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An Exploratory Study of How Decisions Are Made in the Yield Management Environment of Four Star Dublin Hotels

Tony Kiely

A thesis presented in partial fulfillment of the requirements of the MSc in Strategic Management

Presented to the Dublin Institute of Technology, Aungier Street, Dublin.

Submitted to Mr Tony Hughes

September 2004

Declaration

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Abstract

Yield management in the hotel industry has been described as a method of profitably managing fixed capacity. A critical element of yield management is the decision strategy employed as this determines the degree to which optimum solutions are generated. Recent research has indicated that the use of technology assisted decision optimising models (the management science model) would greatly improve the optimisation of decisions by minimising the need to employ guesswork in achieving optimum solutions.

Despite this assurance, yield management remains couched in uncertainty through being inextricably associated with forecasting future demand for a perishable product in an increasingly competitive environment. The consequential pressures on the decision maker have afforded the opportunity for human idiosyncrasies to play a significant role in the decision making process. The primary objective of this study, therefore, is to gain an insight into how decisions are made in the yield management environment of the hospitality industry.

The study reviews current literature on decision strategies, exploring in particular models of decision making, heuristics, biases and psychodynamic forces associated with unconscious decision making, and their respective influences on decision outcomes. The methodology chosen to elicit the data involved the use of a non-positivistic paradigm, incorporating an interpretative approach. The strategy employed within this methodology utilised phenomenological approaches to interviewing respondents and analysing data. Specific attention was also given to developing a methodology to assist the author in accessing the unconscious.

The findings of this research reveal that the management science model of decision making has been disregarded in favour of decision strategies, wherein, according to the respondents, human intervention plays a more significant role. The findings also suggest that this human intervention has actively facilitated, and has simultaneously been facilitated by the potential for decision makers to fall into psychological traps, and make systematically biased errors. The research also concludes that the unconscious forces impacting on decision makers forces them to rationalise the irrational, thus suggesting that conscious and unconscious practices, with regard to decision making strategies, are inextricably linked.

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Chapter 1
Introduction

Yield management, in the hotel industry, is defined as a method of profitably managing fixed capacity (Lieberman, 2003). Yield management fundamentally requires hotels to make decisions on the number of rooms that should be allocated, at differentially prescribed rates, to segmented markets, within an ever narrowing time frame, in order to maximise revenue (Kimes, 1989; Kimes & Chase, 1998). However, the decision process outlined above is neither clinical nor simple. Intensive growth in business competition, acute price sensitivity of customers and increasing pressure from shareholders has intensified the need for hoteliers to maximise revenue. These factors, coupled with increasing time and data overload pressures has resulted in computerised yield management systems being promoted as a rational solution to the problem of maximising revenue generation in an increasingly hostile market (Johns, 2000).

The pressure to optimise revenue generation decisions is further complicated by the high levels of uncertainty facing the decision maker (Appendix 1). This uncertainty is closely associated with the need to forecast future demand on specific dates, at optimum pricing levels, under fluctuating market conditions. Although this complex mix of variables often appears "manageable", it can promote a fear of, or inability to examine all possible alternatives. These factors in turn, drive the decision maker into psychological traps, or the comfort zone offered by familiar patterns of recognition (Bazerman, 2004; Klein, Orasnu, Calderwood & Zsambok, 1993; Slovic, Finnucane, Peters & MacGregor, 2002).

Additionally, decision uncertainty inevitably leads to risk-laden trade-offs, where balance needs to be achieved between selling rooms at the highest rate (risking non-achievement of occupancy targets), and selling rooms at the lowest rate (risking the sub-optimisation of revenue generation). Accordingly, in a market environment, imbued with uncertainty, where profit maximisation has become increasingly significant, it is

interesting to speculate if hotels have embraced mathematical models of decision making in the search for optimum yield management solutions.

Yield management systems (mathematical models of decision making) take the guesswork out of the room management decision process (Kimes, 1997; Orkin, 1988; Lieberman, 2003), by improving the capability of delivering optimum solutions. The management science decision model (Appendix 2) uses statistical analysis from multiple relevant data reports to either make the decision (a dynamic model), or to offer the best option for selection by the decision maker (a semi-static decision support model). These yield management systems enable parameters to be expressed and ultimately tackled in a structured way by using decision rules which detail the inventory levels to be made available, the rates and cost factors associated with this inventory, and the market segments within which these rules will apply (Sumner & Sellers, 1996; Cho & Connolly, 1996; Lucy, 1995). Application of these rules, according to Jauncey, Mitchell & Slamet (1995), will lead to consistent maximisation of room revenue, through the manipulation of room rates in a structured fashion, while simultaneously taking forecasted patterns of demand into account.

Additional variables (Appendix 3) including competitor price analysis, market segment data, levels of forecasted demand, cancellation information, rules for restricting the sale of discounted rooms and price sensitivity data are inputted into the decision model from the hotel property management system. Thereafter, the system's task is to apply algebraic and statistical techniques to the analysis of this information.

In order to deliver optimum solutions, hotels require efficient and effective information systems that instantly communicate changes in room availability and price to decentralised decision makers. The seamless updating of room price and availability status is critical in minimising the risk of selling rooms at a sub-optimised rate, through reservations staff being unaware of the changing dynamic (Kimes, 1997; Johns, 2000).

Combinations of the above factors continuously alter the yield management decision context, making the optimum solution a moving target for the decision maker. Thus, the complex combination of moving variables invites the assistance of a management science solution to this complex decision problem.

Despite the assurances offered by this unemotional decision process, the yield management decision environment is further complicated by human factors associated with the seductive influences of heuristics, biases and unconscious forces. Herbig, Milewicz & Golden (1993) argue that pressures associated with forecasting may lead to practitioners becoming vulnerable to subjective biases and fears that negatively impact on the accuracy of the forecast, and suggest that Baysean assignment of judgement probabilities should be utilised to eliminate that pressure.

But what if the presence of this optimising tool is itself a source of unconscious behaviour? And what if these very same forces that drive the need for profit maximisation and optimisation also impact consciously and unconsciously on the individual decision maker?

A number of human idiosyncrasies that influence decision behaviour within the yield management process are outlined by Yeoman & Ingold (2000) and include ethical concerns about overbooking (concern for the customer outweighing profit maximisation), pressure to achieve a budget target, and personal pressures associated with performance-linked incentive payments. Avoidance of internal conflict, the individual's need to satisfy the group decision goal, and career promotion issues additionally influence decision behaviour. In addition to these factors, greater weight being given to qualitative thinking over quantitative thinking may influence the eventual decision outcome, through the promotion of solutions that are made to appear "acceptable" via value biases and delusions of success (Tversky, Sattath & Slovic, 1988; Sloman, 2002). Furthermore, the individual's perception of their own role and it's relevance to the process may substantially influence decision behaviour.

These behavioural shortcomings are encapsulated in repeated scenarios, wherein hotels, having a fixed number of rooms that are only available on a particular night (room perishability), places a fundamental pressure on the decision maker, as unsold rooms on a "particular" night, represent revenue lost forever. Conversely, where rooms are available for sale in advance, the decision maker is faced with a choice between selling at a lower rate to secure the booking, or waiting until closer to the specific date and achieving a higher price for the room (Lieberman, 1993).

Although the Internet has become a preferred booking conduit for many guests, it may become a poisoned chalice for the incentivised decision maker. Indeed, despite recent research, suggesting that transferring a substantial amount of room booking activity to the Internet will guarantee significant competitive advantage and generate higher revenues (Noone & Andrews, 1999; Marmorstein, Rossomme, & Sarel, 2003), the majority of hotels have not attempted to sophisticate their yield management techniques. Instead they have resorted to indiscriminate price reductions, based on simplistic timing rules that do not require prudent communication efforts. This reluctance to embrace technology has been identified by Yeoman & Ingold (2000), who suggest that many hotels still input information based on historical demand, associated with particular customer market segments, attributable to specific times of the year, rather than using a dynamic pricing strategy, as offered by a computerised yield management system.

The conundrum, therefore, faced by the hotel sector is how to maximise revenue, while at the same time offering a product which is competitively priced and satisfies price-sensitive customers. If, as suggested, revenue maximisation is a key success factor for a hotel, it would appear that optimised yield management decisions, capable of being made in a rational-normative way by the use of technology assisted systems, can accentuate this requirement. However, while this seems like the ideal solution to a decision problem, McMahon-Beattie & Donaghy (1999) view yield management systems as containing inherent heuristical flaws through their "predicated" allocation of available bedroom capacity to "predetermined" market segments.

So how do yield management decision makers try to minimise the uncertainty that impacts on the decision process? Do they gravitate towards technology based mathematical models, or do they fall prey to urges and comfort zones where subsidiary factors, such as unconscious forces associated with the Freudian model, may influence decision design? Do heuristics and biases, as proposed by Tversky & Kahneman (1974) improve or impede the decision outcome, and even create a dependency relationship between conscious and unconscious decision making.

Previous research into optimum decision models of decision making in hospitality yield management have proven inconclusive (Gore, 1995). Findings from this research indicates a preference among for either of two behaviourist decision models, namely the rational normative model, where options are individually weighted, the best option being selected, and the bounded rational model, where there is an acknowledgement that the capacity of the human mind is limited, resulting in rules of thumb (heuristics) determining the decision process (Gore, 1995; Yeoman & Ingold, 2000).

However, little research appears to have been carried out into factors that may inhibit the use of particular models of decision making. The growing justification for the unquestioned acceptance of the mathematical management science rational model of decision making is finely counterbalanced by impeding factors that militate against its acceptance. This dichotomy of opinion has intrigued this researcher and has prompted the following research question;

How are decisions made, in hospitality yield management environments?

The following chapters will attempt to address this question. Chapter two will constitute a literature review. This literature review will address the secondary research on decision making under three headings, namely, (i) the decision models utilised in decision making, (ii) the influence of bias and heuristics on the decision making process and (iii) the role of the unconscious in decision making. Chapter three will explore and

critique a range of methodologies that might best address the extraction the information to answer the research question. Implicit in this section will be a determination of the researcher's paradigmatic positioning and an attempt to develop a methodology for hearing the psychodynamic (unconscious) discourse. A presentation of the research findings and subsequent analysis is detailed in chapter four. Finally, conclusions and recommendations will be presented in chapter five.

Chapter 2
Literature Review

2.0 Introduction

This chapter provides a discussion on a number of models of decision making and the associated factors impacting on the decision making process. In order to answer the research question, this chapter is divided into three sections. The first section addresses conscious decision making and incorporates the identification and critique of decision models associated with yield management decision making. Following on from this, the next section explores the influence of heuristics and biases (conscious and unconscious) on the decision making process and the final section examines a range of psychodynamic factors that contribute to, and influence unconscious decision making.

2.1 Conscious Decision Making

Descartes' famous contention, "*Cogito ergo sum*" ("I think, therefore, I am") stands at the head of a philosophy that sees the conscious process of observation, analysis and logic as critical instruments in search of objective truth. Descartes views the self primarily as the foundation of all knowledge and experience, through which the world can be controlled and ordered into a sense-making organism. This emphasis of the self, as the origin of all experience and knowledge, leads to doubt being cast on everything that cannot be verified from first principles (Mansfield, 2000). An interesting counterpoint to Descartes' contention, advocated by Lacan (1977), states, "Cogito ergo sum, ubi cogito, ibi non sum" (Where I think, "I think, therefore, I am", that is where I am not) will be explored in the section addressing unconscious behaviour.

Theorists belonging to the Enlightment Period of the sixteenth and seventeenth centuries (Descartes, Kant, and to a lesser extent Rousseau) reject the idea of the individual as a completely self-contained and autonomous being (Mansfield, 2000). Kant (1929) argues that before we perceive anything some conscious process must be in place to do the perceiving, thus ensuring that every observation must be channelled through the "I."

Applying Kantean theory to decision making would suggest that before one makes any decision, however simple, the self thinks. Rousseau (1953), on the other hand, in championing the "individuality" of the individual emphasises the uniqueness, autonomy and absolute governing freedom of individual experience, but concedes that humankind is born into a world where the individual is preyed upon and entrapped by society. Lacan (1949) subscribes to this view in his mirror phase (Leader & Groves, 2000), where the "prematurely born" individual is trapped in an image that is alien to him, and where true freedom and fulfilment can only be gained by adhering to social pressures, and creating a false appearance of coherence and completeness in the process.

In agreeing with this theory, Foucault (1979) argues that as individuals we become trapped by the conviction that autonomy of the self, and its resultant freedoms are our most precious possessions, but that these actually function to imprison us in a set of practices and routines that are determined for, rather than by us. Indeed, Foucault (1979, p.30) reverses the Christian platitude to say that "*the soul is the prison of the body.*" Foucault, in using the analogy of the panoptican (a glass covered prison) concludes that prisoners (the individual), not knowing that they are being observed, become responsible for "appearing" to behave responsibly, and that this is typical of the processes of subjectivisation that govern modern life.

This dichotomy between true autonomy and the requirement to conform, results in the emergence of a conflict between the attempt to grasp individual experience as a totality, and the belief that its essence and truth is only found in conscious processes. In terms of decision making, this contradiction has provided a space for the development of unconscious theory, which directly challenges Descartes, Kant, and to a lesser extent, Rousseau, (who attempted to keep the doors to emotion and impulse open). Where decision makers seek to structure themselves solely on their awareness of the world around them, they can only do so by suppressing those parts of their subjectivity that are inconsistent, irrational, obscure or unknown (Mansfield, 2000).

So, what are the key factors influencing the decision making process? The following sections will explore this conundrum, starting with a description and critique of a number of behaviourist decision models.

2.2 Decision Models.

Yield management is predicated on large volumes of programmed decisions, taken in an environment of temporal uncertainty, that relate to price setting, room capacity management and market segmentation (Yeoman & Ingold, 2000). This process of programmed decision making is viewed by Rosenfeld & Wilson (1999), as encoding arguments and rationalisations in a very precise and predictable form, usually through a set of decision steps to be followed. An alternative view, argued by Davis & Olsen (1985), suggests that although structured programmable decisions can be completely automated, provided the requisite information to apply the decision rule is available, human review is generally considered necessary. The above divergence of opinion immediately suggests a conflict between the desire to optimise decisions and the degree of trust in systems that can execute these decisions.

A number of decision models exist that endeavour to explicate the decision making process. Daft (2001) adopts a positivistic approach to decision making, defining the process in terms of a broad number of evaluation categories including:

- Environments where decisions are rationally constructed, through options being examined and systematically evaluated before acceptance of an optimal solution (The rational/normative model).
- Decision processes which utilise technology controlled mathematical processes to deliver the optimal solution (management science).
- Environments in which problems and solutions co-exist in a chaotic environment and where outcomes result from chance encounters between problems, participants, choices and solutions (The garbage can model).
- Environments where the decision maker's experience and judgement influence choice (bounded rationality)

These models are now critiqued both in terms of secondary research relating to the model and also in terms of how they are associated with yield management decision making in the hospitality and broader industries.

2.2.1 The Rational/Normative Model of Decision Making

This model incorporates the need for a systematic analysis of the problem and an objective evaluation of options, resulting in the selection and implementation of the optimum solution. While this may prove difficult to achieve in an uncertain and complex environment, its value lies in forcing managers to think more clearly and rationally about the decisions they have to take (March, 1994). Assumptions contained within this model include the need to maximise utility where constraints are environmental or external and where information is taken for granted and certain (Glazer Stecker & Winer, 1992).

While agreeing that the rational-normative model has the potential to provide optimum forecasting solutions for yield management decision makers, Yeoman & Ingold (2000) propose, in addition, that it enables objective, cost-benefit analysis of suggested options. An inherent implication in this argument is that pure rational choice assumes the existence of a common set of preferences, whose alternatives and consequences are defined by the environment, and that perfect knowledge of all alternatives and their consequences also exists.

Criticism of the rational/normative model of decision making is not uncommon. Gore (1995) argues that the model is not relevant to the real world of yield management decision making, where extenuating factors such as decision time pressure, dichotomies between qualitative and quantitative measures of success, political factors and the existence of “group-think” conspire to impede the decision making process. This results in the model being more useful in showing how decisions should be made, rather than how they are actually made (Jennings & Wattam, 1994).

Perceptions of decision making in organisations often associate "action" with "rational choice." Depending on contextual factors, "rationality" is alternatively defined in terms of being "intelligent" and "successful," or "coldly materialistic" and "not telling the full story," imputing either a label of "sanity" or "unacceptability" to the decision making process, depending on one's perspective (March, 1994). This use of language to signify the meaning or universally accepted context of the model, also determines its acceptability, associating it, therefore, with Lacan's (1949) mirror phase theory. This perception suggests the possibility of unconscious impacts on decision making, either through a rationalising rejection of decision data, or alternatively, through an unquestioning support for decision enabling data.

An interesting alignment with this perspective, proposed by Glazer et al (1992), argues quite strongly that the mere presence of additional information may have dysfunctional consequences, even where decision makers process the information correctly. This "local rationality" phenomenon contends that although decision makers may focus on "chunks of information" that assist in the delivery of a pattern recognised decision, the presence of "additional information" will have a "seductive" or distracting effect, leading managers to seek out alternative decision making components. This practice ultimately results in poorer decisions if these additional components are not those most closely tied to success.

2.2.2 Management Science and Technology in Decision Making

Management science tools are traditionally seen as having the greatest application in the area of forecasting (Bartol & Martin, 1998). However, scientific models have conferred significant benefit in a number of other areas including process measurement, strategy formulation, shelf space optimisation, inventory replenishment, efficient and effective allocation of skilled workers within flexible manufacturing systems, co-ordinating contracts in decentralised supply chains, and optimising yield management decision making, using models adapted from queuing theory, linear programming, network flow models, multi criteria decision making and simulation (Hahn, 2003).

The inherent mathematical algorithm in the management science model can contain thousands of variables, each one relevant in some way to the ultimate outcome. Clark & Scott (1997) and Bohan & Dillane (2001) argue that advances in computing capabilities have increased the scope for technological support and further extended the potential capabilities of the management science/operational research toolkit. These advances lessen the risk involved in successfully forecasting the probability of a future event, a practice which, from a decision making point of view, is traditionally filled with uncertainty and fraught with anxiety. The real value of the management science model, therefore, lies in its ability to extract decision pathways from a maze of uncertainty that is increasingly being attributed to information overload.

Empirical evidence shows that where organisations adapt management science principles, a corresponding increase in customer service and revenue generation occurs. Subramanian, Scheff, Quillinan, Wiper, & Marsden, (1994) report that the use of linear programming at Delta Airlines to assist in airline fleet assignment for over 2,500 daily flights is estimated to have saved the company over $300 million over a three year period. The development of quantitative models within yield management systems, suggests Wisniewski (1997), is estimated to have contributed about $500 million to American Airlines on an annual basis. In terms of customer service, Kentucky Fried Chicken reduced waiting times for customers by fifty per cent, and also improved productivity, sales and profit through the application of management science techniques (Apte & Reynolds, 1995).

The model is closely aligned with the rational/normative model of decision making. However, an additional advantage associated with the management science model is that it can speedily and accurately solve problems that have too many explicit variables for human processing. Management science decision tools have a significant application in yield management forecasting due to their innate ability to comprehensively aggregate historical data and present it in a useable format (Kimes, 1989; Rosenfeld & Wilson, 1999). In arguing the case for management science solutions to forecasting problems,

Wright (2000) illustrates how quickly scenarios can change, evidenced by the growing trend towards customer relationship management. The pull coming from ever demanding and proactive customers, and the push from increasingly sophisticated technology, coupled with increasing globalisation, make predictable futures more and more unlikely and forces organisations to gather and process increasing amounts of customer data within narrower market segments.

Wisniewski (1997) argues that information overload, caused by a combination of the increasing pace of competition and continual improvements in telecommunications, strains the information capacity of managers and this ultimately diminishes their ability to assess, analyse or react to problems or opportunities. However, while accurate forecasting enhances an organisation's performance, inaccurate forecasting can seriously debilitate an organisation, in which practitioner bias may become a factor impacting negatively on the accuracy of forecasts (Herbig et al, 1993). The authors argue that the use of management science techniques that include scenario analysis and the interpretation and assignment of judgement probabilities (Baysean rules), would constitute an effective tool in counterbalancing the negative effects of bias and elaborate unconscious rationalisations embedded in forecasting.

Developments in technology have changed how systems have been able to manipulate data and assist in decision making. This suggests that the availability of user friendly technology should have propelled decision making from an intuitive model, with a greater emphasis on human intervention, (Gore 1995) to a more rational model that improves decision making effectiveness through the elimination of guesswork (Marakas 2003). Applications of this evolution are common in research literature and incorporate a wide industry usage. Lewis & Shoemaker (1997) suggest that SPSS systems have addressed the issue of consumer price sensitivity, removing the uncertainty of gut feeling or trial and error from the decision process. Modern software packages greatly improve capacity management decisions through negating the tendency to disregard information which may be critical to the decision making process (Orkin 1998).

Scenario analysis afforded by yield management computer technology also maximises efficiency through the involvement of fewer intermediaries and faster decision making due to the universal and instant access to data and the creation of horizontal relationships (Lieberman, 1993; Brown & Pattinson, 1995).

However, research also illustrates that there are potential downsides to the use of technology. Donaghy et al (1997) suggest that the hospitality industry has been slow to adapt to technology citing the unavailability of integrated software and the requirement for "multiple technologies" as creating a bias against using technology. The perception of a "loss of control" is identified by Carroll & Siguaw (2003) as militating against the acceptance of technology in the decision making process. They argue that the global shift to increased numbers of distribution channels, with their complex interconnectivities, can create the feeling of a loss of control on the part of the decision maker and that this in turn creates a mental block against utilising the technology.

This point is developed by Davis & Olsen (1985) who argue that senior managers, who have requested information from subordinates, subsequently use a non-routine form of decision making, which in turn leads to many management decisions and the environment in which they are taking place becoming diffuse and unstructured.

Interestingly, Gehrlein & Fishburn (1976) feel that the inability to handle large volumes of information is not an exclusively human weakness. In describing information overload, they contend that mechanical systems are themselves prone to overload, due in part to the inability of the system to detect all ordered pairs in an underlying linear order, and that this perception on the part of decision maker, has implications for the level of trust in a mathematical system.

2.2.3 Logical Incrementalism

Logical Incrementalism, although associated with the conscious decision making process, moves away from the logical/normativism to a model in which human influence

becomes more evident. Quinn (1978) proposes a model where decision making takes place through a series of small proactive steps, where ongoing evaluation, choice, adaptivity and flexibility are implicit in the development of the solution. This model acts to select the most valuable alternative from a number of variables at a particular time, through a process of cycling, recycling and reformulation of information and alternatives, which enable decisions to be made in a halting, incremental, non-linear way.

However, there are also criticisms of this model. Yeoman et al (2000) suggest that the use of logical incrementalism may lead to decision making by exception, where the full range of alternative solutions are not considered. What is considered are those alternatives that do not differ substantially from the status quo. This, according to Miller, Hickson, & Wilson, (1996), may substantively result in incrementalism becoming a formula for inertia, in which the existence of a central reservations system and departmental responsibility for profit or loss, collectively mitigate against the success of Quinn's (1978) model. The resultant scenario promotes the search for "good enough" solutions within which, a corresponding minimisation of the willingness to evaluate risk resides.

2.2.4 The Garbage Can Model of Decision Making

The garbage can model offers an interesting and alternative perspective on the process of organisational decision making. The model can be used to explain the pattern of decision-making in environments of high uncertainty, where decisions are typically characterised by poor goal definition and ambiguity, and where problems and solutions co-exist. Poorly understood technology and limited employee integration with problems also define its use (Cohen, March & Olsen, 1972). What differentiates it from other models is that it offers the possibility of dealing with patterns of multiple decisions within organisations rather than focussing on the processing of a single decision. The model is, therefore, appropriate to decision environments that appear chaotic, due

mainly due to their close association with the phenomenon of uncertainty (Cohen et al, 1972).

The key point in this model is that problems and solutions are attached both to choices and to each other, not because of any means-end linkage, but because of their temporal proximity. In addition, the model appears to deviate from perceived constraints on decision making that have traditionally been imposed by vertical hierarchies of authority and the constraining effect of bureaucratic decision rules. Poorly understood and unclear technology, characterised by the absence of explicit databases that apply to decisions, suggests that cause and effect relationships are difficult to identify and enable the use of this model. In addition, time constraints on individuals forces participation in any given decision to be fluid and limited (Daft, 2001). These factors contribute to the model being associated with the bounded rationality model of decision making, in which the extent of the evaluation of available options is limited by information overload.

Although decision makers are involved with one choice opportunity at any one time, they also constantly move from one choice opportunity to another (March, 1994). This unique characteristic of the model proposes that the decision process is not a sequence of steps that begins with a problem and ends with a solution, but rather that decisions are fundamentally the outcome of independent streams of solutions and problems, co-existing and interacting within the organisation.

A potential flaw in the garbage can model of decision making is that it affords a form of autonomy to the decision maker. Individuals within the organisation may push for the adoption of their solution regardless of the existence of a problem. Existing problems may not be solved by the adoption of a particular solution. In addition, problems and solutions may be valued and perceived quite differently by different participants in the decision making process (March, 1994). Although “randomness” is a defining characteristic of the mode, enabling choice opportunities to be matched with problems, individuals can also vision choice opportunities in terms of their own personal desire for

prestige and success. This unstructured approach to the decision process affords the opportunity for the implementation of the super-ordinate goals of the individual.

2.2.5 Boundedly Rational Decision Making

Simon (1972) defines rationality as behaviour appropriate to the achievement of goals. This practice coined the phrase "satisficing of objectives," which essentially removes the need for the decision maker to evaluate all options. The requirement to be "rational" is bounded or limited, therefore, by the enormous decision complexity faced by managers, suggesting that there is a realistic limit to how "rational" managers can be. The resultant human intuition, according to Daft (2001), is not arbitrary or irrational, but is based on years of practice and hands-on experience often stored in the subconscious. The overarching proposition, therefore, embedded in this decision model, is that in situations involving ambiguity, previous experience and judgement are used to make the "correct" decision (Appendix 4).

While bounded rationality is a departure from the pure form of the rational model, it still fits within the framework of conscious decision making as described earlier. Hospitality research indicates that relatively few decisions are made using the pure rational analytical process. "Pattern recognitions" of previously recognised situations and the reliance on a number of guiding principles or heuristical rules of thumb are used to reduce the complexity of assessing probabilities to simple judgemental operations (Tversky & Kahneman, 1974; Klein et al, 1993). This practice is viewed as being appropriate to the decision making process.

However, other theorists are more critical of the bounded rationality model of decision making. March (1994) suggests that in the search for a "good enough" solution, decision makers identify a number of strategies to overcome cognitive constraints. These strategies include "editing" problems before entering into the choice process. This results in the loss of the holistic view by reducing complex problems to their

component parts, and framing the decision to be taken within the decision maker's own beliefs of what constitutes the problem and the solution.

Furthermore, this form of hierarchical decision making may conflict with the team decision making goal of yield management (Yeoman et al, 2000), in which the evolution of group-think results in lack of commitment to the search for an optimum decision, and promotes instead the search for limited information to make "satisficing" decisions. The value of these "satisficing" practices is explored by Arnold, Robertson & Cooper (1991). Their Subjective Expected Utility Theory concludes that individuals often make decisions on the basis of expected outcomes resulting in the team having a high level of agreement with the decision taken, while simultaneously experiencing low levels of morale.

2.3 Heuristics and Biases

Before discussing the effects of heuristics and biases on the decision making process, it is necessary to briefly profile the authors of this theory and its significance for understanding the decision making process. Daniel Kahneman is Professor of Psychology at the University of British Columbia and Amos Tversky was Professor of Psychology at Stanford University, until his untimely death in 1996. What makes their theories most significant and radical is that they apply human behaviour in the guise of heuristics and biases to judgement and decision making under conditions of uncertainty. Their work skilfully integrates the causal relationships between clinical and statistical prediction, the subjective probability associated with the Bayesean paradigm and both the positive and negative significance of rules of thumb in decision making.

In October 2002, Kahneman was awarded the Nobel Memorial Prize in Economic Sciences for his groundbreaking work in applying psychological insights to economic theory, particularly in areas of judgement and decision making under uncertainty. As the Royal Swedish Academy of Sciences does not award prizes posthumously, Kahneman, when receiving the award, poignantly acknowledged his colleague

Tversky's contribution to the research, stating "Certainly, we would have gotten this award together."

In their seminal paper on Prospect Theory (1979), Kahneman & Tversky's findings counter traditional assumptions of economic theory. Their theory proposes that people make rational choices based on their self-interest, evidenced when they frequently fail to fully analyse situations in which they must make complex judgements. Thus, rather than economists making their decisions in a logical, unemotional manner, the authors found that decisions were based on factors such as fairness, vividness of past events, how the problem was numerically framed and the individual's aversion to loss (Kahneman & Tversky, 1979).

Heuristics are defined as pattern recognitions or rules of thumb that become useful and effective when providing hard pressed managers with simple ways of dealing with complex decisions. However, despite their efficacy, a key drawback of their usage involves individuals being frequently unaware that they are dependent on them. This dependence leads to decision makers making systematically biased mistakes, indicating the presence of unconscious traps in decision making, wherein the instrumental rationality of human actions in serving egotistical ends, enables rational choice to fall prey to an individualistic bias (Wrong, 1994; Bazerman, 2004).

In addition, an inability or unwillingness to learn from mistakes can seduce the decision maker into repetitious behaviour. Nutt (2002) argues that the practice of rushing to judgement because of time or peer pressures, ensnares unsuspecting managers in psychological traps, through limiting the search for remedies, and consolidates the existing fear of moving away from the tangible to the unknown. What makes these traps so dangerous is their invisibility, and within this "invisibility" behavioural catalyst such as "misuse of evaluation," forces decision makers to take a defensive posture by collecting information that "justifies" the decision that they have already taken (Hammond, Keeney, & Raiffa 1999).

The failure to learn by ignoring ethical questions, or through escalating commitment to proven errors by failing to objectively reflect on past decisions, also suggests that decision makers will repeatedly stumble down the same failure prone path (Bazerman, 2004). This inability or unwillingness to free oneself from past decisions is attributable, according to Hammond et al (1999), to a conscious or unconscious inability to admit to a mistake.

Judgemental heuristics have traditionally been classified under three main headings: (i) the availability heuristic, (ii) the anchoring and adjustment heuristic and (iii) the representativeness heuristic. More recent research into heuristics and biases (Sloman, 2002; Rozin & Nemeroff, 2002 and Slovic, Finnucane, Peters & MacGregor, 2002), has focussed on such areas as the influence of "emotion" and "feelings" on the decision process, and the automaticity of decision making as exhibited in theories of sympathetic magical thinking and the affect heuristic.

2.3.1 Availability

Availability is described as "*the tendency to judge the likelihood of an occurrence on the basis of the extent to which other like instances or occurrences can be recalled"* (Bartol & Martin, 1998, p153). The authors ask the following question to illustrate this heuristic:

"In a typical English text, does the letter "K" appear more often as the first letter in a word, or as the third letter?"

People generally judge that the letter "K" is more likely to be the first letter in a word, even though the letter is almost twice as likely to appear in the third position. They do this because of a bias called availability. In this case, it is usually easier to recall word beginning with the letter "K" than words in which "K" is the third letter. Availability shows up in the tendency to overestimate the likelihood of deaths due to vividly imaginable cause, such as, airplane accidents, fires and murder, and to underestimate more common, but less spectacular causes, such as emphysema and stroke.

Organisational examples of this heuristic are seen where managers base their annual performance appraisals on the most recent and easily recalled performance of subordinates.

Decision makers often experience difficulty in extracting diagnostic information from the signs and signals attracting their attention. This makes them prone to using information that is readily available, while overlooking information that may be more diagnostic (Nutt, 1999). This, the author suggests, is often done spontaneously and to a large extent indiscriminately, without any rules to guide what is and what is not accepted as fact. For the most part, this occurs where managers avoid the use of statistical information or mathematical models in their decision making. Tversky & Kahneman (1973) propose that decision makers assess the frequency, probability, or likely causes of an event by the degree to which instances or occurrences of that event are already "available" in the memory.

While this "vividness" can make the availability heuristic a valuable tool in managerial decision making, the heuristic can also be fallible because the availability of information is also affected by factors unrelated to the objective frequency of the judged event, such as when the mind unconsciously blocks out undesired information which is "vivid" for all the wrong reasons (Plous, 1993;Bazerman, 2004).

Salience, according to Kahneman, Sloman & Tversky (2001), influences the retrievability of an instance, which suggests that personal experience of the success or failure of a decision is more significant than hearing or reading about it. This determinant of decision intentionality is also explored by Slovic et al (2002) who suggest, through their writing on the affect heuristic, that an initial conscious or unconscious feeling of "goodness" or "badness" attributes a positive or negative quality to a stimulus, and that this automatic categorisation of the stimulus in turn influences decision making. This phenomenon is also categorised in the laws of sympathetic magic (Rozin & Nemeroff 2002), in which the law of similarity (appearance equals reality),

and the law of contagion (once in contact, always in contact) identify the influence of human feelings towards a range of options as the ultimate determinants of decision choice. This proposal, therefore, suggests that individuals will normally seek out the comfort zone of familiarity rather than engage in objective analysis of available options.

2.3.2 Anchoring and Adjustment

Anchoring and adjustment is defined as *"the tendency to be influenced by an initial figure even when the information is largely irrelevant"* (Bartol & Martin, 1998, p153).

The anchoring and adjustment heuristic proposes that decision makers make assessments by starting from an initial value and subsequently adjusting this value to yield a final position. This can lead to decision makers being drawn to available information due to a combination of the "anchoring" of personal experience and selective perception of solutions (Plous, 1993;Bazerman, 2004). A common anchor impacting on forecasters is the record of past events or trends, where according to Yeoman et al (2000) yield managers, when giving their opinions on a forecasting option based on their previous "experience," can result in anchoring on the part of other members of the yield management team.

Anchoring often prejudices thinking in that it inhibits the making of good decisions. The anchoring trap permits this through an over reliance on one's first thoughts which, subsequently establish the terms on which a decision will be made. Again this is associated with both the affect heuristic (Slovic et al, 2002) and the laws of sympathetic magic (Rozin et al, 2002).

When considering options on which to make a decision, Hammond et al (1999) suggest that the mind gives disproportionate weight to the first information it receives and that these initial impressions, ideas, estimates or data, anchor subsequent thoughts. This argument corresponds with Sloman's (2002), articulation of his two systems of thinking theory in which he arrives at a similar conclusion when addressing the influence of the tension between an immediate intuition, and a more measured rational belief, on the decision making process. In addition to this, Kahneman et al (1982) argue that

anchoring occurs, not only when the initial estimate is stated and given to the decision maker, but also when the decision maker bases his estimate on a data set that is the result of an incomplete computation.

2.3.3 The Representative Heuristic

Representativeness is defined as "the tendency to be overly influenced by stereotypes in making judgements about the likelihood of occurrences" (Bartol & Martin, 1998, p.153). Tversky & Kahneman (1983) offer an interesting example of this heuristic through their conjunction fallacy theory. Linda is thirty-one years old, single, outspoken and very bright. She majored in Philosophy as a student. She was deeply concerned with issues of discrimination and social justice and also participated in anti-nuclear demonstrations. The authors asked participants to rank order eight statements about Linda according to the statements probability. The statements included the following two:

- Linda is a bank teller (T).
- Linda is a bank teller and is involved the feminist movement (T and F).

More than eight percent of the groups of graduate and medical students with statistical training and a group of doctoral students in the decision science programme of the Stanford Business School rank the statement T and F as more probable than statement T. A general principle participants used to make this judgement is similarity or representativeness. In the paragraph description Linda is more similar to a feminist bank teller than she is to a stereotypical bank teller.

In this decision environment, making a judgement is based on initial "gut feelings or traits" that correspond with previously formed stereotypes. Bazerman (2004) argues that judgemental deficiencies arise where individuals tend to rely on such strategies, in the absence of sufficient information, or when better information that would lead to more accurate decisions exists, but is ignored. Within the hospitality industry this heuristic can be used to predict the success of a rate category for a market segment based on its

similarity to previous rate categories for that segment that were, or were not successful. It also can be utilised for decision making when comparing room rates against competitor rates or where one's rates are based in relation to where one stands within a competitive set Yeoman et al, 2000).

The representative heuristic can alternatively lead to irrational behaviour. The "status quo" trap suggests that decision makers display a strong bias towards alternatives that perpetuate the current situation (Hammond et al, 1999). This pull of the status quo, suggest the authors, becomes even stronger when there are several alternatives, and decision behaviour in such instances may be associated with unconscious impacts including:

- The search for the comfort zone of familiarity
- Fear of failure
- Information overload
- Sins of commission (making a wrong decision) being punished more severely than sins of omission (avoiding the making of a decision)
- The psychodynamic influence of shame

Representativeness, in the form of the "evidence trap," also leads decision makers to seek out information that confirms their instinct or point of view, while avoiding information that contradicts it. Hammond et al (1999) suggest that there are two fundamental psychological forces at work here. Firstly, our tendency to decide what we want to do before we figure out why we want to do it, and secondly, our tendency to be more engaged by things we like than by things we do not like. This leads us to be drawn to information that confirms our subconscious leanings. The "evidence trap" is again closely associated with the law of similarity as proposed in the laws of sympathetic magic (Rozin et al 2002).

Decision makers also rely on the representativeness heuristic in which probabilities are evaluated by the degree with which one situation is representative of or similar to another (Tversky & Kahneman 1971). However, this approach to the judgement of probability leads to serious error because several factors are typically ignored, such as insensitivity to statistical probabilities of outcomes, insensitivity to sample size, misconceptions of chance and insensitivity to predictability.

2.3.4 Magical Theory

The laws of sympathetic magic (Rozin & Nemeroff 2002), involve a set of heuristics or biases that place a significant emphasis on the individual's perception of what is real for them. Magical theory fundamentally highlights the contrast between an initial reflexive evaluation and a more considered rational assessment. These cognitive heuristics differ from the classic heuristics, such as availability and anchoring, in that they are more strongly associated with "feelings."

What is really interesting, however, is the fact that the decision makers are either aware, or can be made aware, of the irrational aspects of these laws (Rozin et al, 2002). Individuals, therefore, rationalise the irrational, through a conscious contradiction of empirical data. This preference for the irrational state is guided and controlled by the power of feeling, in which the interaction of feelings or beliefs with logical, rational reason is evidence of a conscious state being used to validate or rationalise an unconscious state. The laws of sympathetic magic, therefore, support Freud's primary process theory which states that the mind does not distinguish between hallucination and reality. The law of similarity, in proposing that "appearance equals reality," relates this heuristic to the Tversky & Kahneman's positive view on the representativeness heuristic (1984).

However, it also suggests that similarity promotes categorisation, thus transforming this generally useful heuristic to a biasing influence in the world of symbolic language and images, relating it to the signifier and the signified theory, as proposed by Lacan (1956),

where the unconscious has to be understood as a chain of signifiers. This would suggest that the linguistic signifier must be thought of as something that actively cuts into something else that is not yet structured in the strict sense, and in doing so gives rise to meaning (Van Haute, 2002).

Avoidance of actions that feel harmful is a very powerful influence on decision making (Johnson, 2004). Simon (1987), in a departure from his bounded rationality theory, argues that the intuition of the emotion driven manager is very different from the intuition of the expert, the latter's behaviour being the product of learning and experience, the former's response, being more influenced by primitive urges. The laws of sympathetic magic propose that while negative feelings may be unfounded, individuals do acknowledge them, supporting Freud's theory that the unconscious does not process negatives.

This acknowledgement of negative feelings can specifically impact on decision making when individuals avoid disagreeing with someone that they like or fear, or when elements of risk are associated with a decision. Accordingly the belief that appearance equals reality also links significantly with the misuse of analogy by influential members of a decision team, further reinforcing the powerful influence of Lacan's signifier and signified theory (Arnaud, 2002).

The law of contagion similarly argues that physical contact between the source and the target results in the transfer of some effect or quality (physical, mental or moral), which can be negative or positive in valence. A modification of this law suggests a disproportionate influence of the "halo effect" of experience or the signification of the "position" of individuals within the decision environment. The idea that negative bias is stronger than positive bias is encapsulated by decision makers not wanting to repeat a mistake, due to their recognition of a particular set of negative circumstances being a more powerful influence, than the repeating of a process characterised by recognition of a set of positive symbols. This in turn may lead to the defence mechanism of avoidance and the suggestion that negative fears are more powerful than delusions of success (Rozin et al, 2002).

2.3.5 The Affect Heuristic.

The affect heuristic mirrors the philosophies associated with the laws of magical thinking. Slovic et al (2002) suggest that "feelings" encapsulated in a sense of "goodness or "badness," that equate with the positive or negative quality of a stimulus, can significantly drive judgement and decision making. These feelings can occur rapidly, sometimes being triggered by the use of language, situating this heuristic also within Lacan's (1956) signifier and signified theory. Reliance on "feelings" differs from the cognitive or rational approach to decision making, and although analysis is certainly important in some decision making circumstances, reliance on affect and emotion is seen as being a quicker, easier and more efficient way to navigate in a complex environment.

This theme is developed by Damascio (1994), who suggests that "somatic markers" or "images" marked by positive and negative affective feelings, guide judgement and decision making in a process where people refer to an "affect pool" containing all the positive and negative tags that are consciously or unconsciously associated with the decision.

"Rational" choice or preference can also be manipulated through controlled exposures. Zajonc & Markus (1982) suggest that when objects are repeatedly presented, the mere exposure is capable of creating a positive attitude or preference for these objects. A different perspective is offered by Slovic et al (2002), through their identification of "proportion dominance," which looks at the impact on judgement and decision making of *how* information is presented.

They conclude that in situations that involve uncertainty or ambiguity, one information format normally attains a higher value, leading it to carry a greater weight in many judgement tasks. This heuristic may have significant relevance in yield management, where decisions are often based on numerical projections and forecasts, inviting the possibility that decision makers may give greater weight or trust to specific data in order to justify their decision, or become blinded by the "halo effect" of the leader when it comes to team support for particular decisions.

The affect heuristic also impacts on the willingness to take risks. This heuristic is used by Alhakami & Slovic (1994) to illustrate how risk and benefit, are negatively correlated. Their research suggests that if decision makers "like" an activity, they are likely to judge the risks as being low and the benefits as being high. However, if they "dislike" it, they tend to judge the opposite, (high risk and low benefit).

Agreement with this theory is found in Finnucane et al (2000), who demonstrate that where time pressure reduces the opportunity for analytic deliberation, the inverse relationship between perceived risks and benefits increased greatly. This supports the contention that, affect influences judgement directly and is not simply a response to prior analytic evaluation. This strategy bears a great similarity to the representativeness heuristic with its associated attraction to familiarity. The affect heuristic is also associated with the availability heuristic, where Wright (1975) proposes the "affect referral heuristic" as a mechanism by which the "remembered" affect associated with an outcome, influences subsequent choice.

Slovic et al (2002), however, caution against an unquestioning acceptance of the affect heuristic in the making of decisions. They argue that experiential thinking can misguide decision makers in two ways, firstly, by a deliberate manipulation of affective reactions by those wishing to control the decision behaviour through the abuse power and the misuse of analogy, and secondly, the existence of unconscious stimuli in the environment that are not amenable to valid affective representation.

2.4 Unconscious Decision Making

Although heuristics and biases are primarily perceived by some as being associated with conscious decision making, they can also play an unconscious role in decision making. Kersten (2001) argues that while conventional organisational theory portrays organisations as being rationally ordered and emotion free life spaces, where the right decisions are made for the right reasons by the right people, in a reasonable and

predictable manner, this image is as about as far from reality as the 1950's image of the "ideal" family ever was.

On a more dramatic level, mention of the unconscious mind paints a picture of the interior life of an individual that is potentially fractured and prey to irrational impulses that threaten its usual role in the social order. Mary Shelly's depiction of the relationship between Dr. Frankenstein and the monster he created is an analogy of the modern self in that it illustrates the relationship between the almost pathological involvement in the conscious mind's rational processes (the scientist) and the vulnerability, primal innocence and malicious physical violence that embodies the dangerous and dark domain of the unconscious. Equally in Robert Louis Stevenson's, "Dr. Jeckyl & Mr. Hyde," the rational scientist experiments on himself until he is completely transformed into his own malicious and amoral double (Mansfield, 2000).

What we see in both of these examples is not a conscious mind controlling its irrational impulses, but one that is fascinated by, and drawn towards the dark and uncertain impulses it was thought to rule.

Psychoanalytic interpretation of organisations points to underlying unconscious causes of behaviour where much of the rational and taken-for- granted reality of everyday life gives an "acceptable face" to preoccupations and concerns that lie beneath the level of non-pathological awareness (Morgan, 1986), in which the unconscious is structured like a language. This philosophy fundamentally contradicts the theories of eighteenth century rationalists like Kant who viewed the conscious mind as the defining attribute of the human relationship with the world. In many ways, the Kantean approach still prevails in modern businesses, where managers and decision makers appear uncomfortable with the possibility of unconscious processes being part of their decision making processes (Mansfield, 2000).

The unconscious, however, acts as a triggering mechanism, where we do not know why we feel what we feel, why we fear what we fear, why we think what we think, or why we do what we do (Kahn, 2002). Ideas and images constantly pass in and out of our awareness in our everyday lives. Freud (1913) argues that the notion that ideas on the fringe of the mind reoccur unpredictably, is not due to some simple process of mental circulation, but rather that these peripheral thoughts are strong and even menacing enough for the conscious mind to want to suppress them. Freud, cited in Kahn (2002), contends that the unconscious consists of the Id, the unconscious part of the mind, the superego which, operates as a conscience through prohibitions, fears and guilt, and the ego, which acts as a form of watchman, trying to satisfy both the ego and the superego. Kahn (2002) suggests that it is not just fear, guilt and shame that are being kept at bay by the superego, but also wishes, desires and dreams of success.

Dreams are not the only place where such unconscious investments re-appear. Workplace nuances such as parapraxes (Freudian slips), jokes, and body language, (i.e. the pushing back of one's hair, the scratching of the nose, obsessive tidying and washing), are neurotic symptoms of this "surprise surfacing" of incongruous material. These interferences can be viewed as manifestations of the unconscious that are beyond the control of the individual (Mansfield 2000).

Experts in the field of marketing, such as Chrzanowska (2002), in applying neuroscience to their marketing armoury have identified that these nuances indicate how social expectations can introduce conflict between the conscious and unconscious parts of the mind, in an environment where the conscious mind is not fully aware of the deeper dynamics influencing attitude and behaviour.

Issues of motivation are also central to the psychoanalytic approach, in that individuals are often unaware of the true reasons motivating their behaviour, because the unconscious mind contains ideas experiences and feelings that are blocked from conscious awareness by the power of repression (Glassman 2001). Although direct

proof of the unconscious is deemed unobtainable, Freud (1913) suggests that it can be accessed through dreams, and particularly wish fulfilment in dreams, in which the latent or threatening content of thought is transferred into something less threatening (the manifest content) via the controlling influence of the "dream censor," whose function is to ensure that sleep is not disturbed. A modern analogy of this may be illustrated through individuals being inhibited in saying what they think or feel. A glimpse of this unconscious process may be achieved through the identification of defence mechanisms.

According to Freud (1920), the psyche is automatically regulated by the Pleasure Principle. In The Pleasure Principle, Freud views the drive to maximise pleasure in terms of the need to avoid that which is unpleasant. This identification of pleasure with a discharge of tension, and "unpleasure" with an increase in tension, drives human behaviour linking it with the correlation between decision making and the feelings associated with that decision (Rozin et al 2002; Slovic et al 2002).

Neuroscientists, such as Pinker (2003), in agreeing with Freud's psychoanalytic theory, argue that behaviour comes from an internal struggle among modules with differing agendas and goals. Pinker suggests that each of us feels that there is a single "I" in control, an illusion that the brain works hard to produce. Instead, however, we move our eyes to whatever looks interesting, which fools us into thinking that the detail was there all along, suggesting that the brain's ability to override habits or urges is not, therefore, an implementation of the rational free agent. Thaler (1994) suggests that human thinking and decision making are biological adaptations rather than engines of pure rationality, in which systems work with limited amounts of information, need to reach decisions in a finite period of time, which ultimately serve evolutionary goals such as status and security, through the unqualified acceptance of a heuristic.

Unconscious decisions, therefore, offer the perfect defence mechanism, where according to Pinker (2003), people rationalise the irrational. This enables decision makers to excuse themselves by arguing that it was "the culture of the time" (Irish Banks), or

taking performance enhancing drugs to "level the playing pitch" (Olympic athletes), thus illustrating an unwillingness to take responsibility and creating the perfect alibi, the "get-out of jail card," the ultimate "doctor's excuse note."

Campbell (1949, p.8) offers perhaps the most succinct and incisive overview of the impact of the unconscious as follows:

> *"The unconscious sends off all sorts of vapours, odd beings, terrors, and deluding images up into the mind – whether in dreams, broad daylight, or insanity; for the human kingdom beneath the floor of the comparatively neat little dwelling that we call our consciousness, goes down into unsuspected Aladdin caves. There not only jewels but also dangerous jinn abide: the inconvenient or resisted psychological powers that we have thought or dared to integrate into our lives. And they may remain unsuspected, or, on the other hand, some chance world, the smell of a landscape, the taste of a cup of tea, or the glance of an eye may touch a magic spring, and then dangerous messengers begin to appear in the brain. These are dangerous because they threaten the fabric of the security into which we have built ourselves and our family. But they are fiendishly fascinating too, for they carry keys that open the whole realm of the desired and feared adventure of the discovery of the self."*

Psychodynamic theorists have indicated that a number of factors, including problem framing through misuse of analogy, overconfidence, control and regulation, the need for power, anxiety, shame in the workplace, fear of success, attitudes to technology, and centralisation of decision making, both collectively and individually contribute to unconscious behaviours that in turn impact on the decision making process.

2.4.1. Framing through Misuse of Analogy

According to March (1994), the tendency to "categorise" and "stereotype" in order to make sense of complex data, increases in times of uncertainty. Indeed, making a comparison with the "known," or forcefully indicating one's prior experience of the problem often helps to remove the ambiguity of choice in the minds of the decision team members creating a comforting calm in the process (Brindle 1999). However, despite this positive intent, endeavouring to deflect attention from the decision to be taken can

cause the process to go astray when issues of problem framing through misuse of analogy shape matters.

Problem framing represents the way in which the problem is defined or presented, yet the way the problem is not defined can also be significant. Limiting the decision making space to a binary (either/or) context, omits critical data and limits the discussion to the problem as defined by the space.

The decision to launch the "Challenger" spacecraft, despite an awareness that the o-rings would fail under freezing temperatures, illustrates this point (Brindle 1999). "Framing" can make it difficult for decision makers, psychologically speaking, to reverse their decisions. In addition, this "hubris effect" can lead undecided decision makers to become unduly affected by charismatic leaders, or alternatively, to leaders needing to be surrounded by "yes men," who in turn feel unable to voice a critical view (Staw & Ross 1978).

Misuse of analogy also impacts on decision making in an unconscious manner. Brindle (1999) illustrates this well when describing how suggestions are sometimes categorised as being "like a previous idea that failed," or "that definitely worked before." This categorisation has a substantial influence on decision makers through associated emotional contexts. These emotional contexts again correspond with the laws of sympathetic magic (Rozin et al 2002), and Lacan's identification of language as being an unconscious signifier (Arnaud 2002). Indeed, a modern example of this phenomenon was seen when American news media, referring to the Clinton political scandal as being "like Watergate," had a subconscious impact on listeners who immediately associated it with the fall of the U.S presidency (Johnson 2004).

In structuring the unconscious like a language, Lacan's (1956) influential conclusion proposes that individuals must locate themselves in the field of language, where phenomena, "acted out" through imagery and unconscious symbolic determinations,

enable participation in everyday organisational activity. The essence of this is that while the individual is forced to inhabit this symbolic order, they maintain at an unconscious level their pursuit of intense satisfaction, by endeavouring to achieve the sense of completion and self-identity that it had lost through being born (Lacan 1956; Mansfield 2000). This leads to many "rationalist" observers viewing organisational dysfunctions, including recurrent operational failures, careerism, or the repeatedly aggressive behaviour of managers, as nothing other than deficiencies in decision making or manifestations of the inability to think decisions through, while ignoring the powerful undercurrent of desire, and its impact on the decision process (Arnaud 2002).

2.4.2 Overconfidence

Problem framing through misuse of analogy is closely linked with overconfidence in decision making, typically where uncertainty is a critical component of the decision making process. Lovallo & Kahneman (2003) suggest that decision failure is best explained, not as a result of rational choices gone wrong, but more likely as a consequence of flawed decisions due to delusional optimism. To achieve a desired outcome, rationalisation of the decision choice is often achieved through the spinning of scenarios of success, while overlooking potential for mistakes and miscalculations. This over-optimism is caused by the tendency of individuals to over-exaggerate their own talent, which is then amplified by a tendency to misperceive the cause of certain events, i.e. taking personal credit for successes while attributing negative outcomes to external factors.

The inherent psychodynamic forces impacting on the decision process include the need for recognition and an unwillingness to admit a mistake. This escalating commitment to an incorrect decision is facilitated by individuals consciously and unconsciously blocking out or distorting negative information that will increase tension levels in the decision maker, linking it with Freud's Pleasure Principle (1920). Another apparently positive but equally psychodynamic motive persisting with a course of action which is failing, is that consistency and persistence are often valued as signifiers of desirable leadership qualities in modern society (Daft 2001).

2.4.3 Control and Regulation

Many individuals find themselves working in organisations that are obsessed by rules and compulsions to control and regulate. Such organisations outwardly manifest the trappings of success, while inwardly they conceal suppressed emotions and tensions (Kersten 2001). While decision making appears consultative in these organisations through elaborate sets of meetings and committees, it is more often than not centralised and hierarchical, resulting in psychodynamic forces and defence mechanisms, such as low morale, self-protection and a preoccupation with perfection influencing the decision process.

These "rational" organisations, characterised by an absence of "judgement-free spaces," act to contain aggression, explore errors, and stress compliance, conformity and obedience, where subordination and the identification of one's ego with the organisation, results in entrapment and retarded development (Kersten 2001).

This confinement of the individual is often expressed in excessive concern for security, lack of independence, lack of feelings and an inability to assume responsibility for one's actions (Jacobson 1993; Diamond & Adams 1999), linking it with Foucault's (1979) idea of the individual's freedom being compromised by the mere fact that they belong to an organisation.

Furthermore, where the pursuit of economic goals becomes an organisational aim in itself, organisational narrative and myth goes beyond being a sense making tool, providing members instead with an emotional outlet, where fantasy prevails over reality and where spontaneous activity temporarily replaces regimentation (Gabriel 1991).

Despite this individuals often rationalise methods of bypassing organisational rules. Slovic (2002) suggests that individuals are capable of believing that they are following all of an organisation's rules, while at the same time being aware that they are disobeying some of them. This unconscious bending or breaking of rules emerges, according to Furnham & Taylor (2004), when individuals perceive the rules as being either "unfair", or leading to "unnecessary" additional work being required. The internal

rationalisation here is that breaking the rule does not have a significant consequence, perhaps because they have been broken without censure on a continuous basis.

Additionally, ignoring the rules enables the individual to justify their actions by constructing and enhancing better results in their own minds, while simultaneously downplaying the potential outcomes if the required protocols were followed. This perception is further copper-fastened by the sustained belief that those who have drawn up the rules do not work in the decision maker's area and have not thought through their value and usefulness (Furnham et al 2004).

2.4.4 Power

Organisations can become "maelstroms of political activity," according to Miller, Hickson & Wilson (1996), where power games that are only partially open to view are played out. This view contrasts with seeing decision making as a functional prerequisite of an effective organisation. Power can be used to frame the matter for decision in a way that suits one individual's requirements, but inactivates those of another by manipulating, withholding or ignoring relevant information, thus creating a situation where the means by which decisions are made may be separately rational, while the ends may not be.

Zaleznik (1970) describes organisations as a political pyramid, where individuals compete for finite resources, and where "the psychology of scarcity and comparison" emerges when authority is unevenly distributed in the pyramid. This results in coalitions of individuals, grouping themselves into unconscious collusions as a defence against perceived risk. This in turn can lead to some parts of an organisation gaining power or acknowledgement through their ability to control access to resources (Pfeffer & Salancik 1978). Consequently, in environments of uncertainty, individuals who are in a position to buffer the organisation from instability can become empowered to make decisions beyond their own competence (Hinings, Hickson, Pennings & Schnech 1974).

Organisational conflict can also be sidelined through the removal of topics from the discussion arena that might complicate the status quo. Again, this can be achieved by ignoring data or privately indicating prior personal experience of a particular set of circumstances that contributed to the failure of a similar project. Beck (1992) progresses this idea suggesting that the ultimate expression of power is to prevent any awareness of conflict in the first place, by shaping views and beliefs in such a way that one's own interests are not recognised by others. This unreflexive practice creates a scenario where organisational interests are perceived to be shared, thus reducing conflict by the current state of affairs remaining unquestioned.

2.4.5 Anxiety

Anxiety is very much at the centre of unconscious discourse. Fear, resulting in the implantation of anxiety and the consequential defence from its effects, is an important factor in understanding organisational effectiveness. The long term effectiveness or success of an organisation is often bound up with the techniques it uses to contain the emergence of anxiety (Menzies Lyth, 1988). This argument is supported by Kets de Vries (1991), who proposes that when individuals enter the workplace they do not leave their emotions behind, yet the overriding assumption in organisations is that they run on the basis of objective data and in a logical manner, where in reality, emotions influence how people do work and behave in organisations.

According to Obholzer (1994), there are three levels of anxiety that employees may experience.

- Tasks undertaken by the employee can generate anxiety, specifically when task-doers consider the responsibility that they bear and the consequences of failure.
- Anxiety also derives from personal history, encapsulated in experience of authority figures, of success and failure, of competition and rivalry and of being valued or undervalued within the decision environment.

- The final level of anxiety is of a more primitive level and is associated with the psychological separation from the mother figure and the shocking discovery that we are individuals.

Relationships within an organisation can also be characterised through an acute awareness of never being "good enough," even when agreed targets are exceeded. The lack of positive feedback here results in risk-taking decision making ability being diminished, and anxiety being unconsciously acted out through defence mechanisms such as denial or repression (Walsh 1999).

Anxiety also promotes the persistence with a course of action beyond an economically defensible point. Psychological theorists argue that escalation represents the outcome of a decision error, where a host of social and psychological pressures for persistence come into play, that conspire to prevent the decision maker owning up to a mistake (Staw, 1981; Bazerman, 2004). This is compounded where decision makers operate in environments where probabilities and expected values can only be estimated, and where decision criteria cannot be judged by statistical laws. This enables the decision making process to become a subjective exercise, reflecting the decision maker's preference for short term convenience at the expense of longer term opportunity costs (Drummond, 1997; Lopez, 1981).

2.4.6 Shame in the Workplace

Shame also promotes anxiety in situations where organisations discourage pessimism. Walsh (1999) contends that a blend of attachments at work, coupled with the need for the individual to meet performance targets, may create work environments that are shame- laden.

The relationship between shame and decision making ability can be associated with the tendency towards overconfidence (Lovallo et al 2003), but with the diminished propensity for risk taking, as outlined in the affect heuristic, by Slovic et al (2002).

In defining shame as the experience of a diminution of self, in which one's performance is exposed as unacceptable, fragile or contemptible, psychodynamic factors come into play resulting in an inability to generate a realistic sense of self-esteem, which ultimately burdens the individual with unrealistic aspirations for perfection to overcompensate for their vulnerability (Walsh, 1999; Czander, 1993).

2.4.7 Fear of Success

Fear of success is also associated with the development of anxiety, or more appropriately with unconscious guilt in the individual. Although it seems quite acceptable to assume that fear of failure can promote irrational behaviour on the part of managers, fear of success can also elicit irrational behaviour (Jarrett & Kellner 1996). Accordingly, Freud (1915) argues that ordinary people become uncomfortable when a deeply rooted and longed for desire comes to fulfilment, particularly where there is a perception, consciously or unconsciously, that success has been achieved by the displacement of someone else.

An example of this behavioural trait is recognisable where yield management decision makers become uncomfortable with the practice of 'overbooking' (Ingold et al, 2000). Overbooking involves overselling rooms to ensure maximisation of occupancy. However, a consequence of this target being achieved may be the displacement of legitimately booked guests from the hotel's stock of rooms, leading to feelings of unconscious guilt in the decision maker.

2.4.8 Attitudes to Technology

In situations where organisations operate within a façade of rationality which overemphasises goal orientation, while simultaneously viewing emotion as antithetical to performance, technology often makes it easy to fake, or manipulate authenticity (Smith & Sharma 2002; Lukensmeyer & Parlett 1997). Orlikowski (1992) agrees, suggesting that human behaviour is both enabled and constrained by the rules and resources that result from previous action. Her structurational model suggests that a

duality of technology can exist where designers physically construct a technology to satisfy management priorities and expectations, in which users socially construct the technology by deciding which features to accept, ignore, use or adapt to suit their way of working.

This issue is also addressed by Walls (2002), who argues that the premise behind rationality in organisations is based on the notion that reasonable people will respond to their environment by assessing the known facts, estimating possible outcomes and weighting those outcomes against their respective costs. However, though managers have become more comfortable with logical solutions, due to the growing presence of technology, they simply expect too much of the same from the people around them
In such scenarios, employees often become part of a co-ordinated complexity of forces that structure the place of technology, in which the individual belongs to the technology, rather than being its master. The suggestion here is that this "belonging" may in reality become dehumanising where the technology is pre-programmable, making room for irrational, capricious and unpredictable behaviour (Malevich, 1968). Virilio (1998) agrees, suggesting that terms like "interactive" and "user friendly" are but forms of subtle enslavement of the human being that can lead to unconscious revolt within the individual, corresponding with Foucault's (1979) theories on organisational enslavement of the individual.

2.4.9 Centralisation

Although technology has enabled centralised decision making, Eisenhardt (1997) suggests that centralisation of decision making power in an organisation invariably leads to the emergence of political behaviour or group-think in the support team. Complex decisions are increasingly taken by groups, resulting in a corresponding tendency to believe that the group will make a better decision. However, tensions in these groups has become an everyday experience, by competing forces separating or pulling the organization's actors together as required by particular sets of circumstances.

In proposing that these forces mitigate against effective decision making, Chrispin (1996) concludes that temporal delays in information exchange and solution choice and breaches of confidentiality through a dissemination of personal authority, lead to groups becoming static and "decision inert," and this rationalisation of failure, or indecision, becomes acceptable.

2.5 Linking Conscious to Unconscious Thinking

Conflict often emerges between the most formal and highly abstract concepts and the most immediate and intense emotions. This is richly illustrated by post-modern theorists who envisage a contemporary era in which we are consistently driven to express instant and unevaluated feelings in an "automatic" manner via "pop questionnaires" that are designed to trigger emotion. This in turn leads to our work and social values being understood in terms of satisfaction, pleasure, like or dislike, excitement or boredom, and love or hate (Mansfield, 2000).

The identification of the self is related to both conscious and unconscious decision making, and plays a critical, though often understated, role in both processes. Indeed the word "I" suggests uniqueness that conflicts with the idea of belonging to an organisation, associating it instead with Foucault's Panoptican Theory (1979). Foucault's anti-subjective approach, views individuality as how we have been made to think of ourselves as individual subjects by those who have invented moral categories that assert doctrines of guilt and responsibility, in order to control and manage the individual.

Recent research in neuroscience, (Pinker, 2003; Chrzanowska, 2002), require concepts of the unconscious to be embraced, albeit in a more contemporary model. These neuroscientists argue that unconscious stimuli influence feelings and subsequently impact on conscious decision making. This can be identified where the brain becomes involved in the preconscious filtering, processing and categorising of stimuli of which

we have no awareness. Because conscious awareness is a limited channel, the brain likes to automate behaviour wherever possible, resulting in phenomena like the "time gap experience" (driving a familiar route without being aware of it until you reach your destination).

2.5.1 Two Systems of Reasoning

In the process of decision making, tensions can exist between immediate intuition and a more measured rational belief, exemplified by a comparison between the representativeness and availability heuristics on the one hand, and a coherent justifiable set of data or beliefs on the other. Within this tension individuals can be torn between decisions that they resonate towards (associative thinking), and decisions that they find analytically more accurate (rule based). Sloman (2002) argues that parallel processing of information through diffuse associative links (intuitive bias, regulated by associonistic or unconscious forces, where information is rejected or ignored) conflicts with deliberate and sequential manipulation of internal representations through a rule governed system (conscious computer logic), making decisions more difficult for the decision maker.

The practice of selecting the "familiar" or deciding to reject an option can be either deliberate or unconscious, exhibited through willingness, or an unwillingness to take a risk. Rule based systems (if-then scenarios) create a large set of propositions, in which rule based language is encoded into a signifier and signified model of operation that gives decision making a logical structure. Here, the "correct" application of the rules is determined by the relations among symbols, rather than through any meaning that we attribute to the symbols (Sloman, 2002).

These approaches correspond with those inherent in the theories of bureaucratic dysfunction as proposed by Merton (1968), and Selznic (1966), wherein the adherence or belief in organisational goals is simultaneously aligned with the achievement of individual agendas. This is not to say that these practices, but rather that rule adversity corresponds with institutional norms replacing organisational goals.

Evans & Over (1996) agree, suggesting that these two systems of thought are driven by different forms of rationality. Associative behaviour is concerned with the achievement

of one's goals, whereas rule based behaviour connects with ensuring that one's conclusions are sanctioned by a normative theory. Sloman (2002) argues that when a response is produced by an associative system, we are conscious only of the result of the computation and not the process (indicating the presence of unconscious or automatic behaviour), whereas we are aware of both the result and the process in a rule based computation. In situations where computer data gives an alternative and more justifiable solution to an initial intuitive feeling, individuals may chose to reject the computer solution because they are fed up with being dictated to (rule aversion behaviour) (Sloman, 2002).

So which of these forces is the stronger? In contrasting the power of decisions that are intuitively compelling against those that are probabilistically correct, Tversky and Kahnemen's Conjunction Fallacy Theory argues strongly that judgment related to Similarity and Representitiveness is stronger than logical argument. This preference links strongly with compulsive behaviour argument proposed by Arnaud (2002), and the Inclusion Fallacy Theory proposed by Osherson, Smith, Wilkie, Lopez & Shafir (1990), which argues that compelling logical arguments often fail to erase an even more compelling intuition.

2.6 Behavioural Indicators of Unconscious Behaviour

Employees in organisations experience work group tensions that create mutual interdependencies. Bion (1961) discusses these tensions illustrating them as the wish to face reality, or the wish to avoid it when it is perceived as painful or causing psychological conflict, between group members. Bion suggests that the complexity of feelings in the individual as part of a group springs from three basic assumptions.

- Groups dominated by the basic assumption of dependency, see the primary task as the satisfaction of the needs and wishes of its members and the leader becomes the personification of this purpose. This pathological form of dependency inhibits growth and development and is often characterised by a heavy resistance to change and preoccupation with status and hierarchy as basis for decision making.

- The second basic assumption (fight or flight), argues that the group is prepared to do neither or to do each indifferently. Evidence of this can be found where groups spend inordinate amounts of time protesting rather than planning alternatives. Decision behaviour under this assumption is characterised by aggression, suspicion and a preoccupation with rules and procedures.
- The third basic assumption (pairing), suggests that the group believes that future events will solve existing problems, the future thus becoming a defence against the difficulties of the present. Decision behaviour under this assumption is characterised by the preoccupation with alternative futures.

When a group is under the influence of basic assumptions, trivial matters can take on disproportionate importance. Questioning attitudes are viewed with suspicion as they challenge familiarity and predictability. This can result in effective decision making being impeded as the capability for rational thought is sacrificed in the web of dependency.

2.7 Conclusion

This literature review explored the factors that are associated with the decision making process. Section one critically analysed the decision models associated with yield management decision making. The decision models explored included those that pertained to the rational normative model of decision making, in particular the management science model, and models of decision making that require varying degrees of human intervention.

The subsequent section identified conscious and unconscious heuristics and biases that might impact on the decision making process. These included the traditional heuristics of representativeness, availability and anchoring and adjustment, and more recently researched heuristics that relate to the effect of human feeling on the decision process, and the psychological impact of positive or negative valences.

The final section explored psychodynamic (unconscious) factors that potentially influence the decision maker in exercising decisions, and attempted to relate conscious to unconscious decision making. These factors include anxiety, overconfidence and the need for applause or recognition.

The author feels that the notable absence of research into unconscious influences on yield management decision making in hospitality management, indicates a potential gap in the literature.

The literature review indicates that the management science model of decision making will offer the optimum solution to the problems associated with forecasting demand and optimising rates, under conditions of uncertainty. However, subsidiary influencing factors on the decision making process, emanating from both biases and unconscious forces may conspire to undermine the achievement of this optimum solution.

The following chapter will address the methodologies to be employed in accessing the requisite data to answer the research question.

Chapter 3
Research Methodology

3.0 Introduction

Saunders, Lewis & Thornhill (2003) define research as something that people undertake to obtain information in a systematic way, in order to increase their knowledge of a particular topic. Researchers may use quantitative, qualitative, or a mixed methods approach, to elicit data that will assist in answering their research question. Quantitative research is associated with a positivistic orientation that adopts an etic or outsider's perspective, which incorporates measurement tools such as hypothesis testing, as an integral part of the research process. Qualitative research emphasises an emic or insider's perspective, and is based on a phenomenological approach, which focuses on understanding the meaning that events have for the subjects being studied, through exploring the richness and subtlety of their experiences (Patton, 1991; Maykut & Morehouse, 2001; Phillmore & Goodson, 2004; Denzin & Lincoln, 1998).

However, what counts as evidence, and how it is collected, often constitutes a difficulty for the researcher. Social theory, according to Burrell & Morgan (2000), can be conceived in terms of key paradigms, based on different assumptions about the nature of society, within which, the researcher's frame of reference plays a critical role. Therefore, in order to understand alternative points of view, and to gain an appropriate and accurate insight into answering the research question in an unobstructed manner, it is critical for the researcher to understand the assumptions on which their own perspective is based.

In order to extract and evaluate information, best suited to answering the research question and the supporting objectives, the following sections will attempt to critically analyse and address the approach taken by this researcher, beginning with an analysis of ontology, and epistemology. The fundamental research paradigms (positivism and non-positivism), the research design, and the selection of data gathering and analysis tools

will also be evaluated. Particular attention will be paid to the difficulty of accessing the unconscious framework of both the interviewer and the interviewee, in attempting to hear the psychodynamic discourse. Finally, issues relating to interpretation and practitioner bias, the limitations associated with the methodologies, and ethical factors impacting on the research process will be considered.

3.1 Research Question

The research project will seek to answer the following question:

- **How are decisions made in hospitality yield management environments?**

3.1.1 Supporting Objectives

The following supporting objectives will be addressed through primary research, and will facilitate answering the research question.

- To ascertain if there is a predisposition towards a particular decision model
- To investigate if bias or heuristical factors influence the decision making process
- To explore the role of psychodynamic forces in the decision making process
- To establish if a relationships exist between conscious and unconscious decision making

3.2 Ontology and Epistemology

Research is a messy, non linear process, where researchers, through being innovative and creative, seek out different pieces of the "puzzle", until they reach a point when they are able to present as complete a picture as possible. Within this process, the researcher's actions are underpinned by a set of basic beliefs that define research approaches. Ontology and epistemology issues tend to emerge together and subsequently influence methodology chosen, consequently defining what falls inside or outside legitimate inquiry (Guba & Lincoln, 1998). Ontology examines the researcher's assumptions about the nature of reality (how knowledge exists), whereas epistemology

examines their assumptions about the most appropriate ways of gathering the requisite information to address the research question (Crotty 1998).

Ontological assumptions therefore concern the very essence of the phenomena under investigation, where "reality" is viewed as being either external to the researcher or the product of the researcher's own mind. Maykut & Morehouse (2001) propose that ontological assumptions associate themselves with questions such as "what is real, and what counts as evidence? Based on this proposition, non-positivistic researchers view the external world as a conduit to explore the research question, whereas positivistic researchers believe the external world is made up of tangible and immutable structures that exist as empirical entities (Burrell & Morgan, 2000).

Epistemology frames the research approach in terms of how one goes about obtaining knowledge. It is fundamentally concerned with providing a philosophical grounding for what kinds of knowledge are possible and how the researcher can ensure that they are both adequate and legitimate (Crotty 1998). This suggests a need to identify, explain and justify the epistemological stance that is taken. Burrell & Morgan (2000) argue that critical to this approach is whether the researcher considers the available knowledge as capable of being transmitted in a tangible form (acquired knowledge) or through a more personalised, subjective conduit (experienced knowledge). Epistemology, therefore, tries to unfold the relationship between the knower and the known, while simultaneously emphasising the role that values play in generating "understanding" (Maykut & Morehouse, 2001).

Values play a key role in the stance taken by the researcher. Positivistic researchers believe that these values can be suspended in the development of understanding, as the required research outcomes, namely, generalisation and verification of propositions, are the key drivers. Non-positivists, on the other hand, believe that values mediate and shape what is understood, arguing that only tentative explanations are possible through the discovery or uncovering of propositions (Phillimore & Goodson, 2004). The

epistemology of the non-positivistic researcher rejects the standpoint of the detached observer, arguing that one can only understand, by occupying the frame of reference of the participant. Positivistic researchers, on the other hand, search for regularities and causal relationships between constituent elements through verifying or falsifying hypotheses.

The epistemological relationship between the researcher and the research environment is also critical to the process of knowledge acquisition. Non-positivistic researchers see the information source, as being autonomous and free willed, whereas positivistic theorists hold a deterministic view that sees the individual and their activities as being completely determined by their environment, (Burrell & Morgan, 2000; Maykut & Morehouse, 2001).

3.3 The Inquiry Paradigms – Positivism and Non-Positivism

The failure to think through the relationship between data and theory can seriously affect the quality of the research. Paradigms therefore become important in structuring research and providing flexible guidelines that connect theory and method to determine the structure and shape of any inquiry (Goodson & Phillimore, 2004; Easterby-Smith, Thorpe & Lowe, 2002).

An initial difficulty for the researcher comes from the fact that terminology is far from consistent in the research literature and social science texts, where one frequently finds the same term used in a number of different, sometimes contradictory ways (Crotty, 1998). Although this ambiguity exists across research methodology texts, two general overarching philosophical perspectives shape our understanding of research. These paradigms are positivism and non-positivism (also labelled as phenomenology, social constructivism, constructionism, subjectivity etc.). It is important to state that these approaches are not mutually exclusive, indeed, some researchers see great benefit in combining elements from both traditions to produce a hybrid theory (Easterby-Smith et al, 2002). In an effort to allay any subsequent confusion, this research will address inquiry paradigms under two main headings, namely, positivism and non-positivism.

3.3.1 Positivism

Positivism (coined by August Comte in 1830) is associated with knowledge obtained from observable and measurable facts, resulting from detached objective enquiry, rather than being inferred subjectively through sensation, reflection or intuition (Kincheloe, 1991; Easterby-Smith et al, 2002). The positivistic relationship between knowledge and observable fact contains an ontological assumption that reality is external and objective, with an epistemological assumption that knowledge is only significant if it is based on observations of this external reality. This associates it with a quantitative approach to inquiry, wherein researchers can be substituted, one for another, without having any impact on the findings (Phillimore & Goodson, 2004).

Total commitment to this research strategy requires independence of the observer from what is being observed. Consequential elements of this approach encompass the negation of the researcher's feelings, the identification of causal explanations for human behaviour, verification or falsification of hypotheses, fragmenting research data into measurable chunks and utilising statistical probability to facilitate the drawing of generalisable inferences (Cresswell, 2003). Interestingly, positivistic research characteristics still dominate research studies in the hospitality industry, where a pronounced absence of reflexivity, leads, in turn, to the researcher's voice as an expert, dominating the texts, making inaudible, the "authentic voices of those researched" (Phillimore & Goodson, 2004).

3.3.2 Non-Positivism

Non-positivistic strategies aim to understand the meanings events have for those being studied, implying that the researcher sees the individual and his or her world, as co-constituted. This approach proposes that reality is not objective and external, but is socially constructed by being given "meaning" through the language and behaviour of ordinary people (Patton, 1991; Valle & King, 1998). From a research viewpoint, this differs from positivism in that, rather than focussing on factual data and its frequency of occurrence, peoples' thoughts, feelings, and the way in which they communicate with each other, are the key research drivers.

Researchers influenced by the non-positivist inquiry paradigm favour research being undertaken in a collaborative fashion, wherein the researcher and the researched are seen as partners in the production of knowledge. The interaction between both parties becomes therefore, a key site for both research and understanding. This approach also cautions against specific attempts to identify generalised theories, as practiced by positivistic researchers may result in frameworks being forced inappropriately on others (Schwandt, 1998). Local knowledge is implicit in this collaborative approach to knowledge generation. If the researcher believes that this knowledge is contextually bound, then, for the research to have a theoretical value, it should focus on these local and unique practices, and negate the temptation to generalise across cultures (Boyacigiller & Alder, 1991; Cook & Brown, 1999).

Furthermore, how we understand the nature of reality, according to Phillimore & Goodson (2004), directly affects the way we see ourselves in relation to knowledge. Knowledge that can be separated allows the researcher to take an objective view, whereas if knowledge has to be constructed, separation of the researcher from the research subject is not appropriate. Maykut & Morehouse (2001) differentiate between the assumptions of the positivistic and the non- positivistic researcher through condensing the fundamental differences between the two approaches into two questions. Positivists ask "what is happening", whereas the non-positivists ask "why is it happening". This researcher wonders, however, if an inherent ontological assumption in each of these approaches is that *it is happening*, thus engaging a perception on the part of the researcher that the phenomenon is real, or is rationalised as real in the mind of the respondent

Recent research has suggested that these paradigms are not mutually exclusive. Interestingly, Hammersely (1993), in calling for methodologically aware eclecticism, proposes that an either/or approach to paradigm selection, is less than helpful. He argues that qualitative and quantitative approaches provide a crude characterisation that is often misleading, and as such, should not be viewed as alternatives. The author

suggests that a full range of options should be part of the researcher's armoury, in terms of both methods and philosophical assumptions. For example, where unstructured data is collected and subsequently coded, it can be later subjected to quantitative analysis. This approach facilitates the exploratory approach taken by non-positivists to be integrated with the verification/falsification approach taken by positivists.

3.4 Further Distillation of the Inquiry Paradigm

Adapting a particular inquiry stance (positivistic or non positivistic) suggests that the researcher must carefully match the methods of collecting and analysing data with the research question. To further refine the perspective of the researcher, Burrell and Morgan (2000) subdivide the two overarching approaches into four distinct paradigms, which, theoretically, according to the authors, are mutually exclusive, and have specific interactions with the organisational world. Despite this initial pronouncement, the authors later outline how elements of one paradigm have infiltrated each other, leading to a hybrid usage of inquiry paradigms. The four paradigms are labelled as:

- Functionalist
- Interpretivist,
- Radical Humanist
- Radical Structuralist.

Each of these paradigms divides along research perspectives such as ontology, epistemology, human nature and methodology, in addition to their relationship with the order/conflict debate. According to the authors, positivistic and non-positivistic stances are each associated with polar positions relating to ontology, epistemology, human nature and methodology.

The ontological position of the non-positivist is nominalist, which holds to a belief that there is no real structure to the phenomenon of interest beyond that which exists in the mind of the individual. Conversely, the ontological perspective of the positivist is

realist. For the realist, the phenomenon of interest exists as an empirical entity independently of the individual's appreciation of it (Burrell & Morgan, 2000).

The epistemological position of the non-positivist suggests that knowledge can only be accessed through an alliance with the narrative of the participant, rejecting the idea of generating objective knowledge to answer the research question. The epistemological position of the positivist suggests the opposite, namely, that the required knowledge can be achieved using scientific techniques that predict outcomes or validate hypotheses through establishing causal relationships (Burrell & Morgan, 2000).

Within the human nature debate, non-positivists hold to a voluntaristic view, which argues that the individual is completely autonomous and free-willed. Positivists, on the other hand, hold a determinist view, which proposes that individual behaviour is completely determined by their environment (Burrell & Morgan, 2000).

The methodological debate is also characterised by differing approaches on the part of non-positivists, who adopt an ideographic approach, and positivists, who favour a nomothethic approach. Non-positivists believe that in order to understand and access the required knowledge, the subject must be allowed to reveal their feelings in an undirected manner. Positivists are more comfortable with systematic approaches such as surveys, questionnaires and objective research tools (Burrell & Morgan, 2000).

It is important to note that while these approaches appear to offer either/or scenarios, intermediate positions are possible, (Cresswell, 2003), and imperative for the researcher (Hammersely, 1993).

A diagrammatic description of the relative positions of the paradigmatic approaches is shown below.

Subjective	**Sociology of Radical Change**	**Objective**
Radical Humanist	Radical Structuralist	
Interpretive	Functionalist	

Sociology of Regulation

Source: Burrell & Morgan (2000), Sociological Paradigms & Organisational Analysis (p.22).

3.4.1 The Functionalist Paradigm

This paradigm adopts an objective approach within the sociology of regulation. It is realist, positivist, determinist and nomothethic and seeks to provide rational explanations for social affairs. It is problem oriented in approach (needing to provide practical solutions to practical problems), and is rooted in sociological positivism, wherein relationships can be identified, studied and measured. Sociological theories associated with this paradigm include interactionalism and social action theory, integrative theory, social systems theory, and objectivism, while organisational theories associated with the paradigm include the action frame of reference, theories of bureaucratic dysfunction, social system theory, pluralism and objectivism (Burrell & Morgan, 2000).

3.4.2 The Interpretive Paradigm

Researchers within this paradigm see knowledge as an emergent social process, created by the individual. The approach assumes that understanding and explanation comes through human consciousness that exists within the framework of the individual. It takes a sociology of regulation approach, and is nominalist, anti-positivistic, voluntarist and ideographic. While the ontological status of the organisation is seen as extremely questionable, researchers support a social world of subjectivity through the use of a common language and shared meanings. Sociological theories associated with this paradigm include solipsism, phenomenology, hermeneutics and phenomenological sociology, while organisational theories associated with the paradigm include ethnomethodology, and phenomenological symbolic interactionalism (Burrell & Morgan, 2000).

3.4.3 The Radical Humanist Paradigm

This inquiry paradigm takes a nomanilist, antipositivist, voluntarist and ideographic stance within the sociology of radical change. It is concerned with overthrowing the order of existing social arrangements and providing a critique of the status quo. Its

central emphasis upon human consciousness is in keeping with the subjectivist approach to social science associated with the interpretivist paradigm. Sociological theories associated with this paradigm include solipsism, French existentialism, critical theory and anarchistic individualism, while the organisational theory associated with the paradigm is anti-organisational theory (Burrell & Morgan, 2000).

3.4.4 The Radical Structuralist Paradigm

This paradigm associates with the sociology of radical change, albeit from an objectivist standpoint. It is realist, positivistic, determinist and nomothethic. Sociological theories associated with this paradigm include contemporary Mediterranean Marxism, conflict theory and Russian social theory, while the organisational theory associated with the paradigm is radical organisational theory (Burrell & Morgan, 2000).

These four paradigms offer insights into matching the research question with the approach taken to answer the question.

3.5 Factors Influencing the Choice of Paradigm

Additional factors require consideration before final selection of a suitable paradigm. The adoption of an inductive or deductive approach to research, the stage in the research process at which one develops theory and whether the emphasis is on testing or developing of a theory, all impact on the choice of research paradigm (Carson, Gilmore, Perry and Gronhaug, 2002). However, as suggested earlier, allocating strategies to one tradition (deductive) or the other (inductive) is often unduly simplistic, as these strategies may not be mutually exclusive. What matters is not the label that is attached to a particular strategy, but whether it is appropriate to the research question and objectives (Saunders et al, 2003).

Deduction entails the development of a theoretical structure, with causal hypotheses, prior to it's testing through empirical research methods. In adopting a totally deductive stance, the researcher uses existing theory that has helped to shape the research question, to determine the approach to data gathering and data analysis (Yin, 1994). This strategy

demonstrates a preference for starting with and utilising theory, rather than allowing it to develop. Bryman (1988) argues against this approach, suggesting that "prior specification of a theory raises the possibility of introducing premature closure on the issues being investigated. Nevertheless, when a deductive approach is taken at commencement, it helps in providing an initial framework, for linking the research into the existing body of knowledge (Saunders et al, 2003).

Induction, on the other hand, allows data to guide research and theory building, through using observations of the empirical world to construct explanations and theories.
Adopting a totally inductive approach proposes that the researcher starts by collecting data and then explores this data to see which themes and issues to concentrate on (Yin, 1994). This can be a difficult strategy for the inexperienced researcher, as themes emerging from the data must be analysed on an ongoing basis.

Carson et al (2002) suggest that while pure forms of induction may protect the researcher from existing theory, exclusively deductive approaches prevent the development of new theories. The authors suggest a balance of inductive and deductive approaches for non-positivistic research, using a deductive framework derived from the literature review and evaluating this empirically and inductively to allow new insights to emerge.

The stage at which the research is developed is also significant. Although, generally speaking, the researcher usually brings some prior theory to the research, positivistic researchers consult prior theories in the literature to arrive at hypotheses or research questions at the early stages of the research, and are unlikely to add prior theory during the later stages. Non-positivist theorists, on the other hand, use theory at various stages in the research (Carson et al, 2002; Fetterman, 1989). Miles (1979) suggests that prior theory can help in defining the problem, where following a pure non-positivistic approach, with the setting very loose parameters at the start of the research, imposes a self binding framework.

The setting of loose parameters often results in the accumulation of incoherent, bulky or irrelevant observations that may be impossible to interpret. The author feels, however, that while Miles (1979) criticism may indeed be appropriate for conscious discourse, the accumulation of apparently incoherent, bulky or irrelevant observations may be exactly what is needed for unconscious discourse. Carson et al (2002) argue that anti-positivistic approaches allow for a compromise or balanced approach of developing preliminary theories early on, bracketing them, and revisiting them at a later stage.

Whether the researcher should follow a theory building or theory testing approach also influences the choice of paradigm. Theory building falls under the influence of non-positivistic research, where the purpose of the study is to seek out meaning and understanding of phenomena. Theory testing is associated with a positivistic approach, where proof of, or negation of the theory is required (Carson et al, 2002).

3.6 Methodological Approaches Associated with the Philosophical Paradigms

Having selected an inquiry paradigm, appropriate to answering the research question, the next step in the process is selecting an appropriate methodological approach. Carson et al, 2002) suggest that under the umbrella of anti-positivistic research, theorists use a variety of interpretive approaches such as critical theory, constructivism, phenomenology, hermeneutics, grounded theory, and case studies, to understand the deeply set beliefs, emotions, and meanings that are embedded in the activities and behaviour of individuals in different contexts.

3.6.1 Critical Theory

An assumption of critical theory is that discoverable social realities exist, from which, the researcher liberates the participant from their mental chains, thus allowing them to transcend obstacles to their development (Fay, 1987). This methodology aligns with Burrell & Morgan's (2000) radical humanist paradigm, through allowing the researcher

and the participant to be interactively linked, wherein the belief system of the researcher influences the inquiry. Apart from being associated with emancipation, critical theory is often associated with evaluation, indicating a leaning towards a positivistic position (Carson et al, 2002).

3.6.2 Constructivism

Constructivism differs from critical theory in that it is based on the acceptance of multiple discoverable realities, which are socially and empirically based intangible mental constructions. In this process, created knowledge depends on the interaction between the researcher and the respondent. The aim of constructivism is to achieve an understanding of the similarities and differences of constructions between the researcher and the respondent, wherein the researcher's experience must be accounted for (Carson et al, 2002).

3.6.3 Phenomenology

Phenomenology, on the other hand, is a philosophy without pre-suppositions, which assumes that even though we cannot be certain about the independent existence of objects in the external world, we can be certain about how they appear in consciousness (Brown, 1995). Phenomenologists, according to Bogdan & Taylor (1975), are committed to understanding social phenomena from the perspective of the actor. This approach, in effect sets out to describe the lived experience of individuals concerning a phenomenon, through exploring the structures of consciousness in human experiences, wherein, the researcher seeks out the central underlying meaning of the experience, or its "essence". This is achieved through emphasising the intentionality of consciousness (Cresswell, 1998; Polkinghorne, 1989). This intentionality, where consciousness is perceived as always being directed towards the reality of an object, may have significant relevance in accessing the unconscious, through unconscious behaviour exhibiting itself in the rationalised explanations of the individual.

Burrell et al (2000) contend that within the phenomenological approach, there are a number of distinctive and interrelated approaches, distinguished by their degree of subjectivity, including, solipsism, transcendental phenomenology, existential phenomenology, ethno-methodology and phenomenological symbolic interactionalism.

3.6.3.1. Solipsism

Solipsism, in denying that the world has an independent reality, suggests that reality is completely the product of individual perception. The world becomes no more than the subject perceives it to be, wherein knowledge is totally limited to what people experience, without perceptual reference points. In other words, there is nothing tangible beyond oneself and one's ideas. This perception totally dismisses the significance of the organisation, suggesting that the individual is totally autonomous and independent, with regard to decision making (Burrell & Morgan, 2000).

3.6.3.2 Transcendental Phenomenology

In focussing on the intentional object of consciousness, where reality, or pure meaning for the participant, replaces objectivity, transcendental phenomenology is, according to Cresswell (1998), equivalent to psychological phenomenology. Here, all the assumptions of everyday life are brushed aside in the pursuit of pure subjectivity, the intentionality of which is the source of all meaning (Burrell & Morgan, 2000). This inquiry perspective is quite similar to a narrative approach as proposed by Czarniawska (2004), wherein consciousness focuses on that which constitutes it, making it comparable with the signifier theories of Lacan (1956), in which the unconscious is constructed like a language. Although this pure form of interpretivism may steer too close to solipsism for answering fully the research question, through viewing the experience of the participant as being undiluted, it may open the door to unconscious discourse. This "access" may be enabled through interviewers experiencing the defence mechanisms of interviewees who utilise reference points to illustrate their experience.

For example, if, when individuals are making a decision, their true intention is other than utility maximisation, the unconscious may play a part, wherein reality is not consciously constructed, but is instead revealed to it by an unconscious act of intentionality.

3.6.3.3 Existential Phenomenology

Existential phenomenology views the world from a sociological perspective, focussing more on everyday activities than transcendental phenomenology. Meaning is dependent on reflexivity, and is attached to actions retrospectively, wherein only the already experienced is meaningful. The approach has a temporal dimension, through containing elements of the past and the anticipated future (Burrell and Morgan, 2000). By focussing on the past, individuals are able to attribute meaning to the present. This approach looks at understanding the social world from the point of view of those living within it, using constructs and explanations which are intelligible in terms of the common sense interpretation of everyday life.

However, this again presents a difficulty, in that it does not completely address the research question, because of an inability to deal with any reality outside of the individual's consciousness and in particular where the phenomenon of interest, is not common-sensical. Nevertheless, one man's reality may differ from another's, and the unconscious behaviour of an individual may indeed be inextricably linked to experience of past events.

In an effort to unearth more fully the essence of the individual experience, sociologists, within the interpretive paradigm, have endeavoured to illustrate that the hard, concrete, tangible, and real aspects of organisational life are dependent on the subjective constructions of the individual. This has encouraged them to focus on ethnomethodology and phenomenological symbolic interactionalism in an effort to fully access the experience of the individual with regard to a particular phenomenon.

3.6.3.4 Ethnomethodology

Ethnomethodology is grounded in the detailed study of the world of everyday life, concerning itself in the process with how individuals go about the task of seeing, describing and explaining the order of the world in which they live. It also looks at how individuals order, and make sense of their everyday activities, and most importantly, make these activities accountable to themselves and to others, in the sense of being observable and reportable (Garfinkel, 1967).

Bittner (1965) argues that within this environment, the individual is not a disinterested bystander, but rather is one who uses the rational organisation as a gambit of compliance. This is achieved through the construction of rules as portraying common-sense meanings, in the mind of the individual. Here, rules are invoked by merely using them, making the rationality of the organisation tangential to the controlling needs of the individual. This implies that the organisational world is constructed by its members under a façade of compliance. Bittner's research is important in demonstrating the role of "accountable" practices in the social construction of reality, wherein the social world, in becoming the direct product of human unconsciousness, affords the researcher a glimpse into how unconscious behaviour informs conscious decision making.

Indexicality and reflexivity play a role, where individuals seek to make their activities "rationally accountable". Indexicality relates to shared ideas that are not explicitly stated. Here, the rationalising of an activity comes through use of language (linguistic ethnomethodology), where conversations convey much more than is actually said (Silveman, 1972). Zimmerman & Wieder (1970) argue that the social world is created through the accounting practices of individuals, as they engage in the routine activities of everyday life, through movement within the rules being "possible." These examples of ontological oscillation reinforce an approach already identified by this researcher as being appropriate to answering the research question.

Situational ethnomethodologists seek to understand how people negotiate the social contexts in which they find themselves and may consciously question the taken for granted elements of everyday situations in order to reveal the underlying processes at work**.** However, in providing explanations for how the individual appears to order his world through the use of various accounting practices, ethnomethodology may steer into the realms of positivism, through its seeking out knowledge from the perspective of what the researcher feels is common sense?

3.6.3.5 Phenomenological Symbolic Interactionalism

This approach, in differing from ethnomethodology by the degree of attention it gives to interaction, is typified by its emphasis on the emergent properties of interaction through which individuals create their social world, rather than merely reacting to it. In addition to this, meaning is attributed to the environment, rather than being derived from and imposed upon the individual. While ethnomethodologists explore how individuals account for and make sense of their world (rationalising the irrational), phenomenological social interactionalists explore how individuals employ a number of practices, for example negotiation, to create and sustain different definitions of their world (Burrell and Morgan, 2000).

Cresswell (1998) summarises the steps involved in using phenomenological research tools as follows:

- The researcher brackets his or her own preconceived ideas about the phenomenon in order to understand it through the voices of the informants
- The researcher writes the research questions and asks individuals to describe their everyday lived experiences
- The researcher collects data from individuals who have experienced the phenomenon, through interviews and self reflection.

3.6.4 Hermeneutics

Hermeneutic approaches suggest that objective knowledge can be obtained by reliving experience through the conduit of the subject, wherein language, in reflecting the inner life of those who use it, becomes the main avenue for gaining an understanding of their world. Burrell & Morgan (2000) argue that the social whole cannot be understood independently of its parts, suggesting that words in a sentence must be understood in terms of their total context rather than as fragmented meanings. Therefore, while phenomenology is primarily oriented towards the immediate phenomena of human experience, such as thinking and feeling, hermeneutics is more context directed (Oldman, 1985). The author contends that in interpreting human action, hermeneutics often tries to go beyond the observable in order to try to read between the lines, thus categorising it as trans-phenomenal.

3.6.5 Grounded Theory

Grounded theory is both a methodology and a tool used in data analysis. Glaser & Strauss (1967) see the task of the researcher as developing theory through examining the same event or process in different settings or situations. Glaser (1992) argues that researchers should start with no presuppositions, and should allow ideas to emerge from the data, whereas Strauss & Corbin (1998) recommend familiarisation with prior research and the use of structured and mechanistic processes to make sense of the data. This difference in emphasis has implications for the researcher in explaining their adherence to one or the other of these approaches.

The Straussian view of grounded theory assumes that pre conceptions are inevitable, due in the main to the interest of the researcher in the topic, and that this results in the researcher familiarising themselves with previous work conducted in the general field of research, before starting to generate their own theories. This approach strays into the positivistic environment, in that it suggests the development of a prior heuristic. Nevertheless, an advantage of this approach is that there is initial clarity about what is to be investigated, leading to fast and efficient collection of information, allowing for replication of the study by other researchers.

The disadvantage of this approach is that it may only confirm what is already known and may offer little in the form of explanation if the results are inconclusive or negative. The grounded approach, therefore, while acceptable at providing both explanations and new insights, can be regarded as suspect due to its lack of clarity and its need for standardisation of methods (Mason, 2002).

3.6.6 Case Studies

Case studies also fall under the umbrella of non-positivistic research. Collis & Hussey (2003) describe case studies as extensive examinations of a single instance of a phenomenon of interest. However, while these studies are particularly suited to non-positivistic research, they may need to be carried out over a long period (Carson et al, 2002). Rather than confirming or disconfirming prior theory, case studies can also focus on a more in-depth study of specific issues, using interviews, follow-up interviews, and documentary evidence, through a blend of inductive and deductive approaches.

3.7 Specific Issues Pertaining to Hearing the Psychodynamic Discourse

Words are often the means by which we come to understand and navigate situations, in that we create our world with words, we explain ourselves with words and we also defend and hide ourselves with words (Bogden & Taylor, 1975). The unconscious discourse is closely associated with the Lacanian theory of the signifier and the signified (1956). It therefore incorporates and integrates the relationship between the signifier and the signified, and, as such, has major implications for accessing the unconscious (Arnaud, 2002). Indeed, Lacan (1956) has described the unconscious as being structured like a language.

Walsh (1996) in describing the unconscious as any aspect of experience of which an individual is not aware, including thoughts, assumptions, feelings or actions, suggests that a problem for the qualitative researcher, may be one of “hearing” the unconscious.

Furthermore, if an individual's motives are unconscious, the subject can not, rather than will not talk about their real motives. This resistance, or inability to communicate, may be due to their lack of psychological vocabulary or the presence of "shame," "guilt" or anxiety in the subject's environment Furnham & Taylor (2004). True interpretive research, therefore scrutinises narratives as much for what they reveal about the narrators, as about what they narrate (Walsh, 1996).

Unconscious material can be conceptualised as internal and subjective, or as contextual and directly observable, and the research approach will depend on which assumption one follows. If unconsciousness is structured like a language, then research must focus on the words that the participants use to describe their experience. If, however, unconsciousness is distinct from language, then qualitative methods must incorporate non verbal data (Walsh, 1996).

While traditional views of unconsciousness see it as resting within the individual, recent research has conceptualised it in interpersonal terms (King, 2003). This suggests that if the unconscious is located within the individual, that access can only be afforded through that individual, suggesting that researchers must find ways to access the unconscious. Here, researchers typically use the interview technique, wherein the participant's elaborations, clarifications and associations become the data for analysis.

Walsh (2003) suggests that this methodology follows from the assumption that human consciousness is the basis of all experience, including unconscious experience. As a result, all procedures begin with and remain focussed on the researcher's and the participant's consciousness. By contrast, locating unconsciousness between individuals focuses more on the context of the individual's actions, and views the research process as a socially embedded activity, where reflexivity is achieved through the researcher's scrutiny of verbal behaviour in the light of cause and effect, leading it therefore to a more positivistic slant (King, 2003).

Researchers also need to be aware that the subject's unconscious is inaccessible to the actively engaged subject, whereas, the researcher is presumed, somehow to have access to their own unconscious. Here, language exists at the level of both conscious and unconscious discourse. For interpretive research, this means that a scrutiny of words within a given narrative is presumed to reveal the structure of the subject's experience.
It is also important that the researcher's interpretive narrative be scrutinised for the structure embedded within it, as a researcher's language can illuminate their own particular frame of reference.

Apart from structured language, access to the unconscious is also possible through dreams, parapraxing (Freudian slips) or through free associations (saying aloud whatever comes to mind in an effort to allow patterns to emerge). Body language, (grimacing, furrowed brow or a particular stance) may also indicate unconscious detachment from what is being said (King, 2003).

The observation of anxiety and the corresponding use of body language and defence mechanisms offer a glimpse into the unconscious of the individual. Anxiety arises when the ego is faced with an influx of stimuli with which it cannot cope. Defence mechanisms subsequently distort reality through the redirection of gratification.
Repression, displacement, reaction formation, regression, denial, intellectualisation/rationalisation and sublimation are often depicted as characteristic defence mechanisms (Glassman, 2001; Furhnam & Taylor, 2004; Kahn, 2002).

- Repression arises where threatening emotions are blocked from becoming conscious, thus forcing the mind keep a lid on unacceptable feelings.
- Displacement or projection involves blaming other sources of anxiety rather that the true source, or projecting one's own unacceptable feelings, through anger onto someone else. People use displacement when they perceive that the real target is too threatening to confront directly.

- Reaction formation involves transferring the feelings that produce unconscious anxiety into it's opposite in the conscious state. These defence mechanisms give themselves away through excessively demonstrative behaviour. Here the individual asserts the feelings too much and is overly extravagant and compulsive about demonstrating it. Thus the "hater" expresses "love" and the "intolerant totalitarian" becomes an advocate of participant democracy.
- Regression is observable where the individual becomes fixated with the past or is unable to outgrow a clinging dependence through constantly looking back. This defence mechanism is exhibited through temper tantrums, or reverting to the sulkiness of adolescence.
- The defence mechanism of denial is seen through the refusal to admit that something unpleasant is happening.
- Intellectualisation and rationalisation are higher level defences that depend on complex cognitive processes. Intellectualisation is the unconscious control of emotions and impulses by excessive dependence on "rational" interpretations of situations. Rationalisation involves offering an acceptable reason for behaviour rather than the true reason. The researcher needs to be wary of the rational analysis that interviewees make for their own behaviour, as it prevents the person from recognising the true motives for actions. Thus, it represents a form of distortion from reality. In rationalisation, the decision maker finds excuses to justify actions that were caused by repressed and unacceptable feelings.
- Sublimation is the only defence mechanism that does not protect the ego. It differs from displacement in that the drive energy is redirected to a socially desirable creative reality.

Walsh (1999) agues that a stumbling block to exploring the links between the psychodynamic world of the individual and the organisational world, is that psychodynamic literature focuses on infantile experiences in a manner almost incomprehensible to those outside the therapeutic world. She also argues that the language used in the psychodynamic world (despair, shame, envy, rage and attachment)

often raise a smirk when applied to the organisational world, wherein difficulties arise in transferring a psychotherapeutic framework, traditionally focussed on individual private dysfunction and distress, to an organisational context defined by public rationality. This suggests an unconscious rejection of "non rational" approaches to decision making.

3.8 Data Collection Methods

Easterby-Smith et al (2000) bracket qualitative data collection methods under the umbrella of interviews, observation methods, and diary methods, whereas quantitative research is more associated with questionnaires and surveys. As this research proposes to follow a qualitative approach, the methods associated with this approach will now be considered.

3.8.1 Interviews

Qualitative or semi-structured interviews are described by Mason (2002) as the construction or reconstruction of knowledge, rather than its evacuation, and as being characterised by relatively informal styles, a thematic approach and a contextual focus. Bell (1999) reinforces this point, arguing that interviewers can probe responses and identify motives and feelings, wherein the way in which the response is made can provide information that a written response might conceal. However, Frey & Fontana (2000) caution that the spoken word often has a residue of ambiguity, irrespective of how carefully one words the questions or codes the answers. This may create a problem for the researcher as to whether to use topic or resource interviews.

Topic interviews and resource interviews, although approaching the construction of knowledge in differing ways, are not mutually exclusive Seale (2001). Topic interviews view *how* interviewees say things and tend towards being hermeneutic or ethnographic. This treating of conversation as a social process, causes empirical representation to becomes less of an issue, resulting, sometimes, in a criticism of the method's validity.

Resource interviews on the other hand, view information as *what* people say and rely on a contextual approach to elicit the true feelings and views of the interviewee. Resource interviews can become topic interviews through the identification of opportunity. However, opportunism in topic interviews does present a problem of bias, e.g. a tendency in the interviewer to seek out answers that support a preconceived notion, can creep into interviews.

It can also be difficult for participants to remain focussed, particularly where the means of accessing information is through interview (Heron, 1996). Marshall & Rossman (1995) suggest that interviewers may use a set of prompts to guide the interviewees to respond to a question and that systemisation in the questioning and gentle probing may be required to overcome feelings of unwillingness or discomfort in the interviewee.

Deciding on the style of the research questions is another issue. Collis et al (2003) differentiate between approaches that are appropriate for both the positivistic and non-positivistic designs. Positivistic approaches involve a specific research question, followed by a number of hypotheses, whereas with non-positivistic approaches, the research question may need to be refined as the research process proceeds. Questions within the positivistic paradigm should:

- Express a relationship between variables
- Be unambiguously stated
- Imply the possibility of empirical testing

Non-positivistic approaches on the other hand may use one or two "grand tour" questions, followed by a small number of supporting sub-questions. This strategy is appropriate to approaches where the methodology is considered to be associated with emergent theory. Effective access to data is enhanced in the anti-positivistic paradigm by paying attention to the language of the question by:

- Avoiding words such as "effect", "impact" and "determine" that suggest a relationship between variables
- Using open-ended questions, without reference to the literature or theory, unless otherwise directed by the research design (Cresswell, 2003)

3.8.2 Ethnography

Ethnography differs from data collection through interviews, in that it aims to clarify the way culture simultaneously constructs, and is formulated by peoples' behaviours and experiences, therefore giving a primacy to being interpretive. Tedlock (2000) & Mason (2002) describe participant observation as a method of generating data which involves the researcher immersing themselves as participant observers in a research setting, while systematically and reflexively observing dimensions of that setting. Geertz (1993) in describing ethnography as "thick description" proposes the practice of, establishing rapport, selecting informants, transcribing texts and keeping a diary, followed by the writing up of the diary notes as soon as possible after immersion. The process, according to Cresswell (2003) consists of looking at what people do (their behaviours), what they say (their language), and the tension between what they really do and what they ought to do. This point is re-enforced by Carson et al (2002), who contend that a key advantage of ethnographic research is its closeness to the reality of the topic under investigation. Accordingly, it can provide significant understanding of the phenomena being researched, as well as producing new, previously unrecognised phenomena and insights.

3.9 Data Analysis

It is important to bear in mind that data analysis is not sharply divided from other activities in the process, such as collecting data and formulating the research question. A potential difficulty with the analysis of qualitative data lies in its complexity. The non standardised nature of this data requires that it must be classified into categories before it can be meaningfully analysed, otherwise, a mere impressionistic view of what the data means may emerge (Saunders et al 2003). These authors also suggest that qualitative data analysis can be approached from either an inductive or deductive perspective. The analysis of qualitative data differs from quantitative data in that it is conducted through the use of conceptualisation rather than through the use of diagrams and statistics. The interpretivist paradigm is, broadly speaking, associated with an inductive approach to

data analysis and uses strategies such as comprehending the meaning of text through action or reflective techniques. The functionalist paradigm, on the other hand, is more associated with a deductive approach which incorporates strategies related to discovering regularities in the data (Burrell & Morgan, 2000; Tesch, 1990).

Classifying data into meaningful categories provides the researcher with an emergent structure that is relevant to the research question. Riley (1996) suggests that the use of aids such as interim summaries, self memos and a researcher's diary are sources of additional information that assist in the formulation of an answer to the research question. These interim summaries are useful for self checking the research methodology being employed, developing new topic themes and making comments about the person interviewed, the location, events that might have occurred during the interview or observation that might have impacted on the nature of the data being collected. The researcher found this strategy particularly useful.

Spiggle (1994) suggests that while analytical procedures manipulate data, interpretation makes sense of it through abstract conceptualisations that represent a holistic and illuminating grasp of meaning, enabled through the deciphering of codes. Mason (2002) describes how data may be read in a combination of literal, interpretive or reflexive manners, and suggests moving beyond the data through a process of cross sectional and categorical indexing to evaluate the extent to which the research data addresses the research question and theoretical concerns. However, she cautions against simple serial indexing, insisting that further sub classifications and cross referencing between different texts in a non static environment will allow "surprises" to emerge from the data. In addition, the process of data analysis is contingent on whether the researcher aligns themselves with deductively based or inductively based strategies.

3.9.1 Deductively Based Analytical Strategies

Deductive approaches to data analysis are based on existing theory. They assume that the researcher is in a position to commence data collection with a well defined research question and objectives, in addition to a clear framework and set of propositions that have been derived from the theory. The literature review and the theory therein will shape the data analysis. Pattern matching and explanation building are two examples of deductively based data analysis procedures (Saunders et al, 2003).

Pattern matching involves predicting a pattern of outcomes based on theoretical propositions and using testing to explain what the researcher expects to find. Patterns can be dependent on each other (verification) or independent of each other (evidence based) (Yin, 1994).

Explanation building involves building an explanation while collecting and analysing data rather than testing a predicted explanation as described above. This approach is quite similar to the grounded theory approach, but differs in that explanation building is still designed to test a theoretical proposition, albeit in an iterative manner, rather than to generate new theory as is the case with grounded theory (Yin, 1994).

A key element of the deductive approach to data gathering is that while predetermined categories may change, subject to the data that the interviewee provides, analysis will be guided by the theoretical propositions and explanations with which the researcher commenced. (Saunders et al, 2003).

3.9.2 Inductively Based Analytical Strategies

Inductive approaches include strategies such as data display and analysis, template analysis, analytic induction, phenomenological data analysis, grounded theory, narrative analysis, discourse analysis and case study analysis. Inductive approaches are often considered beneficial where the research project is exploratory. Saunders et al (2003) suggest that qualitative strategies often combine inductive and deductive approaches to the analysis of qualitative data.

Data display and analysis comprises of three concurrent sub-processes; data reduction (simplifying or selectively focussing on parts of the data through the use of summaries), data display (organising the data into diagrammatic or visual displays) and drawing and verifying conclusions (Miles & Huberman, 1994).

Template analysis involves categorising and unitising data to identify and explore themes, patterns and relationships. This approach combines deductive and inductive approaches in that it consists of a predetermined list of codes and categories that are amended to represent the themes represented in the collected data (Saunders et al, 2003). King (1998) suggests that template analysis is similar to data display and analysis in that it offers a more flexible route to analysis, through it allowing amendment to satisfy the needs of the research.

Analytic induction proposes the intensive examination of a strategically selected number of cases in order to empirically establish the causes of a specific phenomenon (Yin, 1994)

This inductively lead approach commences with a loosely defined explanation of the phenomenon to be explored, which is not derived from existing theory. Explanation is tested through a purposefully chosen case study that will allow the phenomenon to be explored. Saunders et al (2003) propose that this strategy has the capability of leading to the development of well grounded explanations through the collection of rich and thorough data, based on the explored actions and meanings of those who participate in the process, whether through in-depth interviews, observations or a combination of these methods.

When using phenomenological data analysis, the researcher finds statements in the interviews that relate to how individuals are experiencing the topic, lists out these significant statements (horizontalisation of the data) and treats each statement as having equal worth, while working to develop a list of non-repetitive, non-overlapping statements (Moustakas, 1994; Lee, 1991). These statements are then grouped into

‘meaning units’ of data (the participant’s experience of the phenomenon), using verbatim examples. This is followed by outlining a description of the textures of the experience (textural description). The analyst then explores all possible meanings and divergent perspectives, through varying the frames of reference about the phenomenon and continuously constructing a description of how the phenomenon was experienced. The analyst finally constructs a holistic description of the meaning and essence of the experience (Cresswell, 2003).

Grounded theory does not permit the prior specification of codes to analyse data, holding as it does to a more purely inductive analytical approach. It is designed to build an explanation, or generate a theory around the central theme that emerges from the research data. Strauss & Corbin (1998) suggest that grounded theory should be structured and systematic at each stage of the analysis, however, it also allows for analysis to be carried out in a less formalised way, while still maintaining a systematic and rigorous approach to arrive at a grounded explanation. This method of analysis involves the dis-aggregation of data into units through open coding, the recognition of relationships between categories through axial coding and the integration of categories to produce a theory through selective coding.

A criticism of grounded theory in qualitative data analysis is that it is inherently positivistic through applying “sliced data” to a priori theory, however, Collis & Hussey (2002) argue conversely, that rather than applying data to theory, grounded theory engages in the discovery of codes from the interpretation of data.

The grounded theory approach is similar to phenomenological data analysis, through its provision of a procedure for developing categories of information (open coding) interconnecting the categories (axial coding), building a story that connects the categories (selective coding) and ending with a discursive set of theoretical propositions. Critical differences between the approaches relate to their association with positivism (grounded theory being more so), and whether the data is sliced (grounded theory) or remains more intact (phenomenological data analysis).

Discourse analysis is associated with constructionism, and incorporates the associated phenomenological perspectives of ethnomethodology and symbolic interactionalism (Potter, 2002). Constructionism, according to Gergen (1994, p52), examines "the way language derives its significance in human affairs from the way in which it functions within patterns of relationships". While being similar to grounded theory, in that it is both a methodology and a data analysis tool, it also seeks to expose contradictions between text and actual practice, through exploring the relationships between conversations and the signifying practice, when expressed as language (Henwood, 2002).

Inquiry perspectives using discourse analysis reject the idea that language is simply a neutral means of reflecting or describing the world. This approach suggests that discourse analysts are interested in texts in their own right, rather than seeing them as means of getting at some reality that is assumed. This may cause problems of interpretive bias for the analyst, as description may be analysed in a number of different ways, depending on the orientation of the speaker and the writer (Gill, 2002).

Individuals use discourse to offer blame, to make excuses or to present themselves in a positive light, suggesting that discourse does not occur in a social vacuum. Gill (2002) argues that as social actors, we continuously orientate to the interpretive context in which we find ourselves, and construct our discourse in order to fit that context. This analysis method may therefore be significant in accessing of the language of the unconscious.

Looking at "how" participants respond can offer valuable analytical clues to the researcher that go beyond the literal usage of conversation. An important first step in this process is the suspension of belief in what is normally taken for granted in language use. This, in effect, involves rendering the familiar, strange (Potter, 2002).

Analysts using this approach have rejected the more traditional cognitive explanations of social interaction (actions being a consequence of mental processes) and have instead looked at how mental processes are constructed and used in interaction (Potter, 2002). This allows the researcher to explore situations where interviewees "break off" from a flow of conversation associated with a specific response to give a more personal opinion. This researcher feels that this may facilitate an exploration of the deconstruction of meaning in addition to the ongoing construction of meaning, and consequently aid in accessing the unconscious.

Discourse analysis involves the careful reading, re-reading, and interpretation of texts in a rigorous manner (Billig, 1988). This immersion in the material is time consuming, but is a necessary preliminary to coding. The categories used for coding will be determined by the questions of interest. Potter & Wetherell (1987) caution that merely getting the gist of the text is the wrong way to approach the analysis, as this inevitably ignores nuances, contradictions, and areas of vagueness. In addition, discourse analysis involves the researcher in interrogation of their own assumptions, and the ways in which they make sense of things through reading passages in particular ways.

There are two separate phases in analysing discourse (Gill, 2002). Firstly, the searching for pattern in the data takes the form of both variability (differences within and between accounts) and consistency. The second phase involves formulating tentative hypotheses regarding the functions of particular features of the data, and checking these against the actual data. Although discourse analysis requires sensitivity to the way language is used, Billig (1991) also proposes that it requires sensitivity to what is not said. Narrative approaches suggest that maintaining the integrity of the data collected and conducting analysis from the verbatim transcripts or sets of notes is more appropriate to interpretive approaches. While grounded theory involves the fragmentation of qualitative data to further the process of analysis, some researchers consider this approach to be inappropriate. Saunders et al (2003) propose that phenomenological and life history approaches are based on individuals' accounts of their experiences. The ways in which they explain these experiences through their subjective interpretations and relate them to constructions of the social world in which they live (Saunders et al, 2003)

Case Study analysis consists of making a detailed description of the case and its settings. Where the case presents a chronology of events, Cresswell (1998) suggests analysing multiple sources of data to determine evidence for each step or phase in the evolution of the case. Typically, data analysis in case studies is a multi stage process. Stage one involves categorical aggregation, wherein instances from the collected data are explored for issue relevant meanings. Patterns of categories are established through coding. Direct interpretation follows and may include the establishment of causal relationships.. Finally, naturalistic generalisations are developed, and augmented by tables and figures.

3.10 Interpretation Issues and Practitioner Biases

Research is never value free. Examples of this occur when questions may arise concerning the personal biography of the researcher and how this biography determines the approach to the research (Dyer, Aberdeen & Schuler, 2003). This approach questions the adequacy and efficacy of the author's interpretation, promoting instead, a more open approach for readers to reach their own conclusions. Whether or not one writes oneself into the narrative of the research is also a concern. This raises issues relating to the possibility of researchers remaining totally objective when it comes to research (Fullagar, 2002).

The acknowledgement of multiple interpretations, the questioning of the researchers interpretation of data, and the privileging of the readers own judgement of the text, are all closely aligned with the validation of data interpretation (McGregor, 2000; Ateljevic & Doorne, 2002). Here, the authors place a high degree of significance on subjective accounts and individual interpretations of texts in a socially constructed environment. This approach gives a greater resonance to issues of interpretation, and also accounts for the researcher's own biases and subjectivities by opening up the analysis to multiple interpretations. Morgan (2002) and Pritchard, Morgan, Sedgley, Khan & Jenkins, (2000) agree, arguing for the need to provide a space for voices to come alive and be heard in an environment of respect. Accordingly, Denzin & Lincoln (1998) conclude that research has evolved from being content specific to being context specific, and that the authority of the researcher as an objective expert has been rejected.

The values and biases of the researcher can also play a role in the interpretation of phenomena and the construction of texts. Jamal & Hollingsworth (2001) argue that in order to move towards more interpretative qualitative research, it is necessary to depart from the more static, quantitative and positivistic knowledge bases, to a more dynamic, experiential and reflexive approach, where there is a recognition that social agents are central to the construction of knowledge, and that the researcher's voice is one among many that influence the research process.

Bias is possible in ethnographic research. Marshall & Rossman (1995) contend that care must taken to ensure that values are not imposed by the ethnographer. An interesting differentiation between the polar opposites of participant and non-participant observation is provided by Gill & Johnson (2002), who argue that by becoming embroiled in the every day lives of the subjects, the researcher may lose the ability to become dispassionate, whereas the lack of interaction raises the problem of ethnocentricity (a failure to understand the underpinnings of the subjects overt behaviour).

In terms of researching the unconscious, transference and counter transference may impact on research validity. Transference refers to the process by which an interviewee reacts emotionally to an interviewer with an unconscious spontaneous reaction, where feelings, unrelated to the research, are transferred to the interviewer. Counter-transference is where the interviewer may experience feelings of protection, repulsion, or attraction to the interviewee which may subsequently affect the interview dynamics. Researchers need to be aware of when transference triggers counter-transference, as this dynamic may disempower both parties (King, 2003).

Discourse analysis also offers the potential for bias in interpretation. The description of a phenomenon can be both constructed and interpreted in multiple ways, depending on the orientation of the speaker and the analyst. The researcher, therefore, needs to be aware that individuals may construct discourse to fit in with their own contexts, or what

they believe is an “expected” answer, or they may perceive the researcher as a conduit for expressing subjugated feelings. The researcher therefore, needs to be cautious of over-speculation, through being drawn in by the emotional context of the response, or through attempting to align the discourse of the respondent to their own embedded beliefs. In addition, the researcher must be aware that discourse analysis does not lead to the production of broad empirical generalisations, s it is designed for specific interpretive contexts (Gill, 2002).

3.11 Limitations of the Methodologies

In describing the importance of qualitative research in the hospitality industry, Walsh (2003), argues that the researcher must seek to understand the situationally based local perspective. In choosing participant observation as part of a research suite, this researcher too felt the need to explore the behaviour of decision makers in a natural environment, to evaluate how processes were connected. Thus observation as a participant offered the prospect of new insights into decision practices in a real time environment. This research took place some weeks after the interviews in order to broaden and give greater legitimacy to my findings. This approach follows Hammersely & Atkinson (1995), who ague that epistemologically, it is better to observe a decision making meeting in progress than to depend on retrospective or reconstructed accounts. I also felt that this approach would be more reflexive and dispassionate than the interview process.

However, difficulties were experienced when attempting to gain access to yield management meetings, and when trying to access documentation (training documents and data sets used to assist with formulating the decision), relating to the decision making process. The author repeatedly and unsuccessfully attempted to gain access to this information through phone and e mail contacts with the human resource departments of all hotels, where interviews had taken place. This concerted approach on the part of the author yielded a positive response from just one of the hotels that had participated in the interviews.

The author felt that while this reluctance may have been due to a confidentiality factor, it may also have been due to him not being an employee of the hotels in question, or that the hotels were concerned about the sensitivity and transparency of their data. However, he also speculates that due to the time lapse between interview and the request for further information, the hotels in question may, on reflection of what was already contributed, may have decided not to facilitate further probing into their decision processes. This approach corresponds with a finding of the literature review that a dearth of research exists into unconscious factors influencing decision making in yield management.

In terms of the ethnographic approach, Gill & Johnson (2002) describe access to boardrooms as being notoriously difficult and suggest that this may be due to the fear of potential indiscretion. Alderfer (1968) suggests that protracted negotiations regarding access can also provide critically important insights into the organisation's culture.

Interviews have a limitation when taken in isolation. Denzin et al (1998) and Blackburn & Stokes (1999) argue that as the worlds of the academic researcher and the interviewee are so culturally different, that any one-off, face to face interview is essentially an artificial setting. The interview process maximised at one hour, in an environment where the researcher was trying to elicit data to understand what lay behind the decision making process. Difficulties were experienced when interviewees curtailed the interview, due to being pressed for time.

The scarcity of time also placed a limitation on the research, providing an impediment to the study in the process. This in turn resulted in a mere surface understanding of what influences the decision making process. Time also impacted when trying to re-arrange interviews that had been cancelled by the interviewee.

Finally, the topic itself, being so subjective, created a difficulty for the researcher in constructing a methodology that would enable unconstrained interviewee response. The researcher acknowledges that this constraint on the interviewee may be associated with resistance, caused by the immediacy of the interview environment and the inherent difficulties of establishing rapport, and that this potentially inhibited the researcher from gaining access to the unconscious.

3.12 Location and Participants

Five Dublin hotels offered to participate in the research. Each of the hotels was graded as a four star hotel (The Dublin Guide). In two of the hotels, two members of the yield management team were interviewed separately. One member of the yield management team was interviewed in the other three hotels. A more detailed profile of the participants is found in Appendix 4.

3.13 Ethical Considerations

Ethical constraints should be implicit in the research approach (Bell 1999). These include, negotiating access to the research site, seeking permission to tape an interview, verifying interview transcripts with the interviewee, guaranteeing anonymity and following the organisation's ethics protocol, if required. In addition, honesty about the purpose of the exercise, integrity in the conduct and reporting of the interview, and a commitment to allow the interviewee access to the transcript, should also apply. Furthermore, the research process should not harm or embarrass the participants, or those organisations about which information is gathered.

However, despite this, situations can come to the researcher's attention which suggest illegal practices, and having guaranteed confidentiality, may cause an ethical dilemma for the researcher. Although confidentiality is a given, particularly in encouraging open and honest responses, this honesty may throw up information that is unknown to senior management. It is also important to realise that the researcher may be considered as someone in authority by the participants, and that this perception may influence the way that they answer, through either withholding information, or feeling obliged to answer the questions in a particular way.

Furthermore, the pressure to achieve results may encourage falsification of research findings, through the exaggeration or omission of results. Additional pressure may also come to bear on the researcher to alter the findings if the findings cast the host company in an unflattering light (Collis et al, 2003).

Informed consent through informing potential participants of the purpose of the research and obtaining their permission, may pose problems where it might be perceived by the researcher as being more appropriate to gain information in a covert manner. Ditton (1977) argues that participant observation is essentially deceitful, as, if the researcher informs the participants about the purpose of the research, he becomes unsure whether the participants have adjusted their position, or not. The ethical dilemma here is how much deception in a given situation is acceptable. Easterby-Smith et al (2002) contend that researchers should be truthful, vague and imprecise.

The researcher also plays a part in the research approach. This is influenced by the epistemological position of the researcher as to whether they remain detached or become part of the research instrument (Carson et al, 2002). Within the non-positivistic paradigm, being the subject of the research process demands that the background and previous experience of the researcher be explained, as previous experience will have an impact on how the researcher structures understanding, and may simultaneously prevent them from seeing a certain aspect of the problem (Storbacka, 1994). In addition, being swept along by one's own views and experiences can lead to a skewing of the research findings. This phenomenon is recognised by Alvesson & Deetz (2000) who make a strong case for critical sensitivity in carrying out research, which will serve to counterbalance the more natural practice to seek out only that evidence that confirms the researcher's beliefs.

Ethical issues also apply to accessing unconscious behaviour. Although reflexivity is critical to the practice of qualitative research, the problem of unconsciousness seems to stand in its way, in that, if aspects of lived experience are unconscious to an engaged participant, then how can one become reflexive (Walsh, 1996). Reflexivity thus becomes a problem, due to the participant being forced to pay attention to details that might typically be ignored.

In addition, the researcher must become acutely aware of their own assumptions as they move beyond a surface understanding of lived experience, to look for examples of unconscious behaviour (King, 2003). Furthermore, validity problems may arise if the researcher specifically looks for evidence of unconscious decision making, in that the overt imposition of the researchers needs may bias the methodology, cloud the interpretation and steer the inquiry paradigm towards becoming positivistic rather than interpretivistic.

Mason (2002) argues that researchers may overcome such ethical dilemmas by acting as thinking, reflective practitioners who are prepared to ask difficult questions about the ethics and politics of their own research practice on a regular basis. This researcher tried to overcome the above ethical issues by being constantly aware of the ethical dilemmas created by the methodological approach taken to answer the research question.

3.14 Reliability, Validity and Generalisability

The distinction between verification and falsification also has also a broad significance for the researcher. Easterby-Smith et al (2002) argue that while much of the debate surrounding verification and falsification relates to the positivist paradigm, non-positivists might also take lessons from this debate. In terms of validity, Easterby-Smith et al suggest that for the results of non-positivist research to be believable, there must be transparency. This transparency is achieved through the researcher explaining how they gained access to a particular organisation, what process lead to the selection of informants, how data was recorded, what processes were used to summarise and collate the data and how this data was transformed into theories.

Silverman (2000) agrees, arguing that qualitative research methods must be seen to be protected from opportunistic researchers who pick evidence out of the mass of data to support their particular prejudices. To defend against this kind of “anecdotalism,” he suggests adopting practices such as refutability of evidence, constant comparison, comprehensive data analysis prior to analysis, and greater vigour in tabulating data.

3.15 Conclusion and Justification of Chosen Methodology

This section will outline and justify the inquiry strategy and the associated methodologies, data collection and analysis methods utilised by the author to answer the research question and to address the associated sub-objectives.

Referring back to the overarching paradigms and the issue of ontology and epistemology, the author will mainly adopt a non-positivistic approach as he believes that the information required to answer the research question will be more appropriately constructed through the voices and beliefs of the research participants. However, he disagrees with one assumption associated with the interpretive paradigm, namely, that the subjects under study are completely autonomous.

Ontologically and epistemologically, the author associates more with the relativist perspective (data to answer the question is constructed by the people who make the decisions). Additionally, while the author does not subscribe to decision makers being wholly autonomous, neither does he believe that they are totally controlled by their environment. Therefore, an intermediate viewpoint which allows for the influence of both determinist and voluntary standpoints is taken.

Methodologically, the author stands firmly within the ideographic perspective. Indeed, by prefacing the research with "how" he makes an assumption that there are multiple realities that can be constructed by the actors. This places the author within the interpretivist paradigm, wherein knowledge is seen as an emergent social process, and where understanding and explanation of the phenomenon of interest, comes through the language of the respondent. The research question, in asking how decisions are made, in reality asks if extenuating forces impact on the decision making process. Therefore it is not simply a case of the respondent describing how decisions should be made, but rather, how they feel that these decisions are made.

With regard to the choice of paradigm, the author concurs with Carson et al (2002) and recommends taking a broadly inductive approach, which proposes constructing rather than testing theory, thus firmly placing the research within the non-positivistic paradigm. The author also concurs with Saunders et al (2003) and Yin (1994) in seeing some merit in a deductive approach. The approach therefore taken involves taking a deductive approach at the commencement of the research, through providing an initial framework from the literature review, and evaluating this empirically and inductively to allow new insights to emerge (Carson et al, 2002).

While a number of the methodologies discussed earlier offer possibilities in assisting with obtaining data to answer the research question, the methodological approach chosen by the author will employ a combination of phenomenology and hermeneutic enquiry to access both the conscious and unconscious elements of the research question. While broadly speaking, phenomenology is associated with the conscious state, due to its focus on intentiality, transcendental phenomenology and hermeneutic inquiry seem appropriate to accessing the subjectivist state of the unconscious, whereas existential phenomenology, an ethnomethodological approach and the utilisation of phenomenological symbolic interactionalism may be appropriate for accessing the unconsciously constructed conscious state through language signifiers (Lacan 1956).

Broadly speaking, phenomenological sociology, characteristic of the interpretivistic paradigm is underwritten by the basic assumption relating to order in social affairs. However, the fact that reality may be “created” within such social affairs may result in the author straying into the radical humanist paradigm, profiled by Burrell & Morgan (2000). Nevertheless, the author feels that a combination of the phenomenological approaches listed above may be effective in understanding if individuals consciously construct the decision environment, to satisfy and placate their own unconscious urges.

As a method of inquiry, hermeneutics is concerned with clarifying the meaning of hidden messages, such as messages with multiple meanings and messages that carry essential importance for the ways that the participant lives (Nakkula & Ravitch 1998). Hermeneutics was therefore considered as being additionally useful in collecting data that observes the underlying causes of managerial behaviour in relation to their decision processes, thus making it a useful method of accessing both conscious and unconscious behaviour.

Thus, the approach chosen by the author to access unconscious behaviour is a narrative interview approach, within a broad phenomenological/hermeneutical framework, utilising a discourse analysis/hermeneutic strategy, to read between the lines in an inquisitorial manner. The reason for this rather complicated approach is because of the difficulty in accessing the unconscious. The tactic used in the interview is to start by attributing membership to the interviewee ("describe your role and career in the organisation"). This is followed by enabling the emergence of logico-scientific knowledge ("How are decisions made"). This helps to create a safe and unthreatening environment, which might not occur if the researcher went straight into talking about their feelings, risking a premature ending to the interview. An ethnomethodogical approach of questioning their explanations in an unthreatening manner follows, drawing out underlying factors in the decision making environment of the respondent. The strategy here is to expose the ordinary, and to uncover justifications and defence mechanisms, thus allowing access to the unconscious. This approach will allow a continuous movement from the creation of logico-scientific knowledge to narrative knowledge, where the telling of stories of human intentions and deeds may access both conscious and unconscious behaviour.

In addition, while adopting a mainly positivistic approach, the author was also open to considering the application of other inquiry methods. Theories of bureaucratic dysfunction offered a complimentary approach to the interpretivist strategy, particularly when addressing sub-objective (iv).

Other methodologies were evaluated, but were not considered as appropriate to answering the research question as those listed above. Critical theory is associated with theories of emancipation and research into organisational power struggles. While not discounting the possibility of conflict, particularly in relation to what was found in the literature review, the overwhelming assumption of the author is that compliance determines behaviour although he is open to evidence of conflict emerging during the research.

Similarly, it was felt that while grounded theory would address how people react to a phenomenon, phenomenology would be more appropriate in dealing with how they experience it. In addition, grounded theory's all too systematic approach, and its close association with the positivistic approach mitigated against its use. Regarding case studies, the author felt that as they are often bound within a specific time period, and normally deal with events that have happened, they would not be appropriate to the need to construct interpretations, as required by the research question.

Data collection methods consisted of taped semi-structured interviews followed by observation techniques afforded by ethnography. The data analysis suite selected consisted of phenomenological data analysis, to induce themes from the data and discourse analysis, used to deconstruct the data in order to illustrate what lay behind it (Lee, 1991). Other collection methods were not used. Although focus group interviews are notoriously difficult to organise, this researcher would have been loath to use them due to the possibility that the mere presence of other participants might dominate proceedings or dampen a willingness on the part of participants to share their true feelings.

In summary, a broad spectrum of phenomenological strategies was selected, to unearth the data required to answer the research question, and to deal with both conscious and unconscious discourse. Specific data collection techniques of interviews and ethnography were utilised, along with the analysis methods of phenomenological data

analysis and discourse analysis. Discourse analysis was used to find contradiction in the texts. This follows from the view of Tonkiss (1998), who argues, in relation to interviews, that it is not so much the views that are expressed that important, but how different views are establishes and warranted.

The author listened to each tape within one hour of conducting the interview and transcribed perception notes during and after the interview to assist with discourse analysis at a later stage. Also, as access to documentation proved difficult, discourse analysis could only be used to analyse e mails that indicated a preference on the part of the hotels, not to allow access to written data such as training manuals, and data sets used to assist with the analysis of data.

Throughout the analysis, the researcher found it challenging to ensure that his input was meaningful and sensitive, rather than attempting to impose his own interpretation, without justification. The researcher had a reflexive input into the data analysis. Interview texts were read a number of times, both literally and reflexively (Mason 2002). In addition to multiple readings of the interview transcripts, each of the tapes was listened to in order to identify additional contextual factors that might supplement the determination of meaning, such as, tone, expression, changes in voice volume, pauses, laughter, annoyance and paraphraxes. Broken sentences, including sentences being cut short by the interviewee, were also considered.

The selection of respondents followed a letter sent to a number of four star hotels in the greater Dublin area. This was followed by five pilot discussions with the general managers of four star hotels, primarily to introduce the author and explain the purpose of the research, and to allay any ethical issues or concerns that might impede the research process. Participants were selected based on their grading (four star) and that they had access to technology for assisting with or making decisions. Interviews lasted between forty five minutes and one hour. Interviews were taped, except in one case where the respondent expressed a wish not to do so. Additional notes were taken during the interviews. Observation as a participant took place in one of the hotels. All other hotels declined the offer, some doing so by e-mail.

Chapter Four

Findings and Analysis

4.0 Introduction

In this chapter, the findings from the primary research will be presented as they relate to each of the sub-objectives that support the research question. In the previous chapter, the suite of methodologies, appropriate to enabling respondents to describe their experience of the decision making process in yield management, were explored and selected. The resultant body of transcripts tells of this experience.

Analysis of the transcripts identified a number of common themes that emerged from the interviews and ethnographic observations. These themes were condensed, in relation to each of the sub-objectives, and presented in terms of representative trends and meaningful relationships, that would facilitate answering the overall research question (Lee, 1991).

While the management science model may be viewed as the optimal model of decision making for yield management, evidenced by comments from Dublin hoteliers during pilot discussions to arrange interviews, who suggested that "it is the only show in town," and that they have selected this model because, "it permits only a 3% emotional input into the decision making process," and has "afforded their hotel the opportunity to finally move away from the subjective biases of human decision making", it is important to note that the respondents in the interviews, in describing their approaches to decision making, were neither familiar with, nor did they use the technical jargon associated with these models.

What the author attempted to achieve through the interviews was to facilitate a description of what each of the respondents perceived as the essence of their evaluation of the decision making process. Evidence of contradiction in the interviews was sought through the use of discourse analysis. Evidence from e-mails and the participant data notes were also integrated into the findings.

4.1 Findings associated with objective (i)

To ascertain if there is a predisposition towards a particular decision model.

As a first step to answering the research question, the author sought to inquire if there was a preference for particular decision models, or indeed, if particular decision models were disregarded by the participants. In a number of the interviews, the time at which a decision needed to be taken and the level of pressure on the decision maker at the particular time, were significant determinants of the strategy adopted in making that decision. Three approaches to decision making were prominent across the research sites. Respondents described approaches that were synonymous with the bounded rationality model, the garbage can model and logical incrementalism, in situations that were characterised by the degree of time pressure on the decision maker.

When asked how they viewed the decision making process, interviewee (A) stated:

> *"From a yield management perspective we would tend to look at things from a rolling 90-day perspective and once a week a small team of us meet to discuss strategy relevant to market segments, rate segments and room types, tactical promotions etc., and within those meetings, we make decisions about opening or closing various rate categories or room types to maximise the room rate or the actual yield for the hotel on a given set of dates."*

Later in the interview, (A) reinforced this view by stating; *"And then at the very last minute when the city is full, it becomes very much the supplier's market. You can charge what you like then.*"

When asked of their experience of the decision making process closer to the due date, respondent (B), an employee of the same hotel took a less sanguine approach when stating:

> *"It's a combination of controlled and chaotic, controlled chaos if you like. You are just trying to make sure that you are staying on top of what you have coming in and using that to your benefit, rather than your detriment, and I think that's for the most part, what I would do I would say a fairly chaotic environment more often than not."*

Respondent (C) also suggested an approach consistent with time pressured decision making, when stating; *"We all understand the dynamics of the market place and you know, you have to make decisions as you go along, you have to review as you go along, you know"* .This overview of the temporal aspect of decision making was expressed later in the interview, when (C) states: *"I try to work on an ad hoc basis. We will look at the enquiry in isolation, totally in relation to the group's piece of business and in relation also to the time of the week and the time of the month."*

How the hotel was perceived to be performing in relation to their external environment also seemed to promote the use of last minute decision making. When asked about the process of price setting, interviewee (D) commented:

> *"Our Rack rates (maximum standard rates) are set on an annual basis but sometimes we would go out onto certain websites with some of our rooms at a certain price, and we might decide to change that then, based on how it is performing, closer to the time"*.

Later, in the same interview, when commenting on the pressure to make decisions, (D) comments *"So, therefore, you insist on somebody taking the two nights together, but if you know that it is not going to happen a week out, you can always drop your rates. So, I suppose, it's trying to manage things as best you can"*. This view was consolidated again, later in the interview when stating:

> *"But you might find, say for instance, on a weekend, if it's not a bank holiday weekend, we might reduce the Saturday night rate to the Thursday/Friday night rate, and we would make those decisions on an ongoing basis."*

Evidence of competitive environmental pressures impinging on the temporal nature of the decision making also surfaced in other interviews, with respondent (F) commenting; *"We have a meeting next week. We have left our rates at €190. Our rooms don't seem to be selling, so we may have to drop them, closer to the time."*

Strong evidence of a preference for greater human involvement in the decision making process was found across each of the interviews. This expressed preference was particularly evident when discussing variables such as technology and the requirement to evaluate data. When asked if they utilised technology to measure price sensitivity, interviewee (A) answered: *"We do [long pause]….to a certain extent. I mean we measure it more intuitively than specifically."*

Later in the interview, when discussing the relevance, for decision making purposes of the data they use (A) commented: *"This technical data is in turn supported by intuitive information that one has about what is going on in the market place, like what you hear from other properties, what we hear from customers and what we hear from our employees, etc."*

When discussing their attitude to allowing a financially affordable technology to play a greater part in making the decisions, interviewee (C) responded: *"No I would still want a greater human influencing factor"* and later, when using a critical incident (September 11th 2001) to explain their preference of the human model over the technological model, (C) commented: *"The Americans were walking around the hotels, and you know, when you see the like of that, and when you see people walking around like that, you say, human intervention has to be more important."*

This expressed preference for the role of the individual in the decision making process also broadly corresponded with a strongly expressed desire for autonomy in the decision making process. When commenting on their experience of the decision making process, interviewee (C) stated:

> *"I personally am happiest working with decisions that I feel happy about, and I feel that, 'yeah I will have a go at that.' I am definitely a gut feeling type of person, yeah. But equally I could say 'I could feel bad about this.' To me this is really important personally. I am a really big believer in going with my gut feeling and that maybe comes with time in the business and experience, I don't know. I am a big believer in that, yeah. So it's sort of intuition, I suppose that's another word for it."*

Experience and pattern recognition were also identified by respondents as being a significant determinant of their decision approach. Respondent (F) describes this intuitive approach to decision making in her rule of thumb approach. *"Another rule of thumb we have is that three star hotels fill up before four stars. So if we see three stars filling up we know that we are going to be next."*

Respondent (D), in stressing the significance of personal experience, commented:

> *"But having said that we would often take two groups because we know that one is going to wash down and one is going to cancel. A lot of the time – there is a little bit of poker going on, – a lot of the time you would take two groups because it's six months away and although there will be times when you end up with the two groups, because they didn't cancel as you thought they would, to be honest 80% of the time your gut feelings are pretty good."*

This preference for human intervention was also evident where respondents voiced a distinct preference for decentralised decision making. When outlining their views on this, respondent (A) commented; *"Effectively the local dynamic, or the local environment, drive your decisions about revenue strategy rather than what is necessarily going on in the wider environment"* There was agreement from respondent (B), albeit for a different reason, who felt that; *"You don't want to have a central reservations office in India, determining if a person travelling to Dublin can get a room that night"*

The lack of support for rational decision making models, and specifically in relation to the management science model was epitomised in the consistent downplay of technology in each of the interviews. This was perhaps the strongest theme uncovered by the primary research. Throughout each of the interviews, this downplaying of significant benefits of technology assisted decision making, was articulated through a counter pointed and validating opinion, expressing the importance of the human input in the making of effective decisions. Although at times there was an acknowledgement of the significant role that technology could play in the decision making process, this initial acknowledgement was consistently downplayed, often quite irrationally.

When offering their view on the usefulness of technology in decision making, respondent (A) was quite circumspect, stating:

> *"Technology plays a huge role. Technology per se is not the thing that plays the role. The role really is the intelligence it provides. And the functionality of the technology, the availability and accuracy and functionality of the intelligence, and so it certainly does play a big role in assisting the decision making. There is no question about that."*

However, respondent (B), a different member of the same yield management team expressed a contradictory view, when stating:

> *"I believe that any technology is only as good as the person that is using it. It is a system that's just there, that's been put in place by the hotel, - costs a lot of money. I mean, it's never going to make decisions for you but it can give you advice on what to do. But only the people are going to know what's best for the business. I mean, I wouldn't say that it gets in the way of making good decisions, I just think that as long as it's used properly, [pause]…then it should be an assisting tool in your decision making, but it shouldn't guide all or your decisions, maybe some, but it certainly shouldn't make decisions. I'd say that's what I would probably think about technology [pause] …and how it should be used in our hotel system."*

Again, while acknowledging the capability of a technology assisted decision making system, respondent (D) questioned its acceptability, stating:

> *"Although we may have some rooms available that are not on the computer, and we could probably offer those rooms at a lower rate than what is on the computer to our business client, but because the computer refuses to do this, we could have lost that business forever. But a human person would not have done that. So I believe that when you are trying to get loyalty from customers you definitely cannot rely on technology to make your decisions for you."*

The transparency of technology assisted decision making was also a bone of contention to some of the respondents. Difficulty with the transparency associated with technology appeared to translate into a justification for a preference for human intervention in decision making. Again, the downplaying of technology was associated with a related factor, in this case, what the individual might lose. This was articulated by respondent

(D), who in decrying transparency, stated, *"We don't have as much flexibility in yield management as you might think because our hands are tied a lot of the time."*

Later, issues of cost, and the related issue of the decision maker's role in updating information were also used to denigrate the relevance of technology in decision making. Respondent (D), speculating on the potential arrival of a technology based decision making systems commented:

> *"Oh yeah, there are some companies beginning to look into that, but will they pay for their system to be integrated into Opera which is our PMS system? I doubt it. I mean, how many PMS systems are there in Irish hotels. Huge, huge amounts. It's almost a full time job now for us to ensure that we have the right rate, the right availability out there at any one time and amended when things change. It's seriously time consuming."*

The spectre of human based decision making being replaced by a technology system also resulted in a tendency to downplay the potential benefit of technology in the decision making process. When addressing this issue, respondent (B) earnestly commented:

> *"No. No, definitely not. [pause]…No [laughing] I'd say that would be the end of my job, you know. And that would be the first reason because you know I have to protect my own interests."*

Respondent (C) also expressed a fear of being replaced by technology, by articulating a desire to cling onto the status quo, through rationalising that everything was ok at the moment, when commenting:

> *"That's a fair comment but it's more about what's being done to date. Maybe it's just letting go and allowing the computer to do its own thing, and trusting it to do its own thing, and maybe that will come in time, but as regards to the here and now I don't think that it's quite there yet. I don't think technology is quite there yet. Maybe for the next generation of sales managers or hotel people that will come through they may well decide that's the way to go."*

Later, the same respondent, when addressing the idea of trust in technology assisted decision making comments:

> *"I think yeah. It's simply because…it's the classic isn't it. It's just the human brain trusting a machine and it's the same today as it was when computers first came out. It's trusting the machine, it's trusting the mechanical brain to do what you need to do, to gets results that you want and I am sure that it will come in time more into the hotel industry and it's probably in place, but you know, I don't know because I mean I haven't worked in a large hotel environment for a number of years, so I don't really know what is happening in these hotels or as to how far they are trusting these systems coming in."*

The role of technology was also downplayed in an effort to emphasise the importance of the individual in the decision making process. In addition, interviewees appeared to disregard the fact that technology systems could input decision constraints into the system. When reviewing the process of how technology could make decisions, interviewee (B) commented:

> *"Like I know they say it's unemotional, and computers as they say can make that pure logic decision, and based on logic you'd say, 'well yeah, take the first option,' because the computer doesn't know that the second one is going to come, so the computer would take the €160 and sell at the first bid. That's what the computer would tell itself to do."*

Interviewee (C) was far more emphatic on this issue, describing the possibility of securing a decision making technology system as a waste of money;

> *"We don't have that system in place. We don't have any automated yield system in place, so, therefore, we make our own decisions on yield. This is a conscious decision on our part. It has to do with our size. We don't need a system that can do that sort of decision making. We are not big enough. We have only got forty-four rooms. It would be a waste of money in my humble opinion."*

Other technology deflecting reasons including, not supporting internet based decision systems, were articulated by respondent (E), who commented:

"The problem I have is that we have no guarantee that our name will come up quicker on the system then any of the other independent hotels here in Dublin. I think that the names are ridiculous, things like, Expedia.com.uk. I mean, hey, what the hell am I doing looking for a room and I have to remember a name like Expedia.com.uk. I mean, it's bad enough that we don't get priority when somebody decides to use the Internet, but I think that the names are not easily remembered."

This downplay was evidenced later by the same interviewee stating:

"We are dealing on the other hand with so many different systems that are not connected, it's terribly manual. The problem is that the systems don't communicate with each other, so how could you take advice from them?"

This unwillingness or inability to trust technology in decision making emerged as a universal theme across the interviewees. Respondent (D) in particular was quite vocal in expressing disquiet with regard to their technology systems. The following statements were extracted from the particular interview as evidence of such feelings.

"I mean we have had a few issues with our property management system."

"So we do find faults in the data, and it's only through our human interaction that we find that, and that's a little bit scary because we have had huge issues with our Property Management System and I'd rather not go into that."

"We do use technology but as I have said, maybe I am a little bit old fashioned but I am not 100% reliant nor ever could become 100% reliant on technology. But I suppose I'm a bad person to ask, because as I have said we have had a huge amount of problems with the property management system we have and this is meant to be a very good system."

"We often find that sometimes little blips appear. We just tear up the reports and we have to go back and start from scratch again, so I wouldn't really trust technology in that regard. I really wouldn't."

On the other hand, Internet technology was viewed positively, through being used in some cases as an advertising medium, albeit reluctantly. The benefit of property management technology was also viewed positively, due to its operational ability to internally update data. Respondent (D) conditionally supported the need to be visible on a distribution system, by minimising the number of rooms available for sale on the system, when stating:

> *"Like, we agree an allocation to say your tour operators, like some of the big wholesalers in the U.K. And in order to get onto their website, that large numbers of customers can access, you have to commit a number of rooms to them. We obviously try to give them the least number we can".*
>
> Later he consolidated this view, when commenting;
>
> *"So in effect, we don't really want to deal with them, but we want the exposure."*

However, respondent (D) was less forthcoming in her support for using the Internet when suggesting that she would "*feel exposed*" and would feel that she was "*baring her soul*" if forced to use it on an ongoing basis.

This need to reluctantly use technology as an advertising conduit was reinforced in another interview when respondent (E) commented:

> *"There is another thing too. When you approach some of the websites they have a band of rates that they only deal with, so for us to get on that website we must correspond with the rate band, and there are a lot of four star hotels competing for business so this is another way that we are tying our hands by having to conform to the demands of the distribution system. So getting onto a programme, however beneficial it might or might not be, is dependent on the rate that you are willing to charge, but as I said earlier, hey we need the business. It's very competitive out there."*

Although the use of technology to update data was also highlighted as assisting with the decision making process, a preference for manual input again surfaced, with respondent (D) commenting:

"There is an section in the property management system that you can insert a comment on a particular day, like 'don't sell below such and such' – but it has to be manually activated and it is not as quick as clicking your fingers."

Mixed attitudes towards the significance of data in determining decisions emerged during the interviews. The data used was invariably of a historical nature, and was, generally speaking, internally generated. In addition, data was selected to validate the decision choice, and was seldom evaluated in terms of its validity. An interesting theme, relating to the need or willingness to evaluate data emerged during the interviews, wherein a number of respondents did not see the necessity to do this. Some comments have been extracted from the interviews to illustrate this point.

> "*We do... [long pause]…to a certain extent. I mean we measure it more intuitively than specifically" (A)*

> *"Computers can do this I know, but will give us less control." (A)*

> *"Yeah…we would look at it at least monthly. It's not unusual for us to say 'we are unhappy, or we feel unhappy about that particular set of numbers, so let's double check to see if they are as accurate as they say they are." (A).*

> *"Regarding data, I suppose we just come to meetings, or through communication, they present the data, whoever has it." (B)*

> *"We don't have a computer system that we could put it all into and it might give us an answer as part of the yield management system. It's pretty up to individuals like myself, or the yield meeting that is attended by the director of marketing and myself, the director of sales, hotel manager, and the director of rooms, and obviously the general manager as well. They will hear all the options and come up with decisions and strategies, and that's where we move from." (B)*

> *"No. Not really because we have not had that situation to date, because with Fidelio it's as good as the information we put in, and it's as good as you use the information that you get out of it. So we have created our own manual reports by way of a spreadsheet or whatever and we input these figures into various reports and manipulate and use those figures and we gauge our performance on those figures and to date we haven't had any real issues with that, as far as I am aware." (C).*

The verifiability of the data, according to the respondents also appeared to impact on how the decision was processed. However, there was a reluctance to engage in the process of verification. Respondent (B) admitted to an occasional need to verify data, when stating:

> *"Eh….[long pause]…you do have to have a certain amount of trust in the system but the systems as well tend to make mistakes, so you do have to do manual checks which are time consuming and annoying to do data processing work which is in fact double checking. But I guess it has to be done on the figures that are already there, so it is never an enjoyable job but, yes, sometimes it has to be verified or double checked I would believe."*

Respondent (D) also felt somewhat reluctant to quantify the reliability of the data used when stating; *"But with regard to statistical data, in terms of pie charts and graphs, we are not really into that. It would be more hard figures like what average room rate are we getting."*

While objective verification of the data was not considered necessary, respondents were quick to indicate that they trusted the data that they chose to use, even though it was not validated. *"Oh yeah, we trust it, because we ourselves have actually inputted the information, so therefore, the information that comes out is only what we have put in. So unless we put a load of rubbish in we are going to get decent information out" (C)*
This view was also supported by respondent (D), when stating:

> *"Do I trust the data, or do I rely on it, I'd say maybe seventy-five per cent or eighty per cent reliance on, or confident in any data that I would be given to look at but I would rely probably more on the feedback from the revenue agents, like what they hear on the phone."*

4.2 Analysis of findings Associated with objective (i)

To ascertain if there is a predisposition towards a particular decision model.

Inherent in the language of this sub-objective is the suggestion that the decision maker may be influenced, because of a particular set of circumstances, to consciously or unconsciously apply a particular decision model. Accordingly, in the course of the interviews, while none of the respondents consciously referred to a particular decision model, neither did they give the impression that any systematic analysis of options took place. Indeed, many of the respondents alluded to the necessity of selecting specific data in order to justify the decision taken. Yeoman et al (2000) argue that for the rational model to be successful, a common set of preferences, with perfect knowledge of the alternatives needs to exist. The research found that there were more often conflicting preferences, where individuals followed a solo agenda in making decisions.

With regard to the application of the rational model of decision making, the findings suggest that systematic analysis and objective evaluation of a complete suite of options did not occur. Neither did a cost-benefit analysis of the chosen options occur through the evaluation of the relationship between the chosen data and the resultant outcome. The findings thus correspond with those of Yeoman et al (2000), who argue that a cost benefit analysis of all available options is greatly facilitated by adapting the management science model of decision making. The findings also correspond with those of Gore (1995), who posits that internal political factors and time pressures may mitigate against the acceptance and appropriateness of the rational/normative model of decision making.

While one of the respondents in advocating the need for human intervention, described rational decision making as “cold and unfeeling,” thus corresponding with March’s (1994) proposal that assigning a label to rationality of being either coldly materialistic, or alternatively intelligent, confers an acceptability or unacceptability on the strategy, other respondents referred to the necessity to feel good about a decision. This finding corresponds with the “feeling factors”, characteristic of the affect heuristic (Slovic et al,

2002) and the imputation of a negative evaluation to negative feelings as proposed in magical theory (Rozin et al, 2002). The apparent rejection of rational decision making may additionally be attributable to unconscious factors such as Lacan's (1956) signified and signifier theory, and other unconscious determinants such as use or misuse of analogy (Brindle, 1999), wherein a concerted dismissal of the rational model of decision making, particularly the management science model, appears to have infiltrated the mindset of the respondents and possibly influenced the hotel's approach to the use of technology based decision models. This strategy corresponds with a number of Freud's defence mechanisms, particularly displacement or projection, where blame is transferred to other sources (technology), and rationalisation, wherein respondents provide "rational" explanations for a preference that satisfies an unconscious need, by blaming or downplaying the benefits of a perfectly legitimate alternative (Glassman, 2001, Furnham & Taylor, 2004, Kahn, 2002)

The management science model was not considered as being appropriate to decision making by each the respondents, evidenced by the significant downplay of the role of technology, and as significantly illustrated in the previous section (findings). These findings agree with Wisniewski's (1997) contention that information overload ultimately diminishes the ability of the decision maker to analyse or react to a problem or an opportunity.

In addition, this author feels that although there was an acute awareness that technology could facilitate the making of decisions, the respondents chose to ignore this for a number of reasons, particularly, a fear of losing control within their decision environment, and thereby, the likelihood of personal recognition. This finding corresponds with the phenomenon identified by Carroll & Siguaw (2003), who argue that the global shift to increased numbers of distribution channels, with their complex interconnectivities, can create the feeling of a loss of control on the part of the decision maker, and this in turn creates a mental block against utilising the technology.

The fear of losing control of their decision environment was also apparent where, despite the fact that centralised decision making was available at each of the research locations, respondents invariably expressed a wish for decentralised decision making. Additionally, the lack of belief in the need to validate data signified an unconscious rejection of the rational normative model of decision making. Furthermore, the author feels that respondents indicating that they have problems with the specific technology (the property management system), seems at a surface level to indicate a genuine concern and rationalisation for not using a technology. However, subsequent statements by the same respondents, indicating lack of trust in the system and fear of exposure on internet technology booking systems, both contradict and undermine their initial statements, and demonstrate the presence of deeper unconscious factors impacting negatively on the acceptability of technology assisted decision making processes.

In terms of the decision models that were favoured by the decision makers, bounded rationality, logical incrementalism and elements of the garbage can model were practiced across most of the research sites. Logical incrementalism and aspects of the garbage can model were used when the decision time was short.

The practice of recycling information in order to make decisions, particularly when it came close to the decision time evidenced itself as a common practice across each of the hotels taking part in the research, thus following Quinn's (1978) model. This model suggests that decision making is associated with proactive steps taken in an environment of ongoing evaluation of options. The weekly yield management meetings, held by the yield management teams, afforded the opportunity to enable decision making through a series of small proactive steps where ongoing evaluation and flexibility, enforced by a changing competitive environment, conspired to deliver a "localised" solution to the problem of maximising occupancy and revenue generation.

However, an optimum solution was not sought or achieved, as the full range of options was not considered, due to time pressures and the urgency created by the relationship between the unresolved occupancy problem and the shortening decision time. The

author concludes that this practice lead to satisficing outcomes through management by exception, wherein the decision maker, internally minimised the willingness to evaluate or take risks as proposed by Yeoman et al (2000), Miller et al (1996), and Sloman, (2002). Indeed the findings also indicate the possibility of decision makers becoming risk averse, as proposed in Kahneman & Tversky's (1979) prospect theory.

Cohen et al (1972) suggest that the garbage can model of decision making is appropriate to decision environments characterised by poor goal definition and ambiguity, and where problems and solutions co-exist. The environment of "organised anarchy", typical of a collegiate, non bureaucratic environment, as defined by this model is, in the view of the author, suited the decision practices outlined in some of the transcripts as being "chaotic." For example, respondents "keeping rooms up their sleeves" and the consistent downplay of technology suggest an environment wherein people may push for their own individual choice opportunities.

The use of the garbage can model was also evidenced by the fact that cause and effect relationships were chosen not to be identified, as evidenced in the findings, through a determination not to evaluate data. This absence of evaluation, in conjunction with the fact that explicit databases that could offer decision scenarios were either absent, or considered unnecessary by the respondents, corresponds with Daft's (2001) analysis of the model's applicability.

Avoidance of addressing the inherent problem in yield management, namely how to optimise decision forecasts under conditions of uncertainty, is therefore facilitated by the garbage can decision model. A consequence of using the model is that problems persist without being solved (Daft, 2001). This promotes familiarity, through decision makers becoming used to, and comfortable with the problem. The author feels that this in turn justifies the use of the bounded rationality model by the respondents, wherein fear of, or avoidance of the need for finding an optimum solution promotes usage and acceptance of the garbage can model. Thus, according to the author, the model itself in becoming

associated with bounded rationality creates a comfort zone of indecision, wherein non optimisation becomes an acceptable practice.

Bounded rationality, on the other hand applied, when the pressure was less intense Indeed, the bounded rationality strategy was the key strategic model utilised by the respondents as evidenced by strong evidence of the use of pattern recognition throughout the interviews.

In addition, evidence of "satisficing" (delivering "good enough" solutions) was also determined, through the practice of not evaluating all of the options and the emphasis on the importance of experience and was in some cases used to emphasise the criticality of human intervention in the decision process.

Thus, the preference for the bounded rationality model may not be totally attributable to a conscious belief that this particular model was more appropriate to realising an optimum solution. Rather, it may be more to do with the unconscious effect of the need to negate the merits of using technology to make decisions, or significantly assist in the making of decisions. The findings correspond with those March (1994) who argues that satisficing leads to framing the decision, through editing the problem before entering the decision environment, and with Arnold et al (1991) who propose that individuals make decisions on the basis of expected outcomes.

The author feels that this expressed preference for the role of the individual in the decision making process also broadly corresponded with a strongly expressed desire for autonomy in the decision making process. This finding suggests itself, both in terms of the need for power, and the need to feel good about the decision taken.

The author also feels that the boundedly rational approach adopted by the respondents is analogous with the garbage can decision model (Cohen et al, 1972), and facilitates the mindset of the decision maker, not just through the decision maker being unable to specify goals and objectives, even when knowing what the problem is, but in addition to this, not wanting to specify them.

Having explored the preferences for decision models, the author will now address the influence of heuristics and bias on the decision making process.

4.3 Findings associated with objective (ii)

To investigate if bias or heuristical factors influence the decision making process.

Examples of the traditional heuristics of representativeness, availability and anchoring and adjustment (Kahneman & Tversky, 1974) were evident in the interview texts, as were examples of the influences of both magical theory (Rozin et al, 2002) and the affect heuristic (Slovic et al, 2002).

In a number of the interviews, respondents associated themselves with data that represented situations that were familiar to the respondent. Respondent (A), when discussing the data he uses to effect a decision stated that he buys in a whole series of reports that provide *"market intelligence relevant to our business,"* and that this data is important because it shows *"where you, as an individual property are, relative to the whole market."*

Similarly, in describing approaches to pricing respondent (B) articulates the need to set prices in terms of "*what the local market has, or our competitive set had as its price range"*, thus indicating being guided by the representativeness of the market rate. Respondent (E) equally indicated a dependency on the representative heuristic when in relation to how he decides on contract rates for a particular period states; "*We can command these rates at this time because there are facts, and these facts come from the past."*

The justification for an unwillingness to evaluate data corresponding with the importance of representativeness was forwarded by respondent (C) who stated:

> "*The Fidelio property management system is as good as the information that we put in, and is as good as the information that you get out of it. So we have created our own manual reports by way of spreadsheet, or whatever, and we input these figures into various reports, and manipulate and use these figures to gauge our performance on those figures. And to date, we haven't had any real issues with that, as far as I am aware."*

Another theme that emerged related to data overload. The perceived problem of data overload also appeared to impact on the decision process, with respondent (B) stating; "*you have to know how much of the data you need to present, I mean, you do in a sense pre-select to know what you can and can't use"*

Later in the same interview, this view is reinforced with respondent (D) stating:

> "*The individual will always have to pick which is the most relevant piece of information, and who you are going to give that information to that you think will yield the best possible answer. And you pick that information in terms of who is going to support or go against the decision that you think is best."*

The overload of data, in the opinions of the respondents also impacted on the process of making decisions. This overload, sometimes lead a number of the respondents to engage in the selection of particular data sets to suit the required decision. Respondent (B) was quite succinct about this, stating:

> "C*an you get to all of it? Probably not. The individual will always have to pick which is the most relevant piece of information for who you are going to give that information to and that you think will yield the best possible answer. And you pick that information in terms of who is going to support or go against the decision that you think is best"*

The perception of time pressure, particularly when close to the implementation date for an inventory decision, accentuated this pressure, resulting in a limiting of the search for solutions, with a consequential dependence on available data. This time pressure was listed as decision determinants by a number of respondents, typified by respondent (F), who commented, *"time pressure is a big factor, but it's a business-yeah, that's what you expect."*

The need to confirm the *status quo* was also apparent in descriptions of a fear of failure. Respondent (B) addressed this issue when stating "*internal pressure is always more important than the external pressure applied by the bosses"*. Later in the same interview, when discussing how others felt about him, respondent (B) again addressed this fear of failure when stating "*Yes, yeah, yeah, your reputation, if you like is at stake with some decisions that you might make*".

When asked to elaborate on "*intuitive*" approaches to data evaluation, respondent (B) outlined how he tries to "*track typical patterns of guest stays by market segment, what rate they are at*", confirming the status quo in the process, and reaffirming this later in the interview when stating that they "*don't have a computer system that they could put data into and that would give us the answer.*"

Selection of specific sets of data further reinforced evidence of the use of the representative heuristic. Evidence of the pre-selection and discarding of data in order to inform the decision process were apparent throughout the interviews. Respondent (D) confirmed this strategy when stating; *"You can look at loads of data at the moment but what we are really concerned about is the average room rate that we are getting"*

This was reinforced later in the interview when stating;

> *"We are only interested in certain amounts of data, like company statistic reports, in the sense of who are the top rated companies, what was our top twenty companies during June of last year, why is it changed, who is the new company that is using us, and we would then obviously follow up on that."*

And when being even blunter later in the same interview; *"Yeah, to be honest there's quite a bit of data we wouldn't use."*

> Respondent (E) also alluded to the need to be selective with respect to data when stating:
>
> *"There are times when we disregard data depending on where it comes from. I mean there is nothing that we have now that I would completely disregard. I mean I would take some of it with a pinch of salt but some of the stuff is way too general."*

An associated theme was addressed by respondent (B), when being asked if decisions ever felt automatic, replied "*You do have to think about it, but you use your past, pre-set of experiences to automatically make your decisions. Whatever you have done in the past will effect how your decision making is going to be"*.

This citing of the significance of past experience in terms of decision making was of immense value to respondent (D) when stating *"you have constantly to look to past experience."*

Pattern recognition, in terms of previously experienced situations, was equally relevant for respondent (E) when stating; "*We have demand trends, how we fit against our ideal, how we fit against how we think it should be, and if it is falling away from there, or if it is above, then we adjust. So we set our rate based on this."* This practice, while indicating the use of the representativeness heuristic, is also associated with the anchoring and adjustment heuristic. In addition, these findings also exhibit evidence of satisficing in addition to being associated with the representative heuristic.

Further evidence of this association emerged later in the interview when (E) comments: "*So if 1,500 rooms are sold on the 31st of August going into September, you know that you should be going into September of the following year with the same number, if not more."*

Respondent (F) also speaks of the significance of past experience when stating: "*Christmas decisions are being made at this time, so we sit down and look at last year, we look at the history, and we look at the special rates that other hotels are offering around Christmas, so therefore, there is a lot of history*."

Factors associated with feeling positively disposed to the decision taken, and its association with the representative affect and magical theory heuristics were expressed by respondent (D), when discussing the feelings associated with making successful decisions:

> "*It's a confidence thing, I mean, being able to go into a meeting with the general manager and say, I have a fixed amount of business at an increased rate, makes you feel good, and you feel confident about going up another notch with other business."*

In addition, the unwillingness to criticise a colleague associated itself with the need for the comfort of familiarity, or indeed fear and anxiety, as associated with the affect heuristic. Respondent (F) addressed this when declaring; "*I don't question my seniors."*

Further examples of how respondents relate to feeling good or bad about a decision, and how these feelings predispose them towards making or nor making that decision, were also evidenced in the transcripts.

Respondent (B) refers to this when speaking about seeking support from colleagues before making a decision. *"If colleagues feel it is a bad idea, I don't go with it, if they feel is a good idea, I go with it."*

And respondent (C) supporting this philosophy commented that she is "*happiest working with decisions that she feels happy about."*

Evidence of the use of the availability heuristic, and its influence on the decision making process was common. Respondent (D) enforced this view when stating that they "*are not really into pie charts or stuff like that"* arguing that they are "*more comfortable with pre-selected data.*"

The vividness of data also determined the decision protocol. Respondent (B) described how guest profiles particularly stand out when reviewing the guest's history and that this in particular "*aids the making of a decision.*" Respondent (B) also stated that "*the vividness of historical data makes you feel that you are on the right track."*

The exclusive use of historical data was considered as being significant in the making of decisions by many of the respondents. Respondent (G) was quite emphatic, stating:

"Guest history is an important one that will help me personally to make a decision. That means looking back at our guest history."

Other respondents equally regarded the availability of historical data as being significant in the construction of decisions. The following quotes illustrate this dependence:

> *"We would use last year's numbers, 2003's numbers, to forecast for 2004, and then we would use 2004's numbers to forecast for 2005 and that determines our budgets, and we would look at the first six months of any year and we tend to take that time period and its trend as a way of moving forward for the second six months." (B)*

"There are facts that we go on to make the decision and these facts come from the past" (E)

Some of the respondents appeared to be anchored to the evidence of past trends, with respondent (D) commenting that "*decisions are always based on what happened in the past."* For most respondents, this historical data was mined locally through the property management system although in some cases, it was supplemented with bought in data and opinions from staff, competitors and customers.

Respondent (A) articulated a clear view of this when stating:

> *"Well you have your own hotel's data, which is obviously very easy to get coming primarily from the property management system that you operate, in our case Fidelio. There is a whole series of reports that we buy that relate to booking pace, and all those kind of things. So that is where we get market intelligence relevant to our own business. This technical data is in turn supported by intuitive information that one has about what is going on in the marketplace, what you hear from other properties, what we hear from customers and what we hear from our employees."*

Respondent (B) from the same hotel took a slightly different approach stating: *"Generally speaking, we don't buy in much data. No. In fact, I would nearly go so far as to say that over ninety per cent of our data is mined internally."*

Evidence of the combination of the representativeness and anchoring and adjustment heuristics were apparent in the influence of competitor data on the decision making process, with respondent (D) stating: *"I suppose past performance, forecasting, looking at how competitors are doing, yes, we would tend to look at that an awful, awful lot"*

Further evidence of this was found, with respondent (A) commenting:

> *"Primarily because we know what we are doing. We equally have good market intelligence from one or other of our competitors and we can compare that with the total, and if we are doing x we know where we stand in the competitive table of hotels, and equally we know where this other competitor is. So then, we would pretty well have a good gut feeling for where there is an inaccurate report or if there is faulty reporting going on or not."*

Competitor behaviour was strongly perceived as being a determinant of decision behaviour, wherein part of the data used to influence a decision was the performance of a number of competitors, and the hotel's position in relation to that competitor set. *"We get them (data) from the competitor-probably." (E)*

Respondents expressed a need to be aware of what competitors were doing and how they were performing and that this also influenced them when making pricing and room allocation decisions. This external factor was certainly a significant factor for respondent (B), when commenting; *"So the big question is - what does the local market have, or our competitive set, have as its price range? And we set our price within that range, or maybe a little bit higher, as we would like to be the top product in the market."*

This view was confirmed by a similar response from other respondents. Examples of their comments extracted from the transcripts included;

"It is also what our competitors are doing and what we need to achieve as a hotel (C)

"Where do we get our figures? We base them on competitors, probably" (E)

"See here, they get the occupancy but their rates are not as high, and this relates to the competition that is out there at the moment. I mean, you just can't…it's a balancing act at the moment" (F)

Interdepartmental competition did not really as a particularly strong influence in the decision making process. Indeed it was only a significant factor in one or two of the responses. Respondents did not perceive this as an impeding factor in the making of decisions, suggested in (B)'s articulation; *"I suppose, another thing that happens at the meetings is that we have interdepartmental competition for room availability, but that's not a problem, we do what's best for the hotel"*. This comment appeared to contradict other perspectives in the transcripts that indicated a need for individual reward.

In addition, anchoring on the part of an influential member of the decision team resulted in anchoring the opinions of other members of the decision team. Respondent (C) hinted at this when describing revenue managers at various stages in the interview as being "*like gods,*" capable of "*making or breaking a hotel,*" and "*they are like voodoo, they are the future, if they are not already.*"

4.4 Analysis of findings associated with objective (ii)

To investigate if bias or heuristical factors influence the decision making process

This sub-objective was utilised to firstly establish if heuristics and biases influenced the decision making process, and secondly to ascertain if these factors influenced the decision process either positively or negatively

The general finding was that they do indeed influence the decision process and that the decision makers are conscious of this fact in that they use rules of thumb to improve the quality of the decision taken.

However, the findings also concur with Nutt (2002) in showing that time pressure on the decision maker resulted in limiting the search for remedies, consolidating a fear, in the eyes of the author of respondents moving away from the tangible to the unknown. This practice was evidenced by the degree of dependency on the representative heuristic.
Evidence of an unwillingness to learn from mistakes also emerged, which resulted in some of the respondents escalating their commitment to decisions already taken. This finding was apparent where decision makers selected specific data to justify the already taken. This finding was also associated with respondents alluding to their fear of a loss, aligning it with Tversky & Kahneman's (1979) prospect theory.

In addition, here was strong evidence of decisions being based on gut feeling that corresponded with previously formed stereotypes. This was apparent in a number of interviews, where there appeared to be a comfort factor associated with the reliance on historical data, leading in some cases to satisficing behaviour. The findings thus concur with Bazerman (2004) who argues that judgemental deficiencies arise where individuals tend to rely on such strategies in the absence of sufficient information or when better information that would lead to more accurate decisions exist but is ignored.

The findings were also associated with the respondents seeking comfort in the similarity offered by previous scenarios. This corresponds with the affect heuristics (Slovic et al, 2002). Findings related to the selection of data to confirm decisions already taken were also associated with the evidence trap as proposed by Hammond et al (1999), who proposed that decision makers will seek out information that confirms their instinct or point of view, while avoiding information that contradicts it. Examples of this practice were found in the transcripts, where one respondent suggested their strategy was to decide what they wanted to do before attending a group meeting.

This phenomenon was also apparent through the availability heuristic where information overload propelled decision makers to use information that was readily available, while overlooking information that may have been more diagnostic, as suggested by Nutt, (1999). This author concurs with Bazerman (2004) who posits that the availability of vivid information may cause the mind to unconsciously block out undesired information. This finding also associates itself with Slovic (2002) affect heuristic where personal experience of the success or failure of a decision is more significant than reading or hearing about it.

The author also believes that these phenomena conspire to propel the decision maker to seek out the comfort zone of familiarity rather, as was detailed in the analysis of sub-objective (i) to engage in objective analysis of available options.

As an evaluation of the outcomes of yield management decisions taken in the research sites was not carried out by this researcher, the determination of whether or not systematically biased mistakes were inherent was not possible. However, broad evidence of respondents not being willing to validate or evaluate data would indicate the

possibility of these systemically biased errors being inherent in the process. Indeed, the importance of salience to the respondents confirms the attractiveness of decisions that are preferred over the merit of objective decisions. Finally, the misuse of evaluation through collecting information to justify decisions that were already taken provided evidence of a Freudian defensive mechanism of rationalism (Glassman, 2001, Furnham & Taylor, 2004, Kahn, 2002), adapted by the decision maker.

Evidence of the anchoring and adjustment heuristic was also prevalent and broadly corresponded with the need for satisficing, as proposed by Simon, (1972). Respondents appeared to strongly associate with past trends and the "excessive" relevance of historic data, leading them to adjust their position to correspond with equivalent scenarios from a previous time period.

This previous experience was used as an analogy to justify decision behaviour. These findings are consistent with those of Yeoman et al (2000) who conclude that, yield managers when offering opinions on a forecasting option which is based on their previous experience, often result in anchoring and adjustment of other team member's opinions. Again, this over-dependence on previous experience appeared to make decision makers give disproportionate weight to the information available.

The influence of magical theory (Rozin & Nemeroff, 2002) was apparent where some respondents appear to rationalise the irrational through a conscious contradiction of empirical data. In addition, respondents avoided the difficulty associated with negative feelings by avoiding disagreement with authority figures that they either liked or feared. Evidence of the law of similarity promoting categorisation was also apparent in a number of the interview transcripts, thus agreeing with similar arguments made by Slovic et al (2002).

In summary, this researcher feels that bias and heuristical factors did indeed play a significant role in the decision making process and while these factors were used in an effort to short cut decision making, due to factors like time pressure and data overload, they were also used in an unconscious manner to validate and justify preferred decision practices. Having established that bias and heuristical factors play a part in the individual decision making process, the next section will address findings associated with unconscious factors, and if they also influence the decision process.

4.5 Findings associated with objective (iii)
To explore the role of psychodynamic forces in the decision making process

In addressing this sub-objective, the author sought to ascertain if unconscious factors, inherent in the decision behaviour of the respondents, influenced the decision making process.

For some respondents, incentivisation was associated with the need for recognition. Although there were mixed feelings when it came to discussing incentivisation, the majority of respondents reacted in a positive manner to the idea.

Interviewee (A) was quite enthusiastic about the beneficial impact on the decision making process, stating:

> *"I think that it certainly brings a lot of focus to things. I think that it makes people very clear that if they have an incentive plan driving them…. I meant to say directing them in a certain direction; I certainly feel that that would be very helpful to focus the mind set."*

However, contrasting viewpoint was also expressed wherein a fear of incentivisation also posed problems for some interviewees. Respondent (B) indicated a concern about possible repercussions of making wrong decisions when commenting:

"But you don't want to have a performance measuring system based on, I mean, for somebody to make a poor decision, or what might be perceived as a poor decision, that I would have thought at the time right, you can't fault somebody for taking the action or steps to have made the decision. I would always say to make a decision is better than making no decision at all. If you come up with a plan of action well then you should be rewarded for making that decision. If it turns out to be the wrong decision well then you can learn after the fact that maybe the next time you won't go with that decision again."

For other respondents, incentives were a significant factor in driving the decision process, interviewee (C) commenting:

"Yes, we are all incentivised to achieve those targets here, and that has an awful lot to do with managing the rate and making sure that it is up there and getting the maximum, and you get to know what you need to do in these circumstances."

And later, when relating incentivisation to performance, respondent (C) confirms this view, when stating:

"Oh yes, certainly. I mean our reservations manager is incentivised; the guys on the desk are, yes, that is there. And as I said earlier, the revenue manager is on big bucks to do this."

For others, however, these incentives did not, in their view, drive the decision process. Respondent (D) viewed the emotional high associated with achieving targets as being more motivational than the financial reward associated with this achievement.

"We do incentivise all our sales staff, our reservation staff, our reception staff, our sales team etc. There is an incentive bonus there. Basically it is based on our budgets that we sit down and do, but to be honest with you I am not sure that it's a huge factor. It is more kind of based on the team and how did we did last night and did we fill last night. It's more kind of giving them a clap on the back. I'm not sure that money is the big motivating factor for them. I mean, it's nice but…"

The pressure to achieve pre-set targets was also seen as impinging on the decision maker, resulting in the expression of stress and anxiety. When discussing what influences their decision making, each of the respondents felt quite strongly about its effect. This is illustrated in the following comments from respondents.

> *"How much business you have already booked at that particular time, how many rooms you are anticipating that you are going to pick up, or what's more important, what you need to pick up to maximise your yield, ultimately influences your decisions." (A)*

> *"How many room nights we need to achieve against that rate type that leads to the ultimate end goal of what we want to achieve from a rooms' revenue perspective for the year ahead." (C)*

The anxiety caused by the closeness to the date on which the room needed to be sold also influenced the strategies adopted by the decision maker in order to achieve these targets. However, attitudes to the pressure imposed by last minute decision making varied, with some respondents being quite sanguine, while others indicated being placed under increasing pressure. These views are illustrated in the following comments:

> *"Generally speaking you look at how far away you are from the dates in question, and this determines the promptness that is required to open or close or do other things." (A)*

> *"We have it on a big white board in the meeting room. It faces you every day you walk in. No, I am not joking. It's very obvious and that influences the way we make our decisions. I mean there is no point in hitting an occupancy target and nothing else. That doesn't do anyone any favours. I mean it's all about revenue here." (E)*

> *"I mean I have been around long enough to understand when pressure is being put on you. I mean we are very target focused here. It is very competitive and the figures are there within the reservation system for previous months that your performance is compared to. You can't bluff your way through because it's all facts and you have also got the situation where your performance is based on what our competitors do daily." (E)*

"I mean what he will probably say is, 'you knew in July that these big GAA dates were coming up. Why did you let five or ten rooms slip in at only €170 when you could have got more?" (E)

"I mean if you think of September 11th you are there on that day and you are trying to make loads of money for the hotel and then all of a sudden something like that happens, it's a global issue and you certainly didn't do it and it whips the carpet [of sales] out from under everybody and you put your head down and you just feel bad, and it's like in any job, when you are winning they love it and when you are losing, it's like really (pause) in the last few years have been very difficult on hoteliers. The competition has increased and the people just aren't there to fill the rooms. It's just…it's crazy stuff. So you are very much aware of not meeting your targets, but you have to look at why you didn't, what are the influences and what stopped you from doing it." (F)

"For example, we had a great month last month. We were well over budget and it was just great to have the peace of your superiors being happy, that peace is priceless here. You can put money on that...but the second that your sales are down and you are worrying about paying full time staff, and trying to manage your own pay roll, and there is that kind of pressure on you, it comes back into view then in the weirdest of ways. Like for example, if the front desk is cluttered it will be picked up by the sales people if the sales are not good. And every little thing is picked up in situations like that by them" (F).

In addition to these external pressures, internal pressure also played a part in the factors influencing how decisions were made. Some of the respondents viewed not meeting their targets as being a measure of their own ability as a manager. This view is illustrated in the following quotes.

"Like you are always conscious of your target or the budget, even as I say, when you have set it yourself. Like if we are not achieving budget. Yeah, like with all the planning and the effort you tend to feel bad when things are not going according to plan. Yeah, I suppose that annoys me more than anything else or frustrates me. It's more frustrating than anything especially when you know the effort that has gone into things, and the effort that you have put into filling the rooms and you just feel let down, of a group has cancelled on you and you feel, yes, particularly as a sales person where I feel that my responsibility is to keep the phones ringing to achieve budget (C).

When discussing their view of what happens if they miss a target, respondent (E) shared this insight:

> *"Limbs get taken off [laughing]. No seriously speaking, what you will always try to do is to make up for it in the next month. So it sort of puts a bit of pressure on you. I mean the pressure comes from the senior management and in a way we put pressure on ourselves but the main pressure comes from the general manager."*

This internal pressure was later aligned with a determination, bordering on overconfidence, when the same respondent added:

> *"That takes an ability for us to say we know the way things are going to be at a GAA final, or at Madonna concert time, or a big event. We can guarantee that it might be late but it's sure as hell going to come and we will hold firm until we get that rate."*

Attitudes to rate integrity and transparency varied across the interviews. Some respondents, for example interviewee (A) were quite adamant about its significance.

> *"One of our core company philosophies is 'rate integrity across all distribution channels.' So we do not believe in selling rooms on the Internet, for example, at a lower price than you can buy if you telephone the hotel directly. We have complete transparency across all distribution channels."*

While others, as stated earlier stated a preference for limiting the transparency of rates through only allowing a certain number of rooms to be "visible" to customers and competitors. This practice was tied in with the need to maximise revenue generation in order to either guarantee incentive payments or satisfy the internal needs for recognition and applause in the decision maker.

Use of analogy was also quite apparent in talking down elements of the decision making process with which the interviewee did not agree. Much less evidence was found wherein respondents used analogy to accentuate aspects with which they agreed. Revenue (yield) managers were described by one respondent (B) as having to "*wade through e-mails,*" another respondent (F) repeatedly referred disparagingly to other members of the decision team who exclude her from the decision forum as "*them upstairs.*"

Respondent (C) spoke of *"actively promoting decisions that she had done her homework on, to ensure acceptance by other members of the decision team,"* while other respondents (B) used contradicting terminology such as "*so called automated*", in describing decision making systems, teams as "*huddled around a table*" and central reservation systems selection processes as "*weeding."*

The desire for autonomy was addressed in objective (i) when considering the respondents' preference for human intervention and decentralised decision making in the decision making process, over the acceptability of technology assisted decision processes. The findings associated with this sub-objective suggest that this desire for autonomy is in turn related to the need for power, and that this is an unconscious influence on the decision making process.

Respondent (C) articulates this need when stressing the "*importance of sales being separate from operations people, who won't always know what the sales and marketing people do."* This corresponds with evidence of a superficial belief in team work. Respondent (C) felt that "*everyone should be sitting around a table but it does not happen"*. Further evidence of this need for control and power was found when respondent (E) describes the rush of adrenalin arising from "*waiting to sell a room and being- better than the computer."* Evidence of this individuality was also apparent in the participant observation exercise, where individuals at the meting emphasised what they had done to deliver solutions close to what the printout had required.

The need for recognition was also apparent in some of the interviews. This needing to be recognised became an important part of the decision process for some participants, leading respondent (C) to declare that she saw the benefit in optimisation, "*only as a personal feel good factor."* Other participants viewed the need for "*personal input*" into the decision making as generating a feel good factor for them which influenced their wish for autonomy.

The link between overconfidence and fear of failure was again demonstrated when one respondent (B), on being asked how they felt about decisions they have made, commented:

"I would have made most decisions pretty confidently," and later when contemplating fear of failure the same respondent stated: *"Failure is something that happens on a day-by-day basis and if you let it overcome you then you are going to become overwrought with it and we all have to move forward."*

In expressing views on her need to be well thought of, respondent (C) states:

> *"Oh yeah. Terribly important because I need to know myself, maybe it's a human thing to see what we have set out to achieve is being achieved in the way we planned and I would need to know that."*

This need for applause was repeated by interviewee (E) who, in considering her frame of mind when going to a meeting, states:

> *"It's a confidence thing, I mean, being able to go into a meeting with the general manager and say 'I have fixed a certain amount of business at an increased rate;' makes you feel good, and you feel confident about going up another notch with other business."*

This necessity to feel good about the decisions taken created the sense of overconfidence on the part of the decision maker. This was exhibited on a number of occasions throughout the interviews and during the observation exercise undertaken in the hotel that agreed to do so.

Attitudes to risk were evident in the transcripts. When contemplating the risk involved in overbooking the reservations, respondent (D) states;*"At this stage sitting here there are quite a few days in 2005 that we would be way over overbooked for, but I am one hundred per cent confident that a huge amount of that will wash down and will cancel out."*

Equally, when addressing how they felt about technology making decisions, respondent (E) commented:

"I really don't think that the system is efficient to tell us something that we don't know at the moment."

This need to feel good about decisions resurfaces as overconfidence later in the interview in an unwillingness to acknowledge the significance of a mistake.

> *"If we make a mistake on our rate, if we make a mistake in setting a rate or something, you know, maybe our GM will say that we should look at it separately at a different time, but it's never a case of saying, 'wow see those guys in Rev, they've made a big booboo there.' It will never happen because they know how much good we do." (E)*

While respondents indicated that they would utilise the internet as an advertising channel, the possibility of being defined by it was negated with respondent (D) seeing additional usage as "*exposing your soul on the internet*" and supporting a policy of "*minimising the number of rooms on selling engines."*

Other unconscious determinants were evident within the interview texts. These included Fear of failure, the practice of never questioning seniors, feelings of guilt about not meeting targets, needing to show confidence at all times, seeing continued success in decision making as a career issue, unwillingness to admit a mistake, the need to avoid transparency, anxiety and the need for perfection.

4.6 Analysis of findings associated with objective (iii)
To explore the role of psychodynamic forces in the decision making process.

The research findings in this section suggest that psychodynamic or unconscious forces potentially impacting on the decision making process, relate to issues as diverse as the linguistic factors associated with misuse of analogy, the influencing factors of overconfidence, and the need for power, recognition, and anxiety. The analysis in this section used hermeneutic enquiry to probe beneath the text of the transcripts. The author was more sensitive to the language used and indeed not used by the respondents. Tapes were listened to and voice tone and body language were factors that influenced the determination and analysis of the findings.

The need for applause and recognition, as a theme was evident in the transcripts, where respondents expressed the need to be well thought of. This highly personalised response, in a number of cases, was associated with a form of overconfidence playing its own part in the decision making process. This corresponded with an individualistic approach to decision making, where as discussed in previous sections, some respondents formulated decisions in terms of how they would be viewed, prior to attending a meeting. Indeed widespread evidence was apparent of respondents preferring autonomy in the decision making process. This leads the author to speculate that the referring to a "team approach" is but a front for the subliminal need individual power roles in the decision making process.

In relation to the unconscious influence of overconfidence, a number of findings presented themselves. Examples of delusional optimism dominated some of the text where participants appeared to exaggerate their own talent, rather than address the possibility that a rational choice may have been wrong, thus agreeing with Lovallo and Kahneman (2003). Evidence of the spinning of scenarios of success were also apparent leading, in some cases, to an escalation of the decision making process. This practice almost universally corresponded with the need for recognition.

The unwillingness to acknowledge a mistake, evidenced in the transcripts through the disproportionate balancing the weight of the mistake against the respondent's perception of how important they are to the success of the organisation, was additional evidence of the repressive impact of overconfidence on the decision process This, in some cases, also appeared to encourage escalating commitment to decisions that were oriented towards the self advancement of the individual, rather than for the benefit of the organisation.

As outlined in sub-objective (i) the difficulty with being controlled dominated a number of the texts, linking it with Foucault's (1979) proposal that the individual's freedom is often compromised by the mere fact that they belong to an organisation.

Evidence was also apparent where respondents rationalised their behaviour through the bypassing of organisational rules, agreeing with Slovic (2002) and Furnham & Taylor (2004), who suggest that individuals perceive rules as being either unfair or leading to unnecessary additional work being required.

In fact, the practice of keeping "rooms up sleeves" enabled one participant to justify their actions by constructing and justifying outcomes as being better for the hotel, while openly stating that the real reason was for their own satisfaction and pride. These better results were rationalised in the transcript, while the respondent simultaneously downplayed the potential outcomes if the required organisational protocols were followed.

As discussed in sub-objective (i) the need for decentralisation and autonomy overrode the possibilities of centralisation and team decision making in a number of transcripts. This corresponded with the individual's need to control and influence their own decision making environment rather than being controlled by it, associating the practice, therefore, with the desire to use decision models where human intervention was a predominant factor. In addition, a number of participants spoke of the likelihood of interdepartmental competition for space. The use of coalitions of individuals to provide a defence mechanism also exhibited itself in one of the sites.

The removal of items from the agenda, that complicated the *status quo*, was also in evidence in one of the research sites.

Strong support also existed of a pre-occupation among participants with perfection. This corresponds with the theories of Walsh (1999), who argues that relationships within an organisation can be characterised through an acute awareness of never being good enough, even when agreed targets are exceeded, resulting in anxiety being unconsciously acted out through defence mechanisms, such as denial and repression.

Anxiety, due to being uncomfortable with the practice of overbooking as cited by Yeoman et al, (2000) was also apparent.

The major psychodynamic factor however, impacting on the decision making process involved attitudes to technology, in particular in relation to the management science decision making model. This author agrees with Orlikowski (1992) who suggests that human behaviour is both enabled and constrained by the rules and resources that result from previous actions. Her structurational model suggests that a duality of technology can exist, where designers physically construct a technology to satisfy management priorities and expectations, within which users socially construct the technology by deciding which features to accept or ignore.

This corresponds with the findings in the research that an escalating commitment to the dependence on human intervention in decision making exists, despite the evidence from both the secondary research, and the muted acknowledgement from a number of the respondents, that technology assisted decision systems offer more optimised solutions.

The author feels that a possible reason for this escalation, may be that consistency and persistence are valued in modern society where they become signifiers of good leadership (Daft 2001), linking it with the need for applause and recognition, and the flipside of that coin, the fear of shame and failure. This escalation, therefore, involves managers blocking out or distorting negative information when they sense that they may be personally responsible for negative decisions. Human intervention in this case, though appearing to be consciously selected, is in fact unconsciously driven by the fear of failure.

However, one must also speculate if decision makers are correct in rejecting the management science model of decision making due to their belief in the inherent flaw incorporated in the model resulting from the human inputting of data. This may correspond with their belief that the model itself does not have an ability to deliver objective, quantitative data, or to incorporate the qualitative data required to assimilate the "softer" side of decision making.

If this is true, then the management science model satisfices, thus allowing the decision maker to use the technology in a socially acceptable format to deliver reports as they want to receive and utilise them. This therefore associates itself quite overtly with Lacan's (1956) theory of the relationship between the signifier and the signified. This then becomes a major theme in the analysis of decision practices in yield management, wherein, the management science model, through enabling the delivery of data, which has been internally constructed to suit the aims of the decision maker, is subsequently used to validate the decision taken.

These findings also correspond with those of Walls (2002) who argues that individuals are uncomfortable with objectively assessing the known facts and estimating possible outcomes through weighting them against their respective costs.

With regard to the unconscious influence of anxiety, evidence of decision makers feeling either valued or undervalued by senior management appeared to play a significant role in the decision making process. Furthermore, experience of authority figures through never wanting to go back to previous employment was also evident. These findings correspond with Bion's (1961) BAD group dependency theory. This emerged in the interviews where a search for collegiate support for a decision taken corresponded with the fear of making a bad decision.

4.7 Findings associated with objective (iv)

To ascertain if a relationship exists between conscious and unconscious decision making.

This objective is explored in terms of the relationship that may exist between conscious and unconscious decision making. The author wished to ascertain if one of these forms of decision practice influences the other, or if indeed they can comfortably live side by side. An associated theme that the author wishes to explore is the relationship between rule based and "feelings" driven decision making.

As explored and discussed in previous sections, statistical evaluation of data does not appear to take place. This suggests that the decision process appears to lend itself to decision makers giving a disproportionate weighting to their first thoughts. This ignoring of information leads to what respondent (B) describes as a dependence on "*preset experiences.*"

When discussing how customers might feel about dynamic pricing, interviewee (A) countered by arguing on a number of occasions his need to control prices.

> *"I think that the customer understands to a certain extent the practice of dynamic pricing. However, I think that the volatility of that acceptance is quite low. If they (the customer) could not get access to the rate that they believe they have negotiated in the contract, then, I think it would defeat the whole purpose of entering into any kind of contract to produce a certain level of business over a certain period of time."*
>
> *"Dynamic pricing is based more upon the premise of total choice on both parties perspective. The room is available at the rate that it's available at, and if you want to book you book. The problem with this is that it takes control out of your hands" (A).*

For some respondents, rules were viewed as being part of the decision process but which could be overturned by the individual, evidenced by the following comments:

"I suppose you could say that rules are there for the good of everybody, as well to give general guidelines, but I don't think they are always a black and white situation." (B).

"There are indeed times when you have to tell little white lies, but I mean, these do not do any harm." (G)

"I suppose I do like living within them, they are safe, but I do think if you are going to break a rule you have to know how to break it, and you know like, but I suppose I do like the safety of rules." (F)

An interesting caveat to this was offered by respondent (F), who suggested that if she had made an intuitive decision, which subsequently, her supervisor asked her to revise, she would use rules as a defence blanket.

"But on the other side ... mmm…if my boss tells me to do something and it's going to fall back on him, then I will do what he tells me, 'cos it's his decision and he's going to pick up the can for it! And I don't mean that in terms of 'for the greater good.' If he is willing to go with that then I step aside. You have to …like…but if it's my decision then I go with my intuition. I cover myself, but stay within the rules."

Later in the same interview, when discussing living within a rule based environment, (F) comments:

"I suppose I do like living within them, they are safe, but I do think if you are going to break a rule you have to know how to break it, and you know like, I suppose I do like the safety of rules."

And later again, she reinforces this point when stating;

"So, therefore, I went and I learned the rules. I loved having the rules there but when you get to a certain level you kind of know what rules you can break and what rules you can't, and at the end of the day you have our intuition to fall back on"

When asked to elaborate on this by suggesting how she would recognise a rule that she knew she could break, respondent (F) answered:

> *"Mmm..[long pause] I suppose they are unwritten rules. Maybe, maybe sometimes…and em…and you just make them up in a certain situation where you know you do not have to follow through on that rule and you figure out that it might be a better decision if you don't, and you will get support for it."*

The justification of the breaking or bending of rules, while proclaiming to believe in the same rules, were yet further examples of not wanting to be determined by their environment. Evidence of this was peppered throughout the transcripts, with respondent (G) stating that rules should never be perceived as being "black and white" and respondent (F) speaking of "*keeping rooms up my sleeve that those upstairs don't know about"* in an effort to maintain control and derive satisfaction out of selling them later at a higher price.

Attitudes to rules also played a part in the decision making process. When asked if how she would react if she was not allowed to stray outside the rules, respondent (F) stated:

> *"Oh I would lose, what would you call it, not face, I would slowly, certainly get disinterested, and I would probably end up losing motivation totally. I like to be encouraged, you know, all my team like to make decisions so that it why I empower them"*.

Respondent (B) also alluded to this when stating:

> *"Rules are there [laughing]…I suppose you could say that rules are there for the good of everybody, as well to give general guidelines, but I don't think they are always a black and white situation."*

A dislike of being controlled was also apparent across the interview responses. Examples taken from the interview texts confirm an almost universal dislike of the decision environment being externally controlled, with respondent (C) commenting:

> *"Well I have had that; I mean the shoe has been on the other foot in a big chain of hotels where you do get an element of centralisation, you know, directions or instruction coming out which I don't necessarily agree with."*

Later in the interview, the same respondent added:

> *"So when it comes to somebody saying to me, 'lower your rate' or 'do this or do that,' I tend to say, 'well hold on a minute. We're in this market place, we have these clients on the books, and I know how we work and I think you will be foolish to try and force that upon us."*

Although the above responses indicate a strong dislike of being controlled, there was also an indication of unwillingness in some of the respondents to allow others to make decisions. This was articulated by respondent (D) who stated: *"We try to give each hotel a certain level of ownership and although we do like to control things we do not exactly try to do a Big Brother on them. We do like to give them a bit of a free hand"*

Some respondents characterised their environment as being determined by the simple laws of supply and demand, in addition to being influenced by targets being set externally or through being part of a decision team. Respondent (A) describes the decision environment as being about "*supply and demand."*

There was also a high degree of dependence on what customers were thinking, which in turn became external determinant in decision making. This second guessing of customers, through rationalising that "alienated" customers may not accept time related differentiated prices for hotel rooms because of the degree of competition in the industry, was illustrated by respondent (A), when stating: *"I think the customer, only to a certain extent, understands the practice of dynamic pricing."*

However, strong evidence was also found of participants wishing to determine their own decision environment. Specific examples of this were found in the transcripts where respondent (C) articulated a need to *"bring her own individual sets of information to the decision table."*

When asked about how they deal with conflicting data, respondent (A) replied; "*If you are asking me what wins out, generally speaking your gut wins out over technical information although you do try over time to balance the two."*

Respondent (B), dealing with the same issue, namely whether to discount associative data comments; *"No. No. Never discount it. Sometimes those are the right things to do, right? No, never discount it. That is probably the most honest thought that comes in your brain"*.

Respondent (C) in addressing the same issue comments:

> *"That's because I am established here and I have the knowledge and the experience, and I am not saying that I don't think about things. I like to think that I would always think about things. No. No. There's always thought behind what I do. I don't go out there and say things willy-nilly. I would always weigh up stuff. I would always weigh up a situation."*

This conflict of data appeared to enable the interplay of conscious and unconscious decision making, evidenced by respondent (B) commenting:

> *"If you want to present information that's for the decision that's easy to get; if you want to present information that's against you can always find information there also. In fact, you can find information to support both sides. So it really is as much up to the individual to use the technology to find data to support a decision that they want to make."*

Later in the same interview, when describing the good feeling that they felt from being autonomous, respondent (B) commented:

> "*But you can also go the list as well and create a list of people that compete for a room or bid for a room and you compile a wait list and when you have enough information there and enough high rated guests you take them through.*"

When asked in a follow up question if this was company policy, the respondent answered; *"No, not really. But what we do in my department we do for the company. We do what's best, you know."*

This practice appeared to be facilitated by the lack of a training programme, with respondent (B) commenting:

> *"I don't know if there is one really in analytical decision making but I think as a general rule we would be given the empowerment to make those decisions as an individual and you are encouraged to do that, and follow up on your decisions"*.

The need to gain support for decisions made was also a common theme in the transcripts. Respondent (B), when asked if fear of failure would promote shying away from decisions commented:

> *"Maybe it would make you, rather than shy away, just get the support on the decision before you put it out there as a finalised choice. Go to somebody else and say, what do you think? Is this a good idea, I'm going to go ahead with it. Or do you think that this is a bad idea; I would not like to do it? At least then I think that you are reinforcing your support again, so if you had a failure on one occasion, or as you say, a decision that did not work out so well, then you come in the next time and you have that same decision, then you might just double check and say, this is what I did the last time – this is what I'd do this time, agree/disagree and go with that."*

The protection from anxiety, espoused in the need for collegiate support in the decision making process was also expressed by respondent (D), when commenting:

> *"I mean, I think that it is very important never to make a decision alone, to involve other people in it, to ask questions. I mean, for instance, another woman was here …(pause)……we didn't have car parking here. You get the odd negative comment but city centre hotels don't have …but you know when we got the opportunity ….if we had a car park would we get more business, would customers be happy and I wanted to know and I asked the Receptionist to ask the people involved, to ask the odd customer don't be afraid to ask even if it seems like a trivial question and base your decision on that rather than we will or we wont or whatever".*

This was further stated by respondent (E) when commenting on the consequences of not meeting targets

:

> *"But other hotels that I have worked in out in the country, I mean big four star hotels, I don't think that they are under the same kind of pressure. What I would really love would be to sit down with all the people at my level in a load of hotels so that we could talk to each other about the problems we have and about the pressures that we are under."*

Being controlled by the decision environment, as outlined in earlier sections, also created difficulties for the respondents. Respondent (C) comments;

> *"You know, they all have these wonderful titles like Directors of Revenue Maximisation, I mean, they are earning big bucks out there. I have a friend. He's doing very well. He's in big demand, 'cos in the end of the day when you think of it, these guys can make or break a hotel, especially for a big hotel, they can make or break the hotel big bucks or not, and I think for people who get into this end of things it has already become a career issue for them. These guys are in demand, yeah."*

Later in the interview, (C) again stresses this point when stating:

> *"Well I have had that; I mean the shoe has been on the other foot in a big chain of hotels where you do get an element of centralised, you know, directions or instruction coming out which I don't necessarily agree with."*

Respondent (F), when discussing how she felt about "*the others upstairs*" making decisions for her commented, in a disappointed tone of voice; *"Well yeah, but that is a good thing, 'cos I have got my hands full."*

When asked if she felt that she might better decisions than "*those upstairs*", the respondent appears evasive, commenting:

> *"Em...I would never question, not never, but I suppose I don't question my seniors, I don't, I don't you know. They're there, they get paid for a job and I don't question them. Sometimes some certain characters can question other people's position and their jobs, but I don't. They are paid to do that. But they work hard and they do their best".*

The disinclination to evaluate data, based on the outcomes of decisions that had been taken, was another example of maintaining control. A number of respondents, although aware that technology could perform this task, chose instead to denigrate the technology in favour of their becoming more proactive in the data analysis. This practice enabled decision makers, according to respondent (B), to *"present data in a way that is most beneficial for myself."*

Examples from the interview texts of not wanting a written training programme, preferring instead being part of an *"empowerment system"* represented further evidence of a preference on the part of decision makers to determine their own environment.

In addition to this, the need to maximise applause for the individual was also evident. This possibility was enhanced wherein, individuals, in controlling the revenue generated from their environment spoke of "*the effect being able to go up a notch in the eyes of the general manager." (F)*

An interesting interplay of comments from respondent (F) illustrated the relationship between bending the organisational rules and the need for applause and recognition.

> *"And we have rooms at €110, and I will try to get them to pay that for room only, so they then will have to pay more for their breakfast, or they can go to a bagel place or somewhere else for their breakfast, that's their decision."*

She later elaborated:

> *"So if €190 is on the web at a special rate, other hotels will start charging €190 because they see your special offer, and you will be delighted to have your hotel full at that rate, so in that case I would keep ten rooms up my sleeve because at the last minute you can all these people calling because every room in the city is sold out and you have ten rooms up your sleeve, and you can sell these at whatever rate that you want."*

This was justified by the respondent, when stating:

> *"Because I know they put some rooms up their sleeve, which is a common practice and they just taken them and they have them under one name. So, at the last minute they will have a few rooms to flog for high rates and that."*

And later again when stating; *"I know, I know. I don't know who many times I have done this and I will never apologise for it. And I watch all the time, and if it's two weeks out and I have got ten rooms."*

Finally when asked why she engaged in this practice he replied:

> "*Satisfaction. It's pure satisfaction. So if I had ten rooms up my sleeve, and I could sell them, you know, and I am not the Revenue Manager, I mean, that just gives pure satisfaction, that you are after selling it, and after getting a better rate. You are after getting more money for your hotel, the place that you work in, and its pride like, you know.*

What makes this particular sequence of thoughts interesting is t fact that in a subsequent interview in the same hotel, with a different member of the revenue management team, Respondent (G) was at pains to stress that;

> *"Although you might think that there is a universal practice in the industry of putting rooms up sleeves, it does not happen here. In fact It is true to say that we all sing from the same hymn sheet here. Everyone is part of the team here and works for the good of the hotel"*

However, the preference for autonomy over teamwork emerged again and again in the interviews. While views were expressed that the actual decision process took place in a team setting, strong evidence emerged from the interviews that the individuals ensured that the decision was made in their own minds before attending the meeting. Some respondents also indicated that it was important for their own departments to be seen to be making the decisions. A selection of responses listed below, illustrate these feelings.

> *"That's why I suppose I am happy working in a smaller hotel where I can have my own say." (C)*

> *"But if they were any good at their job they should be battling their corner, yeah, every time, yeah we should all be fighting our corners." (C)*

The emergent theme of the importance of being in control of the decision making process was also associated with the desire for autonomy as exhibited in the following responses.

> *"As far as I am concerned there is only an optimum level of that business you need and once you have got enough money in the kitty you can control the rest of your business in whatever way you like." (E).*

In commenting on allowing the maximum number of rooms to be sold through internet channels, respondent (E) later comments:

> *"Oh my God, no. The maximum number of rooms we would like to put on with them would be only five rooms and once they are gone they can't sell anymore rooms for us and we can get more for the rooms that are left. So we have total discretion then over other rates, so we have discretion over every other rate that is not contracted."*

This coincides with the need for applause, fear of failure and the wish to maximise revenue to boost incentive payments.

The need for applause also surfaced here, respondent (F) commenting;

> *"No…I mean…to a certain extent…I enjoy overbooking to be honest with you, because it is a challenge, a further challenge trying to make the guest happy if you have to out book them, and overbooking…we are very lucky in this hotel that we have apartments….so we have some apartments that are two or three bed roomed apartments, but they are only in the system as one room, so when it comes down to it on the day you might be over by five, but you might have different groups coming in, and you might convince them to share a three bed roomed apartments which has two bathrooms, and you sent them up a bottle of wine and they are happy enough".*

4.8 Findings associated with objective (iv)

To ascertain if a relationship exists between conscious and unconscious decision making

This objective sought to examine the relationship between existing in a rule governed environment and an associonastic environment. This equated to determine how respondents felt about their decision processes being determined by the decision environment (rule based) or whether they consciously or unconsciously decided to define their own decision parameters (associonistic based). As indicated above, a number of specific themes emerged during the interview.

Varying attitudes towards being controlled by the decision environment and the corresponding and conflicting wish to control their decision environment, peppered the interviews. Strong evidence of this theme was found through specific preferences for decentralisation, a preference for autonomy over team work, the need for applause and the requirement to control decisions.

Throughout the transcripts, strong evidence appeared to exist where unconscious urges determined conscious practice, and where conscious behaviour was rationalised by the interviewee. A number of respondents spoke of incentives as leading them to managing the rate that they charged customers.

On an initial reading of each of the interviews, concrete examples of the decision maker being determined by their decision environment seemed to dominate the transcripts. However, following subsequent readings and using discourse analysis techniques, and a hermeneutic approach, evidence of decision makers conspiring to determine their environment became obvious. The author feels that the many examples of rule aversion illustrated above illustrate the practice of the unconscious determining conscious behaviour.

The research concludes that although some examples of the decision maker being determined by their environment were genuine, a number of examples of decision makers endeavouring to control their environment, while professing to "exist" within a deterministic environment, were also evident.

In some interviews, the negating of the benefits of technology was obvious. On almost every occasion that this happened, it corresponded with a reinforcing of the importance of human intervention in the decision making process. This researcher felt that this in turn correlated with the strongly declared need for autonomy, indicating that some decision makers deliberately downplayed the role of technology in order to remain in control of their environment, wherein talk of "teamwork" appeared as a façade for the real needs of the individual.

The author concludes that it is not that the respondents undervalue or mistrust the technology, it's more a case that it gets in the way of their achieving their unconscious desire, epitomised in the need for control and the need for applause and recognition. Indeed, the author believes that the need for applause is dependent on the need for controlling the decision environment. In other words, it removes their ability to rationalise conscious decisions to facilitate the satisfaction of unconscious needs

The findings in this section seem to illustrate that the mind categorises vividness, thus becoming an important pre-filter in decision making. This significantly corresponds with Freud's theory on primary process thinking, in which the author differentiates between the thinking processes of the conscious and the unconscious.

Conscious obeys secondary processes (logical, orderly and causal), wherein the past is separate from the future and where phantasy and action are differentiated. The unconscious obeys the laws of primary process thinking, operating without regard to reality, wherein there is no concept of mutual contradiction (Kahn, 2002).

The author feels that this is illustrated in the fear of technology being displaced onto the fear of the loss of control.

This also exhibited itself in the findings wherein being angry at the technology is another way of being angry at the organisation.

The pleasure principle also transfers to the reality principle (Kahn, 2002). This is also evidenced in the research where individuals learn the necessity manipulating the real world to satisfy their wants, and where individuals learn to estimate consequences. The author feels that this offers the opportunity for the unconscious to play a role in driving the decision making process, as proposed by Pinker (2003).

In conclusion, the author feels that talking about linking the unconscious to the conscious is less of a dark domain, as suggested by Mansfield (2000), but is much closer to that posited by Lacan (1956), that the unconscious is structured like a language.

Chapter 5

Conclusions and Recommendations

5.0 Conclusions

This research commenced by attempting to answer the research question *"how are decisions made in hospitality yield management environments?"* The previous chapter addressed each of the supporting objectives in terms of the primary findings and how these findings related to the secondary research provided by the literature review.

The overall research conclusion is that the management science model of decision making has been subverted by all of the respondents in favour of a decision making approach that emphasises human intervention. However, what is really significant is that those interviewed believed that technology assisted models were appropriate to the delivery of optimum solutions. The influence of bias, heuristics and unconscious factors significantly impacted on this decision to reject use of the management science model. Furthermore, these unconscious factors were internally rationalised, thus becoming conscious and, therefore, real for those interviewed.

The respondents expressed an unconscious preference for a combination of the garbage can model of decision making, logical incrementalism and bounded rationality to effect their decisions. Although some of the respondents agreed that the management science model would significantly contribute to the delivery of an optimum solution, the availability of these models, overlaid with a boundedly rational approach, provided a perfect cover for rejecting the rational model of decision making, while simultaneously providing space for advocating a disproportionate preference for human influence in the decision making process.

The rational normative model did not seem to be applied as there was little evidence of evaluation of all the available options. This approach was justified by a conscious support for the non-evaluation of data throughout the interviews. While elements of the garbage can model and of the logical incrementalist model were in evidence, the bounded rationality model emerged as the favoured approach of the respondents to decision making.

At times this researcher felt that this approach was genuinely used by participants. However, there was also ample evidence of it being advocated to deflect attention away from the consideration of technology to assist with or to make decisions. This corresponded with the findings that management science evaluation procedures were anathema to a number of the respondents.

An interesting finding was that a number of the respondents were aware of the irrationality of this rejection, but persisted with it nonetheless in that they were aware that technology could make decisions, but persisted with a defence of the importance of human intervention, over and above what technology might offer.

The research also concludes that decision makers through not having a training manual, nor being trained in decision making, afforded the opportunity for them to see rules as getting in the way of the decision making process, where their own need for recognition became more important.

While at a superficial level, tacit support was expressed for being determined by organisational rules, strong evidence was found for an inclination to use this façade, through a policy of reinforcing, while bending organisational rules, following Bittner's (1955) theory, and the theories of bureaucratic dysfunction as proposed by Merton (1968) and Selznic (1966). This in turn led the respondents to a yearning for, and indeed in some cases, the actual determining of their own decision environments.

In addition, the findings conclude that feelings towards a decision outcome are important, suggesting that associonistic behaviour is more significant for, and relevant to yield management decision makers than rule based behaviour, thus agreeing with Sloman (2002), Slovic et al (2002) & Rozin et al (2002).

The research also indicates that conscious decision making and unconscious decision forces are inextricably linked, the latter in many cases informing the former.
Strong evidence of heuristics and biases influencing the decision process were also found. This corresponds with the relationship between conscious and unconscious decision making being facilitated through heuristics such as the affect heuristic (Slovic et al, 2002) and magical theory (Rozin et al, 2002), and indeed the unconscious need for individuals to determine their own environments.

The author feels that heuristics and biases were used to create a comfort zone of familiarity in addition to a genuine belief that their experience and judgement offered a shortcut to an acceptable solution. Unconscious factors, such as overconfidence associated with a fear of failure were used to downplay the role of technology and to justify conscious practices.

Evidence of the unconscious application of the garbage can model of decision making, was also apparent, particularly through the limited use of the Internet, and the chaotic decision forum that emerged as decision makers moved closer to the sell-by date. This loosely defined, but interconnected set of activities approximated with the decision making process in a management science yield management environment wherein the "decision maker" is the software or internet system, the choice opportunity is the maximising of revenue through room occupancy, the problem is characterised by the customer seeking accommodation at a specific time and the solution is the satisfaction of both hotel and the customer needs at the required moment.

The author concluded that personal constraints (a desire for prestige), introduced unconscious factors into the rational models of management science, thus making it a boundedly rational model, by the inherent constraining of the search for alternatives, or the constraining of the acceptability of an alternative (Daft 2001). Personal constraints constrain the perfectly rational approach that should lead to an ideal choice. So, it's not just a case of being overburdened or overloaded that precipitates the use of bounded rationality, but it is also a case that unconscious forces drive decision makers to an acceptance of bounded rationality. Rather than being an intuitive, experience based shortcut to an optimum decision, could it also be a comfort blanket for the decision maker?

Daft (2001) argues that intuition is nor arbitrary or irrational. But if unconscious forces drive this intuition, then this author feels that it can be , as evidenced by the fear of negative forces in magical theory (Rozin & Nemeroff, 2002) and the unconscious differentiation between feelings of "goodness" or "badness", demarcating a positive or negative stimulus towards a decision, as outlined in the affect heuristic (Slovic et al, 2002).

What is really interesting here is that while Daft (2001) proposes that intuition is associated with non-programmed decisions, and is geared towards optimisation of organisational decisions, he does not appear to consider the flipside of this coin. What if instead, it is geared towards avoidance of failure, or individual self aggrandisement, or indeed, self preservation? What if it is associated with an avoidance of making programmed decisions? But questions emerge from the findings; namely, were the respondents irrational in rejecting the management science model of decision making, or indeed, were they behaving rationally by recognising the inherent heuristic flaw of human intervention in the model

The author speculates if decision makers believe that the inherent flaw incorporated in the model, results from the human inputting of data, this may correspond with their "belief" that the model itself does not have an ability to deliver objective, quantitative data, or to incorporate the qualitative data required to assimilate the "softer" side of decision making.

If this is true, then the management science model satisfices, thus allowing the decision maker to use the technology in a socially acceptable format to deliver reports as they want to receive and utilise them, corresponding with Orlikowski's (1992) duality of technology theory which proposes that individuals construct a socially acceptable environment in which technology is used to validate social practices. This therefore also associates itself quite overtly with Lacan's (1956) theory of the relationship between the signifier and the signified. This then becomes, according to the author, a major theme in the analysis of decision practices in yield management, wherein, the management science model, through enabling the delivery of data, which has been internally constructed to suit the aims of the decision maker, is subsequently used to validate the decision taken.

5.1 Recommendations

As confidentiality was assured in all research sites, the author feels that it is not in his brief to offer recommendations to the hotels in question. In addition, the research paradigm was mainly interpretive, using a broadly based phenomenological approach to explore the conscious and unconscious experiences of the participants with regard to their decision making, rather than a positivistic approach that might have been more disposed to conclude generalisable findings.

Research is a continuous process, which provides answers to specific questions, but while doing so, raises many other questions. The primary objective of this dissertation was to explore the experience of decision making in a hospitality yield management environment, from the perspective of the individual participant. The author feels that there is considerable potential to expand this research. Accordingly, a number of research questions and areas for further research have come to light, such as:

- An exploration into differences of emphasis between senior management members of the yield management team and ordinary members, on what constitutes an optimum decision might offer a fruitful area for research.

- Similarly the relationship between the responsibility of being a team member, participating in team decisions, and the role of the individual within that team would prove equally fruitful. A longitudinal study of these relationships might also facilitate greater depth to such a study.

- This study could also be extended to two and three star hotels, where the availability of technological support is less obvious and where the impact of heuristics, biases and the unconscious may be even more significant.

- Further research into the relationship between management science and the human idiosyncrasies, epitomised in the influence of unconscious decision making would also prove fruitful.

- A positivistic study of the cause and effect relationship between decision practices and quantifiable outcomes would provide interesting research findings for the hospitality industry.

- Finally, it would also prove fruitful to specifically explore, through a comparative inter-industry study, why hospitality decision makers have not adopted the dynamic decision model used by the airline industry.

The author believes that these questions present opportunities for further investigation. Research into these areas will support a more comprehensive understanding of how decisions are effected in the hospitality industry. It is only through further research that gaps, identified in this research will be addressed. The author concludes that in an ever changing and more competitive marketplace, with increasingly more discerning and demanding customers, increasing awareness relating to the factors that improve or impede decision making, is critical.

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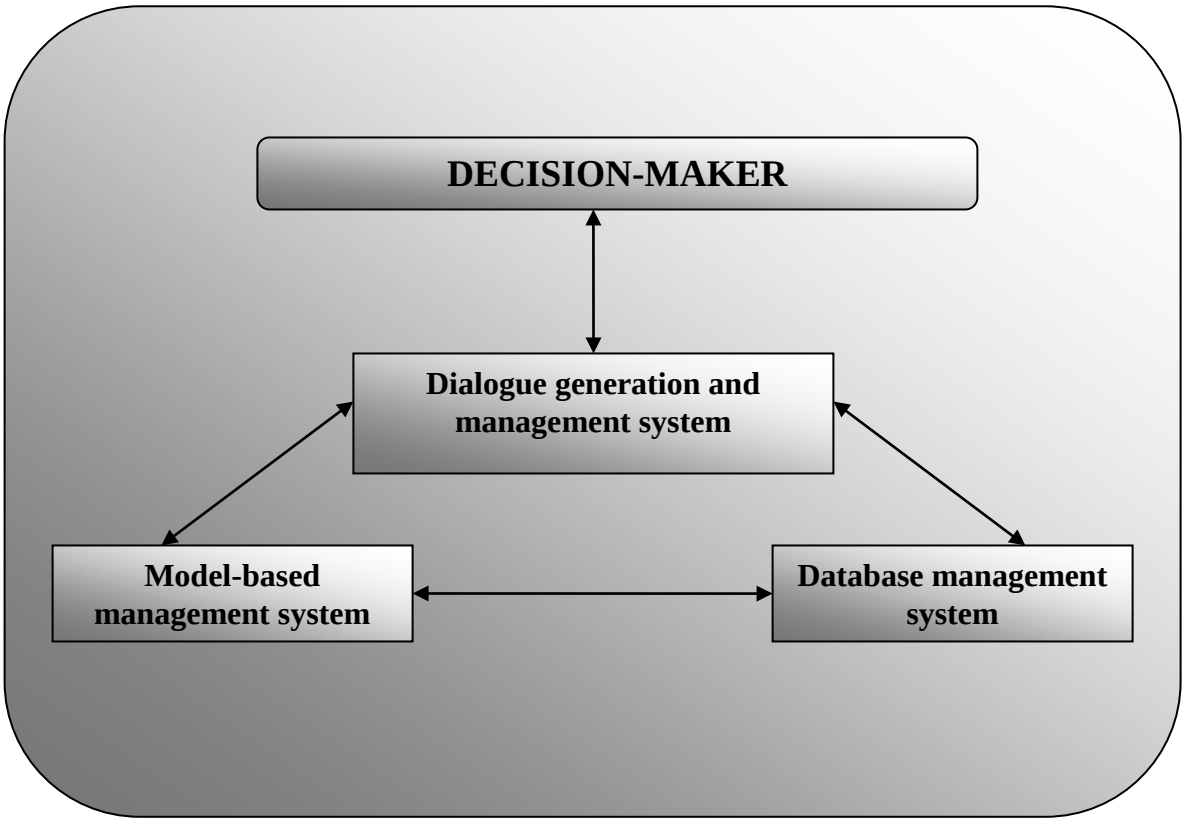
Appendix 2.



To deal with the structured aspects of a decision the above decision support system needs three fundamental components. These are:

- A dialogue generation and management system that enables the user to interact with the decision support system.

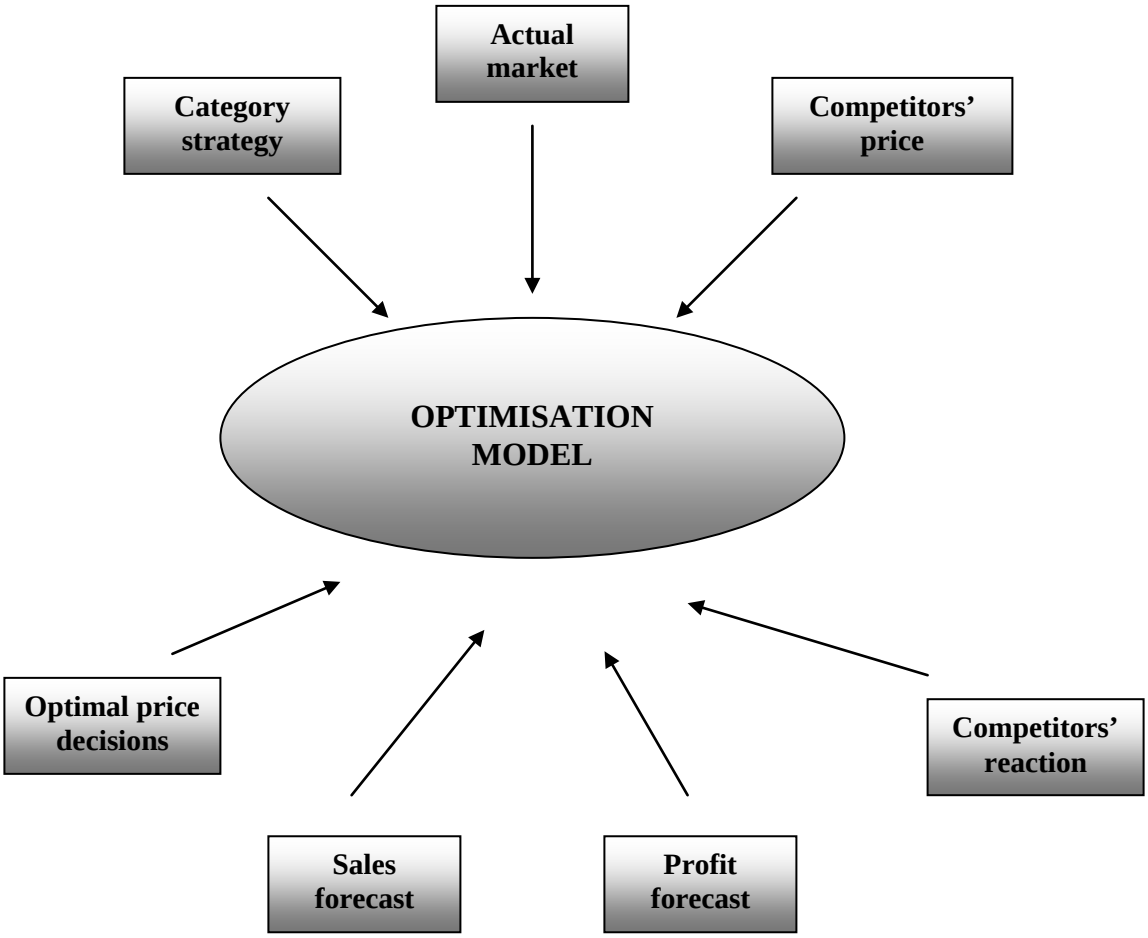
- A model-based management system that enables the system user to explore the decision situation and the range of alternative solutions to the problem. This is achieved through the used of a model-based on algorithmic mathematics, aligned to a range of procedures and management protocols.

- Database management systems that enable the decision support system to draw upon data contained within either an interfaced or integrated database and to make available these data to the user of the systems who may require it in order to inform the decision situation. Within the hospitality industry this database is normally the central reservations system or the property management system, linked to the front office software the database collects, stores and maintains information about inventory levels, availability and the range of prices to be

considered. It usually holds vast banks of historical data about previous demand patterns.

Source:*Johns, N (2000).*

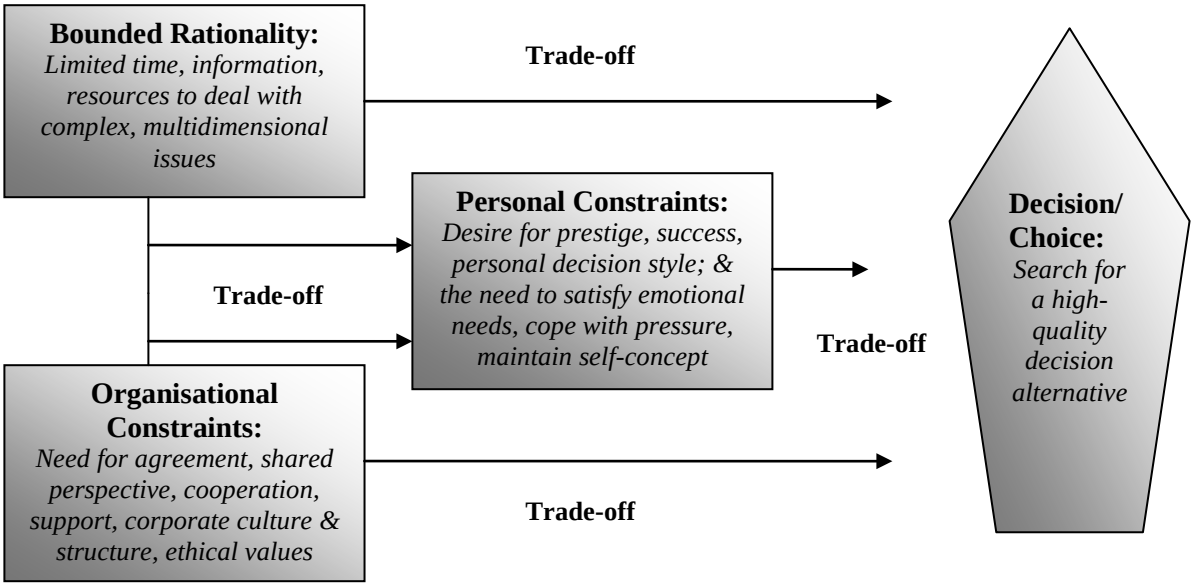
Appendix 3.



Uncertainty variables associated with the yield management decision making process.

***Source**: Johns N, (2000).*

Appendix 1.



***Source**: Daft R, (2001), Essentials of Organisational Theory & Design, South Western College Publishing, Ohio.*

Appendix 4.

Respondent Profile

Respondent A is the Managing Director of a four star Dublin hotel with responsibility for Revenue and Yield Management. This hotel is part of an international group of hotels and has a complement of two hundred and fifty bedrooms.

Respondent B is the Reservations Manager within the same hotel and is part of the Revenue Management Team. He has been employed by that hotel for over three years.

Respondent C is the Sales Manager of a four star Dublin hotel. It has a complement of forty-four bedrooms and suites. The respondent has been employed by the hotel for four years.

Respondent D is the General Manager of this four star city centre hotel which is part of a group consisting of three city centre based hotels. The hotel consists of eighty two rooms and the respondent has been employed there for five years.

Respondent E is the Revenue Manager of a four star city centre Dublin hotel and has been employed there for four years. This hotel is part of an international hotel chain and has a complement of one hundred and twenty five rooms.

Respondent F is the Reservations Manager of a city centre Dublin hotel and has been employed there for one year.

Respondent G is the Revenue Manager of a city centre Dublin hotel with a complement of one hundred and ten bedrooms. This respondent has been employed at this hotel for the last three years.