are created around groups of similar profiles for which unique products are designed to meet the segments need and communicate this value to the targeted market. Using insight and knowledge acquired, the performance assessment process allows firms to circle back and ensure the business and customer strategies are being fulfilled (Payne).

While Payne's framework provides a comprehensive, holistic approach to creating a CRM-centric organisation, this research is primarily interested in what Payne refers to as the Value Creation process. Payne includes the value creation process in the Strategic Framework to CRM. Value creation in this context is primarily focused on firms' benefit in maximising value of the customer. Payne does emphasise "the need to fully understand what constitutes customer value" in what he identifies as one of two major outstanding issues to be addressed (Payne, 2000). The need to understand customer value is difficult to address as value is unique to each industry. Binggeli et al. (2002a) researched CRM in the airline industry and offer another strategy to CRM which focuses on maximizing value delivered to the customer with four key steps:

1) Identifying valuable customers
2) Understanding customer behaviour
3) Implementing systematic CRM programs
4) Operationalising CRM

Binggeli et al.'s (2002a) four steps closely resemble Payne's Strategic Framework for CRM. While much of the CRM literature addresses CRM from a strategic level, technology-centric enterprise, Binggeli et al.'s approach to CRM focuses more on operational level initiatives to create value. Notice how these four steps relate back to the four components of relationship marketing: Customer Lifetime Value, quality and satisfaction, retention and loyalty, and communication. Customer Lifetime value is the process of identifying valuable customers. Understanding customer behaviour is the research of quality, satisfaction and their mediator or connecting concept, value. Implementing systematic CRM programs focus on developing loyalty programs and establishing communication with customers. Finally, operationalising CRM is the support of these functions through corporate strategy and information technology.

2.2.1 Identifying Valuable Customers

As with any strategy, the first step is to gain bearings on the situation. Identifying the target customer market and creating understanding characteristics and behaviours accomplishes this. CRM in specific looks to segment passengers by their financial worth to the company. Segmentation methods allow markets to be broken down into unique groups so they can be valued, analysed and managed independently.

Observing passengers' past behaviour will help to forecast future profitability. Taking into consideration a passenger's behaviour and market value, not just current value to the firm, allows for current potential value and future potential value to be modelled (Binggeli et al., 2002a). Current potential value is simply the cash flow that can be expected from a customer in the immediate future whereas future potential value incorporates progression through the customer life cycle to forecast change in cash flow.

Airlines utilize frequent flyer programs as a segmentation tool by which passengers are segmented according to their 'value'. Almost every airline has a tiered frequent flyer program where passengers are segmented in a hierarchical system according to the number of miles or points accrued. While FFP miles initially correlated to the actual number of miles customers flew, today assuming high level FFP members are valuable customer assets is misleading. Goebbel's (2003) research finds mileage accrual does not correlate with customer value. There are many scenarios where high mileage passengers may be less profitable than others, such as frequent travellers who only travel on discounted fares.

Airlines more often refer to frequent flyer programs as a measure of customers' value to the firm. However, a recent survey of airline frequent flyer programs found on average, only 35 percent of mileage accrual is issued by the airline, with the number rising to 50 percent for larger programs (Trudeau, 2007). The use of FFP status to gauge customer value is further reduced by the fact that airlines provide a significant number of 'bonus' miles for non-flight activity. As FFP members rise in status, bonus miles are supplied even more freely to encourage retention and loyalty. FFP segmentation based on miles does not provide an accurate measurement of customer value to the firm. As shown in Figure 6 less than half of high value customers are top-tier members of airline FFPs.
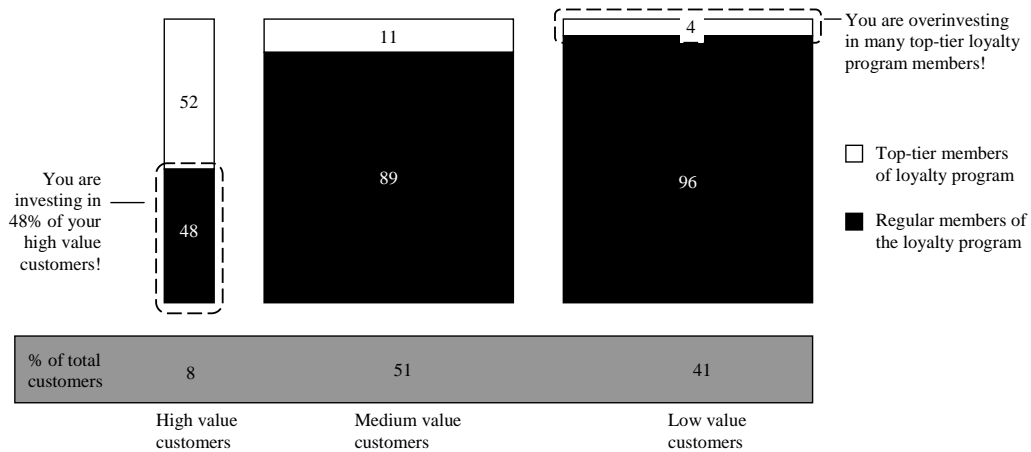
Figure 6. Distribution of customers within value segments. (Roland Berger Strategy Consultants in Goebbels, 2003)

Recency, Frequency, Monetary (RFM) monitoring is used some airlines to value the worth of customers. A white paper published by Blackbaud, a consulting firm specialising in the RFM, discusses the methodology's application (Blackbaud). Recency refers to the last purchase made by the customer, frequency refers to the number of purchase over made by the customer, and monetary refers to the financial value of those purchases. The RFM methodology analyses these metrics over a series of specified periods of time.

For instance, RFM could track recency, frequency and monetary metrics on a monthly, quarterly, etc. basis. Values are typically ranked on a five point scale with 1 being low and 5 being high. Values are then standardized and mapped to the metrics. An example of the mapping for recency on a monthly basis could simply be assigning a rank of 5 to purchases made in the last 30 days, a rank of 4 to purchases made in the last 30 – 60 days, and so on. This methodology is applied to all three metrics for each customer and a profile score is developed. A customer's value to the firm can then be quickly assessed by referencing the three metric ranks, typically displayed R#-F#-M# (i.e. 5-3-4). Understanding passengers' RFM also helps to understand behaviour and interpret motivations.

2.2.2 Understanding Customer Behaviour

Segmentation assumes people with similar characteristics tend to behave in similar ways. Consumers are segmented or grouped based on these characteristics (geographical area, demographics, psychographics, behavioural, etc.) and their responses to marketing stimuli (Gutman, 1982). Segments define people by their characteristics and behaviours into a manageable set so they can be targeted more effectively. With these 'target markets' in mind, marketers produce a product to met the needs and appeal to the desires of a particular segment of customers.

Segmentation traditionally begins with a population and refines it into segments using variables such as geographic (i.e. country, region), demographic (i.e. age, gender), psychographic (i.e. life style, values) or behavioural (i.e. benefits sought, usage rate, brand loyalty, product end use) characteristics. This is known as top-down segmentation. Bottom up segmentation, or what this research refers to as 'reverse segmentation', begins by developing segments from characteristics and fits customers into a pre-defined segment. CRM tools manage vast amount of customer data and conduct segmentation on an ongoing basis making reverse segmentation feasible.

Airlines also segment customers beyond FFP membership on a different form of customer value; customers' willingness to pay. Revenue management utilizes a traditional application of segmentation known as price discrimination. Segmentation 'fences' force passengers to pay a premium base on their behaviour. The most common example of this is Saturday night stay which is intended to prevent business passengers from purchasing cheaper leisure fares.

Airline behavioural segments are broken down into business travel, leisure travel and personal travel (Gilbert, 1996). This segmentation is conducted on

length of journey (short or long haul), traveller characteristics (age, gender, occupation, income, etc.), flying experience and length of stay (peak versus non-peak season or duration) attributes (Gilbert, 1996). Business travel can be sub-segmented into corporate, independent, conference and incentive. Likewise, leisure can be further segmented into holiday, visiting friends and relatives; while personal includes student travel, family crisis travel and migration (1996).

Business travel is characterized by demand for a comfortable product and direct service with high frequency in case of last minute changes (1996). The leisure traveller tends to be more price conscious and willing to sacrifice flexibility in exchange. Leisure traffic is typically seasonal and over weekends. Compared to business travel, leisure travellers tend to stay for longer durations and purchase tickets well in advance. Personal travel is normally in reaction to a special event, often at the last minute, and makes schedule very important. However, these passengers usually pay for their ticket out of their own pocket and are price sensitive despite their buying behaviour resembling that of business travel. This scenario is not always the case, as much personal travel is simply relocation for school or migration (1996). Changing customer behaviours constantly blur the characteristics defining business, leisure and personal segments.

Binggeli et al., (2002a)segments airline passengers on two key characteristics. The first are uncontrollable characteristics such as market competition and corporate-policy constraints; the second are consumer controllable attitudes or behavioural characteristics (See Figure 7). This segmentation is relevant because very little behavioural segmentation has been conducted.
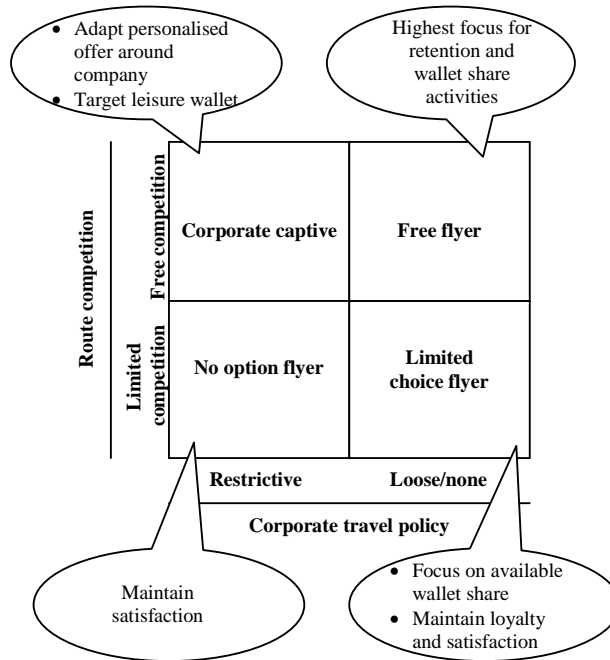
Figure 7. Understanding customer behaviour provides insights into travel decisions (Binggeli et al, 2002: 343).

In 1984, Bruning, Kovacic, and Oberdick (1985)conducted a behavioural segmentation of air service in the U.S. Airline choice was used as the independent behavioural characteristic in this study and categorised as either major or commuter airlines. The relevance of this study today is much reduced in that the strategic composition of the air transport industry has changed significantly. The commuter airline no longer exists in its previous form, but has evolved into national and regional carriers. Even still, the research was significant at that time. The findings concluded airline passengers could be successfully segmented by environmental, demographic, and personality factors. The most successful determining factors where convenience, economy, and safety as well as life style (1985).

Bruning, Kovacic, and Oberdick's (1985) discovered an unexploited strategic advantage for commuter airlines. At this time, commuters operated at much lower costs due to the nature of their service. However, their pricing strategy was to simply match the major carriers. Bruning, Kovacic, and Oberdick

concluded that the commuter airlines could compete with a price leadership strategy, despite their reduced service offerings (1985). This finding is significant, because today the low-cost, no-frills market has revolutionized the air transport industry.

Bruning, Kovacic, and Oberdick's (1985) study inadvertently segmented customers based on a simple definition of customer value. As established previously, relationship marketing is highly dependent on matching customers' desires to the value offered by a firm. However, existing top-down methods of behavioural segmentation do not adequately segment consumers by this desired value because each customer's unique idea of value.

Micro-segmentation is advanced segmentation philosophy enabled by CRM technology. Micro-segmentation is simply segmentation on many variables to break down markets into highly targeted groups of customers with well defined characteristics. The vision of micro-segmentation is to manage customers as 'segments of one'. This allows each customer to be defined by their perception of value so that a custom product can be created to meet their desires. CRM supports this vision through personalisation and customization.

2.2.3 Implementing Systematic CRM Programs

Personalisation is a method of one-way communication controlled by the firm. Communication is not limited explicit messages. Customer and firm behaviours act as an implicit form of communication. Personalisation can be as simple as explicitly addressing a customer by first name in all communiqué or to the extent that firms implicitly communicate exclusive product offering designed specifically for a segment. An excellent example of such personalisation includes the multitude of designs which Apple provides iPod customers or the many unique ancillary products which customers can purchase to differentiate their iPod and 'make it their own'.

Personalisation is limited in the fact that customers are unable to communicate back to the firm. However, mutual communication is made possible through customisation. Customisation is customer involvement in the product design process. It differs from personalization largely in that it is directed by the customer whereas personalization is firm dictated. Compare the personalisation of Apple's iPod to the customisation of Dell computers. Customers are involved in all aspects of product creation; directing the configuration of product attributes, delivery methods, service levels and ultimately price of the product. Though no human interaction takes place, customization allows for explicit and implicit communication between the customer and the firm.

Many coordinated personalisation initiatives, when viewed together as a whole, comprise significant differentiation in the minds of consumers (Robertson, 2007). In a market increasingly identified by commoditised products, personalisation efforts such as signature drinks, more leg room and seat-back, satellite television can create very significant differentiation. While personalisation is a useful CRM tool, customisation possesses more potential to create added value for customers (Winer, 2001). Personalisation relies on the firm's understanding of customer value while customisation enables the customer to communicate their own value.

The return on investment from CRM comes in its ability to mobilize highly targeted campaigns to further develop customer relations. Binggeli et al offer three broad categories of campaigns typical of CRM to influence customer behaviour:

1) Re-attracting profitable customers
2) Increasing wallet share
3) Reducing the cost of service (Binggeli et al., 2002a)

	CRM bottom line impact	Incremental IT requirements	Time to implement	Priority
Promotion of loyalty program membership	high	low	short	high
Targeted loyalty program campaign "spend"	high	low to medium	short	high
Targeted campaign (e.g. price)	medium to high	low	short	high
Targeted loyalty program campaign "earn"	medium to high	low	short	high
Campaign management/permission marketing	high	medium	medium	high
Upselling (upgrades)	high	medium	medium	high
Retention management	medium	medium	short	medium
Optimizing sales and fulfilment channels	low to medium	low	short	medium
Upselling (fares)	medium	medium	medium	medium
Cross-selling, bundling	low to medium	medium	medium	low
Proactive customer information (e.g. waitlist confirmations)	low to medium	medium	medium	low
Service recovery management	low to medium	medium to high	medium	low
Process improvements using customer profiles	low	medium	medium	low
Feedback-management	low	medium to high	medium to high	low

Figure 8. An evaluation of the "classic" areas of CRM reveals the key areas of leverage (Beckmann, 2001: 2)

Figure 8 provides a table of typical CRM campaigns which aim to accomplish the three goals defined above. Notice CRM strategy is strictly defensive and does not pursue customer acquisition.

Figure 9 provided by Payne presents an example of how the two previous steps of customer valuation and segmentation support effective campaigns for each segment. However, even this level of sophisticated strategy is not enough. Knowledge is useless if it does not empower customer-facing employees and stimulate actionable change (Goebbels, 2003). CRM is a massive undertaking requiring major resource investment, organizational buy-in and proper strategy is necessary to operationalise.

Segment Number	Segment Name	No. Existing Customers (S)	Acquisition Target for year (N)	Cost of Acquisition (C)	Annual Retention Rate (ℛ)	Profit per Customer per Year (K)
Segment 1	Struggling empty nest super-loyals	421,300	500	£110	96%	£6
Segment 2	Older settled marrieds	618,000	66,000	£70	94%	£9
Segment 3	Switchable middles	497,900	110,000	£55	90%	£18
Segment 4	Promiscuous averages	459,600	220,000	£30	80%	£22

Figure 9. Customer Segment Data Template for Electro plc. (Payne, 2000).

2.2.4 Operationalising CRM

The final step in Binggeli's strategy addresses three hurdles to implementing CRM; executive buy-in, ill-defined strategy and legacy technology (2002a). Properly implementing CRM may call for drastic change of direction on corporate strategy. Obtaining buy-in from executive management on financial resources and cooperation throughout the company is crucial. IT related systems and data warehouse development represent the massive capital expenditure (Binggeli et al., 2002a).   In 2002, one US airline spent $25 million on a new data warehouse (Binggeli et al., 2002b). In the same year, Northwest Airlines discussed plans for building a data warehouse in the $5 - $10 million dollar range (Feldman, 2002).

Micro-segmentation and customisation can only be made possible through the utilization of data mining software and massive data warehouse technologies. These sophisticated systems require highly specialised knowledge typically considered an IT responsibility. This often results in a gap between the

knowledge specialists and strategists leading to poorly defined CRM strategies (Binggeli et al., 2002a).

The merging of IT knowledge and marketing strategy in CRM has spun off into several derivatives of CRM, each focusing on important elements of the CRM concept. Customer Knowledge Management (CKM) is one of such CRM off shoots that is heavily driven by information technology management and analysis of customer data. As its name implies, CKM is the field of managing customer information and relies on data mining and network enterprise management concepts. Customer Value Management (CVM) also relies heavily on data mining to track Customer Lifetime Value (CLV) over time. Customer Experience Management (CEM) is a marketing centric philosophy emphasising the importance on managing the customer experience (i.e.(Winer, 2001)).

2.3 CRM IN VALUE LEADERSHIP

As with any relationship marketing strategy, Value Leadership aims to drive transactions while strengthening the net present value of long-term relationships through intrinsic loyalty. This is accomplished by understanding customer behaviour and providing customisation programs to allow customers to cooperatively design solutions, not simply personalised products. CRM relies on technology to enable relationship marketing in mass-consumer markets, such that exist in the airline industry. The development of Value Leadership will focus on understanding customer value and customisation through CRM to systematically deliver maximum customer value and create intrinsic loyalty. However, previous attempts at CRM and its derivatives have met with limited success in the airline industry (Binggeli et al., 2002b).

2.3.1 CRM in the Airline Industry

CRM is not an innovative, earth shattering concept for the airline industry. In the late 90's and early part of the new millennium, CRM was the hot topic and new buzz word in every industry, the airline industry being no exception. Many carriers invested large amounts of money in technology, expecting immediate return on investment. Airlines' intentions were noble, however, most simply implemented out of the box, cookie-cutter technologies . Not all who sought the holy grail of customer relationship management fell short. Cathy Pacific, an early innovator of CRM in the airline industry, estimated a 300 percent return on their technology investment between 1998 and 2000 (Goebbels, 2003). Ethiad is an example of a new entrant airline also able to achieve success with CRM (Baumgartner, 2007).

The value of CRM has long been questioned and measuring return is often difficult. Binggeli et al., in their study of 17 world-class airlines, found that CRM can improve revenue by 0.9 to 2.4 percent:

- Between 0.1 and 0.3 percent from re-attracting deserted customers,
- 0.3 to 1.2 percent from increasing existing customers share of wallet;
- And approximately 0.05 percent from new customer acquisitions (Binggeli et al., 2002a).

EXHIBIT 1

Good for the bottom line

Impact of customer relationship management (CRM)

Increase in revenues by source, percent

| | 0.05 | 0.85–2.35 |

0.30–1.20

0.50–1.10

Reduced churn | Growth in wallet share[1] | New customers | Total

Potential improvement in operating profit, $ million per year

Large airline[2]	100–250
Midsize airline[2]	25–60
Small airline[2]	15–50

Change in costs, percent

| | 0.2–0.5 | 0.1–0.8 |
| 0.1–0.3 | | |

0.2–0.4

Reduction in costs[3] | Increase in marginal flight costs[4] | CRM implementation costs | Net increase

[1]Proportion of consumer's disposable income allotted to single company.
[2]Based on revenue-passenger-kilometers (RPKs), that is, number of passengers multiplied by number of kilometers they fly; large airline = 76 million to 200 million RPKs; midsize = 21 million to 75 million; small = 5 million to 20 million.
[3]Through elimination of waste associated with targeting unprofitable customers.
[4]Due to increased business.

Figure 10. Good for the bottom line (Binggeli et al., 2002a).

As much as 15 to 25 percent of these benefits can be realised within the first six to twelve months (2002a). In addition to the financial benefits, CRM provides data to more accurately forecast demand, allowing for more efficient planning (Gialloreto, 2001). Most importantly, those who successfully implement CRM before their competitors can realize first mover advantage (2002a) by acquiring and maintaining loyal customer assets.

However, over half of all CRM projects fail (Beckmann, 2002). Technology vendors have developed an expectation that technology mixed with a personal touch will result in satisfaction and loyalty. Airlines have invested massive sums of money and resources to address the technological hurdles with little resulting change in loyalty. The lack of success in CRM is not the result of insufficient effort; misguided strategy is mostly to blame.

There has been little empirical research on CRM in the airline industry. What literature there is tends to be theoretical and focus on technology implementation, personalised marketing campaigns and assessing the value of existing CRM systems. The shortfall of CRM is the principle of its use. CRM has very much focused on the high-priced information technology and cookie-cutter mass-marketing solutions. Customer data is treated as an input into the CRM process and not well understood, driving misguided marketing campaigns. An understanding of the customer, of which the data represents, is needed to properly utilize CRM.

The basic concept central to relationship marketing, loyalty through value creation, has been lost in the 'management' of relationships. This issue goes beyond CRM and relationship marketing to the root of all marketing, the transaction. CRM is ironically used by most firms as a tool to 'push' transactions rather than 'pull' customers into the firm's value chain (Taneja, 2005). CRM does not inherently promote relationship-based exchanges; it is a tool to enable relationship-based exchanges. CRM should enable value creation for the customer to establish loyalty and nurture relationships with customers. However, when it comes to understand passenger value and catering to customers' demands, airlines are in the dark. What is missing is research into passenger value and how value builds relationships to create loyalty. This can be said for most industries and is not limited simply to CRM research in air transport.

2.3.2 Understanding Value

Value creation has been the differentiator between the airline industry and other industries, such as hotel and car rental industries, where relationship marketing and CRM have been a success. Relationship marketing strategies must create value and focus on establishing loyalty and nourishing a mutually beneficial relationship with the customer. To do this, firms must communicate with the customer, listen to their needs, and react to maximize value for the customer.

Airlines typically utilize one-way communication with the intent to 'herd' customers towards specific behaviours. Firms act as shepards, attempting to lead customers towards loyal behaviour. However, technology has empowered the customer, and as a result, customers are resistant, even defiant to being led. A means of two-way communication is needed for airlines to establish dialogue with customers and perhaps even for airlines to take leadership from the customers themselves. Allowing customers to co-create the product creates a sense of responsibility for the outcome but more importantly, allows the customer to customise value to meet their needs and desires.

Little attention has been paid to the value creation process in Customer Relationship Management. Firms must understand consumers' needs and desires to orchestrate a service which meets the benefits sought and satisfies customer goals. CRM strategies remain transactionally focused on pushing sales and do not consider how to cultivate loyalty. Most value creation activities are one-sidedly focused on creating value for the firm, rather than creating value for the customer. CRM also lacks the metrics to measure and track customer loyalty. Therefore, no loyalty goal can logically be set if its outcome cannot be gauged. There has been much research suggesting a relationship between value and loyalty, however, no explanation has been provided as to how they interact. The next chapter takes the first step to rectifying this gap in relationship marketing theory. Chapter 3 reviews the value and loyalty fields independently to understand how each influences customer behaviour. Chapter 4 discusses the interaction of value and loyalty to explain how relationship marketing leads to greater profitability.

3 VALUE RESEARCH

Chapter 2 identified the need for a better understanding of the role customer value and loyalty play in operationalising relationship marketing through CRM. The value literature was developed in parallel by many academics in varying fields of research. Much of this research strove to explain value from the perspective of strategy, economics, psychology and marketing; resulting in overlapping concepts and duplicate terminology. This review attempts to 'piece the puzzle' of existing work together while rationalizing redundant concepts and terminology so that a better understanding of value and loyalty may be achieved.

3.1 VALUE LITERATURE

The concept of marketing began to take on new meaning during the late 1960's and early 1970's. Kotler and Levy (1969), Kotler (1972) and Bagozzi (1975) contributed work on the central role of value in commerce that began a paradigm shift in corporate strategy. This collective work acted as a catalyst to spark research in the field of value and has shaped marketing into its present day form.

At the heart of marketing lies the transaction (Bagozzi, 1975)).   Kotler's definition of marketing as the science of "how transactions are created, stimulated, facilitated and valued" (1972) emphasizes the central role of the transaction in all marketing functions. The 'essential activity' to enabling the transaction is producing a product which offers value to the marketplace (1972).

Even as early as 1969, pushing products was considered an outdated form of marketing (Kotler and Levy, 1969) and socially immoral 'brainwashing' (Kotler, 1972). Marketing can be used as 'brainwashing' to change people's values and preferences towards the product offering, convincing the customer that the

product is what they need rather than constructing a product around the customer's actual needs. Kotler understood it was a firm's ethical responsibility to produce a product which enriches the market and satisfies consumers' needs (1972). Thus, value emerged as a critical concept in marketing and so began the value research field.

3.2 DEFINING VALUE

The value literature is a rich and long standing field of study dating back to the 1960's. Since its introduction, researchers in the field of marketing have struggled to define value (Zeithaml, 1988; Woodruff, 1997; Parasuraman, 1997). This objective is complicated due to the ambiguity of the term value (Payne and Holt, 2001). Value has been derived from previous work in economics and marketing but can also be found in accounting, finance, organisational behaviour, psychology and social psychology fields (2001). The roots of value can be traced back to economic concepts of exchange and utility. Utility is the belief that consumers behave in a way that will maximize their satisfaction for the least amount of resources (Porter, 1985). The concept of utility emerged from the economic field to explain the trade-off between what is received and what is given (Zeithaml, 1988). Value in a marketing context is similarly defined as the trade-off between what the customer gets and what is given in exchange (Kotler, 1972).

3.2.1 The Marketing Environment

However, the value concept transcends the borders of utility. While consumers do act to maximize their satisfaction, they do not always act rationally when observed from a purely utilitarian viewpoint. Variables in the value exchange are not limited to goods, services and money but also include time, energy and feeling (1975). Bagozzi (Woodall, 2003) noticed several 'symbolic' aspects of value which influence consumers. These include:

- ☐ Tangible and intangible rewards
- ☐ Internal and external forces
- ☐ Incomplete information and imperfect valuations
- ☐ Individual and social constraints

These factors identified make up what has since been developed as the marketing environment. Figure 11 provides a high-level, view of the environment as constructed by (Woodall, 2003). It is within the context of this environment that the value process takes place.
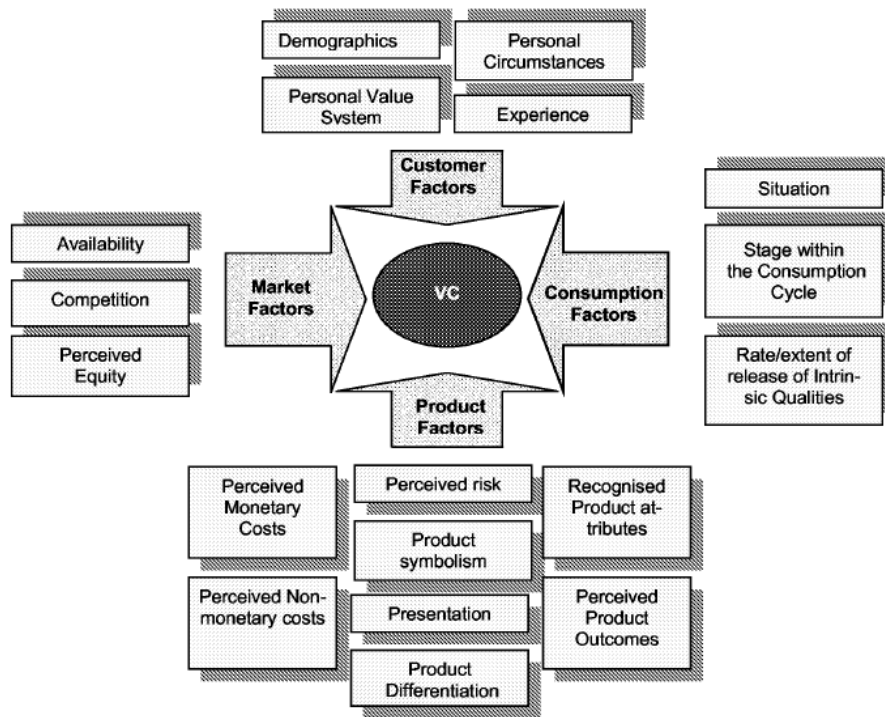
Figure 11.   Factors Influencing Consumers' Valuation Process (The Marketing Environment), (2003).

3.3 BUYER CHARACTERISTICS

Kotler's figure below demonstrates how the market environment influences buyer's characteristics throughout the purchase process (2003).

Marketing stimuli	Other stimuli		Buyer's characteristics	Buyer's decision process		Buyer's decisions
Product Price Place Promotion	Economic Technological Political Cultural	→	Cultural Social Personal Psychological	Problem recognition Information search Evaluation of alternatives Purchase decision Postpurchase behavior	→	Product choice Brand choice Dealer choice Purchase timing Purchase amount

Figure 12. Model of Buyer Behaviour (Kotler, 2003).

Market stimuli represent the firm controllable variables while other stimuli represent external environmental variables also influencing the buyer's decision process.   Buyer characteristics represent the interaction between external influences and consumers' internal values systems to motivation. The external influences referenced are represented by the market environment and stimuli illustrated in Figure 12.   Consumer motivation is a result of the market environment's influence on consumers' values. Motivation plays a critical role in the Buyer's decision process, otherwise known as the purchase process, which ultimately results in several Buyer's decisions. Consumers' values systems and motivation are discussed in more depth below. A detailed discussion of the purchase process follows this section.

3.3.1 Value and Values

It is important to differentiate between value in the singular form and values in the plural form. As previously discussed, value refers to the 'utility' or benefit derived from exchange (Payne and Holt, 2001). Value can also be referred to in the plural form 'values' (Rokeach, 1973 and Holbrook ,1994 in 2001). Values are the personal ideals of an individual which motivate our behaviour and choices (Woodruff, 1997) across situations and products or services (Woodall, 2003).

Values act as the reference point for our decisions. De Dreu and Bowles identify values as the 'motivational orientations' influencing our thought process when making decisions (Woodall, 2003). Woodall summarizes observations on values by Rokeach into three key point; 1) there is a small number of values 2) that people share to different degrees and 3) the degree to which we order these values make up an individual's 'value system'. Woodall suggests each customer focuses on a small number of critical values. These critical values are organized in a hierarchical manner on the degree to which they are valued (Woodall, 2003). The collective hierarchical order of a consumer's values is referred to as their 'value system'.

However, as Bagozzi (1975) noted, motives may include symbolic desires not simply to satisfy pure utilitarian needs. Notable psychologists Maslow (1974) and Skinner (2003) argue individuals are motivated by a combination of internal and external factors. Internal motivation is driven by individuals' values systems while external motivations only become influential when they are internalised by values systems. These motivations are influenced by numerous internal and external factors in the marketing environment.

3.3.2 Attitudes and Behaviours

The study of value and loyalty is very much one of attitudes and behaviours. Attitudes are positive, negative or neutral judgements of behaviour. This discussion digresses into the psychology field which provides more insight into the relationship between attitudes and behaviour. Wirga and De Bernardi introduce the ABC model developed by Ellis (1962) to explain attitude development, (Wirga and Bernardi). The ABC model represents responses of Affect, Behavioural intent and Cognition. Affect is the emotional preference towards an object; Behavioural intent is the planned response while cognition is the rational evaluation which forms an attitude (www.wikipedia.com/attitudes). The ABC model can be visualised in a Venn diagram as seen in Figure 13.
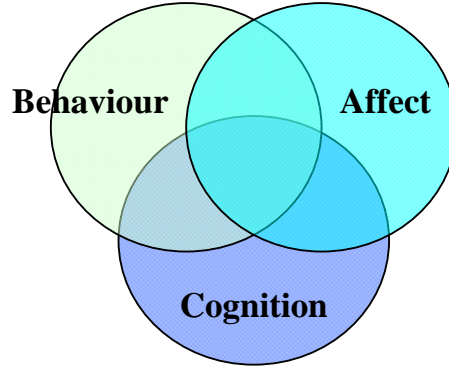
Figure 13. Venn diagram of the ABC model.

The ABC model can also be represented as an equation. Motives were referred to above as attitudes which drive behaviour. Motivation can be represented as A x C = B, where the interaction of Affect (A) and Cognition (C) equal a Behavioural (B) motivation (O'Keefe and Berger, 1993). Affect and cognition (A + C) form the attitude which stimulates behavioural intent. However, intent itself remains an attitude until it is turned into action. The equation can also be turned around B = A x C; where Behaviours (B) influence feelings (A) and thought (C) (1993).

To understand value and its interaction with the external market and internal customer influences, the composition of the concept must be dissected and each 'gear and lever' examined to understand how these interactions form value. Referring back to Kotler and Levy (1969), at its most basic form value drives the transaction, or facilitates the sale. The purchase process provides a framework to conceptualise the influence of value in transactions. The value literature will be examined throughout the purchase process to provide an understanding as well as simplify the abundant concepts developed over the years. Following this discussion, the retention and loyalty literature will be introduced.

3.4 THE PURCHASE PROCESS

The purchase process is a visual representation of consumers' method to satisfy motivations through a transaction. Customers' motivations consist of needs perceived to satisfy the problem initiating the purchase process, as well as desires above and beyond these requirements.   For example, a traveller searching for airline tickets needs transportation between two points but may desire in-flight entertainment, comfortable travel, etc.

Identification of these needs represent the first stage of five stages in the purchase process, the aptly named Need Recognition stage. Need recognition (1) leads to an Information search stage (2). The motivation to satisfy recognised needs initiates affective and cognitive evaluations of the value assessment stage (3).   Affect is motivated by values systems to form a preference in the form of a hierarchy of desired attributes (Greenburg, 2007). The cognitive evaluation involves processing information gathered during the information search stage and making choices based on perceived benefits and sacrifices (Greenburg, 2007) resulting in a 'purchase intent' (4), representing the fourth stage. Satisfaction results from a similar cognitive evaluation of the purchase intent and represents the fifth and final stage of the purchase process, the post-purchase evaluation stage (5).

The first three stages of the purchase process comprise the pre-purchase phase of the purchase process; purchase intention represents the purchase / post-purchase phase while post-purchase evaluation stage represents the use / post-use phase in the purchase process (Kotler, 2003). The purchase process and corresponding phases of purchase and use are visualised in Figure 14.
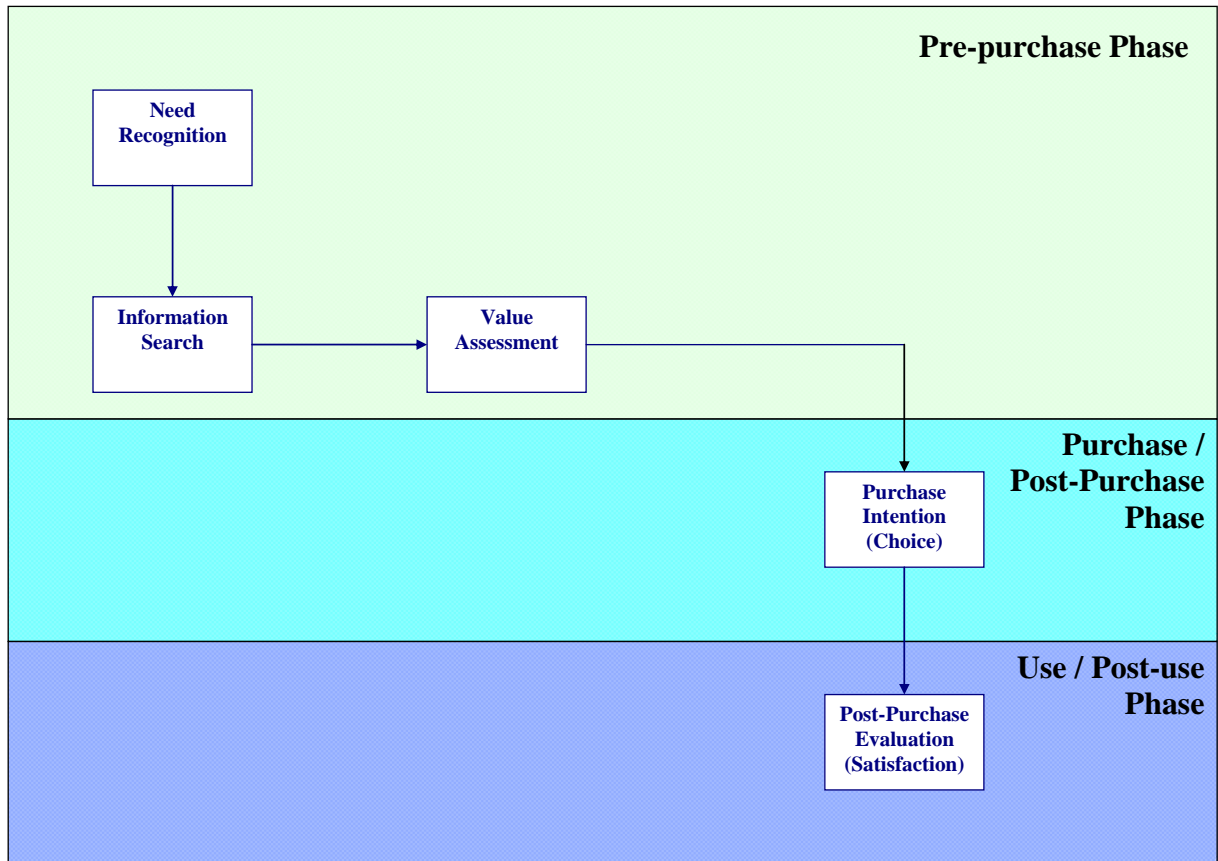
Figure 14. The Purchase Process (Kotler, 2003).

Expectations are the customers' perception of firms' promises on how product offerings will satisfy their motivations. The value proposition is a configuration of benefits and sacrifices offered by firms in the marketplace to satisfy customer needs (2003). When a company designs a value proposition, they are creating a product or service to meet the desires of customers. How this value proposition is positioned in the market will set expectations in the mind of the consumer. For example, if an airline positions its product as the most spacious seat in economy class, an expectation for this product to deliver on the statement has been set in the mind of the consumer. For repeat customers, past experiences may have developed preconceived expectations for a product.

Following need recognition, the customer begins the information search stage to identify expectations of value propositions with the potential to satisfy

recognised needs. This data collection does not only utilize formal, structured research (i.e. researching suppliers and products), but also includes past experiences, word-of-mouth, or any other relevant information. Sources of information include personal sources (i.e. family and friends), commercial sources (i.e. firm supplied information), public sources (i.e. third party mass media) and experiential sources (i.e. product testing and trial) (Kotler, 2003).

The search process typically does not limit potential value propositions to just one product category. The need to travel between two points can be satisfied by many product offerings (2003). Automobile, bus and train transportation are all viable alternatives that compete with air travel. Consumers categorize the available product offerings into sets to simplify the purchase decision (Payne and Holt, 2001). All available products which satisfy the need comprise the total set. Products the consumer is aware of make up their awareness set. These product offerings are further filtered by initial evaluation criteria to make up the consideration set.   After more rigorous evaluation during the value assessment process, only a few products will remain in the choice set from which a buy or no-buy decision will be made.

The evaluation of product offerings takes place during the value assessment stage of the purchase process. The result of the value assessment stage is several choices which comprise the purchase intention. The post-purchase evaluation assesses the value delta between expectations from the firm's value proposition and actual value received in the context of satisfaction.   The literature review will continue with an in-depth discussion of the remaining three stages in the purchase process spread throughout this chapter, beginning with the value assessment process.

3.5 THE VALUE ASSESSMENT PROCESS

The purchase process begins with customers identifying needs and desires. Needs and desires are internal motivations formed by consumers' values systems during the need recognition phase. Conversely, expectations are externally driven motivations which interact with internal consumers' values systems during the Information Search phase. The set of products identified in the search are evaluated during the value assessment stage on customers' expectations for each value proposition's ability to satisfy the recognised need. The product expected to closest match the customer's motivations (needs and desires) is chosen.

Customers assess value propositions as a package of benefits offering a solution to satisfy their need (Payne and Holt, 2001). Value propositions have both product and service elements. Levitt suggests firms do not compete on the physical products alone but on the bundle of supplementary products and services that comprise "a promise, (or) a cluster of value expectations" (Levitt, 1981 in Payne and Holt, 2001). This idea is known as the augmented product, which defines a value proposition as the core product and supporting goods or services (Ravald and Grönroos, 1996). The augmented product concept suggests that products and services, though they still retain unique characteristics, have largely become a single element in the eyes of the consumer. When product offerings or value propositions are discussed in this research, the concept refer to the collective product and service elements which make up the product offering.

3.5.1 Means-End Model

Consistent with the augmented product concept, the means-end model suggests products are viewed by consumers as bundles of qualities or 'attributes' (Gutman, 1982, Woodruff, 1997, Woodall, 2003). Attributes are the qualities or features a product offering possesses which customers use to assess and compare products (2003). Attributes can best be described as the physical and psychological elements differentiating products (Manyiwa and

Crawford, 2002).   Examples of common attributes in the airline product include IFE, seat pitch and airports, but can also include more subjective elements such as service quality and seat comfort.

Gutman (1982)hypothesizes that all consumer actions result in consequences and that consumers learn to relate consequences with specific actions. Consequences are defined as "any result (physiological or psychological) accruing directly or indirectly to the consumer (sooner or later) from his/her behaviour" and can also produce additional ensuing consequences (Gutman, 1982).   Consequences occur either as a direct result of an action or indirectly through our environment and can occurs immediately during consumption or much later (1982).

An example of consequences in the airline industry would be saving money or a less stressful experience.   A consequence represents a more abstract concept than attributes, with several attributes influencing it.   For example, consumers may consider the ticket price attribute in an attempt to realize the consequence of saving money.   A cost of ground transportation attribute may also exist for the travel experience which would also influence the consequence of saving money.

The Means-End Model by Gutman (1982) was originally intended to show that consumers categorize products by the consequences they result in.   However, the model found application as a consumer behaviour model to demonstrate the importance values play in product choice.   Consumers determine the positive or negative significance of each consequence based on congruency with the individual's values (1982).   The value of the Means-End model is identifying these consequences and subsequent attributes associated with customer's desired ends.   Product attributes that communicate the ability to satisfy the desired ends are vital selling points.   Spreng, MacKenzie and Olshavsky explain,

"people judge the extent to which a product contributes to the attainment of their desired end-states by examining the extent to which the product produces consequences or outcomes or provides attributes or benefits that they believe will be instrumental in leading to the attainment of their higher-level desires" (1996)

Product offerings are assessed on their collective attributes' ability to maximize the positive consequences and minimize negative consequences. More specifically, the Means-End model attempts "to explain how a product or service selection facilitates the achievement of desired end states" (Gutman, 1982). Ends are desired outcomes, or goals, while means are the path to which that outcome is reached. An individual's values system desire goals which will satisfy a need. Examples of airline passengers' goals can be family, accomplishment and satisfaction oriented. In a marketing context, products or services serve as the means to achieve goals that satisfy a consumer's values. After evaluating all alternatives, the consumer is left with a product offering the bundle of attributes which provide the 'best path' to the desired end (1982).
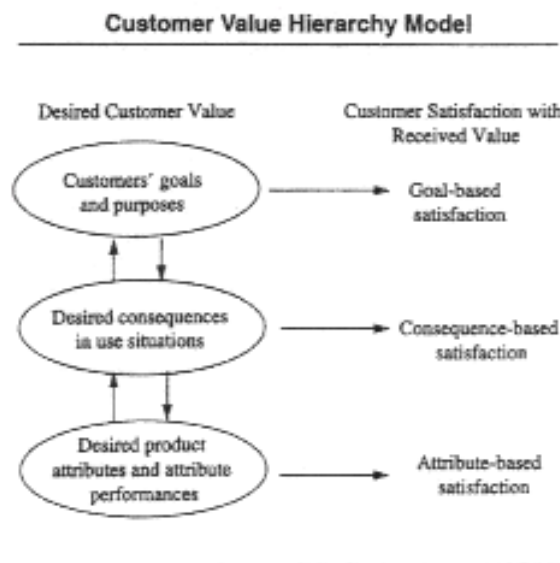
Figure 15. Customer Value Hierarchy Model (Woodruff, 1997).

Gutman's (1982) means-end model focuses on the relationship between values and consequences. Woodruff and Gardial (1996) suggest this relationship is hierarchical with values acting as the underlying force driving goals, consequences and attributes throughout the purchase and use stages. This is visualised on the left side of the Customer Value Hierarchy Model (Figure 15).

3.5.2 Customer Value

Customer value is the perceived benefits and sacrifices resulting from an exchange. In the marketing field, much of the research on value has focused around the concept of customer value. As is the case with value, the customer value term is ambiguous and has many meanings. Woodall (2003) conducted an in-depth investigation into the concept which revealed eighteen different terms used to describe customer value. These definitions generally refer to two differing concepts. Woodall coined the first as 'value for the customer' or what customers find valuable in a product offering. Conversely, customer value can also refer to the value a customer presents to the firm or 'value to the firm' (2003). Throughout this research, the term customer value refers to the value a consumer receives through an exchange.

It is also important to differentiate between customers and consumers. A customer is defined as the entity purchasing the product while the consumer is identified as the end-user of that product. Typically, both the customer and consumer are one in the same; however, this distinction becomes particularly important in the airline industry where flights are often purchased and paid for by one individual or entity for use by another. Throughout this research, we will use the two interchangeably unless specifically noted.

In an attempt to address the various uses of the value term, Woodruff (1997) reviewed popular definitions of customer value (e.g. Zeithaml, 1988; Anderson, Jain, and Chintagunta, 1993; Monroe, 1990; Gale, 1994; and Butz and

Goodstein, 1996). Woodruff notes three commonalities among the various definitions:

- □ customer value is linked to the use of a product,
- □ customer value is determined by the customer, and
- □ customer value involves a trade-off between benefits and sacrifices (Woodruff, 1997)

Woodruff goes on to define customer value as:

"a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations" (Woodruff, 1997).

Woodruff's definition broadens the previous definitions and incorporates multiple contexts (i.e. purchase and use phases), multiple cognitive tasks (i.e. motivations and perceptions), and multiple levels of assessment criteria (i.e. Means-End Hierarchy) (Parasuraman, 1997). Parasuraman applauds this attempt to define customer value, but notes that it may be difficult to implement given its complexity (1997).

Following Woodruff and Parasuraman's work, Woodall (2003) refines the definition of customer value as:

"any demand side, personal perception of advantage arising out of a customer's association with an organisation's offering, and can occur as reduction in sacrifice; presence of benefit (perceived of as either attributes or (consequences); the resultant of any weighed combination of sacrifice and benefit (determined and expressed either rationally or intuitively); or an aggregation, over time, of any or all of these."

Examining Woodall's definition, we learn customers ultimately determine the worth of a product or service. This value "can occur as reduction in sacrifice" which can be as simple as paying less money or avoiding undesirable situations. Customer value can also be the "presence of benefit" such as a positive attribute (more legroom), a consequence (in-flight comfort as the result of more leg room), or any combination of reduced sacrifices and positive benefits over time (2003).

3.5.3 Dichotomies of Customer Value

At the most fundamental level, Woodall (2003) portrays customer value as the interaction of subjective / objective and intrinsic / extrinsic value dichotomies. Holbrook (1994) discusses subjective value as a personal, intrinsic judgement unique to each consumers' values systems of what an object means to the individual. Intrinsic value is worth determined by an individual's values system; whereas extrinsic value is worth determined by the marketplace or other environmental factors. Objective value is derived from intrinsic value, where an object's worth is derived from possession value by which the object's attributes provide sought after benefits or 'value-in-use' as the means to an end goal (Woodall, 2003). Objective value can also be extrinsically determined by the objects economic exchange value in the marketplace. Exchange value is relatively constant in the marketplace and therefore quantifiable. Objective value can be measured in financial, quality or other established terms whereas the subjective view is completely dependent on the consumer. Subjective value can also be influenced by extrinsic factors in the market environment.

Holbrook suggests consumers judge value based on a 'balance' of the object's extrinsic worth in the market and the object's intrinsic worth to the individual (Holbrook, 1994). Customer value is essentially a give and take between the subjective and objective motivations of an individual. The objective value is influenced by society or the market, which is the aggregate of many people's

subjective views and is subjectively accepted, rejected or negotiated by the individual (Woodall, 2003). The two dichotomies are complimentary in their interaction between each other.

Utilitarian and Hedonic Value

The economic concept of utility or utilitarian value, not to be confused with Woodall's (2003) defined term 'utility value', is also one side of another distinct dichotomy. Hedonic value opposes the tangible, financially motivated utilitarian value and can simply be defined as intangible 'pleasure fulfilment'. Wang, Chen, Chan and Zheng suggest utilitarian orientation is driven based on necessity through product functionality, whereas hedonic value orientation seeks immediate gratification through experiences (2000).   Chaudhuri and Holbrook view products as possessing both hedonic and utilitarian value to varying degrees, but not as two ends of a continuum (2001). Value is often approached from the economic function of utility, but little research has incorporated hedonism due to challenges in measurement.

Consumers with a utilitarian value orientation tend to be more frugal while hedonic consumers are not satisfied with the basic product functionality and are willing to pay more for products with emotional elements such as brand and symbolism. Hedonic oriented consumers may be willing to pay a premium. However, Wang et al. suggest hedonic oriented customers have a higher propensity to explore and shop around, therefore sustaining loyalty becomes more challenging than utilitarian oriented consumers (2000). Interestingly enough, hedonic value is also believed to contribute to product affect, which strengthens loyalty to a brand (Chaudhuri and Holbrook, 2001). This suggests committing hedonic oriented consumers to the loyalty of a product or brand may be more difficult; however, once loyalty is established the benefit becomes a more committed, higher paying customer.

3.5.4 Dynamic Dimensions of Customer Value

The dynamic dimensions of customer value explain how each customer's perception of value is dynamic dependent on situation and time within the purchase process and over the life of a relationship.

> "…the nature and determinants of customer value may change over various stages of a customer's association with a company…the attributes that motivate a customer's initial purchase of a product may differ from the criteria that connote value during use right after purchase, which in turn may differ from the determinants of value during long-term use. Moreover, deficiencies that trigger customer defections may not necessarily occur on criteria that dominate value assessments during product use" (Parasuraman, 1997).

In the quote above, Parasuraman demonstrates the importance of understanding how customers' underlying motivations evolve for product association, purchase and loyalty, but also defection among many other value and loyalty related motivations not discussed. Below, three dynamic dimensions to value are identified; situational, temporal and customer duration.

Situational Dimension

The use situation provides the context in which an exchange between customer and firm takes place (Garver and Gardial, 1996 in Payne and Holt, 2001). Situation influences consumers' values systems and results in a reorganized hierarchy of desired attributes. Ravald and Grönroos (1996) illustrate this point with the irregular situation of an automotive breakdown. In this situational context, the customer may be willing to pay significantly more while settling for lower quality than typically accepted.

It is well understood that the attributes a consumer seeks depend on the situation. A businessman travelling on vacation will seek a vastly different set of

product attributes than when travelling for business. Airlines acknowledge this fact and segmented passengers on their situation as previously discussed. Butz and Goodstein (1996) provide another airline example. Passengers flying Cathay Pacific Airways on long-haul flights of over ten hours, indicate cleanliness of the aircraft, quality of meals and up-to-date information is more important than on-time departure and arrival typically more important for short-haul flights.

Temporal Dimension

The attributes a customer seeks also vary throughout the purchase and use cycle in addition to the use situation. The hierarchy of desired attributes and consequences used to assess value may vary in composition and magnitude during the pre-purchase, in-use, or post-usage stages (Woodruff, 1997, Ravald and Grönroos, 1996).

Zeithaml finds attributes' importance fluctuated during the stages of use (1988). The attributes, consequences and goals of the means-end hierarchy where observed in Zeithaml's explanation but not explicitly discussed. For example, during the pre-purchase stage, external attributes such as price and brand are more important due to the lack of information or time (1988). Value judgements during the purchase stage take on a more rational process and rely on quality attributes or abstract, high level consequences of product use. Post-use value judgements rely on goal oriented assessment and resemble satisfaction evaluations.

Woodruff (1997)later explicitly proposes attributes and consequences to which value is measured may vary in magnitude throughout the pre-purchase, in-use, or post-usage stage. Corresponding with purchase, use and post-use stages, customers judge value on preferred attributes, attribute performances, and consequences respectively. For example, value may be interpreted as low price (attribute) during the purchase process, convenience (consequence) during the use stage, and feeling accomplishment (goal) after use (1997).

Customer Duration

Parasuraman (1997) furthers Woodruff's (1997) work and offers a framework to monitor the evolution of customer value over the duration of a customer's experience or relationship with a firm (see Figure 16). Customers are segmented into first-time, short-term, long-term, and lost customers. The segments' value attributes and corresponding attribute importance are charted with the progression of time and customer experience, referred to as customer duration. Customer duration is a function of both time and frequency of use (1997).

Framework for Monitoring Customer Value

Key:
A — First-Time Customers
B — Short-Term Customers
C — Long-Term Customers
D — Lost Customers
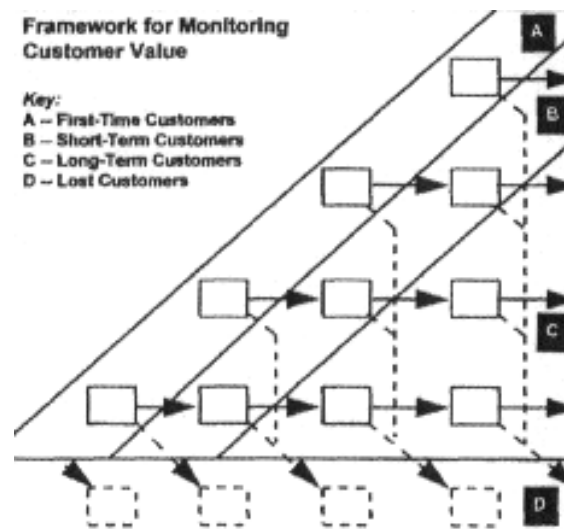
Figure 16. Framework for Monitoring Customer Value (Parasuraman, 1997).

Parasuraman suggests customer duration corresponds to Woodruff's(1997) Customer Value Hierarchy. First-time customers are primarily concerned with the attribute level. With consumption experiences, customers progress up the hierarchy and become more consequence and goal oriented (1997).

For example, first-time customers spend more time researching product attributes such as the airline's schedule and destinations during the purchase stage. As customers' familiarity with an airline's product attributes increases,

less time is spent researching and attention shifts to more abstract product elements during the purchase stage, such as customer service and relationship with the airline (Dube and Maute, 1998). As Parasuraman suggests, more experienced customers may desire consequences or goals over attributes (1997).

Parasuraman further suggests that as customers' duration progresses, the customer becomes more familiar with the product and its ability to satisfy personal goals. A new understanding of the product may emerge that perhaps did not exist at the beginning of the purchase process (Mick and Fourneir, 1995 in Parasuraman, 1997).

Parasuraman's model provides a means to study the attributes and consequences driving customer acquisition, customer up-sell and relationship development as well as customer defection. This framework also allows for the monitoring of changing attribute importance within segments over time as the marketplace environment changes and new generations of customers emerge (1997).

Woodruff explains since consequences and goals are abstract consumers' continue to assess value on a hierarchy of desired attributes associated with the attainment of particular consequences and goals rather than a hierarchy of desired consequences and goals themselves (1997). So as customers' experiences grows and focus shifts to consequences or desires, attributes still play the same critical role in value assessment. However, these attributes will likely change according to which consequences and goals they are perceived to result in.

Firms must recognize the differing and changing needs of new and loyal customers. Separate strategies for customer acquisition and retention should recognize attributes which first attracted customers are not likely to be the same attributes which customers seek in a long term relationship (Mittal and Katrichis,

2000). These considerations must be incorporated into any relationship marketing strategy or customer relationship management campaign.

3.6 DESIRED, PERCIEVED AND RECEIVED VALUE

Thus far the discussion on value has been limited to a structural definition of the concept itself. The discussion will now switch gears to focus on the value sub-concepts of desired, perceived and received value as well as the interaction of value with service quality and satisfaction.

The means-end research of consumer behaviour and value utilized several sub-concepts to explain the value assessment process (observed in Woodall, 1997 and Zeithaml, 1988). These sub-concepts include desired value, perceived value and received value but also rely on perceived and received quality. The dynamic properties of value discussed thus far are assumed remain true for the value sub-concepts as they apply to the value assessment process. This assumption may not hold true for all sub-concepts in all situations, but is assumed none-the-less for this research.

3.6.1 Desired Value

Customers begin the purchase process with needs to be fulfilled. Throughout the information search stage, customers develop an idea of what will satisfy their needs and desires. When the value assessment stage begins, consumers will have a defined sense of desired value. Desired value is a customer's perception of ideal value received from a product offering in achieving a desired outcome (Flint and Woodruff, 2001). Desired value represents the hierarchical ranking of product attributes by consumers' values systems and is highly influenced by use situations and duration (2001). Figure 17 is proposed by this research as a dispositional structure of desired value.

```
                    ┌──────────────────────┐
                    │  Values Influences    │
                    │ (Situation, duration, etc.)│
                    └──────────┬───────────┘
                               │
                               ▼
┌─────────────────┐   ┌──────────────────┐   ┌──────────────────────┐
│  Values System  │──▶│     DESIRED      │──▶│    Hierarchy of      │
│                 │   │     VALUE        │   │  Desired Attributes  │
└─────────────────┘   └──────────────────┘   └──────────────────────┘
```

- Goals
- Consequences
- Attributes
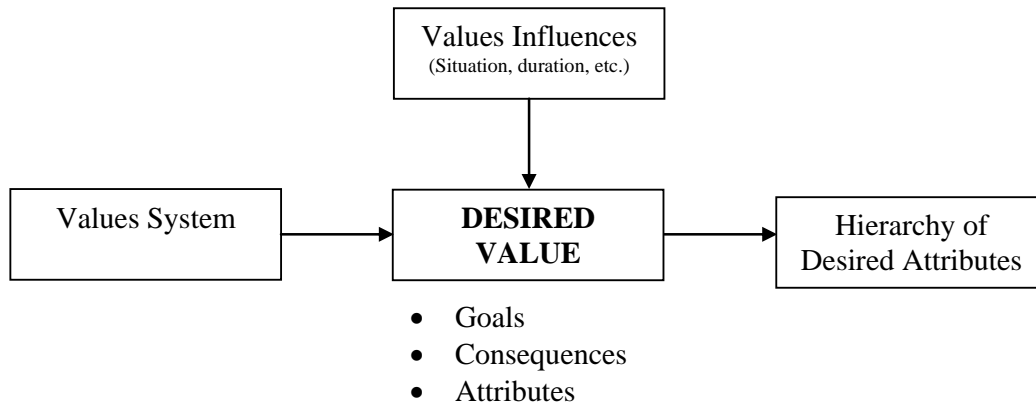
Figure 17. Desire Value Relational Conceptualisation.

Woodruff's means-end research defines desired value as the attributes or consequences that that consumers want or seek in a product offering (Woodruff, 1997).   Desired goals may also be considered and are not necessarily limited to satisfying the need which initiated the purchase process. Desires may be secondary hedonic or utilitarian motivations bundled into the desired value assessment. For instance, an airline passenger flying first class has a need to travel between two points but also has a goal to feel accomplished, fulfilled by the prestige of a premium cabin.

Woodruff further highlights the dangers involved in focusing on attribute-based, 'key buying criteria'.   Key buying criteria places a large emphasis on the transaction. Woodruff suggests learning more about consequence and goal-based influences on customer value and satisfaction.   Woodruff's advice is consistent with relationship marketing theory that customers desire solutions more than simple transactions (Woodruff, 1997).

Manyiwa and Crawford (2002) conducted critical research linking means-end theory with consumer choice.   Manyiwa and Crawford suggest desired attributes act as the means by which consumer's values influence purchase choices.   Manyiwa and Crawford explain, "…consumers make choices to

'achieve' desired consequences and values, values guide the choices and preference for attributes and consequences" (2002).

3.6.2 Perceived Quality and Perceived Value

Value assessment determines the benefits and sacrifices of products in the consideration set. Consumers can only perceive these benefits and sacrifices since value is influenced by many variables of which the actual outcome is realised in the future. Many researchers acknowledge quality as a key component of value (Khalifa, 2004, Howard and Sheth, 1969, Burns and Woodruff, 1992, Kotler and Levy, 1969, Ravald and Grönroos, 1996). Zeithaml defines quality as superiority or excellence. Therefore, Perceived Quality is a consumer's judgment of a products quality or excellence (Zeithaml, 1988).

The concept of quality is often confused with value. Zeithaml (1988) suggests quality is the assessment low-level, functional products benefits and price. Only when perceived quality is considered in conjunction with abstract, subjective benefits (consequences and goals) and non-monetary sacrifices does the resulting judgement then becomes perceived value. Think of quality as a measure of products' functional attributes performance. Product attributes can be intrinsic (physical product characteristics) or extrinsic (price and brand).

We emphasise the difference between objective attribute performance as opposed to attribute performance of an objective and subjective nature. The later is essential to perceived value, indicating quality itself is a subset of the value assessment as well. If you recall from the discussion on objective / subjective value, objective value is measurable while subjective value is determined by the customer. Therefore, quality is an assessment of measurable, objective attribute performance whereas value and satisfaction consider quality in addition to higher level, subjective performance of consequences and goals.
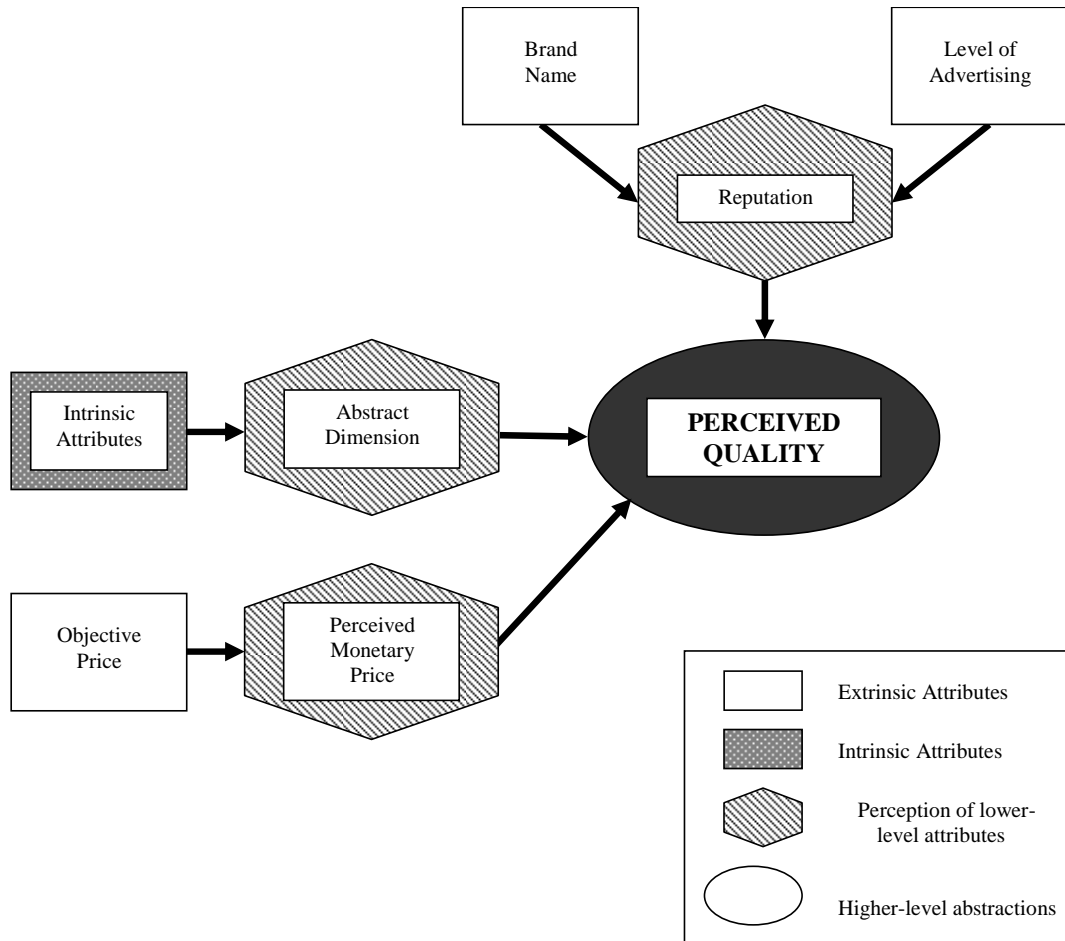
Figure 18. The Perceived Quality Component (Zeithaml, 1988).

Much of the quality research encompasses services quality as well. Service quality is merely the quality of a service or the service element of a product such as delivery and customer service. The augmented product concept suggests service elements are integrated into product offerings. Therefore, service quality comprises a significant component of perceived product quality. This observation also suggests service quality literature can apply to the quality assessment of all products, since all products have a service element.

Zeithaml notes perceived quality is:

- Different than objective or actual quality; objective quality can be quantified on a set of weighted attributes while perceived quality is a

personal judgement base on a variety of attributes with varying degrees of importance.

- A higher level abstraction rather than a specific product attribute; Perceived quality is a judgement of several product attributes.

- A global assessment resembling an attitude; Product attributes comprising perceived quality include measurable product attributes prior to purchase (search attributes) as well as the perception of attributes later assessed in use (experience attributes).

- A judgement usually made within a consumer's evoked (consideration) set; Perceived quality is relative to alternative product offerings in a consumers evoked set (Zeithaml, 1988).

Though perceived quality may be a higher level, global attitude of product attributes, perceived quality remains a lower level assessment that makes up a part of perceived value.

Zeithaml also discusses customers' use of particular attributes to infer or 'signal' quality and serve as cues to quality. Product attributes are generalized by consumers to form abstract evaluations. These abstract evaluations help to compare alternatives on common dimensions and infer information when product information is incomplete (Zeithaml, 1988). Dimensions resemble the higher-level consequences represented in the means-end model. While perceived quality is a higher level abstract than attributes, the dimension of quality is referred to throughout this research as an attribute because there are no easily identifiable attributes which comprise quality.

Zeithaml's (1988) research resulted in a means-end model of price, quality and value perceptions. The value of Zeithaml's model is in the simplicity of defining perceived value. Perceived value is displayed as a function of two variables, price and quality. In the model, Zeithaml segments value into four groups of perceptions:

- □ Value is low price (price emphasis);
- □ Value is whatever I want in a product (attribute quality emphasis);
- □ Value is the quality I get for the price I pay (quality / price);
- □ Value is what I get for what I give (attributes importance / sacrifice) (Zeithaml, 1988).

'Value is low price' considers the product as a commodity and the purchase is made solely on price. 'Value is whatever I want in a product' considers all benefits and selects a product which satisfies customer motivations. 'Value is the quality I get for the price I pay' consider only one benefit (quality) and only one sacrifice (price). Conversely, the 'Value is what I get for what I give' considers all benefits and non-monetary sacrifices such as time and effort (Zeithaml, 1988). These four value segments can be summed up in one definition; "perceived value is the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988).

The value of Zeithaml's (1988) work is in integrating the perceived quality and value concepts. Zeithaml defines perceived quality as the objective assessment of utilitarian benefits provided through a product's intrinsic and extrinsic attributes in relation to price. Products' functional benefit and price are fairly consistent in the marketplace. Therefore, perceived quality becomes an abstract, quantifiable dimension. Perceived value is the subjective assessment of perceived quality in relation to perceived non-monetary sacrifices. Sacrifices are perceived through subjective cues such as past experiences (1988).

This research argues that price itself should not influence "the superiority or excellence of a product" as quality Zeithaml defined quality (Zeithaml, 1988). Quality should only be influenced by a product's functional attribute performance. Like value, the quality research has been confounded by inconsistent definitions and measurement methodologies. For example, Bolton and Drew (1991 in Petrick, 2004) state perceived quality, not price, is the best

predictor of perceived value. While this may be accurate, it is not logical if price is an element comprising the concept of perceived quality. Zeithaml (1988) admits there is no clear indication a positive relationship between price and quality exists. However, some customers may consider price as a functional attribute providing the benefit of saving money. For example, Ravald and Grönroos (1996) view perceived quality as an attribute of perceived benefits. Price as a functional attribute may contribute to quality assessment for products or brands but the dimension of perceived monetary cost may act as a cue and contribute to perceived value.

Regardless, price remains a critical cue, but may act as a cue to perceived value rather than perceived quality. It is interesting to note that the impact of price as a cue to quality is most likely null in the airline industry where pricing is often illogical and not understood by consumers. However, price as a cue to value is certainly logical, especially for passengers who view air travel as a commodity and define 'value as low price'. Figure 19 modifies Zeithaml's (1988) Means-End Model Relating Price, Quality, and Value to highlight this research's theorised structural definition of perceived value.
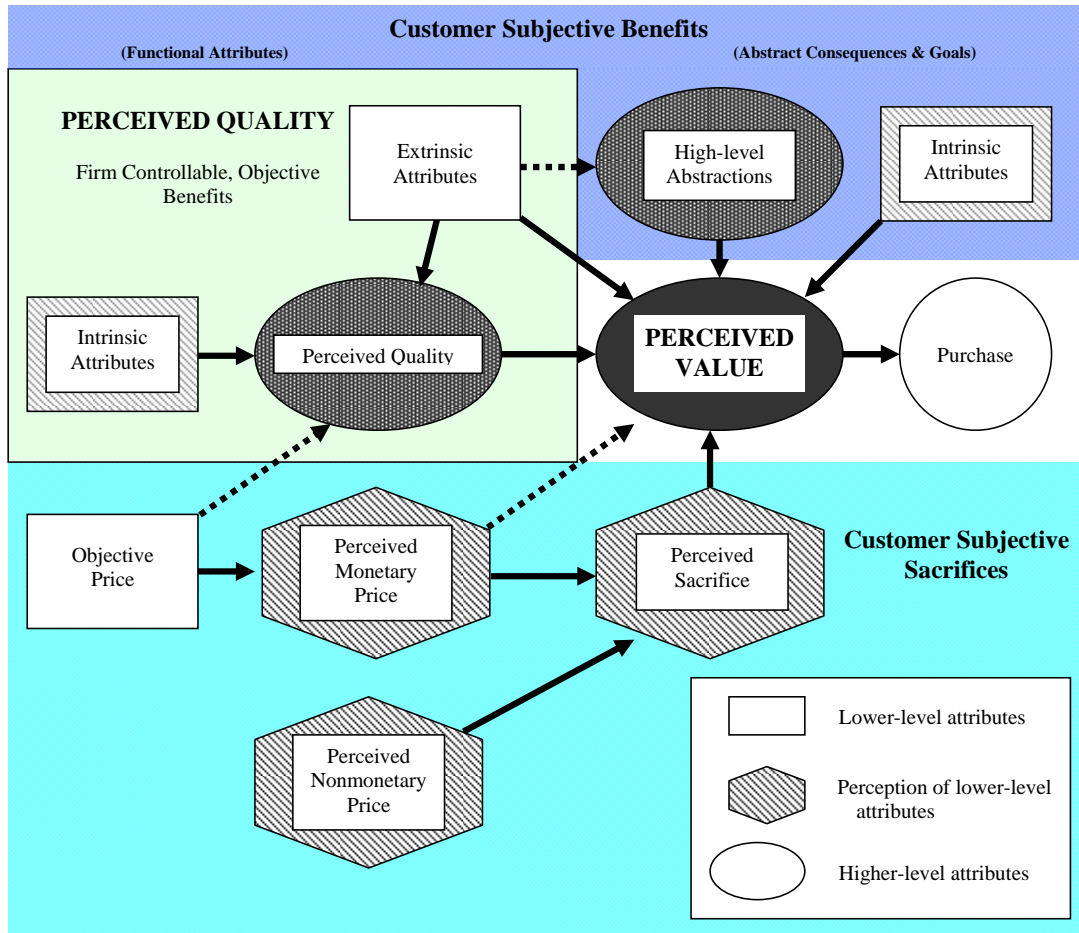
Figure 19. A Means-End Model Relating Price, Quality, and Value (Zeithaml, 1988).

Firms must always keep in mind that customer-perceived value is defined by the customer. It is necessary that organizations understand customers' perceived value in order to truly become customer focused. Focus on objective value becomes irrelevant when it is consumers' subjective perceptions that ultimately determine a products value (Zeithaml, 1988, Ravald and Grönroos, 1996). Christopher et al. (1991 in Ravald and Grönroos, 1996) suggests anticipating the customer's usage or need for the product. This implies understanding the consumer in addition to understanding the immediate customer.

In any situation where a product is purchased for use by another individual, such as is often the case in air travel, this consideration becomes crucially

important in assessing customer value and consumer satisfaction. This is obvious in business travel, where customer negotiated contracts are done at the corporate level while the employees who consume the product have little say in product choice. In this scenario, the customer assesses value while the consumer assesses satisfaction.

3.6.3 Received Quality and Received Value (In-use / Post-use stage)

The adjective 'received' preceding quality and value indicates an in-use or post-use assessment of actual value. Received quality is the consumer perception of actual attribute performance. Received value is the assessment of received quality and other benefits received in relation to actual costs incurred.

The relationship between received quality and value possesses is nearly identical to the relationship between perceived quality and value. While received quality and value are assessments of actual occurrences, these judgements are still subjective and perceived by the customer (Woodruff, 1997). This is important to consider because value delivered by the firm is only relevant if the customer realises the value received. Think of received value as consumers' assessment of actual attribute performance. This is closely related, but not to be confused with satisfaction; consumers' evaluation of how accurately their perceptions of attribute performance predicted actual attribute performance.

Anderson and Mittal (2000) researched the dynamic relationship between attribute performance and satisfaction. While Anderson and Mittal (2000) discuss attribute performance, this research has discussed attribute performance in terms of received value. After all, received value is the performance of attributes leading to the realisation of benefits and sacrifices. The relationship between attribute performance and satisfaction was thought to be linear and symmetrical, meaning that each increase in attribute performance resulted in an equal increase in satisfaction.

Anderson and Mittal suggest attributes influence satisfaction in one of two dynamic relationships (2000). Satisfaction-enhancing attributes, also referred to as surprise or delight attributes, possess a positive asymmetry, or increasing returns as satisfaction increases. Attributes are typically satisfaction-enhancing in their introductory stage (i.e. in-flight entertainment systems and flat bed seats). As competitors begin to innovate and match, the attribute becomes a core, satisfaction-maintaining attribute.

Satisfaction-maintaining attributes are core attributes that exhibit negative asymmetry and diminishing returns. Satisfaction-maintaining attributes are those considered by consumers to be basic service requirements. Satisfaction maintaining attributes offer little possibility for differentiation, however, if they are not met, can lead to dissatisfaction. Attributes may also move from enhancing to maintaining attributes as customers' duration length increases, because customers may begin to take these attributes for granted (2000). Figure 20 demonstrates the performance satisfaction relationship of satisfaction-maintaining and satisfaction-enhancing attributes.

NOTE: The dotted line in Panels 2 and 3 represents a linear approximation of the nonlinear relationship.
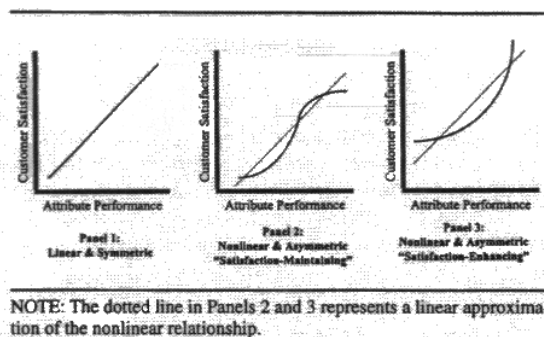
Figure 20. The Performance-Satisfaction Link (Anderson and Mittal, 2000).

The application of an asymmetric, non-linear view of product attributes allows for more efficient and productive allocation of resources (Anderson and Mittal, 2000). Traditionally, firms focus on the most important customer perceived attributes. However, focus on improving weak attributes rather than building up

strong attributes can be more beneficial (2000). For example, an increase in the performance of satisfaction maintaining attributes with weak performance scores will result in more value than an increase in performance of a satisfaction maintaining attribute with strong performance scores. Mittal and Baldasare state, "While positive and negative performance on an attribute are two sides of the same coin, each side of the coin buys a different amount of overall satisfaction" (1996 in Anderson and Mittal, 2000).

Khalifa furthers the Performance-Satisfaction link by synthesizing the work of Kano (1984) and Schneider and Bowen (1999) (Khalifa, 2004). The result is a two dimensional plane which also evaluates satisfaction on attribute performance. However, Khalifa's model segments attributes into implicitly expected, explicitly expected and unexpected attributes. Implicitly expected attributes are those 'satisfaction-maintaining' core features described by Anderson and Mittal (2000) expected regardless of the situation. The presence of implicitly expected attributes provides a neutral satisfaction rating. High relative quality of these attributes will not likely provide a worthwhile investment; however the absence or under-performance of these attributes will likely lead to dissatisfaction or outrage (Khalifa, 2004). Implicitly expected attributes are considered to be industry standards and must always be met, without exception (Kano et al., (1984) in Butz and Goodstein, 1996).

Explicitly expected attributes are those features which consumers demand (Khalifa, 2004). Butz and Goodstein refer to explicitly expected attributes as the attributes customers want but do not necessarily expect as an industry standard. These attributes can be either satisfaction maintaining or enhancing attributes, depending on their importance to the customer. As explicitly expected attributes become established and match by competitors, consumers begin to implicitly expect these attributes (1996). Delivering on explicitly stated attributes may provide added value, differentiate one brand from another, and may cultivate a slight premium for these attributes.

Unexpected or innovative attributes, provides an opportunity to delight the customer by delivering unexpected benefits which satisfy their desires and values. These attributes address predicted future issues, or latent needs, customers have not yet realized (Butz and Goodstein, 1996). Anticipating customers' latent needs and raising awareness will cause these attributes to work their way into consumers' desired value assessment. Predicting or shaping desired value can provide competitive advantage (Flint and Woodruff, 2001), however it is important to remember that these levels are dynamic and unexpected needs will likely shift to expected attributes.

If unexpected attributes under-perform or are absent, there is no significant dissatisfaction since these features where not expected in the first place (Khalifa, 2004). However, these attributes they will likely go through an adoption process of becoming expected by customers, match by competition and work their way into the product as implicitly expected attributes. Once innovative attributes have been introduced, reversing the adoption process or withdrawing the attribute becomes very difficult. Khalifa's value dynamics model is displayed in Figure 24.
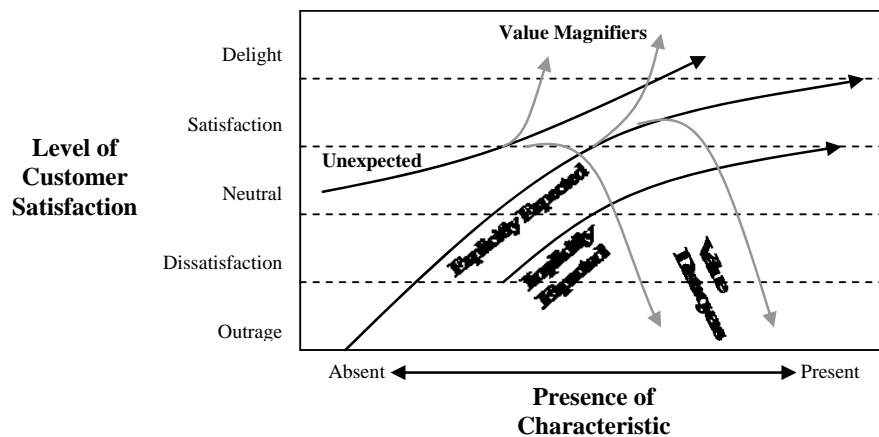
Figure 21. Value Dynamics Model (Khalifa, 2004).

This study of the value assessment stage introduced value sub-concepts of desired, received and perceived value as well as perceived and received

quality. Figure 22 integrates these sub-concepts into the purchase process and suggests a dispositional relationship with the purchase intention and post-purchase evaluation stages. This dissertation finds the concepts comprising desired value and perceived value interact to determine the purchase intention. Similarly, perceived value and received value interact to assess satisfaction. Perceived value and received value are significantly influenced by interactions with perceived and received quality respectively.   Customer satisfaction is vital in achieving retention and loyalty (Heskett et al., 1994 in Ravald and Grönroos, 1996). At the same time, satisfaction assessment considers desired, perceived and received value, consequentially bridging the concept of value to that of retention and loyalty.
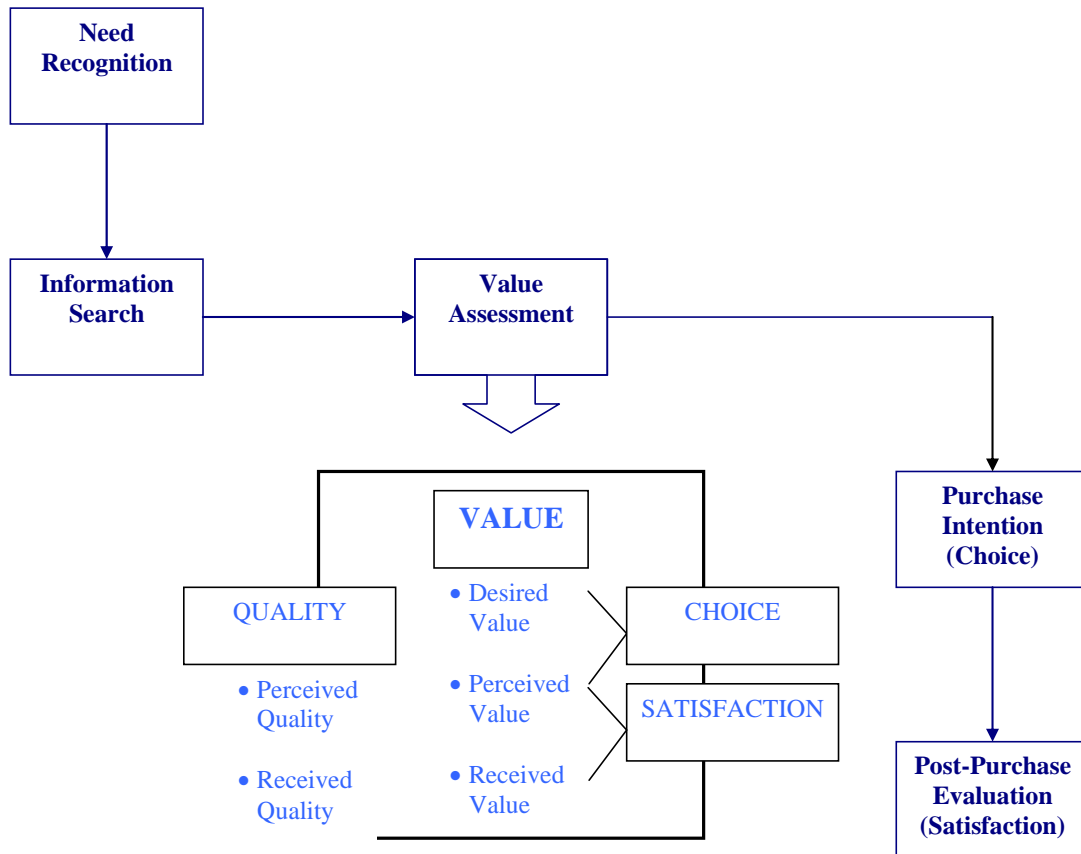
Figure 22. Value Sub-concepts in the Purchase Process.

3.7 PURCHASE INTENTION (CHOICE)

Purchase intention is the stage subsequent to value assessment in the purchase process. It is during purchase intention that customer's act on their motivations and perceptions developed thus far in the purchase process. Figure 22 identifies choice as one of two outputs resulting from the value assessment stage. This research found choice to be the result of an interaction between desired value and perceived value. Choice is further broken down as product and brand choices.

Woodall (2003) found five reoccurring forms of customer value which help to explain the interaction of value concepts to form choice and satisfaction.

1) Marketing VC
2) Net VC
3) Sale VC
4) Rational VC
5) Derived VC

The discussion of these five forms of customer value often refer to Woodall's (2003) other work in his review of the value literature discussed earlier

Marketing VC is the term used to portray 'key buying criteria' or key attributes which comprise the value proposition. This form of VC occurs before the purchase, what Woodall refers to as Ex Ante. The process involves the supply side (firm) identifying 'key buying criteria' to create a value proposition or Proposed Marketing VC. Woodall defines a value proposition as "those multi-faceted bundles of product, service, price, communication and interaction which customers experience in their relationship with a supplier" (Buttle, 2000 in Woodall, 2003).

Consumers evaluate this value proposition and determine which product attributes are of 'intrinsic value' from their Human/Personal Values.   This

process evaluates attribute 'Benefits' of supply-side value proposition. We relate this to perceived quality in the form of attribute consequences (i.e. in-flight comfort) and foreseeable sacrifices/costs that are perceived as positive consequences (i.e. low price). Consumers' valuation of attributes is dynamic in importance as well, and therefore, consumers will prioritize or weight attributes in regards to their significance (i.e. Anderson and Mittal, 2000) represented by the hierarchy of desired attribute. The result of this process is a consumer Perceived Marketing VC or 'true' value proposition.

Net VC is the consumer 'computed net result' of a comparison between perceived benefits and perceived sacrifices/costs associated with a value proposition. In the Ex Ante or pre-purchase stage, Net VC is a prediction of Net VC to be received as the result of a transaction, much like perceived value. Prospect Net VC computes the benefits minus the sacrifices for each value proposition to determine which one will provide maximum value. Consumers identify necessary sacrifices/costs associated with obtaining the benefits inherent in the value proposition. Benefits identified in the Marketing VC process are evaluated along with sacrifices/costs identified in the Net VC process to compute a 'net' outcome of the value proposition. Two alternative forms of Net VC exist for specific circumstances. Rational VC is a more advanced form of Net VC for complex purchase decisions while Sales VC is a simplified Net VC for less involved transactions (2003).

Rational VC is an advanced form of ex ante Net VC used in complex purchases, such as business to business transactions. Rational VC evaluates the perceived value proposition against a market 'standard' or benchmark, typically an average market value. Rational VC is calibrated from previous purchase experiences to set the market benchmark. Attributes can be itemized and evaluated on a Net VC basis (computing benefits minus sacrifices/costs), as a whole (how much more am I willing to pay) or one-by-one on an itemized basis (attribute of product one versus attribute of product two) (2003).

Sales VC is a rudimentary or simplified form of ex ante Net VC best understood by Zeithaml's (1988) form of value, 'Value is low price'. Sales VC focuses exclusively on the reduction of sacrifices, primarily monetary cost, and disregards the computation of benefits and sacrifices (Net VC) (Woodall, 2003). This form of value is prevalent in commodity markets. While air transport resembles a commodity market at times, air transport remains somewhat of a luxury product requiring high involvement. However, air travel does become a routine purchase for many corporate frequent flyers, often constrained with busy schedules and hand off the purchase to subordinates.

Derived VC exists in both the Transaction and Ex Post phase of use/purchase to infer the benefits resulting from a transaction outcome (2003). 'Exchange value' of Derived VC is immediately realised during transaction while 'use' value is realised during the ex post or post-purchase phase. Derived VC only considers benefits resulting from a transaction outcome. The post-purchase or ex post Net VC is computed by measuring the actual sacrifices/costs resulting from the transaction against the Derived VC, similar to received value.

Woodall (2003) goes on to suggest an 'Aggregated' form of value similar to Net VC but accommodating less rational consumer decision and purchase behaviours. Aggregate VC views value as dynamically in which all of the previous forms of value can have differing influence on the overall value perception at differing points throughout the purchase and use experience. Woodall also suggests satisfaction judgements are made periodically throughout the purchase and use phases and that value and satisfaction are dependent concepts (2003).

Figure 23 expands upon the temporal relationship to the five forms of customer value expressed by Woodall (2003). This discussion is provided to further explain the purchase process in detail and is for discussion only. Figure 23 is a hypothetical construct of Woodall's five forms of customer value in the purchase process and confirming its accuracy is outside the scope of this research.

Pre-purchase Phase	Purchase / Post-Purchase Phase	Use / Post-use Phase
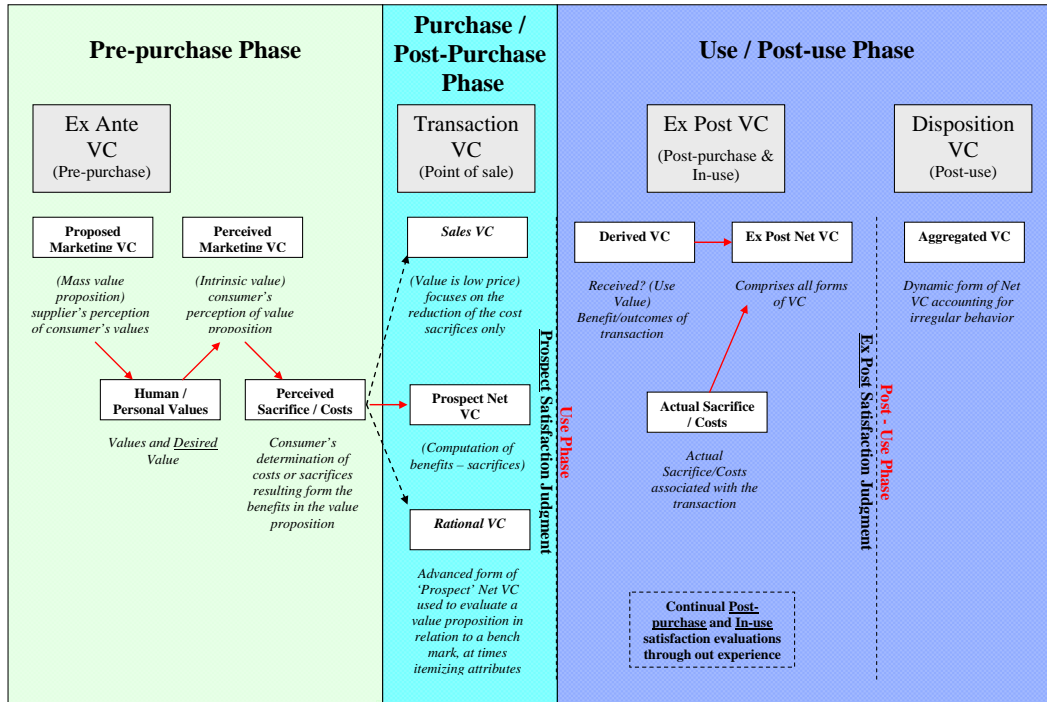
Figure 23. Five forms of VC in the Purchase Process (derived from Woodall, 2003).

For this scenario we assume a service transaction and use air transport as an example. The process starts with the supplier creating a product offering based on the understanding of what consumers' values, the Proposed Marketing VC. This is released to the market through the value proposition. Each consumer individually evaluates the mass value proposition against desired value and their Human / Personal Values. The result is perceived quality, identified as Perceived Marketing VC, which is the intrinsic product attributes. The consumer then identifies the costs or sacrifices associated with benefits in the value proposition, previously identified as perceived value. At this point in the Ex Ante stage the purchase decision is made. It is assumed the purchase decision is made to maximize value by choosing the perceived value proposition closest matching the consumer's desired value. The choice process evaluates each perceived value proposition using Prospect Net VC, Sales VC, or Rational VC. Consumers may use any combination of these depending on the complexity and habits of the purchase process.

Immediately following the purchase decision but prior to usage, the first satisfaction judgement is made based on Prospect Satisfaction the consumer believes to have received. It should be noted that this satisfaction judgement is continually re-evaluated up until the actual service delivery. It is typical for consumers to periodically assess alternative value propositions to the one purchased.

A similar assessment of satisfaction occurs during the in-use phase of the Ex Post stage. The consumer continually evaluates received value (Ex Post Net VC) as compared to perceive value (Perceived Marketing VC and Perceived Sacrifice / Cost). Once the service delivery is completed, the consumer will form an Ex Post Satisfaction judgement and continually revise this judgement as additional benefits and sacrifices are realized. Sometime after the consumption experience, an Aggregated form of value is derived. This judgement is similar to the Net VC process, however it accounts for irrational consumer behaviour and differing influences of the former value perceptions.

3.8 POST-PURCHASE EVALUATION (SATISFACTION)

Value and satisfaction are incorrectly used interchangeably and often difficult to distinguish between. As with value, satisfaction too is loosely defined and often the concepts overlap (Parasuraman, 1997). The reason being, customer value and customer satisfaction are very closely related. Both have been used in the past to evaluate judgments on products and both have similar properties (Woodruff, 1997).

Parasuraman is among some who recognizes the legitimacy of the growing research on value and satisfaction. Yet, Parasuraman suggests it is unlikely significant implications will result from research differentiating measurement of

value and satisfaction (1997). However, the majority of academics do realise the benefit of differentiating value and satisfaction. Payne (2001) distinguishes between the two terms, citing Woodruff and Gardial, states "Customer value explores the interaction between the product and service, the user and the use situation, while customer satisfaction generally focuses on the product or service, i.e. what the organization provided" (1996, in Payne and Holt, 2001).

The two concepts form an integrated and dependent relationship with satisfaction as the abstract, high-level interpretation of the comprehensive value judgment incorporating the product and service, the user and the use situation (Parasuraman, 1997). From this, we can say that satisfaction is the measure of value delivery. Therefore, satisfaction is a separate concept from value formed continually through out the use and post-usage stages and based on value perceptions earlier in the process or from previous experience.

DESIRES AND EXPECTATIONS

The contemporary view of satisfaction is dominated by the disconfirmation or dissatisfaction model (Spreng et al., 1996). The disconfirmation model is based on theory that satisfaction is an evaluation of the 'gap' between customer expectations and product/service performance (Zeithaml and Bitner, 1996). Spreng, et al., refer to the disconfirmation assessment as the 'expectations congruency'. The result of the expectations congruency is either an expectations confirmation, meaning the expectations were met or exceeded, or an expectations disconfirmation where the expectations were not met. Spreng, et. al further the thinking on expectations by adding that consumers form expectations from more than just the performance of a products attributes (1996). Oliver (1988, in Spreng et al., 1996) differentiates between two components of expectations: the probability of the occurrence (likelihood) and the evaluation of the occurrence (value). This suggests expectations are the likelihood of realising a perceived value.

However, as Spreng, et al. (1996) point out, the satisfaction disconfirmation model does not explain 'logical inconsistencies'. For instance, if a customer, who expects poor performance, received poor performance, a satisfactory experience would be the expected result. (15) Spreng, et al. further the disconfirmation model by integrating customer desires into the framework to explaining overall satisfaction. Spreng, et al. define expectations as "beliefs about the likelihood that a product is associated with certain attributes, benefits, or outcomes, whereas desires are evaluations of the extent to which those attributes, benefits, or outcomes lead to the attainment of a person's values" (1996). Think of desires as the motivation of satisfying customers' desired value.

Further differentiating the two concepts, expectations are future oriented while desires are present oriented and more stable than expectations. Simply put, expectations are the perceived outcomes resulting from the use of a product. Desires then are the outcomes sought from the use of a product. By incorporating desires into the disconfirmation model, Spreng et al. are able to explain changes in satisfaction overtime despite no increase in expectations; attributable to changes in desires resulting from, for example, increased knowledge of a product. While it is well established that desires are based on a consumer's values system, it has been suggested that expectations are based on market information supplied by the firm (1996). This research suggests expectations are based on market information supplied by the firm as judged by a customer's value system.

3.8.1 Value Disconfirmation

Another school of thought questions whether it is expectations that consumers use as a reference against performance or whether it is perceived value (Payne and Holt, 2001 citing Clemons and Woodruff, 1992). Value disconfirmation provides the best 'fit' for explaining the relationship between value and satisfaction. Woodruff suggests that customer satisfaction is evaluated based

on disconfirmation between expectations or 'desired value' and performance perceptions or 'received value' (Woodruff, 1997) (see Figure 24). If this assumption proves true, then satisfaction is the result of customer value judgments. Desired value was previously discussed as consumers' assessment of desires while perceived value is consumers' assessment of product expectations. Therefore, received value would be the consumer's assessment of desires and expectations fulfilled.
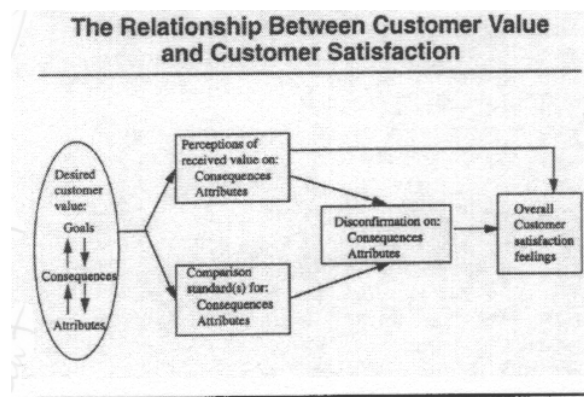
Figure 24. The Relationship between Customer Value and Customer Satisfaction (Woodruff, 1997).

The Means-End Value Hierarchy Model proposed by Woodruff and Gardial (1996) explains satisfaction as well as value. Value is determined working top-down; values drive desired consequences, which in turn drive desired attributes. Satisfaction is assessed bottom-up; received attributes result in consequences incurred, which in turn are assessed on whether customers' values are satisfied (Woodruff, 1997). Figure 25 displays the top-down development of value desires on the left and the bottom-up development of expectation satisfaction on the right.

Customer Value Hierarchy Model

Desired Customer Value   Customer Satisfaction with Received Value

Customers' goals and purposes   →   Goal-based satisfaction

Desired consequences in use situations   →   Consequence-based satisfaction

Desired product attributes and attribute performances   →   Attribute-based satisfaction
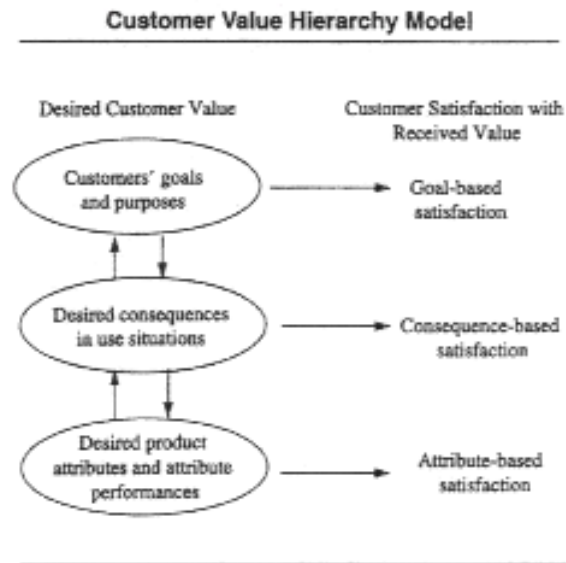
Figure 25. Customer Value Hierarchy Model. (Woodruff, 1997, p.142)

Using the example provided by Spreng, et al. (1996), a consumer's values for protecting his family results in the desired consequences of products providing safety and security benefits.   When purchasing a car, these desired consequences are manifest in Desired Attributes such as anti-lock brakes. Thus, the customer finds value in anti-lock brakes by obtaining the consequences of providing safety and security for his family.

In a satisfaction assessment, the received attribute, anti-lock brakes, is judged on its ability to fulfil the level of both perceived and desired consequences for safety and security.   If received value meets the customer's expectation of perceived value, the result is neither satisfying nor dissatisfying.   An unsatisfactory assessment of the received value may result in dissatisfaction of product performance or the information used to form perceived value. Similarly, if received value meets the customer's expectation of desired value the result is satisfying.   However, if received value provides unexpected value exceeding desired value, 'delight' may be experienced. An unsatisfactory assessment of the perceived value may result in the consumer evaluating their own desires and changing accordingly. Satisfaction is not only the responsibility of firms to

fulfil, but also the responsibility of customers to manage their own desires and expectations.

Parasuraman (1997) points out the disconfirmation approach to value and satisfaction using requires customers engage in disconfirmation across the purchase stages. Furthermore, the dynamic nature of value and how customers' key attributes and consequences may vary across purchase stages in assessing desired, perceived and received value was addressed earlier in this chapter. This raises the question as to how consumers compare two concepts assessed on differing factors, desired value from the pre-purchase stage with received value from the use / post-use stage. This would require a lot of cognitive analysis for the consumer (1997).

The other possibility is that consumers assess value and satisfaction within each stage separately. This thought supports the idea that consumers evaluate value in a cost-benefit trade-off process and the cost-benefits value is assessed may change through out each stage. It is also possible that consumers use a hybrid of both in-stage and across stage processing (Parasuraman, 1997). This research would like to consider the possibility of a hybrid model of value / satisfaction disconfirmation which separates the concepts of value and satisfaction. Therefore, satisfaction would be a higher-level, abstract disconfirmation of lesser value assessments.

Satisfaction is an emotional, subjective evaluation of a purchase and use experience. This research earlier defined satisfaction as evaluation of how accurately their perceptions of attribute performance predicted actual attribute performance. Think of satisfaction as the customers' comparison of received value to perceived value. This definition is the contemporary view of satisfaction and is expanded in this research to include a second satisfaction evaluation; customers' caparison of received value to desired value. Satisfaction now becomes a twofold evaluation, 1) received value to perceived value measures dissatisfaction, the extent to which products fail to meet

perceived expectations; 2) received value to desired value, or the extent to which products succeed in fulfilling desired motivations. Exceeding perceived expectations or desires result in excessive satisfaction referred to as 'delight'.

This theory is support by Mittal and Kamakura finding that attribute (use) performance and satisfaction have been demonstrated to be nonlinear (Mittal and Kamakura, 2001). Satisfaction is dependent on value performance (purchase) as well as attribute performance (use). This research suggests differentiating purchase satisfaction and use satisfaction. Use satisfaction is the evaluation of products' received value to satisfy consumers' perceived and desired value as discussed above. In contrast, purchase satisfaction is the evaluation of products' perceived value to satisfy consumers' desired value. Purchase satisfaction assesses sacrificed value; what desired value is not expected to be satisfied by the product. The reverse can be true as well; purchase satisfaction may result in unexpected value or value in excess of expectations. This evaluation takes place immediately following the purchase but is continually revisited through use and post-use stages. Think of purchase satisfaction as the customer's evaluation of their own performance as well as the product's performance to satisfy needs and desires. The Value – Satisfaction Measurement Structure (Figure 26) and Structural Definition of Satisfaction (Figure 27)visualise satisfaction as described here.
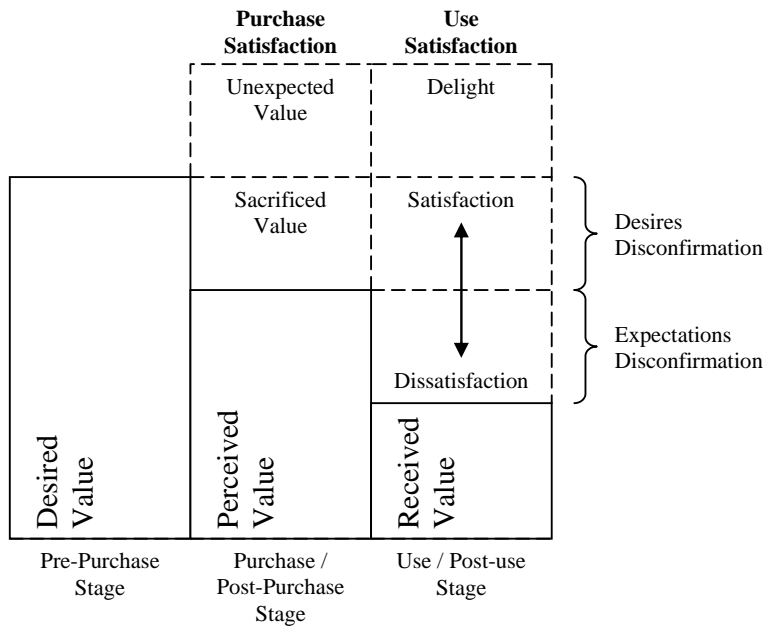
Figure 26. The Value – Satisfaction Measurement Structure.

Satisfaction is simply a tool to measure the value received in this experience. Numerous studies confirm satisfaction as a highly significant moderator of loyalty to service quality and value. The study of satisfaction has been popular for many years. The Satisfaction – Profit chain, otherwise known as the loyalty business model, studies the link between loyal customers and profitable companies.
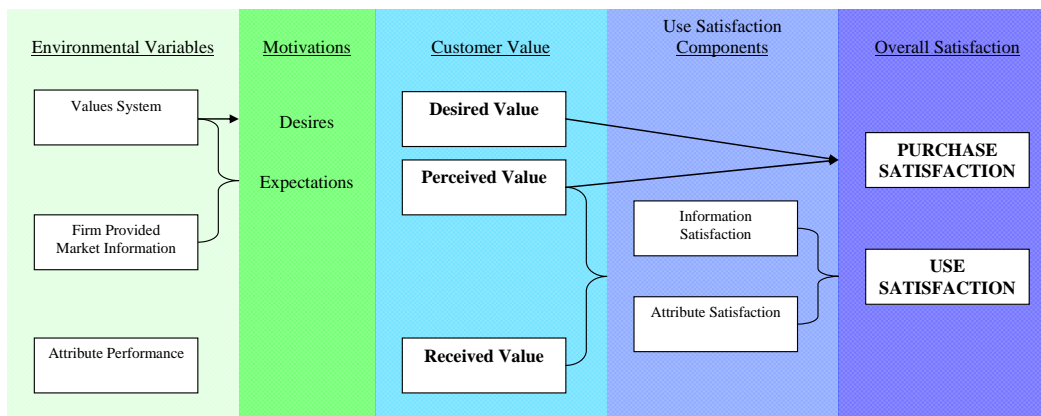
Figure 27. A Structural Definition of Satisfaction.

3.8.2 Satisfaction-Profit Link

As its name implies, Mittal and Anderson's (2000) satisfaction – profit chain links attribute performance and satisfaction to customer retention and profitability. This model states that performance on critical product/service attributes lead to customer satisfaction, which, in turn, lead to customer retention, ultimately resulting in firm profitability (2000).

There are three unique links connecting the Satisfaction – Profit Chain (see Figure 28). The first of which is the link between attribute performance and satisfaction (Anderson and Mittal, 2000). The perception of actual attribute performance was previously defined as received quality, a component of the higher-level concept received value. Thus, the first link in the Satisfaction – Profit Chain can be viewed as connecting received value to satisfaction.
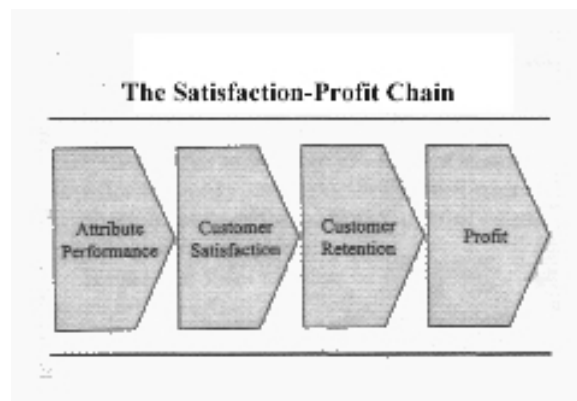
Figure 28. The Satisfaction-Profit Chain (Mittal and Katrichis, 2000).

The second link connects satisfaction with customer retention. Retention can be defined as the continued intention to repurchase and is dependent on continually providing satisfaction. Ravald and Grönroos (1996) contend satisfaction is a better indicator of intention to repurchase than product quality. However, satisfied customers are not necessarily loyal customers, nor are all loyal customers satisfied (Oliver, 1999, Dube and Maute, 1998). Oliver found

the relationship between satisfaction and loyalty to not be linear (1999). Reicheld (1996) found 65 – 85 percent of satisfied customers will defect (in Oliver, 1999). Galbreath points out, "satisfaction does not necessarily equate to loyal or profitable customers. The reality is merely "satisfied" implies the customer is sitting at the point of indifference" (2002).

Mittal and Kamakura (2001) explain variability in the satisfaction-retention relationship with differences in customer characteristics such as demographics like age. Mittal and Kamakura also suggest satisfaction thresholds may contribute to this variability. A satisfaction threshold is the 'point of indifference' at which relationship satisfaction degrades to a point where retention can no longer be maintained. Retention of different segments may be driven by unique attributes such as accumulated investments (switching barriers) and initial investment (search cost) (Mittal and Kamakura, 2001: 140 & 132). The loyalty of some segments may not always be an achievable goal depending on the importance placed on these attributes (Oliver, 1999). High satisfaction ratings do not directly translate into customer loyalty, but over time, may promote the development of loyalty.

The third and final link in the satisfaction-profit model suggests there is a high correlation between customer retention and firm profitability (Galbreath, 2002).

3.9 LOYALTY

As the satisfaction-profit model suggests, value is a moderator of satisfaction; satisfaction indirectly leads to loyalty and therefore profitability (Mittal and Kamakura, 2001). While Mittal and Kamakura (2001) suggest that Satisfaction leads directly to Loyalty, research discussed above by Reichheld 1996 (Reichheld, 1996) and (Oliver, 1999) disagree. Satisfaction may be related to loyalty, but it may act more as a moderator intermediating the effects of value on loyalty. This research explains the inconsistent influence of satisfaction on

loyalty by differentiating retention as a moderator between the two. Therefore, satisfaction and retention are both identified as moderating concepts between value and loyalty. Research on the relationship between value and loyalty in the context of the purchase process has not been studied sufficiently.

Retention vs. Loyalty

Much of the literature confuses retention and loyalty, using the two terms interchangeably. Retention is simply not losing customers implying a customer continues to consider the firm's value proposition during the next purchase process. In contrast, loyalty is the allegiance or devotion of customers to a product or brand maintained through an emotional bond. Loyalty passengers prefer one airline over all others, will frequently use that airline whenever possible and are willing to pay a price premium above the utility or market value of the product.

Customer retention is the behaviour of repurchase while loyalty contains elements of behaviour and attitude (affect, commitment and satisfaction) given the availability of choices. The behaviour driven definition of customer retention in past literature suggests it can be viewed as the behavioural component of loyalty (Curasi and Kennedy, 2002). Therefore, the inconsistency between satisfaction and loyalty could be due to the absence of attitude assessment. This relationship suggests that while retention is a component of loyalty, it is also a behavioural result of loyalty as well.

3.9.1 Definition of Loyalty

The loyalty literature has focused on measurement issues and view loyalty from an abstract perspective (Dick and Basu, 1994). Loyalty is often operationally characterized by repurchase measures such as share of wallet, purchase sequence and probability of purchase. Dick and Basu describe brand loyalty as a combination of repurchase outcomes and an altitudinal disposition for the brand (1994). Attitudinal disposition includes customer feelings of affect,

commitment and satisfaction and is the emotional bond which differentiates retention behaviour from loyalty. Unlike the repurchase behaviour component of loyalty, attitudinal disposition is not a result of loyalty but instead a measure of loyalty.

3.9.2 Relative Attitude and Behaviour
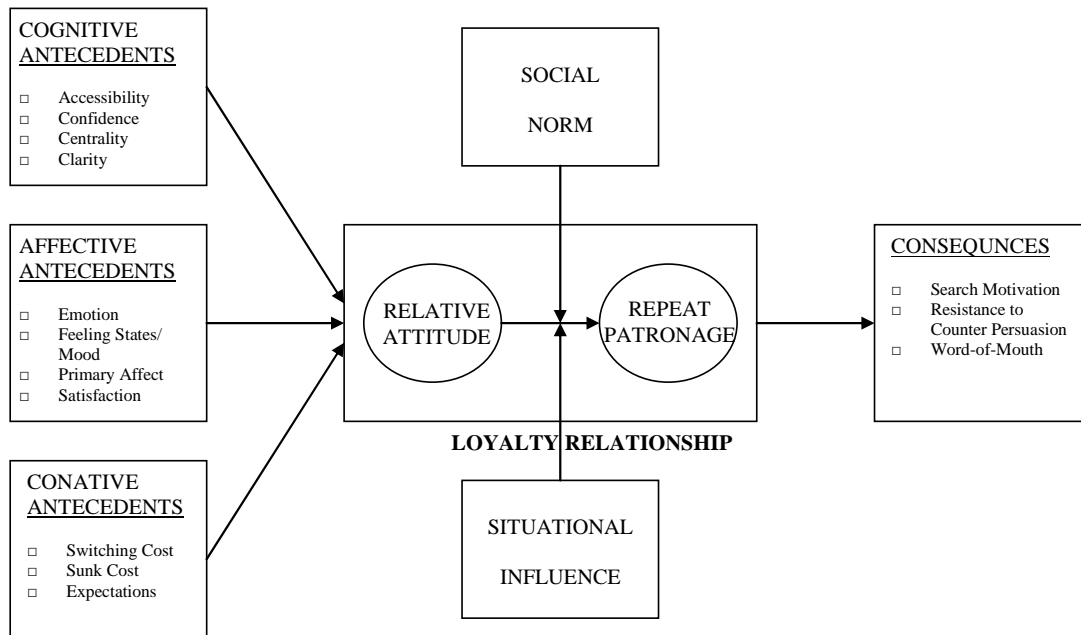
Figure 29. A Framework for Customer Loyalty (Dick and Basu, 1994: 100).

The framework for customer loyalty, presented in Figure 29 by Dick and Basu (1994), suggests relative attitudes are considered in the context of social and situational influences to determine repeat patronage. Attitude is defined as the evaluation of a product in relation to alternatives. While a product can be found to have a positive attitude, the importance lies in which product has the highest favourable relative attitude in relation to alternative products. Relative attitude is composed of attitudinal strength and attitudinal differentiation. Strong attitude for a product does not necessarily mean it provides the most favoured relative

attitude. A product which is both strong and unique relative to alternatives will have the highest relative attitude (1994).

Dick and Basu provide the example of an auto mechanic for whom the consumer may not hold in high regard, but may have high attitudinal differentiation relative to alternatives with even lower attitudinal strength. Conversely, cross-brand loyalty may exist in situations where high attitudinal strength but low attitudinal differentiation is present. Dick and Basu use the example of consumers who are loyal to both Coke and Pepsi (1994).

Repeat Patronage

		High	Low
Relative Attitude	High	Loyalty	Latent Loyalty
	Low	Spurious Loyalty	No Loyalty

Figure 30. Attitude-Behaviour square (Dick and Basu, 1994: 101).

Dick and Basu define four conditions of loyalty based on relative attitude and repeat patronage (see Figure 30). The first condition is no loyalty where relative attitude is low and repeat purchase is spread across brands. Spurious loyalty is the second condition where repeat patronage of a brand may exist, but low relative attitude indicates that social or situational factors drive the repeat purchase. This can be the case in markets served by only one air carrier. Customers are given no choice but to fly an airline they do not particularly care for. Latent loyalty is also heavily influenced by social and situational factors; however, in this case high relative attitude exists but repeat patronage is low. Finally, loyalty exists in cases where relative attitude and repeat purchase are both high (1994).

Oliver (1999) defines loyalty as:

> "A deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour."

The significance of this definition lies in the concepts it incorporates from Dick and Basu (1994). First, loyalty is "a deeply held commitment" for a "preferred product/service" or *relative attitude* as discussed by Dick and Basu. This attitude is toward "repatronage" or *behaviour*, for which the outcome "caus(es) repetitive same-brand…purchasing" "consistently in the future". These attitudes and behaviours occur in the context of "situational influences and marketing efforts", both *situational and social factors* (1994).

Oliver further notes that the attitude is a 'readiness to act' which does not become loyalty until 'obstacles are overcome' such as the situational and social factors. Obstacles to loyalty include variety seeking, multi-brand loyalty or cessation of product need. Switching incentives attempt to reduce the cognitive justification to switch brands by adding benefits or reducing opportunity costs (1999).

This definition of loyalty does not explain how or why loyalty is formed. A better understanding of the cognitive drivers of loyalty is needed if loyalty is to be managed. Oliver lays out a loyalty hierarchy consisting with is driven by satisfaction. Oliver likens satisfaction to a seed which requires nurturing to grow into loyalty (1999).

3.9.3 The Loyalty Hierarchy

In a key article, Oliver (1999) elaborates on a previous, four level loyalty hierarchy developed by Oliver (1997). Oliver (1999) suggests loyalty exists at

four levels: cognitive, affective, conative and action loyalty. Cognitive loyalty is rational loyalty to product features perceived to provide the best transactional value. This loyalty is of the benefits provided and the performance of those attributes which matter to the customer, not the brand itself (1999). Cognitive loyal customers are highly vulnerable and remain as long as no better perceived alternative emerges. Think of cognitive loyalty as retention; behavioural repurchase exists but there is no emotional relationship.

As satisfaction is reinforced through multiple positive experiences with this brand, affective loyalty develops. Affect is the attitude of preference or 'liking' for a brand, resulting in increased attitudinal strength (1999). The customer's preference towards the brand transforms into a 'motivation' to continually repurchase the product. This motivation is a commitment to the brand but not a commitment to avoiding other brands. Translating motivation into action is the final stage of loyalty, action loyalty. It is at this stage that loyalty is characterized by the commitment to repurchase, even at the detriment to the customer. Minor obstacles are overcome by the customer to fulfil their commitment to repurchase, as long as cost or situational influence is not excessive (1999).

Oliver (1999) discusses loyalty in the context of love and relationships. His analogy describes commitment in a social setting, but works equally well to describe the stages of loyalty presented. Cognitive loyalty is like 'puppy love' which is only skin deep and based on initial excitement. At this stage, the relationship has no long-term prospects and will only last until someone else comes along who provides more excitement. Just as emotional liking develops, so does Affective loyalty. The relationship becomes deeper than attraction and develops meaning, but only as long as the attraction remains. Conative loyalty is the initial 'dating' stage of a relationship where a commitment is entered into. The intention is exclusive, but there are no barriers to switching 'brands' at this point. However, once Action loyalty is reached, the consumer has fallen so in

love that no other product will do and a commitment is made to purchase only that brand, regardless of cost or situation.

Trust is believed to contribute to affect and commitment as well as behaviour (83-84). Chaudhuri and Holbrook found both brand trust and brand affect significantly contributed to purchase (behaviour) and attitudinal loyalty (2001). Trust is the attitudinal measurement of loyalty which grows with repeated satisfaction. Repurchase, measured by share-of-wallet, is the behavioural measure of loyalty driven by value.

3.9.4 Brand Trust and Switching Barriers

Brand trust works to strengthen relationships and loyalty by reducing risk. In contrast, switching barriers are transactionally focused means to reduce the value of competitor' offerings and deter customers from defection, thereby enforcing retention. This suggests that trust is a relational tool driving loyalty while switching barriers are transactional tools to drive retention. Brand trust is defined as "the willingness of the average consumer to rely on the ability of the brand to perform its stated function" (2001). Brand trust is a cognitive 'calculation' of a brand's probability to perform based on reliability, safety and honesty. Trust creates value in a relationship by reducing the consequences of risk and uncertainty in a volatile market environment (2001).

This research suggests trust is a mediating concept between satisfaction and loyalty which is the measure of continual, reinforced satisfaction. This definition conceptualizes the repeated satisfaction experiences which drive customers up the loyalty hierarchy as suggested by Oliver (1999). Loyalty is developed out of a mutual exchange and fulfilment process of setting expectations and delivering, which develops trust and further, long-term relationships (Grönroos, 1989 in Oliver, 1999).

Trust also compliments satisfaction. Ranaweera and Prabhu (2003)found a positive interaction between trust and satisfaction. It has been suggested that, as loyalty grows stronger, customers become more lenient on assessing the satisfaction of a use experience with the firm. Loyal customers tend to forgive firms for the occasional, less then satisfactory experience. Ranawerra and Prabhu also found that satisfaction is a more significant driver of retention than trust (2003). It is possible that satisfaction drives behavioural loyalty (retention) while trust influences attitudinal loyalty (affect) or overall loyalty. This is consistent with Ranawerra and Prabhu (2003) suggestion that the absence of trust results in weak retention. This research argues the opposite, that satisfaction drives attitudinal loyalty and trust. A possible explanation for Ranawerra and Prabhu's findings is likely due to satisfaction being a transactional attitude while trust is a relational attitude. Therefore, a single unsatisfactory experience isn't likely to impact trust significantly. Satisfaction is the assessment of value delivery, also suggesting that satisfaction mediates the impact of value on retention. Retention is likely a behavioural driven relational measure of the transactional concept of value.

Techniques to create value-added switching barriers include product bundling, cross selling, cross promotions, loyalty programs and integrating the customer's value chain into the firm's own (answers.com(wikipedia)/relationship marketing). Product bundling offers a bundle of products and services at one price, requiring customers to purchase ancillary items. Cross selling is the technique of selling these related ancillary services to current customers individually. Cross promotion involves discounting the ancillary products or services to incnetivise purchase. Loyalty programs reward customers for frequency or value of their business and create an incentive to remain with the firm or an opportunity cost of switching firms. Integrating the customer's value chain requires an investment by and creates reliance upon the firm, making switching far more difficult for both parties.

Relationship Value

Dick and Basu (1994)suggest loyalty also adds value to customers relationships by reducing sacrifice (search time, switching costs) and increasing benefit (trust, affect or hedonic value, utilitarian value). Grönroos agrees the relationship itself may be a perceived value add and incorporated into the product offering (Grönroos, 1997). The value of maintaining a long term relationship from the customer's perspective may be more than the associated short term savings of switching. In contrast, a firm's short term costs associated with retaining a relationship may be more valuable in the long term if the customer is a loyal one (Ravald and Grönroos, 1996). Just as customer value is the transactional calculation of benefits minus cost; relationship value is similarly calculated. Grönroos and Ojasalo (2004) further develops the Customer Perceived Value (CPV) equation to incorporate episode and relationship benefits and sacrifices.

Relationships can add value on a transactional level and on a higher, abstract level. For example, transactional value may be perceived by a customer looking to purchase from a firm who may not provide the superior product or solution, but which has an established relationship with the customer. The relationship itself provides satisfaction or goal achievement through benefits such as safety, credibility, security, and continuity that develop trust (Ravald and Grönroos, 1996). While providing a product or solutions which meets consumers' needs is important, establishing trust is also vital in establishing loyalty.

3.9.5 Brand Management

The weakness of loyalty lies at its foundation; value deterioration is the nemesis of loyalty. As value deteriorates, a chain reaction is started resulting in dissatisfaction and reduced repurchase followed by distrust and defection. While loyalty is built through cumulative satisfaction, it is brought down through dissatisfaction. This is the tool which competitors use in an attempt to steal loyal customers away. Dissatisfaction need not come from lack of attribute performance. Remember, satisfaction is a perception and therefore at the

judgment of consumers. Competitors attempt to negatively influence consumers' satisfaction judgments through marketing and advertising just as firms attempt to positively influence the perception of their own product. The practice of stimulating new customers or recruiting defecting customers from competitors is known as the offensive marketing strategy (Dube and Maute, 1998).

Offensive strategies are transactionally focused and aim to grow volume through market stimulation or market penetration as opposed to relational defensive marketing strategies attempt to increase satisfaction and loyalty by enhancing customer-firm relationship value. Defensive marketing aims to build trust and switching barriers to reduce defection and increasing attitudinal loyalty. Defensive strategies come in two varieties: value-added defensive strategies aim to increase the long-term value of the relationship by increasing benefits while value-recovery defensive strategies focus on sustaining satisfaction in service failure and reducing relationship costs (1998).

Dubé and Maute test the effects of value-added and value-recovery defensive strategies for effects on customer satisfaction and loyalty in a controlled air transport environment. Dubé and Maute explain value-recovery strategies attempt to make up for service failures by reducing the associated cost of that failure (i.e. flight vouchers). Two types of loyalty were also defined in the study: situational and enduring loyalty. Situational loyalty is short-term commitment despite a service failure. Enduring loyalty is a long-term commitment to the relationship with the firm (1998).

Dube and Maute found value-added strategies provided weak support to maintaining satisfaction of short-term and long-term loyalty considerations. Value-recovery strategies were more effective on both forms of loyalty and even in highly competitive environments. The results of the study indicate value-recovery strategies have six times the effect on satisfaction than value-added strategies. In fact, value-added strategies were only effective on satisfaction

and enduring loyalty when employed in conjunction with value-recovery strategies. In a highly competitive environment, the effect of value-added strategies was insignificant on both situational and enduring loyalty. Dubé and Maute concluded that value-recovery strategies influenced customer satisfaction and retention, while value-added strategies did only in an non-competitive environment (1998). It is suggested that value-recovery strategies are a necessary compliment to value-added strategies in achieving customer loyalty.

Some researchers suggest service failure can fully restore satisfaction or even delight customer who experience service recovery (Johnston and Fern, 1999 in Ranaweera and Prabhu, 2003), even more than those who did not (Brown, 2000 in 2003). While satisfaction may be restored, Ranawerra and Prabhu found that trust was lower in respondents who experienced positive service recovery than those who experienced no service failure at al (2003). This suggests that service recovery is effective recovering short-term, transactional satisfaction but lastingly detracts from long-term, relational trust. This is backed up by Levesque and McDougall (2002, in Ranaweera and Prabhu, 2003) suggestion that customers may forgive but not forget the experience. The best strategy is a proactive strategy to prevent service failure, while having a reactive service recovery strategy in place.

Galbreath suggests 1) focusing on acquiring customers with a high propensity for loyalty, 2) proactively promote repeat purchase and increase share of wallet with the firm's customer base, 3) while addressing problem areas to reduce defection rates and 4) focus efforts to encourage retention and create loyalty (2002). Loyalty schemes and brand management strategies aid in maintaining, but do not create loyalty. As discussed with the Satisfaction – Profit Chain, there are two requirements for building customer loyalty; 1) consistently delivering customer value and satisfaction in addition to, 2) maintaining a 'bond' or a relationship identified as trust. Frequent flyer programs may prove to be effective with some highly active segments, but certainly do not act to retain all

customers. Both frequent and appropriate service recovery efforts are necessary to maintain a healthy relationship as well (Carlson Marketing Group presentation, U.K., May 18 2004).

Successful brand management does not create price premium or competitive advantage, customer value and loyalty do; brand management should promote brand value to the masses. Brand equity is the customer's association with a brand that results in increased sales or premium than would be possible without the brand. Utilitarian and hedonic value from use contributes to product affect, which should be differentiated from brand effect (Ravald and Grönroos, 1996). Customers are loyal by nature due to the efficiencies and 'bond'' created (Butz and Goodstein, 1996). This remains true as long as the 'bond' or relationship is maintained and not abused.

Oliver (1999) lists another limitation to loyalty, unavailability. The availability of seats and routes is a paramount challenge in the airline industry and presents a several limitation to the establishment of loyalty in air transport. It is impossible for any one brand to satisfy the all air transport needs of a consumer. This suggests the realised potential of loyalty may be limited in the airline industry.

4 THEORY DEVELOPMENT

This chapter develops theories to overcome the challenges facing Value Leadership. Chapter 2 exposed value creation as the critical limitation to all relationship marketing strategies. Chapter 3 reviewed and expanded upon existing literature in the fields of value and loyalty to better understand the process of value creation in terms of both a single transaction (value literature) and over the lifetime of a relationship (loyalty literature). The purpose of this chapter is to lay the groundwork for primary research to be conducted. First, the previous chapter is tied together with a discussion proposing a theoretical link between the two literature fields of value and loyalty. Second, a methodology is developed for the purpose of collecting data to further develop the Value Leadership strategy.

4.1 THE VALUE CREATION FRAMEWORK

The academic objective of this thesis is to establish a conceptual relationship between value and loyalty. Value and loyalty are critical concepts in much of the marketing and strategy literature, but there remains little understanding as to how the two concepts interact to influence each other. Previous research has demonstrated a cause and effect link between components of value and loyalty but has yet to establish a relationship explaining the mechanics of the interaction. Both fields overlap in discussions of transactional and relational, desires and expectations, service quality and satisfaction concepts; yet the perspective of these concepts in each field have not been integrated as one.

In this chapter, the consumer purchase process is progressed from a value perspective and the influence of loyalty on the purchase process is hypothesized in the Value Creation Framework (Figure 31). The value creation framework elaborates on two important relationships. First is the value assessment relationship between the value sub-concepts and their relation to

choice and satisfaction. The second important relationship, and focus of this study, is that between value and loyalty.

The relationships between the value sub-concepts are assessed using the value disconfirmation approach introduced in the satisfaction literature of Chapter 3. Disconfirmation theory was discussed to explain satisfaction by the gap in desires, expectations and actual performance. Satisfaction assessment is based on a value disconfirmation of perceived value and received value. Similarly, the value disconfirmation above proposes choice assessment is based on the disconfirmation between desired value and received value.

Figure 31. Value Creation Framework.
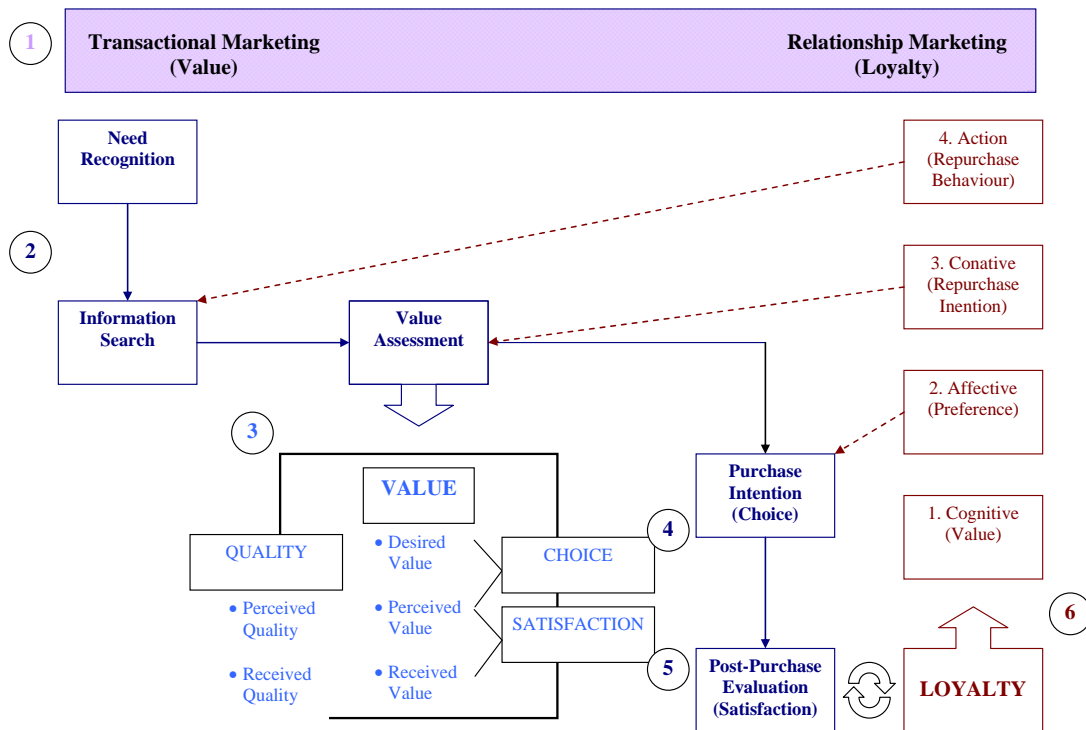
The Value Creation Framework (Figure 31) was created to illustrate loyalty's influences on the customer purchase process. At the top, transactional and relationship marketing (1) are placed on a continuum to show the transition from the utility driven transactional purchase process to the relational, loyalty hierarchy. The second element is the customer purchase process (2) covered

in detail throughout Chapter 3. The value assessment stage of the purchase process is expanded to demonstrate key value sub-concepts (3) linkages to purchase intention and post-purchase evaluation stages; representing outcomes of choice (4) and satisfaction (5) respectively. The sixth and final element of the value creation framework integrates Oliver's (1999) loyalty hierarchy (6) into the purchase process. The value of this framework lies in illustrating the suggested influential link between each level of the loyalty hierarchy and corresponding interactions with stages in the purchase process.

4.2 THE LOYALTY SCALES

Chapter 3 found loyalty to be composed of attitudinal and behavioural components. This research suggests the attitudinal component of loyalty is represented by trust; the cumulative, relational assessment of satisfaction. The attitude of trust can be measured by assessing outcomes of affect, preference and willingness to pay a price premium. Similarly, the behavioural component of loyalty is represented by retention; the cumulative, relational assessment of value measured in terms of repurchase. This relational definition of loyalty is visualised in Figure 32.
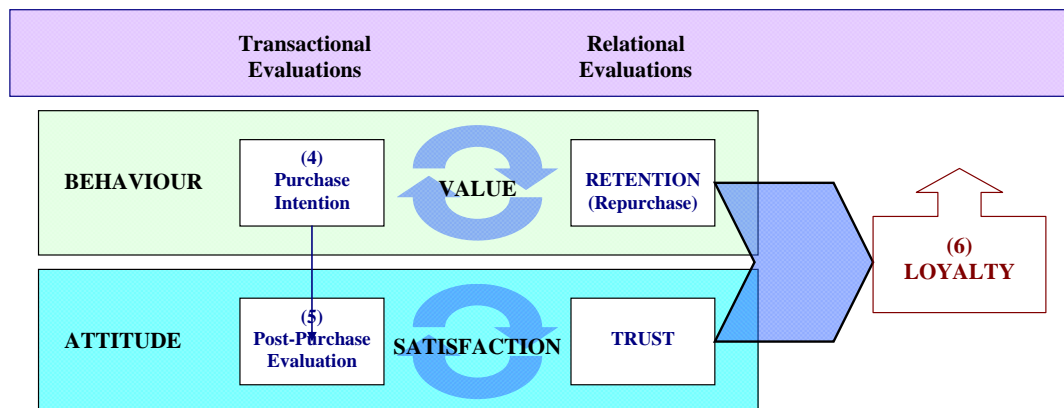

Figure 32. Value and Satisfaction in Loyalty.

Recalling the ABC model of motivations and attitudes discussed in Chapter 3, we notice satisfaction resembles an emotional judgement resulting in Affect (A),

while value resembles a Cognitive (C) judgement process. Together the motivations of satisfaction (A) and value (C) result in the Behavioural Attitude of loyalty (B) as demonstrated in Figure 32. Purchase Intention (4) and Post-Purchase Evaluation (5) in Figure 32 represent the respective stages of the purchase process in Figure 31 as they relate to Loyalty (6). Figure 32 can be viewed as a subset of the relationship between the transactional evaluations of choice and satisfaction with the relational evaluation of retention and trust to form the attitude of loyalty in Figure 31.

Loyalty is an ***attitude*** which drives predictable, preferred ***behaviour***. Each stage of Oliver's (1999) loyalty hierarchy (6 in Figure 31) represents an attitude at varying levels of emotional and behavioural motivation. As Dick and Basu [1994] suggest in their Attitude-Behaviour square; either affect, repatronage or both indicate varying stages of loyalty. For example, affect need not be present to achieve spurious loyalty. Therefore, the measurement of loyalty is a composition of both attitude and behaviour.

4.2.1 Attitudinal Loyalty Gauge

Oliver suggests 'cumulatively satisfying usage occasions' produce affective loyalty while 'repeated episodes of positive affect' further propel the customer to conative loyalty (1999). This suggests satisfaction is the key motivator of movement up the loyalty hierarchy. We hypothesize trust to represent the accumulation of positive attitudes associated with satisfaction and affect. As satisfying purchase experiences occur, the level of trust increases. Conversely, when a negative episode occurs, the level of trust is reduced. Therefore, trust is the metric to measure cumulative satisfaction and the ascension of the loyalty hierarchy.
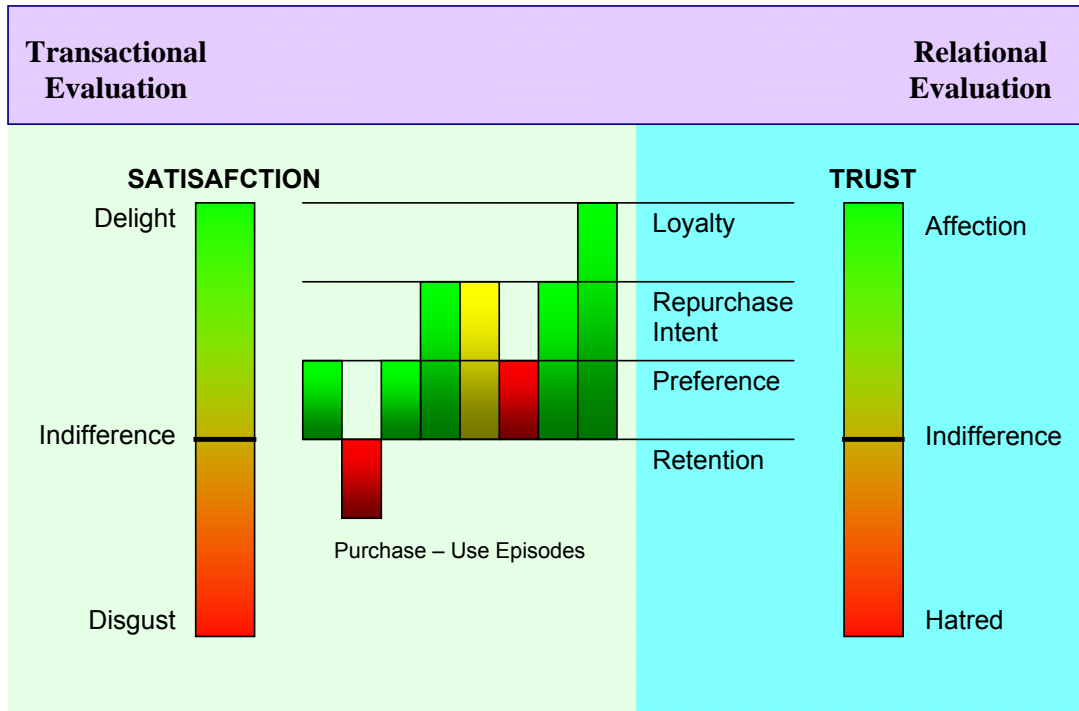
Figure 33. Attitudinal Loyalty Gauge.

The proposed theoretical relationship is supported by existing literature. When studying the relationship between value and loyalty, both repurchase intent (attitudinal component) and repurchase behaviour (behavioural component) should be considered. In their study on the Satisfaction-Profit Chain Model, Anderson and Mittal (Anderson and Mittal) state satisfaction has a negatively asymmetric influence on repurchase intent. This suggests the attitudinal assessment of value (satisfaction) influences the attitudinal component of loyalty (affect – repurchase intent). Affect is actually the emotional component of loyalty which drives repurchase intention. Anderson and Mittal (2000) also found as satisfaction increases the number of alternatives the consumer searches decrease. Therefore, as affect develops repurchase intention, the search process is significantly downplayed.

Petrick suggests service quality (a critical component of value) may also influence repurchase intentions (attitude) (Cronin, Brady and Hult, 2000 in Petrick, 2004). Petrick demonstrated service quality to be a greater predictor of

repurchase intentions in first-time customers; however, perceived value was a better predictor in repeat customers (2004). The influence of value on first-time customers' attitudes is insignificant when considering the relational measurement of loyalty since no relationship exists yet. However, this influence of value on behavioural loyalty is significant. It is agreed that perceived value influences purchase intention (Zeithaml, 1988) as well as satisfaction (Bojanic, 1996 in Petrick, 2004) indirectly influencing repurchase intention (2004).

4.2.2 Behavioural Loyalty Gauge

The influence of value on the behavioural component of loyalty is demonstrated in Figure 34. Value has been demonstrated to drive the transaction through the purchase process. Similar to cumulative satisfactions evaluations resulting in trust; cumulative value evaluations result in retention. Retention is a measure of repurchase over the course of a relationship, from which each individual purchase is driven on a transaction level by value.
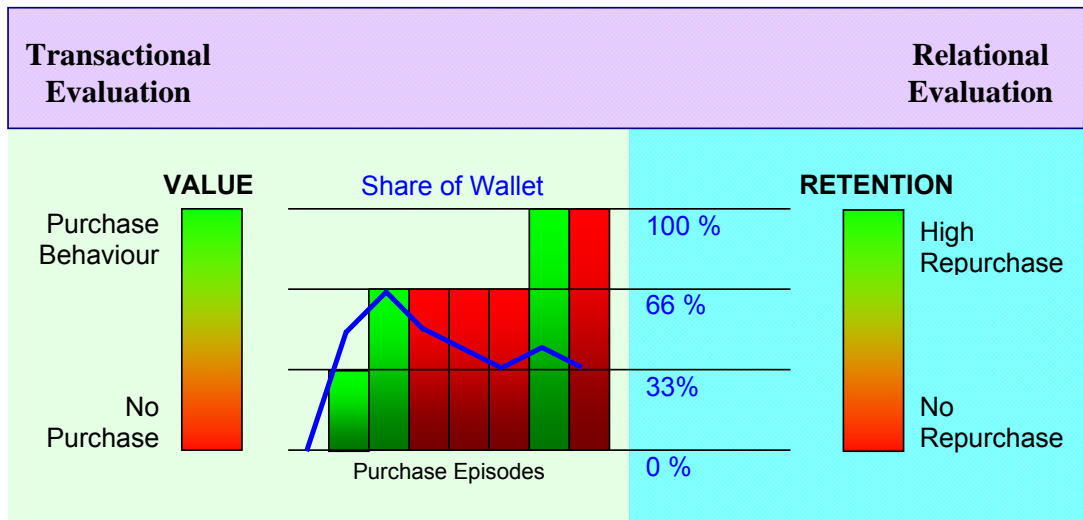

Figure 34. Behavioural Loyalty Gauge.

It is important to reinforce the idea that the evolution up the loyalty hierarchy is a process which requires many satisfactory purchase and usage experiences over time. Cognitive loyalty is not replaced, but merely built upon. Products

must continue to always provide the superior attribute performance; however as individuals move up the loyalty hierarchy, utility becomes less significant and is replaced by more hedonic, emotional benefits represented by affective loyalty. These affective emotions develop into Conative loyalty or a behavioural intention to repurchase. This will eventually evolve into a habitual behaviour representing Action loyalty.

This research suggests as customers move up the loyalty hierarchy, loyalty's influence on the purchase process is exerted at earlier stages. We also suggest that as the customer ascends the hierarchy the relationship moves from a transactional focus on value and satisfaction to a relational focus on repurchase and trust respectively.

Cognitive loyalty is transactionally focused on satisfaction of value delivery. Customers are simply retained if satisfaction is perceived. As long as cognitive loyalty is maintained, consumers will be retained. With each positive purchase and use episode, 'leniency' in the satisfaction evaluation increases, influencing the post-purchase evaluation satisfaction assessment stage.   This link from loyalty back to the purchase process to influence value is represented by a dotted line in Figure 31.

Cumulative satisfactory experiences develop trust; the attitudinal driver of customers up the loyalty hierarchy. As leniency in the satisfaction evaluation increases, the incremental increases in trust grow larger with repetitive satisfactory experiences. After several satisfactory experiences a customer may begin to develop Affective Loyalty. Affective Loyalty is a preference towards one brand or product over another. Oliver defined affective loyalty as a liking or 'preference' for the brand.   This suggests affective loyalty may influence the purchase intention stage as represented by the second dotted line in Figure 31. Given products with similar values assessments, affective loyalty may tilt the scale in favour of the 'preferred' product.

This research also discussed cognition and affect in the psychology field. Affect is an emotional judgement, indicating the transition from cognitive loyalty's rational and calculated focus on transactional concepts of value to a relational view of satisfaction demonstrated in the concept of trust. Omitted from the previous psychology discussion was the concept of conation. Cognition, affect and conation are the three traditional components of behavioural psychology; however, focus on cognitive research subsequently diminished research of conation in the psychology and value fields. Cognition refers to the process of gathering knowledge and developing perceptions while affect is the emotional interpretation of knowledge and perceptions (Huitt, 1999). Conation connects the knowledge and emotions to behaviour. Conation is the intentional, goal-oriented component of motivation and the proactive (as opposed to reactive or habitual) aspect of behaviour (1999).

Referring to the ABC model, motivation is defined as affect (A) + cognition (C) to equal behaviour (B). Conation is the middle ground between motivation (A + C) and actual behaviour (B), representing a motivational intent towards a specific behaviour. This intent was previously implied within behaviour, but here conation is broken out from the act of behaviour. Conative loyalty may be a purchase intention itself, influencing the value assessment process. At this stage, the customer may favour one product or brand to which all other value propositions are measured against. An intent to purchase the product to which conative loyalty exists may be assumed given no product is found to provide a significantly better value.

Conation is the proactive component of behaviour which is differentiated from action loyalty defined by habitual behaviour. This research suggests by the time action loyalty is reached, the product or brand has consistently reaffirmed value and satisfaction. At this point, enough trust exists in the relationship that the purchase becomes routine so that the search process and value assessment stages are significantly reduced. Action loyal customers may develop a habitual process for satisfying a reoccurring need, making the search

and value assessment process unnecessary altogether. Dislodging a consumer from action loyalty becomes very difficult when action loyalty is established.

This research proposes the concept of intrinsically motivated loyalty as an attitude towards the product itself resulting in behaviour. This form of loyalty is opposed to extrinsically motivated loyalty, or the interference of external influences to create an attitude which leads to behaviour. For example, intrinsically loyal passengers choose an airline because the service itself provides value and satisfaction and is not influenced by external monetary factors such as frequent flyer programs, switching barriers or lack of alternatives.

4.3 VALUE CREATION METHODS

Chapter 2 concluded CRM's apparent failure has resulted from the lack of customer value creation. Chapter 3 sought out to review the current understanding of value and loyalty with the intent of bridging the two concepts in Chapter 4. With the hypothetical understanding of how value and loyalty interact, the focus of this chapter changes focus to the theoretical development of value creation methods necessary to effectively engender loyalty through CRM.

Due to the lack of two-way communication between firms and their customers, the traditional value creation method is for firms to create production around customer segments based on their understanding of the market. This research seeks to identify key segments in the air transport market and understand their motivations and attitudes in order to stimulate behaviour and facilitate long-term relationships. Customer segmentation profiles are created using the newly

developed understanding of the relationship between customer value and loyalty.

In Chapter 2, this thesis also suggested co-creation through customisation may provide a better method of value creation than the traditional segmentation method. This chapter also aims to develop hypotheses for testing the effectiveness of customisation versus standard bundled value propositions.

4.3.1 Customer Segmentation Profiles

The review of airline CRM practices found most airlines conduct segmentation on FFP value and customer behaviour. However, both of these practices were found to have significant flaws. Many methods of segmentation on attitudes and behaviour are found in the value literature as well. The means-end model provides a foundation for segmenting on value from which customers' motivations and attitudes are assessed on attributes, consequences and goals. Similarly, duration provides a variable for behavioural segmentation of new and loyal customers. However, neither provides a model to assess attitudes and behaviour for segmentation on both value and loyalty.

This research proposes a 'reverse segmentation' of value and loyalty attitudes and behaviours to provide a better understanding of airline passengers.

Gutman suggests the means-end model can serve as the basis for an attitudinal segmentation on customer value (Gutman, 1982). Olson and Reynolds (1983) applied the means-end model to aggregate qualitative data from individual customers (See Gutman and Alden (1985), Reynolds and Jamieson (1985) in Zeithaml, 1988). "Linking lower level attributes with their higher level abstractions locates the 'driving force' and 'leverage point' for advertising strategy" (Zeithaml, 1988). The means end research provides a methodology for segmenting customers into groups of individuals with collective attitudes of desired, perceived and received value.

A method of behavioural value segmentation found in the literature review utilises the variable of duration. Duration is a function of experience and frequency, similar to the Recency, Frequency, Monetary (RFM) method currently utilised to predict customer value by some airlines. Research on duration as a segmentation variable has been developed in work by (Woodruff, 1997), (Parasuraman, 1997) and (Mittal and Katrichis, 2000). Woodruff suggests value attributes evolve as the customer's experience with the product progresses (Woodruff, 1997). Parasuraman expands upon Woodruff's work by segmenting customer experience into First-time, Short-term, Long-term and Lost customers (Parasuraman, 1997). Mittal and Katrichis (2000) empirically study the differing value perceptions of new and loyal customers and develop the Dynamic Attribute Importance Model (DAIM).

Mittal and Katrichis suggest the DAIM can be used as the basis of a value segmentation on the finding that attribute importance varies between new and loyal customers (2000). Different attributes and consequences drive value and loyalty even though the two concepts are closely related. Customer's changing desires and expectations will reduce the importance of some attributes influence on value while increasing the importance of others.

Mittal and Katrichis stress the importance of plotting the change in attribute importance over time by segment. Cross-section versus longitudinal approach to researching behaviour changes over time. A cross-sectional regression analysis on customer duration is ideal to determine the difference in attribute importance for new and loyal customers (2000). However, conducting cross-sectional research requires tracking customer attitudes and behaviours over the life of a relationship.

While the means end research and the DAIM offer a starting point for assessing value, neither provides a comprehensive solution for measuring the attitudinal behavioural components of value and loyalty. Conducting any research on value and loyalty is limited by the difficulty of measuring these ambiguous and

intangible concepts. Both are highly dependent on intangible motivations, attitudes and behaviour; all of which are dynamically changing over the lifetime of any relationship.

Development of the Value Creation Framework (Figure 31) provides the necessary understanding of value and loyalty, allowing this research to overcome the measurement limitations to segmenting on attitudes and behaviours. From this, it is theorised that purchase intent is the transactional behaviour of value which is directed by attitudes formed from personal values. Evaluated in a relational context, value is represented by continuous transactions comprising repurchase. The behavioural outcome of value forms the behavioural component of loyalty. Similarly, attitudinal component of loyalty is derived from satisfaction, the attitudinal outcome of value. Satisfaction represents the transactional assessment of the value attitude, which over time comprises the attitude of trust. In the end, loyalty is an attitudinal assessment influencing the behavioural and attitudinal assessment of value; essentially creating a reoccurring and interdependent cycle.

	Value (Transactional)	**Loyalty** (Relational)
Attitudinal	**Satisfaction**	**Trust**
Behavioural	**Purchase Intent**	**Repurchase**

A proper CRM segmentation must incorporate the components of value and loyalty concepts. Attitudes of value and loyalty are measured in terms of satisfaction and trust while behavioural components include purchase intent and repurchase. A method of measuring the attitudes and behaviours must be identified in order to conduct a value segmentation which can be implemented by airlines.

In chapter 2, Binggeli et al. (2002a) laid out a list of four steps to developing an effective segmentation for CRM:

1) Identifying valuable customers
2) Understanding customer behaviour
3) Implementing systematic CRM programs
4) Operationalising CRM

The first two steps of segmentation are developed in chapters 4, 5 and 6. The remaining two steps covering implementation and management will be discussed in Chapter 7.

4.4 IDENTIFYING VALUABLE CUSTOMERS

Binggeli et al. (2002a) lists 'identifying valuable customers' as the first step to segmentation. As discussed in Chapter 2, both Expected Relationship Value (ERV) and Recency, Frequency, Monetary (RFM) provide adequate methodologies for measuring customer valuation. However, both of these methodologies also require a temporal cross-section of transactions over the history of the relationship. While the ability to assess profitability based on the individual members of a segment is important; developing a customer profitability model was not one of the objectives of this research. Instead, the analysis will focus on the development of value segmentation profiles.

4.5 UNDERSTANDING CUSTOMER BEHAVIOUR

The second step of segmentation is understanding customer behaviour. Variables which correlate with customer profitability should be identified for use in the segmentation analysis. However, this study has already demonstrated

through an extensive literature review that intrinsic loyalty provides the best indicator of customer profitability. Since behaviours are the outcome of cognitive evaluation of attitudes, this research expands the assessment to attitudes and behaviours of customers. The two principal attitudes discussed throughout this dissertation are value and loyalty. An understanding of the limitations of measuring attitudes and behaviours is required to properly assess the concepts of value and loyalty.

4.5.1 Measuring Attitudes and Behaviour

Mittal and Kamakura find that there is a significant difference between intent and behaviour when related to satisfaction. They do not suggest this as a problem, given that the variation can be explained systematically and suggest customer demographic characteristics for this purpose (2001). This research however, suggests that the underlying bias can be attributed to personal values and suggest investigating their effect in explaining variation. Either way, both methods suggest the satisfaction-loyalty link differs in magnitude by segment and managerial considerations should be taken to address each segment individually (Mittal and Kamakura, 2001supported by Rust, Zahorik, and Keiningham, 1995). Bagozzi (1992) further suggests the omission of conation to explain cognition and affect can also be attributed to the disconnect between attitudes and behaviour (Huitt, 1999).

Throughout this study, attitudes are used to infer actual behaviour when observation is difficult. This limitation is common in cross-sectional surveys (Ranaweera and Prabhu, 2003). In consideration of these limitations, several steps were taken to minimise floor and ceiling bias as well as inconsistency. When space allowed, multi-item scales were used to reduce the probability of response bias and error (e.g. Mittal and Kamakura, 2001). Seven point Likert scales were chosen to avoid ordinal properties while not confusing the

respondent with too many interval data choices. Extreme descriptive anchors were used to avoid floor and ceiling effects which limit respondents' ability to record extreme attitudes (e.g. , 2001).

This allows for redundancy to be built into the methodology as similar questions can be compared or used to create an index for consistency and accuracy in reporting. Myers and Shocker warn measuring quality along side product attributes over emphasizes attributes which drive quality. Attributes should be organized into higher level dimensions to avoid over emphasizing attributes. (Ahtola, 1984 in Myers and Shocker, 1981, Zeithaml, 1988) These indices allow this research to address the danger in over emphasizing attributes which make up higher level abstractions (1988).

Another limitation that exists is the risk both satisfaction and intent suffer from the same response bias, resulting in spurious correlations (Mittal and Kamakura, 2001). The threshold linking satisfaction to intent may differ in degree to the threshold which drives action (2001). This is supported by Oliver's loyalty hierarchy which differentiates the degree of satisfaction (trust) which requires customers to move from conative loyalty (repurchase intent) to action loyalty (repurchase behaviour).

However, this limitation is a theory which this research set out to test. It has been suggested that satisfaction influences intent (attitude) while value influences repurchase (behaviour). Mittal and Kamakura (2001) find significant variation in the satisfaction-intent relationship compared to the satisfaction-behaviour relationship. They also state that this likely varies across products and industries. Therefore, the limitation raised by Mittal and Kamakura only limits this research's findings to applications outside the international air transport market.

Assessing the concept of loyalty becomes even more difficult than measuring received value because loyalty requires a temporal cross-section of the

relationship over time. Variables included in the questionnaire were intended to collect a cross-section of a passenger's attitudes and behaviours for their unique situation. As Parasuraman states, value is highly dynamic and is unique to each situation and individual, changing as experience grows and even within the purchase process itself (1997). The dynamic nature of value makes it difficult to define. With this in mind, the research was aimed at identifying a pattern in the progression of value segments rather than segments of passengers themselves. As passengers progress through a life cycle of value segments, the identifying the value segment which the passenger is currently in would effectively define value for a passenger at that point in time. By grouping individuals with similar value profiles, we assume their behaviour follows a similar, predictable path. This assumption allows for the segments responses across different situations to be aggregated, representing several transactions over the lifetime of a relationship which can be extended across the entire segment.

4.5.2 Measuring Value

As discussed in Chapter 3, value is dynamic, highly subjective and loosely defined. This presents serious issues in measuring value. Development of value models based on the economic concept of utility have been widely researched, but have failed to incorporate both attribute level and high-level value abstractions (Zeithaml, 1988). Perceived value measured in one-dimensional scales lack validity (Zeithaml, 1988, Petrick, 2004). Both Perceived Quality and Perceived Value are highly subjective and so research subjects would rate these concepts dramatically different. SERQUAL developed by Parasuraman, Zeithaml and Berry (1985) utilizes a scale comprising consumer expectations and perceived performances to assess quality. (Zeithaml, 1988)

Holbrook describes value as a preferential judgement based on values, which are the personal, comparative ideals an individual judges a product or service (1994). Woodroof suggested that value is initially assessed on desired value

affecting purchase decisions (1997). We also know that value assessment is dependent upon the context of the situation. Therefore, we can measure value by the importance and influence particular attributes, consequences, and goal level values have on the purchase decision.

This research believes 'importance' implies a measurement of desire. Importance, like desire, is a subjective evaluation. Conversely, 'influence' implies a measurement of perception, because like perception, influence is an objective evaluation. For instance, an important attribute is personal to the subject whereas an influential attribute exerts external persuasion on the subject through the objective attribute. Therefore, the importance of values would represent the respondent's subjective values system. This is relevant because values lead to the development of desired value.

As with the values orientation scale, consequences should also be measured in terms of importance, implying desires. Though the literature review portrays desired value as a list of desired attributes, the means-end research emphasises consequences as the key moderator between goals and attributes. Simply stated, the list of desired attributes is a simple representation of desired outcomes or consequences.   Conversely, attributes provide a more effective means to measuring perceived value. As discussed in chapter 3, consumers evaluate products on their attributes in an attempt to perceive the benefits to be received.

Desired and perceived value can also be assessed by monitoring behaviour. For instance, desired value is simply the search criteria specified in a realistic purchase situation. Search engines of online travel agencies (OTA's) and airlines' direct web sites require initial criteria to display more meaningful search results. Passengers typically specify desired day of week, airport pairs and class of service features. Optional criteria include time of day, preferred airline(s), and number of stops. These six features compose the elements of a typical airline product offering. In a perfect environment, airline passengers

would purchase a product meeting the desired search criteria. Reality is rarely so perfect and passengers are forced to settle for a product which closest matches their desires. However, if customers where provided an unrestricted choice situation where they have the opportunity to customise their product offering as they see fit, the resulting product would represent perceived value. Therefore, it is possible for both desired and perceived value to be assessed in a realistic setting by modelling the airline search and purchase process.

Received value is more difficult to measure because it is a post-purchase / post-use evaluation. Because of this, monitoring behaviour during the purchase process also is ineffective in assess received value. The only solution is to assess the subjective importance of attribute performance following the purchase / consumption experience. Satisfaction assessment typically takes the form of a scale based instrument. However, Chapter 3 identified two forms of satisfaction; purchase satisfaction and use satisfaction. Use satisfaction is the ultimate outcome of the purchase / use process which drives affect and trust over time. Purchase satisfaction can be assessed from desired and perceived value. Purchase satisfaction is of particular importance because it is the satisfaction resulting from the value proposition. Think of purchase satisfaction as the transactional satisfaction while use satisfaction is relational satisfaction. Purchase satisfaction is necessary for use satisfaction to exist. While use satisfaction ultimately translates into trust, attribute performance is an entirely different discipline than designing a valuable product proposition. This study has focused on the design of value propositions more so that delivery. For the purpose of this research, attribute performance is excluded since a satisfaction survey could not be administered. Purchase satisfaction is simply extended to use satisfaction as well, assuming that attribute performance is a controllable element.

4.5.3 Measuring Loyalty

Loyalty is portrayed by observable behaviour such as share of wallet and willingness to pay a premium as well as intangible attitudes such as affect, preference, differentiation and trust. Share of wallet is the measurement of repeat patronage behaviour (retention). Affect and preference are indicators to the level of trust, resulting from cumulative satisfaction. While Dick and Basu's (1994) segments are not interrelated or hierarchical as is Oliver's (1999) loyalty hierarchy, the two methodologies both measure loyalty using attitude and repurchase behaviour. Dick and Basu measure loyalty as an index of two separate concepts: relative attitude and repeat patronage. Relative attitude is composed of both attitudinal strength and differentiation (1994). This allows a customer's attitude towards one firm to be gauged relative to its differentiation versus alternatives.

I fly this airline more often than other airlines because…

	Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree	
This airline provides the best product (service quality)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I prefer to fly on this airline (preference)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I am willing to pay a higher price to fly this airline (premium)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This is an honest airline (trust)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I love flying this airline (affect)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I believe this airline has my needs in mind (trust)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's product is unique compared to all other airlines (diff)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's experience is unique compared to all other airlines (diff)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 35. Affective Loyalty Battery.

To measure attitudinal strength and differentiation, a battery of questions was designed which aimed to gather attitudes towards respondents' loyal airline. The questions referred to factors which are known to relate to loyalty including: service quality, preference, price premium, trust, affect and differentiation. Affect and differentiation are used to compute attitudinal loyalty. Service quality is a significant component of value which contributes to behavioural loyalty. Preference is an outcome of value and indicates the development of affect. Trust is hypothesised to be a measure of accumulated satisfaction which should increase as customers climb the loyalty hierarchy. Premium is an outcome of affective loyalty.

Oliver's (1999) levels of loyalty can be identified by focusing on particular factors in the battery of loyalty questions. For instance, a relatively high focus on service quality or value above other factors could indicate the passenger is cognitively loyal (retention), while a focus on preference would indicate affective loyalty. Conative loyalty becomes slightly more difficult to identify because it is indicated by repurchase intention. However, Reichheld (2003) found that willingness to recommend was the best indicator of repurchase intention and so this question was included on the survey as well. Finally, action loyalty is indicated by repurchase behaviour which corresponds to the second element used in Dick and Basu (1994) measurement method.

Repeat patronage was asked using a simple, self-reported scale.

What percentage of your **international** flights do you fly with **this airline**?
    ○ **less than 25%**   ○ **between 25% – 50%**   ○ **between 50% - 75%**   ○ **more than 75%**

Figure 36. Behavioural loyalty question.

Current Situation	Values	Important List of Values (LOV)
	Desired Value	Important Consequences
	Perceived Value	Influential Purchase Attributes
	Received Value	Importance of Attribute Performance (Satisfaction)
Temporal Cross-Section	Trust / affect	Attitudinal loyalty self-reported scales
	Repatronage	Share-of-wallet self-reported scale
	Loyalty	Trust / repatronage index

Figure 37. Academic concepts interpreted as purchase variables.

Traditional, scale based value assessment research methods are prone to validity issues because of ignorance to particular preferences, fear or unwillingness in participation, rating all attributes as very important, or influenced by external factors (Payne, 2000). For this reason, an experimental simulation was developed to corroborate data on value and loyalty attitudes and behaviour. Possessing two sources of similar data allows for all assumptions to be validated. For instance, the price elasticity of brand from the experimental simulation can be used to validate the price premium of loyal brands.

5 PRIMARY RESEARCH METHODOLOGY

Chapter 5 discusses development of the research instrument. The methodology and results of an experimental survey are reviewed and utilized in the development of further instruments. The theories and hypotheses formed in the previous chapter required an operational understanding of value and loyalty concepts. The following methodology was devised to accurately collect such data for analysis.

In order to develop a research instrument to meet the data needs, exploratory research was carried out to scope out preliminary requirements of the primary research. The challenges of measuring value and loyalty concepts required a survey instrument which could capture the dynamic nature of these concepts. An experimental simulation modelled after a typical airline purchase process was developed. However, the deployment of this instrument was not possible and a paper questionnaire was developed as a substitute.

5.1 EXPLORATORY RESEARCH

This research set out with the objective of operationally measuring value and loyalty in air transport. Previous research in the air transport field provides a foundation for measuring value and loyalty; however a comprehensive list of attributes which compose these concepts was needed. In past research, attributes where typically identified from secondary research or compiled from an expert panel. It is believed that a free-elicitation approach to identify the consumer's evoked set of choices will produce impartial results.

This study utilises exploratory research identify value attributes and their corresponding level in the value hierarchy directly from the consumer. To do this, the laddering technique was used to probe customers' important attributes. The findings of the exploratory study were used to build the primary research

questionnaire. An exploratory study to identify value attributes and their level on the value hierarchy was conducted utilizing the laddering technique research by Gutman (1982). He suggests a method for developing consumer attribute and consequence values based on previous research by Gutman and Reynolds in 1979. This method is based on the Means-End Model discussed previously and attempts to probe attributes (means) to uncover consumers' goals (ends). Gutman's research uses a repertory grid (Kelly 1955) to ask consumers to evaluate three choices and discuss how they are similar or different. The laddering technique is applied to investigate which choice consumers prefer based on value attributes and consequences (1982).

The exploratory study was conducted by one researcher using a prefabricated questionnaire administered through the interview technique (See Appendix A: Laddering Questionnaire). The research covered a four day period beginning August 31, 2004 and took place in the check-in area at Dulles International Airport (IAD). The research targeted international passengers flying to and from the London area, specifically those flying on British Airways and Virgin Atlantic flights. A random sampling was taken; however, those passengers travelling with families were not invited to participate in the research in order to avoid inconveniencing. The objective of populate a list of attributes did not require a statistically significant representation of the market. Approximately two dozen interview surveys were conducted over the course of this research period.

Subjects were approached immediately after check-in and asked to have a seat at a table set up in the check-in area. Special consideration was taken to ensure that subjects felt comfortable and secure. An introduction was read aloud to each individual stating:

> 'I am conducting research for my Ph.D. thesis at Cranfield University. The survey will only take approximately ten minutes. I am simply trying to understand how you view airline services making you the expert on this topic. There are no right or wrong

answers. Many of the questions I ask may seem somewhat obvious and possibly even stupid. If you are willing to donate your time and opinions, I would greatly appreciate your assistance."

Respondents were then asked which airline they were flying today and what other airlines they considered while purchasing the ticket. Then the respondents were asked to list what attributes influenced them to choose this airline above the others considered. In addition, subjects were asked what other attributes they took into consideration when purchasing their ticket. Several interviewing techniques were used to elicit consequence and goal-level elements which are often difficult to extract (see Reynolds and Gutman, 1988). The laddering interviews involved guiding passengers from attribute level values to goal-level values. This is done by continually asking, "Why is that important?" With each response the question is repeated, in effect, delving deeper into the consumer's conscious. The data collection resulted in a list of attributes, consequences and goals (Figure 38). However, end state responses where categorized into nine goals defined by Kahle (1983) in the List of Values (LOV) methodology.

Code	Attributes	Code	Consequence	Code	Goal
1	Price	16	Stress	38	Satisfaction
2	Schedule	17	Productivity	39	Family
3	Service	18	Save $	40	Accomplishment
4	FFP	19	Travel more	41	Belonging
5	Destinations	20	Hassel	42	Self-fulfillment
6	Premium Economy	21	Maximize time	43	Self-esteem
7	Business Discount	22	Comfort	44	Health
8	Non-stop	23	Refreshed	45	Value
9	Familiarity	24	Simplicity	46	Ethical
10	Seat	25	Cared for		
11	Lounge	26	Justification		
12	Limo Service	27	Make more $		
13	Entertainment	28	Upgrades		
14	Aircraft	29	Lounges		
15	Flexibility	30	Convenience		
		31	Value		
		32	Peace of mind		
		33	Budget		
		34	Familiar		
		35	Benefit firm		
		36	FFP		
		37	Seats		

Figure 38. List of Attributes, Consequences and Goals.

The exploratory research resulted in a means-end chain for each individual and was then used to derive a Hierarchical Value Map (HVM) for all international airline passengers. Attributes, consequences, and goals elicited were charted on a matrix in order to calculate the direct and indirect links (Figure 38). Direct links are those elements which respondents list adjacent to one another. Indirect links are those elements which respondents list in the same chain but are separated by other elements. To analyse the linkages, direct links are counted in whole numbers (1.00) while indirect links are counted in increments of 1/100th (0.01).

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Price	X															0.01	0.02	6.00	2.02	1.01
2	Schedule		X						1.00								2.02	2.01			1.00
3	Service			X							1.00					1.00	3.04	1.03			2.00
4	FFP				X												0.01		1.00	3.01	
5	Destinations					X											0.01				1.00
6	Premium Economy						X											1.00	1.00		
7	Business Discount							X											1.00		
8	Non-stop								X												0.03
9	Familiarity									X											
10	Seat										X							0.01			
11	Lounge											X									
12	Limo Service												X								
13	Entertainment													X			1.00				
14	Aircraft														X						
15	Flexibility															X	1.00		1.00		
16	Stress																X	2.01			2.00
17	Productivity																	X		1.00	1.00
18	Save $																		X	2.00	
19	Travel more																			X	
20	Hassel																				X

Figure 39. Sample view of Total Matrix.

For example, a subject says ticket price is important to save money and saving money is important to travel more often. Ticket price is directly related to saving money and indirectly related to travelling more often. Ticket price would receive a score of 1.01, 1.00 point for the direct link to saving money and 0.01 points for the indirect link to travelling more often. Similarly, saving money would receive a score of 1.00 for the direct link to travelling more often while travelling more often would receive 0.01 points for the indirect link with ticket price.

The distribution of points should remain balanced. If the score of ticket price is 1.01, then the score for the linkages which it connects to should be 1.01 as well. This example represents one of many linkages each consumer possesses. It is important to remember that total values of the scores are not comparable relatively. A score of 2.00 is not necessarily better than a score of 0.002. The analysis conducted in this research cumulatively scored each linkage for all the participants interviewed. The scoring results are displayed in Figure 40.

		Differentiation	Preference	Total
1	Price	13.18	4.05	17.23
2	Schedule	7.12	3.04	10.16
3	Service	4.07	14.22	18.29
4	FFP	3.04	5.05	8.09
5	Destinations	2.00	1.02	3.02
6	Premium Economy	3.04	0.00	3.04
7	Business Discount	1.02	0.00	1.02
8	Non-stop	2.03	2.04	4.07
9	Familiarity	1.03	0.00	1.03
10	Seat	2.01	6.04	8.05
11	Lounge	0.00	0.00	0.00
12	Limo Service	0.00	1.00	1.00
13	Entertainment	0.00	1.01	1.01
14	Aircraft	0.00	1.00	1.00
15	Flexibility	0.00	4.02	4.02
16	Stress	10.06	18.10	28.16
17	Productivity	11.03	10.08	21.11
18	Save $	16.05	3.01	19.06
19	Travel more	11.04	6.02	17.06
20	Hassel	9.05	9.05	18.10
21	Maximize time	8.05	8.04	16.09
22	Comfort	5.02	12.04	17.06
23	Refreshed	10.05	4.01	14.06
24	Simplicity	3.02	8.05	11.07
25	Cared for	5.02	9.03	14.05
26	Justification	2.01	2.01	4.02
27	Make more $	4.02	2.01	6.03
28	Upgrades	2.01	5.03	7.04
29	Lounges	2.01	4.01	6.02
30	Convenience	3.02	2.02	5.04
31	Value	0.00	0.00	0.00
32	Peace of mind	1.01	1.00	2.01
33	Budget	4.00	2.00	6.00
34	Familiar	3.00	0.00	3.00
35	Benefit firm	2.01	0.00	2.01
36	FFP	1.02	0.00	1.02
37	Seats	0.00	0.00	0.00
38	Satisfaction	14.25	13.25	27.50
39	Family	8.13	2.02	10.15
40	Accomplishment	3.05	3.06	6.11
41	Belonging	2.03	0.00	2.03
42	Self-fulfillment	4.06	0.00	4.06
43	Self-esteem	1.02	3.05	4.07
44	Health	0.00	1.02	1.02
45	Value	0.00	2.00	2.00
46	Ethical	0.00	1.02	1.02

Figure 40. Attribute, Differentiation and Total Matrix Scores.

Differentiation scores in Figure 40 represent attributes, consequences and goals elicited from the differentiation laddering question. Preference scores represent other elements considered by consumers during their purchase; portrayed in this research as preferences. It is interesting to note, many variables show varying importance in differentiating a product from competition while other variables are critical across all products in determining value. A summary of key variables are provided in Figure 41. Values represent the

percentage of cases in which variables where present as either a differentiator or a preference.

Attribute	Dif %	Pre %	Total %
Price	**19%**	5%	25%
Service	5%	**16%**	21%
Schedule	**10%**	6%	17%

Consequence	Dif %	Pre %	Total %
Stress	4%	**9%**	13%
Productivity	**5%**	**5%**	10%
Save $	**7%**	2%	9%
Travel more	**5%**	3%	8%
Hassel	**4%**	**4%**	8%
Maximize time	**4%**	**4%**	8%
Comfort	1%	**7%**	8%
Refreshed	**5%**	2%	7%
Simplicity	1%	**5%**	6%
Cared for	1%	**5%**	6%

Goal	Dif %	Pre %	Total %
Satisfaction	**20%**	**25%**	45%
Family	**15%**	4%	18%
Accomplishment	**5%**	**5%**	11%

Figure 41. Key differentiation and preference attributes, consequences and goals.

From Figure 41 above, we can see that price and service represent the two most significant attributes; price being a differentiator and service being a preference. Schedule is also a differentiator. There are many consequences that passengers consider, either to avoid or achieve. These consequences are the most significant influence on choice and determine attributes sought and the importance of those attributes. Stress is a consequence that passengers prefer to avoid, but do not necessarily choose one airline over the other on. Productivity is another significant consequence passengers consider as either a differentiator or preference. On the other hand, saving money is an example of consequences that differentiate airlines. Finally, the consequences that passengers deem important are evaluated on subconscious goals. Satisfaction by far is the most significant goal. This is primarily because the passengers seek satisfaction before any other goal due to that fact that satisfaction is a lower-level goal that acts as a prerequisite for most goals. Satisfaction is also a

very broad and loosely defined term. Family is also a surprisingly significant differentiating goal that can be utilized to provide value.

While it is interesting to differentiate key differentiators from key value elements, the development of the HVM used a total of both scores displayed in the right most column of Figure 40. Using the total scores, the strongest relationships or "chains" were then aggregated into a Hierarchal Value Map (HVM) representative of all the interviews. The HVM (Figure 42) provides a view of customers' desired goals and values as well as the means employed in which they seek to accomplish these goals.

The findings of the HVM will not be discussed in detail but can easily be understood by examining Figure 42. For example, the attribute of price implies the consequence of saving money. The result of saving money can either satisfy the high level goal of self-fulfilment by allowing the customer to save for personal goals (buying a house, starting a personal business) or corporate goals (satisfying management, supporting cost saving initiatives). Saving money can also support the consequence of flying more often to satisfy the high level goal of spending time with friends and family by applying the savings towards future flights. This example is by no means comprehensive and only represents the major linkages from the attribute of ticket price and consequences of saving money.

The exploratory study was to create a list of attributes, use consequences, and consumer goals considered during the purchase process through free elicitation. This list was utilised in the primary survey instrument for purposes of market segmentation and bundling analysis. The data gathered was also used to create a Hierarchal Value Map (HVM) for international airline passengers. The hierarchical value map was not used to develop the survey instrument but provides an understanding of the results from the primary research as well as airline passenger attitudes and behaviours in general. Future HVM studies on

specific segments of airline customer with similar attitudes and behaviours would result in more valuable insights.
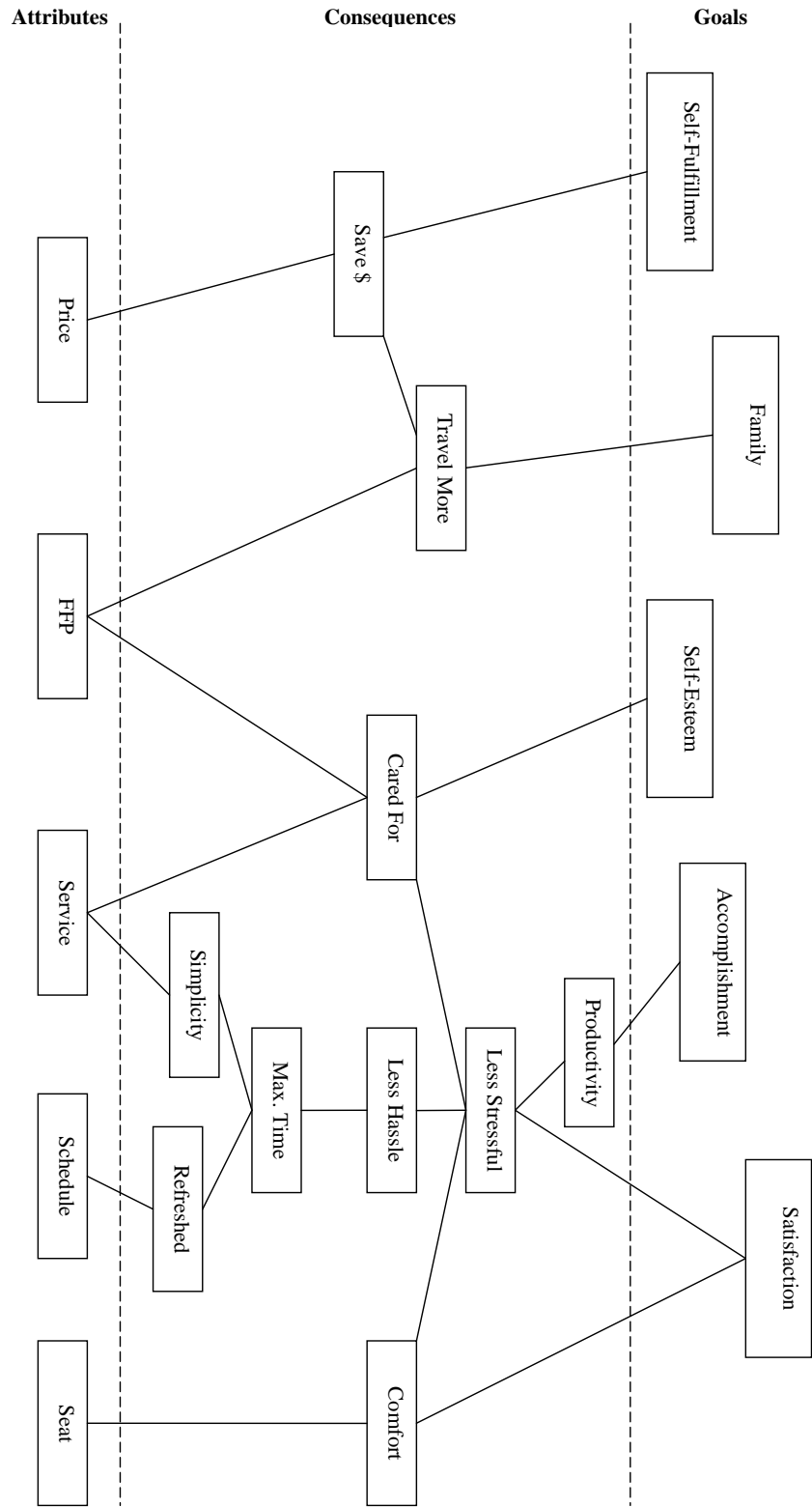
Figure 42. Hierarchical Value Map (HVM) of International Airlines Passengers.

5.2 PRIMARY SURVEY INSTRUMENT

The exploratory research led to the development of a dynamic, html-based, quasi-experimental questionnaire. The questionnaire was assembled following simple guidelines provided by Weisberg, Krosnick and Bowen (1996). Questions were ordered to begin with simple, situational elements to build trust and then led into the behavioural elements. The seven point scale was consistently used across variables. This allow respondents a middle alternative as well as provide distinction without making it overly confusing. Extreme descriptives were also provided to emphasis the distinction between opposing ends of the scale (1996). Throughout the questionnaire, detailed instructions were included at critical points to calibrate the participant's responses. The instructions provided a reference point for aligning attitudes with the scale. A copy of the final survey instrument is available in Appendix B.

The primary survey instrument was initially designed in two parts; an attitudinal and behavioural questionnaire followed by an experimental choice simulation. Part 1 of the questionnaire can be further broken down into three sections. In the Current Situation section, passengers were asked to provide details of the flight they were travelling on that day. The Value Scales section contained three scales to survey participants' values orientation (Figure 44), desired consequences
(

6. In the next section, please rate how **IMPORTANT** the following benefits were in purchasing today's international flight *(1 being not influential, 7 being most influential).* If you did not purchase your ticket for this flight, assume you had purchased a ticket for an identical situation.

Circle "1" if the benefit is not important when flying. Circle "4" if the benefit is important but not required. Circle "7" if the benefit is a necessity when flying.

	Not Important		Somewhat Important			Very Important	
Minimizing travel time	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Comfortable while travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Earn frequent flier miles	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Productivity during travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Cared for by airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Saving money	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Relaxing, less stressful travel experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Overall satisfactory experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 45) and influential purchase attributes (Figure 46). A fourth scale measuring loyalty disposition (Figure 47) was included with several other questions collecting data on loyalty attitudes and behaviour in the third section of Part 1. An in-depth discussion on Part 2 of the instrument will be discussed in the Experimental Simulation section following this discussion.

Variables surveyed in each section were identified through several sources. The Current Situation section was comprised of standard elements found in typical survey instrument {Porter 1985 #10} used by airlines and the U.S. Department of Commerce's Survey of International Travellers. The List of Values (LOV) was used to populate the Values Orientation section (Madrigal, 1995). Variables collected from the exploratory research were included in both the Desired Consequences and Influential Purchase Attributes sections.

The Current Situation section collected situational variables such as airline, fare, airports, stops, ticket flexibility, class of service, travel times, product packaging features and purpose of trip. In addition, situational variables influencing the purchase were included. A battery of questions was designed for the purchase situation variables and is displayed in Figure 43.

4. When searching for information before purchasing your ticket for this flight:

How many hours did you spend searching?	○ < 30 mins	○ .5 – 1 hour	○ 1-2 hours	○ 2-4 hours	○ 4+ hours	○ I didn't search
How far in advance did you purchase?	○ 1-3 days	○ 4-7 days	○ 8-21 days	○ 22-45 days	○ 46-90 days	○ 90+ days
Where did you purchase? (Tick only one)	○ Airline Call Center ○ Online Travel Website (i.e. Orbitz, Opodo, etc.)		○ Airline Website ○ Travel Agent ○ Tour Operator		○ Corporate Travel Manager ○ Corporate Intranet ○ Other _____	
Who paid for this flight?	○ **Myself**	○ **Business / Organization**		○ **Friend or Relative**		○ **Other**

Figure 43. Battery of Situational Purchase Variables.

The Values and Lifestyles (VALS) methodology (Mitchell, 1983) and List of Values (LOV) methodology (Kahle, 1983) were develop to inventory customer's values systems. These similar methodologies measure the strength of common values identified across all individuals using a battery of scales (Payne and Holt, 2001). The LOV scale was used to measure values by self-reporting

importance of the eight high-level values identified by the LOV methodology. While this is not an appropriate way to implement the LOV methodology, space limitations required an abridged application. Note that both values and consequences are evaluated in terms of importance as discussed in chapter 4.

5. The following is a list of things that people look for or want out of life. Please rate each element on how important it is to you in your daily life. *(1 being not important, 7 being most important)* **Only circle 7 if the value is extremely important to you.**

	Not Important		Somewhat Important			Extremely Important	
To be proud of who you are	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To succeed at what you want to do	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be admired by others and to receive recognition	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be safe and protected from misfortune and attack	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To have close companionships and intimate friendships	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be accepted and needed by your family, friends or community	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To lead a pleasurable, happy life	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To find peace of mind and to make the best use of your talents	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To lead an exciting, stimulating life	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 44. Values Orientation Scale.

It is interesting to note the third and sixth values represent externally focused values of individuals' acceptance in society.   The remaining values represent internally focused values of personal acceptance.

The importance of consequences identified through the exploratory research was assessed in the Desired Consequences Scale (Figure 45). Particular care was taken in stating values and consequences to portray the desired meaning. Both values and consequences represent high level, subjective attitudes unique to each individual.

6. In the next section, please rate how ***IMPORTANT*** the following benefits were in purchasing today's international flight *(1 being not influential, 7 being most influential).* If you did not purchase your ticket for this flight, assume you had purchased a ticket for an identical situation.

Circle "1" if the benefit is not important when flying. Circle "4" if the benefit is important but not required. Circle "7" if the benefit is a necessity when flying.

	Not Important		Somewhat Important			Very Important	
Minimizing travel time	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Comfortable while travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Earn frequent flier miles	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Productivity during travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Cared for by airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Saving money	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Relaxing, less stressful travel experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Overall satisfactory experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 45. Desired Consequences Scale.

The instructions for the influential purchase attributes scale indicate attitudes of both preference and differentiating attributes should be considered in the influential purchase attributes scale.

Attributes and consequences were evaluated in different scales because there is much perceived overlap. From the exploratory research, we know that ticket price directly influences the consequence of saving money. This overlap is important to validate the scales effectiveness as well as the Hierarchical Value Map.

7.   In the next section, please rate how *INFLUENTIAL* the following statements were in purchasing today's international flight. If you did not purchase your ticket for this flight, assume you had purchased a ticket for an identical situation.

Circle "1" if you did not consider the element at all in your purchase evaluation. Circle "4" if you prefer the element, but it was not significant in your purchase choice. Circle "7" if the element was one of the key factors that made the difference in your purchase choice.

	Not Influential		Somewhat Influential			Most Influential	
Timing & frequency of flights	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Airline's overall customer service	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Perception of airline image	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Frequent Flier Program	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Arrival / departure airports	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Previous experience with airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ticket price	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Number of stops	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ease of booking in purchase process	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Seat comfort & legroom	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Airport lounge availability	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
In-Flight Entertainment	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Quality of in-flight meals	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Availability of upgrades	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Relationship with airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ticket flexibility	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Good value for money	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Corporate discount	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 46. Influential Purchase Attributes.

The Loyalty Behaviour and Preferences section drew from previous research as well. Along with the common frequent flier program questions, several duration elements were included as the result of research by Mittal and Katrichis that duration may influence value and loyalty (2000). The questions were directed towards travel on international flights to keep responses inline with the survey scope. A loyalty scale was added as well using elements incorporated in

previous research from (Chaudhuri and Holbrook, 2001) and (Dick and Basu, 1994) to incorporate hedonic / utilitarian variables, trust, affect, as well as relative attitude strength and differentiation.

13. Thinking about the airline you fly most for international travel, rate how strongly you agree / disagree with the following statements. **Circle "4" if you have not opinion.**

I fly this airline more often than other airlines because…

	Strongly Disagree		Neither Agree Nor Disagree			Strongly Agree	
This airline provides the best product	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I prefer to fly on this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I am willing to pay a higher price to fly this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This is an honest airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I love flying this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I believe this airline has my needs in mind	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's product is unique compared to all other airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's experience is unique compared to all other airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 47. Loyalty Disposition Scale.

Relative measures of loyalty were used in the methodology, putting assessments in the context relative to competing products. Relative measures are thought to be more effective in predicting loyalty for products in a competitive market environment where there are several product choices (Olsen, 2002). Other elements besides affect and repatronage behaviour that can be used to characterize loyalty include word-of-mouth, purchase intention, price sensitivity, complaining, commitment, and resistance to change. (2002)

Demographic characteristics were left off the primary survey instrument in consideration of survey length. The questionnaire design was not excessively lengthy, stretching over two double sided pages. However, the instrument was intensive and required approximately 10 – 15 minutes on average to complete with some respondents taking well over thirty minutes. Since the objective was to segment on attitudes, demographic data would have provided insight into the segments but was not critical to the research.

5.3 EXPERIMENTAL SIMULATION

The experimental choice simulation was designed as the second of two parts to the primary survey instrument. The experimental simulation adapts to the respondents' previous inputs throughout the course of the survey, simulating the consumer purchase process to collect quantitative value and loyalty data. This instrument provides the opportunity to collect behavioural data that was not possible using traditional methods. By simulating the actual purchase process itself, the questionnaire can randomly alter the situational context to test price elasticity and preferences of individual passengers in various situations.

While circumstances prevented the deployment of this instrument, it led to the development of the paper based survey actually used for data collection. The development of the experimental simulation has been included in this dissertation because of the significance of its implications for the industry. An experimental simulation was initially chosen because it allowed for data on value to be collected utilising existing means readily available to airlines. This means that airlines wishing to measure customer value of their passengers simply need to record data presented through web sites and online travel agencies.

The experimental choice section simulates a realistic purchase setting based on the subject's current trip situation. The model uses elements from the current product and tests price elasticity on several fixed and variable product elements. Subjects follow the typical search process for booking air travel online, and are then led through a proposed customisation-based booking engine.

There are four steps making up the experimental simulation. A landing page starts off the survey by introducing the survey and asking for primary segmentation variables (Final destination and purpose of flight, etc.) which will then lead the subject to one of four specific questionnaires. Step 1 further gathers more details to customize the questionnaire similar to the subject's current trip situation. Step 2 uses this data to test price elasticity on the fixed

product elements including airport, airline, number of stops and schedule (day of departure and time of departure). Step 3 simulates the booking engine of an airline offering a customized product. Subjects are allowed to choose ancillary products such as meal, IFE, wireless internet, lounge access, meet and greet service as well as car & driver for each leg of their flights. Step 4 is contains a series of questions to evaluate the customization process in comparison to their current trip choice.

The best of breed features where used in developing the simulated booking engine. The airport selection grid from Travelocity.com (Figure 48) allows the value of the airport product feature to be assessed relative to alternatives. This then allows for the quantifiable measurement of willingness to pay for varying attributes (departure / arrival airport pairs) of a feature (airports). For example, one passenger in a segment may choose to fly from the primary airport pair (JFK-ORD) for an additional $80 rather than the alternative airport pair (LGA-MDW). However, the same subject may choose a less expensive alternative (i.e. LGA-ORD) if the price of the primary airport pair increases further. By observing this behaviour of a multiple subjects in a segment, the price elasticity can be assessed and applied to all customers belonging to that particular segment.

Figure 48. Airport selection grid from Travelocity.com.

The simulated booking engine also simulates product feature selection. The flight selection grid from aircanada.com is integrated with orbitz.com's brand selection in Figure 49. The grid from orbitz.com allows customers to easily compare airline brand offerings on price. Willingness to pay a premium for one brand over another infers added value provided by the brand feature. The orbitz.com grid also incorporates the number of stops feature in an identical manner. Further price elasticity for product features in addition to airport selection can be ascertained from the aircanada.com product selection grid. These features include day of departure, departure time, arrival time, aircraft and class of service.

Figure 49. Brand selection grid from Orbitz.com and flight selection grid from aircanada.com.

The concepts adopted from the orbitz.com and aircanada.com grids were incorporated into the experimental simulation to develop the Flight Selection Engine (Figure 50).

In choosing airports, assume the travel time difference is from door to door.

[DEPT C] – [ARRIVAL C] (XX mins closer/farther) from $XXX	[A/P SET] (XX mins closer/farther) from $XXX	[A/P SET] (XX mins closer/farther) from $XXX	[A/P SET] (XX mins closer/farther) from $XXX

Find Flights By: Airline Stops Price	[AIRLINE]	{DEST SET – [AIRLINE]}	{DEST SET – [AIRLINE]}	{DEST SET – [AIRLINE]}	{DEST SET – [AIRLINE]}
Non-stop					
1 stop					
2+ stops					

Lowest price	Departure time	Shortest flight

Select departing flight

[Day Mmm-DD] - 3   [Day Mmm-DD] - 2   [Day Mmm-DD] - 1   **[Day Mmm-DD]**   [Day Mmm-DD] +1   [Day Mmm-DD] +2   [Day Mmm-DD] +3

From: **[DEPT_AIRPORT]**
To: **[ARRIVE_AIRPORT**

Airline	Depart	Arrive	Stops	Travel Time	*Economy*	*Economy Plus*	*Premium Economy*	*Business*	*First*

OK   Reset

Figure 50. The Flight Selection Engine.

A Product Customisation Engine (Figure 51) was also developed to allow customers to design their ideal product. Utilising the same dynamic attribute pricing used in brand and product selection grids, willingness to pay can be assessed to measure price elasticity.

Figure 51. The Product Customisation Engine.

If the model were to be operationalised, further detailed customisation is required.   For example, passengers may desire a business seat on the departure to arrive at their destination refreshed for an important meeting. However, the same passenger may prefer an economy seat with in-flight entertainment to help relax on the way home while keeping cost down.   The Product Customisation Detail Engine (Figure 52) satisfies this need by allowing the customer to specify desires by passenger and flight leg.

Figure 52. Product Customisation Detail Engine.

The limitation of the experimental simulation lies in its delivery methods. Two options exist; an online questionnaire over the internet or a client based application administered on laptops in the terminal. A previous attempt to solicit participation using invitation cards (Figure 53) proved unsuccessful due to the low response rate and high sample required for the segmentation study. A trial run of the online solicitation methodology resulted in 23 responses from approximately 250 invites, or about 10 percent. While this is an acceptable response rate for most online surveys utilizing email invitations, high manual labour involved would have significantly limited the ability to meet the study's required target sample size.
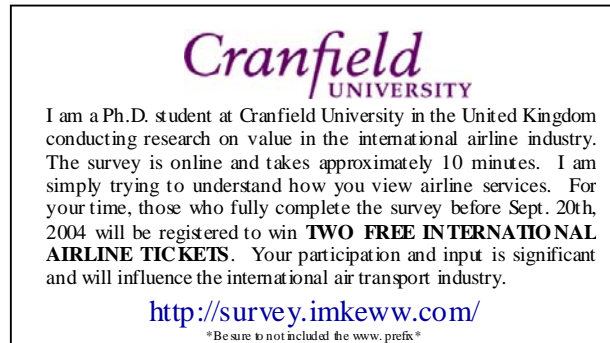
Figure 53. Online Survey Invitation Card.

As a result of this initial experience, the questionnaire was designed to be administered via laptop computers at the airport. The research called for three laptop computers containing the survey program to be set up on a folding table near gates in the concourse. However, this methodology had to be scrapped due to theft of the research laptops at the last minute.

While this instrument was not used to collect data for this research, it is included to discuss the implications of its methodology. Administered properly, the experimental simulation represents a significant opportunity to collect data on value and loyalty by observing purchase behaviour. This does not necessarily require a specially designed survey, since this simulation is modelled after the online purchase process followed in some form by all airlines today.

Online travel agencies (OTA's) have the unique functionality of displaying nearly all available value propositions available. This implicitly provides relative product evaluations assuming near perfect knowledge of alternatives and corresponding prices. Collecting and analyzing this information would allow airlines to decompose price elasticity of airline brands. Similarly, OTA's and airlines' direct web sites provide data on product specific price elasticity as well. Applying factoral analysis or hedonic regression analysis methods would provide price coefficients for attributes comprising the augmented air transport product.

5.4 PAPER QUESTIONNAIRE

The experimental simulation methodology was converted to a paper questionnaire at the last minute to accommodate the unavailability of required laptop computers. The paper questionnaire restricted the ability to collect all the desired data. While the paper questionnaire followed a similar two part design, the experimental simulation was no longer feasible. The second part was replaced with a price elasticity survey on various product attributes to accommodate the dynamic data collection provided by the experimental simulation. The first part of the paper survey remained relatively the same and gathered data on the passenger's attitudes and behaviours.

The design of Part 2 was intended to gather data for a factoral survey based on previous research by Tomkovick and Dobie (1995). Prominent product attributes identified in the exploratory research were included in the survey. A battery of scales was used to test the passenger's price elasticity. Vignettes of brand and product attributes were grouped on seven point scales with a range of prices assigned. The passengers were asked to indicate how much more or less they would actually pay for this attribute as compared to their Current Situation. The instructions provided to subjects were as follows:

> In the next section you will be asked to value how much more or less you would
> pay for a corresponding increase or decrease in benefits received. The questions
> lay out several different scenarios and we ask that you select **one price for each
> line**.

Participants were then presented with six vignettes assessing willingness to pay for varying attributes of airline brand, class of service, airports, in-flight time, day of departure and time of departure product features. Figure 54 is an example of the airline brand vignette.

18. How much more or less would you *actually* pay for a ticket…

On United Airlines	-$150	-$75	-$25	$0	$25	$75	$150
On Virgin Atlantic Airways	-$150	-$75	-$25	$0	$25	$75	$150
On Aer Lingus	-$150	-$75	-$25	$0	$25	$75	$150
On Continental Airlines	-$150	-$75	-$25	$0	$25	$75	$150
On British Airways	-$150	-$75	-$25	$0	$25	$75	$150

Figure 54. Airline Brand Vignette.

The willingness to pay vignettes were developed to assess price elasticity relative to available alternatives. For most of the features, relative comparisons were objective. For instance, the closest airport is preferred or the desired time of departure is preferred. However, the relative assessment of airline brands is a subjective evaluation of perceived quality. Therefore, Figure 55 was included in the survey to assess perceived quality of airline brand choices presented.

17. How do you **view** the following airlines in terms of overall quality? If you have never flown on the airline, indicate what you think it would rate based on what you have heard about the airline.

	Among the Worst		Average			Among the Best	
United Airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Virgin Atlantic Airways	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Aer Lingus	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
British Airways	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Continental Airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 55. Airline Brand Perceived Quality Scale.

Finally, a battery of scales was tested for willingness to pay of ancillary product attributes. This batter is displayed in Figure 56.

24. How much more would you *actually* pay for these products if they were not included with your flight…

Personal in-flight entertainment / DVD player	$0	$5	$10	$25	$40	$60	$100
Gourmet quality meal	$0	$5	$10	$25	$40	$60	$100
Airport business / family lounge access	$0	$5	$10	$25	$40	$60	$100
A flexible / refundable ticket	$0	$5	$10	$25	$40	$60	$100
Car & Driver pick-up / drop-off service	$0	$5	$10	$25	$40	$60	$100
Meet & Greet escort through airport	$0	$5	$10	$25	$40	$60	$100
Onboard internet access	$0	$5	$10	$25	$40	$60	$100

Figure 56. Ancillary Product Willingness to Pay Scale.

A prior version of the questionnaire used in development of the experimental simulation, which did not included the willingness to pay vignettes, was tested with management employees of an international airline. In total, approximately a dozen surveys were collected resulting in a few terminology changes. The sample of test subject were likely more familiar with the subject matter than the target population, however, difficulties in obtaining access to airport areas made this the only available option given time constraints. The cross-sample of the subjects ranging from highly seasoned airline employees to those with little industry knowledge provided a diverse sample for the test to overcome any subject familiarity bias. This test resulted in valuable feedback for revising Part 1 of the instrument.

However, given circumstance prompting the hastily prepared Section 2, no opportunity was available to test the willingness to pay vignettes. Instructions did not clearly communicate that vignettes were to be compared relative to the subject's current situation resulted in confusion with the scales. For example, the willingness to pay vignette for day of week is shown in Figure 57. Many subjects found the exercise illogical and difficult to comprehend. The collection of this dynamic data is much better represented visually, as is the case in the experimental simulation where this trade-off is made implicitly given the selection of an ideal value proposition over all other available alternatives.

22. How much more or less would you *actually* pay to for a flight…

1 day later	-$150	-$75	-$25	$0	$25	$75	$150
3 days later	-$150	-$75	-$25	$0	$25	$75	$150
1 week later	-$150	-$75	-$25	$0	$25	$75	$150
1 day earlier	-$150	-$75	-$25	$0	$25	$75	$150
3 days earlier	-$150	-$75	-$25	$0	$25	$75	$150
1 week earlier	-$150	-$75	-$25	$0	$25	$75	$150

Figure 57. Day of Week Willingness to Pay Vignette.

The primary research instrument was intended to be followed by a mail in satisfaction survey to gather data on the complete value creation process. This follow-up questionnaire was to be mailed to consenting participants using email addresses collected during the computer based questionnaire. While this was

still possible using a paper questionnaire, the time to complete data entry of email addresses compromised the effectiveness of a satisfaction survey so far after the consumption experience.

5.5 TARGET SAMPLE

The target sample was initially selected to include only passengers flying between the US and Europe so that market situational influences could be isolated and held constant. This segment proved hard to target operationally as the sample, though constituting the largest international market, was not large enough given time constraints and identifying passengers flying to Europe was difficult in itself.

A simple random sample of consenting passengers was chosen as the sampling methodology. A stratified sample of passengers was conceived of by surveying passengers at targeted gates. However, security limitations restricted the researchers from entering the secure side of the airport. Terminal 4 at John F Kennedy (JFK) and Terminal B at Newark Liberty (EWR) airports in the New York metropolitan area were chosen due to the terminals high percentage of international passengers (94.5% and 53.4% respectively (PANYNJ 2004 Departing Passenger Profile)) and pre-security concession areas.

5.6 RESEARCH METHODS

In a study similar to this research, Mason and Gray (1995) utilised factor and cluster analysis methods to develop airline segmentation profiles of short haul, European business passengers. The methodology applied is used as a guide in developing the value segmentation profiles of this research.

5.6.1 Factor Analysis

Factor analysis is a quantitative multivariate analysis method to explain variability among random variables. Garson (2007b) provides a comprehensive resource for conducting and understanding factor analysis which is referenced here. Factor analysis serves to reduce sets of variables into 'factors' identifying latent structures. This function of factor analysis applies nicely to segmentation studies given its nature of grouping many consumers on a set of a few common variables.

Garson also notes factor analysis can be used to:

- select a subset of highly correlated variables from a larger set using principal component analysis.
- determine network groups of people clustered together using Q-mode factor
- identify clusters of cases (2007b).

The most common method of identifying underlying factors is using Principal Component Analysis (PCA). PCA analyses all combinations of variable and extracts the 'factor' or set of variables which explain the highest variance. The analysis is then repeated with the remaining variables. Factor analysis is limited by 1) the subject interpretation of analysis, 2) variable selection, and 3) data linearity and normality. First, factors are comprised by subjectively grouping variables with high factor scores. The naming convention used to identify each factor is arbitrarily determined by the researcher and may be interpreted differently by other researchers. Second, factor analysis is highly dependent on the variables chosen to be included in the factor analysis. Adding new variables or excluding existing variables will significantly change the results. Finally, factor analysis is a linear procedure and may be affected by data normality. However, linearity and normality are generally more critical for smaller sample sizes and are not a limitation to this study. Of course, factor analysis is only relevant assuming there are underlying factors in the data to be identified. Factor analysis cannot create valid results if none exist.

Principal component analysis results in eigen values, factor loadings and factor scores. Eigen values are given to each factor and indicate the variance accounted for by that factor. Factors with low eigen values indicate the factor is not particularly effective in explaining variance of variables. Dividing a factor's eigen values by the total number of variables results in factor loadings. "Factor loadings are the correlation coefficients between variables and factors" (Garson, 2007b). When squared, factor loadings represent the percentage of variance explained in a variable. Factor loadings are used to compute factor scores allowing factors to be used as variables in modelling. The variables of each factor are summed to comprise a factor score. Each case analysed in the sample will have a factor score for all of the factors identified.

Rotation methods are typically necessary to make the eigen values and factor loadings more understandable. Different rotation methods do not change the sum of eigen values but will change the distribution of factors' eigen values. Therefore, the interpretation of factors is inconsistent and varies by the rotation method used. When no rotation is used, variables tend to load on many different factors. This is because factor analysis the first axis will fall between the clusters of variables (Garson, 2007b). Applying varimax rotation will skew the loading of each variable to one primary factor, making it easier to associate that variable with a particular factor.

5.6.2 Cluster Analysis

Q-mode factor analysis clusters cases together rather than variables and is used to interpret the composition of a group. Cluster analysis has replaced Q-mode factor analysis as the common method for this purpose. Matteucci (2003) defines cluster analysis as "the process of organizing objects into groups whose members are similar in some way" (2003). This definition strikes a similar resemblance to that of segmentation, the objective of this . Matteucci discusses the most common approach to cluster analysis, K-means clustering. This

method of clustering defines a priori the number of clusters (k) to be developed. Centroids for each cluster are chosen to maximize the distance between clusters. Cases are then assigned to a cluster by their proximity to the cluster centroids until all cases have been assigned a cluster. Given the composition of cases in each cluster, new centroids are calculated to more accurately reflect the cluster. The processes of assigning cases to clusters and adjusting centroids accordingly is repeated until the centroids no longer move significantly.

K-means clustering is highly subjective resulting in several limitations. The selection of initial cluster centroids is subjective and often left to random generation. Results are highly dependent on the initial cluster centroids defined. In addition, the number of clusters is also arbitrarily chosen at the beginning of the analysis. This limitation often requires the method to be conducted with various numbers of clusters until the research is satisfied with the results.

5.6.3 Discriminant Analysis

Discriminant analysis (DA) or discriminant function analysis classifies cases into the categories of a dependent variable. DA is restricted to dichotomous dependent variables with only two categories. When the dependent variable is characterised by more than two variables, multiple discriminant analysis (MDA) is used (UNESCO, 2001). MDA is also referred to as discriminant factor analysis and is similar to principle component analysis method in factor analysis. While principle component analysis is concerned with the variance between variables of a factor; MDA is concerned with the variance between values of the dependent variable (Garson, 2007a). The variance between values of the dependent variables are represented by discriminant functions or dimensions.

A dimension is a linear function of independent variables which discriminate the dependent variable. This equation is represented:

$$L = b_1 x_1 + b_2 x_2 + b_n x_n + c$$

Where L represents the latent discriminant score, x is the independent variable, b is the corresponding coefficient and c is a constant. Discriminant scores can be visualised in a scatter plot using the discriminant scores with each function as an axis.

For MDA, there are g-1 orthogonal functions where g is the number of dependent variable categories. The first function maximises the difference between values of the dependent variable. In stepwise DA, the function is repeated in either a forward or backward stepwise method to control for the most discriminant factor(s) in the previous function(s), and so on. After each step, cases are segmented on their distance from group centroids and eigen values are calculated to test significance.

Wilkes's lambda (U statistic) is used in MDA to test the significance of the eigen value for each discriminant function. The smaller the lambda the greater the distance between group centroids (vectors) and the more significant the function is in discriminating between values of the dependent variable. A lambda of 1 means all groups means are the same. Bartlett's V transformations represent the significance of lambda scores. Hold-out samples are also commonly used to validate the sample .

For the purpose of this research, discriminant analysis is used to segment respondents into one of three categories of the dependent cluster group variable from the cluster analysis.

6 DATA ANALYIS

The results of the methodology designed in chapter 5 are presented here. Analysis methods are applied to the raw data to quantify concepts of value and loyalty. A reverse segmentation on value and loyalty variables results in the development of three unique passengers segments. The characteristics of these segments are explored and the implications of the results elaborated. Chapter 6 is followed by a discussion on implications for the air transport industry and how this study contributes to the success of CRM programs.

6.1 SURVEY RESULTS

Data collection took place at JFK Terminal 4 on Friday, November 18th, 2005 and Saturday, November 19th, 2005.   Research at Newark Terminal B took place Thursday, December 1st – Saturday, December 3rd, 2005. The research resulted in 1,177 questionnaires collected, approximately 500 from JFK and 700 from EWR. Four researchers worked over a 7 hour shift from 4PM – 11PM, timed to hit the evening bank of international departures. The majority of flights for the targeted US-EU segment departed during this window. All departing travellers were included in the survey, of which 69.7% fell into the initial target population of the Europe (EU) – US market, with 88.3% of respondents departing on an international flight.

The composition of international passengers at JFK Terminal 4 is 95 percent while EWR Terminal B is 54 percent international. Given the international composition of both terminals and the number of surveys collected at each, a sample composition of 70 percent international passengers would be expected. The 18 point positive skew towards international passengers was likely due to data collection in the evening targeting international departure banks.

Researchers approached passengers in the pre-security concession areas of the terminal and inquired regarding their willingness to participate in the survey. Passengers were briefed on the research intentions and invited to participate in the survey. Due to the length of the survey, passengers were given an expectation of how long the survey would take and offered an incentive. Two free business class tickets between New York JFK and London Stansted airport were provided by MAXjet Airways to be raffled off to participants.

6.1.1 Data Validation

All 1,177 surveys collected were included in the analysis. Data collection of the target market proved to be too limited. Including an additional 533 surveys, approximately 30% of the sample, in the analysis was deemed more valuable than isolating the research to the trans-Atlantic market. Expanding the research to include all passengers was not perceived to be detrimental to the research since regional differences were not the focus of this study.

Despite some surveys being significantly to partially incomplete, no cases were excluded outright from the data set. In all analysis, cases were excluded list wise, only selects cases were all variables are complete. The drawback to this method is each analysis draws from a unique data set with highly variable sample sizes.

Surveys were also tested for invalid data. The invalid data analysis identified cases where subjects indicated the same response across a complete battery of questions. In the end, these cases were included in the analysis. The majority of the cases included valid data and what invalid data was questioned could not be ruled out as inaccurate. For example, the possibility exists that some respondents find all attributes to be equally important or desirable. The concern was minimised by the fact that the large sample size should reduce the significance of any invalid data.

6.1.2 Recoded Data

Airport names were recoded into the standard three-letter IATA airport code and classified by region. Airline names were also recoded into the standard two-letter IATA airline code. In addition, flight times for major routes were standardised to accurately reflect average elapsed time, taking connections into consideration. Flight time and travel time to airport were both banded into ordinal data. Flight time was group into 11 increments from 0 to 20 hours while travel time was grouped into 13 increments of 15 minutes from 0 to 3 hours. Finally, fare data was banded into 13 increments of $200 from $0 - $2,000.

6.2 VALUE SEGMENTATION PROFILES

Chapter 5 discussed factor and cluster analysis methodologies as a means of developing segmentation profiles on customer value and loyalty. Before conducting this analysis however, the data must first be tested to demonstrate it is fit for applying these methods. The Kaiser-Meyer-Olkin (KMO) test for sampling adequacy and Bartlett's test of sphericity are common approaches for testing data validity. KMO is an index for comparing correlation coefficients. A large KMO value suggests a factor analysis is appropriate. The data selected for factor analysis had a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.931 indicating the sample is acceptable. Bartlett's Test of Sphericity tests for correlation between variables. Bartlett's Test of Sphericity resulted in a 0.000 confidence level indicating the correlation matrix is an identify matrix and is acceptable for factor analysis.

A factor analysis was conducted on the four battery of scales included in the study; values, attributes, consequences and loyalty. It was hypothesised that a factor analysis on each scale would result in a more robust understanding of the customer. However, a principal component analysis of all 43 variables resulted

in seven factors after 6 iterations which explained 63 percent of variance over 875 of the valid cases (Figure 59). Varimax rotation with Kaiser Normalisation was applied to better understand the results.

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.733	29.611	29.611	6.183	14.378	14.378
2	4.058	9.438	39.048	5.625	13.082	27.460
3	3.763	8.750	47.799	4.597	10.690	38.150
4	2.002	4.655	52.454	3.029	7.044	45.195
5	1.671	3.887	56.340	2.887	6.713	51.908
6	1.491	3.467	59.808	2.775	6.454	58.361
7	1.396	3.246	63.053	2.018	4.692	63.053

Extraction Method: Principal Component Analysis.

Figure 58. Total Variance Explained by Factors

Variables were grouped within seven factors by identifying those with component scores above 0.500 when Varimax rotation was applied. All but two of the forty three variables fit exclusively into one of the factors with a component score above 0.500. The two exceptions were included into Factor 2 with scores of 0.491 and 0.437. Factor 1 was comprised of the eight loyalty variables which made up the battery of loyalty questions. Factor 1 represents current relative attitude towards the respondents preferred airline. Factor 2 included variables 2, 3, 10, 11, 12, 13, 14, 15, 16 and 18 from the Influence scale. These questions represent overall customer service, airline image, seat comfort & legroom, airport lounge, in-flight entertainment, quality of in-flight meals, availability of upgrades, relationship with airline, ticket flexibility and corporate discount respectively. Factor 2 appears to be comprised of ancillary product attributes or 'frills'. These items are not core to the product but have become expected by many passengers, especially demanding business passengers.

Factor 3 comprised all questions included in the personal values battery. Factor 3 indicates how important a passenger's values are in the purchase process. Factor 4 focuses on high-level, desired consequences, including variables 1, 2, 5, 7 and 8 from the corresponding scale. These questions represent minimising travel time, comfortable while travelling, cared for by airline, relaxing / less stressful travel experience, and overall satisfactory experience variables respectively. Factor 4 will be labelled as product delivery since these questions specifically target the experience received. Factor 5 complements Factor 2 in that the influential attributes included focus on core product features as opposed to the ancillary product features of Factor 2. Influential attribute questions 1, 5, 6, and 8 represent timing & frequency of flights, arrival / departure airports, previous experience with airline, and number of stops. While influential attribute question 6 may not seem to fit into core product, appropriately it had a weak component score of 0.501.

The final two factors appear to represent specific niche factors. Factor 6 included FFP variables from desired consequence questions 3 and 4 as well as important attribute question 4 representing earning frequent flyer miles, productivity during travel, and frequent flyer programs respectively. Factor 7 included all the price variables included in the scales. Desired consequences question 6 and influential attribute questions 7 and 17 represented saving money, ticket price, and value for money respectively. A table of the factor analysis component scores can be found on the next page in Figure 59.

Rotated Component Matrix

	Component						
	1	2	3	4	5	6	7
Loy1	**.832**	.120	.112	.098	.107	.044	.082
Loy2	**.815**	.094	.099	.131	.132	.045	.028
Loy3	**.731**	.179	.103	.024	.040	.252	-.190
Loy4	**.837**	.134	.111	.065	.060	.032	.029
Loy5	**.888**	.172	.081	.044	.020	.109	.051
Loy6	**.875**	.173	.137	.067	.027	.091	.062
Loy7	**.826**	.157	.151	.076	.054	.148	.051
Loy8	**.839**	.135	.144	.087	.042	.136	.054
Imp1	.056	.092	**.714**	.104	.036	.015	-.031
Imp2	.111	.134	**.711**	.200	.001	-.095	.040
Imp3	.209	.179	**.537**	-.111	-.001	.370	.140
Imp4	.105	.112	**.615**	.163	.062	.069	.095
Imp5	.091	-.009	**.660**	.029	.132	.002	.122
Imp6	.110	.097	**.589**	-.029	.109	.194	.159
Imp7	.067	-.060	**.772**	.154	.145	-.010	-.021
Imp8	.084	-.010	**.721**	.191	.062	-.028	.086
Imp9	.109	.107	**.674**	.124	.012	.106	-.037
Des1	.021	-.024	.221	**.581**	.374	.310	.016
Des2	.090	.209	.210	**.721**	.205	.055	-.008
Des3	.193	.181	.066	.171	.067	**.787**	.033
Des4	.246	.247	.179	.251	.077	**.655**	-.017
Des5	.132	.287	.205	**.601**	.060	.095	.088
Des6	.035	.026	.177	.311	-.072	.180	**.731**
Des7	.114	.214	.164	**.762**	.121	.066	.142
Des8	.165	.159	.198	**.725**	.125	.023	.146
Inf1	.042	.172	.178	.164	**.654**	.131	-.048
Inf2	.108	**.538**	.127	.229	.492	-.002	-.012
Inf3	.197	**.513**	.195	.073	.461	.067	.002
Inf4	.132	.342	.007	-.007	.323	**.679**	-.005
Inf5	.088	.094	.089	.064	**.674**	.148	.178
Inf6	.154	.440	.044	.158	**.501**	.125	.061
Inf7	.007	.051	.128	.035	.304	-.046	**.764**
Inf8	.040	.150	.054	.184	**.629**	.030	.265
Inf9	.088	***.491***	.131	.127	.397	-.011	.277
Inf10	.076	**.695**	.054	.233	.291	-.051	.082
Inf11	.132	**.762**	.089	.140	.023	.298	.013
Inf12	.163	**.796**	.090	.103	.004	.098	.093
Inf13	.196	**.819**	.079	.096	.041	.097	.077
Inf14	.166	**.723**	.089	.108	.127	.342	.023
Inf15	.248	**.623**	.064	.135	.247	.322	-.022
Inf16	.201	**.584**	.003	.098	.144	.320	.217
Inf17	.075	.287	.092	.029	.165	-.017	**.672**
Inf18	.192	***.437***	.031	.001	.080	.542	.080

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Figure 59. Variables comprising seven factors.

Component scores for all seven of the factors were computed for each of the 875 cases included in the factor analysis. A cluster analysis was then applied on the seven factors and grouped cases into three segments. Of the 875 valid cases included in the cluster analysis, 351 fell into Cluster 1, 340 into Cluster 2 and 184 into cluster 3; nicely distributed into segments of 40, 39 and 21 percent respectively. Loyalty and product delivery factors influenced segment composition far more significantly than any other factors. The significance of loyalty and product delivery component scores was more evident when the valid cases were exposed to a stepwise discriminant cluster analysis.

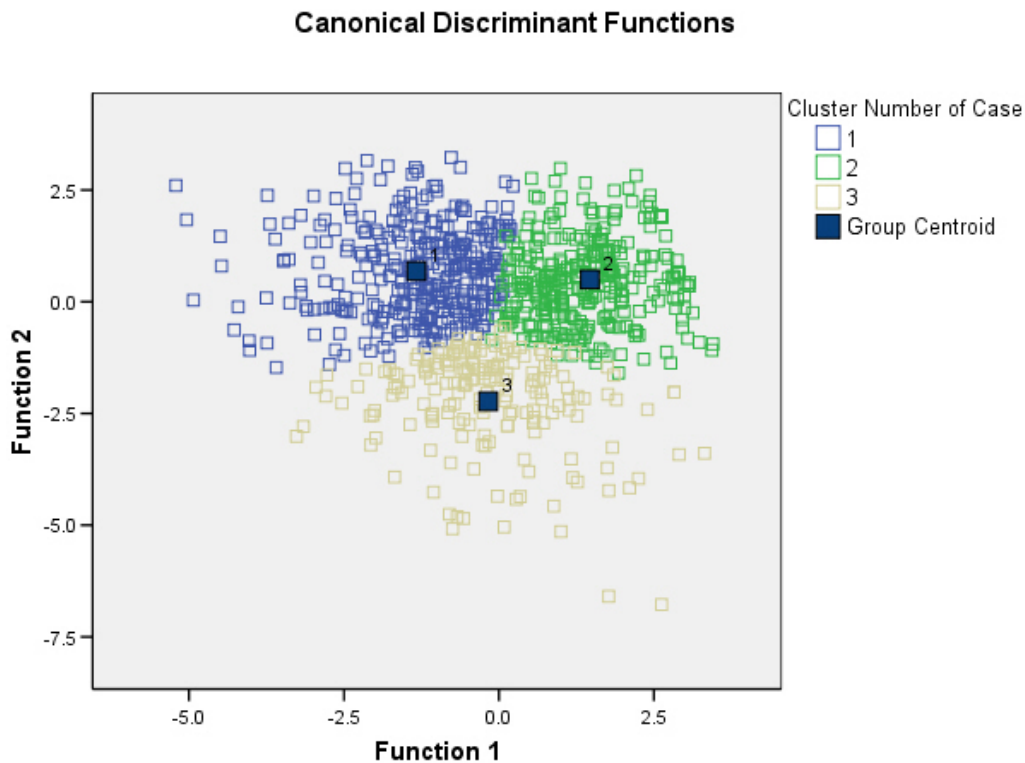**Canonical Discriminant Functions**

Figure 60. Discriminant Functions Map.

Cluster 1 scored a strong negative coefficient for loyalty factors (-1.882) while having a high coefficient for product delivery factors (1.339) and a moderate negative coefficient for price factors (-0.462). This segment appears to be

willing to pay a premium for an airline which can provide a superior experience but has not found an airline which satisfies their needs enough to develop strong loyalty.

Cluster 2 was unique in that it scored strong, positive coefficients for loyalty (2.218), ancillary products (0.439), values (0.696), and FFP (0.555) factors where both other clusters had negative coefficients for these factors. It is interesting to note that Cluster 2's loyalty coefficient is in sharp contrast to Cluster 1's loyalty coefficient, indicating that this segment is much more loyal than either of the other two segments, but especially Cluster 1.

As Cluster 2 was unique in its strong, positive coefficients, likewise Cluster 3 is unique in its strong, negative coefficients. This cluster scored negative across all factors with the exception of price (0.376). While the price coefficient does not appear significantly strong, it is the strongest positive coefficient of the three segments indicating that Cluster 3 is the most price sensitive. This segment also had the strongest coefficient reported, positive or negative, for product delivery factors (-3.035). This indicates passengers in Cluster 3 would gladly sacrifice service delivery (i.e. experience) for a lower price in product selection.

Classification Function Coefficients

	Cluster Number of Case		
	1	2	3
Factor_Loyalty	**-1.882**	**2.218**	**-.507**
Factor_Ancillary_Product	-.102	**.439**	-.617
Factor_Values	-.227	**.696**	**-.852**
Factor_Product_Delivery	**1.339**	.260	**-3.035**
Factor_Core_Product	.044	.204	-.460
Factor_FFP	-.094	**.555**	**-.846**
Factor_Price	**-.462**	.273	**.376**
(Constant)	-2.220	-2.301	-3.597

Fisher's linear discriminant functions

Figure 61. Coefficient of seven factors for each of three cluster segments.

The segmentation analysis reveals three distinct passenger segments. Cluster 1 are 'Comfort Kings' and account for 40 percent of the cases. This segment desires a comfortable, relaxing experience and is willing to pay for it. By the low, negative loyalty coefficient, it appears that this segment is still searching for an international airline that can satisfy their demands. Cluster 2 are 'Frill Seekers' and comprise another 40 percent of the international market. These passengers are very loyal to their respective FFP's and enjoy the little frills in flying but expect a reasonable value as well. Finally, Cluster 3 is labelled 'Hitchhikers'. These are the Ryanair passengers of international travel; willing to sacrifice all other factors for the lowest ticket price. This segments accounts for the remaining 20 percent of cases and is only concerned with getting from point A to point B for as cheap as possible.

COMFORT KINGS	FRILL SEEKERS	HITCHHIKERS
Not loyal	Highly loyal	Not loyal
Seek positive experience	Influenced by product features, especially FFP	Flexible with product
Price inelastic	Fairly price sensitive	Price is primary concern
Consequence oriented	Attribute Oriented	Price Oriented
40 %	**40 %**	**20 %**

Figure 62. Cluster Segment Characteristics.

This segmentation demonstrated that loyalty can be a key factor in segmenting customers on attitudes and behaviours. Using the data gathered from the loyalty scale and behavioural questions developed in Chapter 5, this research will attempt to demonstrate a relationship between value and loyalty exists. The loyalty battery measures six attitudinal variables: service quality, preference, premium, trust, affect, and differentiation. In addition, the behavioural loyalty measure of repatronage was collected through a self-reported share-of-wallet metric.

6.3 VALUE – LOYALTY MODEL

Previous research identified relative attitude and repatronage behaviour as key components used to measure the degree of loyalty. Relative attitude is a composite calculation of attitude strength and attitude differentiation; measured in terms of affect, preference, premium, differentiation and trust. Figure 63 identifies the variables used to gather data on these variables in the Loyalty Disposition Scale. Using the values for these variables, relative attitude and differentiation scales are developed culminating in a loyalty index.

13. Thinking about the airline you fly most for international travel, rate how strongly you agree / disagree with the following statements. **Circle "4" if you have not opinion.**

I fly this airline more often than other airlines because…(LOYAL)

	Strongly Disagree		Neither Agree Nor Disagree			Strongly Agree	
This airline provides the best product (service quality)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I prefer to fly on this airline (preference)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I am willing to pay a higher price to fly this airline (premium)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This is an honest airline (trust)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I love flying this airline (affect)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I believe this airline has my needs in mind (trust)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's product is unique compared to all other airlines (diff)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's experience is unique compared to all other airlines (diff)	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

Figure 63. Coded Loyalty Disposition Scale.

This research averaged the two differentiation scores together and then combined the average with affect score to form the relative attitude index.

$$\text{Relative Attitude Index} = [\text{affect} + ((\text{diff1} + \text{diff2}) / 2)] / 2$$

The two trust scores are also averaged together to form a trust index which should move in step with the loyalty index.

$$\text{Trust Index} = (\text{trust1} + \text{trust2}) / 2$$

Repatronage behaviour was obtained using a four point scale measuring share of wallet in terms of percentage international flights flown with the subject's loyal carrier. The repatronage index was created as a seven point scale so that it could be compared with other indices and scales. The following formula was used:

$$\text{Repatronage Index} = (\text{LoyalShare} * 7) / 4$$

Theoretically, repatronage should correspond with trust. However, there are many scenarios were a passenger may have little choice in repatronage behaviour and would characterise loyalty; as is the case with spurious loyalty discussed by Dick and Basu (1994).

A simple correlation analysis reveals the two indexes have a Pearson Correlation of 0.874 at the 0.01 level of significance. Therefore, we can conclude that relative attitude correlates positively with trust. The correlation analysis of repatronage and trust only found a mild relationship with a Pearson Correlation of 0.200 at the 0.01 level of significance.
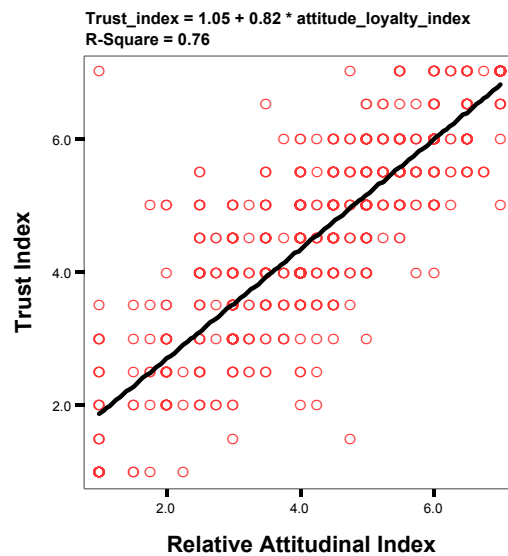

Figure 64. Relative Attitude Index – Trust Index Scatter Plot.

A loyalty index is created by combining both the relative attitude and repatronage indices into a loyalty index. The following formula was used:

Loyalty Index = (Relative Attitude Index + Repatronage Index) / 2

The correlation between the loyalty index and trust averages out to 0.665 at the 0.01 level of significance. It appears that relative attitude results as satisfactory experiences cumulate and trust develops, not necessarily repatronage. This corresponds with Dick and Basu's (1994) findings which indicate spurious loyal customers can have high affect for a product or brand, yet do not have high repatronage. Latent customers can also exist who have high repatronage but low affective loyalty. As discussed previously, this often occurs in air transport where choice of carriers is limited. To address this limitation, the respondents are segmented by applying Dick and Basu's (1994) conditions of loyalty (Figure 65).

Repeat Patronage

		High	Low
Relative Attitude	High	Loyalty	Latent Loyalty
	Low	Spurious Loyalty	No Loyalty

Figure 65. Attitude-Behaviour square (Dick and Basu, 1994: 101).

A quick look at the relative attitude and repatronage indices show that respondents were evenly distributed around the mean of 4.5 (See Figure 66). We will round the mean down to the scale median of 4.0 for simplicity and assume passengers with a score greater than 4.0 possess strong relative attitude and those less than or equal to 4.0 possess weak relative attitude. The same metric will be used for repatronage for consistency sake.   This methodology is adapted to Dick and Basu's (1994) Attitude-Behaviour square

resulting in four loyalty conditions. Loyalty condition 1 is 'no loyalty' where both repeat patronage and relative attitude are low. Loyalty condition 2 represents spurious loyalty where repatronage may be high but relative attitude is low. Loyalty condition 3 represents latent loyalty where high relative attitude exists indicating potential for a relationship exists but repatronage behaviour does not indicate action loyalty. Finally, loyalty condition 4 would be action loyalty itself where relative attitude and repatronage are both high.

		relative_attitude_index	repatronage_index
N	Valid	1047	1059
	Missing	130	118
Mean		4.468	4.490
Median		4.500	5.250
Mode		4.0	5.3

Figure 66. Descriptive Statistics of Relative Attitude and Repatronage Indices.

Figure 67 shows the segments to be well distributed with the largest segment being the loyal segment with 37 percent. Loyalty Condition 1 indicates no loyalty because neither high relative attitude nor high repatronage exist. Loyalty Condition 2 possesses strong repatronage, but scored low relative attitude, satisfying the conditions of latent loyalty. Loyalty Condition 3, spurious loyalty, posses strong relative attitude but scored low repatronage. Finally, Loyalty Condition 4 meets both conditions of loyalty by possessing high relative attitude and repatronage.

			Loyalty Condition				
			1	2	3	4	Total
Cluster Segment	1	% within Cluster Number of Case	41.0%	36.0%	8.1%	14.8%	100.0%
	2	% within Cluster Number of Case	.9%	1.5%	30.0%	67.6%	100.0%
	3	% within Cluster Number of Case	36.7%	30.6%	10.6%	22.2%	100.0%
Total		% within Cluster Number of Case	24.5%	21.5%	17.2%	36.9%	100.0%

Figure 67. Descriptive statistics for Loyalty Segments.

More importantly, Figure 67 illustrates the glaring contrast of loyalty across the three loyalty segments defined in the cluster analysis. Nearly 98 percent of Frill Seekers have a strong relative attitude disposition, with two-thirds demonstrating action loyalty. Conversely, 77 percent of Comfort Kings and 67 percent Hitchhikers scored low relative attitude, despite half of both these segments possessing strong repatronage already (loyalty conditions 2 and 4). Action loyalty (condition 4) was present for only 15 percent of Comfort Kings and 22 percent of Hitchhikers.

This suggests airlines should focus on strengthening relative attitude with existing customers who already have high repatronage by designing niche product offerings to satisfy the demands of Comfort Kings and Hitchhikers. The findings confirm loyalty factor coefficients from the discriminant analysis indicating that segment two was the only significantly loyal segment. Though we cannot measure satisfaction, we can speculate from the results that the cumulative satisfaction for segments 1 & 3 is not sufficient to develop trust and loyalty. Segment 3 is inherently unloyal due to their sole focus on price, viewing air transport as a commodity. However, Segment 1 on the other hand is quite the opposite; indicating an elastic willingness to pay. The lack of loyalty likely results from the lack of value creation. While the products' attribute performance will not vary across segments, the attributes which factors are assessed on may.

Segment 1 represents 40 percent of the market and suggests there is an opportunity to acquire valuable customer assets by meeting the desires of this segment. The motivations and attitudes of Segment 1 indicate a focus on consequences and the overall experience. Segment 1 places very high importance on product delivery consequences suggesting dissatisfaction results from airlines' inability to consistently provide a comfortable, less-stressful experience and a sense of being cared for. CRM provides an excellent method

for not only creating a valuable product, but also to deliver on intangible service consequences valued by this segment.

6.4 HIERARCHICAL LOYALTY ANALYSIS

This research has proposed that loyalty is hierarchical with key characteristics defining each level. If loyalty is in fact hierarchical, we would see expect to see sharp peaks and plateaus for each variable. First, service quality was suggested as an antecedent to all loyalty levels, but must be present for Cognitive Loyalty to exist. Next, preference was believed to be an outcome indicating Affective Loyalty. Willingness to pay a price premium was also a suggested outcome of Loyalty. A quick look at the correlation between relative attitude and these key characteristics does not reveal any stepwise, hierarchical properties. Instead, it merely suggests that as Relative Attitude grows in strength, these key characteristics correlate in a linear fashion.
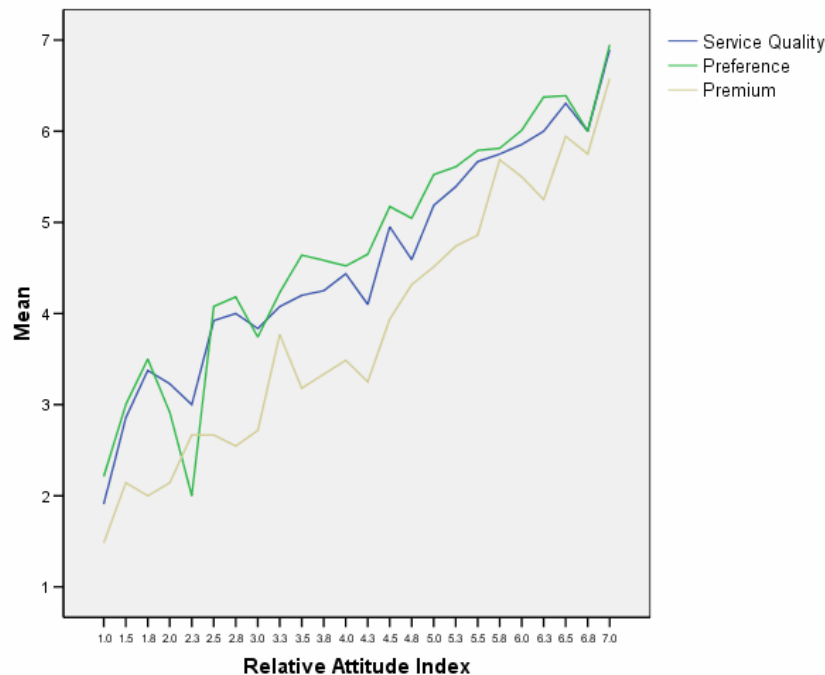
Figure 68. Line graph of key loyalty characteristics against Relative Attitude Index.

If we take a look at each of the three characteristics identified individually, we can find small indications that a hierarchy may exist. Both Service Quality and Preference show an early peak with the former more defined.   Premium demonstrates a slower slope with a slight increase around a relative attitude of 4.0.   However, these behaviours are so slight that stating a hierarchy exists would be pure speculation.
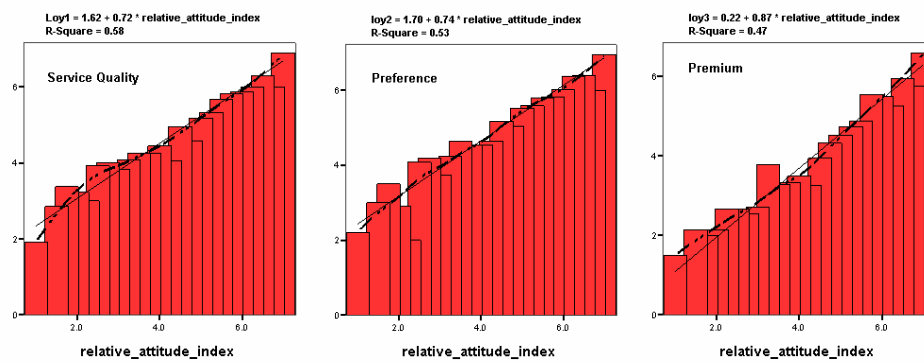

Figure 69. Smoothing fit lines for key loyalty characteristics.

The possibility exists that the true behaviour of these characteristics is inhibited by including invalid loyalty scales in the results. This was tested visually by plotting perceived service quality, preference and premium on a scatter plot and applying cubic fit lines (see Figure 70). This resulted in much more defined behaviours, especially price premium.   This would indicate passengers willingness to pay a premium gradually begins to increase at a relative attitude index around 2.0.   It is not until passenger reach a relative index of approximately 4.0 that their adversity to a premium becomes neutral.   This willingness peaks between a relative attitude of 6.0 and 6.5.   At this peak, passengers willingness to pay a premium is a 5.0 to 5.5.

The remaining two characteristics appear to be linear, however similar assumptions could be made. At a perceived service quality of 4.5, relative

attitude crosses the midpoint of the scale and continues to increase linearly as service quality increases. Similarly, passengers begin developing a preference (score > 4.0) around a relative attitude of 3.0 and increases linearly until tapering off near 7.0.
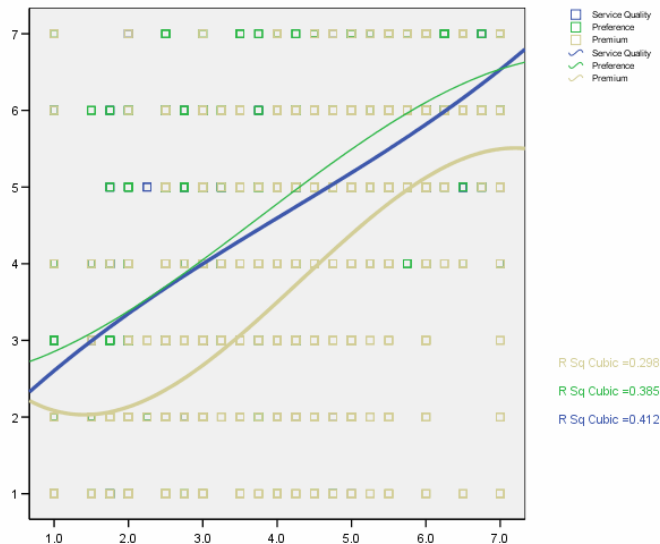

Figure 70. Cubic fit lines for Valid Loyalty Scales.

The final loyalty characteristic to test is passengers willingness to recommend their loyal airline to a friend. Reichheld found that willingness to recommend is the ideal indicator for predicting repurchase intent, the characteristic identifying Conative Loyalty.   The percentage of respondents indicating they would recommend their loyal airline to a friend was plotted against relative attitude scores in Figure 71.   At a relative attitude index of 4.0, over 60 percent of passengers are willing to recommend the airline, up 40 percent from relative attitude value of 1.0. Willingness to recommend increases to 100 percent at a 7.0 relative attitude score.
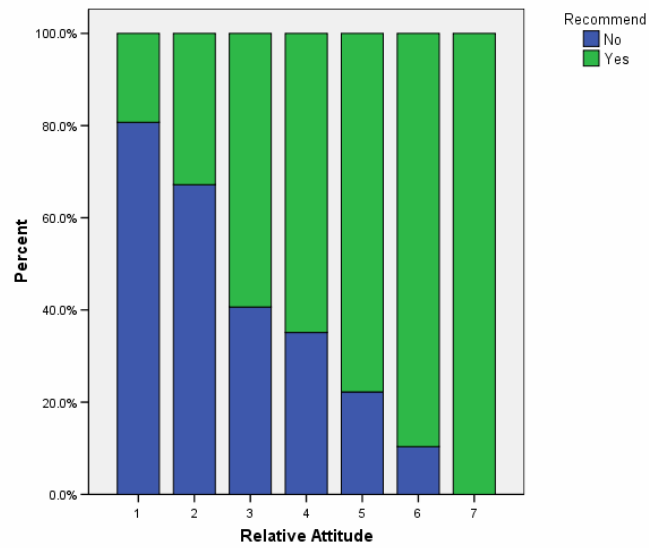
Figure 71. Willingness to Recommend correlation to Relative Attitude Index.

The hierarchical analysis of loyalty does not provide much value to existing research. However, the passenger value segmentation and loyalty profiles offer a significant and strong argument for the value leadership strategy. Chapter 7 will discuss the significance of these findings and provide insight into the practical application of the value leadership strategy.

7 CONCLUSION

The existing air transport environment is not conducive to firm profitability given its competitive nature. Competing on price and product only fuels competition between airlines. This research suggests competition for customer assets on value can provide sustainable competitive advantage. This aim of this study was to develop a strategy for competing on customer assets.

7.1 RESEARCH CONTRIBUTION

This research set out to develop Value Leadership as a new competitive strategy for airlines built upon the concept of relationship marketing. Relationship marketing was evaluated as a viable strategy for the airline industry. Customer relationship management was found to provide a means of implementing relationship marketing in a mass consumer market. CRM has demonstrated the ability to provide a financial return on investment and create loyal customers in other industries. However, the functional level understanding of how CRM creates value for the consumer to motivate loyal and profitable behaviour was missing in the academic literature.

A literature review of the value and loyalty fields set out to understand how these two concepts interact to add value in transactions. Several areas of overlap were evident which allowed the two concepts to be linked together when viewed over multiple transactions in a relationship. A methodology based upon the extensive literature review was developed to test the proposed theories. The methodology underwent empirical testing via a paper survey administered to approximately 1200 airline passengers. An advanced segmentation of passengers' attitudes and behaviour was also conducted to apply the new understanding of value and loyalty. The findings confirmed many

of the theories proposed and provide insight allowing airlines to more effectively create value for passenger segments and apply CRM in the airline industry.

7.1.1 Value Creation Framework

This thesis contributes to academia with the development of the Value Creation Framework. The Value Creation Framework explains the interaction of value and loyalty concepts through the transactional purchase process and over the lifetime of a relationship.

The Value Creation Framework expands upon the purchase process by elaborating on the value creation stage. Value disconfirmations are theorised to explain how value creation results in a purchase and satisfaction evaluation. A value disconfirmation between desired and perceived value results in the purchase evaluation while a valued disconfirmation between perceived and received value results in the satisfaction evaluation. Perceived and received quality play a critical role in the respective value concepts and are often used synonymously with the benefit component of the cost / benefit equation comprising value in existing literature. Therefore, quality may be used to refer to value.

The purchase and satisfaction evaluations of the purchase process provide the 'bridge' to integrate value and loyalty in the Value Creation Framework. Previously literature found loyalty to be comprised of attitudinal and behavioural components. This research suggests these components are represented by trust and retention respectively. This is confirmed by the finding of this research that trust correlates with relative attitude while repatronage did not significantly correlate. The representation of trust as attitudinal loyalty and repatronage as behavioural loyalty is critical in integrating value and loyalty. Trust is further theorized to represent cumulative satisfaction evaluations whereas retention represents cumulative purchase evaluations.

The attitudinal and behavioural gauges where created to visualise these relationships. The gauges provide a practical means for firms to monitor movement of the relational components of loyalty on a transactional level. Measuring the trust between firms and customers after each transaction is not practical; however, measuring satisfaction over time is practical and theorised to represent the accumulation of trust.

This research encountered the inverse problem; a cross-section of data was not available and concepts had to be measured using indices.   The loyalty disposition scale measured several attitudinal components of loyalty. Behavioural loyalty was measured by asking respondents to self-report their past repatronage behaviour. This methodology can be applied by firms to assess the existing loyalty condition of their customers from which to base a monitoring program off of if no historical data is available.

The loyalty disposition scale measured quality, preference and willingness to pay a premium, among others. These concepts all positively correlate with relative attitude as theorised in the attitudinal loyalty gauge. However this correlation appears to be linear and not in a stepwise functions as initially thought. This implies the attitudinal components of loyalty steadily increase in unison rather than in a hierarchical manner. A similar conclusion was reached with willingness to recommend, which previous research found to represented repurchase intent. This finding does not necessarily rule out the hierarchical composition of loyalty. The higher level components may simply posses a higher threshold to action. Fore example, a score of 2 may be enough for preference to exist but a score of 5 may be required before willingness to pay a premium is evident.

7.1.2 Value Segmentation Profiles

This study found passengers to view the airline product in terms of five key factors: 1) core product, 2) ancillary product, 3) product delivery, 4) FFP and 5) price. Along with these five product factors, two other attitudinal factors were observed: loyalty disposition and values disposition. These seven factors effectively classified airline passengers into three distinct segments; Comfort Kings, Frill Seekers and Hitchhikers. The behavioural segmentation allows airlines to supply differentiated products design specifically to meet the needs of unique customer segments and not simply provide a 'one-size-fits-all' product.

Comfort Kings desire a service oriented product and are willing to pay for it. This market is not necessarily premium cabin customers. Comfort Kings place little value on both core and ancillary product features. Comfort Kings are solely concerned with the experience and consequences incurred, not product attributes.   These consequences include minimising total travel time; comfortable travel; care, respect and attention by airline staff; relaxing, less stressful and an overall satisfactory travel experience.

An airline product which consistently delivers on standard industry expectations while providing an extra level of service to ensure passengers have an event free experience will provide the most value to this segment.   Consistently providing a normal, uneventful experience is more important than occasionally providing delight or an above-average experience. More importantly, ensuring passengers don't have negative experiences is more important than delivering positive experiences.

A small opportunity for product customisation exists to provide differentiation with Comfort Kings. Allowing ala carte purchase of comfort amenities such as lounge access and IFE's could help to make the experience more relaxing. However, personalised communication such as soliciting feedback and customer facing issue tracking provide a unique potential to build a relationship with customers in this segment.

A loyalty segmentation found 77 percent of Comfort Kings exhibit low relative attitudes, suggesting this segment has little existing commitment to other brands and the most potential for growth. Thirty six percent of those possess latent loyalty with the remaining 41 percent possessing no loyalty. Supplying a product which satisfies the expectations and delivers consistent value to Comfort Kings will help to increase the latent loyalty of those with no loyalty. However, developing trust through consistent satisfactory experiences is the only way to strengthen relative attitude and establish intrinsic loyalty.

Similarly, the same conclusion applies to Hitchhikers with 67.3 percent of the segment possessing weak relative attitude. Approximately 30 percent of those display signs of latent loyalty with the remaining 37 percent indicating no signs of existing loyalty. Providing value to this segment will develop trust and, over time, relative attitude. Hitchhikers define value simply in terms of price. Product customisation allows hitchhikers to purchase only those attributes desired, keeping the overall cost down. While this may intuitively seem contrary to maximising profits, customisation works to build intrinsically loyal customers who become less price sensitive as their purchasing behaviour changes. Customers who consistently find the lowest price, or simply perceive the lowest price, with one firm will reduce time spent searching and may skip the search process all together. More importantly, customisation can also allow price sensitive customers to be channelled. This concept is practiced today in the airline industry by revenue management. However, channelling customers to underutilised airports and flights is made simpler through customisation.

The inverse loyalty conditions exist with Frill Seekers. This segment possess extremely high relative attitude towards their chosen brand, 97.6 percent of the segment in all. Amazingly, almost 67 percent of those show signs of loyalty with the remaining 30 percent possessing spurious loyalty. Spurious loyal customers are already 'captured' but are not acting on their strong attitude towards their loyal airline. A customisable product can aid in capitalising on

these customers by allowing passengers to design a product which they find valuable, regardless of their current situation. With theoretically no reason to desire any other brand, share of wallet and retention will grow developing these Frill Seekers into intrinsically loyal customers.

The loyalty segmentation adapted from Dick and Basu's (1994) loyalty squares not only provides valuable insight into the value segments, but also validates these segments. The high consistency of loyalty within the segments demonstrates that these segments respond similarly to market stimuli.

7.1.3 Value Leadership Strategy

Throughout this dissertation, the value leadership strategy has incorporated findings from primary and secondary research. Value Leadership is defined as a relationship marketing strategy maximising customer value through mass-customisation. Value Leadership aims to drive transactions while strengthening the net present value of long-term relationships through CRM to systematically deliver maximum customer value and create intrinsic loyalty.

Customisation and personalisation are key tools in utilising CRM properly. Product customisation enhances retention and behavioural loyalty while personalised communication enhances satisfaction and attitudinal loyalty. Enabling product customisation allows customers to maximise perceived value to match their desired value. Co-creation also creates a sense of responsibility for received value since firms took direction from their explicit choices. Personalisation techniques such as experience follow-ups and customer facing issues management make the customer feel cared for and provide a sense of relationship with the brand.

With this knowledge in hand, airlines can seek to cultivate intrinsic loyalty through the Value Leadership developed in this research. The results support a shift from the commoditized low-cost, no-frills airline model to a low-cost, 'high-

value' model focusing on mass customization and personalisation through CRM technologies. Competing on value allows airlines to become more profitable in an unprofitable industry structure while strengthening the industry structure at the same time.

7.2 IMPLICATIONS

Over the years there have been many competitive strategies which aim to create maximum value for the customer and engender loyalty. While these strategies are well founded and insightful, the fact remains that little empirical research has been conducted to understand the underlying value and loyalty concepts on which these strategies are founded upon. Value Leadership has the potential to be a successful strategy for any airline, but is well suited for legacy airlines struggling to combat low cost carrier competition. Any company hoping to find an enduring place in its respective industry must choose a defined, narrow strategy focused on a segment of customers and concentrate on satisfying those customers needs better than any other firm (Treacy and Wiersema, 1995). What is needed to make relationship marketing work? It will take more than 'management;' it will take 'leadership.'

Knowing the role of value in creating loyalty and how loyalty contributes value to a firm, we now look to develop a strategy that maximizes the value creation process to create intrinsic loyalty. Value leadership uses mass-customization allowing each customer to configure the value proposition according to their needs. This process allows the customer to communicate with the firm through their involvement in the co-creation of the product.

Employees can be trained to interact and provide a different level of service for new customers than for experienced and loyal customers (Mittal and Katrichis, 2000).

7.2.1 Customisation

Winer (2001) notes that customisation goes beyond communication to co-create the product specifically for the individual. Unbundled airline product because only the seat allocation is demand sensitive. Price sensitivity for an in-flight meal or for IFE does not increase as time to departure approaches. If a customer is willing to purchase lounge access for his entire family, should the ancillary revenue be turned away by forcing the customer to purchase a bundled business class product and pay an insurmountably high fare for one additional product attribute? Has the cost of lost incremental revenue and the cost of damaged relationships been weighed against the revenue from protecting high-class products? Therefore none of the augmented products need to be dynamically priced with revenue management.

Value leadership does not require customization. Value for a specific target market can be maximized with a well-designed standard offering. Low-cost carriers have achieved value leadership over their legacy competitors by offering a slightly low quality product for a significantly lower price. Legacy carriers can pursue value leadership were customers prefer a high quality product while still remaining competitively priced relative to low-cost offerings. Even low-cost carriers will need to refine their business model in order to compete directly with other low cost carriers in the same markets.

Customization offers a great deal of potential in its ability to provide value leadership in a mass market. Competitive advantage is lost if competitors are able to offer more value in their offerings. Loyal customers lose their intrinsic motivation to remain loyal because the cost of remaining with the firm increases with each transaction. Unbundling and customization of the airline product maximizes value to the customer and provides a significant first-movers advantage. Strong relationships can created before competitors can emulate the innovation, resulting in high barriers to switching.

Unbundling and customizing the product / service offering provides opportunity to reduce cost as well as increase revenue through new sales and increased share of wallet or demanding a price premium from additional customers. Customization and focus on meeting consumer demands can move the focus off of price while providing managers with more pricing tactics (1995). Anderson and Narus discuss Baxter Healthcare's strategy to provide 'bonus dollars' to customers according to their sales volume to use in purchasing optional services (1995). This strategy would apply easily to the airline industry where airlines provide FFP miles which are declining in value.

In reviewing recent airlines strategies, three generic levels of product model innovation were identified: unbundling, menu pricing and a hybrid of the two.

7.2.2 Recent Developments in Airline Customisation

Some airlines, most notably Air Canada, have moved to a model of limited 'a la carte' pricing for features such as ticketing fees for reservations, onboard meals and curb side check-in as well as leg room, more desirable seats, extra luggage, IFE and early boarding (Taneja). These additional features allow airlines to push product up sell {2005 (Taneja, 2005)} and drive incremental revenue. Value added pricing naturally unbundles the product and allows for 'a la carte' upsell. This has the potential to generate more revenue than the current discount based pricing (Taneja).

Figure 72. Air Canada Product Bundle Selection.

Menu Pricing (LCC+ Model)

Some LCC's have begun adding perks to differentiate from the original low cost model while remaining profitable. Figure 73 illustrates two examples of menu pricing. easyJet sells a 'Speedy Boarding' feature which allows passengers priority access to seating onboard. easyLounges allow passengers to book access to an airport departure lounge through a separate website.

While not a true LCC, Air Canada provides passengers flying their low-fare product the option to customise their product.

Figure 73. Air Canada Checked Baggage Discount / EasyJet Speedy boarding feature.

However, it can be argued that those who more closely follow the original model remain more profitable (Taneja, 2005).   Taneja indicates that with the introduction of LCC's the air transport product has become less commoditized as more options in the market have forced legacy airlines to innovate their products as well {2005}.

Conventional airlines have begun to increase personalisation for their valued customers.   These include special reservations numbers, separate airport check-in, security and boarding queues, and preferential seating [economy plus].   These changes by legacy airlines still do not offer superior product

offerings. Examples of what consumers are looking for include rationalised business class pricing, more non-stop flights, and reasonable fees for ticket flexibility (Taneja, 2005). As Keith Alexander of the Washington Post reported in March 2005, some US Airways passengers were sending the airline tubes of lipstick to indicate that the airline was only making cosmetic changes. One US Airways customer was quoted as saying, "You can put lipstick on a pig, but it still stinks" (Alexander).

However, many legacy carriers are unable to quickly adapt (Taneja, 2005). Technology has allowed airlines to establish a direct relationship with customers, but also have lead to an increase in pricing transparency and the number of distribution channels. Both of these developments cut into airlines profits while complicating direct relationships with passengers. However, the largest hurdle to implementing change is often corporate culture. Aer Lingus, Air Canada, Air New Zealand and British Airways are examples of airlines that have all significantly changed their business models (2005).

7.3 LIMITATIONS AND FUTURE RESEARCH

This research chose a narrow focus in order to achieve relevant findings. The consumer market was the studied, however B2B considerations where too complex to address in the same study.

This research also chose to focus on corporate strategy and ignore research on industry structure. It was determined early on that airlines individually have little control over industry structure, but through corporate strategy can influence the marketplace.

Similarly, the research focused on the consumer controllable characteristics, but it is always important to keep in mind uncontrollable market environment factors which influence behaviour.

The scope of this research was limited to segmentation on value and loyalty attitudes and behaviours. Further research should also aim to include customer or segment level profitability analysis.

In closing, while this research was approached with a narrow focus, the depth of the research limited the ability to thoroughly study all of the points of interest identified. A detailed literature review was conducted outside of this dissertation and provides even more depth on the relationship between value and loyalty in the context of transactional and relational exchanges. There remains an extensive amount of future research to conclusively understand the attitudes and behaviours of consumers and customers in the airline market.

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APPENDIX A – Exploratory Laddering Survey

I am conducting research for my Ph.D. thesis at Cranfield University. The survey will only take approximately ten minutes. I am simply trying to understand how you view airline services making you the expert on this topic. There are no right or wrong answers. Many of the questions I ask may seem somewhat obvious and possibly even stupid. If you are willing to donate your time and opinions, I would greatly appreciate your assistance.

Please name the airline you chose to fly and two others you considered for this flight (if any).

CHOICE:
Alternate 1:
Alternate 2:

Business / Leisure

Situational Context
Absence of product/service
Negative laddering
Age-regression contrast
Third-person probe
Silence/Reiterate

Why did you choose this airline over the other two?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Accomplishment / Belonging / Self-Fulfillment / Self-Esteem / Family / Satisfaction / Security

What other variables (such as price, schedule, services, ect.) significantly influenced your

decision to select the airline of your choice for this flight?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Accomplishment / Belonging / Self-Fulfillment / Self-Esteem / Family / Satisfaction / Security

Airline: Flight: Date:

APPENDIX B – Primary Paper Questionnaire

THANK YOU FOR YOUR PARTICIPATION
We are pleased to have you help us with this survey today. We are trying to understand how you view airline services. There are no right or wrong answers. The survey takes about 10 minutes to complete. *It is very important that you thoroughly read the instructions and thoughtfully ANSWER each question.* Only complete surveys will be entered for the prize drawing. Your participation and input is significant and we greatly appreciate your taking the time to help us.

Please describe the situation of **TODAY'S FLIGHT.** If you did not purchase this flight yourself, answer those that apply.

Airline Name:	Fare in US dollars ($)	$ .00
		(It is very important that you provide an approximate fare)
Today's Origin Airport:	Today's Final Destination:	
Number of stops 0 1 2+	Roundtrip Ticket: YES NO	
Flexible Ticket: YES	NO	Refundable Ticket: YES	NO
Approx. travel time to airport (mins.)	Total in-flight travel time (hours)	

1. What is the main purpose of this flight? (Tick only one)
   - Business / Professional
   - Leisure / Recreation / Holiday
   - Convention / Conference
   - Visiting Friends / Relatives

2. What class of service is your ticket?
   - Economy
   - Premium Economy
   - Business
   - First

3. Inclusive packages: (Tick all that apply)
   - Hotel
   - Rental Car
   - Cruise
   - Tour

4. When searching for information before purchasing your ticket for this flight:

How many hours did you spend searching?	○ < 30 mins	○ .5 – 1 hour	○ 1-2 hours	○ 2-4 hours	○ 4+ hours	○ I didn't search
How far in advance did you purchase?	○ 1-3 days	○ 4-7 days	○ 8-21 days	○ 22-45 days	○ 46-90 days	○ 90+ days
Where did you purchase? (Tick only one)	○ Airline Call Center	○ Online Travel Website (i.e. Orbitz, Opodo, etc.)	○ Airline Website	○ Travel Agent	○ Tour Operator	○ Corporate Travel Manager ○ Corporate Intranet ○ Other _____
Who paid for this flight?	○ Myself	○ Business / Organization	○ Friend or Relative		○ Other	

Throughout the survey we will refer to the information in this section as 'your current international flight'.

5. The following is a list of things that people look for or want out of life. Please rate each element on how important it is to you in your daily life. *(1 being not important, 7 being most important)* Only circle 7 if the value is extremely important to you.

	Not Important		Somewhat Important			Extremely Important	
To be proud of who you are	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To succeed at what you want to do	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be admired by others and to receive recognition	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be safe and protected from misfortune and attack	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To have close companionships and intimate friendships	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To be accepted and needed by your family, friends or community	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To lead a pleasurable, happy life	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To find peace of mind and to make the best use of your talents	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
To lead an exciting, stimulating life	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

6. In the next section, please rate how *IMPORTANT* the following benefits were in purchasing today's international flight *(1 being not influential, 7 being most influential)*. If you did not purchase your ticket for this flight, assume you had purchased a ticket for an identical situation.

Circle "1" if the benefit is not important when flying. Circle "4" if the benefit is important but not required. Circle "7" if the benefit is a necessity when flying.

	Not Important		Somewhat Important			Very Important	
Minimizing travel time	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Comfortable while travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Earn frequent flier miles	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Productivity during travel	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Cared for by airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Saving money	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Relaxing, less stressful travel experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Overall satisfactory experience	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

7. In the next section, please rate how *INFLUENTIAL* the following statements were in purchasing today's international flight. If you did not purchase your ticket for this flight, assume you had purchased a ticket for an identical situation.

Circle "1" if you did not consider the element at all in your purchase evaluation. Circle "4" if you prefer the element, but it was not significant in your purchase choice. Circle "7" if the element was one of the key factors that made the difference in your purchase choice.

	Not Influential		Somewhat Influential			Most Influential	
Timing & frequency of flights	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Airline's overall customer service	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Perception of airline image	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Frequent Flier Program	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Arrival / departure airports	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Previous experience with airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ticket price	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Number of stops	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ease of booking in purchase process	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Seat comfort & legroom	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Airport lounge availability	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
In-Flight Entertainment	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Quality of in-flight meals	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Availability of upgrades	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Relationship with airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Ticket flexibility	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Good value for money	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Corporate discount	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

8. Based on your purchase, do you feel you received **VALUE** compared to the **next best option**?
(1 being received poor value, 7 being received exceptional value)

Received Poor Value   1   2   3   4   5   6   7   Received Exceptional Value

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9. How many years ago did you take your first commercial flights? (Circle the one most appropriate answer)

     <1   1-5   6-10   11-15   16-20   21-25   26+

10. Including today's flight, how many **flights** have you taken in the past **six months**? (Circle only one answer)

     1-2   3-5   6-11   12-18   19 +

Of theses flights, what percentage have been for business?

     0%   <25%   <50%   <75%   100%

11. How many Frequent Flyer programs have you earned miles for **international travel** on in the **last 12 months**?

   0   1   2   3   4 +

   Of theses Frequent Flyer programs, what is the highest status level you currently hold?

   Low   Mid   Upper   VIP   *N/A*

12. Indicate the **ONE** airline you fly most often for your international travel.

○ British Airways (BA)	○ American Airlines (AA)	○ Virgin Atlantic (VA)	○ Air India (AI)
○ Continental Airlines (CA)	○ United Airlines (UA)	○ Delta Airlines (DA)	○ KLM (KL)
○ Northwest Airlines (NW)	○ Kuwaiti Airways (KU)	○ Aer Lingus (EI)	○ Lufthansa (LF)
○ Cathay Pacific (CX)	○ Other _____	○ None, this is my first international flight	

13. Thinking about the airline you fly most for international travel, rate how strongly you agree / disagree with the following statements. **Circle "4" if you have not opinion.**

I fly this airline more often than other airlines because…

	Strongly Disagree		Neither Agree Nor Disagree				Strongly Agree
This airline provides the best product	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I prefer to fly on this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I am willing to pay a higher price to fly this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This is an honest airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I love flying this airline	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
I believe this airline has my needs in mind	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's product is unique compared to all other airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
This airline's experience is unique compared to all other airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

14. What percentage of your **international flights** do you fly with **this airline**?

   ○ less than 25%   ○ between 25% – 50%   ○ between 50% - 75%   ○ more than 75%

15. How many years have you flown on **international flights** with **this airline**?

   (Circle the one most appropriate answer)   <1   1-5   6-10   11-15   16-20   21-25   26+

16. Would you highly recommend this airline to a friend?   YES | NO

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17. How do you **view** the following airlines in terms of overall quality? If you have never flown on the airline, indicate what you think it would rate based on what you have heard about the airline.

	Among the Worst		Average			Among the Best	
United Airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Virgin Atlantic Airways	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Aer Lingus	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
British Airways	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○
Continental Airlines	1 ○	2 ○	3 ○	4 ○	5 ○	6 ○	7 ○

In the next section you will be asked to value how much more or less you would pay for a corresponding increase or decrease in benefits received. The questions lay out several different scenarios and we ask that you select **one price for each line.**

18. How much more or less would you *actually* pay for a ticket…

On United Airlines	-$150	-$75	-$25	$0	$25	$75	$150
On Virgin Atlantic Airways	-$150	-$75	-$25	$0	$25	$75	$150
On Aer Lingus	-$150	-$75	-$25	$0	$25	$75	$150
On Continental Airlines	-$150	-$75	-$25	$0	$25	$75	$150
On British Airways	-$150	-$75	-$25	$0	$25	$75	$150

19. How much more would you *actually* pay over a standard economy product for…

A Premium Economy product	$0	$50	$100	$250	$500	$1,000	$3,000
A Business Class product	$0	$100	$250	$500	$1,000	$3,000	$5,000
A First Class product	$0	$250	$500	$1,000	$3,000	$5,000	$10,000

20. How much more or less would you *actually* pay to fly from an airport that is…

15 minutes away	-$150	-$75	-$25	$0	$25	$75	$150
30 minutes away	-$150	-$75	-$25	$0	$25	$75	$150
45 minutes away	-$150	-$75	-$25	$0	$25	$75	$150
90 minutes away	-$150	-$75	-$25	$0	$25	$75	$150

21. How much more or less would you *actually* pay to arrive at your destination…

30 minutes earlier	$0	$10	$25	$75	$150	$250	$500
1 hour earlier	$0	$10	$25	$75	$150	$250	$500
2 hours earlier	$0	$10	$25	$75	$150	$250	$500
30 minutes later	$0	-$10	-$25	-$75	-$150	-$250	-$500
1 hour later	$0	-$10	-$25	-$75	-$150	-$250	-$500
2 hours later	$0	-$10	-$25	-$75	-$150	-$250	-$500

22. How much more or less would you *actually* pay to for a flight…

1 day later	-$150	-$75	-$25	$0	$25	$75	$150
3 days later	-$150	-$75	-$25	$0	$25	$75	$150
1 week later	-$150	-$75	-$25	$0	$25	$75	$150
1 day earlier	-$150	-$75	-$25	$0	$25	$75	$150
3 days earlier	-$150	-$75	-$25	$0	$25	$75	$150
1 week earlier	-$150	-$75	-$25	$0	$25	$75	$150

23. How much more or less would you *actually* pay to for a flight…

1 hour later	-$150	-$75	-$25	$0	$25	$75	$150
3 hours later	-$150	-$75	-$25	$0	$25	$75	$150
12 hours later	-$150	-$75	-$25	$0	$25	$75	$150
1 hour earlier	-$150	-$75	-$25	$0	$25	$75	$150
3 hours earlier	-$150	-$75	-$25	$0	$25	$75	$150
12 hours earlier	-$150	-$75	-$25	$0	$25	$75	$150

24. How much more would you *actually* pay for these products if they were not included with your flight…

Personal in-flight entertainment / DVD player	$0	$5	$10	$25	$40	$60	$100
Gourmet quality meal	$0	$5	$10	$25	$40	$60	$100
Airport business / family lounge access	$0	$5	$10	$25	$40	$60	$100
A flexible / refundable ticket	$0	$5	$10	$25	$40	$60	$100
Car & Driver pick-up / drop-off service	$0	$5	$10	$25	$40	$60	$100
Meet & Greet escort through airport	$0	$5	$10	$25	$40	$60	$100
Onboard internet access	$0	$5	$10	$25	$40	$60	$100

Be sure to include your email address for a chance to win two free business class tickets between New York City and London.

THAT'S IT. MANY THANKS FOR YOUR TIME AND EFFORT. IT IS GREATLY APPRECIATED.