Information and Communication Technology in Auckland Hotels: Context and Impact

Thesis submitted to Auckland University of Technology in fulfilment of the degree of Master of Philosophy

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements) nor material which to a substantial degree has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Ann Cameron

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Ethics Approval

The study for this thesis was granted ethics approval (04/119) by the Auckland University of Technology Ethics Committee on 24 January 2005.

Abstract

The aim of this study was to identify how Information and Communication Technology (ICT) affects business processes and service delivery within hotels and how ICT interacts with strategic issues confronting hotel managers.

The areas of exploration were: 1) the business context of ICT; 2) the main role of ICT in day to day business; 3) ICT's impact on service delivery to hotel guests; and 4) the role of ICT in the future.

As the study was exploring the General Managers' (GMs) perceptions, interviewing was selected as the most appropriate data gathering method. The sample covered a range of Auckland hotels which differed according to location, size and quality. Semi-structured interviews were used to facilitate the comparison of data between interviewees. Common themes and concepts were identified which were compared to the demographic characteristics of the hotels as well as previous research detailed in the literature.

The contextual issues identified were staff availability and retention, competition (particularly price wars resulting from discounting), and location and infrastructure issues. Only half the GMs interviewed identified benefits from ICT in the day to day operation of their business. All of them described challenges or disadvantages posed by ICT. The impact on service delivery to guests was viewed more positively but there were still misgivings about the potential barriers which ICT created. There was a strong view that staff were of overwhelming importance to service delivery. Finally, envisioning the future, ICT was perceived as having the ability to make a strong contribution to business development but this ability would be constrained by staffing problems.

Analyses of the findings suggest that ICT has a dual role of gathering management data and providing guest services, and GMs appear unaware of how this dual role contributes to the challenges posed by ICT. Similarly, there was limited awareness of the interaction between human agents in a business, the organisational structures, and ICT.

The business implications of these findings suggest that GMs would benefit from being aware of the roles of ICT and addressing the needs of staff for a clearer understanding of how their role, and the ICT that supports it, fits into their broader operation of the business.

This study is the one of first to examine the impact of ICT in New Zealand hotels, and, in particular, how this interacts with the broader social issues, and offers insights into the areas of potential conflict and ways to manage the impacts of ICT in hotels.

Chapter 1 - Introduction

This chapter details the research objective, provides the background and motivation for the research then presents an overview of the study. Finally, an outline of the thesis provides a structure to guide the reader.

1.1 Research Objective

The objective of this study was to examine the ways in which Information and Communication Technology (ICT) affects business processes and service delivery within hotels and how ICT interacts with strategic issues confronting GMs.

The areas of examination were:

1. The business context of ICT.
2. The role of ICT in day to day operation
3. The impact of ICT on service delivery to hotel guests.
4. The role of ICT in the future.

1.2 Scope of the Study

The study will consider ICT as a factor external to the hotel and analyse GMs' perceptions of the way their internal systems should and do respond to the requirements imposed by ICT. For the purposes of this study, the internal elements of the hotels, such as corporate culture, and operational processes, will be considered as a seamless whole which alters in response to the presence of ICT.

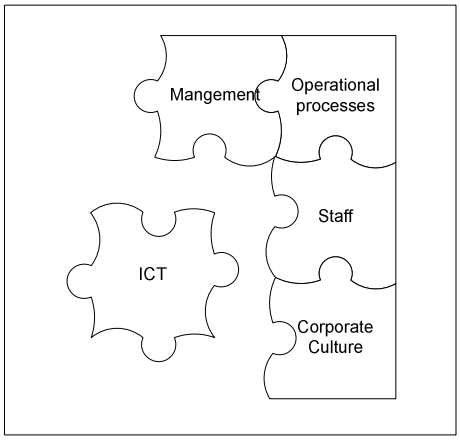

Figure 1 ICT as an external variable

The impact of ICT is examined solely from one perspective, that of GMs. Although there are other stakeholders such as staff, guests, ICT suppliers, training providers and industry service providers whose views may differ, this study focuses on the impact of ICT within hotels at a strategic level.

GMs were selected for the study as they are assumed to have the best broad overview of how their organisations are changing in response to the use of ICT. They are responsible for establishing the strategic direction of their properties, which form the context in which decisions about ICT are made.

The marketing and competitive positioning roles of ICT will not be examined except in so far as they are part of the internal workings of each organisation.

1.3 Research Background and Motivation

To understand how ICT affects business processes and interacts with strategic issues within the hotels, this study examines how technology is perceived and conceptualised by GMs.

The intention was to explore how technology fitted into the broader organisation, the interaction of the technology with people, both hotel employees and guests, and how it affected the interactions between these groups.

Some writers (Namasivayam, Enz, & Siguaw, 2000) have considered technology in isolation, as part of a single function of a business or focused on the technology itself rather than how it fits into a business. There may be a tendency to see technology as a silver bullet solution rather than part of a broader picture of the tactical and strategic needs of business. The literature offers little acknowledgment of ICT's potential to cause problems or that systems are broader than just technology itself and include the interactions of people within a social context. Of the 11

articles on ICT in hotels considered in the literature review only three (Brotherton & Turner, 2001; Luck & Lancaster, 2003; Sigala, Lockwood, & Jones, 2001) consider the broader business issues and how ICT affects them, and only one (Brotherton & Turner, 2001) examines the roles of staff and the social context of technology.

Even where problems exist with ICT these tend to be viewed as training issues rather than as a possible symptom of a fundamental conflict between ICT and what is trying to be accomplished. That ICT is wrong or poorly implemented or integrated seems not to be accepted – rather the common view seems to be that people should change what they do to fit the technology. Of the articles noted above, in the single article that did discuss staff (Brotherton & Turner, 2001), the suggested solution to the problem of the fit of technology within the business was additional training. This is not to disparage the importance of training. As Lam, Cho and Qu (2007) note, even where there is a good fit of technology to task, lack of know-how will mean the technology is not well utilised. This illustrates the requirement for both technical and social elements to be addressed.

Personal experience in ICT support and training has enabled observation of users' struggles to learn to use systems. In many cases, the problem was not the users but the systems, which did not follow their expectations or fit the way the organisation as a whole operated. As part of a small software house it was possible to carry these observations back to the programming team and have alterations made in the software to allow it to follow the mental models of the users more closely. This frequently removed training issues and reduced the volumes of support calls while still meeting the requirements of the business. Alternatively, where changes to the software were not possible, training could be altered to acknowledge the users' mental models, to address their variance from the software's models and make it easier for users to interact with the software.

This and similar experiences indicated that the fit of ICT within a business is dependent on the mental models of the users as well as on the business requirements. It became important to discover how these factors interacted with the broader business environment within hotels and to see how ICT was perceived by the managers; silver bullet, malevolent monster or a little of both.

In earlier work with the New Zealand Tourism Research Institute, it had become clear there is little research referring specifically to the New Zealand business environment. It was questionable how relevant research from the United States of America (U.S.) and the United Kingdom (U.K.) was to the New Zealand context due to, among other things, differences in scale. This research is, therefore, specific to New Zealand and hopefully useful to GMs, providing them with a clearer perspective on the impact of ICT and alerting them to possible methods of addressing problems that may arise.

1.4 Overview of Research

As a starting point, the existing academic literature was surveyed, which revealed little published research on New Zealand hotels and virtually none on ICT. In research outside New Zealand, ICT had been examined both from a technical perspective in terms of technology in use and from an operational perspective of how ICT was being used. There was little consideration of how hotel staff and guests fitted into the picture, although there was research which showed failure to consider these factors could limit the benefits realised from ICT use.

With the limited literature appearing to confirm the exploratory nature of the research, interviewing was selected as the most appropriate data gathering method. This is because interviews allow subjects to define the concepts and constructs rather than having them predefined by the interviewer. The fifteen hotels in the study, in terms of size, location and quality, covered the broad range of hotel accommodation available in the Auckland area. In each hotel the GM was interviewed.

The interviews were taped, transcribed and edited to identify the substantive statements. These statements were then categorised and coded for a categorical content analysis, as detailed in Chapter 3. From this the concepts and constructs were identified and then compared to a number of hotel demographic characteristics and previous research.

The major business issues to emerge from the findings were staffing and competition issues, particularly the impact of discounting. Within this context, ICT provided both benefits and challenges in the day to day operation of businesses. The perceived primary role of ICT varied depending on the size of the hotel, with externally facing ICT such as Internet marketing being more important in smaller properties and the management reporting aspect dominating in larger properties. Examining service delivery to guests, ICT was perceived as being as much of a barrier as a facilitator of service delivery. In looking to the future, ICT was viewed as an important part of moving a business forward but within the constraints posed by staffing problems. The findings clearly demonstrated the interaction between the human agents within the business, the organisational structures and ICT.

1.5 Structure of Document

Chapter 2 presents the details obtained from the review of literature, including the types of ICT used, how they are applied and the importance of staff in service delivery. The use of ICT in other service businesses is examined and gaps in the literature identified.

Chapter 3 details the research methods used, including details of the sample, its size and characteristics. This chapter also provides the interview questions, further justification for the use of interviews, and full details of the coding schema used for data analysis.

Chapter 4 presents the findings. For each of the four questions, the concepts and constructs are presented, along with supporting quotations

from the interviews. Responses are then compared to the hotel demographic characteristics and prior studies.

Chapter 5 discusses how the various areas interact and presents overall conclusions and the business implications arising from the study. Limitations of the study and its findings are noted with suggested further research.

Chapter 2 - Literature review

This review will briefly examine the published research on ICT use within hotels and its impact on daily operations and service delivery.

There is a limited range of prior research on hotels in New Zealand; this does not currently include any work considering ICT within the hotel industry. Research outside New Zealand addresses the types of ICT being utilised (Section 2.2), the business applications to which ICT is put (Section 2.3) and the impact of ICT on service delivery (Section 2.4). Research examining other service industries, such as banking and finance, is considered for possible insights into ways these businesses address the impacts of ICT (section 2.5). Finally, a framework for considering the place of ICT within the organisation is reviewed and perceived gaps in the existing literature identified.

2.1 Research in New Zealand

Previous academic research into hotels in New Zealand is sparse: a search of some major academic databases (Proquest, Emerald, Science Direct) using the keywords 'New Zealand' and 'hotel' returned only fifteen articles. None of these considered the adoption or implementation of ICT in hotels. The research covered a broad area. Most reported on marketing, for example, selection criteria used by guests (2002; 2003; 2005a; 2005b) building guest loyalty (Kandampully & Suhartanto, 2000; McIlroy & Barnett, 2000), and online marketing (Fam, Foscht, & Collins, 2004). Au and Tse (1995) examined the extent of marketing orientation of the hotel industry. Other works examined operations, for example Thomson and Thomson (1995) considered service quality and Becken, Frampton and Simmons (2001) energy consumption. Haynes and Fryer (2000), Ryan and Barnett (1995), Ledgerwood, Crotts and Everett (1998) and Haynes (2005) were concerned with various aspects of human resource management in the hotels. Knowles and Egan (2002) considered the New Zealand hotel industry as part of their broad

overview of the economic performance of hotels in the Asia Pacific region.

Beyond the academic literature there have been a number of reports (New Zealand Tourism Research Institute, 2004, 2007) prepared for Government to give New Zealand specific data. The 2004 report focuses primarily on the training needs of hotels to enable them to make effective use of ICT, while the 2007 report addresses productivity in the food and beverage sector. The GMs interviewed and surveyed for the 2004 report note that ICT can add a level of complexity that can become an obstacle to service delivery and the need to integrate ICT and business processes to realise the potential benefits.

2.2 Types of ICT in Use in Overseas Hotels

This section reviews research outside New Zealand regarding the types of ICT used in hotel businesses and the rate of adoption.

Namasivayan, Enz and Siguaw (2000) examined the uptake of technology in U.S. hotels, reanalysing data from 4,250 hotels drawn from a survey conducted on behalf of the American Hotel and Lodging Association, examining facilities in hotels. They divided technology into three categories: efficiency and productivity, guest service delivery and revenue management. They found that, of the hotels in their survey, nearly 70% using technology had adopted four or less of the ten technologies under consideration. The tendency was for adoption of revenue and productivity enhancing technology over all levels of adoption. The slower adopters tended to be independent rather than chain properties, mostly operating in the budget and economy sections of the market. They noted that the initial technologies adopted are those that integrate well with existing systems and strategies, are easy to try, and produce visible results at a financial level. They did not provide any information on the existing technologies within the hotels.

In a 2003 study of Hong Kong hotels, interviewing Electronic data Processing/Management Information Systems (EDP/MIS) managers at 21 hotels, Law and Joganantam (2005) found that, while the technology adoption had increased since a similar study in 1997 (Law & Au, 1998), it was still primarily limited to operational and administrative areas. Senior managers were not utilising the information held in the information systems in their strategic planning and decision making. Law and Joganantum noted that this could be due to “a lack of enthusiasm on the part of senior hotel decision makers in utilising IT” (p. 178).

In a Thai study, Sahadev and Islam (2005) demonstrated that the likelihood of hotels adopting a particular piece of technology is influenced by factors such as the market they serve, the level of competition and the age of the property. Hotels in highly competitive locations utilise ICT to try to gain an edge, particularly if they have large numbers of guests from the U.S. and Europe. Older properties are less likely to adopt new technology due to having an established market and the difficulties of involved in adopting the technology. This involves both integration with existing systems and physically getting technology into the buildings, for example wiring older rooms for Internet access. This study was based on a questionnaire administered directly to the executives of 95 hotels in seven popular tourist destinations in Thailand.

Choi and Kimes (2002) examined booking systems in hotels and presented an overview of some of the internal technology as the following discussion outlines. For each individual hotel, the Property Management System (PMS) is at the centre of both technology and hotel operations. This system is used to manage the room inventory, record guest details and produce billing information. It often interfaces with other systems such as the telephone systems and food and beverage point of sales terminals to allow integrated billing and management reporting.

For hotels that are part of a chain or franchise group there may be a Central Reservation System (CRS). This allows on-booking between

hotels as well as the acceptance of direct bookings from a Central Reservation Office (CRO). These systems commonly have direct access into the PMS and update automatically so the hotel front desk and Central Reservations Office have the same view of the hotel's available room inventory.

Outside of hotels exists the Global Distribution Systems (GDS) such as Sabre and Galileo. These systems include not only hotels but airlines, car rental and other travel resources and are commonly used by professional travel agents. In many cases these are allocated a block of rooms within the hotels PMS systems but bookings from the GDS do not automatically update the PMS and must be entered manually.

Bookings from the Internet can enter the system through any of these marketing channels, either via an on-line travel agent or directly from the customer.

Choi and Kimes (2002) note that each of these channels has different costs associated with them for the hotel. GDS in particular incurs a charge for being listed, as well as substantial commissions per transaction. However, in their computer simulation of revenue contributions for a business hotel, no significant difference was found between revenue management by length of stay and room rate compared to adding the distribution channel to the process. They did note that the gap between room rates in comparison to the channel fees would be likely to affect the outcome. For example, in hotels where there was very little difference between room rate levels with widely varying distribution costs, the hotel would need to include distribution costs in their revenue management model.

Research in the U.K. has tended to focus more on the small to medium sized properties rather than the large properties typical of the U.S. studies.

In a Welsh study, Main (2001) noted that there was increased use of technology between her 1994 and 2001 surveys, with the focus shifting from word processing to accounting and wages. These two studies were conducted using postal questionnaires to member hotels of the Wales Tourism Board. The population was 600 in both surveys but the response rate changed from 38 percent in 1994 to 50 percent in 2001. Use of technology for marketing and advertising purposes has also grown over the time period. In these smaller properties, the front office and booking processes may still not be computerised. The use of the Internet by these businesses is growing in line with the general uptake of Internet. Again, chain properties tended to be making better use of the Internet than the independent owner operated properties. Chains were also more likely to be doing their own website design and development rather than relying on external providers.

In a similar study of small scale properties in Scotland, Buick (2003) found that even among hotels that did not have a computer, most had a web page to advertise and promote their business. Again, many of these properties used their computer for accounting and word processing. There was limited use of PMS type packages but extensive use of spreadsheets which individual owners could use to build functionality specific to their business needs. Of the sites not using a computer, (30% of the sample), the reasons most commonly given were that the owner did not see a requirement for one to operate the business and that the capital costs associated were too high. The population surveyed was drawn from the VisitScotland database of hotels which gave 160 properties with 15 or fewer guest rooms. The response rate to the postal questionnaire was 30%.

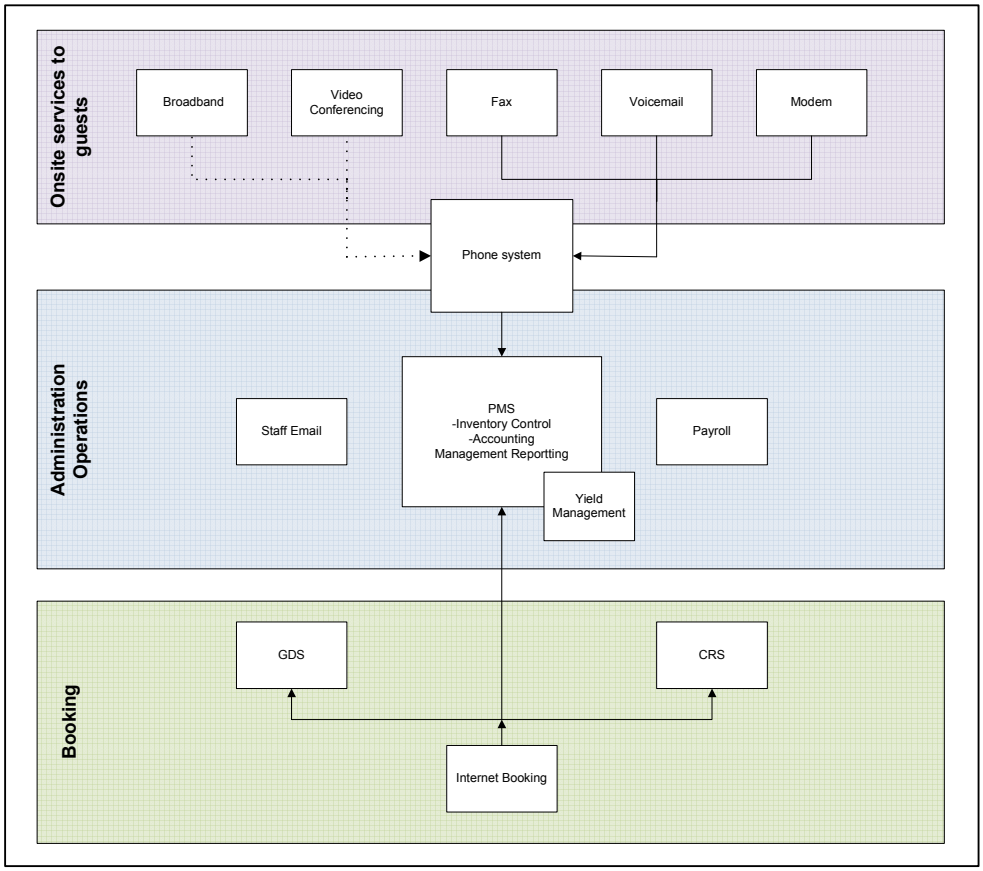

Figure 2 Model of ICT used in hotels as described by the literature

Hotel organisations utilise their PMS to carry out operational and administrative tasks while dealing with multiple distribution channels: GDS, CRS and direct. The Internet as a booking medium and source can enter at any of these levels and can potentially cause distortions in pricing and yield management.

There is a range of ICT provided for guest use, such as phone, fax and voicemail services. This range is growing and expanding but presents problems with integration with internal technology and service support, as well as revenue generation.

Hotels are not unwilling to adopt new technology but have a preference for immediate payback on investment and prefer limited risk when testing or sampling new technology. The technology that has been adopted was compatible with existing systems and had clear and visible benefits, for

example, voicemail. More complex technologies, such as automated check in, or better utilisation of information in strategic decision making, have a lower adoption rate.

2.3 Business Applications of ICT

This section examines reported research on how the technology in use in hotels is being applied within the business. It considers functional uses, not the impact and limitations which will be considered in the next section.

Sigala *et al.* (2001) discuss the growing sophistication of technology and how this has allowed the move from the management of reservations to yield management. They explain the difference between the two: "Reservation Management is about process (how to do something) whereas Yield Management has an output focus (what to achieve)" (p. 364). Yield Management (YM) has moved from the single property level to the chain or group level with the development of network centric computing, where information is able to be broadly shared utilising technology such as the Internet and private networks. They discuss the potential for the development of one to one marketing strategy to allow YM to maximise yield on a customer by customer basis. One to one marketing strategies are defined by Peppers, Rogers and Dorf (1999) as where "different customers are treated differently, the firm changes how its products are configured or its service is delivered based on the individual needs of individual customers" (p. 10).

The increasing sophistication of ICT allows for the capturing of additional information to facilitate management of revenue rather than solely per room yield (Vinod, 2004). However, this ability is constrained by factors beyond the technology, such as the fragmentation of the industry particularly in the way it interacts with a range of available booking channels (Mainzer, 2004).

These tools take into account variables such as length of stay, the optimal mix of business and leisure guests, group bookings and the costs

associated with overbooking and unaccommodated guests (Vinod, 2004). Internet booking tools which allow access to a room selector (and, by implication, give a view of the available level of inventory) remove some of the information asymmetry that revenue management is based on (Chen & Schwartz, 2006). However, the hotel can still control when this information becomes available to drive the customers' decision whether to make a booking or wait until later and, therefore, the revenue management implications. Chen and Schwatz suggest that when the room rate and demand are both high, the selector should be made available before a booking is made to encourage immediate booking. Where the demand is low, access to a room selector and therefore the state of inventory, should only be available once a booking has been made. They also suggest that where the room rate is low, making the room selector tool available before booking may produce a perception of better service.

Yelker and DaCosta (2001) discuss the need to include segmentation variables in web offerings, such as websites, to allow a determination of the guests' willingness to pay to maximise revenue. Rather than treating all Internet bookings as a single segment, they identify the ability to use dynamic pricing based on segmentation variables given as part of a web booking. This allows customisation of the offering to the guests' needs and the ability to maximise revenue. They also examine the ability to customise pricing and offerings to gain customer loyalty, defined as repeat purchasing.

Similarly, Luck and Lanchaster (2003) examine ways to use information that is gathered in the reservations and billing process to facilitate targeted marketing through electronic channels. They discuss integrating workflow technologies with Customer Relationship Management (CRM) and e-CRM strategies but do not consider how this can be implemented in day to day service delivery in the hotel.

Piccoli, Spalding, and Ives (2001) examine the potential role of ICT in the various stages of customer service delivery without considering overall integration into day to day operations.

Noone, Kimes, and Renaghan (2003) conduct an initial theoretical examination of the integration of CRM with the practices of revenue management and cite some practical examples of the use of guest history to enhance service delivery (Marsan, 2000; Oliva, 2002).

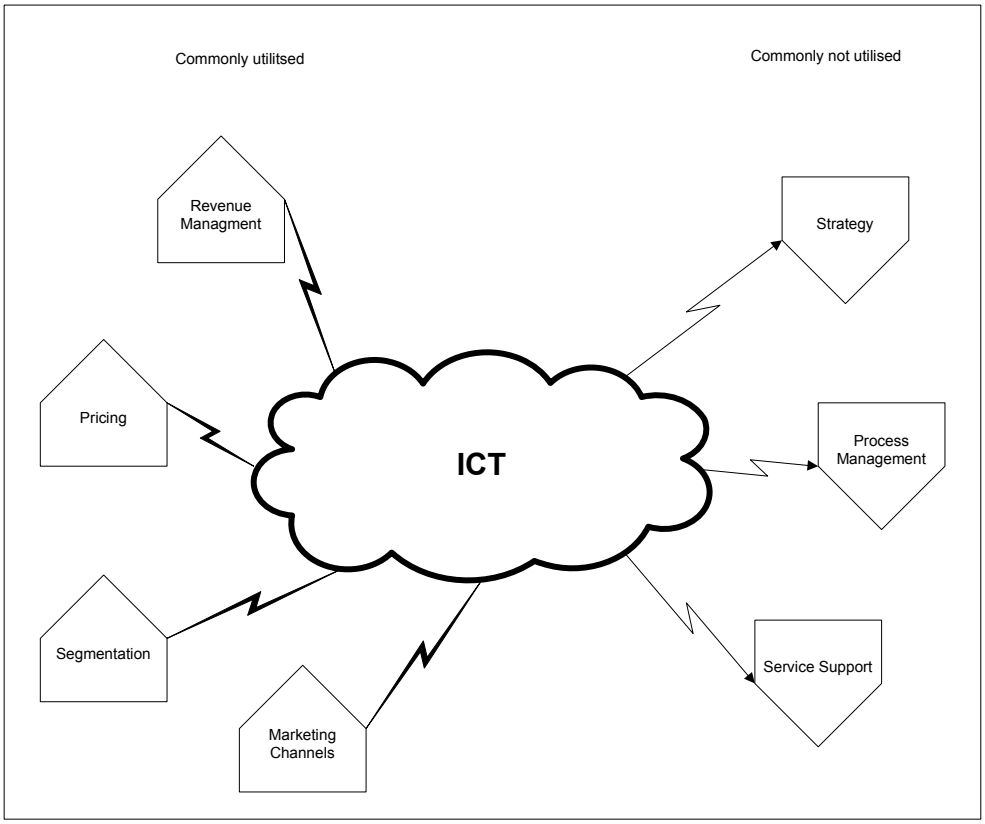

Figure 3 Utilisation of information from ICT as described by the literature

The operational and administrative focus of hotel's ICT use means that opportunities to use ICT in decision support, strategy building and realisation are not necessarily being taken, as illustrated in Figure 3.

As described in the literature, even in the areas that are being utilised, there is a not a clear description of the processes outside of ICT that need to be put in place. This means that, for example, the attempt to build a relationship with customers can be undermined by repeated collection

of the same data as staff do not know or have time to search for an existing profile (Fournier, Dobscha, & Mick, 2002).

The preference for an immediate pay back explains the focus on revenue generating areas such as Yield/Revenue management and CRM. The literature obliquely touches on the importance of staff and organisational culture but underestimates how important they are (Noone *et al.*, 2003). The need to capture the knowledge and skills of staff as they pass through the organisation is discussed, rather than how to use ICT to support staff in service delivery (Luck & Lancaster, 2003).

2.4 The Importance of Staff in Service Delivery

This section discusses the research on the interaction between people and technology in service delivery. It also considers the limitations and barriers to service delivery that ICT can create.

Gronroos (2000) identifies the role of ICT in service delivery as providing systems for effective internal service support from support persons and systems, and other systems and technologies that make it possible for the contact employees to give good service. If such support is lacking, even the most customer-orientated and service-minded employees will eventually start to feel frustrated and lose interest in being good part-time marketers.

"Part-time marketing" following Gummerson's (1991) definition is the term Gronroos uses for "the people representing the firm (who) create value for the customers in various service processes, such as deliveries, customer training, claims handling, service and maintenance etc, and some are directly engaged in sales and cross-sales. Thus, they are involved in marketing" (p. 56) without being part of the formal marketing effort of the firm. Both writers emphasise the importance of people in the service delivery process in forming the customers' image of the firm.

A number of writers address various points of interaction between people, technology and service delivery in hotels.

Brotherton and Turner (2001) consider the implementation of a Computerised Yield Management System (CYMS) in a large hotel. For this case study, they interviewed a number of the managers and staff about the training they received and how they understood the system to work. They found a level of confusion as to who was finally responsible for the system and, in the response of the front line staff, whose interactions with the guest in the booking process should be influenced by the system. Particularly worrying was that the Reception Manager reported that they were "committed to it [Yield Management] but none of my staff are" (p. 39). However, this group of staff is vital to the successful operation of a Yield Management system. One of the receptionists pointed out that they had "hardly any training and I'd be scared to touch the system in case it crashed" (p. 40), and that the Yield Management concept and how it related to bottom line profit was "still a mystery, I'm not really sure what it is all about" (p. 41). Thus, a very expensive piece of software was not going to be able to deliver its full benefits to the organisation, due to not being fully utilised and integrated into the culture of the organisation.

This problem, in realising the full potential of technology, is not limited to the hotel industry, Parker (2003) reported on the limitations imposed on airline use of revenue management tools by the absence of what he describes as a "community of practice" of skilled and experienced staff (p. 138).

This need for integration of ICT into the operating environment relates to Gray, Matear and Matheson's (2000) point that the full benefits of ICT are dependent on the culture of the organisation and their conclusion that management practices are critical to maximising the benefits. Management establishes the culture of the organisation (Gray *et al*), a culture that encourages innovation maximises the benefits in productivity

from technology especially where there is a balance between the needs of employees, customers and other stakeholders.

This need for delivering on service promises and differentiating hotel offerings is seen as needing a commitment to Strategic Human Resource Management (SHRM) to address the issues of culture and operational practice (Maxwell, Watson, & Quail, 2004). Drawing on their case study of Hilton International, the authors note the requirement for training, direction and development of the front line staff to allow them to deliver the service standards. They also note that it is

> the behaviour of the staff mainly with guests but also with each other to create – directly and indirectly – the right type of organisational culture that will encourage appropriate employee/guest exchanges (p. 169).

This requires trainers who are

> innovators and consultants rather than traditional providers of training. The facilitation of learning becomes more important than the direct provision of training services (p. 177).

This focuses on providing a brand environment where the integration between staff and technology is seamless.

Keating and Harrington (2003), in reviewing the literature on quality in Irish hotels, note the limits of physical upgrades to differentiate and compete. They note the need for managers to be change agents and facilitators for their staff to deliver services to improve quality.

Milne and Ateljevic (2001) note the expectation of hotels that there will be improvements in service quality from implementing ICT. Some of these will come from supporting staff in service delivery but details of how to integrate this with workflow and corporate culture are not considered.

In describing the impact of ICT on employment, including job role definitions, Sigala (2001) finds that the use of technology in reservations and marketing in the hotel managers' estimation did not provide staff more time to provide guest service. In fact, it required staff to do more tasks and possess a broader range of competencies than previously.

Looking to the future for hotel front offices, Baum and Odgers (2001) report that:

> a key, evolving change in front office work is the integration of technical and interpersonal skills in all aspects of work. This is a result of a growing emphasis on the latter while technology has developed as a support for the delivery of service rather than an objective in itself (p. 107).

They also note that in Europe the tightening labour markets will require front office staff to be able to make business decisions, requiring greater skill and abilities, as well as relevant information readily available.

In a Delphi study of lodging experts in the U.S. focusing on the future role of ICT, Singh and Kasavana (2005) asked for predictions for 2007 and 2027. The panel identified a number of technical areas such as wireless networking technology and on-line reservations that they expected to grow in importance over these timeframes. The panel also considered service automation and guest service experiences, an expectation emerging of more technology supporting fewer staff more strongly dedicated to guest interaction. Alongside the growing role of on-line booking was a concern that this could drive "commodisation" of hotel rooms with competition based solely on price with implications for future revenue realisation.

Similarly, in their 2002 Delphi study of electronic distribution, O'Connor and Frew identified a growing role for web driven growth but still utilising many of the traditional channels described by Choi and Kimes (2002).

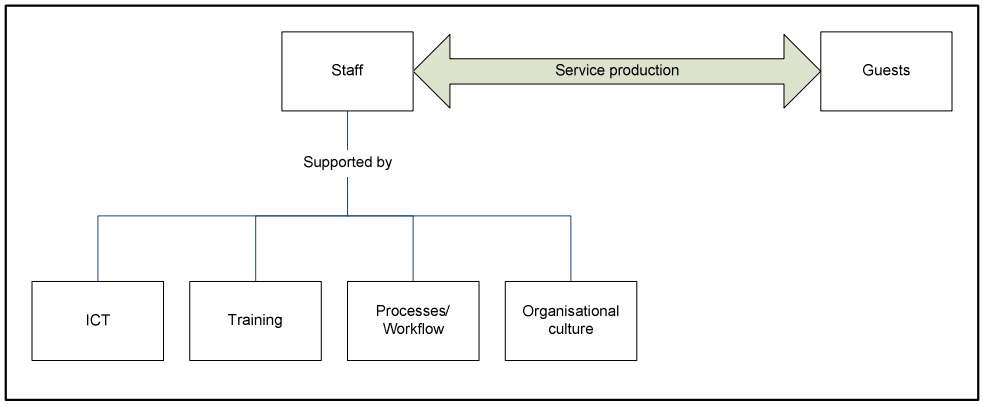

Figure 4 Model of Staff and ICT role in service delivery as described by the literature

Academic literature has focused on the administrative and management information provision roles of ICT in hotels. The role of ICT in supporting service delivery has been overlooked as have the interactions of ICT with other elements of service support. Similarly the roles of staff and organisational culture in realising the full benefits of ICT in all its roles have not been examined in the hotel context.

2.5 Other Similar Businesses' Use of Technology

This section briefly considers research into the way other service industries are applying ICT and addressing the issues which ICT raises.

A key issue associated with the use of ICT to allow delivery of service through multiple channels such as Internet, call centre and in person, is the need to ensure that the same information is available at all points of contact. Wells, Fuerst and Choobinch (1999) examine what is required to allow a firm to successfully meet this challenge. While they consider business processes, (e.g. information gathering at customer interaction and how to record this), and data design issues to ensure an integrated view of customer data, they do not examine the human elements beyond noting the need to train employees to use the systems put in place.

This continuity across channels is raised as an important issue in the acceptance or rejection of automated service offerings by Walker, Craig-Lees, Hecker and Francis (2002) and Broderick and Vachirapornpuk (2002), where failures in the follow-through or a perceived need by customers for personal contact can lead to the rejection of the business's service offering and consequent damage to its reputation. All authors note that technology needs to be perceived as a benefit for customers and not just for the business. These benefits do not necessarily have to be financial, although reduced costs for use of Self Service Technology (SST) is a common expectation among customers (Broderick & Vachirapornpuk). Benefits, such as the ability to control the time and place of business and use of technology, are a voluntary choice to be made by the customer with face to face options available, and are all potentially of value but do need to be drawn to the customers' attention (Walker *et al.*).

After examining the banking and insurance sectors, Jarvinen, Lehtinen, and Vuorinen,(2003) developed a model of the range of possible combinations of technology, extent of service standardisation and level of personal interaction (the touch factor) and describe the need to allow for these variations in building service channels. They note that customers may deliberately choose low touch options in some circumstances and not in others. This variation in channel choices also affects the use of channels as a segmentation variable in marketing and service design.

As well as the customers' social inclinations, the attitudes of staff affects the choice of how much interaction is required and the customers' level of willingness to use technology as part of the service process (Curran, Meuter, & Surprenant, 2003). Staff need to be trained and capable of supporting the technology as well as providing face to face encounters (Curry & Penman, 2004). Curran *et al.* also note that attitudes towards the company as a whole as well as to a particular technology will affect willingness to use self-service technology. Respondents who had positive feelings about a service firm were more likely to try SST options.

Similarly, a positive attitude towards one SST will increase the willingness to try other offerings from the same provider.

Beyond this, the customers' role as co-producer of the service when using self service technologies means the ability of customers to use the technology effectively influences the benefits realised by both the customer and the firm (Xue & Harker, 2002). Xue and Harker note that this level can be improved using tools such as careful website design to enhance usability and load management over peak use periods, to help customers' progress through a transaction.

All authors stress the need to be aware of social roles and the abilities of customers and staff in designing and implementing technological supports to the service process.

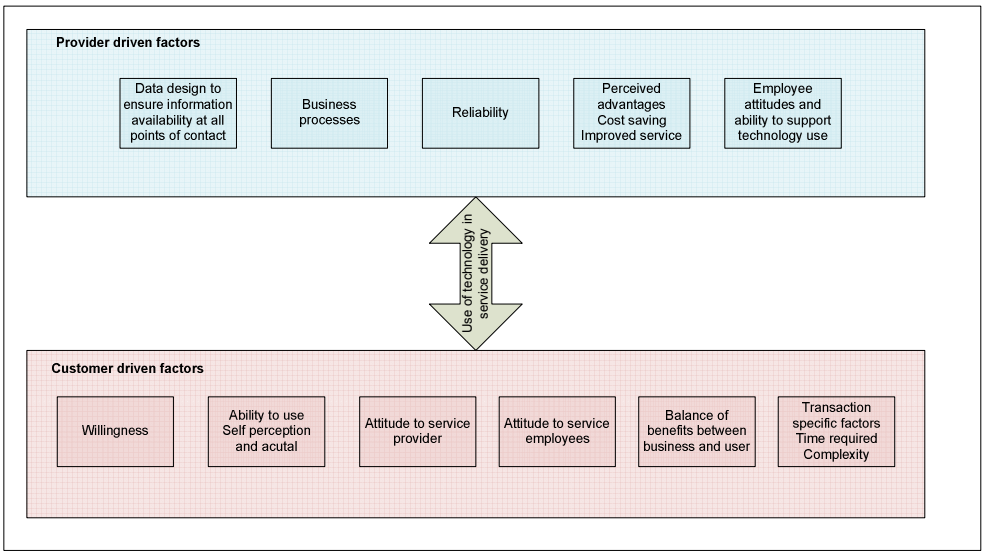

Figure 5 Factors in use of ICT particularly self service technology as described in the literature

Any service firm wanting to utilise ICT within its service delivery system needs first to examine its data design and business processes. Data needs to be managed to allow a single view of each customer from any point within the organisation rather than being segmented by department. Business processes need to be structured to facilitate the collection, updating and use of data, including by the customer where appropriate (Wells *et al.*, 1999). Employees need to be able to see benefits for

themselves as well as the organisation in the same way that customers do (Curran *et al.,* 2003).

This sense of benefit is required for customers to be willing to use ICT, in particular self service technology (SST), and for employees to support this use and enhance the customers' sense of control.

Customer willingness to use ICT to transact business is dependent on many factors beyond the perceived benefits. Attitudes towards the service provider and their employees, and the customer's perception of their own ability to use technology, all influence a general willingness to use ICT. There are also factors that vary on a transaction to transaction basis such as complexity, the importance of the transaction to the customer and degree of risk that also influence the choice of channels to transact business (Curran *et al.*, 2003; Jarvinen *et al.*, 2003).

While some segmentation by service delivery channel is possible, there will be many customers who need (or demand) a variety of channels. This demand increases the need for information to be effectively shared and to be available at all contact points within the organisation.

For hotels, the benefits to customers of using SST are still primarily viewed in financial terms by both parties, with attendant risk of price distortion and reduced revenue to the business (Chen & Schwartz, 2006). Similarly, some large chain organisations are still coming to terms with how best to manage data to allow the seamless access that is required (Piccoli, O'Connor, Capaccioli, & Alvarez, 2003).

2.6 New Zealand is Different

Academic literature, in general, is concentrated on North America and Europe (Hunter, 2004). For hospitality, these two areas accounted for approximately 80% of the output in a sample year (Mason & Cameron, 2006). However, starting from Hofstede (1980) writers have begun to question the relevance of this work to other locations due to the impact of

culture (Hofstede, 1980, 2001; Peterson & Smith, 1997) and other geographic factors (Hunter). Even seemingly simple areas such as the definition of a 'small' business vary depending on the size of the economy and the purpose of the definition (Pollard & Hayne, 1998). Studies in the U.S. using the number of employees to define business size, range from 50 to 500 employees (Pollard & Hayne) whereas Statistics New Zealand uses 20 employees as its definition of small (2006b; 2007b).

This is not to deny all ability to compare and draw useful conclusions in both directions (Winfree & Taylor, 2004). However, the variations in industry structure and resultant changes in perception need to be clearly borne in mind when doing so (Trayler, Nielson, & Jones, 2000; Winfree & Taylor).

In considering New Zealand, the degree of deregulation of the economy also needs to be kept in mind (Akoorie & Scott-Kennel, 1999). New Zealand has a relatively simple governmental structure with most legislation coming from the national level rather than the multiple layers of regulation common in the U.S (Winfree & Taylor, 2004).

Variation also occurs within countries, with a clear difference often apparent between urban and rural areas (Hinson, Turner, & Brooker, 1995; Winfree & Taylor, 2004). Studies of metropolitan areas, therefore, may not represent the entire countries, although there are reasons beyond the pragmatic for carrying these out. Again, the requirement is an awareness of the limitations.

To give a sense of the scale of the New Zealand hotel industry Table 1 below presents the comparison with the U.S and U.K. industries discussed in the literature in sections 2.2 to 2.5.

	Accommodation & Food service(including hotels)		Hotels	
	Establishments	Payroll (Millions)	Establishments	Rooms
New Zealand	**3715**	**1298**	**566**	**939000**
United States	**416464**	**128649**	**47598**	**4411908**
United Kingdom	**118988**	**13038**	**10375**	**740671**

Sources : (National Statistics Office, 2004; StarUK, 2004; Statistics New Zealand, 2004, 2006a; U.S. Census Bureau, 2004)

Table 1 Comparison of hotel industries in New Zealand, United States and United Kingdom.

2.7 Theoretical Framework

Hospitality is a young discipline still trying to define its scope (Brotherton, 1999; Lashley, 2000; Lashley & Morrison, 2000; Slattery, 2002). It is, in many ways, a contingent application of several business disciplines and, as such, has inherited the traditions and expectations of business research, in particular a focus on providing prediction and guidance to practitioners (Dobson, 2002).

ICT needs to be considered within the framework of the business. Orlikowski (1992) proposes the model shown in Figure 6 to describe the interaction of ICT with the human agents and institution in which they are situated. Technology, including ICT, is created and sustained by human action. In use, technology facilitates activity while constraining the way in which that activity is performed. The way in which people interact with technology is also influenced by the institutional properties of the organisation, such as the professional norms and culture of the organisation. These properties are themselves influenced by technology which can either reinforce or change them. As such, the model is dynamic, with the accommodation and equilibrium between the elements changing over time.

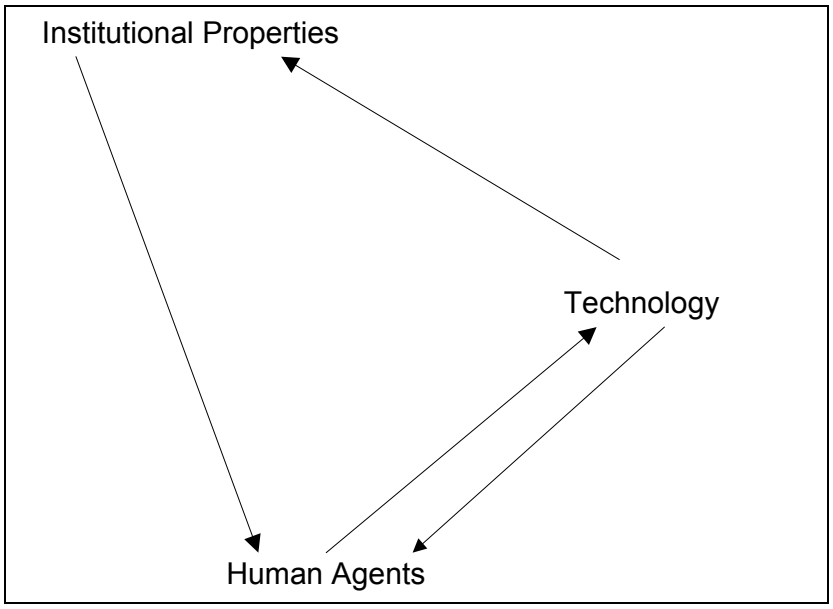

Figure 6 The interaction of technology, human agents and the organisation (Orlikowski, 1992, p. 410)

The impact of ICT is a product not only of the human use of technology and the immediate social setting, but is also influenced by the wider context of structural and systemic factors (Carlsson, 2003). This requires an awareness, not only of the immediate situated and interpersonal elements of ICT use, but also of organisational factors such as power structures and behavioural norms. Similarly, these need to be understood as being influenced by broader systemic macro factors, for example economic variables such as employments levels.

This study is informed by the need to understand not only the immediate interactions between human agents and ICT but also the social setting of institutional properties within the broader environmental context.

2.8 Gaps in the Literature

While the literature covers the types of ICT in use in hotels, it does not consider the ways that these are integrated with business practice in day to day operations. The description of ICT used in hotels is very much focused on administrative and operational uses, in part reflecting the views of managers who do not see ICT as part of their strategic tool kit

(Law & Jogaratnam, 2005). The business processes around the ICT, such as how data is handled after entry, how the competing demands of service delivery and data entry are reconciled and the physical and manual process that surround the ICT are raised as potential issues in need of research by hotel managers (New Zealand Tourism Research Institute, 2004)

Except for Brotherton and Turner's (2001) work, there is little discussion of the roles which staff and ICT play in service delivery in hotels, despite the importance that authors such as Gronroos (2000) place on this interaction in determining service quality. Service quality is dependent on the staff who co-produce the service with the customer being able to access the correct information in an appropriate manner at the point they need it and it is not clear whether this is occurring for hotel staff.

Generally, the literature on ICT in hotels does not consider the broader social elements or organisational norms and culture despite work in both ICT and hospitality research (Carlsson, 2003; Gray *et al.*, 2000; Orlikowski, 1992), suggesting that these are important variables in the use of ICT to produce best results for the business. Similarly, the importance of the external environment has not been acknowledged (Carlsson).

It is these gaps, regarding the business process surrounding ICT in hotels, the interaction of ICT and staff in service delivery and the broader business context of the hotels that this study seeks to address.

Chapter 3 - Research Methods

This chapter outlines the research objective, and describes the sample and data collection methods. It then details the data analysis process.

3.1 The Research Objective

The aim of this research was to explore the way ICT affects business processes and service delivery along with the interaction with strategic issues. The impact of ICT on the daily operations of a hotel is difficult to measure directly. Of necessity, the research had to use qualitative methods to take account of the fact that impact, in this instance, cannot be simply counted but needs to be described and illustrated in examples (Patton, 2002; Rubin & Rubin, 1995). In this research the impact of ICT was examined from the perspective of the hotels' General Managers. It is acknowledged that there are other stakeholders such as staff, guests, ICT suppliers, training providers and industry service providers whose views may differ; however, as the GMs have the responsibility for coordinating all functions within their hotel, they were the key informants.

3.2 Sample

3.2.1 Sample selection

Hotels in the Auckland Region were chosen for these interviews because, although not necessarily considered a tourism destination, Auckland is New Zealand's major entry point for both people and goods. Auckland International Airport receives approximately 70% of the visitors to New Zealand. In 2001, the region hosted 1.667 million international visitors and 2.983 million domestic overnight visitors, along with 8.857 million domestic day visitors (Market Economics, 2002).

3.2.2 Description of sample

To define the sample frame, a list of hotels in the Auckland Region was drawn from the Yellow Pages (2004), Jasons Accommodation Guide (2004) and local knowledge of the researcher. The initial information was drawn from these listings. Additional information, particularly the name of

the GM for each hotel, was gathered by a research assistant who telephoned each property.

Hotel properties in different locations tend to cater to different markets, with clear distinctions between Central Business District (CBD), city fringe and suburban properties (Egan & Nield, 2000). Airport hotels have slightly different characteristics to hotels in other locations due to their relationship with their airport (Smith, 2004). For this reason, the list was divided into three geographic areas: the CBD of Auckland City, the area surrounding Auckland International Airport, and finally the rest of the region. The analysis of the properties is given below

	Total properties	Letter sent	Interviewed
CBD	**36**	**18**	**9**
Airport	**5**	**4**	**4**
Rest of Region	**19**	**8**	**2**

Table 2 Sample by location of hotel

The sample consists of hotels ranging from 2 star to 5 star, from 44 to 400 rooms. The larger, higher quality properties were located in the CBD with the smaller properties being spread around the rest of the region.

In qualitative research, the size of the sample is driven by the purpose of the study (Patton, 2002). To examine the perceptions and context of ICT in Auckland hotels, it was necessary to cover both geographic and business type variables to determine the effect, if any, these had. The properties selected were a mix of independent and chain properties, servicing a range of leisure and corporate guests. For the CBD, strata-titled, all suite properties and traditional hotels were sampled.

The GMs were selected for interview as they have the best broad overview of how their organisation is changing in response to ICT (Alkhafaji, 2003). Most importantly, they are usually responsible for the strategic development of the hotel (Nebel, 1991) including the alignment of ICT with business strategy (Huang & Qing, 2007). The role of the GM

in providing oversight and direction is key to realising the potential benefits from ICT (Huang & Qing, 2007; Kearns & Lederer, 2003). The GMs are, generally, the ones who make decisions about ICT use and monitor ICT's contribution in realising the strategic aims of the business (Kay & Moncarz, 2007; Pervan, 1998; Tai & Phelps, 2000).

3.3 Data Collection

3.3.1 Why interviews

The purpose of this study was to understand how the GMs perceive technology fitting within their business. Interviews allow the interviewee to describe the world as they experience it (Kvale, 1996; Rubin & Rubin, 1995). This is particularly important for this topic where there is limited material available in the existing literature (Rubin & Rubin), as is the case for this study. As this study was exploratory, it was more appropriate to allow participants to determine their answers rather than the researcher supplying them, as is the case with a questionnaire or other closed instrument (Gillham, 2005). Interviews as an extension of ordinary conversation allow for interaction "to achieve richness and depth of understanding" (Rubin & Rubin, p. 13). Interviews are able to change in response to the interviewees' answers (Gillham).

3.3.2 Semi structured interviews

As these interviews had to provide information about the ICT context as perceived by GMs at a range of sites, a structured set of questions was prepared and applied to facilitate comparisons (Miles & Huberman, 1994; Rubin & Rubin, 1995). This meant that a standard set of questions was used to ensure all the areas of interest were broadly covered (Miles & Huberman), although these were not necessarily presented in the same order at each interview. In each interview, slightly different follow-up and probing questions, as described by Rubin and Rubin, were used to clarify the context and meaning for the interviewee as suggested by Gillham (2005).

3.3.3 The questions used

The following were used as opening questions in each interview:

1. What are the major issues facing your business?
2. In what ways does ICT affect the daily running of your business? Has this changed over the last five years?
3. In what ways does ICT affect the delivery of services to hotel guests?
4. What about the future? What trends do you see emerging?

These questions were tested in a small pilot study of four Auckland CBD sites before being used for the main sample. As the pilot interviews provided an adequate depth of information and were of an acceptable timeframe to both to the researcher and interviewees, the questions were carried forward into the main study unmodified.

The first question aims to identify the business environment in which ICT is operating, macro economic variables such as employment and tourism flows, along with internal factors, for example organisational structure and staffing. This influences the impacts of ICT as described by Carlsson (2003) and Orlikowski (1992) giving the parameters of operation. This question seeks to identify whether ICT is one of the major challenges facing GMs.

The second question attempts to address the gap identified in the literature regarding the interaction and integration of ICT and business practice (Section 2.8). The literature describes the types of ICT in use, for example Property Management Systems (PMS) (Choi & Kimes, 2002), yield management tools (Sigala et al., 2001) and how they can be applied to single issues like pricing or customer tracking (Luck & Lancaster, 2003; Yelkur & DaCosta, 2001). However, the literature does not address how the tools are integrated with business processes and practices to actually deliver service and reach strategic goals. The wording of this question deliberately excluded a definition of ICT to allow the GMs to define the

elements of importance to them and therefore the role they perceive that ICT plays.

The third question, on service delivery, explores the GMs perceptions of the balance between the roles of ICT and staff in service delivery. As discussed by Brotherton and Turner (2001), the effectiveness of ICT can be limited by the willingness and ability of staff to apply it. Similarly, the requirement of ICT can impose barriers to service delivery (New Zealand Tourism Research Institute, 2004; Sigala, 2001). This question explores the interplay between these factors.

The final question asked the GMs to theorise about future developments in ICT and the business environment. It seeks to examine the ways in which the GMs view ICT as an influence on strategy and the evolution of their businesses. It also seeks their views on the ways the context in which their businesses operate is evolving and where their major concerns lie.

3.3.4 The process

Interviews were arranged through an initial approach by letter and a follow-up telephone call. As presented in Table 2, of the 30 hotels approached, 15 agreed to participate in the study. Most refusals were due to time constraints with GMs saying they were too busy to be able to participate. The average interview was 60 minutes duration and was taped, transcribed and analysed as described in Section 3.4. The pilot study was conducted in late 2004 with the main set of interviews carried out during May and June 2006. There was immediate interest in the topic, and all the GMs asked to receive the results of the study.

3.3.5 Ethical issues

AUT requires all research involving human subjects to be approved by the AUT Ethics Committee (AUTEC) to ensure that research is conducted in an ethical manner observing the principles of informed consent, respect for privacy, truthfulness, avoidance of conflict of interest and

respect for cultural sensitivity. Informed consent means that the participants are aware of the purpose of the research, how data will be gathered, their rights to withdraw from the project at any time without penalty, how the data will be published and whether confidentiality will be maintained (AUTEC, 2007).

For this study, the letter inviting hotel GMs to participate included an outline of these details (refer to Appendix 1 for a copy of the letter). At the time of the interview, the interviewer reconfirmed the right of the interviewee to withdraw from the study and stressed that published data would be non-identifiable to maintain confidentiality. The same information was stated on the consent form that each participating GM signed prior to the commencement of the interview. A copy of the consent form is in Appendix 1.

The findings of this report are therefore presented without any identifying data, to maintain confidentiality.

3.4 Analysis

3.4.1 Coding

3.4.1.1 Process

The interviews were transcribed from the tapes by an experienced transcription typist, with the researcher reading over the transcripts while listening to the relevant tape to confirm a verbatim transcription. As each transcript was completed, it was summarised to define the key topic or idea for each paragraph, using the technique recommended by Gillham (2005). Once all the transcripts had been coded in this manner, the topics and ideas were examined for commonalities and grouped accordingly. Each of these groups was given a title and then examined for smaller coherent subgroups. Taking, as an example, the major issues question, the initial inspection of topics revealed three main areas of concern: staffing, competition and location. After all the staffing comments had been identified, they were examined for common themes, for instance

availability of staff, reliability of staff and so forth. From this process, the tree structure detailed in Appendix 3 was constructed.

This process is recommended by Gillam and Patton (2002) and Rubin and Rubin (1995). Gillam's recommendation to use this kind of structure to conduct a categorical content analysis was followed, which also enabled clear identification of associated concepts and constructs, defined by Rubin and Rubin as the core ideas which can have shared meanings that are particular within the situation.

Table 19 in Appendix 3 provides a numeric summary of the coded items Table 3 to Table 7 are derived from Table 19.

3.4.1.2 Overview of Major Categories

MAJOR CATEGORIES		
ICT In Day To Day Business	**(71)**	**37%**
Major Issues Affecting the Business	**(43)**	**22%**
Impact of ICT on Guest Service	**(42)**	**21%**
Future	**(38)**	**20%**

Table 3 Major categories showing percentage of responses

Table 3 presents the number of coded items under each of the major headings. These major headings were derived from the questions asked in the interview. The impact of ICT in day to day operation of the business formed the area of major concern for the GMs, although the even weighting of responses in the other three headings show that they all form an important part of the context for ICT's day to day operations.

3.4.1.3 Business context of ICT

MAJOR ISSUES AFFECTING THE BUSINESS		(43)
Competition	**(22)**	**51%**
Staffing	**(18)**	**42%**
Location	**(3)**	**7%**

Table 4 Subcategories within business context of ICT

Analysis of the 43 items classified as "Major Issues facing the business" (Table 4) showed responses fairly evenly distributed between staffing and

competition with a small group of responses concerning location issues. The items coded in this category were concerned with the context in which ICT operated the external, macro-economic influences on the hotels. Sub-categories for competition included the price wars arising from discounting of rates by the hotel industry in Auckland, for example "All the hotels start dropping their rates" and "They're out there reducing the market down and they absolutely destroy your yield". Sub-categories for staffing included issues such as availability of staff with typical quotes including:"Short staffed right now" and "Our biggest problem at the moment is looking for receptionists".

3.4.1.4 ICT in day to day operation

ICT IN DAY TO DAY BUSINESS		(71)
Impact – Negative	**(31)**	**44%**
Definition -External	**(15)**	**21%**
Impact – Positive	**(13)**	**18%**
Definition - Internal	**(12)**	**17%**

Table 5 Subcategories within ICT in day to day business

The role of ICT in day to day operations was the dominant area of discussion. Analysis of the 71 items classified within this category (Table 5) showed a strong negativity, 44% of the comment describing negative impacts from ICT. Examples of items coded as negative impact include "Systems aren't necessarily generic across the industry" and "If the system goes down you are lost".

There were two areas under examination in this category, the first being the GMs definition of what comprised the domain of ICT, and the second the impact of ICT. The first area, the domain of ICT, was divided into internal and external facing technology. Internal covered ICT such as reporting, while external was mainly concerned with on-line booking and other Internet applications. Examples of items coded as internal include quotes such as "Whole business is computer centred". The external sub-category included items such as "Bookings, the majority come over the Internet".

The second area covered was the impacts of ICT classified as either positive or negative. Positive aspects included the availability of better data to facilitate business decisions, while concerns such as reliance on third parties and the risks posed by system failure were counted as negatives. Comments exemplifying positive impacts include: “Amazing the information that is available in seconds” and “Offers us the opportunity to deal with people the way they want to be dealt with”

3.4.1.5 Impact of ICT on guest service

IMPACT OF ICT ON GUEST SERVICE		(42)
Negative	**(18)**	**43%**
Positive	**(14)**	**33%**
Caveat – importance of staff	**(10)**	**24%**

Table 6 Sub categories within Impact of ICT on Guest Service

Analysis of the 42 items classified as “Impact of ICT on guest service” (Table 6) showed that 43% of the comments were negative. Typical examples of items coded as negative include: “Major complaint is it takes too long to dial up” and “the biggest challenge is making sure learning the system doesn’t take over from looking after the guest”.

The GMs were more positive about the impact of ICT on service delivery than on day to day business, although this was qualified by an emphasis on the importance of staff in service delivery which was placed in a separate sub category for this reason.

Examples of items coded as positive impacts include: “ICT has improved it [guest service] a lot with things like guest history” and “Click of a button, all filled in”. The sub-category importance of staff was based on quotes such as: “Nothing ever takes away from personal contact” and “that’s where it boils back to the person and the training, I guess”.

3.4.1.6 Future

FUTURE		(38)
ICT into the future	**(21)**	**55%**
Business into the future	**(17)**	**45%**

Table 7 Sub categories within Future Issues

Analysis of the 38 items classified as "Future Issues" (Table 7) showed slightly more emphasis on ICT than on general business issues. The ICT area included discussion of service automation and the role of on-line booking systems. This sub-category includes quotes such as "Expectation of broadband to rooms" and "Outsource housekeeping, use technology instead [of staff]".

The business issues raised were very much a continuation of the current major issues. Typical quotes coded in this sub category include: "Getting the right people and keeping" and "Price wars, how to work that side of it."

3.4.2 Comparison to demographic characteristics

3.4.2.1 Process

For each category and sub-category of the coding schema, a spreadsheet of the demographic characteristics of the respondents' hotels were constructed (the characteristics used are detailed in Table 8 to Table 12 below). These spreadsheets were examined to identify any relationship between responses and hotel demographic characteristics. As the aim was to identify patterns in the overall group this process was carried out after coding and categorisation were complete for all questions and transcripts.

The demographic characteristics selected for analysis were size, class, age, affiliation and location. The analysis of the sample by these characteristics is presented in Table 8 to Table 12 below.

	City	Airport	Other
Location	**9**	**4**	**2**

Table 8 Sample by location

Location divided the properties into those in CBD of Auckland City, those surrounding the airport and those in other parts of the Auckland Region as described in Section 0

	Small <100 rooms	Medium	Large >200 rooms
Size	**4**	**6**	**5**

Table 9 Sample by size

For size, the category breaks were placed at the points that divided the sample roughly into three.

	Budget	Mid-market	Luxury
Class	**4**	**8**	**3**

Table 10 Sample by class

The class was determined by the star rating and standard room prices, with budget being below 3 star and $90 per night, mid-market being 3–4 star up to $200 and luxury being 4½ star plus over $200 per night.

	<5 years	5 - 10 years	>10 years
Age	**3**	**3**	**9**

Table 11 Sample by age

For age the category breaks were determined by possible infrastructure issues. Most properties less than five years old would have been built to incorporate advances in technology such as wiring to all rooms for data access. Those between five and ten years old would have been built and equipped in the midst of the transition, particularly regarding in-room technology. Properties over ten years of age are likely to be facing issues associated with retrofitting new technologies to existing buildings.

	Chain	Marketing alliance	Independent
Affiliation	**6**	**5**	**4**

Table 12 Sample by affiliation

Properties that belonged to a group such as Accor were described as having an affiliation of ‘chain’, those being part of a marketing alliance (for example Best Western) as ‘marketing alliance’ and independent properties labelled as such.

These characteristics were selected because they define the scale and scope of the business and its operating parameters. Additionally, they were the characteristics used by the GMs in describing and defining their hotels.

Two summary tables, in percentage form are presented in Appendix 3. Table 20 presents the percentage of each class raising an issue at the lowest coding level, for example one of the four small hotels raised staff availability as an issue. Table 21 presents the percentage of responses from each demographic group, and includes totals to the sub-category and category level. The tables discussed below are drawn from Table 21. Given the small size of the sample, the results are not statistically significant but provide indications of the factors that influence responses.

Initially, the demographic characteristics of the GMs were classified with a view to comparing the responses given according to these characteristics. The demographic characteristics examined were gender, age, nationality, whether the GM had formal hospitality training and the area of the hotel in which they had commenced their career. As analysis proceeded, it became clear that the demographic characteristics of the GMs did not seem to influence their responses, so this line of analysis was not pursued.

3.4.2.2 Overview of Major Categories

Table 13 (on page 40) presents the coded items at the category level. Aggregated to this level, each group's representation in the number of responses closely matches its proportion in the total sample.

	Size			Class			Age			Affiliation			Location	
	Small 4	Medium 6	Large 5	Budget 4	Mid-marke 8	Luxury 3	<5 years 3	5 - 10 year 3	>10 years 9	Chain 6	Mktg 5	Independe 4	City 9	Airport 4	Other 2
MAJOR ISSUES AFFECTING THE BUSINESS (43)	27.9%	48.8%	23.3%	14.0%	65.1%	20.9%	25.6%	27.9%	46.5%	46.5%	30.2%	23.3%	67.4%	30.2%	4.7%
ICT IN DAY TO DAY BUSINESS (71)	25.4%	52.1%	22.5%	18.3%	69.0%	12.7%	32.4%	18.3%	49.3%	59.2%	22.5%	18.3%	66.2%	23.9%	9.9%
IMPACT OF ICT ON GUEST SERVICE (42)	28.6%	47.6%	23.8%	16.7%	69.0%	14.3%	23.8%	26.2%	50.0%	57.1%	23.8%	19.0%	59.5%	31.0%	9.5%
FUTURE (38)	28.9%	52.6%	18.4%	15.8%	73.7%	10.5%	21.1%	23.7%	55.3%	55.3%	23.7%	21.1%	63.2%	31.6%	5.3%
Representation in total sample	26.7%	40.0%	33.3%	26.7%	53.3%	20.0%	20.0%	20.0%	60.0%	40.0%	33.3%	26.7%	60.0%	26.7%	13.3%

Table 9 Comparison of response to demographic characteristics for major categories

	Size			Class			Age			Affiliation			Location	
	Small 26.7%	Medium 40.0%	Large 33.3%	Budget 26.7%	Mid-marke 53.3%	Luxury 20.0%	<5 years 20.0%	5 - 10 year 20.0%	>10 years 60.0%	Chain 40.0%	Mktg 33.3%	Independe 26.7%	City 60.0%	Airport 26.7%	Other 13.3%
MAJOR ISSUES AFFECTING THE BUSINESS (45)															
Competition (22)	18.2%	63.6%	18.2%	13.6%	72.7%	13.6%	36.4%	13.6%	50.0%	63.6%	13.6%	22.7%	77.3%	18.2%	4.5%
Staffing (19)	38.9%	33.3%	27.8%	11.1%	61.1%	27.8%	11.1%	44.4%	44.4%	27.8%	55.6%	16.7%	50.0%	50.0%	5.6%
Location (3)	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	0.0%	66.7%	100.0%	0.0%	0.0%

Table 10 Comparison of response to demographic characteristics for Major Issues

	Size			Class			Age			Affiliation			Location	
	Small 26.7%	Medium 40.0%	Large 33.3%	Budget 26.7%	Mid-marke 53.3%	Luxury 20.0%	<5 years 20.0%	5 - 10 year 20.0%	>10 years 60.0%	Chain 40.0%	Mktg 33.3%	Independe 26.7%	City 60.0%	Airport 26.7%	Other 13.3%
ICT IN DAY TO DAY BUSINESS (71)															
Impact – Negative (32)	22.6%	48.4%	29.0%	12.9%	67.7%	19.4%	35.5%	19.4%	45.2%	58.1%	19.4%	22.6%	67.7%	19.4%	12.9%
External (16)	33.3%	60.0%	6.7%	13.3%	86.7%	0.0%	26.7%	26.7%	46.7%	53.3%	26.7%	20.0%	60.0%	33.3%	6.7%
Impact – Positive (13)	23.1%	53.8%	23.1%	23.1%	61.5%	15.4%	30.8%	15.4%	53.8%	69.2%	23.1%	7.7%	76.9%	23.1%	0.0%
Internal (12)	25.0%	50.0%	25.0%	33.3%	58.3%	8.3%	33.3%	8.3%	58.3%	58.3%	25.0%	16.7%	58.3%	25.0%	16.7%

Table 11 Comparison of response to demographic characteristics for ICT in day to day operation

	Size			Class			Age			Affiliation			Location	
	Small 26.7%	Medium 40.0%	Large 33.3%	Budget 26.7%	Mid-marke 53.3%	Luxury 20.0%	<5 years 20.0%	5 - 10 year 20.0%	>10 years 60.0%	Chain 40.0%	Mktg 33.3%	Independe 26.7%	City 60.0%	Airport 26.7%	Other 13.3%
IMPACT OF ICT ON GUEST SERVICE (42)															
Negative (18)	27.8%	50.0%	22.2%	11.1%	77.8%	11.1%	22.2%	27.8%	50.0%	61.1%	22.2%	16.7%	61.1%	33.3%	5.6%
Positive (14)	28.6%	50.0%	21.4%	21.4%	64.3%	14.3%	28.6%	21.4%	50.0%	50.0%	35.7%	14.3%	64.3%	28.6%	7.1%
Caveat – importance of staff (10)	30.0%	40.0%	30.0%	20.0%	60.0%	20.0%	20.0%	30.0%	50.0%	60.0%	10.0%	30.0%	50.0%	30.0%	20.0%

Table 12 Comparison of response to demographic characteristics for Impact of ICT on guest service

	Size			Class			Age			Affiliation			Location	
	Small 26.7%	Medium 40.0%	Large 33.3%	Budget 26.7%	Mid-marke 53.3%	Luxury 20.0%	<5 years 20.0%	5 - 10 year 20.0%	>10 years 60.0%	Chain 40.0%	Mktg 33.3%	Independe 26.7%	City 60.0%	Airport 26.7%	Other 13.3%
FUTURE (38)															
ICT into the future (21)	28.6%	47.6%	23.8%	14.3%	71.4%	14.3%	23.8%	23.8%	52.4%	61.9%	23.8%	14.3%	61.9%	33.3%	4.8%
Business into the future (17)	29.4%	58.8%	11.8%	17.6%	76.5%	5.9%	17.6%	23.5%	58.8%	47.1%	23.5%	29.4%	64.7%	29.4%	5.9%

Table 13 Comparison of response to demographic characteristics for Future

3.4.2.3 Business context of ICT

Examining the distribution of responses at the sub-category level (Table 14 on page 40), the 45 items coded as “Major Issues” showed differences in demographic characteristics between the two major sub categories. The GMs raising competition as their major issue managed medium sized (63.6% of coded items), mid-market (72.7% of coded items) chain (77.3% of coded items) properties. Those GMs with staffing as a major concern were also from mid-market properties (61.1% of coded items) but affiliated to marketing alliances (55.6% of coded items) rather than chains (27.8% of coded items). The hotels located at the airport featured strongly in the staffing group with 50% of the coded items being from airport properties where they are 26.7% of the sample. Concerns about staffing were evenly spread over properties of all sizes.

3.4.2.4 ICT in day to day operation

Examining the distribution of responses at the sub-category level (Table 15 on page 40) for the 71 items coded under “ICT in day to day operation” showed that the GMs at chain properties (69.2% of coded items) were more positive about the impact of ICT particularly compared to those at independent properties (7.7% of coded items despite being 26.7% of the sample). Similarly, respondents at newer hotels appeared to be more aware of the impacts of ICT both positive (30.8% of coded items) and negative (35.5% of coded items). Examining the GMs definition of the domain of ICT, larger, chain hotels were more strongly represented in the internal sub category covering areas such as management reporting with 75% of the coded items being from GMs of medium and large properties.

3.4.2.5 Impact of ICT on guest service

Examining the distribution of responses at the sub-category level (Table 16 on page 40) for the 42 items coded under “Impact of ICT on guest service” showed GMs from mid market (61.1% of coded items), chain (77.8% of coded items) properties were more strongly represented in articulating negative impacts than their weighting in the sample at 53.3% and 40% respectively. Conversely, GMs from marketing alliance

properties were more likely to raise positive impacts 35.7% of coded items against their 26.7% weighting in the sample.

3.4.2.6 Future

Examining the distribution of responses at the sub-category level (Table 17 on page 40) for the 38 items coded as “Future Issues” showed that the GMs at newer properties were more likely to be aware of ICT’s role in the future with 23.8% of coded items. Chain properties (61.9% of coded items) and those in the mid-market (71.4% of coded items) were also strongly represented in the ICT sub category. The responses surrounding future business issues at this aggregate level reflect the composition of the sample.

3.4.2.7 Verification

Quality was assured by making multiple passes through each transcript using clean copies to ensure similar identification of concepts each time. Once the tree structure in Appendix 3 had been developed, it was put aside and possible alternative coding schemas such as by user or functional area were tested for their fit with the data. However, these alternatives did not adequately describe the data and were subsequently discarded. The coding for comparison to demographic characteristics was completed then rechecked before being written up to ensure correct coding and counting. The emergent patterns were also checked for consistency between questions and divergences rechecked against the original transcripts for possible explanations, along with a recheck of the analysis chain. The coding schema in its final forms and the output from the demographic comparisons were checked and accepted as reasonable by the primary supervisor.

Chapter 4 - Findings

4.1 Introduction

This chapter presents and discusses the findings from the interviews. This includes the four interviews from the pilot study with any differences due to the timing being noted as appropriate.

The findings are discussed under four main headings:

1. The business context of ICT
2. The role of ICT in the day to day running of the business
3. The impact of ICT on the delivery of service to guests
4. The role of ICT in the future.

Within each of these main headings, the sub-headings used are derived from the coding schema presented in Chapter 3.

For each of these headings, the concepts will be presented with the supporting data from the interviews, and then the relationship between responses and the demographic characteristics of the hotels, presented in Chapter 3, will be discussed. Finally, the concepts and their relationship to demographics will be compared with findings of prior studies from literature. Due to the interlinked and overlapping nature of the responses, the discussion of the literature has been presented at the end of each main heading following the examples of Hwang (2005) and Kay and Moncarz (2007). This allows a clear presentation of the findings of the study and facilitates comparison while avoiding repetition.

Discussion of the interaction between the various issues, limitations of the research, business implications and further research will be presented in the next chapter.

4.2 The Business Context of ICT

To identify the context within which ICT was operating, the GMs were asked "What is the major issue currently facing your business?" Their answers divided mainly into two areas: issues around staffing and issues surrounding competition and pricing. Three of the interviewees also raised location and infrastructure as issues of concern.

This section will examine each of these issues in turn, giving the areas of concern then analysing them by hotel characteristics to identify any patterns. The issues raised as major concerns were uncovered during the interviewing process, with the literature being reviewed as part of the data analysis. Therefore, the review of relevant literature will be presented before the comparisons to the finding of this study.

4.2.1 Staffing

Staffing was raised as a major issue by one third of the group.

The availability of suitable staff in the current economic climate with an unemployment rate in the three to five percent range (Statistics New Zealand, 2007a) presented a major challenge. Hotels are a 24 hour a day, seven day a week business and finding people willing and able to cope with the demands of shift work was raised. Alongside the physical demands of working at times the human body is programmed to sleep and eating meals at strange times, there are the social implications such as limited time to spend with families or to socialise; this limits the available supply of workers. Typical comments included:

- Finding the right staff that can cover the shifts – [they] want weekends off and [we] can't guarantee that then they get shirty[1]."
- No one out there with experience.
- Employment, lack of well trained staff at the coal face, lack of management staff, lack of staff. That's obviously driven from the point of view of whatever the unemployment is three or four or five percent.

[1] Shirty: New Zealand idiom for annoyed or upset

- It's huge, we haven't got skilled level of staff and we haven't got the pool out there, the talent out there, to come into the industry.

As evidenced by these quotes, this staffing issue extends to all levels of the business. One GM of a reasonably new property did note that they had expected problems hiring into skilled areas such as front office and kitchen but that the real problem had been in semi-skilled areas such as Food and Beverage (F&B) service staff. As a result, much of their opening period was managed with agency staff, which then presented problems with service delivery by the hotel to its guests:

> [The agency] couldn't guarantee we would get the same person back two days in a row. Some of the early large functions, novelty value events, the agency would send school leavers with no skill, [who were] supposed to be waiting on tables of 10 at a formal dinner.

In the period around the actual opening of the hotel, when they were working to establish their reputation and people were booking functions for their novelty value, they were using temporary staff provided by a staff agency. These staff were not necessarily well trained. Providing service at functions where there are large numbers of guests, particularly formal dinners, requires a high standard of skills both technical, (i.e. silver service of food), and personal. These are not skills that an untrained school learner is likely to possess.

This problem is not limited to agency staff with a number of GMs having concerns about the reliability of their permanent staff as the following quotes demonstrate:

- Are they [the staff] going to turn up to work?
- Important to keep staff happy, rather than hunting for cover[2] at 6am.
- If [we] have to call someone in, which happens frequently…

The ability of staff to deliver on the hotel's service promise, in terms of their brand and reputation, was seen as key:

[2] Cover: Replacement for a staff member who is unable or unwilling to work, particularly where very short notice is given

> Dependant on having people willing to go out of their way to provide any little service people want. We've got nothing better to offer [than other hotels].

The willingness of staff to provide service to meet the guests' expectations was perceived as an important part of differentiating the hotel from its competitors.

One of the pilot study group, about to open a second property noted:

> We're not going to recruit the type of people that we want to run a five star hotel if we're going to do it properly, they just simply aren't out there. Not the people with the right look, the right verbal skills, the right competencies to match our guests, so we will take people with the right competencies and give them the skills.

This same GM also made the point that service delivery requires a particular mind set:

> People that understand what hotel guests want, it's quite different from, you know the way that kids are brought up now, it is different and you've really got to start from the basics.

Consequently, investment into staff training gives retention a great importance:

- It takes about five weeks to train a new front office staff member so retention is important.
- Systems aren't necessarily generic across industry, skill base bringing staff time to train and get productive is taking longer and longer.

However, New Zealand shares the problem with staff turnover that is common to hospitality. The interviewees were examining training, altering rosters and other work/life balance initiatives to try and retain staff:

- In trying to manage staffing over our quieter periods we are moving to a six [days on] three [off] rotating roster. On a five [on] two [off] roster at the moment, if [we] have to call someone in, which happens frequently, only get one day off which is hard on people.
- In essence they're not being managed properly, need to earn more money so they do other jobs and by mid-30s there's a lot of them dropping by the wayside. Which is a waste, if you train a builder, he's always a builder. If you lose a chef in the late-30s they never come back to us.

- We are getting the people through and the people who show any type of skill or initiative we're pushing through and at times pushing through a bit too quick. They might be starting with us at, you know, 20 years old or something like that and by the time they're sort of 23 or 24 they're into a very senior position and, you know, if they hang it out for another couple or three years they're almost burnt out.

In response to the lack of suitable applicants, some hotels were trying to source staff from other countries. However, this solution is not without its own problems as the comments below illustrate:

- I know we have a lot of problems with immigration and getting people through and all this type of stuff and it makes it very, very difficult to get the people in.
- New Zealand staff shortage at all levels. Never had so many work permit applications to deal with[3]
- Shortage of skills in the hotel industry not acknowledged by [the Department of] Immigration. I'm running a hotel I don't have time to mess round with Immigration people day after day after day with stupid stuff.

If staff can be hired from overseas there can be difficulties with language and guest expectations:

- Messages are back to front, bookings made for the wrong day so the owners have said only English as first language may be employed on the front desk.
- [There can be] language issues, [problems with the] expectations of the guests if the work force is dominated by immigrants.

There was also acknowledgement that the lack of staff is an issue facing the hospitality industry worldwide.

Hotels are very dependent on staff for service delivery, yet in a tight labour market they struggle to attract and retain staff of the calibre they need. They struggle with their need for staff that are able to work shifts, often on rotating rosters at anti-social hours, especially as there is a perception of the industry as being low waged unskilled work. The GMs also expressed a perception that external agents, such as the Department of Immigration, do not understand the industry and its needs.

[3] An employer is required to give proof of job offer when a potential employee is applying for a New Zealand work permit.

For example, hospitality workers are not included in the skilled labour categories for immigrants to New Zealand (Immigration New Zealand, 2004) requiring additional paperwork to prove the need to hire immigrants.

4.2.2 Competition

Issues around competition such as tourism flows, seasonality, marketing, oversupply of accommodation and the resulting price wars were mentioned by two thirds of the interviewees.

Inbound tourism numbers impact strongly on the business coming through the hotels with 54% (Statistics New Zealand, 2006a) of hotel nights in Auckland being international visitors. The fluctuations in the value of the New Zealand dollar, which was strengthening at the time of the interviews, and the impact of escalating fuel prices, were areas of concern as the following quotes illustrate:

- Fuel prices at the moment, impacts everybody else. Airlines, prices will go up, people don't travel, not just corporates, leisure makes up a big part of the business. All about volume if your hotel is half full you can't charge as much as if your hotel is 90% full.
- Fluctuating dollar has an effect on the amount of tourism coming into New Zealand.
- Our costs are rising on monthly, annual, basis particularly with petrol.

Similarly, the possible impacts from changes in Air New Zealand's routes and the code share[4] arrangements with Qantas (Air New Zealand was attempting to negotiate a code share arrangement with Qantas for trans-Tasman flights at the time the interview took place in April 2006):

- Air New Zealand is dropping flights from places like Japan which is not always helping.
- Coordinating what some of the airlines are doing and what Tourism New Zealand are doing on some of their marketing. Enough capacity to get people here.

[4] Code share: An agreement between airlines to sell space on each others flights. For example Air New Zealand flight NZ9090 from Los Angeles to Dallas/Fort Worth is actually operated by United Airlines

Code sharing allows the airlines to utilise their aircraft more efficiently but may reduce the number of seats available on a given route or increase the cost of tickets.

A related area of concern was the seasonality of business coming through Auckland:

- Seasonality of the market, first quarter high season, fourth quarter shoulder. Auckland as destination in the business mix so busy in the first quarter is due to the combination of corporate and leisure market as well as all the overseas visitors. During the winter relying purely on the meetings market – Auckland does not have a stand alone convention centre so you can't attract big events.
- When we go through quiet spells, you can't quite work out is the world going into new thing of no travellers coming through or are they all going to your competition or are they just not coming to Auckland, what is the problem. Then suddenly it's flat out busy again and you're fine.

This variation in demand through the year, leads to difficulties in planning in all areas:

- If you were an independent [hotel] and you were a one man band, you'd find winter very difficult to sustain yourself to the next high season
- This week we're very quiet and this weekend we're wondering how we're going to cope.

This does extend beyond Auckland with hotels throughout New Zealand being impacted to some extent:

> Seasonality right throughout the country. Queenstown and perhaps Taupo a little have minimal seasonality due to ski business.

This variation in utilisation of the hotels' resources due to the cyclic, seasonal nature of their business creates problems for planning in terms of staff required and income flow through the year. The first quarter of the calendar year, over the New Zealand summer, is the busiest part of the year for hotels; the fourth quarter with Christmas functions and early holidays is next. The middle part of the year, over the New Zealand winter, for Auckland hotels can present problems attracting enough business to cover costs.

For Auckland, this volatility combines with an oversupply of rooms:

> Was an oversupply of accommodation when [we] opened five years ago. Was much of a muchness between four and five star hotels for rates and facilities. Lots of old room stock.

This is true not only of hotels but of the property market in general with apartments being seen as posing a particular threat:

- There is a lot of additional supply in New Zealand - not only hotels, in different markets such as apartments, things like that. Apartment blocks as pseudo hotels, don't have infrastructure we have to have, have some of the legal things, fire etc.
- Someone told me there's 6000 apartment rooms coming on the market in the next six months, that's a 1000 apartments a month that's a big concern for us because people start thinking, especially corporates start thinking, well I could rent an apartment for two or three hundred dollars a week, furnish it, it still works out cheaper than putting people in hotel rooms.

Groups of apartment owners are using property management services to rent out their apartments on a nightly or weekly basis. While they do not offer services such as restaurants and have limited housekeeping, they compete in the same market space as hotel rooms, particularly for the corporate traveller. As they are not bound by the same legal requirements as hotels and have fewer costs they are able to offer lower rates.

All of these factors lead to price cutting and price wars as the following comments indicate:

- Industry as in competition – how people handle competition… rates are being driven down by market forces through lack of business and through particularly short sightedness of some operators.
- This is what we call our low season. It's when everyone, all the hotels, start dropping rates. Everyone is vying for the business.
- There are a few hotels out there that are slicing the guts out of rates, because they're not doing that well for whatever reason that maybe, and they're out there reducing the market down. And they destroy your yield, absolutely destroy your yield.
- Certainly has driven rate down in a lot of areas. It's started to turn round a little bit now, people have started to realise it and starting to yield manage it a lot better now but it certainly did effect our rate.
- Hotel rates in New Zealand have languished for the last 10 years.

Discounting leads to problems with image and future viability:

- Once you've knocked it down it's very hard to put it back up.
- There is the issue of guest perception, if you sell your room for $99, your hotel in their mind is forever going to be worth $99.
- In OECD, Auckland has the fourth highest hotel occupancy and fourth lowest yield. Says that [we are] not positioned correctly in the market.
- Survive in the here and now and don't think about the future.

Nevertheless, some of the hotels had been able to set rates and maintain them:

- When we came in we said we can either join the mass or try to create a point of difference. Because of our location, the strength of our brand and our size, we went in and positioned ourselves above all the others
- They didn't fold to the pressure to lower their rate and it's worked for them. It's exactly the way to do it.

Others have had to make adjustments and yield to the rates wars to a greater extent than they would have liked:

> [We] dropped rates to get share, the yield in the last six years has moved from $88 to $120 as [we] moved rates back up. Always knew had product but had to get market share to realise the rates.

Most of the GMs thought that this issue was starting to be addressed by the industry in a more appropriate manner:

- It's started to turn round a little bit now, people have started to realise it and starting to yield manage it a lot better now.
- Rates for 2005 were lower than a decade earlier, last year was a watershed. Everyone decided enough was enough and started moving rates up but when times get tough people swing back to discounting, doesn't help anyone.

These issues accentuate the usual problems of marketing and mean that a key issue is "what can you do next to get more business in" or, as one GM put it, "bums in beds".

4.2.3 Location and Infrastructure

The issues discussed in this section relate to factors that the guests would encounter outside the hotel that would impact on their perception of the hotel.

- Street people, boy racers, undesirables in the central city is probably the biggest concern. We had somebody arrested from here a couple of weeks ago, that was making a nuisance of themselves, we had a van dealing drugs out the side here three weeks ago. I looked on the camera and there's like 50 people hanging out the back of the van – I don't know if it was drugs or it was a bloody soup kitchen, I don't care what it was but I don't want 50 homeless people hanging around the side of the hotel
- …about the cleanliness of the roads and the street. I mean you go to Singapore or something, they have people walking round the whole time picking up rubbish keeping everything swept clean. You walk down E Street and that and sometimes it is just disgusting and, you know, you've got your guests walking in and out and they're thinking, "That's terrible".

This extends to broader issues with the provision of service from the local councils:

- Local city council, like Cirque du Soleil or something not being able to get the right consents to be able to hold Cirque du Soleil in downtown, those things.
- And you look at the footpaths out the front and there's potholes and all this sort of thing. And the amount of money they rake in with traffic fines and all the rest of it, they should be able to keep the footpaths and the roads nice.

Similarly, the problems with Auckland's roading and transport infrastructure were significant:

> I mean in broad terms, obviously the traffic and other issues that slow business as a whole down but not directly impacting. See traffic can impact, … they had to come in for a cocktail party at 6:30 and they left out there at 5, no one made it till like 7, 7:30 'cause it was a wet day and there were a couple of prangs[5] on the motorway but people were mortified just like "oh my god it took us two hours on a bus from Greenlane" yep. The rest of the New Zealand delegates were all going "nah nah Auckland."

The journey from Greenlane to Auckland CBD varies between 20 and 40 minutes in more usual conditions.

[5] Prang: New Zealand slang for a motor vehicle accident

4.2.3.1 Relationship between responses and hotel characteristics

Staffing was mentioned as a major issue by half the airport GMs. For them retention and, more particularly, reliability of staff were problematic. This reflects both the characteristics of the labour pool they are drawing their staff from and the fact they are perceived to be paying lower wages and offering less career potential than jobs in the CBD.

For GMs of the downtown hotels, which are targeting the corporate and luxury market segments, the ability to deliver service that met their guests' expectations and brand promise were of higher importance.

The concerns about marketing from a solely occupancy perspective, of how to keep guests coming into the hotel, came from the smaller operators, with even the largest firm articulating it as a concern being the GM of a hotel of only just over 100 rooms.

Interviewees who were concerned about inbound tourism were focused on either Free/Fully Independent Travellers (FIT)[6] booking from the airport or tour groups as key elements of their business.

The interviewees focused on oversupply and the resulting price war. All had a strong focus on the corporate sector of the market and, in most cases, a correspondingly heavy reliance on conference business. Most of this group was also concerned with seasonality of business, although they did note that rate variations meant that discretionary conference business was moving to the hotels' off season to some extent.

Location and infrastructure issues were raised by the group of CBD GMs interviewed as part of the pilot study. At the time of the pilot study, resource consent applications for performances by Cirque du Soleil and

[6] Free/Fully Independent travellers are defined as "holiday visitors who do not prepay any of their holiday, do not travel on a package and do not travel on an organised coach tour" (Collier, 1999, p. 6)

for a proposed V8 street race[7] were being processed by Auckland City Council.

Traffic congestion was only raised by one of the group, who had a large number of tour groups coming through the hotel, meaning transit time to and from the airport and other sites were of interest.

4.2.3.2 Comparison to prior research

As the issues raised as major concerns were uncovered as part of the interviewing process, the literature was not reviewed in these areas prior to the commencement of the study. For this reason, this section will present a review of the relevant literature then a comparison to the findings of this study for each of the major contextual issues of staffing, competition and location.

Literature

Staffing

This section provides a brief sample of the literature surrounding staff availability, recruitment, retention and impact on service delivery.

The lack of skilled workers, both within hotels and available for recruitment, has been raised by a number of writers.

Marchante, Ortega and Pagan (2006) provide a formal definition of skills shortage and hard to fill vacancies based on their survey of the Andalusia hospitality sector. This identified a number of factors such as the general labour market, problems of shift work, labour mobility along with the perception of low wages and low status that make employees more difficult to find. There was also a mismatch between what is being taught in training institutions and the requirements of employers. The authors note that most of the firms surveyed were using hourly nett wages, although they note that a firm's reputation can also attract employees and decrease the likelihood of having hard to fill vacancies.

[7] V8 street race: Competitive motor racing on a street circuit featuring the Australian V8 powered formula cars.

Examining the Chinese market (Zhang & Wu, 2004), similar problems with wages and perception of job status arose leading to a shortage of applicants for positions within hotels. These authors noted that service quality within the hotels tended to suffer. There was a tendency to promote employees too quickly into supervisory and management roles. The mismatch of expectations they observed was between the expectations of graduates and the reality of the work they would be performing particularly in the early stages of their careers.

In reviewing best practice in hotel recruitment, Lockyer and Scholarios (2004) identified similar problems in Scotland with 85% of their respondents feeling there was a shortage of suitable applicants for front line vacancies. The respondents also felt they were suffering from high labour turnover, increased staff cost and the impact of legislation such as Equal Employment Opportunities and Health and Safety requirements. While over half the staff employed in the businesses were full time, the majority of the recruitment activity surveyed was for part-time and temporary positions, reflecting the shift driven and seasonal nature of the work. The authors noted in their conclusions that large hotels with more bureaucratic models of recruitment tended to suffer more problems in solving recruitment difficulties, this being to the importance of the social processes.

As part of their examination of branding in competitive strategy, Cai and Hobson (2004) note that, in the customer's perception, the employees are the brand. For this reason, it is important that marketing and human resources interact in areas such as staff recruitment, induction and continuing training to ensure there are no gaps or disconnects in the brand dynamic. Any lapses in staff training and, therefore, employee buy-in to the brand can potentially devalue the brand to the customer.

While guest expectations are high due to the increasing sophistication of the guests along with the need to address differing guest needs in one place, service can also suffer due to staff attitudes (Presbury, Fitzgerald,

& Chapman, 2005). These attitudes arise from concerns such as high turnover and the casualisation of the work. Problems in staff attitudes are also reinforced by a lack of mentoring for supervisors and managers. The authors also mention the problems generated by very rapid promotion in terms of creating poor staff attitudes.

Similarly, research conducted in Taiwan (Chang, 2006) identified the importance of organisational culture and leaders' behaviour in service attitude. Chang also noted the importance of personality traits in the individuals as an important part of their ability and willingness to deliver service.

In attempting to address these kinds of issues by changing the organisational culture and focusing on staff training, Hilton is regularly raised as an example (Magnini & Ford, 2004; Maxwell *et al.,* 2004). Hilton's Equilibrium programme and its accompanying Esprit human resource management initiative aims to make the company "a number one employer, first choice in the hotel business" (Maxwell *et al.*, 2004, p. 168). This programme runs from recruitment and induction through on-going training and includes regular recognition of staff achievements.

The problem of staff turnover and its impact on both service delivery and bottom line budgetary performance are discussed by Hinkin and Tracey (2000). While they examined the costs involved in losing a single employee, giving a figure of between US$5000 and $13000 for a front desk employee, they did not consider the underlying problems. This study has been cited in New Zealand research (New Zealand Tourism Research Institute, 2007) but has not been used to produce actual costs.

Iverson and Deery (1997) discuss these underlying factors and identified a "turnover culture" in hospitality with "an acceptance of turnover as part of the workgroup norm" (p. 71). This is due, in part, to the structural factors such as shift work, low pay and work overload. External factors such as family responsibility also play a part, along with union

membership, employee personality and job satisfaction. It was noted that some sub-groups were more prone to turnover and turnover culture. There is a need for management to provide a permanent employment culture and to address these efforts to sub-groups within the organisation rather than the entire workforce.

In trying to address the turnover issue, as well as in trying to attract suitable staff, wages and hours are used as to advantage in the U.S. market, Cohen and Kleiner (2004) note that, while there are constraints from legislation and business requirements, staff who are consulted and involved will be more satisfied with their pay and hours. This involvement can be used to make wages and hours a key part of a work/life balance programme.

In a Lithuanian study, Kazlauskaite, Buciuniene and Turauskas (2006) suggest there is a need to empower employees to improve their commitment to the organisation. This is particularly important as the workforce is young and has skills that are in demand in other industries. This empowerment needs to take the form of clear flexible guidelines for handling unfamiliar situations, the ability to use independent problem solving skills and easy access to company information.

A final area of concern was minority group employees, both new immigrants and existing residents such as Maori and Pacific Island workers. Gilbert, Carr-Ruffino, Ivancevich, and Lownes-Jackson (2003) examined the role of stereotyping, noting that some groups, particularly African-American men, were viewed as less competent and less polite. Interestingly, African-American women were seen as stable and hard working, though not as desirable of Asian-Americans of either gender.

While New Zealand does not have the enforced diversity requirements in hiring present in the U.S., the requirements of the Human Rights Act (1993) and Employment Relations Act (2000) mean that hiring methods must be seen to be fair to all groups. Schmitt (2003) describes how

traditional written tests rely on skills minority group members may not possess, despite the fact they are able to meet the requirements of the job. He recommends use of job simulation tests to measure the personality and abilities that are important for hospitality work.

As evidenced by the range of countries covered by the above studies and the similarity of issues and finding, human resources management is a truly global challenge for the hospitality industry.

Competition and Pricing

Hotel room pricing and the role of pricing in competition is not straightforward. Steed and Gu (2005) give no fewer than 14 different models that can be used for pricing. Some of these, particularly the cost-plus models, were deemed to no longer be suitable for use. Even supposedly sophisticated yield management models had a potential to lower overall revenue if not controlled and implemented properly. There was also the potential to confuse and annoy customers with constantly changing rates due to differing demand over time.

This underlying seasonality is, in itself, a major issue for all tourism businesses (Butler, 1994). Seasonality is, in part, due to natural factors such as climate but also responds to social norms such as holiday observances (Hinch & Hickey, 1997) as well as fashion, sports and traditions (Butler). This means that demand is not evenly spread over the year but clumps into distinct high and low periods. Authors such as Jang (2004) suggest that it is possible to mitigate seasonality to some extent by developing a portfolio of market segments which use the facilities at different times of the year, pricing being one of the means of doing so.

Into this already complex mix is added on-line distribution channels. These have to be managed to ensure price consistency and revenue maximisation (O'Connor, 2003). For reasons both historical, the early entrants on-line competed mainly on price, and current, customers expect

to benefit from lower distribution costs; there is an expectation of lower prices on-line. This has been reinforced by the ability of on-line channels to process very short lead business such as distressed inventory which is cleared at low prices. For the U.S. market, by 2003 there was beginning to be better management of on-line pricing with consistency between channels emerging.

There was still a lack of understanding of the need for a rational pricing model overall. Particularly, there was a lack of awareness that discounting does not necessarily increase revenue due to a degree of price inelasticity in the demand for hotel rooms (Enz, 2003). There is still a need for a pricing model with less complexity and less use of discounting as a first reaction to falling business (Enz).

Location and Infrastructure

As well as the issues surrounding where to locate a hotel at the time of construction or conversion, which were examined in Chapter 3, location also impacts on security. The issue of the responsibility of the hotel for security beyond their premises has been examined by Wolff (1992) and Jones and Groenenboom (2002). Particularly in the U.S. example (Wolff), there is an element of foreseeability where a hotel can be held responsible for the guests' safety if they fail to warn guests of crime or other security risks in the vicinity of the hotel (Bach, 1996). The impact of these types of factors, along with general maintenance issues such as the state of the pavements outside the hotel, on the guests' perception of the hotel appear not to have been examined, although they have been considered for destinations as a whole (Kathrada, Burger, & Dohnal, 1999).

While there is literature considering where to locate a hotel at the point of entry (Egan & Nield, 2000; Smith, 2004; Urtasun & Gutierrez, 2006), there appears to be little written about the impact of that location on service delivery once the hotel is operational beyond considerations of

security (Jones & Groenenboom, 2002) and the hotel's liabilities for crimes occurring in and around its premises (Bach, 1996; Wolff, 1992). The impact on the guests' perceptions of the hotel itself rather than the destination overall (Kathrada *et al.*, 1999) appears not to have been considered.

Comparison to findings

Staffing

The concerns around staffing expressed by the GMs broadly concurred with those described in the literature.

Issues of the disparity between what was required and available raised by Marchante, Ortega and Pagan (2006) were a common concern of the GMs in this study. The need for people to be willing to work and start from the bottom described by Zhang and Wu (2004) in the China was just as much of an issue for the Auckland GMs.

Problems caused by rapid promotion and the resulting burnout (Presbury *et al.*, 2005) were a concern to the GMs in this study.

Concerns about turnover in all its forms (Hinkin & Tracey, 2000; Iverson & Deery, 1997; Kazlauskaite *et al.*, 2006) were causing as many problems for the participants in this study, as for their international counterparts reported in prior studies.

The GMs of luxury hotels were clearly conscious of the importance of staff in service delivery and brand image (Cai & Hobson, 2004; Presbury *et al.*, 2005). They were taking actions through staff training (Maxwell *et al.*, 2004) and empowerment (Kazlauskaite et al., 2006) to meet guest expectations with the staff they had.

Hotels were also making adjustments to rosters and trying to address the issue of perceived low wages (Cohen & Kleiner, 2004) to create a better

work/life balance for their employees in an attempt to reduce turnover and improve staff reliability.

The problems found in the airport hotels where there is a strong representation of workers belonging to lower socio-economic groups and ethnic minorities, as shown in Table 18 following, was consistent with the international experience as described by Gilbert, Carr-Ruffino, Ivancevich, and Lownes-Jackson (2003). Table 18 compares the population data for Manukau City where the airport is located, to the Auckland Region as a whole. New Zealand Maori and Pacific Islanders are the major non-European ethnic groups and dominate the lower socio-economic strata in New Zealand. The table also notes the percentage of the population born outside New Zealand and those earning under the average wage to provide a background to the differences in labour supply. The GMs were using training and rostering to try to address these issues.

Percentage of total population	Manukau City	Auckland Region
Maori	**15.6%**	**11.0%**
Pacific Island	**25.6%**	**13.4%**
Born overseas	**34.0%**	**30.8%**
Unemployed	**6.4%**	**5.1%**
Income under $20,000	**43.6%**	**41.9%**

Source: ((Statistics New Zealand, 2001a)

Table 18 Comparison of selected demographic characteristics between Manukau City and Auckland Region

The range of countries, from China to the U.S., Australia to Lithuania, included in the surveys in the literature confirms the GMs view of staffing problems as being global in nature.

Competition and Pricing

While the GMs interviewed were well aware of the pitfalls of discounting, described by Enz (2003), and of poor revenue management exampled by Steed and Gu (2005), they were only beginning to reach the level of sophistication shown in the U.S. regarding on-line pricing (O'Connor, 2003)

Seasonality was understood as being due to the broad range of factors identified by authors such as Butler (1994) and Hinch and Hickey (1997). The potential risk of the fashion element was of concern. Managers were trying identify market segments that may not be sensitive to these factors or able to override them, such as meetings and conference business and trying to encourage them to shift their bookings to the low seasons as suggested by Jang (2004).

Location and Infrastructure

As there is limited literature available on this topic it is difficult to say how the views of the GMs in this survey compare to previous experience.

4.3.1 Summary

This discussion identifies the context in which ICT was operating. The GMs described a fiercely competitive business environment where pricing decisions and positioning were often driven by very short-term considerations. The ability to attract and retain staff was also highly contested both within and beyond the industry.

The GMs' identification of the staffing issue concurs with the findings of studies throughout the world. Pricing and retaining control of this in the marketplace, especially the electronic marketplace, showed the GMs in this study were still catching up with their U.S. counterparts in terms of sophistication (O'Connor, 2003).

The implications of these issues and their interaction with ICT within the business will be discussed further in Chapter 5.

4.4 ICT in Day to Day Business

This section examines the role and impact of ICT in the day to day operation of a business. The question for this section was worded as "In what ways does ICT affect the daily running of your business?" The first area of interest was what the GMs defined as "Information and

Communication Technology" so the question deliberately offered no definition of ICT to elicit this.

The first part of this section details the hotel GMs view of what comprises the domain of ICT. It then examines their perceptions of the benefits of the technology followed by the drawbacks, challenges and frustrations arising from the use from ICT. These findings are then compared to the hotels' demographic characteristics to identify any trends and examine these against research detailed in the literature.

4.4.1 Defining ICT

This section details the hotel GMs view of what comprises the domain of ICT. For a third of the group, the first response to this question involved external facing technology such as on-line booking systems including Global Distribution Systems (GDS), email or general marketing issues. The rest of the group identified "ICT" with reporting, administration and distribution of information within the property. One GM's first response focused solely on "information" such as surveys by the Hotel Association of New Zealand (HANZ):

> Any assistance in that area is of great assistance, even getting information about how other hotels in the area are faring. If everyone is quiet there is comfort in knowing it is not something we're doing or if everyone else is busy then we need to look at ourselves.

Beyond their initial response, most GMs did cover both internal and external elements of ICT.

Interactions with the world through the Internet were of great importance to the business in the eyes of many GMs as evidenced by the following quotations:

- So certainly information technology for us is crucial for the success of the hotel, websites, it's crucial for us to have to have a good website that's constantly updated and has regular specials, good information and easy links, with bookings being particularly important.
- Bookings, [the] majority come though the Internet.

- Have connections to work the association. Have the knowledge and the understanding how to work the sites.
- Website takes instant on-line bookings straight into the PMS, confirmation in one second.
- We have Internet, of course for bookings and that sort of thing.

For several of the GMs the GDS element was also of growing importance:

- A huge percentage of our business is now based on GDS which is travel agents, wholesalers from all around the world. They just go straight in, there is no human contact, they don't want human contact, they go in and they get an instant confirmation and the booking is guaranteed.
- GDS is a very big part of our business and growing.

Email also plays a key role in these external interactions:

- Email, the volume of email business is colossal. People just don't want to deal with other people which makes a lot of sense, if you can do it without any contact and that's the way people are going.
- So it's obviously very powerful, email and all that type of stuff, as much as it's a pain in the neck it obviously has its place.
- All our information/bookings are through email, how we communicate through all our locations is all email.

Likewise GMs commented on the role of email for internal communications:

> We email each other; we all have our own links in the hotel. Every day we would communicate with each other probably up to half a dozen times a day about different things, 'cause again it's quicker than getting on the telephone.

This all provides input into the internal systems such as the Property Management System (PMS) for use in marketing and market analysis:

- The hotel system (THS) downloads information to find where the markets are coming from, countries, where they made booking. Segments – airport telephone, Internet, Best Western, travel agents. Plug in this information every day. Addressing marketing issues, see what is happening.
- Vital part of business, especially for marketing. So many web sites [we] can hook up to.

The reporting and information management elements for internal use were also viewed as critical:

- Whole business is computer centred right through from reservations, accounts, all our conference bookings, till systems from the restaurant straight into the PMS.
- For a lot of hotels it's about stats and historical data…can work out where we are going to be in three, four months time by the information we gather.
- Used to take 10 days to do end of month now it is a day, report back within a day. End of month is finished on the first day of the month, no way in the old days.

As one manager put it:

> Obviously they're vital, absolutely we can't run it without it, as simple as that. We're not going to go back to old pen and pencil and rubber and book that's for sure.

4.4.2 The benefits of technology in day to day business

The positive aspects of ICT in the day to day running of the hotels focused around four areas; the timeliness of information and response, the depth of information available, the simplicity and accuracy ICT bought to processes and the transparency it brings to the market.

Timeliness was a key benefit for most of the GMs and has two elements. Firstly, the ability to have information required by the business on a more or less immediate basis:

- Work that used to take hours or week now much quicker - things such as reporting. [It is] amazing the information that is available in seconds. [We can] predict income [continuously, we] don't have to wait for quarterly financial statements.
- Quite fabulous, grow and grow in importance, we can react quickly now that we know both what our competitors and clients are doing.

The second element was being able to respond in a timely manner:

- As technology speeds up response times speed up. This includes being able to interact in an appropriate manner.
- Keeping up with systems that offer us the opportunity to deal with people the way they want to be dealt with, more as individual and knowing who they are.
- People just don't want to deal with other people which makes a lot of sense, if you can do it without any contact and that's the way people are going.

This relates to the depth of information now available to manage the business:

> Previously a lot of business decisions based on gut feeling, experience, where now you can, because of technology, can drill down into the data to pick up trends immediately.

Similarly, trends can be monitored and adjustments made on a near real time basis, as shown in these examples:

- To find where the markets are coming from, countries, where they made booking. Segments – airport telephone, Internet, Best Western, travel agents. Plug in this information every day. Addressing marketing issues, see what is happening.
- If numbers drop off you want to look at pricing, quality, what food you are offering. The ability to manage trends.

This information drives areas such as yield management:

> Have lots of tools to do this [Yield Management]. Looking at today versus nine years ago [we] have come so far in managing rates, understand it a lot better.

However, there can be a downside to this ability to gather information:

- Someone to keep track of it, focused on monitoring what is going on out there.
- The front end from a customer point of view is quite savvy the back end is quite a clunker, so we've got a huge amount of information we don't really don't do anything with.

The ability of technology to be used to simplify processes was raised with the caveat that this needed to be managed to ensue an appropriate fit with the business:

> [I've become] more familiar with the tools over the five years, changed to a smarter system. Originally [the system] only produced a receipt had to do manual reconciliations. Too many steps, you're dealing with humans. I like changing systems – I like making things simpler.

The ability to move information directly between systems, such as the Central Reservations Office (CRO) working directly with the hotels PMS, also improved accuracy and efficiency:

> They [CRO] can go right through. And we don't even know we have no idea they are in the system they are just making bookings

> all the time and they do probably about 2500 bookings a month for us.

The automation of tasks and the ability to prevent errors was also seen as a benefit:

> Means at a hotel level we have to make sure we're using the correct logo. I picked them [the new logos] up; put them in a shared file on LAN emailed internally to say this is where they are. No reverting to wrong version.

The transparency that Internet marketing tools such as Wotif.com, Expedia and hotels' own websites have introduced was seen as a positive making it easier to monitor the market:

> Not that difficult these days. We all go on Wotif and look at what our competitors are doing. It is as transparent to us as to anybody.

This transparency can cause its own set of problems, as will be discussed in Section 4.3.3

4.4.3 Challenges and drawbacks – the other edge of the sword

Technology was also perceived as having a number of drawbacks, in some cases mirror images of the benefits, or challenges arising from those very benefits. In this category came the yield implications of Internet bookings and the expectations of guests in terms of speed of response. Other problems identified included reliance on third parties for technology, the speed of change in technology and the risks arising from system failure and inappropriate use, as well as issues around fear of technology and the time involved in training staff to a productive level.

The challenges involved in managing on-line price display and booking were a major issue for many of the GMs. While they appreciated the transparency it introduced, they were concerned it exacerbated the price wars occurring in Auckland:

- A huge thing is also the distressed inventory sites, all these short lead, 24 hour, that's been huge for the hotel industry. I personally don't agree with it, I think it's, you're just shooting yourself in the

foot basically. But we do belong to two of them because we have to but personally I don't believe in distressed inventory[8] sites.

- The concept was fine but it has actually driven rates down.
- Really just done the retail side of the Internet and the retail side is the cheap, nasty side. Retail side should be last minute filler.

It has also encouraged customers to behave in ways that go against the best interests of the hotel:

> What we ultimately ended up doing was training the public that you get the cheapest rate on the Internet and so they stopped booking out with us far in advance, they were leaving it to the last minute to book and going on these websites, people were going on there putting cheap rates on there and the whole bit and it's hurt us big, you know.

Interestingly, the attitude towards this problem had changed in the 18 months between the pilot study and the main interview set with GMs feeling they now had better control of how they were using the Internet as the examples below demonstrate:

- …very savvy when it comes to Internet distribution. [We] partnered with Expedia when it started [so we] have connections to work the association. Have the knowledge and the understanding how to work the sites here a lot of properties haven't really tapped into that market.
- Don't just dump rates on a website, don't undercut our own site, try to have some parity across the websites. People shop around and use crawlers to check.
- Wotif is biggest client for hotel; cliché of distressed inventory – doesn't have to be like that. The Wotif placement is yield managed through the in house system to allow only a small amount rather than being used to dump distressed inventory.

While the initial use of on-line booking had been to clear the last few remaining rooms that would otherwise remain unsold, the impact of these discounted rooms being easily accessible to the general public had exacerbated the price wars described earlier in this chapter. Over time, there had been an increasing level of understanding of how to manage this element of the market to maximise revenue and clear inventory effectively while minimising the impact on image and booking patterns.

[8] Distressed inventory: Hotel rooms which would otherwise remain unused which are sold at a discounted price usually with a very short lead time.

Customer expectations and uncertainty around technology impacts in several ways around speed of response and double checking of transaction, meaning that expected time savings do not occur. Expectations around speed of response impacts in a number of ways, for example:

- People who can't get an instant confirmation think well don't worry we'll try somewhere else. The instant confirmation [of the new system about to be installed] will overcome hesitation of 'has it really happened'.
- Guests expect a response much quicker. [Guests can be] unrealistic about time frame for response.

Uncertainty on the customer's part as to whether a transaction has processed correctly leads to double handling, meaning the benefits of time saving that the technology should provide do not occur:

> Even when you confirm it with them, they come back a day later and go just confirming our booking - and we just confirmed it to you yesterday.

The problem with reliance on third parties has two elements. First, the impact on the hotel's reputation of things beyond their control, such as Internet speed, with the following comments being typical:

- Yes they're wanting high speed access and broadband. Doing through third party suppliers so pricing is an issue. Expensive here compared to overseas. Get comments on speed and price - that's New Zealand rather than a third party supplier.
- Got marked down in last Best Western inspection because New Zealand wide does not have high enough Internet speed. It's like why would you mark us down if we don't have it, New Zealand just can't provide it.
- Expectation now is someone flying in from overseas I can open my computer pick up a wireless signal and go straight online. Fast service, reasonable cost that's a reality in many parts of the world – it's not in New Zealand at this stage, it's quite expensive to operate and to use and unfortunately not as reliable. Perceive it as the hotel's service. When you try to explain it is a third party service (shrugs).

The other element is reliance on external providers and the problems this can cause:

- The THS hotel system on-line booking option only offered support Monday to Friday 9 to 5 with a $200 charge per call for after hours support. In 1 Solutions offered 24/7 support office in Ireland as well as NZ in a single charge.
- It is very, very expensive to have someone off-site or a contractor situation to look after all IT.

There are also issues with responsiveness of external software suppliers when changes are required:

> You can make suggestions but then it's the computer company in Australia that creates the tool that, I mean, they can't just suddenly change something. There's different versions, you've got to wait 12 months for a new version to come out and then they might have made a change to a report that you wanted, something taken off a mandatory field.

The issues of managing relationships with many different providers, or even keeping track of external listing were also raised:

> Yeah, we're with so many different Internet providers, Internet companies.

The support issue also related to the speed of change in ICT, including software changes:

> Keeping abreast of issues and being able to use it effectively.

There was also concern that the rapid pace of change undermined both reliability and costs to the business:

> Can't take longevity for granted. The business environment changes. From an investment perspective IT obsolescence is a concern. All the Y2K upgrades are now obsolete, you can't get service contracts. Plus development is so fast; I'm not convinced it is as reliable as it was.

This need to keep moving also poses a constant risk of getting behind as demonstrated in the following examples:

- Website needs to be upgraded - nothing wrong with them but nothing spectacular that would impress you ahead of the others.
- Our technological back of house systems have not kept up, so we're currently in the middle of what we call a "cornerstone" project which is going to be PeopleSoft, that rolls out in August and that will have huge changes in the way supply chain, HR etc 'cause everything will be online.

- Gone are the days of OHP - had a meeting yesterday [with the hotel's owners] and said we need to get a datashow - NOW 'cause everyone's asking for it.

There were a number of GMs worried about making mistakes or less than confident of their ability with technology:

- Terrified of making a mistake that would wipe out all the information in the system.
- I can't check a guest in now – I wouldn't dare.

The critical place of ICT in the business, interacting with the factors just noted, meant that system failure was seen as posing a major risk to the business. Typical comments include:

- If the system goes down, you're lost; you've lost all your bookings.
- If you took the computer away from them, they would be stuck, to a certain degree. Obviously you have systems in place for those, for when the computer failure happens, they can do it manually to a certain degree but you know that's obviously a short period of time until the systems back up and running type of thing. Any more than a couple or four hours and we'd be absolutely lost that's for sure.
- Challenge of failure. Never worked in a hotel with a manual system. At hotel school have to learn. 1980 lot of them had very basic computer systems, a lot was still manual, physically had to understand the flow "now they just press a button and it is done so when there is a problem they don't know where to look for the issue so it does bring with it its own set of challenges.

Some sites resorted to measures that could be viewed as extreme in an attempt to protect their systems:

> Owner will not allow access to email on the computer that has access to the reservations or debtors systems, most people have two computers on their desk. [They are] worried about viruses and security breaches. The accountant is not allowed access to the bank accounts via Internet for the same reason as the owner doesn't trust it.

The risk of inappropriate use was also raised. There was concern around staff use of the Internet:

> Not everyone on staff has Internet access, everyone has intranet. People might use it in the incorrect manner.

There was also concern that technology could be used internally in ways that worked against the business:

> We force ourselves to get together every Wednesday for an operations meeting so all the heads of department get together, physically sit around a table.

While this GM was half joking, he acknowledged a risk of disconnects using solely email communications. Another GM raised deeper concerns about the use of email:

> email and all that type of stuff, as much as it's a pain in the neck it obviously has its place, you know, at times I think its become too much of a monster, to be honest with you. I mean, people are using it in the wrong sense, disciplinary or, you know, something like that, talking to people and 'cause obviously, something written down can taken be taken a myriad of different ways as opposed to sitting in front of someone and seeing what their whole body language is saying, you know, they can say exactly the same thing as what they've written down but their body language actually tells you whether or not it's, you know, an aggressive or passive or whatever situation, it gets used for that unfortunately in the wrong terms.

The last issue of major concern was the training required to allow a staff member to become productive:

- Systems aren't necessarily generic across industry, skill base bringing staff time to train and get productive is taking longer and longer. In the sense of investment in training in technology, to train these people up to be productive, where before it might be two to four weeks you're now talking two to three months.
- So many systems for someone to get their head around. [It would take] 12 to 18 months for an outsider to start to fully appreciate systems and make them work.

The time taken to train staff combined with the turnover of staff presents a serious challenge:

> …so you pay low wages, you are going to get monkeys sometimes. That doesn't give you the ability to manage your business and move forward as a business.

It was also noted that it is difficult to train staff to understand the implications of their actions due to the extent of automation:

- Now they just press a button and it is done so when there is a problem they don't know where to look for the issue so it does bring with it its own set of challenges.
- In a perfect world, it would happen beautifully but, we might go through stages where, to be honest I haven't looked at a report for about two weeks, and it's probably built up to maybe 30 percent again, and sort of, it takes me to come along and say "what the heck's going on, you know, smarten yourselves up" and then they're sweet again for another month, two months.

4.4.3.1 Relationship between responses and hotel characteristics

The GMs that focused on external technology in their initial response to this question tended to be from smaller properties, more likely to be independent or part of a marketing alliance rather than a chain, targeting the budget and lower end corporate markets. Most of the airport properties were part of this group.

Those raising on-line booking as a part of ICT that impacted day to day running were mainly mid-sized and focused on the corporate market at the lower to mid range. They tended to be GMs of chain properties with properties in all locations being represented. The GMs who talked about GDS as a related issue were in properties with a very strong focus on corporate business.

Those who discussed reporting as part of ICT were, unsurprisingly, from larger properties and more likely to be chain properties.

The other areas of the definition of ICT did not seem to have clear links to the characteristics of either the hotel or the GM being interviewed.

While the all interviewees identified drawbacks with technology, only half discussed positive aspects. Those who saw positive benefits were from smaller properties and focused on the mid-market. The most obvious characteristic uniting this group were that these properties were part of a chain or, in a few cases, a marketing alliance.

The group that noted timeliness as a benefit had the same basic characteristics as the positive group overall. The GMs that raised simplicity and accuracy as a benefit were the smaller properties with a mix of leisure and corporate guests, with only one having significant tour business. For depth of information, the GMs were from the slightly larger and slightly more upmarket properties than the positive group as a whole.

Third party reliance was an issue for about half the group and divided into the two main issues as discussed above. The issues of availability of technology, particularly broadband speed, and the problems for the hotel's reputation were raised by a group of properties with a distinct U.S. link both in their guest base and by affiliation to chains or marketing alliances. Those GMs citing the other half of the issue around cost, inflexibility and management were at smaller properties and more likely to be independent.

The group of GMs who viewed ICT, in particular on-line booking sites, as a contributor or facilitator of price wars were mainly mid-sized in the mid-market, often having a corporate focus. All except one were part of a chain with all locations being represented.

System failure and its ramifications were raised as an issue by a third of the group. These respondents were from larger hotels, spread across all markets. All but one of the GMs was 40 or older and all of them had sufficient industry experience to have worked in non-computerised hotels.

The speed of change and pressure to keep up with new technology was a problem for a fifth of the group. These were GMs in large hotels focused on business in the middle to upper end of the market.

The issues associated with the training required to allow staff to be productive were raised by large properties in the mid-market, all less than five years old, the only case where age seemed a factor. Again these were all chain hotels.

The possibility of inappropriate use, both by staff, i.e. accessing inappropriate Internet content, and managers themselves, i.e. choice of mode of communication, was raised by GMs of mid-sized, mid-market chain properties.

4.4.3.2 Comparison to prior research

This section compares the findings described to those from the literature review in Chapter 2, Sections 0 and 0.

With respect to identification and adoption of technology, compared to the U.S. example of Namasivayam, Enz, and Siguaw (2000) the hotels in the sample were clearly very technology aware. The budget hotels had keenly adopted on-line booking and email as opposed to the U.S. sample. Some of the technologies discussed by Namasivayam *et al.*have since become less popular, such as fax, or private ownership in New Zealand is higher, i.e. cell phones. With regard to provision of in-room Internet, the issues raised in the article were also among the concerns of GMs in older properties with some of the budget and tour hotel GMs saying they would not consider cabled options due to cost and difficulty in running cable. Wireless options were mentioned as a possible work round solution in most cases. On-line booking and email for the business itself were seen as essential not optional by most of the interviewees in this study, which was not the case in the U.S. sample – given the earlier research is five years old this may also reflect the change in technology in that time. Namasivayan *et al.* did not consider PMS, seeming to assume it would be in place, but the sample in the present study viewed this as a key element in ICT's contribution to their business. The GMs in the present study did share the focus on productivity and efficiency as primary benefits of ICT along with the Namasivayan *et al.*sample.

With the importance of on-line booking and, in some cases, GDS, the GMs were working to manage the issues of revenue management raised by Choi and Kimes (2002). As noted, between 2004 and 2006 the hotels

had begun to gain better control over how they integrated on-line bookings into their yield management practices. However, the GMs were still addressing the consequences from the price competition in low yield and damaged reputations. While the technology does now exist to facilitate one to one marketing and yield management as discussed by Yelker and Dacosta (2001) and Sigala, Lockward and Jones (2001) the GMs interviewed had not yet started to implement these types of systems to any great extent.

Main (2001) and Buick (2003) examined properties on a much smaller scale than the hotels included in this study. However, the focus on on-line marketing noted by these authors was also evident in the smallest properties in the group, those under 100 rooms.

The smaller, flatter hierarchy in New Zealand hotels seems to have removed some of the barriers perceived by Law and Joganantam (2005). The depth of information generated by ICT to support strategic decision making was specifically raised as a benefit by GMs. GMs making these comments were among the oldest and most experienced in the group, including one who had initially been fearful of making mistakes and damaging the system. While several of these GMs felt they were "not computer people" and, quite reasonably, noted they were looking for business benefits rather than technology for its own sake, the attitude was neatly summarised by one GM:

> It is the future. Even someone my age, you can't say I don't need to know this or I don't need to learn that, it's wrong. You do or you need to have a reasonable grip on it.

The issue of staff training and the time and effort involved for staff to become productive were consistent with the comments made by the Hong Kong ICT managers (Law & Jogaratnam, 2005). While Brotherton and Turner (2001) were specifically interested in Yield Management, the comments made by interviewees in this study, indicate that the integration of technology and the ability of staff to manage technology needs to be addressed in many areas; for example, the problems created

by staff not understanding the business processes beyond the actions they take on the system. As discussed by Gray *et al.*(2000) this limits the benefits realised by a business.

4.4.4 Summary

In describing the role of ICT in day to day business, the GMs in the study considered both internal and external facing elements. A major degree of negativity existed about the impact of ICT despite an awareness of the benefits provided.

While the hotels in this study appeared more technologically advanced than some of their U.S. counterparts (Namasivayam et al., 2000) the GMs were still working on addressing the issues created by ICT (Brotherton & Turner, 2001; Gray et al., 2000; O'Connor, 2003).

The details of the variation in the perception of ICT as it relates to hotel characteristics and the means of addressing issues will be discussed further in Chapter 5.

4.5 The Impact of ICT on Service Delivery to Guests

When asked “How does ICT affect the delivery of service to guests?” the GMs gave both benefits and drawbacks with an overwhelming caveat regarding the importance of people in the process.

This section examines the benefits identified by the GMs, the problems caused and the importance of staff in the delivery of guest service. It provides the concepts raised by the GMs, compares these to the hotel characteristics then compares the responses with previous research.

4.5.1 Sunny side up – the benefits of ICT to guest service delivery

ICT provides the ability to respond quickly to guest needs. This ranges from on-line booking to processes within the hotels such as check in and check out:

- Click of a button, all filled in.
- Check out remotely for account customers.

This allows a rapid response:

> Amazing the information that is available in seconds

with fewer staff:

> Looking back it seemed to work but there were a lot more people involved, manual and it was slow.

The technology also allows guest needs to be met better:

> The more we didn't have to do at check-in, the more time we can actually spend talking to the guests.

It also allows hotels to offer differentiated services in a single area such as reception:

> Try to minimise the whole check in for regular guests. Leisure market want more interaction – it's an occasion it's a celebration, want to go through the whole experience the need is completely different. Using loyalty desk to express check in.

ICT also enhances traditional services such as concierge:

> I mean we have a concierge system so somebody says I want to find out where the Catholic Church is well we would go in and we bring up churches then it brings up all the information.

Email was mentioned specifically as being able to remove barriers to good service, such as the ability to interact with overseas facilitators in a conferencing environment, for example the desired room set up:

> Email helps with overseas facilitators, where secretary didn't know. "Can you confirm these details with your facilitators?"

This ability to communicate removes the potential for panic on the day, whereas a telephone call would be expensive and difficult due to time differences.

An area seen as benefiting guest service is one of the older pieces of technology, the ability to use data in the PMS to track guest history. Information from previous check-in data, billing information and stay

patterns builds a profile of guests. This profile can then be utilised to improve guest service as illustrated:

- Don't really have much in the way of passing the benefit to the guest apart from the old second stay, third stay tracking patterns.
- Guests perceive that it is them you recognise as opposed to the computer recognising them. It is how you deal with it, been around for years.

This adds to the ability to meet guest needs:

> Use the guest history quite heavily, have a loyalty card, Kiwi Club, which gives 10% discount on accommodation and F&B which we get a lot of return guests through. Different guests have different requirements know that everything is there for them.

For the corporate market this is perceived by the GMs to be essential:

- Corporate we're strong, we really understand the corporates, we understand the convention market. By that I mean, we've got mailing lists, we know how long you stayed, we know when you stayed, we know what you like and we use it, we know your room type.
- We use it all the time because we are a corporate hotel different if we were a leisure 'cause you never see them, but corporates you see them time and time again, you have to have it, a totally up to date history systems.

To make best use of guest history does require constant maintenance which will be discussed below but overall it was seen as a very powerful tool:

> ICT has improved it a lot with things like guest history. Easier for good people to deliver good service.

4.5.2 Talking to the computer - the drawbacks

An issue identified as a drawback in day to day operation was articulated again in the guise of ICT being a barrier to the delivery of good service; this was the lack of true OECD level broadband in New Zealand as explained by these interviewees:

- Major complaint is it takes too long to dial up.
- Americans [are] a very big part of the market and the technology they are used to - we are so archaic in comparison.
- What are the international expectations of travellers and can we meet those expectations. Sometimes it's up to the hotel to invest money to keep up but if we can't offer it, we can't offer it.

As these GMs pointed out, internet speed is an issue beyond their control but it still reflects on the hotel and causes the guests to feel their service expectations have not been met.

Similarly with the provision of technology like in-room internet or kiosk based tnternet there is a need to support the guests' use of technology:

- Issues with guests not knowing how their computer works. It is changing, [however] not all the guests will change with it, [the] old school don't value anything to do with electronics.
- We're supposed to be the experts. Good thing about the [wireless] hotspot is it has its own help desk, can just ring and talk the customer through the problem.

Support of the guest's use of technology can also be used as an opportunity to deliver outstanding service:

> Every now and again you get people that don't have an email, they don't have an address, they don't have anything and then you spend a wee bit of time with them. Setting them up an email name, 'cause they want emails to come to us, and "no no you've got to have your own thing". "How do we get that" oh right."

Uncertainty surrounding on-line transactions was mentioned as an issue:

> Don't trust the on-line direct stuff. They are very tentative approaching the check in counter.

Similarly, the reliability of technology within the hotel meant it could be as much of a hindrance as a help:

> Mini bar fillers have the ability to post directly to guest account from the room utilising the telephone or using TV. Unfortunately not always reliable, not saying losing charges but you weigh it up and say ok [what] is the cost factor [of] doing it manually versus doing it through the technology. Manual dockets are useful in resolving queries at check out.

A major issue noted was the requirement for staff to interact with a computer which could distract them from interacting with guests:

- Like at the doctors where they tap tap tap away - that's what I don't want for the guests.
- More so now when got the additional barrier of a computer system.

This was especially an issue for new staff being trained on the system:

- In the old days there was no ability to go face down with the computer system. With new people on the front desk the biggest challenge is to make sure learning the system doesn't take over from looking after the guests. Challenge in every hotel.
- Staff training is an issue, inexperienced just learning. The way I would check someone in would be different from someone just learning because I know what I can get away with a little bit.

However, GMs felt that this could be an on-going problem:

- But like I said, I think that's more, definitely, a training thing, yeah and a personal thing, you know, they obviously, should be looking someone in the eye when they speak to the person, making that eye contact first up, you've got to do that, you know and then, yes they've got to look at the screen as well to continue.
- I mean, if they're going to use that computer and they're just going to sit there in front of it and they're going to look at it and not give people the eye contact, it's certainly not what we, we certainly try and preach and try and train to our people.

A related training issue was getting staff to select an appropriate technology to accomplish a task, illustrated in the following quotes:

- Get on the phone - we have to know today. [I] don't find email efficient, [you] don't get replies. [We are] working to the clock, have lead times, guests just don't realise this.
- Have to realise some people aren't on email and they have to pick up the phone or get out of their chair and find the person they need to relay the message to.
- Have to be very careful could become a robot but it is still the hospitality industry.

The last area of concern for GMs in the area of staff training and computer interaction was the need for accuracy in entering data:

- We don't use the same profile all the time we'll suddenly end up with 20 different profiles in the history and, of course, you've had to fill in your details 20 different times to be able to get that so, you know, it's a matter of staff training, making sure they actually know. It’s imperative, you know especially for a corporate hotel, people get very distressed if they have to keep filling in their own details all the time, we make them present their credit cards again, that’s our policy we must sight the credit card they are going to use but that’s the only thing they should have to hand over.
- Got to make sure information is loaded into the computer correctly i.e. where there is lost property and the booking is loaded

> incorrectly might not be able to find it. Professionalism of that booking being loaded.

There is a conflict between the need to be accurate with data entered and the need to interact with guests. This is particularly acute for new staff when they are both learning the computer system and their role in delivering service to the guest. Again, there is the problem of staff not understanding the implications of their actions; not searching for a customer profile may save time now but will cause an unhappy customer at some point in the future when the customer is asked to complete their details again or a service the guest requires is not provided.

Staff members are also commonly asked to move beyond their area of expertise, customer care, into the support of technology. Even if this is done well, it can be time consuming and may mean other guests' needs are not met.

4.5.3 Caveat – importance of staff

In every discussion regarding ICT in the delivery of guest service, there was a consistent comment that "it all came down to the people", the following interviewee provides a representative example:

> Supposedly it gives them better service. Supposedly, I say that, but nothing ever takes away from the personal contact. As a boutique hotel [we] have a philosophy that names are more important than numbers, personal contact is still very important.

The possibility of losing contact with guests to some extent was viewed with concern:

> Definitely the danger, from a hotelier's perspective that's what differentiates one hotel from another is the ability to go back to basics of looking after people and keep our staff from processing people. It's an ongoing challenge as I'm sure it was in the old days.

The ability of technology to truly replace staff is beyond the present state of the art in ICT:

- I mean, the technology can have it all written there in front of them, doesn't mean they're going to say it, doesn't mean they're going to do that, unfortunately, that's where it boils back to the person and the training, I guess.
- While you can have a great system, long term staff are far, make such a difference, I don't care what anyone says, I mean you go up to the front desk and they recognise you, you feel great, and that for us is a lot stronger than having a fabulous computer system that you go "Oh Mr Jones this is your third stay".

The delivery of service was considered to be reliant on the people:

- Soft skills versus hard tech skills. Balance [is the] ideal between the two.
- I have the most amazing team of staff, I really do, they've all been here two years, two and a half years, they all know what they are doing, they're young they've got heaps of energy, you know, they're absolutely fantastic, so the mistakes we have here are pretty small.
- I mean it helps, of course, if they've had, that they are computer literate before they come in. It's mainly, I'm still looking for very people person, that's what I need, the rest can be trained in.

4.5.3.1 Relationship between responses and hotel characteristics

In contrast with the impact on day to day operations, almost all the interviewees described ICT as having a positive effect on guest service delivery although they also all gave drawbacks.

The airport hotels were strongly represented in those noting speed of response as a benefit. This group's business was largely comprised of the budget to mid-market and the hotels were slightly older properties.

The respondents seeing additional ability to meet guest needs as a specific benefit were from mid to upper end properties, mostly newer hotels.

Those seeing benefits from guest history were from larger properties in the mid-market. The newer properties had a strong presence in the group suggesting possibly the older properties take the benefits for granted. This group was comprised of chain and marketing alliance properties.

Those concerned about the barriers raised by the lack of international standard broadband were from airport properties and those hotels with strong U.S. and European links. These links were both the guests they serviced and hotel groups they belonged to.

The other general issues around support, reliability and guest uncertainty were not directly linked to any characteristics of the hotel.

Issues around training and the risk of computer focus were greatest for the mid-sized mid-market properties. These were largely chain properties.

For all the interviewees, people were perceived as pivotal to delivering good customer service with ICT having, at best, a support role.

4.5.3.2 Comparison to prior research

The benefits noted by the interviewees closely match those noted in the literature as far as speed of response and ability to meet guest requirements (Luck & Lancaster, 2003; Piccoli *et al.*, 2001; Sigala *et al.*, 2001) The role of guest history described matched the practical examples given by authors such as Marsan (2000) and Oliva (2002). The broader uses of CRM in marketing (Piccoli *et al.*, 2001) and integration with functions such as revenue management (Noone *et al.*, 2003) were not raised by interviewees.

The literature is not as clear on the drawbacks of ICT but supports the interviewees' opinion regarding the continuing importance of staff in service delivery (Baum & Odger, 2001, Keating & Harrington, 2003, Maxwell *et al.*, 2004).

All interviewees appeared to be in agreement with Gronroos (2001) on the position of ICT in service delivery – a support role to allow good people to deliver good service.

4.5.4 Summary

In the perception of the hotel GMs in this study, ICT brought both benefits and drawbacks with the majority holding the view that staff held primacy in service delivery. While agreeing with the benefits described in the literature, the GMs showed a willingness to identify problems which appears to be absent from the literature. The implications of this will be discussed further in Chapter 5.

4.6 Future

As a final question, GMs were asked what trends they saw emerging in the future, first in ICT, then for the hotel industry as a whole.

This section presents the GMs predictions, first around ICT then regarding the hotel business in Auckland. These predictions will then be compared to the characteristics of the hotels and finally, comparisons to the literature will be made.

4.6.1 ICT into the future

In trying to predict the future in ICT many GMs voiced concerns that this is difficult to predict for even a five year period. Partly this was due to their views of themselves:

- I'm not as computer focused as a younger person.
- It's hard, I'm no good at picking what's going to happen down the track, it's very hard trying to set your budgets for the next year, you know, it's just things change.

The other aspect was simply the pace of change which they envisaged continuing into the future:

- Development is so fast.
- Keeping up with technology, always changing for example the Yield Management/Revenue Management systems have evolved over time and continue to develop.

Further issues with this rapid pace of change were the reliability and security issue it raised both for the guests:

> Why should they trust it, when they see ATMs getting knocked over? There are some very loose, easily crackable systems. Their

response to the headlines about hackers and crackers "no I'm not giving my credit card number to anyone."

… and for the hotels themselves:

> I mean people have tried to convince me that I should have my bookings and that, being able to tie in with the Internet. But I don't know enough about it, and I get far too nervous when I read on, see the TVs, these big viruses that have infiltrated these huge companies. And I said "no way" how could anybody guarantee me that a virus couldn't in and crash my system and so my, I have a stand alone Internet thing and then I have my computer which runs my front office which runs every thing. And there's just no way I'll connect them because I, I'm just far too nervous about it, and people think well you're nuts but I think "No until I see". You know these people just sit there, it seems to me, making a bigger and better bug to infiltrate, you know, with that mentality around I just couldn't risk it.

The trend GMs were most aware of was the continuing growth in Internet use, as evidenced by the following quotes:

- Internet, faster connections will make it easier especially for overseas guests.
- Full Internet access to room Email communications take over the telephone.
- Wireless hot spots are expected, plus an expectation of broadband to the rooms.
- Broadband, which has just been incredibly popular, and that's a service that we have to provide.

Similarly, the ability to access technology on demand was identified as a possible trend:

- We have to keep up as a hotel simply because the new hotels are going to be built with it, fully integrated systems in the room, all digital and integrated, all sort of linked together.
- To be able to use technology wherever they want to - realistically.

For many properties, the ability to keep abreast of technology posed some problems:

- The building is one of the originals from when the airport was built so wireless is the best way to go due to the cost and difficulty of putting in wired connections.
- Difficult scenario to incorporate technology into, we've wired it ourselves right the way through the hotel and wireless in the first two levels.

- I've never worked with wireless but I've certainly known managers that have and they, I don't think the technology is there yet to do it.

There was also a clear identification that technology had to be appropriate to the requirements of the market being served:

- Designing the product to the need, purpose of product.
- For instance for this property, broadband in every room is not practical – combination of age of the building and clientele. Cost is not worth it for the revenue it brings in. Make sure whatever market is coming into your hotel is the market you are providing these items for

Automated service delivery was identified as having significant potential for further development in the future:

- Three to four staff in whole hotel, outsourced housekeeping, [the hotel] uses technology instead [of staff to deliver services].
- Like I just had a meeting today with the in-house movies guy, you know and that's now all on server there's no tapes or DVDs or anything like that, it's all controlled through the Internet, downloaded, you know, and up it goes into their rooms.
- Interactive, plasma screens in bar/restaurant, branding of their own but advertising others, adventure, local attractions. Going into all the rooms as well.

These types of automation were discerned as having efficiency benefits to hotels:

- Accurate track of restaurant, what's selling, what's not. Trends within the business, save money don't need to roster people. Allow more fine tuning.
- Redex - software for travel agents to book. No phone calls.

One of the GMs had tried an automated check-in in early 2000 but had removed it as the guest did not use it:

> Might be time to have another look at it.

With all the potential applications for technology the continuing need for human interaction was raised:

- Computer is just one little part of it [doing the job]. Very important to understand why they do things instead of just you click.
- Communication again, we get it in the neck if the travel agent has booked it for the wrong day.

- They don't know what room configuration they want; they don't talk the way we talk. It's only by talking to that person do you find out their requirements, how many adults, how many children, how old the children are, do they need an interconnecting room.

There was also the risk of human error being exacerbated by ICT, for example a computerised yield management system:

> Comes with a danger itself, lack of control. System has to be good but have to make sure you are managing yield that you aren't opening up things that you shouldn't. The technology is great but if you make a mistake…I heard of a hotel that opened bookings [in their YM system] during the Lions tour at the wrong rate. They only had it open an hour but they were nearly booked out [due to the incorrect pricing appearing on their website]

It was also noted that, while ICT may allow improvements to business efficiency and effectiveness, it may not necessarily reduce staffing requirements:

> Used to be able to run reservations in a hotel this size 10 years ago with one to one and a half people, now takes four! Need people to interpret the output from the system and make decisions.

4.6.2 Business into the future

When GMs attempted to predict the general business issues facing them over the next five years, these were seen as a continuation of their current major issues – staffing and competition.

Staffing was considered a major issue for the future as the following quotes demonstrate:

- 20,000 immigrants to staff hotels can't find people need locally.
- The change in the work style and expectations of the people coming into the industry need to be designed in.
- Using people appropriately, staff development
- The level of formality of the industry, requirement to wear uniforms, work under pressure, have to balance that and attract people to the industry
- Expectation of Gen Y[9] is fairly impatient, career development, "Where are you going to take me" having development plans in place is key.

[9] Gen Y: Gen Y is broadly defined as those born 1978 – 2000. The term is used in this context to describe the young people entering the workforce at present.

Some thought this was part of a broader systemic problem that extended beyond hospitality:

> The challenge is the up-down reactionary behaviour, i.e. the building industry where they will hire apprentices and train them well in the good times, then there is a downturn and they are let go so oops next upturn there isn't anyone. Same with accommodation too, where, because it takes at least three years from concept to actually getting something on the ground and working we've got this boom or bust type attitude; instead of a steady flow of things coming onto the market.

GMs identified a need to address poor wage levels paid by hospitality:

- The dollar value is getting pushed up – nothing wrong with that. Miles behind the rest of the world in that regard but we have to be able to afford it.
- Communally have to move rates to point can sustain bigger salaries. Government will legislate if don't do something. Minimum wage still entry level at minimum wage. End up with housekeepers doing two jobs because they need to survive, they need to feed their family. We'd like to move it.
- Only way to retain staff is to pay better, can do as an individual hotel. Every staff member gets an annual review no-one ever got less than a five percent pay increase.

There was also an apparent need to address training to improve the image of the industry and retain staff:

- In New Zealand education is run like a business selling courses to just anyone. Have all sorts of people coming through the industry who never belonged in the industry in the first place. Personality, personal situation, i.e. can't work shifts. Not enough filtering out of people and not enough value put on education, industry education.
- Let's find the ones that have the presence, the personality, the desire to want to do something." Bring them in, train them, buddy them up.

The ability to maintain inbound tourism numbers in the future was also an area of concern:

> Getting tourism up. Government has to do a good sell of New Zealand.

Budgets allocated by organisations such as Tourism New Zealand, the government body that promotes New Zealand overseas, were also a concern:

> "The 100% Pure campaign is great but they don't spend enough on it, budget of $69 million just increased from $50 million. Fifty million New Zealand dollars won't take you anywhere in the United States in regards to that."

The current level of expenditure, even with the increased budget, is not significant in the multi-billon dollar advertising market of the U.S. There were concerns that the need to stretch a limited budget meant that there were bursts of advertising rather than sustained promotion.

Associated with this was the concern with getting guests to their own hotel – "Where do we get our clients from?" particularly with the changes to distribution channels:

> New phenomena of "corporate travel company" selling ability to manage airline and accommodation. Sixty percent of corporate business is now managed by those companies; they pick the hotels where seven to ten years ago they didn't exist.

The continuing increase in the number of properties, with three new hotels opening in the CBD during 2006 and another under construction and the ability to maintain Return on Investment (ROI) in order to sustain maintenance of assets were also of concern:

- Competition - another hotel is being built at the airport. The age of the buildings, trying to keep them upgraded. A lot of people don't appeal to the older buildings. Trying to modernise is going to be hard yakker[10].
- The glut of accommodation - property investors are saying to build in Wellington where hotel supply is lower. Property maintenance if return on investment falls.

From this came concerns about the continuation of the price wars:

- As soon as it gets quiet the big rig guys like next door just bring their prices right back down like to $99 and they just slash and slash and that's a real worry when everyone starts slashing their prices, just not good for any of us. But, I mean, you get the ruthless ones.
- Price wars between hotels, how to work that side of things.

[10] Hard yakker: Australian and New Zealand slang for hard or difficult work, derives from an Australian Aboriginal word for work.

Technology came back into the frame with its ability to facilitate and exacerbate the problem:

> I think distressed inventory is definitely a problem, short lead bookings, opening up markets to countries that are not high yielding markets e.g. India, you know, Emirates bringing people in, a lot of these markets are not high, Asian markets is one of the lowest yielding markets around but people accept it 'cause it's top up business.

Some GMs felt there was a clear need to manage on-line pricing as well as overall yield into the future:

> Make sure technology gives parity of rates to avoid playing rate games. We can't be played but also offer a service people can trust.

4.6.2.1 Relationship between responses and hotel characteristics

Those GMs focused on internet technology as a future issue were from mid-market properties, often corporate focused, and more likely to be part of a chain. Those expressing concerns at their ability to implement this, particularly wired broadband, were in two groups. First were the older properties where physically getting cables in would be problematic, the second group were among the newest properties but were strata title properties; they confronted difficulties getting agreement from individual owners to make the necessary upgrades. Wireless technology and attitudes towards it had changed over the past 18 months. GMs in the pilot study were unsure about wireless whereas the main interview cohort were more accepting, in part due to a more mature technology but also due to the support model being used by major suppliers having improved.

GMs from the larger chain properties perceived the speed of change in ICT increasing but it was those in small independent properties who expressed concerns regarding the implication, particularly around security aspects.

The GMs considering automation to add value and increase efficiency were in the larger properties in the mid to upper end of the market.

Interestingly, it was the older and newer properties where automation was most under consideration. These were GMs from chain properties dominated by the CBD hotels.

Those seeing a strong need for continuing human interaction were from the smaller, lower end properties. The chain properties in this group were more concerned with the need for humans to moderate and manage systems such as Computerised Yield Management.

Staffing was raised as an issue for the future by half the interviewees; by comparison only one third noted staffing as a current major issue. These properties were strongly mid-market with staffing being particularly important to the newer properties. The staff issue was raised by GMs from hotels of all sizes, locations and affiliations.

The continuation of competition was raised by two-thirds of the interviewees. These were GMs at small and mid-sized properties in the budget and mid-market. It was a major issue for the older properties and was raised by all airport property GMs, as new development is anticipated in the airport precinct. The potential contribution of on-line booking and the need to continue to improve management of this element were raised by managers from chain properties in the mid-market.

4.6.2.2 Comparison to prior research

While the Delphi group in Singh and Kasavana (2005) looked solely at ICT (whereas this study also examined broader business issues), the result in this study broadly agreed with the overview of ICT, with the focus in the immediate future on broadband. The issue of “commoditisation”, where hotels rooms compete solely on price rather than being differentiated by quality, amenities or experiences, and the role of on-line booking services in promoting this trend were raised by both groups.

Even with the more specific ICT focus, the Delphi panel still anticipated a strong continuation of human interaction and the need for skilled staff.

Singh and Kavasana (2005) described this as a symptom of a traditionalist view of hospitality. The managers in this study shared this view to some extent but many considered automated service delivery as a potential market segmentation variable.

4.6.3 Summary

In envisioning the future, the GMs identified a continuation of the staffing and competition issues they currently face. ICT was seen as having a role in addressing these issues as well as having the potential to offer novel ways of segmenting the market and addressing guest needs.

The interaction of ICT with future business developments will be discussed further in Chapter 5.

Chapter 5 Conclusions

This chapter presents a discussion of how the various elements from the findings interact with each other, then provides the limitations of the study and, finally, identifies potential for further research.

5.1 The Initial Areas of Exploration

This section presents the findings as they relate to each of the original areas of examination.

1: The business context of ICT

ICT is not a major challenge, as none of the GMs mentioned it in reply to the question regarding major issues confronted by their business. The major challenges are the external, macroeconomic factors. The major issue identified was competition and pricing which formed 51% of the responses in this area. Staffing was the other major issue. ICT does, however, interact with these issues and, in some cases, amplifies the problems.

The time taken to train staff to a productive level interacts with the problem of staff turnover. When it is difficult to keep staff there is a temptation to train to a minimum level resulting in staff that do as they are told without understanding the reasons for their actions. This means the business may not receive best value from either the people or the systems they work with. Similarly, the length of time taken to master the system could lead to frustration and disillusionment, reinforcing turnover problems, with staff feeling they are being poorly paid to do something they do not understand.

Price wars were seen as being broader than on-line discounting but the ability to dump inventory through this mechanism was seen as adding to the problem, functioning as a ratchet mechanism driving prices downwards. There is a need to integrate all distribution channels more explicitly into the yield management models being used. At the time the

main interviews were conducted, there was a discernable movement in this direction but the extent to which the hotel business had been blind-sided by the additional channels and had mismanaged their initial implementation was concerning, as was the lack of long term strategy shown by the price wars.

2: The main role of ICT

The perceived main role of ICT is dependent on the size and affiliation of the hotel. The GMs of larger properties identified internal ICT such as reporting as the main role whereas those at smaller properties were more concerned with externally facing ICT such as websites. A possible explanation is the complexity of a large operation, with the GMs primary interaction with technology being reporting and other internal systems. Similarly, chain properties have more reporting, in terms of group requirements, which again determines the GMs focus. Those in smaller properties were more likely to be preoccupied with survival and the external environment. The levels of delegation possible within the executive team in larger hotels could also determine how the GMs view technology.

The dominance of chain properties among those who were positive about technology raises a number of interesting possibilities. These properties have large IT departments available, as well as the ability to purchase better support from software suppliers. They are better supported and more able to access resources to allow them to address any problems that do arise. It would be interesting to know whether the fact they spend less time fighting their technology merely improves their perception of the benefits they receive or whether they receive more benefits in some measurable way.

Conversely, smaller independent properties are not able to access these fixed cost type contracts for support, meaning they are subject to uncontrollable costs. This is beginning to change with software suppliers such as In One Solutions (an on-line booking provider) making fixed cost

support, available 24 hours, seven days a week, a key element of their offering at a price level that is accessible to smaller hotels.

3: The impact of ICT on service delivery to hotel guests

The findings show a potential conflict between ICT and service delivery with an acknowledged danger that staff become focused on the computers rather than on guests.

Delivery of service to guests casts the dual nature of hotel systems into stark relief. A single system is required to collect management data as well as support service delivery and these two roles can very easily come into conflict. The most obvious example is the sheer volume of information requested from guests in the booking and check-in processes, which means that all but the most experienced staff members are likely to have to attend to the computer rather than the guest during the interaction. Similarly, the training required means that, during the training process, guest service will always be compromised to some extent.

For chain properties, with their greater need for information to allow delivery of their brand promise across properties, there are extra levels of complexity. This need forms a nexus with the training problems meaning that they are more likely to experience problems with staff interacting with the computer rather than guests. The need for consistency can become a barrier to service delivery rather than a guarantee of quality.

The level of staff training and the capacity of staff to manage technology is part of the problem (Lam *et al.*, 2007), especially as hotels tend to be paying low wages; however, the conflict between ICT and service delivery goes beyond this. The GMs in this study had reservations about the level of complexity that ICT allows to be created, for example one hotel had over 70 different room rates available in their PMS. The combination of this level of complexity with the time pressure to process reservations creates a large potential for error. The GMs identified situations where

staff would have to make choices between service delivery and data entry and ICT use, noting there were shortcuts that could be taken, although these were risky as the shortcuts increased the probability of incorrect data being entered into the system. Without ICT this level of complexity and the expectation of short lead times to handle reservation requests would not be possible

While GMs from newer properties appear to take ICT for granted, they were also trying to use service delivery at a human level to establish themselves in the market. This requires very active management of ICT to support service delivery rather than an unconscious acceptance of the technology.

4: The Role of ICT in the future

Electronic booking is only one small aspect of the ICT issues the GMs perceive as being important for the future. The role of electronic booking concerned the GMs primarily as it affects the broader business problems with yield management and pricing. The GMs are focused on how to manage competition and work the price wars to their advantage. The management of multiple distribution channels and the ways to use them to allow effective revenue management is the major concern rather than electronic booking in isolation. This accords studies undertaken in the U.S. (Enz, 2003; O'Connor, 2003; O'Connor & Frew, 2002) although with New Zealand being a little later to adopt the technology the GMs are still at a less sophisticated stage with managing the technology but hoping to avoid the problems encountered particularly in the Australian market.

The provision of technology to the guests once they were at the hotel and service automation and the extent to which it should be pursued were also issues of concern. In their view of the future and ICT's place within it, there is a group of GMs who take a traditionalist view of what hospitality is, in that they see an unchanging primacy of human interaction. There are also GMs, mostly in the chain properties which have already started to explore automated hotels, who feel that hospitality is broader than a

traditional definition and the technology-interaction continuum is simply one more way to segment a market.

5.2 Beyond the Initial Areas

This section discusses other findings beyond the scope of the initial areas of exploration, particularly the social and organisational dimensions and ICT's interaction with these areas.

Beyond the original areas there were a number of themes around social interaction worthy of additional comments such as the role of the GM and the integration of ICT into hotels' operating environment and social structures.

The GMs who identified the most benefits in ICT and seemed to have the best understanding of how to use it strategically were not the youngest. In fact, all of them seemed to go against the general perception that older people do not adopt technology, but they were very selective about the technology they did adopt being techno-realists rather than technophiles. They were also GMs who had entered the industry through Food & Beverage or reception positions and had been through traditional apprenticeship type training so had a very broad view of their business overall, not limited to what the ICT could tell them. This raises concerns about the speed with which new GMs are being promoted and the limitations this imposes on their exposure to the breadth of the hotel business.

There are many places where technology appears not to fit well in the hotel business; for example, training demands of ICT are not compatible with the requirements of a business with high staff turnover. The problems are not simply training issues (in fact, the technology causes training problems), but a basic incompatibility between the way the systems are designed and implemented and the needs they have to meet. At some point there needs to be a clarification between the

management data collection and service delivery requirements and a reconsideration of how to implement one or both of these functions.

While technology has provided many benefits for hotels, it also is a barrier to staff doing what is required and encourages the guests to behave in ways that work against the hotel's best interest.

Drawing on Orlikowski's (1992) model, the interaction between technology in the form of ICT, the human agents and the institutional properties such as organisational culture, norms and processes can be clearly seen in the hotels under study as will be described in the following paragraphs.

The ability of technology to both facilitate and constrain the performance of work required is clearly seen in both day to day operations and the delivery of guest services. ICT is seen by GMs as having both positive and negative effects. This is in contrast with the focus on positive effects evident in the literature. The literature has a desire to view negative features as requiring changes in the human agents, in this case the staff, such as extra training. The GMs felt the problem went beyond what training could rectify and agreed with the view that some of the problem is inherent in the nature of technology itself.

ICT is clearly part of both defining the institutional properties and of reinforcing them. However, all the GMs noted that it was possible for staff to choose to act in ways that circumvented the requirements of the ICT and, as such, move away from the norms of the hotel even though this was not encouraged or sanctioned.

ICT interacts with and is, in part, the product of the particular social, economic and organisational history that produced it. In hotels, this includes a reflection of the history and expectations of service delivery. However, these are not always fully integrated with the ICT due to constraints such as software design, budgetary limitations on support and

the current stage of the art in ICT. To some extent, ICT has simply become part of the way things are done and is passively and unreflectively used, and the constraints it imposes are accepted rather than questioned.

The tension between the constraints of ICT, the need to modify ICT-human interaction to improve service delivery, placed within the context of a highly competitive market place and a tight labour market will pose major challenges to the hotel business moving into the future.

5.3 Business Implications

While the GMs seem well aware of the problems that ICT can present, there appears to be a lack of conscious awareness of one of the underlying causes, the conflict between the two roles (data collection and service delivery) required of ICT within the hotel. While this conflict may be difficult to remove, it is possible to minimise the impact through active management. Such management may include decisions about which aspect to emphasise in interactions with guests, for example how much demographic information about the guest should be collected at check-in.

Suppliers who want to work with hotels, such as wireless internet providers, need to think carefully about their support model. For hotels, considerations in the provision of technology to guests include how this affects their core business and ensuring that support from the supplier allow each to focus on their core competencies. Similarly, systems to manage the impact on the hotel's own reputation of third party services that are exposed to the guests would be beneficial.

ICT can be used to allow guests to undertake some of the collection of management data on the hotel's behalf, for example, making their own bookings or using an automated check out process. However, care should be taken that this provides benefits to guests as well as to hotels. Equally, these benefits need to move beyond pricing elements, such as a discount for booking online, so as not to aggravate price competition. This

can be as simple as stressing the ability to undertake transactions at a time that suits guests rather than hotels. Benefits might also include the availability of customer service personnel should they be required or maintaining a face to face option for customers who prefer to transact business in person (Walker *et al.*, 2002).

Possibly an examination of training methods used to minimise the impact of staff training on guest service delivery would be beneficial. Additional use of simulation and role play training may be helpful in this respect. At the point where new staff begin interacting with guests, mentoring and supervision are critical. While initial training provides the basic skills, continuing guidance and feedback are required to develop an employee's skills to their full potential (Krazmien & Berger, 1997). A mentor also provides social support in the form of encouragement and confirmation as well as being a possible role model of desired behaviours (Lankau & Chung, 1998). For these reasons mentoring and coaching are important in continuing staff training.

Empowering staff by enabling a broader understanding of the system beyond the minimum required to function could also provide many benefits to the hotel. Firstly, it would help mitigate the "just push the button" syndrome as staff would understand the consequences of their actions for other departments. This would also provide more meaningful jobs with improved autonomy for employees, the ability to extend themselves and understand how their role fits into the broader operation of the hotel. This would assist in reducing staff turnover by increasing organisational commitment (Hogan, 1992; Kazlauskaite *et al.*, 2006; Zhang & Wu, 2004).

5.4 Limitation of Research

This study examined a small group of hotels in a single location. New Zealand has a high rate of technology adoption (Statistics New Zealand, 2001b) and an awareness among at least some of the hotel GMs of the strategic uses to which ICT can be put, in contrast to some other

locations (Law & Jogaratnam, 2005). While the issue of staff availability and turnover appears to be global, the GMs in this study place much more emphasis on the role of staff in service delivery than is evidenced in the literature. The New Zealand GMs also view ICT, particularly self-service technologies, as a way to segment the market rather than changing the definition of hospitality. These types of cultural differences mean that the results, although clear, need to be replicated in other locations before findings are generalised beyond this immediate setting.

The study also relates to a particular point in time, whereas ICT moves very rapidly. Technology is constantly changing meaning the specific technology in use will change and alter the context around it.

5.5 Further Research Required

In relation to the concepts and constructs described in Chapter 4, it would be useful to conduct a questionnaire based survey of all New Zealand hotels to allow generalisation beyond the Auckland Region and be a cost and time effective way to gather data from a larger group of sites. It would also give quantifiable measurements of the possible trends identified in this study. This later survey could then be replicated overseas for further generalisation.

Further studies with guests and staff to obtain their views on the implementation of ICT would also be useful to understand the perspectives of all the participants in the process. Similarly, a clearer understanding of the end to end service expectations (from booking to post-check out) of guests and how best to manage those expectations would be a valuable further research area to enhance the understanding of the social context in which ICT operates.

The finding that GMs of larger, chain properties are more likely to be positive about ICT raises an interesting question. Do they simply feel more positive about the benefits they are receiving or are these

properties actually realising more benefits from ICT? Addressing this question would extend the findings of this study in a useful way.

Another possibility is that the GMs of large hotels encounter fewer problems with ICT due to the delegation that is possible in larger organisations. For example, larger hotels have ICT specialists on staff so the GM does not necessarily work directly with the software supplier if there is a problem, whereas a GM in a smaller hotel might. It would be useful to examine the differences between GMs in larger and smaller properties in terms of how they spent their time and who they were required to interact with to measure the contribution of role difference to perceptions about ICT.

Similarly it would be interesting to examine the role of ICT complexity in staff turnover and whether this could be mitigated by changes in training.

5.6 Conclusion

While the findings of this study demonstrate that GMs are aware of the benefits ICT provides their business, they have misgivings about the use of ICT in guest service. The demands ICT use makes on staff can create barriers to service but the GMs appear to be unaware of the contribution of dual roles of ICT, (collection of management data and provision of guest service), as an underlying cause. Similarly, the role of organisational policies and procedures and the way these interact with the use of ICT, add to the problems without being part of the GMs consciousness.

Training new staff was a point of particular concern, where learning the system could take precedence over guest service. This could be addressed by extended use of simulation and role play training along with active mentoring of new staff once they are on the front line.

While the technology itself can provide some solutions to the problems caused by the dual role of ICT, (for example by allowing guests to do

some of the data collection for hotels by making their own booking on-line), care must be taken to ensure systems are appropriately designed to allow the separation of the tasks.

To address the barriers to service arising from the dual role of ICT in hotels, a decision has to be made as to which role has priority in any given interaction. Active management rather than reflexive use is required for ICT to support, rather than prevent, dedicated staff from providing excellent service

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Appendix 1

Dear Hotel Manager

Auckland Accommodation Providers and Technology

As part of a regional study, researchers from Auckland University of Technology are examining the impact of Information and Communication Technology (ICT) on businesses in the accommodation sector. Over the next few months our research team will be conducting interviews with a number of Auckland hotels.

We are interested in understanding how demand for labour and skills requirements are evolving given the ICT changes currently occurring in the accommodation sector. We will not be using a questionnaire - rather we hope to conduct a semi-structured interview that will take approximately 1 hour. We must stress that only the research team and myself will have access to the interview information - it will be treated in a strictly confidential manner. Should you wish to withdraw your information from the study at any point this can be done with no disadvantage to yourself.

Information from the research will be presented in a number of academic articles and reports which will be available to you and the wider community although individual businesses will not be identified. The data collected will also be used in preparation of a Master of Philosophy thesis again without identification of individuals.

If you wish to withdraw from the study at any time prior to completion of data collection (expected to be late September 2006), this can be done simply by requesting it.

We have contacted a number of hotels to date and the response has been positive. If it is possible, we would like to arrange interviews with yourself and/or the Human Resource Manager from your company in the near future. Ann Cameron of the research team will be contacting you shortly to provide you with more details about the study and to arrange a meeting. Should you require further information, please feel free to contact Elizabeth Roberts by email: elizabeth.roberts@aut.ac.nz
We look forward to meeting you in the near future.

Yours sincerely

Elizabeth Roberts
Associate Head of School
School of Hotel and Restaurant Studies

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor. Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz ,917 9999 ext 8044.

Approved by the Auckland University of Technology Ethics Committee on 14/06/2004 AUTEC Reference number 04/119

Consent to Participation in Research

Title of Project: **Auckland Accommodation Providers and Technology**

Project Supervisor: **Elizabeth Roberts**

- I have read and understood the information provided about this research project
- I have had an opportunity to ask questions and to have them answered.
- I understand that the interview will be audio-taped and transcribed.
- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- If I withdraw, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.
- I agree to take part in this research.

Participant signature: .....……..

Participant name: …….

Date:

Approved by the Auckland University of Technology Ethics Committee on 14/6/2004 **AUTEC Reference number** 04/119

Appendix 2

AUCKLAND UNIVERSITY OF TECHNOLOGY
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

MEMORANDUM

Academic Services

To:	Elizabeth Roberts
From:	**Madeline Banda**
Date:	24 January 2005
Subject:	04/119 The impact of IT in the workplace: An analysis of large accommodation providers in the Auckland Region

Dear Elizabeth

Your application was approved for a period of two years until 15 February 2007.

You are required to submit the following to AUTEC:

- A brief annual progress report indicating compliance with the ethical approval given.
- A brief statement on the status of the project at the end of the period of approval or on completion of the project, whichever comes sooner.
- A request for renewal of approval if the project has not been completed by the end of the period of approval.

Please note that the Committee grants ethical approval only. If management approval from an institution/organisation is required, it is your responsibility to obtain this.

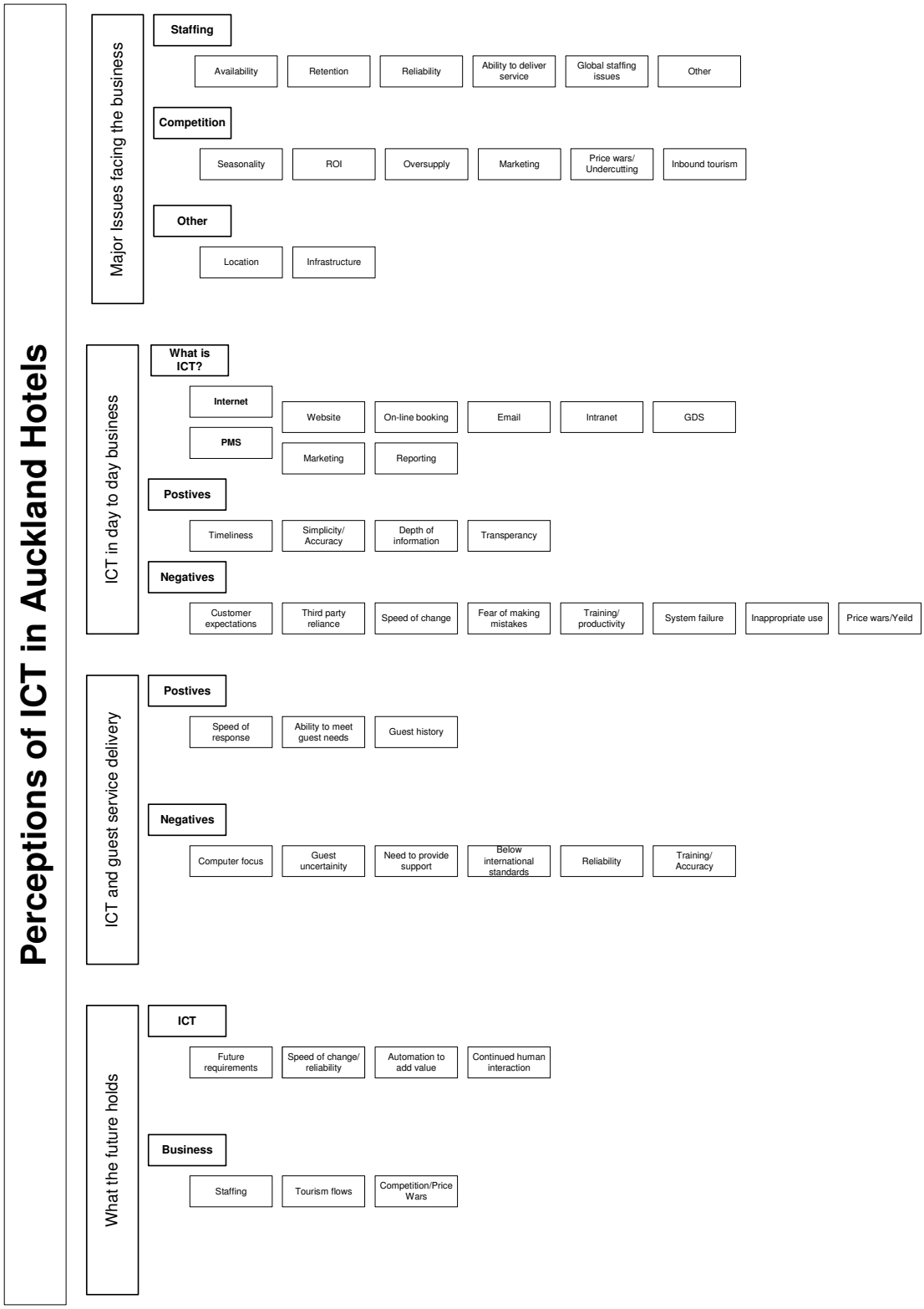
The Committee wishes you well with your research.

Please include the application number and study title in all correspondence and telephone queries.

Yours sincerely

Madeline Banda
Executive Secretary
AUTEC
Cc: ann.cameron@aut.ac.nz

Appendix 3


Perceptions of ICT in Auckland Hotels
Major Issues facing the business
Staffing
Availability
Retention
Reliability
Ability to deliver service
Global staffing issues
Other
Competition
Seasonality
ROI
Oversupply
Marketing
Price wars/ Undercutting
Inbound tourism
Other
Location
Infrastructure
ICT in day to day business
What is ICT?
Internet
Website
On-line booking
Email
Intranet
GDS
PMS
Marketing
Reporting
Postives
Timeliness
Simplicity/ Accuracy
Depth of information
Transperancy
Negatives
Customer expectations
Third party reliance
Speed of change
Fear of making mistakes
Training/ productivity
System failure
Inappropriate use
Price wars/Yeild
ICT and guest service delivery
Postives
Speed of response
Ability to meet guest needs
Guest history
Negatives
Computer focus
Guest uncertainity
Need to provide support
Below international standards
Reliability
Training/ Accuracy
What the future holds
ICT
Future requirements
Speed of change/ reliability
Automation to add value
Continued human interaction
Business
Staffing
Tourism flows
Competition/Price Wars

MAJOR ISSUES AFFECTING THE BUSINESS (43)

- Staffing (19)
  - Availability (5)
  - Retention (4)
  - Reliability (2)
  - Ability to deliver service (5)
  - Global staffing issues (1)
  - Other (2)
- Competition (22)
  - Seasonality (5)
  - ROI (3)
  - Oversupply (3)
  - Marketing (3)
  - Price wars (6)
  - Inbound tourism (3)
- Location (3)
  - Location (1)
  - Infrastructure (2)

ICT IN DAY TO DAY BUSINESS (71)

- Internal (12)
  - Marketing (5)
  - Reporting (7)
- External (16)
  - Promotional website (2)
  - Online booking (7)
  - Email (2)
  - Intranet (2)
- Impact – Positive (13)
  - Timeliness (4)
  - Simplicity/Accuracy (3)
  - Depth of information (5)
  - Transparency (1)
- Impact – Negative (32)
  - Customer expectations (3)
  - Third party reliance (7)
  - Speed of change (4)
  - Fear of making mistakes (2)
  - Training/productivity (3)
  - System failure (5)
  - Inappropriate use (3)
  - Yield/price wars (5)

IMPACT OF ICT ON GUEST SERVICE (42)

- Positive (14)
  - Speed of response (5)
  - Ability to meet guest needs (3)
  - Guest history (6)
- Negative (18)
  - Computer focus (3)
  - Guest uncertainty (2)
  - Need to provide support (3)
  - Below international standards (3)
  - Reliability of systems (1)
  - Training/accuracy (6)
- Caveat – importance of staff (10)

FUTURE (38)

- ICT into the future (21)
  - Future requirements (5)
  - Speed of change/reliability (4)
  - Automated service delivery (7)
  - Continued human interaction (5)
- Business into the future (17)
  - Staffing (7)
  - Tourism flows (3)
  - Competition/rates/price wars (7)

Table 19 Summary of coded items

				Size			Class			Age			Affilation			Location	
			Small	Medium	Large	Budget	Mid-marke	Luxury	<5 years	5 - 10 year	>10 years	Chain	Mktg	Independe	City	Airport	Other
			4	6	5	4	8	3	3	3	9	6	5	4	9	4	2
MAJOR ISSUES AFFECTING THE BUSINESS (43)																	
	Staffing (19)																
		Availability	25.0%	33.3%	40.0%	0.0%	37.5%	66.7%	33.3%	66.7%	22.2%	33.3%	40.0%	25.0%	44.4%	25.0%	0.0%
		Retention	25.0%	33.3%	20.0%	0.0%	37.5%	33.3%	0.0%	66.7%	22.2%	16.7%	40.0%	25.0%	11.1%	75.0%	50.0%
		Reliability	50.0%	0.0%	0.0%	25.0%	12.5%	0.0%	0.0%	33.3%	11.1%	0.0%	40.0%	0.0%	0.0%	50.0%	0.0%
		Ability to deliver service	25.0%	33.3%	20.0%	0.0%	37.5%	33.3%	0.0%	66.7%	22.2%	16.7%	40.0%	25.0%	33.3%	25.0%	0.0%
		Global staffing issues	0.0%	0.0%	20.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	16.7%	0.0%	0.0%	11.1%	0.0%	0.0%
		Other	50.0%	0.0%	0.0%	25.0%	12.5%	0.0%	0.0%	33.3%	11.1%	0.0%	40.0%	0.0%	0.0%	50.0%	0.0%
															0.0%	0.0%	0.0%
	Competition (22)																
		Seasonality	0.0%	66.7%	20.0%	25.0%	37.5%	33.3%	66.7%	0.0%	33.3%	50.0%	20.0%	25.0%	55.6%	0.0%	0.0%
		ROI	25.0%	16.7%	0.0%	0.0%	25.0%	0.0%	33.3%	33.3%	0.0%	16.7%	0.0%	25.0%	11.1%	25.0%	0.0%
		Oversupply	0.0%	33.3%	20.0%	0.0%	25.0%	33.3%	33.3%	0.0%	22.2%	33.3%	20.0%	0.0%	33.3%	0.0%	0.0%
		Marketing	50.0%	16.7%	0.0%	25.0%	25.0%	0.0%	0.0%	33.3%	22.2%	16.7%	20.0%	25.0%	11.1%	50.0%	0.0%
		Price wars	25.0%	50.0%	40.0%	0.0%	62.5%	33.3%	100.0%	33.3%	22.2%	83.3%	0.0%	25.0%	44.4%	25.0%	50.0%
		Inbound tourism	0.0%	50.0%	0.0%	25.0%	25.0%	0.0%	33.3%	0.0%	22.2%	33.3%	0.0%	25.0%	33.3%	0.0%	0.0%
															0.0%	0.0%	0.0%
	Location (3)																
		Location	0.0%	16.7%	0.0%	0.0%	12.5%	0.0%	33.3%	0.0%	0.0%	16.7%	0.0%	0.0%	11.1%	0.0%	0.0%
		Infrastructure	25.0%	0.0%	20.0%	25.0%	0.0%	33.3%	0.0%	33.3%	11.1%	0.0%	0.0%	50.0%	22.2%	0.0%	0.0%
ICT IN DAY TO DAY BUSINESS (71)																	
	Internal (12)																
		Marketing	75.0%	33.3%	0.0%	50.0%	37.5%	0.0%	33.3%	33.3%	33.3%	33.3%	40.0%	25.0%	22.2%	50.0%	50.0%
		Reporting	0.0%	66.7%	60.0%	50.0%	50.0%	33.3%	100.0%	0.0%	44.4%	83.3%	20.0%	25.0%	55.6%	25.0%	50.0%
	External (16)																
		Promotional website	50.0%	0.0%	0.0%	25.0%	12.5%	0.0%	0.0%	33.3%	11.1%	0.0%	40.0%	0.0%	0.0%	50.0%	0.0%
		Online booking	50.0%	83.3%	20.0%	25.0%	87.5%	0.0%	100.0%	66.7%	33.3%	66.7%	20.0%	75.0%	55.6%	50.0%	50.0%
		Email	25.0%	33.3%	0.0%	0.0%	37.5%	0.0%	33.3%	33.3%	11.1%	33.3%	20.0%	0.0%	22.2%	25.0%	0.0%
		Intranet	0.0%	33.3%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	22.2%	33.3%	0.0%	0.0%	22.2%	0.0%	0.0%
	Impact – Positive (13)																
		Timeliness	0.0%	50.0%	20.0%	0.0%	37.5%	33.3%	66.7%	0.0%	22.2%	50.0%	20.0%	0.0%	44.4%	0.0%	0.0%
		Simplicity/Accuracy	25.0%	33.3%	0.0%	25.0%	25.0%	0.0%	33.3%	33.3%	11.1%	33.3%	20.0%	0.0%	22.2%	25.0%	0.0%
		Depth of information	50.0%	16.7%	40.0%	50.0%	25.0%	33.3%	33.3%	33.3%	33.3%	50.0%	20.0%	25.0%	33.3%	50.0%	0.0%
		Transparency	0.0%	16.7%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	11.1%	16.7%	0.0%	0.0%	11.1%	0.0%	0.0%
	Impact – Negative (32)																
		Customer expectations	50.0%	16.7%	0.0%	25.0%	25.0%	0.0%	0.0%	33.3%	22.2%	16.7%	20.0%	25.0%	11.1%	50.0%	0.0%
		Third party reliance	100.0%	33.3%	20.0%	50.0%	50.0%	33.3%	66.7%	66.7%	33.3%	50.0%	40.0%	50.0%	33.3%	75.0%	50.0%
		Speed of change	0.0%	16.7%	40.0%	0.0%	12.5%	66.7%	33.3%	33.3%	11.1%	16.7%	20.0%	25.0%	33.3%	0.0%	0.0%
		Fear of making mistakes	0.0%	16.7%	20.0%	0.0%	12.5%	33.3%	0.0%	33.3%	11.1%	0.0%	20.0%	25.0%	22.2%	0.0%	0.0%
		Training/productivity	0.0%	16.7%	40.0%	0.0%	25.0%	33.3%	100.0%	0.0%	0.0%	50.0%	0.0%	0.0%	22.2%	0.0%	50.0%
		System failure	0.0%	50.0%	40.0%	25.0%	37.5%	33.3%	66.7%	0.0%	33.3%	50.0%	20.0%	25.0%	44.4%	0.0%	50.0%
		Inappropriate use	0.0%	50.0%	0.0%	0.0%	37.5%	0.0%	33.3%	0.0%	22.2%	50.0%	0.0%	0.0%	33.3%	0.0%	0.0%
		Yield/price wars	25.0%	50.0%	20.0%	0.0%	62.5%	0.0%	66.7%	33.3%	22.2%	66.7%	0.0%	25.0%	33.3%	25.0%	50.0%
IMPACT OF ICT ON GUEST SERVICE (42)																	
	Positive (14)																
		Speed of response	50.0%	50.0%	0.0%	50.0%	37.5%	0.0%	0.0%	33.3%	44.4%	33.3%	40.0%	25.0%	33.3%	50.0%	0.0%
		Ability to meet guest needs	25.0%	16.7%	20.0%	0.0%	25.0%	33.3%	66.7%	33.3%	0.0%	33.3%	20.0%	0.0%	22.2%	25.0%	0.0%
		Guest history	25.0%	50.0%	40.0%	25.0%	50.0%	33.3%	66.7%	33.3%	33.3%	50.0%	40.0%	25.0%	44.4%	25.0%	50.0%
	Negative (18)																
		Computer focus	25.0%	33.3%	0.0%	0.0%	37.5%	0.0%	0.0%	33.3%	22.2%	33.3%	20.0%	0.0%	22.2%	25.0%	0.0%
		Guest uncertainty	25.0%	0.0%	20.0%	25.0%	12.5%	0.0%	0.0%	33.3%	11.1%	16.7%	0.0%	25.0%	0.0%	50.0%	0.0%
		Need to provide support	25.0%	16.7%	20.0%	25.0%	25.0%	0.0%	33.3%	33.3%	11.1%	16.7%	20.0%	25.0%	11.1%	25.0%	50.0%
		Below international standards	25.0%	16.7%	20.0%	0.0%	25.0%	33.3%	33.3%	33.3%	11.1%	33.3%	20.0%	0.0%	22.2%	25.0%	0.0%
		Reliability of systems	0.0%	0.0%	20.0%	0.0%	0.0%	33.3%	33.3%	0.0%	0.0%	16.7%	0.0%	0.0%	11.1%	0.0%	0.0%
		Training/accuracy	25.0%	83.3%	0.0%	0.0%	75.0%	0.0%	33.3%	33.3%	44.4%	66.7%	20.0%	25.0%	55.6%	25.0%	0.0%
			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Caveat – importance of staff (10)		75.0%	66.7%	60.0%	50.0%	75.0%	66.7%	66.7%	100.0%	55.6%	100.0%	20.0%	75.0%	55.6%	75.0%	100.0%
FUTURE (38)																	
	ICT into the future (21)																
		Future requirements	50.0%	33.3%	20.0%	25.0%	50.0%	0.0%	66.7%	33.3%	22.2%	50.0%	40.0%	0.0%	22.2%	50.0%	50.0%
		Speed of change/reliability	50.0%	16.7%	20.0%	0.0%	37.5%	33.3%	33.3%	66.7%	11.1%	33.3%	20.0%	25.0%	22.2%	50.0%	0.0%
		Automated service delivery	0.0%	66.7%	60.0%	25.0%	50.0%	66.7%	66.7%	33.3%	44.4%	83.3%	20.0%	25.0%	66.7%	25.0%	0.0%
		Continued human interaction	50.0%	50.0%	0.0%	25.0%	50.0%	0.0%	0.0%	33.3%	44.4%	50.0%	20.0%	25.0%	33.3%	50.0%	0.0%
	Business into the future (17)																
		Staffing	50.0%	50.0%	40.0%	0.0%	75.0%	33.3%	66.7%	66.7%	33.3%	66.7%	40.0%	25.0%	44.4%	50.0%	50.0%
		Tourism flows	25.0%	33.3%	0.0%	25.0%	25.0%	0.0%	0.0%	33.3%	22.2%	16.7%	0.0%	50.0%	22.2%	25.0%	0.0%
		Competition/rates/price wars	50.0%	83.3%	0.0%	50.0%	62.5%	0.0%	33.3%	33.3%	55.6%	50.0%	40.0%	50.0%	55.6%	50.0%	0.0%

Table 20 Demographic characteristics: responses as a percentage of class

				Size			Class			Age			Affilation			Location	
				Small	Medium	Large	Budget	Mid-marke	Luxury	<5 years	5 - 10 year	>10 years	Chain	Mktg	Independe	City	Airport	Other
MAJOR ISSUES AFFECTING THE BUSINESS (43)			43	27.9%	48.8%	23.3%	14.0%	65.1%	20.9%	25.6%	27.9%	46.5%	46.5%	30.2%	23.3%	67.4%	30.2%	4.7%
	Staffing (19)		18	38.9%	33.3%	27.8%	11.1%	61.1%	27.8%	11.1%	44.4%	44.4%	27.8%	55.6%	16.7%	50.0%	50.0%	5.6%
		Availability	5	20.0%	40.0%	40.0%	0.0%	60.0%	40.0%	20.0%	40.0%	40.0%	40.0%	40.0%	20.0%	80.0%	20.0%	0.0%
		Retention	4	25.0%	50.0%	25.0%	0.0%	75.0%	25.0%	0.0%	50.0%	50.0%	25.0%	50.0%	25.0%	25.0%	75.0%	25.0%
		Reliability	2	100.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%
		Ability to deliver service	4	25.0%	50.0%	25.0%	0.0%	75.0%	25.0%	0.0%	50.0%	50.0%	25.0%	50.0%	25.0%	75.0%	25.0%	0.0%
		Global staffing issues	1	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		Other	2	100.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%
	Competition (22)		22	18.2%	63.6%	18.2%	13.6%	72.7%	13.6%	36.4%	13.6%	50.0%	63.6%	13.6%	22.7%	77.3%	18.2%	4.5%
		Seasonality	5	0.0%	80.0%	20.0%	20.0%	60.0%	20.0%	40.0%	0.0%	60.0%	60.0%	20.0%	20.0%	100.0%	0.0%	0.0%
		ROI	3	50.0%	50.0%	0.0%	0.0%	100.0%	0.0%	50.0%	50.0%	0.0%	50.0%	0.0%	50.0%	50.0%	50.0%	0.0%
		Oversupply	3	0.0%	66.7%	33.3%	0.0%	66.7%	33.3%	33.3%	0.0%	66.7%	66.7%	33.3%	0.0%	100.0%	0.0%	0.0%
		Marketing	3	66.7%	33.3%	0.0%	33.3%	66.7%	0.0%	0.0%	33.3%	66.7%	33.3%	33.3%	33.3%	33.3%	66.7%	0.0%
		Price wars	6	16.7%	50.0%	33.3%	0.0%	83.3%	16.7%	50.0%	16.7%	33.3%	83.3%	0.0%	16.7%	66.7%	16.7%	16.7%
		Inbound tourism	3	0.0%	100.0%	0.0%	33.3%	66.7%	0.0%	33.3%	0.0%	66.7%	66.7%	0.0%	33.3%	100.0%	0.0%	0.0%
	Location (3)		3	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	0.0%	66.7%	100.0%	0.0%	0.0%
		Location	1	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		Infrastructure	2	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%
ICT IN DAY TO DAY BUSINESS (71)			71	25.4%	52.1%	22.5%	18.3%	69.0%	12.7%	32.4%	18.3%	49.3%	59.2%	22.5%	18.3%	66.2%	23.9%	9.9%
	Internal (12)		12	25.0%	50.0%	25.0%	33.3%	58.3%	8.3%	33.3%	8.3%	58.3%	58.3%	25.0%	16.7%	58.3%	25.0%	16.7%
		Marketing	5	60.0%	40.0%	0.0%	40.0%	60.0%	0.0%	20.0%	20.0%	60.0%	40.0%	40.0%	20.0%	40.0%	40.0%	20.0%
		Reporting	7	0.0%	57.1%	42.9%	28.6%	57.1%	14.3%	42.9%	0.0%	57.1%	71.4%	14.3%	14.3%	71.4%	14.3%	14.3%
	External (16)		15	33.3%	60.0%	6.7%	13.3%	86.7%	0.0%	26.7%	26.7%	46.7%	53.3%	26.7%	20.0%	60.0%	33.3%	6.7%
		Promotional website	2	100.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%
		Online booking	8	25.0%	62.5%	12.5%	12.5%	87.5%	0.0%	37.5%	25.0%	37.5%	50.0%	12.5%	37.5%	62.5%	25.0%	12.5%
		Email	3	33.3%	66.7%	0.0%	0.0%	100.0%	0.0%	33.3%	33.3%	33.3%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%
		Intranet	2	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
	Impact – Positive (13)		13	23.1%	53.8%	23.1%	23.1%	61.5%	15.4%	30.8%	15.4%	53.8%	69.2%	23.1%	7.7%	76.9%	23.1%	0.0%
		Timeliness	4	0.0%	75.0%	25.0%	0.0%	75.0%	25.0%	50.0%	0.0%	50.0%	75.0%	25.0%	0.0%	100.0%	0.0%	0.0%
		Simplicity/Accuracy	3	33.3%	66.7%	0.0%	33.3%	66.7%	0.0%	33.3%	33.3%	33.3%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%
		Depth of information	5	40.0%	20.0%	40.0%	40.0%	40.0%	20.0%	20.0%	20.0%	60.0%	60.0%	20.0%	20.0%	60.0%	40.0%	0.0%
		Transparency	1	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
	Impact – Negative (32)		31	22.6%	48.4%	29.0%	12.9%	67.7%	19.4%	35.5%	19.4%	45.2%	58.1%	19.4%	22.6%	67.7%	19.4%	12.9%
		Customer expectations	3	66.7%	33.3%	0.0%	33.3%	66.7%	0.0%	0.0%	33.3%	66.7%	33.3%	33.3%	33.3%	33.3%	66.7%	0.0%
		Third party reliance	7	57.1%	28.6%	14.3%	28.6%	57.1%	14.3%	28.6%	28.6%	42.9%	42.9%	28.6%	28.6%	42.9%	42.9%	14.3%
		Speed of change	3	0.0%	33.3%	66.7%	0.0%	33.3%	66.7%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	100.0%	0.0%	0.0%
		Fear of making mistakes	2	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	0.0%	50.0%	50.0%	100.0%	0.0%	0.0%
		Training/productivity	3	0.0%	33.3%	66.7%	0.0%	66.7%	33.3%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	66.7%	0.0%	33.3%
		System failure	5	0.0%	60.0%	40.0%	20.0%	60.0%	20.0%	40.0%	0.0%	60.0%	60.0%	20.0%	20.0%	80.0%	0.0%	20.0%
		Inappropriate use	3	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	33.3%	0.0%	66.7%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		Yield/price wars	5	20.0%	60.0%	20.0%	0.0%	100.0%	0.0%	40.0%	20.0%	40.0%	80.0%	0.0%	20.0%	60.0%	20.0%	20.0%
IMPACT OF ICT ON GUEST SERVICE (42)			42	28.6%	47.6%	23.8%	16.7%	69.0%	14.3%	23.8%	26.2%	50.0%	57.1%	23.8%	19.0%	59.5%	31.0%	9.5%
	Positive (14)		14	28.6%	50.0%	21.4%	21.4%	64.3%	14.3%	28.6%	21.4%	50.0%	50.0%	35.7%	14.3%	64.3%	28.6%	7.1%
		Speed of response	5	40.0%	60.0%	0.0%	40.0%	60.0%	0.0%	0.0%	20.0%	80.0%	40.0%	40.0%	20.0%	60.0%	40.0%	0.0%
		Ability to meet guest needs	3	33.3%	33.3%	33.3%	0.0%	66.7%	33.3%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%
		Guest history	6	16.7%	50.0%	33.3%	16.7%	66.7%	16.7%	33.3%	16.7%	50.0%	50.0%	33.3%	16.7%	66.7%	16.7%	16.7%
	Negative (18)		18	27.8%	50.0%	22.2%	11.1%	77.8%	11.1%	22.2%	27.8%	50.0%	61.1%	22.2%	16.7%	61.1%	33.3%	5.6%
		Computer focus	3	33.3%	66.7%	0.0%	0.0%	100.0%	0.0%	0.0%	33.3%	66.7%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%
		Guest uncertainty	2	50.0%	0.0%	50.0%	50.0%	50.0%	0.0%	0.0%	50.0%	50.0%	50.0%	0.0%	50.0%	0.0%	100.0%	0.0%
		Need to provide support	3	33.3%	33.3%	33.3%	33.3%	66.7%	0.0%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%	33.3%
		Below international standards	3	33.3%	33.3%	33.3%	0.0%	66.7%	33.3%	33.3%	33.3%	33.3%	66.7%	33.3%	0.0%	66.7%	33.3%	0.0%
		Reliability of systems	1	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
		Training/accuracy	6	16.7%	83.3%	0.0%	0.0%	100.0%	0.0%	16.7%	16.7%	66.7%	66.7%	16.7%	16.7%	83.3%	16.7%	0.0%
	Caveat – importance of staff (10)		10	30.0%	40.0%	30.0%	20.0%	60.0%	20.0%	20.0%	30.0%	50.0%	60.0%	10.0%	30.0%	50.0%	30.0%	20.0%
FUTURE (38)			38	28.9%	52.6%	18.4%	15.8%	73.7%	10.5%	21.1%	23.7%	55.3%	55.3%	23.7%	21.1%	63.2%	31.6%	5.3%
	ICT into the future (21)		21	28.6%	47.6%	23.8%	14.3%	71.4%	14.3%	23.8%	23.8%	52.4%	61.9%	23.8%	14.3%	61.9%	33.3%	4.8%
		Future requirements	5	40.0%	40.0%	20.0%	20.0%	80.0%	0.0%	40.0%	20.0%	40.0%	60.0%	40.0%	0.0%	40.0%	40.0%	20.0%
		Speed of change/reliability	4	50.0%	25.0%	25.0%	0.0%	75.0%	25.0%	25.0%	50.0%	25.0%	50.0%	25.0%	25.0%	50.0%	50.0%	0.0%
		Automated service delivery	7	0.0%	57.1%	42.9%	14.3%	57.1%	28.6%	28.6%	14.3%	57.1%	71.4%	14.3%	14.3%	85.7%	14.3%	0.0%
		Continued human interaction	5	40.0%	60.0%	0.0%	20.0%	80.0%	0.0%	0.0%	20.0%	80.0%	60.0%	20.0%	20.0%	60.0%	40.0%	0.0%
	Business into the future (17)		17	29.4%	58.8%	11.8%	17.6%	76.5%	5.9%	17.6%	23.5%	58.8%	47.1%	23.5%	29.4%	64.7%	29.4%	5.9%
		Staffing	7	28.6%	42.9%	28.6%	0.0%	85.7%	14.3%	28.6%	28.6%	42.9%	57.1%	28.6%	14.3%	57.1%	28.6%	14.3%
		Tourism flows	3	33.3%	66.7%	0.0%	33.3%	66.7%	0.0%	0.0%	33.3%	66.7%	33.3%	0.0%	66.7%	66.7%	33.3%	0.0%
		Competition/rates/price wars	7	28.6%	71.4%	0.0%	28.6%	71.4%	0.0%	14.3%	14.3%	71.4%	42.9%	28.6%	28.6%	71.4%	28.6%	0.0%

Table 21 Demographic characteristics: class as a percentage of response number