THE OPERATIONAL IMPLICATIONS OF SERVICE CUSTOMISATION LEVEL

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KEY WORDS

Customisation, information distribution, collaboration, services, professional services, job design.
ABSTRACT

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Customisation offers the opportunity for organisations to capitalise on the many potential benefits to both themselves and to clients, afforded by offering a greater choice of goods and services for customers. Many organisations have implemented increased customisation with the expectation of increased demand and profitability. However a critical analysis of the operational aspects involved in customising services reveals that different levels of customisation have distinct operational needs which render the adoption of different levels of customisation more difficult than is indicated in existing literature.

Three distinct degrees of customisation are examined in this study. These are standardisation, medium customisation and high customisation. The study puts forward a comprehensive model which provides an insight into the organisational factors which potentially enable or impede an organisation in introducing different levels of customisation. This model builds on previous studies of factors which impact on the ability of an organisation to deliver customised services. Factors which are included in this model are: (a) the level and type of knowledge, skills and abilities (KSA’s) held by employees involved in designing and delivering services (b) the degree of information distribution and exchange between employees and (c) goal clarity for staff involved in delivering the service.

Initial case studies conducted in six organisations and a subsequent quantitative study which elicited 101 responses from 21 organisations, revealed that each level of customisation held a distinct configuration of these operational factors. Organisations offering high customisation were characterised by a low degree of information distribution and exchange between employees, a high level of KSA’s about the service being provided and low goal clarity for
service staff. Organisations offering medium customisation were characterised by a high
degree of information distribution and exchange between employees, a moderate level of
KSA’s about the service being provided and relatively high goal clarity for staff.
Organisations offering standardised services were characterised by a low degree of
information distribution and exchange between employees, a low level of KSA’s required
about the service being provided and high goal clarity for staff.

By examining the relationship between customisation and the identified operational
implications, the study allows us to piece together a multi-faceted viewpoint of the same
broad issue, which is answered by the overarching question ‘how are organisations enabled to
provide different levels of customisation’? This study therefore provides us with a well-
rounded insight as to how and why organisations can effectively implement different levels
of service customisation.
STATEMENT OF ORIGINALITY

The work documented in this thesis was undertaken while I was enrolled as a student at the Queensland University of Technology.

The work presented in this thesis has not been previously submitted for any other degree, diploma or part thereof. To the best of my knowledge it contains no material written or published by any other person except where due reference is made.

Signature: ………………………………………………………

Date: ………………………………………………………
ACKNOWLEDGEMENTS

Perhaps the most instrumental person in motivating me to persevere with this project was my daughter Imogen. The people I am most grateful to and without whose support I would never have completed this thesis, are my wonderful, patient parents. I am also greatly thankful to Robert Waldresee and Boris Kabanoff of the Queensland University of Technology’s School of Management respectively for giving me the opportunity to embark on this project and assisting me in its completion.
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1. INTRODUCTION

1.1. The Purpose of the Study

The purpose of the study is to investigate the impact of service customisation on information distribution and exchange, KSA’s and goal clarity in work groups that are directly involved in the design and delivery of services. This was achieved by identifying and discussing patterns of relationships between these factors in organisations offering different levels of customisation. It uses qualitative case studies and quantitative analysis to identify configurations of these factors as they exist in such organisations.

1.2. Background

1.2.1. Introduction

Organisational strategy and structure are interlinked (Chandler, 1962). The study uses this basis to examine the relationship between the level of service customisation and elements of work organisation in service organisations. The implications of these organisational factors for managing employees who are directly involved in delivering different customisation levels are discussed with relation to the structural requirements and key success factors for each type of organisation’s market position.

1.2.2. Customisation

Three types of service customisation are defined, representing complete customisation, medium customisation and standardisation, which represent three distinct levels of customisation offered by organisations. Organisations offering a completely customised service provide customers with an unlimited choice of how the service is designed and delivered to meet complex needs (e.g. business-to-business assurance services). Organisations offering medium customisation meet complex
customer needs while offering limited choice as to how these needs can be solved (e.g. financial consultancy in which needs are assessed and a limited choice of options are provided as to how to best address these needs). Organisations offering standardised services offer fixed options to customers which cannot be modified (e.g. a billing service, retail banking).

1.2.3. Operational Requirements of Customisation

It was found that organisations offering each type of service had different operational needs because of the different types and flow of information used in designing and delivering each type of service. As customisation increases, the customer becomes involved at an earlier stage in the process of service design and delivery. Therefore, employees involved in delivering customised services are also more actively involved in the service ‘design’. The earlier involvement of customers also increases the quality of information regarding customer needs, as well as the ‘tacitness’ of information used in the service design and delivery. These factors both necessitate greater decision-making based on judgment by service delivery employees.

The operational requirements for each type of strategy which are investigated in this study are not based on continuums. This approach has become increasingly popular in literature. For example, the process of ‘mass customisation’ as a distinct business strategy which requires unique operations which enable ‘loose coupling’ of information and process design (Pine, 1993; Da Silveira, Borenstein & Fogliatto, 2001). The material differences between mass customisation and the more traditional view of complete divergence in customer choice (Shostack, 1987) is consistent with this study’s differentiation between medium customisation and high customisation.

The study argues that the distinct construct of ‘knowledge’, which undergoes a deeper level of processing than does information, is fundamental. The different types of information and
knowledge used in delivering different customisation strategies necessitate entirely different configurations of information distribution and exchange, KSA’s required by staff involved in designing and delivering the service and goal clarity. For example, information in organisations with a standardised or medium customisation strategy can be efficiently stored and disseminated using high-volume sources such as databases, while in contrast, information in highly customised organisations is often held in the minds of ‘experts’ and is not easily transferred.

Extensive literature which discusses group decision making and performance has critically evaluated the impact of information sharing on process and information loss and the need to adopt mechanisms which prevent the deterioration of high quality information. Because high quality information is associated with the ability of organisations to offer customised services, it is paradoxical to expect that extensive information distribution and exchange will necessarily enable organisations to effectively provide a high level of customisation. Certainly, where information is easily shared and is sufficiently explicit to withstand the interpretations and biases that can cause it to deteriorate, a focus on communication and information systems is appropriate. However where information is not easily shared, the deeper understanding of ‘knowledge’ held in the minds of expert staff may be a more reliable mechanism to ensure that the information held by the organisation is sufficient to offer a high quality, customised service. It is therefore important to highlight the differentiation between ‘knowledge’ and ‘information’ as knowledge is a deeper and more embedded construct which is less easily made explicit than is ‘information’.

1.2.4. Implications for Operational Configurations

The implication of non-linear operational needs for organisations is that although the level of customisation represents a continuum, entirely different structural and administrative requirements for each must be implemented. It is therefore unlikely that an organisation could move significantly
between complete customisation and medium customisation without making major changes to its structure. Such an attempt would not yield optimal effectiveness or efficiency.

The non-continuous operational needs of organisations in each type is not purported to restrict organisations to a ‘one best way’ in the processes used to design and deliver service, but allows customisation in the way an appropriate system is implemented in an organisation. Operational and administrative requirements are not the same in all organisations. For example, within a ‘medium customisation’ strategy, information distribution and exchange between employees is higher than in organisations offering very high or low levels of customisation. However how this information is transferred or shared is impacted by many factors, such as the sophistication of IT used and other precise organisational requirements, which are out of the realm of this study. The value of the study with regard to this example is to establish that information distribution and exchange is, in fact, higher in organisations offering medium customisation.

In addition, the typology is relative and in similar industries the structure of organisations adopting different customisation strategies will differ. For example, firms in an industry typified by offering ‘standardised service’ such as the fast food industry, could introduce aspects of customisation to gain a competitive advantage. This study contributes toward effective management of customisation within industries and therefore provides useful guidance as to how organisations might consider a move toward changing the level of customisation that they offer to customers.

1.2.5. Summary of Significant Factors

Table 1 provides a non-exhaustive summary of the key factors which impact on customisation and operational factors, including structural and administrative implications. These are not all further
examined in this study, however they provide a contextualisation for the research which is herein presented.
<table>
<thead>
<tr>
<th>Definition of Customisation</th>
<th>Standardisation</th>
<th>Medium customisation</th>
<th>High customisation</th>
</tr>
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<tbody>
<tr>
<td>No choice. Can provide one or a range of fixed services but they cannot be changed.</td>
<td>Some choice, key aspects of a service can be changed to allow some choice, but it is limited to the combination of options available.</td>
<td>An entirely new service is designed for each customer from inception to delivery, to meet specific needs.</td>
<td></td>
</tr>
<tr>
<td>Role of Customer</td>
<td>Customer enters the organisation at the delivery part of the service process.</td>
<td>Customer enters the organisation after pre-determined choices have been determined.</td>
<td>Customer enters the organisation at the inception of the service design and delivery.</td>
</tr>
<tr>
<td>Type of information used</td>
<td>Standard information which is the same for each customer.</td>
<td>A mix of standard and complex information regarding the product and clients’ needs.</td>
<td>Highly complex, high-level information, which needs to be synthesised and interpreted to meet the complex needs of each client.</td>
</tr>
<tr>
<td>Information flow</td>
<td>Downward communication, front-end employees implement a service which is largely contained in a large repository which automatically provides information as it is needed.</td>
<td>Complex horizontal and vertical communication.</td>
<td>Front-end employees receive complex information from the client and interpret this, making judgment decisions as to how complex needs can be met with complex processes.</td>
</tr>
<tr>
<td>Knowledge needed</td>
<td>How to use the system so it performs most effectively and efficiently.</td>
<td>Mixture of specialists and generalists.</td>
<td>Expert knowledge.</td>
</tr>
<tr>
<td>Repository of knowledge</td>
<td>The system contains knowledge.</td>
<td>A number of people contain parts of the knowledge, which needs to be coordinated.</td>
<td>An ‘expert’ contains most of the knowledge required to design and deliver the service.</td>
</tr>
<tr>
<td>KSA’s required by staff involved in designing and delivering the service of employees</td>
<td>No latitude. Employees refer to scripts for situations which arise unexpectedly.</td>
<td>Varies among people in the organisation, but based on team work.</td>
<td>Divergence in decision-making, no set structure or guidelines for how to do the work.</td>
</tr>
<tr>
<td>Tangibility of outputs</td>
<td>Standardisation</td>
<td>Medium customisation</td>
<td>High customisation</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Tangible: while measures of quality are important and visible, quantity is most important.</td>
<td>Differs with organisations but a mixture.</td>
<td>Not clear whether conflicting needs of customer or organisation have been met.</td>
<td></td>
</tr>
<tr>
<td>Clarity of cause/effect</td>
<td>Clear.</td>
<td>Somewhat clear.</td>
<td>Not apparent.</td>
</tr>
<tr>
<td>Information distribution and exchange</td>
<td>None. Information is passed through the system one-way: down.</td>
<td>Lot of teamwork needed: complex information flows mean information distribution and exchange is vital.</td>
<td>Little: while some discussion may occur re. knowledge, few people are responsible for the actual service and these are usually people who deal directly with the client.</td>
</tr>
<tr>
<td>Role of information technology</td>
<td>Information repository and dissemination.</td>
<td>Communication facilitation: e.g. teleconferencing, email.</td>
<td>Provides support, such as expert systems which need to be interpreted by the employee.</td>
</tr>
<tr>
<td>Control approach</td>
<td>Output-based: e.g. assembly-line.</td>
<td>Teamwork, interdependency.</td>
<td>Inputs: culture, socialisation.</td>
</tr>
<tr>
<td>HRM implications</td>
<td>Performance Appraisal based on objectives.</td>
<td>Team-based rewards and Organisational Development.</td>
<td>Concentrate on excellent recruitment and selection, training and other input-orientated interventions.</td>
</tr>
<tr>
<td>Potential substitutes for leadership</td>
<td>Control system, such as computer-based PA.</td>
<td>Communication channels.</td>
<td>Culture, social systems.</td>
</tr>
</tbody>
</table>
1.3. Aim and Objectives of this Study

The type of information used in designing and delivering different levels of customisation varies. This necessitates different approaches to be taken toward factors which impact on the management of this information, which have been identified as information distribution and exchange, KSA’s required by staff involved in designing and delivering the service and task/goal clarity. The aim of this study is to evaluate the relationship between service customisation and these factors. In this study, ‘customisation’ is defined as ‘developing services tailored to a particular customer’ (Pickholz, 1994).

The objectives of this study are to:

(a) Examine the existence of intra-group information distribution and exchange which arise in designing and delivering different customisation levels.
(b) Examine the KSA’s needed by staff in designing and delivering each level of customisation.
(c) Examine goal clarity and the types of information arising in the design and delivery of each level of customisation.

1.4. Thesis Outline

The chapters in this thesis are organised as follows:

Chapter two reviews the literature pertaining to the operational and marketing considerations for the organisation in offering different levels of customisation. The second part of the
Chapter discusses more specifically the impact of customisation on information distribution and exchange, goal clarity and the KSA’s held by staff who are directly involved in delivering the service.

Chapter Three outlines the qualitative and quantitative methodology used to address the research aims and objectives of this study and provides the results derived from analysis of information obtained from both the qualitative case studies and the quantitative phase of the research. This includes a description of and a rationale for the research strategy used and identification of the organisations which participated in the study.

Chapter four presents a discussion of the results obtained in Chapter Three and reconciles current literature with these findings. It also discusses aspects of the study that have facilitated progress towards achieving its aims and those that have impaired this progress. This is followed by reflection on the reasons for these results and possible ways to apply the findings. Potential sources of bias and the limitations and strengths of the study are also discussed in this chapter.

The thesis concludes with Chapter Five, which discusses the theoretical and organisational implications of this study. The results are discussed, recommendations made and the potential for further research is put forward.

1.5. Key Terms and Definitions

(a) Customisation

Customisation is the extent to which the unique needs of each client are met, determined by the organisation’s ability to modify its product or service (Zahay & Griffin, 2003; Shostack,
1987). The study regards customisation offered as belonging to one of three levels. These are ‘complete customisation’, ‘medium customisation’ and ‘standardisation’. Customisation is influenced not just by market demand, but by internal factors such as whether processes and inputs in an organisation enable the specific needs of customers to be captured and subsequently met (Gilmore & Pine 1997; Shostack 1987).

(b) Information

There is empirical evidence that the level of customisation changes the information used in the service process (Duray, 2002; Pickholz, 1994; Shostack 1987). This information is determined largely by whether the service is designed before or after client intervention (a prerequisite for complete customisation) and the subsequent decisions made throughout the design and delivery of the service. The role of information technology, workgroup structure and the nature of information used in the value chain (e.g. tacit knowledge, expert system) vary at each level, depending on the organisation’s other unique features.

(c) Information distribution and exchange

Information distribution and exchange is defined in the study as the extent to which employees who are directly involved in the delivery of service customisation engage in knowledge transfer needed to deliver the service (Argote, Devadas & Malone, 1991). This might include, for example, whether service employees have input into knowledge base of the system or whether they passively carry out top-down instructions.

(d) KSA’s

KSA’s needed by service delivery employees to operationalise different levels of service customisation differ in many ways. An exhaustive array of KSAs relevant to delivering
service customisation may include interpersonal skills and ‘service orientation’ (Cran, 1994) as well as those relating to the particular content and processes of the particular service being delivered. An attempt has been made in this study to capture a general measure of the complexity of content and process-related KSAs and therefore the study focuses on the level of professional orientation held by employees, which is closely related to the skill level of the job (Podsakoff, Niehoff, MacKenzie & Williams, 1993).

(e) Goal Clarity
Goal clarity (Arvey, Dewhirst & Boling, 1976) is defined as the extent to which crystallised standards of desirable performance can be applied to the work that a person does. In this study, the employee’s understanding of their desired achievements is measured not only in terms of confusion that may exist between different goals, but the extent to which specific goals are defined in a measurable and understandable manner and communicated effectively to the employee.

(f) Information type. Information type is regarded in this study as existing on a continuum from highly defined, ‘explicit’ information, to ‘tacit’ knowledge which is difficult to share and understand.

1.6. Summary
This chapter has presented the background to the research area, identified the research problem and the research questions to be addressed in this study. The contextual framework of the research has been outlined and will be expanded on and used for reference throughout the thesis.
2. LITERATURE REVIEW

2.1. Services

In the early 1970s the marketing of services started to emerge (Gronroos, 1994). However there is an increasingly unclear distinction between services and products, due to their overlap (Gummesson, 1994). For example, a tangible product could embody expert input and early customer participation, with little cost arising from its physical structure. A compact disk containing family portraits taken by a photographer could be arbitrarily considered as a product or a service. The processes involved in customising the design and delivery of services may therefore be what really distinguishes them from products (Gronroos, 1996).

Traditionally, services are distinguished by their intangibility, non-perishability, production/consumption simultaneity and participation of the consumer (Gronroos, 1994). However, ‘services’ without customisation have high ‘product’ content. They can be kept for a long time (e.g. once a type of bank account is designed, it just needs to be sold repetitively), they are tangible (e.g. a set interest rate, people see what they can get), they are produced before the consumer enters the relationship and the consumer therefore does not participate in their development. Likewise, customised products have a high service content (e.g. Levi’s Jeans offer jeans of which the style, colour and fit can be tailored to the individual). The process that enables this to occur involves ‘customer service’ - obtaining information from the customer to establish their individual needs.

Therefore, management research covering services needs to focus on the stage of production that relates to service component of the design and delivery process, rather than the arbitrary measure of physical output. The products and services offered by firms must therefore be
defined by their processes and approach rather than merely the nature of their outputs (Liedtka, 1998).

2.2. Types of Services

Among many ‘service’ typologies, Miles (1993, p.655) differentiates between ‘physical’ (e.g. laundry/cleaning), ‘person-centred’ (e.g. hairdressers, acting) and ‘information-centred’ (e.g. engineering, banking) services. In addition, Porter (1990) and Hamel & Prahalad (1990) have provided insights as to the competitive strategies to be followed by organisations.

However, this study argues that placing services into such categories for the purpose of reconciling an organisation’s competitive strategy with its internal operations does not provide a mutually exclusive and exhaustive framework with which to analyse services. Because of the need to define processes rather than outputs as previously established, the focus of this study is on the central role that is played by early customer participation in the design and delivery of customised goods and services (Shostack, 1987). Examining the level of customisation offers a logical continuum, with no replication, because the level of customisation is a single construct which can be measured on a ‘medium’, ‘high’, ‘low’ basis. Evidence indicates that it is also strongly linked to the organisation’s practices involved in the design and delivery of the product or service (Pine, 2003; Shostack, 1987). The level of customisation offered by organisations is therefore valuable to explore because it strongly relates to both the firm’s marketing strategy and its operations. This approach provides us with an innovative means of assessing the relationship between strategy and structure which is not impeded by spurious factors such as overlap between constructs used in measuring market ‘strategy’, which may occur when surmising that the nature of what is produced by an organisation can be categorised according to market orientation. For example, organisations
which do not conform to the familiar typologies which seek to associate approximations of marketing strategy with structure (Hamel & Prahalad, 1996; Porter, 1990) are increasingly common (Miller, 1996). By examining an aspect of strategy which is inextricably related to an organisation’s processes and structures, the study therefore systematically demonstrates and explains the process through which strategy and structure are interlinked.

2.3. Marketing Service Customisation

A major implication of a ‘service’ approach is that front-line employees become part-time ‘marketers’ who can achieve more than advertising or marketing interventions to influence the decision of customers to return (Gronroos, 1996). It is widely documented that the customer’s participation in the service and their ‘line of visibility’ in the service environment affects their perception of service quality (Gronroos, 1996; Edvardsson, 1992; Shostack, 1987). This is pertinent to the majority of service organisations that rely on an on-going relationship with customers.

Involving the customer early in the service design allows the firm to capitalise on the potential benefits gained from offering increased customisation, which have been widely discussed (Day, 2000). These benefits include potential increased demand and profitability, enabling firms to offer a differentiated product at a premium price (Jiao, Ma & Tseng, 2003; Matson, 1995). Involving the customer early in the service design and delivery also allows the organisation to proactively identify changing trends in customer needs and wants (Leichty, Ramaswamy & Cohen, 2001) and to acquire long-term customer relationships through greater front-line empathy, image, reliability, responsiveness and trust (Edvardsson, Larsson & Setterlind, 1997).
The potential benefits to organisations offering customisation are therefore clear. Many organisations have introduced customisation to some extent, in the hope of capitalising on these benefits, with varying levels of success. However not all of these have succeeded (Peters & Saidin, 2000). Therefore critical examination needs to be made into the demand for customisation with relation to its alternatives, as well as the internal operations involved in delivering different levels of customisation, which impact on an organisation’s ability to provide customisation.

2.3.1. Challenges to consider when marketing customisation

Recently, the urge to ‘customise’ has been critically examined in marketing literature (Zipkin, 2001). The willingness of customers to pay for customisation has been questioned, particularly in light of technological advances which provide consumers with cheaper alternatives to customised products and services. These alternatives are made possible by improved technology and innovation in delivering standardised products and services that are versatile enough to meet different needs of consumers (Zipkin, 2001). For example, rather than tailoring bank loans to suit different consumers, most banks offer a range of standard loans which are well designed and meet a variety of different needs. Other marketing oriented benefits of producing a standardised product or service include the extent to which consumers recognise a standard product or service which is produced over time (Pine, 1996) and the lower costs to consumers which are traditionally associated with standardised products.

These considerations are particularly pertinent in light of the operational challenges which are encountered in designing and delivering different levels of customisation. These factors, which impact on the physical ability of an organisation to offer customisation to clients, are now outlined and discussed.
2.4. Delivering Different Levels of Customisation

The ability of an organisation to provide customised service and to ‘learn’ through early customer input into service design and delivery depends on whether the systems and processes in the organisation enable information to be held and used appropriately (Zahay & Griffin, 2003). Therefore the ability of the organisation to provide a particular level of service customisation varies with its capacity to capture and process information provided by the customer early in the service design. The way information is managed also impacts on whether the firm can deliver other components of the ‘service experience’ which are strongly linked to the level of customisation. For example, in standardised service organisations speed and efficiency rather than ‘personalisation’ are key success factors (Zahay & Griffin, 2003), while organisations providing a customised service rely on excellent communication with clients to ensure that their needs are understood and met (Zahay & Griffin, 2003; Edvardsson, 1992, p.18). Therefore operational aspects of service design and delivery such as communication structure must support the delivery of client needs, as well as an appropriate service environment, which is provided according to the competitive strategy of each organisation (Porter 1985, Storbacka, Strandvik & Gronroos, 1994).

2.4.1. Mass Customisation

As discussed, it is an attractive prospect to many organisations to increase the level of customisation offered because this potentially offers greater client satisfaction – which translates to greater profitability – through meeting specific client needs. Likewise, ‘mass customisation’ offers organisations which offer completely customised services the opportunity to introduce efficiencies associated with an element of standardisation. During the 1990s, ‘mass customisation’ was touted as an efficient way of delivering previously
standardised products and services that could meet unique customer needs whilst affording a degree of efficiency through the re-use of the information used in the stable of ‘core choices’ offered to customers (Pine, 1993). This strategy met with significant success in a broad range of industries. For example, bicycle and clothing manufacturers introduced an element of flexibility and offered customers an element of choice whereas they were previously offered standardised options. In an example that mirrors the move from standardisation to customisation, many organisations which traditionally offered highly customised products and services – such as law firms and business bankers – gained efficiencies associated with offering an element of ‘loosely coupled standard choices’ to enter the ‘mass production’ market, whereas they had previously been limited to providing a ‘one-off’ highly customised service to clients. In short, both variation and efficiency are the key benefits to offering a moderate level of customisation. Variations of the tendency to adopt medium customisation through using ‘modularisation’ (Sundbo, 2002) and ‘mass customisation’ (Da Silveira, Borenstein & Fogliatto, 2001) have proliferated, with varying levels of success.

2.4.2. High Customisation

Offering a high level of customisation is accepted as being more difficult and expensive to implement because firms can’t predictably use the efficiencies achieved by re-using pre-developed aspects of any given service. It is primarily offered by organisations that offer a ‘high price, high level of service’ (Hamel & Prahalad, 1990). The traditional ‘cottage industries’ in which skilled artisans and tradespeople worked closely with customers to offer a personalised service exemplify high customisation (Shostack, 1987).
2.4.3. Standardisation

Offering standardised services does not necessarily preclude the organisation from providing an innovative, high quality product or service. It is therefore not suggested that standardisation is necessarily inferior to more customised services. However the process of designing a standard service is distinct from its delivery, because the customer becomes involved only after the service has been designed. To deliver standardised goods and services, the simple principle of economies of scale can allow the organisation to take advantage of the efficiencies that are precluded in offering a ‘one-off’ product or service. For example, if a house is designed by an architect for a single customer, there are high costs incurred in designing, sourcing and fabricating the components of the house. As a result these fixed costs add significantly to the overall cost of the house. The total cost of the house might be $500,000, of which $100,000 represents fixed costs. In contrast, when the same house becomes a ‘project house’ and is offered as a package by a building company to thousands of buyers, the fixed costs incurred in its initial design are dissolved into the cost price for each of thousands of houses – the marginal cost for producing additional houses may remain at $400,000, however the $100,000 in fixed costs will be decreased to $100 per house if 1,000 units are sold.

To take advantage of the efficiencies of standardisation as illustrated, an organisation must effectively store the information and possess the structural ability to ensure that these economies of scale are achieved. Therefore, the ability of the organisation to recall and use information which is used in the design of its products and services could be critical to its success in efficiently and effectively delivering a quality product at reasonable cost.
2.4.4. Reasons for success and failure in implementing different levels of customisation

There have been several failures in organisations’ attempts to change the level of customisation offered (Zipkin, 2001; Pine, 1990). When the operational aspects of delivering different levels of customisation are considered, there are several important factors that need to be held by organisations in offering customised products and services in order to gain a competitive advantage (Zipkin, 2001). The decision to customise therefore comes from not just the marketing perspective concerning customer needs and willingness to pay for customised products and services, but also internal, operational considerations which could limit the ability of each organisation to offer a particular level of customisation.

2.5. Operational perspectives of customisation

An extensive literature has established that different customisation strategies have implications for the structure of the ‘value chain’ involved in designing and delivering these services (Salvador, Rungtusanatham & Forza, 2004; Pine, 1993; Shostack, 1987). The structure of organisations must often alter to accommodate customisation in any industry. For example, when offering high customisation, the customer must have input at the inception of the service so that it can be tailored to their requirements (Shostack, 1987). This contrasts with standardised services in which a customer enters the organisation after the service has been designed and chooses a ‘pre-packaged’ combination to suit their needs. Alternatively, in organisations offering medium customisation, the customer has input after a number of limited choices have already been established and chooses a combination of the limited selection of choices available. Customisation necessitates the elicitation of information from clients and requires firms to increase process flexibility and introduce operations that can
ensure delivery of the correct product/service to the customer (Leichty, Ramaswamy & Zahay & Griffin, 2003; Cohen, 2001; Peters & Saidin, 2000; Shostack, 1987).

Miles (1997, p.9) asserts that the increase in ‘organic’ organisations increases the ability of organisations to offer a high level of customisation to clients. The organic model of the organisation is characterised by inter- and intra-firm information distribution and exchange. Organic ‘teams’ and ‘work groups’ proliferate and continue to dominate discussion regarding the ability of organisations to offer greater customisation and higher quality of service delivery.

This emphasis on teams and information distribution and exchange to accommodate customisation accompanies investigation into the contrasting ‘mechanised’ structure of standardised firms and its likely effect on the inability of an organisation to deliver customised services. In effect, a linear relationship may exist between customisation and information sharing in the organisation. This assertion has been empirically supported. For example, Garson (1988) found a relationship between standardisation in information services and the decreasing contact between ‘core’ employees.

More recently, Porter’s typology of ‘cost leadership’, ‘quality leadership’ and ‘innovation leadership’ suggests that organisations can charge a premium for a product’s uniqueness and therefore rely less on ‘low costs’ than those that standardise. This is problematic in that ‘there is nothing stopping organisations from somehow adopting customisation while also increasing efficiency’ (Hamel & Prahalad, 1993). In addition, a standardised product of high quality might be relatively expensive due to greater diligence being taken in the quality of its design and construction. For example, “Brand X” stereos might be significantly more
expensive than are “Brand Y’s” stereos. However when one looks further than the expected differences in observance to detail and quality, the two firms are likely to have little essential difference in the processes used in the post-design construction of the product.

The multitude of approaches to reconciling a firm’s marketing focus with its internal operations are not new. This is exemplified when one compares Taylor’s early 20th century approach of ‘scientific management’ in which assembly lines manufacture standardised products (Grint & Woolgar, 1997, p.130; Taylor, 1912) with the ‘customised’ cottage industries of the same period, in which manufacturing workers such as blacksmiths were considered to be skilled experts, with autonomy and input into the design of their customised products.

A review of literature pertaining to the operational implications of customisation revealed several factors that strongly affect the ability of an organisation to deliver a customised product or service. These factors relate to whether they equip the organisation to adequately process and use the various types of information used in customising services. These factors are diverse and this study does not attempt to assess their cumulative effect on an organisation’s customisation capability. Of particular interest in this study are factors which relate to workforce management and the capability of employees, working within an organisation’s systems, to effectively deliver customisation. Factors specifically relating to workforce performance which were reviewed and summarised in table 1 may be seen as falling into three broad categories. These are (a) employee skills and abilities (b) information distribution and exchange and (c) goal and process definition. Following is discussion of the type of information (tacit knowledge vs. ‘information’) used in designing and delivering
different levels of customisation, which is followed by discussion of its subsequent impact on these factors.

The above discussion has illustrated the value of examining the processes involved in tailoring services to customers’ specific needs and the marketing benefits which, when carefully considered, often accompany customisation. The following discussion uses this approach to linking strategy with structure as a basis for examining in detail the relationship between customisation and employee skills, information distribution and goal clarity.

2.5.1. The Implications of Tacit Knowledge vs. ‘Information’ in Service Delivery

All services involve an ‘information’ component, which is of particular interest when examining the effectiveness with which the needs of customers can be met. This aspect of designing and delivering services is crucial (Leichty, Ramaswamy & Cohen, 2001). If information is understood in the context of its role in designing and delivering customer satisfaction across sectors, this provides a framework on which organisations may organise their information sharing capacity judiciously to gain increased competitive advantage.

Acquiring, storing and using tacit knowledge in organisations is a constant trade-off between incurring expense and increasing learning potential. Information defines the firm’s ability to meet the specific needs of customers in both the short and long term (Holzner & Marx, 1979). Therefore, the type of information acquired from customers needs to be appropriately stored and drawn from, just as employees in each part of the value chain need sufficient information and the right type of information, to make quality decisions (Galegher, Kraut & Egido, 1990). Whether this information is effectively used by the firm is determined by the skills of employees involved in designing and delivering the service, the extent to which goals are
defined and managed on both a group and individual level and the information distribution and exchange mechanisms that are involved in the design and delivery of services. All of these factors need to allow the firm to adequately deal with the information used in designing and delivering its product or service and thus enable an organisation to deliver its desired level of customisation.

The type of information used has a strong impact on the organisational systems used in transferring and processing it. Tacit knowledge cannot be easily passed around the firm, because it is not widely understood (Davenport, DeLong and Beers, 1998; Starbuck, 1992). Tacit and ‘inimitable’ knowledge is more often required in delivering highly customised or ‘personalised’ service (Zahay & Griffin, 2003). This is because early participation of the customer when designing a customised service impacts on the quantity and type of information that is subsequently used in designing and delivering the service. Greater participation by the customer in the service that is offered often even requires the organisation to not just acquire but to anticipate information about a customer’s preferences and needs. Such knowledge is less easily stored or shared than information which remains the same for each customer or which varies predictably between customers, as occurs in delivering ‘mass customisation’ (Quinn, Doorley & Paquette, 1990, p.59). Therefore, the use of tacit knowledge plays a large role in the design and delivery of highly customised services. When delivering a particular level of customisation, organisations must ask, “Do people have the ability to interpret and process the knowledge?” “Can the information systems deal with the knowledge?” “Can it be defined and documented by processes and goal setting?”

The difficulty of disseminating complex and ‘tacit’ knowledge provides a challenge to organisations in determining how to most effectively design and deliver services that are
based on such knowledge (Davenport, deLong and Beers, 1998, p.43., Starbuck, 1992, p.714). To date, prescriptions for increasing the capability of a firm to ‘customise’ and offer personalised service are based on increasing the capability of the organisation to process a great deal of knowledge through information systems and decision support systems (Jianxin, Quinhai & Tseng, 2003). This has been extensively researched and found to assist firms in delivering medium customization (Pine, 1997). However tacit knowledge – which is often used in delivering ‘highly customised’ services (Shostack, 1987) is not easily codified and is therefore difficult to transfer (Kerr & Tindale, 2004). Therefore, adopting a high degree of information distribution and exchange when dealing with tacit information could result in information deterioration and loss. Rather than focusing on the ability of the organisation to disseminate knowledge in organisations offering high customisation, it may be more efficient and valuable to focus on minimising the need to disseminate knowledge, rather ensuring that employees can adequately acquire and use this knowledge as individual ‘experts’.

2.5.1.1. KSA’s of employees in service delivery

The way that information is obtained, stored and used can either positively or negatively affect employee skills and the ability of the system to adequately acquire and store information needed to deliver customer service. Information-intensive firms have traditionally been considered to be driven by ‘knowledge workers.’ However, many industries traditionally engaging in skilled, ‘white-collar’ work have shifted from ‘knowledge-intensiveness’ to ‘information-intensiveness’ (Garson, 1988) due to cost-cutting by organisations, as well as organisational innovations such as technology (Klein, Heinz & Hirschheim, 1985, p.21). This is an important delineation as it implies that services traditionally delivered by skilled, autonomous knowledge workers who were once relied upon to make expert judgments, can now be processed using management information systems or
databases. ‘Information’ is much easier to store, describe and manipulate than is knowledge (Nonaka, 1991, p.100). This phenomenon has driven the increase in “mass customisation” (Pine, 1990). One can therefore see that the skills of employees continue to play a large role in determining the firm’s ability to deliver highly customised services, which could act as a valuable, inimitable competitive advantage.

Shostack (1987) presents contrasting models of decision-making requirements in completely customised services and services offering medium customisation. While both are characterised by customer involvement at the inception of the service, complete customisation requires greater decision-making latitude of employees, based on judgment. If an organisation adopts a completely customised approach, this latitude is likely to apply throughout the value chain (Starbuck, 1992).

In organisations offering high customisation, in which tacit knowledge needs to be held by service delivery employees, this knowledge can provide the essential mechanism which enables employees to make their own informed judgments (therefore upholding their value as experts).

In organisations offering medium customisation, in which explicit information is held in databases and information systems, these information systems can serve as a mechanism to store and distribute this information, thus replacing the need for ‘highly skilled’ employees (Klein, Heinz & Hirschheim, 1985, p.74). Organisations offering ‘medium customisation’ may rely on both tacit knowledge of employees as well as explicit, defined information. Because customers choose from a predetermined and often complex menu of options, employees involved in designing and delivering the service often need to acquire a
knowledge of the customer’s needs, as well as having knowledge about the product or service being provided. Decisions regarding the service delivery are made within the parameters set out by limited choices made by the customer.

Standardised services also rely on information which can be more easily stored and manipulated using information technology than can knowledge of experts (Nonaka, 1991, p.100). Therefore, the knowledge and skills of employees may need to be geared towards being able to operate the system that holds and disseminates the knowledge, rather than acquiring a strong knowledge of the information held in the system. In addition, these employees would have little decision-making autonomy and therefore need not possess the skills to make material decisions with regard to the service being offered.

In summary, services that offer a high level of customisation are characterised by a need for greater expertise to be held in the area of the service being delivered, by the people who deliver the service (Zahay & Griffin, 2004). Organisations offering medium customisation must carefully establish and analyse client needs, while at the same time recalling information regarding which existing services most effectively meet their needs. Organisations which provide standardised service have clients with relatively homogeneous needs which can be met through prescribed guidelines. Information in these organisations requires little interpretation and as such, KSA’s held by service delivery staff are less important. Therefore, the level of employee KSA’s is proposed to increase with the level of customisation offered by an organisation, as outlined in Hypothesis 1.

H1: The KSA’s required by service delivery employees increases with the level of customisation offered.
2.5.1.2. Information Distribution and Exchange in Service Delivery

The key elements of the design and delivery of services are the storage of information or knowledge and the subsequent refinement and interpretation of data to meet the requirements of customers (Meyer & Zack, 1996). While the actual process this is done by in organisations is unique, depending on individual features such as size and adoption of technology, literature has indicated that information distribution and exchange varies with the level of customisation.

There has been significant analysis linking customisation of information-intensive industries with ‘information distribution and exchange’ (Pine, 1997; Shostack, 1987). This indicates that increasing customisation raises the need for of information distribution and exchange among employees. However because the type of information dealt with when offering high customisation is often tacit and held by experts who deal directly with customers, too much information distribution and exchange could compromise the quality of this information.

Employees who deliver standardised services have minimal decision-making latitude and little detailed information required regarding customers’ specific needs. However, vast and complete information is available as to the key components of the service which have been designed and are ready for delivery to the customer. They therefore resemble an ‘assembly line’ in which front-line employees have little need for upward or horizontal communication (Garson, 1988). Product information can be quickly disseminated to front-line employees via databases. In a standardised service, the ‘value added’ often comes not from the expertise of people in the service firm, but from information technology (Quinn, Doorley & Paquette, 1990, p.59). This is because, as discussed, there is no need for employees to interpret or
analyse complex data. Therefore, in such organisations there is little need for information
distribution and exchange among employees.

At the opposite end of the spectrum, in highly customised services, specialised ‘experts’
determine the specific needs of clients and draw from a knowledge base to evaluate these
customer needs and provide a unique solution for the customer (Bowen & Lawler 1995). A
relatively high level of decision-making and interpretation of information is therefore needed
as the service provider must make complex decisions to fulfill the customer’s needs. The
difficulty in transferring tacit knowledge, either technologically or through interpersonal
contact, is widely documented (Kerr & Tindale, 2004). Because of the complexity of
decisions and the risk of information loss through the information sharing process, each
expert must often directly liaise with the client to ensure that decisions are made using quality
information (Starbuck, 1992). In addition, the risk of information loss means that information
distribution and exchange is more difficult (Kerr & Tindale, 2004) and that although groups
tend to outperform individuals in many domains, groups can also fall prey to the same
heuristic-based biases found at the individual level (Smith, Tindale & Schneider, 1998;
Argote et al. 1991). Smith et al (1998) found in an empirical study that very small groups or
individuals perform more successfully when the information dealt with is complex. This
lends further credibility to the assertion that when complex, tacit knowledge is used in service
delivery, extensive sharing of information throughout the service delivery process is not
necessarily advantageous.

However, organisations offering ‘medium customisation’ provide elements of both
standardisation and customisation and therefore may rely on the expertise of employees to
make unstructured decisions, while also capitalising on pre-existing, standardised aspects of
their service (Pine, 1993). In these organisations, employees assessing complex needs of clients rely on information systems or collaboration with colleagues to provide them with knowledge of standardised aspects of the service. Because of the complex flows of information involved, information distribution and exchange between such employees determines the success of the service in satisfying customers’ needs. In this type of organisation, communication systems facilitate contact between employees.

We propose that the level of interaction between employees in the value chain should therefore vary in a curvilinear way, according to the type of knowledge used, as outlined in Hypothesis 2.

H2: The degree that service delivery employees are actively involved in information distribution and exchange will be significantly higher in organisations offering medium customisation, than in organisations offering standardised or highly customised services.

2.5.1.3. goal clarity in Service Delivery

As information dealt with becomes less tangible and the processes through which it is processed becomes less shared among groups, goals relating to quality and quantity – as well as process definition available to service delivery employees decreases.

As discussed, in firms offering customised services, there is a need for service delivery employees to analyse complex knowledge and make recommendations based on judgment (Sveiby, 1997). The nature of this detailed knowledge and the processes and outputs involved in applying it to the customer’s service are not easily quantified. In addition, the existence of benchmarks on which to compare performance in a one-off service design and delivery are
extremely limited. The issue of quantity can become almost immeasurable in some cases and
the quality of the service provided is often subjective, not easily measured.

In organisations that offer an element of customisation, some objectivity can be achieved in
observing the process through which the service is delivered (Pine, 2004) because each stage
of the service delivery process deals with tangible information. In addition, the outputs of
medium customisation are more apparent, in terms of both quality and quantity. The number
of customers dealt with in any particular industry increases with standardisation, so one can
surmise that a degree of quality and quantity of output can be better observed in organisations
offering medium customisation, than in those offering high customisation.

In organisations that offer standardised services, quantity provides a reliable performance
goal (Taylor, 1912) because as discussed, greater economies of scale are required to take
advantage of the efficiencies afforded through standardisation of services. Quality is also
significantly easier to measure; when the service is already designed and the customer knows
from the inception of the service what they need it is relatively easy to establish whether they
received a service that met their needs. Because the information dealt with is more explicit
than in services providing a degree of customisation, more specific instructions can also be
provided to service delivery employees as to the process through which to deliver the service.
Therefore goal clarity is proposed to be greater in standardised services. This is a significant
issue because it impacts on the human resource management and leadership approaches used
in the organisation to elicit high performance from service employees. For example, a
‘management by objectives’ structure would be difficult to apply to an organisation offering
high customisation, in which output is difficult to measure, as outlined in Hypothesis 3.
H3: goal clarity decreases linearly as the customisation offered increases.

2.6. The Implications of Operational Needs: Changing Customisation Level

Many firms have restructured their workforces (Garson, 1988; Quinn & Gagnon, 1986, p.97; Klein, Heinz & Hirschheim, 1985) largely due to the need to sustain low costs or offer greater flexibility in the increasingly competitive environment. However by attempting to capture the information held by a skilled and knowledgeable workforce – in effect, attempting to quantify tacit knowledge – firms may preclude themselves from returning to a ‘high customisation’ strategy. This is because the capabilities of a uniquely skilled workforce cannot be simply embedded in an organisation’s information system. In effect, firms may ‘burn their bridges’ in changing the level of customisation offered because of the distinct systems which are required to effectively deliver any single level of customisation.

While resulting in cost saving and often greater productivity to organisations (Klein, Heinz & Hirschheim, 1985, p.28), ‘mechanisation’ of the workforce through Taylorism can have negative implications for organisations. If the expert judgment of professionals is replaced by computerised ‘expert systems,’ this means that information becomes imitable because this technology can be purchased by organisations. Therefore, it does not provide the organisation with a sustainable competitive advantage (Porter, 1997, p.17). This de-skilling of workers also results in the waste of potentially valuable skills. From the sociological perspective, this de-skilling causes distress, depression and other negative effects for employees (Garson, 1988, p.79). De-skilling raises concerns in the ability of organisations to deliver high customisation, based on the fact that tacit information held by these employees may no longer be harnessed and as a result, customer needs may not be met. Likewise, organisations that try
to change their level of customisation without significantly changing the operations involved in service design and delivery may find it difficult to achieve this.

Consideration of the ease and expense with which an organisation could introduce the structural changes required to achieve customisation therefore needs to be taken. For example, a firm might want to add an element of customisation to a large-scale standardised product or service. Therefore the capabilities of the system to capture information from the client and apply it to the product or service being produced could require greater knowledge on behalf of personnel who deal with customers and information technology which facilitates communication. This could involve hiring and training a new workforce and spending a lot of money acquiring and integrating its information system. This expense introduces an element of risk and could be incurred only to discover that customers are not willing to spend significantly more for a customised product.

In addition to the considerations that need to be met when changing a customisation strategy, introducing new operations or technology could also have implications for the ability of the organisation to continue offering a particular level of customisation. For example, if a call centre offering standardised service to customers were to purchase technology which enabled its employees to communicate more fluidly, this might not be useful and would result in wastage. Likewise, an organisation offering complete customisation could de-skill its employees to save costs and capture information in a database, only to find that the innovation and tacit knowledge that is no longer held by its employees prevents it from delivering a high value-added service.
Therefore, organisations are often limited by their structures to offering a particular level of customisation and these structures are not easily replaced, as they could involve changing the skills and job structures needed by the entire service delivery workforce. These constraints needs to be carefully considered when organisations change their structures, or when they attempt to change the level of customisation offered.

2.7. Summary

There is an increasingly unclear distinction between services and products, due to their overlap. Traditionally, services are distinguished by their intangibility, perishability, production/consumption simultaneity and participation of the consumer. However, ‘services’ without customisation have a high ‘product’ content. Therefore, management research covering services needs to focus on the stage of production that relates to service component of the design and delivery process, rather than the arbitrary measure of physical output.

Examining customisation as a key factor of strategy impacting on organisational operations allows us to evaluate a construct which increases and decreases along a continuum with no replication, because the level of customisation is a single construct which can be measured on a ‘medium’, ‘high’, ‘low’ basis. Evidence indicates that customisation is also strongly linked to the organisation’s practices involved in the design and delivery of the product or service.

Involving the customer at different stages in the service design facilitates the firm in capitalising on the potential benefits gained from different levels of customisation, which have been widely discussed. However critical examination needs to be made into the demand for customisation, as well as the internal operations which impact on an organisation’s ability to provide these levels of customisation.
The ability of an organisation to provide customised service and to ‘learn’ through early customer input into service design and delivery depends on whether the systems and processes in the organisation enable information to be held and used appropriately. As discussed, it is an attractive prospect to many organisations to increase the level of customisation offered because this potentially offers greater client satisfaction – which translates to greater profitability – through meeting specific client needs. Likewise, ‘mass customisation’ offers organisations which offer completely customised services the opportunity introduce efficiencies associated with an element of standardisation. Conversely, to take advantage of the efficiencies of standardisation, an organisation must effectively store the information and possess the structural ability to ensure that these economies of scale are achieved. Extensive literature has established that different customisation strategies have implications for the structure of the ‘value chain’ involved in designing and delivering these services.

A review of literature pertaining to the operational implications of customisation revealed several factors that strongly affect the ability of an organisation to deliver a customised product or service. These factors relate to whether they equip the organisation to adequately process and use the various types of information used in customising services and fall into three broad categories. These are a) employee skills and abilities, b) information distribution and exchange and c) goal clarity. The type of information (tacit knowledge vs. ‘information’) used in designing and delivering different levels of customisation and its subsequent impact on these factors is discussed in this thesis.
Services that offer a high level of customisation are characterised by a need for greater expertise in the area of the service being delivered held by the people who deliver the service. Organisations offering medium customisation must carefully establish and analyse client needs, while at the same time recalling information regarding which existing services most effectively meet their needs. Organisations which provide standardised service have clients with relatively homogeneous needs which can be met through prescribed guidelines. Information in these organisations requires little interpretation and as such, KSA’s held by service delivery staff are less important. Therefore, the level of employee KSA’s is proposed to increase linearly with the level of customisation offered by an organisation.

Secondly, the level of interaction between employees in the value chain should vary non-linearly according to the type of knowledge used. In a standardised service, the ‘value added’ often comes not from the expertise of people in the service firm, but from information technology. This is because, as discussed, there is no need for employees to interpret or analyse complex data. Therefore, in such organisations there is little need for information distribution and exchange among employees.

Finally, the study proposes that goal clarity decreases linearly with the level of customisation offered because of the nature of the information used in service design and delivery and the ease of defining mechanisms with which to process this information.

It is important for organisations to seriously consider their ability to offer a particular level of customisation before they attempt to increase or decrease the level of customisation that they offer. This is because of the distinct configurations of the operations required in delivering different levels of customisation, which are not easily changed when embedded in the
organisation. Management and leadership approaches in organisations need to befit the operational configurations involved in delivering each level of customisation, to provide reward and leadership systems which encourage people and groups to deliver a high standard of service.

2.8. Hypotheses

H1: The KSA’s required by service delivery employees increases linearly with the level of customisation offered.

H2: The degree that service delivery employees are actively involved in information distribution and exchange will be significantly higher in organisations offering medium customisation, than in organisations offering standardised or highly customised services.

H3: goal clarity decreases linearly as the customisation offered increases.
3. METHODS AND RESULTS

3.1. Research Strategy

The research was undertaken in two phases, respectively the exploratory, qualitative phase which took the form of case studies, followed by the confirmatory, quantitative phase. Findings from the qualitative study provided a basis for further exploring the issues being studied and also in the later phase was used for designing and testing the questionnaire used in the quantitative research (Eisenhardt, 1989). The quantitative study was then carried out to establish the generalisability of the initial case study findings by statistically testing the hypotheses.

The use of qualitative research as a basis for issues examined in the quantitative research phase ensured congruity between investigative and confirmatory research. This ensured that internally valid constructs were used to test the proposed model (Eisenhardt, 1989; Jick, 1979).

The qualitative and quantitative phases of the research were undertaken with the purpose of investigating the main hypotheses for the study as outlined in the previous chapter. These are summarised in Table 2.
Table 2: Summary of Hypotheses

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<th>Standardised</th>
<th>Medium customisation</th>
<th>Customised</th>
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<tr>
<td><strong>goal clarity</strong></td>
<td>High</td>
<td>Limited</td>
<td>Low</td>
</tr>
<tr>
<td><strong>KSA’s</strong></td>
<td>Low, process oriented</td>
<td>Medium, process and content orientated</td>
<td>High, content oriented</td>
</tr>
<tr>
<td><strong>Information distribution and exchange</strong></td>
<td>Limited</td>
<td>High</td>
<td>Limited</td>
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</table>

3.2. Case Studies

Firstly, case studies were carried out to develop an understanding of the full range of factors involved offering each level of customisation. Yin (1994, p.23) describes case studies as ‘an empirical enquiry that investigates a contemporary phenomenon within its real life context when the boundaries between phenomenon and context are not clearly evident’. Although a theoretical underpinning was established for the issues being studied, the study was instigated by observations made in ‘real life’ and therefore the research began with an inductive approach. The most appropriate initial method of analytical inquiry was therefore deemed to be the case study. In particular, the case study method was chosen because it meets the needs of an inductive research approach for a number of reasons, all pertaining to the need to gather a broad array of information from different perspectives within the organisation:

(a) It copes with the technically distinctive situation in which there may be many variables of interest

(b) It relies on multiple sources of evidence with data needing to converge in a triangulating fashion

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It benefits from the prior development of theoretical propositions to guide data collection and analysis.

This phase involved personal interviews with managers and line employees in six firms (two offering each type of customisation) and explored issues of key interest that arose from literature. These were information distribution and exchange, goal clarity and KSA’s required by staff involved in designing and delivering the service.

3.2.1. Sampling

Six cases (two organisations having each type of customisation) were investigated using qualitative research. The member cases in multiple unit case studies are selected according to replication logic, where cases are chosen for similar characteristics (Yin, 1994). Therefore, while business units offering different levels of customisation were studied, similarities in the type of business unit being examined offered an important source of consistency and a similar ‘background’ against which to view the constructs being examined. This reduced the potential for spurious factors which could account for differences in the variable factors being studied. Therefore business units were chosen, where possible, with similarities in size and ownership (Perrow, 1972) whilst also offering pure examples of each customisation strategy which enabled a focus on theoretically useful cases which filled the conceptual categories (Eisenhardt, 1989, p.533).

A purposive, two-phase sampling procedure was undertaken. Industries offering typical customisation strategies within service industries were analysed. It was determined that the following types of businesses offering services typify each level of customisation:

- Standardised services
Standardised services are typified by general retail, consumer banking and call centres, because customers are provided with a number of services (e.g. bill paying, finding out information) which are designed before the customer enters the organisation. There is little to no customisation in these services and there is generally little desire on the customer’s behalf to access a high level of customisation in the customer/organisation relationship. Such businesses generally follow a high-volume marketing strategy which is supported by the cost structures involved in delivering the service.

Medium customisation

These services are typified by business-to-business financial services. These organisations offer services that are somewhat customised – for example, a range of investment or superannuation choices can be modified to some extent to suit the customer’s needs, however the choices are limited and they are not designed from their inception with each customer’s specific needs in mind. Such businesses take advantage of the efficiencies achieved through the re-use of information which is used in each ‘new’ service delivered and may therefore service a relatively high volume of clients at a lower cost than organisations offering a fully customised service.

High customisation

Services offering high customisation are typified by research consultancies: the customer generally approaches the organisation with a specific need and a solution is designed ‘from the ground up’ to ensure that the customer’s needs are met. Such businesses generally follow a high-priced and low-volume marketing strategy which is necessitated by the cost structures involved in delivering the a completely customised service.
Business units in the above industries were chosen for the study. However within any industry group, customisation strategies differ between organisations. Therefore business units offering services which, within their industries, are relatively typical were selected for the study. This was achieved by contacting organisations which had participated in prior research and therefore some prior knowledge was held regarding the nature of their services. Using this process, two business units within each industry were identified as providing a level of industry customisation typical for the industry concerned and thus organisations offering ‘pure’ customisation strategies were examined.

Conformance to each customisation strategy was confirmed by contacting senior line managers of organisations and asking them questions about their organisation’s level of customisation and cost position within their markets. Business units, rather than corporations or entire organisations were used because multidivisional firms are more likely to have several different market strategies across autonomous business units (Govindarajan & Fisher, 1990).

Selection of participants within each organisation was achieved by randomly selecting at least three management and line employees from an alphabetical list of employees who were able to be interviewed. Where selected participants were unavailable to be interviewed due to time or workload commitments, another person was selected from the list. No guidance was given by employees in organisations as to the selection of participants, which increased the validity of the information gathered, by reducing potential selection bias. Table 3 on page 40 indicates the number and type (management or line) of employees interviewed. The use of multiple sources within organisations had several advantages. It ensured that greater reliability and richness of data were achieved due to reduced respondent bias and provided capacity to
assess agreement as a cross-check on validity. In addition, it provided access to a range of perspectives from within the business unit. Documentation such as performance appraisal forms and job analyses was gathered supporting the data that was collected and cross checking for consistency with interview data and initial classification (Eisenhardt, 1989).

**Unit of Analysis**

The case as a ‘unit’ of study can take on a number of different forms including a single person, a group, a business unit or an entire corporation (Quine & Taylor, 1998). The central requirement for units in a case study is that they are capable of being treated as singular, self-contained units with the boundary between them and other units clearly specified. This study has adopted this approach, using the business unit as the unit of analysis, being treated as singular and self-contained, with the boundary between it and other parts of the organisation clearly delimited. Consistent with this approach, the information collected from individuals was consistent between respondents within business units in the research and data was therefore established as being convergent within business units. Thus, the results reflected the business unit rather than the individual circumstances of the respondents.

**Table 3: Details of participants in interviews**

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Customisation type</th>
<th>No of managers interviewed</th>
<th>No of line employees interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Call Centre</td>
<td>Low</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Local Govt Call Centre</td>
<td>Low</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Insurance Customer Service Centre</td>
<td>Low</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Financial Management</td>
<td>Medium</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
3.2.2. Data Collection

A qualitative, semi-structured interview approach (see Appendix 1) was consistently administered in the focal business units. Eighteen interviews were carried out with employees involved directly in designing and delivering services to customers. The interview data was collected from July to August 1999. Where possible, one participant was interviewed at a time, however some interviews included two participants due to respondents’ time constraints. All interviews were taped and transcribed at a later date; this prevented the need for notes to be taken and allowed the interviewer to concentrate on the proceedings of the interview. Interviews lasted for between 10 minutes and half an hour, with most lasting for approximately twenty minutes.

The interviews focused on establishing how the level of customisation offered by a business unit directly affects a) information distribution and exchange which occurs between staff involved in designing and delivering the service; b) the type and level of employee skills needed to design and deliver the service; and c) goal clarity.

Rigour

The traditional terms ‘validity’ and ‘reliability’ in qualitative research may sometimes be less easy to demonstrate than in quantitative research. However there remains a need to show trustworthiness and rigour in research and to operationalise qualitative forms of these
concepts in order to produce confidence in the results of the studies (van der Heide, 1998; Gifford, 1998). Rigour was achieved in this study through several mechanisms. These were:

(a) The semi-structured interview approach allowed the researcher to gain the required information whilst also allowing participants to share their own perspectives on aspects of the phenomenon under investigation.

(b) Questions were developed based on the objectives of the project. Rapport was developed by the researcher with participants and they were assured of confidentiality and anonymity in order for them to express their thoughts openly and honestly.

(c) The interpretive nature of the study meant that it provided a ‘whole picture’ rather than confirm a hypothesis. The applicability of the research was therefore not just to make conclusions based on the results but to guide the additional quantitative research which was undertaken as part of the study.

(d) An ‘audit trail’ is an important part of case study reporting (Yin, 1994; Miles & Huberman, 1994) which allows the reader to follow a logical chain of evidence from start to finish. This was achieved by attaching the interview questions (see appendix 2) which can be clearly linked to the conclusions which are drawn from the research.

### 3.2.3. Data Analysis

The data from interviews was classified using a structured approach as outlined in Miles and Huberman (1994). A concept tree was developed which incorporated the constructs of information distribution and exchange, KSA’s required by staff involved in designing and
delivering the service and goal clarity. These constructs and the relationships between them were derived from the surveys conducted. Because the surveys were largely guided by theoretical constructs which were identified as being important considerations in the delivery of different customisation levels, the structure of the concept tree was consistent with the overarching principles being investigated by the research, as well as the information which emerged in the course of the interviews.

Incidences in which the above issues were discussed in each interview were highlighted and put into a spreadsheet, thus summarising the interviews so that they could be effectively analysed. A brief summary of this spreadsheet is contained in Appendix 3, which highlights the comments made by participants in support of the hypotheses. In all cases, such comments significantly outweighed those which contradicted the hypotheses, both in number and in expressed importance.
After the interviews had been conducted and documentation collected, a holistic approach was taken toward analysing the data held in the summary document. For example, comments which were made were assessed with regard to the context in which they were made, rather than counting the number of times an issue was discussed using qualitative analysis software. A quantitative content analysis was inappropriate in this study because there was not a very large quantity of data to analyse and qualitative analysis was sufficient to draw conclusions.

3.2.4. Case Study Results

3.2.4.1. Type of Information

The case studies revealed that the ‘tacitness’ of information used in service delivery increased with the level of customisation being offered. Where knowledge was tacit and held by employees and not in databases or information systems, it was difficult to delineate exactly how this knowledge was used in the design and delivery of a customer service. Common comments from employees of organisations offering highly customised services included ‘Because most of our work involves making decisions about what is done for the client, nobody can really see what we’re doing because most of the work is going on in our minds...’

A relationship between customisation and the type of information used in designing and delivering goods and services has previously been established in several studies, as outlined in the literature review. However, ‘information explicitness’ underpins the further propositions put forward in this study. As previously discussed, ‘tacitness of information’ plays a large role in whether work groups are able to implement clear goals and processes and it affects the skills and processes required to effectively store, retrieve and use information. Therefore, while it is not a central hypothesis due to its extensive acceptance in extant literature, the relationship found in this study between the explicitness of customer service
information held in organisations and the level of customisation offered is an important
observation is valuable. This finding allows us to observe the dynamics and further
explanations underpinning other interrelationships in each case, which is a significant
purpose of qualitative inquiry.

3.2.4.2. Information distribution and exchange

In accordance with Victor and Blackburn (1987), interviews indicated that as the richness of
information used by employees increased, so did the time and difficulty of communication
between employees.

**High customisation**

Employees in organisations offering high service customisation felt less need to formally
make joint decisions or work directly together than were employees in organisations offering
medium customisation. Typical responses in customising organisations included: ‘It is much
more effective … and efficient … to use your own knowledge and then you can perhaps hold
an informal meeting where people bounce ideas off each other – but in the end you’re the one
who’s answerable to the customer and that’s because you’ve got the expertise’. ‘We used to
have a team-based approach, but now we work much more independently and focus on
delivering what the client wants, without having to synchronise our work with someone else’s
just for the sake of it.’

While employees in organisations offering high customisation did seek advice from members
of their work groups, this was on a less regular basis and was often carried out regarding
administrative issues such as workloads, or to informally ‘bounce ideas’ off colleagues.
Formal communication channels were not established and records were not kept regarding
communication between staff involved in designing and delivering the service. This indicates that formal communication was not an important part of decision making.

Reasons given for the tendency of staff to work independently rather than in groups in organisations offering high customisation included several considerations. First, there was a strong need to maintain regular interaction with customers. Employees engaged in delivering services in organisations offering high customisation tended to have more meetings with each client than did employees in organisations offering other levels of customisation. The distinction between ‘front line’ employees and ‘behind the scenes’ employees was also less pronounced in organisations offering high customisation. Most staff involved in delivering services in these organisations freely contacted customers regarding aspects of the service being delivered.

Medium customisation

While employees in high customisation organisations minimised formal interaction, this contrasted with the tendency for employees in organisations offering medium customisation to have one point of contact for the customer (in this study, usually a consultant) and a complex ‘behind the scenes’ formal communication system which delivered the service to the customer via this point of contact. The comment that ‘every recommendation that I make about what we give the customer is documented and nobody goes ahead without written word… it’s a bit cumbersome sometimes really but it’s the best way’ indicated that despite any inefficiencies that are encountered in the information sharing process, information distribution and exchange is an extremely important part of the service design and delivery. In addition, comments such as ‘it’s not difficult to get the information across – in fact usually
it’s a matter of black and white’ indicate that information is relatively easy to share and that loss of quality in the information sharing process is not significant.

Employees of organisations offering medium customisation commonly emphasised the need for constant transfer of information among employees. Typically, while customer interface employees had an in-depth, broad knowledge of the service being provided, more detailed, specialised information also needed to be available. Overall there was therefore a higher reporting of information distribution and exchange and joint decision making between colleagues in organisations offering medium customisation.

In addition to the information shared between employees, customers typically provided information regarding their relatively tangible needs prior to the design and delivery of the service, but were not strongly involved in the design and delivery of the service after their initial contact with the business unit. This meant that the information used in such organisations was more concrete and unchanging than in organisations offering high customisation. Therefore there was less emphasis on face-to-face communication and customer contact and a greater focus on communicating and negotiating through non-personal channels such as email, which are more appropriate for the transfer of tangible information. For example, one organisation used a component of standardised information in its service delivery, which was updated as needed by specialised employees, through its ‘intranet’. While joint decisions were made between employees as to the specific requirements of each customer, technological communication provided a source of efficiency, enabling valuable communication channels to be established through transfer of large quantities of information. These factors, considered to be important in organisations offering
medium customisation, were clearly not used by employees of organisations offering a highly
customised service.

**Low customisation**

In organisations offering low customisation, customer service staff directly liaised with
customers, however this was not with the purpose of needing to gather ‘high quality’
information but simply because the only requirement was to convey pre-existing information
to customers.

Organisations offering standardised services were characterised by brief communication with
customers and highly structured guidelines for service design and delivery. There appeared to
be little or no need for information distribution and exchange between employees in such
business units. Medium customisation business units emphasised computer-based
communication, in which information was accessed from a large database which held all the
information required to deliver customer service.

Despite their similarities in terms of accessing large databases of knowledge in the design and
delivery of services, the key contrasting factor between business units offering medium and
low customisation was the lack of two-way communication between employees in
standardised services. A typical comment was ‘we don’t really need to talk to each other
except if an exceptional circumstance arises.’

Communication in organisations offering standardised service also played more of a social
support role than an information-sharing role. ‘It’s nice to have people around because if you
are upset after speaking to a really rude customer, someone will always ask if you’re okay and ask if there’s anything they can do.’

In accordance with the hypotheses, interviews provided evidence that there are clearly defined differences in the roles of information distribution and exchange between customised, medium customisation and standardised services. While organisations offering customised and standardised services are characterised by little need for information distribution and exchange among employees, organisations offering medium customisation more greatly emphasise the role of frequent inter-departmental or interpersonal information distribution and exchange.

3.2.4.3. Process definition

No relationship was found between process definition and level of customisation offered by employees. In all organisations, processes were not explicitly defined and when they were, this was clearly attributable to factors other than the level of customisation offered. For example, the statement was made in organisations offering medium customisation that ‘because of legal ramifications, we need to document everything that is done for customers… this is not a function of our operational needs but the nature of the service that we provide’. This indicated that process definition may be largely due to a number of factors in addition to the level of service customisation offered. Process definition was therefore not further pursued in this study.

3.2.4.4. goal clarity

The interviews identified that work goals and outputs become less explicit as customisation increases. For example, one employee in a highly customised organisation stated ‘I could have no visible output on one day and seem like I’ve been very unproductive but on another
day I might do a whole report for a client... although we have deadlines no-one can look at what we do in a randomly chosen day and say ‘yes, you’ve been productive or unproductive.’

Organisations offering medium customisation also reported a moderate level of goal clarity, with return on investment to customers able to be compared with industry and organisational benchmarks. The ability to measure performance against goals in organisations offering medium customisation is enabled not only by the higher level of goal clarity but also by the comparatively higher number of customers serviced by organisations offering medium customisation than those offering high customisation. This factor also meant that the volume of work done by employees in organisations offering medium customisation was able to be evaluated to a greater extent than in those offering high customisation. Likewise, employees in organisations offering highly standardised service commonly indicated that their work goals can be broken even into daily measures. This is demonstrated by the fact that the call centres printed out daily reports of each employee’s average call time, calls answered and time spent on breaks. These insights support the proposition that goal clarity decreases as the level of customisation offered by organisations increases.

3.2.4.5. Definition of Processes

The case studies revealed that the work undertaken became more the domain of expertise held by individuals as customisation increased. As a result, the processes involved in transforming information into a value-added customer service were more well-defined in business units offering low customisation than in high customisation. Where knowledge was held by employees and not in databases or information systems, it was difficult to delineate exactly how this knowledge was used in the design and delivery of a customer service. Common comments from employees of customised organisations included ‘Because most of
our work involves making decisions about what is done for the client, our supervisors can’t really see what we’re doing because most of the work is going on in our minds... you can’t tell someone how to make a decision.’

A need to abide by certain explicit standards and processes was emphasised in organisations offering medium customisation. Employees needed to maintain records of all communications made between them and clients/colleagues. A substantial emphasis was put on definition of processes in these organisations. Explanations included the fact that several staff are involved in delivering the service to customers and to maintain accountability – or even just to keep track of work in progress – some prescriptive measures need to be taken in the processes and protocols followed by staff in delivering the service.

In organisations offering standardised service, statements such as ‘the main thing we need to be able to do is use the computer system which has defined procedures that you have to follow’ were encountered frequently. In addition, employees and managers in organisations offering standardised service noted that it was easy for a supervisor to observe or listen to the employee working (e.g. by ‘hooking in’ to their telephone conversations) and make judgments as to how their work could improve.

Therefore, the hypothesis that process definition and customisation are linked had initial support from the qualitative data.
3.2.4.6. KSA’s required by staff involved in designing and delivering the service/KSAs Required

Not surprisingly, interviews revealed that the types of and levels of skills needed by employees in delivering different levels of customisation differed vastly. Both managers and line employees in different business units reported significant differences in their duties and the knowledge and skills needed to perform their jobs, including qualifications and/or experience required, knowledge of the core service vs. knowledge of the systems involved in delivering the service and the communication and interpersonal skills needed to achieve customer satisfaction.

Employees in business units providing a highly customised service were revealed to require a detailed knowledge of the particular aspects of the service on which they work or specialised in a niche area of a field, relating to the service being delivered. Relevant qualifications, reinforced by significant experience in the field of the service offered were cited as being essential in enabling staff to perform their jobs. Comments such as “our clients require a very high standard of service delivery and the things I learnt during my university study are the key to being able to deliver that service” were common among staff working in business units that offered a high level of customisation. Typical job descriptions were examined and it was clear that qualifications and/or significantly greater experience were required in business units offering a high or medium level of customisation than in those offering low customisation.

Similarly to those in organisations offering high customisation, interviews and documentation indicated that employees in organisations offering medium customisation required indepth knowledge of the subject matter of the service being delivered. The skills differed more
widely in business units offering medium customisation than in those offering high
customisation. However, whereas employees delivering high customisation were experts with
a more holistic knowledge of the service being delivered, most of those involved in
delivering medium customisation possessed a less holistic and narrower knowledge,
specialising in a particular aspect of the service being delivered. For example, in the financial
consultancy which offered medium customisation, the ‘customer interface’ was made of one
key employee with a generalised knowledge of the service being delivered, who was
supported by several employees who possessed more specific expertise in particular facets of
the service being delivered. A ‘financial planner’ interviewed customers, using a general and
highly expert knowledge of the service. However ‘behind the scenes’, in the specific sub-
areas of taxation, superannuation and investments which were involved in the financial
consulting process, specialists with in-depth knowledge of these areas had the greatest
influence in regard to the service that was actually provided to customers.

Employees in business units offering standardised services required high proficiency in
searching for data and establishing customer needs and required little indepth knowledge of
the service being provided. One observation encapsulated the issue of the skills required in
business units offering standardised service: ‘All the information I use is in the system and if
I don’t know how to use the system – or if the system is ‘down’ for some reason, then I
wouldn’t be able to provide the service that I’m here to deliver’. However the level of
experience and/or qualifications was a less important requirement in such organisations. For
example, in one of the organisations examined which offered a standardised service, a two-
week training course which covered the service and use of the computerised system was
deemed to provide staff with all of the knowledge required to perform their jobs adequately.
3.2.2. Case Study Discussion

Not surprisingly, there were some similarities between organisations offering different levels of customisation. Firstly, case studies indicated the importance of technology and easy-to-share information in organisations offering medium and low customisation. Second, organisations offering high and medium customisation were both characterised by highly experienced and qualified employees, whereas standardised services were delivered by staff whose skills in delivering the service were more easily developed.

An important consideration in the provision of service is not merely the quality of the service provided but the customer’s perception of the professionalism and environment in which the service is provided (Shostack, 1987). Interviews indicated that for this reason, customers of organisations offering high specialisation required a high level of trust and confidence in the people who delivered the service. This could partly explain why organisations offering high customisation were characterised by close customer contact of staff who were responsible for designing and delivering the service. Customers were typically involved throughout the service design and delivery, often providing continuous feedback as to their satisfaction with the product or service while it was still in its design and delivery stage.

The case study findings clearly indicated that there was a basis for further investigation into the relationship between customisation and formal information distribution and exchange, goal clarity and skills required to design and deliver services. Significantly different patterns for these factors were found in organisations offering different levels of customisation.
3.3. **Quantitative Research.**

3.3.1. **Introduction**

After initial support was found in the case studies for the hypotheses, they were quantitatively tested so that statistical support in a broader selection of organisations could be established. Respondents of the quantitative questionnaire were asked to answer questions which directly related to the effect of customisation on (a) information distribution and exchange (b) employee skills used in delivering the service and (c) goal and process structure.

3.3.2. **Sampling**

Of thirty organisations approached to participate in quantitative research, twenty-two organisations agreed to participate in the research, as detailed in Table 4. This represented a participation rate of 86%. Six of these organisations had participated in the qualitative research and therefore represented a convenience sample. However the remaining organisations were randomly chosen using sampling based on industry (with no more than 2 of each service industry) from the Business Queensland Book of Lists.

Administration managers (or equivalent) of the thirty organisations were contacted by phone and asked to volunteer their organisations to participate in the research. While no tangible gift was provided as an incentive for participation, managers were promised a copy of the research results upon availability. Participating managers were sent ten questionnaires and managers returned between two and ten questionnaires. The relatively high response rate was achieved by personally contacting organisations to elicit their participation and also visiting organisations to collect completed questionnaires, rather than asking for them to be posted.

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**Table 4: List of Organisations and Number of Participants**

57
<table>
<thead>
<tr>
<th>Org: Industry</th>
<th>Customisation Level</th>
<th>No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: University research</td>
<td>High Customisation</td>
<td>7</td>
</tr>
<tr>
<td>B: Business Advisory</td>
<td>High Customisation</td>
<td>6</td>
</tr>
<tr>
<td>C: Construction</td>
<td>High Customisation</td>
<td>2</td>
</tr>
<tr>
<td>D: Advertising Agency</td>
<td>High Customisation</td>
<td>3</td>
</tr>
<tr>
<td>E: Advertising Agency</td>
<td>High Customisation</td>
<td>2</td>
</tr>
<tr>
<td>F: Construction</td>
<td>High Customisation</td>
<td>1</td>
</tr>
<tr>
<td>G: Business Advisory</td>
<td>High Customisation</td>
<td>2</td>
</tr>
<tr>
<td>H: Construction</td>
<td>High Customisation</td>
<td>7</td>
</tr>
<tr>
<td>I: Construction</td>
<td>Medium customisation</td>
<td>2</td>
</tr>
<tr>
<td>J: Finance</td>
<td>Medium customisation</td>
<td>4</td>
</tr>
<tr>
<td>K: Finance</td>
<td>Medium customisation</td>
<td>4</td>
</tr>
<tr>
<td>L: Financial Advisory</td>
<td>Medium customisation</td>
<td>3</td>
</tr>
<tr>
<td>M: IT</td>
<td>Medium customisation</td>
<td>3</td>
</tr>
<tr>
<td>N: IT</td>
<td>Medium customisation</td>
<td>6</td>
</tr>
<tr>
<td>O: Legal</td>
<td>Medium customisation</td>
<td>6</td>
</tr>
<tr>
<td>P: Legal</td>
<td>Medium customisation</td>
<td>4</td>
</tr>
<tr>
<td>Q: Call Centre</td>
<td>Low customisation</td>
<td>8</td>
</tr>
<tr>
<td>R: Call Centre</td>
<td>Low customisation</td>
<td>11</td>
</tr>
<tr>
<td>S: Food</td>
<td>Low customisation</td>
<td>7</td>
</tr>
<tr>
<td>T: Food</td>
<td>Low customisation</td>
<td>4</td>
</tr>
<tr>
<td>U: Bank</td>
<td>Low customisation</td>
<td>5</td>
</tr>
<tr>
<td>V: Bank</td>
<td>Low customisation</td>
<td>4</td>
</tr>
<tr>
<td>Total Responses</td>
<td></td>
<td>101</td>
</tr>
</tbody>
</table>

3.3.3. Survey Design

The questionnaires probed aspects of customisation, KSA’s required by staff involved in designing and delivering the service, goal clarity and information distribution and exchange. Results from the qualitative research informed the quantitative phase of research in two important ways. First, they provided a guide to support the conclusions made from a review of theory, thus establishing that the questionnaires posed pertinent questions. Second, the information gained from case studies were used to fine-tune the operationalisation of concepts used in the quantitative data collection, thus ensuring that the measures used captured well-founded research constructs. The quantitative questionnaires based on these constructs were then used to gather data regarding all focal issues of the research.
Constructs derived from the qualitative analyses were measured, where possible, using original, pre-validated measures. Aspects of the questionnaire had therefore been pre-tested for validity and reliability. However due to lack of previous research on areas being investigated, existing scales to measure some variables were unavailable. Some scales were therefore either derived from existing constructs and measurement tools, or developed specifically for the study, using existing constructs and using survey protocols provided by deVaus (1995). For all constructs examined, Cronbach alpha are used to establish their reliability and the scales were reviewed by experts to establish their face and content validity.

Unit of Analysis

The first question posed in the questionnaire established the type of customisation offered in each business unit. In three cases of the 22 organisations which were studied (organisations C, N and P), one dissenting response arose from one respondent within the same business unit. The high level of convergence between participants within organisations indicated that the concept of strategy in the study did reflect a construct which can be readily identified within organisations. In the rare case of dissenting responses, the researcher used prior background knowledge and further investigation (eg calling the contact person in the organisation) to standardise responses for this question so that all responses from any given organisation stated that it provided the same level of customisation. For all other questions, which measured the individual’s perception of their work environment, results were analysed using a between-respondent approach, rather than between-organisation.

3.3.4. Respondent Selection

During the case studies, the people who were best able to provide the relevant information were identified. It was determined that employees and managers who were involved directly in the design and/or implementation of the service had a more thorough understanding of the
operations and processes involved in the service than did support staff or senior managers. Therefore, these employees were targeted in the quantitative phase of the research.

When managers were sent questionnaires for employees to complete, they were therefore requested to include only those who were directly involved in designing and delivering the service. To ensure that only these staff were included in the study, the first item of the questionnaire required respondents to identify whether they were directly involved in customer service to ensure that only those who had been targeted replied. Three respondents answered that they were not involved directly in the design and delivery of the service and were excluded from the study.

3.3.5. Measures

Service Customisation

Before dependent variables were investigated, the issue of customisation was examined in the chosen organisations to confirm that the three levels of customisation were valid, measurable constructs on which to base the study.

A pre-existing scale measuring customisation was adapted from Safisadeh, Hossein, Ritzman, Sharma & Wood’s (1996) study of customisation orientation of manufacturing organisations. The original scale consists of one item with 5 available responses as follows:

Which one of the following descriptions best typifies the production in your plant?
1, standard product with no options;
2, standard product with standard options;
3, standard product modified to customer specification;
4, standard product with options modified to customer specification;
5, customised product manufactured to customer specification.

However the scale was reduced to three responses because of the similarities between several options and because a pilot study indicated that such fine distinctions were ambiguous to respondents (e.g. ‘standard product with no options’ and ‘standard product with standard options’). In addition, because service customisation, rather than product customisation was being measured, the wording was altered appropriately, in accordance with Brown & Eisenhardt’s (1985) ‘retail indicators’ which examined service-related customisation. The question was therefore posed as follows:

Please indicate the statement which best describes the service your work group offers to customers:

1. We provide a set of standard options for customers
2. Existing services are modified to suit individual client needs
3. Our services are specifically designed for each customer

Scale reliability

Because validity and reliability data were not provided by the authors of the original scale, the questionnaire was piloted in organisations which had previously been analysed and observed to conform to each customisation strategy. This confirmed its validity and reliability. All respondents from organisations participating in the pilot study answered in the expected way. Because of the customisation scale’s centrality to the study, correct measurement was critical. Therefore, in addition to the one-item scale, the measurement of ‘quantity of customers served each day’ was also used because this is highly correlated with the level of customisation offered by service organisations.
In order to have a standard response format for questions, the number of choices in all following scales were modified so that they all had a Likert scale with five possible responses from ‘to a very great extent’ to ‘to no extent’. This was to facilitate interpretation of the results.

**Information distribution and exchange.**

The key issues of the existence of formal information distribution and exchange mechanisms and the need to make joint decisions (differentiated from interpersonal communication) were investigated in the quantitative questionnaire.

The group problem solving and decision-making literature (Kerr & Tindale, 2004) was drawn from to acquire a set of suitable constructs on which to base measurements for information distribution and exchange.

Scale items measuring information distribution and exchange were:

“People in our workgroup need each other’s advice for almost every transaction made by clients.”

“People in my work group need to make joint decisions regarding the service we provide to clients.”

“Information is shared within our work group when making decisions regarding the service we provide.”

“In order to deliver our service, more than one person’s direct input is needed.”

The Cronbach Alpha for the information distribution and exchange scale was 0.75.


**Definition of goals.**

To capture the construct of Goal Definition, Snell (1992) provided a measure of ‘crystallised standards of desirable performance’ in a study designed to establish the mediating effect on administrative information on HRM approach. Although validity and reliability data were not provided by the author, a scale reliability alpha of 0.72 was established from analysis of results. In addition, the piloting procedure undertaken established the reliability of the scale. Because the questionnaire contained several scales, its length was a consideration.

Therefore, Snell’s original five-item scale was reduced to two. In addition, the original scale was worded for managers, however because the questionnaire was aimed toward line employees, the wording was changed accordingly, as follows:

Scale items measuring goal clarity:

“Standards of performance are well defined.”

“It’s easy to see whether I’ve done the job well.”

The Cronbach Alpha for this scale was 0.85.

**Knowledge and skills.**

It was originally anticipated that employees’ skill levels could be measured on a simple continuum of ‘high’ to ‘low’. However the qualitative phase of the study revealed that skills needed by employees differed not only in level but also in type. Therefore, in addition to establishing skill level, the questionnaire also contained scales inquiring about the breadth and depth of knowledge required about the service. These constituted 1-item scales which
were designed to differentiate the types of skill required, rather than measuring the levels of skill required.

Scale items measuring skill breadth and specialisation:

“My job requires a broad overall knowledge of the service we provide”

“My job requires particularly specialised knowledge of at least 1 aspect of the service we provide”

The source of the scale for skill level measured was Ouchi & Maguire (1975) who indicate that skill level is closely related to the amount of experience and education required to do the job. Therefore, two items measuring each of these aspects was included in the questionnaire.

In addition, Podsakoff et al. (1993) provided a number of items measuring professional orientation, which is also closely related to the skill level of the job (Podsakoff et al, 1993). One item from this scale was included, which measures the extent to which employees used professional literature to supplement their existing knowledge of the job, giving the three-item scale.

Scale items measuring degree of skill/knowledge level:

“To do my job someone would need the experience of...”

‘To do my job, someone would need qualifications to the level of ...”

‘I use professional literature and/or journals to supplement my existing knowledge of the job”

Cronbach alpha for the scale was 0.83.


3.3.6. Results

Initial descriptive statistics and factor analysis were conducted and confirmed that the data reflected the intended constructs mentioned in the abovementioned scales.

The three items in the ‘knowledge and skills’ scale were all shown to be associated with a factor which was named ‘Professional Operations.’ Further, the single item which measured specialisation of knowledge also loaded strongly onto this factor. The four items which constituted the ‘information distribution and exchange’ scale all loaded onto a factor which was named ‘collaborative operations’. Lastly, two of the items which measured ‘definition of goals’ loaded onto a factor which was named ‘defined operations’.

For ease of reference, Table 5 outlines the abbreviated names given to questions and sorts them according to the factor associated with each item.
Table 5: Summary question items, names and factors comprised

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional operations</strong></td>
<td></td>
</tr>
<tr>
<td>My job requires particularly specialised knowledge of at least 1 aspect of the service we provide</td>
<td>Specialisation</td>
</tr>
<tr>
<td>To do my job someone would need the experience of...</td>
<td>Experience needed</td>
</tr>
<tr>
<td>I use professional literature and/or journals to supplement my existing knowledge of the job</td>
<td>Literature</td>
</tr>
<tr>
<td>To do my job, someone would need qualifications to the level of ...</td>
<td>Qualifications</td>
</tr>
<tr>
<td><strong>Collaborative Operations</strong></td>
<td></td>
</tr>
<tr>
<td>Information is shared within our work group when making decisions regarding the service we provide</td>
<td>Information shared</td>
</tr>
<tr>
<td>People in my work group need to make joint decisions regarding the service we provide to clients.</td>
<td>Joint decisions</td>
</tr>
<tr>
<td>In order to deliver our service, more than one person’s direct input is needed</td>
<td>Direct input</td>
</tr>
<tr>
<td>People in our workgroup need each other’s advice for almost every transaction made by clients.</td>
<td>Advice</td>
</tr>
<tr>
<td><strong>Defined Operations</strong></td>
<td></td>
</tr>
<tr>
<td>It’s easy to see whether I’ve done the job well</td>
<td>Easy to see if job done well</td>
</tr>
<tr>
<td>Standards of performance are well defined</td>
<td>Defined standards</td>
</tr>
</tbody>
</table>

These factors closely match the three theoretical constructs of ‘Information Distribution and Exchange’, ‘Goal Clarity’ and ‘KSA’s’, which were theorised to vary according to the level of service customisation being offered by the business unit as outlined in the hypotheses.
Therefore it is appropriate to treat each factor as representing the construct mentioned in the hypothesis as set out in Table 2.

Table 6 provides a descriptive summary of the results that were obtained from the quantitative study, including means, standard deviations and intercorrelations between the items used.
Table 6: Descriptive statistics for customisation and organisational items

<table>
<thead>
<tr>
<th>Item</th>
<th>X</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Specialisation</td>
<td>2.01</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Experience Needed</td>
<td>2.15</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>655**</td>
</tr>
<tr>
<td>3. Qualifications</td>
<td>2.81</td>
<td>1.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>614**</td>
</tr>
<tr>
<td>4. Advice</td>
<td>3.06</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>617**</td>
</tr>
<tr>
<td>5. Literature</td>
<td>2.69</td>
<td>1.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>556**</td>
</tr>
<tr>
<td>6. Defined Standards</td>
<td>2.18</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>683**</td>
</tr>
<tr>
<td>7. Easy to see if job done well</td>
<td>2.37</td>
<td>.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>648**</td>
</tr>
<tr>
<td>8. Joint Decisions</td>
<td>2.65</td>
<td>1.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Info Shared</td>
<td>2.43</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Direct Input</td>
<td>2.60</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid N</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Correlations

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).
Alpha factoring (oblimin rotation) was used to ‘purify’ the dimensions by removing variables with low item-to-total correlations. As shown in Table 7, a final run yielded 10 variables which sufficiently loaded onto three independent factors, accounting for 48 percent of the total variation prior to rotation. Choice of the three-factor solution was based on the criteria of factor interpretability, number of factors directed to be 3 and Tukey HSD significance test.

<table>
<thead>
<tr>
<th>Component</th>
<th>Professional Operations</th>
<th>Collaborative Operations</th>
<th>Defined Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialisation</td>
<td>.830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience needed</td>
<td>.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature</td>
<td>.823</td>
<td>.110</td>
<td>-.156</td>
</tr>
<tr>
<td>Qualifications</td>
<td>.767</td>
<td>.266</td>
<td></td>
</tr>
<tr>
<td>Information shared</td>
<td></td>
<td>.691</td>
<td></td>
</tr>
<tr>
<td>Joint decisions</td>
<td></td>
<td>.786</td>
<td>.270</td>
</tr>
<tr>
<td>Direct input</td>
<td>.141</td>
<td>.559</td>
<td></td>
</tr>
<tr>
<td>Advice</td>
<td></td>
<td>.509</td>
<td></td>
</tr>
<tr>
<td>Easy to see if job done well</td>
<td></td>
<td>.119</td>
<td>.700</td>
</tr>
<tr>
<td>Standards of desirable performance defined</td>
<td>-.140</td>
<td></td>
<td>.933</td>
</tr>
</tbody>
</table>
Three new variables were created for statistical analysis, each representing one of the above components. The score of each was calculated as the mean of the items that constitute it in each questionnaire analysed. This single item was then used to represent ‘information distribution and exchange’ in further statistical calculations performed to test the hypotheses. ANOVAS and corresponding contrast analyses indicate three distinct configurations of operational emphases tied to each of the 3 customisation strategies.

A preliminary MANOVA established that the level of customisation had an overall influence on the organisational factors that were studied. Significant differences between the three levels of customisation and the three factors were found $F(1)=295.75$ ($p<0.001$).

Three, one-way ANOVAs were then conducted, each using customisation strategy as the independent variable and the score on the three outcome variables – professional operations, collaborative operations and defined operations, as the respective dependent variables. All three ANOVAs indicated significant differences among the customisation strategies on the dependent variables (Professional Operations: $F(15)=49.025$, $p<.000$; Collaborative operations: $F(9)=28.461$, $p<.000$; Specifiable operations: $F(12)= 7.243$, $p < .001$).

Tukey’s HSD analysis of the ANOVA results indicate 3 distinct configurations of operational emphases tied to each of the 3 customisation strategies (Figure2).
Figure 2: ANOVA Results

Results of 1-way ANOVAs measuring the effect of customisation on dependent variables

<table>
<thead>
<tr>
<th></th>
<th>Standardised</th>
<th>Medium Customisation</th>
<th>Customised</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F1: Professional Operations</strong></td>
<td>○</td>
<td>▼</td>
<td>●</td>
</tr>
<tr>
<td><strong>F2: Collaborative Operations</strong></td>
<td>▼</td>
<td>▼</td>
<td>○</td>
</tr>
<tr>
<td><strong>F3: Defined Operations</strong></td>
<td>○</td>
<td>▼</td>
<td>●</td>
</tr>
</tbody>
</table>
The mean score for ‘defined operations’ was 2.84 in organisations offering standardised services, which was significantly higher than the score of 2.148 in organisations offering medium customisation (p<.001) and 2.49 in organisations offering high customisation (p<.05). The mean score for ‘collaborative operations’ was 2.875 in organisations offering medium customisation, which was significantly higher than both the scores of 1.733 in organisations offering low customisation (p<.001) and 2.49 in organisations offering high customisation (p<.05). The mean score for ‘professional operations’ was 1.45 in organisations offering standardised services, which was significantly less than the scores of 2.708 in organisations offering medium customisation (p<.001) and 3.148 in organisations offering high customisation (P<.001). However ‘professional operations’ did not significantly differ between firms offering medium and high customisation (p>.05).
4. DISCUSSION

4.1. Framework for discussion and objectives of the study

Study Objective 1
Identify the relationship between the level of customisation offered by service organisations and the degree of information distribution and exchange among service delivery employees.

Study Objective 2
Identify the relationship between the level of customisation offered by service organisations and the skills required by service delivery employees.

Study Objective 3
Identify the relationship between the level of customisation offered by service organisations and goal clarity for service delivery employees.

These interrelated objectives form a broad and relatively comprehensive structure through which to view the relationship between customisation and strategic organisational factors. The increasing tacitness of information used in offering highly customised services offers an explanation for the non-linear relationship which this study established to exist between customisation and information exchange and transfer. In turn, the need for highly skilled service delivery workers in organisations offering higher levels of customisation is validated by the assertion that ‘knowledge’ rather than tangible information is used in offering high levels of customisation. Similarly, the ability of organisations and individuals to define goals and outputs in providing services for customers is affected by the type and level of skills held by employees.
In effect, by answering each of the three different questions, one can piece together a multi-faceted viewpoint of the same broad issue, which is answered by the overarching question ‘how are organisations enabled to provide different levels of customisation’? Thus, answers to the three issues that were studied provide a well-rounded and comprehensive insight into the organisational implications of service customisation.

4.2. Discussion

This study was carried out within the context of sound management principles and trends, which were identified and researched in the literature review. The abovementioned objectives of the study comprise the framework upon which the discussion in this chapter is based. The research was carried out with reference to the configurations of service customisation, information distribution, KSA’s involved in designing and delivering the service and goal clarity in work groups that are directly involved in the design and delivery of services. Patterns of relationships between these factors in organisations offering different levels of customisation were identified and supported with qualitative case studies and quantitative analysis. Configurations of these factors are now discussed with reference to the theoretical underpinnings of the configurations, as well as the practical implications that they have for organisations. The proposed relationships between customisation and the organisational factors discussed in the research were strongly supported by this study.

4.2.1. Information Distribution and Exchange

The degree of customisation was predicted to have a non-linear relationship with information distribution and exchange. As outlined in the Methods and Results chapter, this was
confirmed by the information gathered in the case studies, as well as the significant non-linear relationship found in the analysis of quantitative data.

This relationship indicates that customisation is facilitated by information distribution and exchange to a point. However because of the high degree of tacit knowledge associated with customisation and the difficulties experienced in transferring or sharing this knowledge, information distribution and exchange in fact may impede the firm in offering a high level of customisation. This is in contrast to the vast opportunities presented by the high degree of information transfer used in medium customisation, which allows “loosely coupled” explicit knowledge to be effectively stored and transferred, which allows the firm to benefit from the flexibility and efficiency of providing medium customisation (Pine, 1997).

4.2.2. Employee Skills and Knowledge

The results confirmed that the decision-making requirements in firms offering different levels of customisation vary. Therefore the skills and knowledge of employees directly involved in delivering a service increase linearly with the level of customisation. Complete customisation requires greater decision-making latitude of employees, based on judgment. The qualitative and statistical results confirm that if an organisation adopts a completely customised approach, this latitude is likely to apply throughout the value chain.

The results also suggest that in organisations offering medium customisation, in which explicit information is held in databases and information systems, these information systems can serve as a mechanism to store and distribute this information, thus replacing the need for ‘highly skilled’ employees. However a moderate level of skill was still found to be required
for employees to make the informed decisions that are nevertheless needed in delivering medium service customisation.

As expected, both the qualitative and statistical analysis indicated that relatively low KSA’s regarding the content of the service were used by employees involved in delivering standardised services. This indicates that because standardised services rely on information which can be more easily stored and manipulated using information technology than can knowledge of experts. These employees typically had little decision-making autonomy and therefore did not need to possess the skills to make material decisions with regard to the service being offered.

4.2.3. goal clarity

The results confirmed that as information dealt with becomes less tangible and the processes through which it is processed becomes less shared among groups, goal clarity for service delivery employees decreases. As discussed, in firms offering customised services, there is a need for service delivery employees to hold a relatively high level of knowledge and the processes and outputs involved in applying it to the customer’s service are not easily quantified. The results confirmed that the issues of quality and quantity are more difficult to measure as customisation increases.

In organisations that offer an element of customisation, some objectivity can be achieved in observing the process through which the service is delivered (Pine, 2004) because each stage of the service delivery process deals with tangible information. In addition, the outputs of medium customisation are more apparent, in terms of both quality and quantity. The number of customers dealt with in any particular industry increases with standardisation, so one can
surmise that a degree of quality and quantity of output can be better observed in organisations offering medium customisation, than in those offering high customisation.

In organisations that offer standardised services, quantity provides a reliable performance goal (Taylor, 1912) because as discussed, greater economies of scale are required to take advantage of the efficiencies afforded through standardisation of services. Quality is also significantly easier to measure; when the service is already designed and the customer knows from the inception of the service what they need, it is relatively easy to establish whether they received a service that met their needs. Because the information dealt with is more explicit than in services providing a degree of customisation, more specific instructions can also be provided to service delivery employees as to the process through which to deliver the service.

4.3. **Summary**

Configurations were found to exist, encompassing the degree of customisation offered by the organisation and information distribution and exchange, skills required and goal clarity for its service delivery employees.

By confirming the relationship between customisation and the identified operational implications, the study pieced together a multi-faceted viewpoint of the same broad issue, which is answered by the overarching question ‘how are organisations enabled to provide different levels of customisation’? This study therefore provides us with a well-rounded and complete insight as to how and why organisations can effectively implement different levels of service customisation.
4.4. Strengths and limitations of the study

The research was conducted in two separate phases, an inductive ‘case study’ phase and a deductive, quantitative questionnaire phase. The separate research phases elicited similar findings, which supports the consistency of the findings.

The convergence of data attained in the two research phases is not only positive in a methodological sense, but also means that the study contributes to existing theory and organisational practice in two distinct ways. Firstly, the inductive qualities of the research allow it to provide an innovative answer to a problematic situation. Tacit knowledge increases with customisation, however a great deal of customisation research suggests that increased sharing of information allows organisations to offer higher levels of customisation. However when one considers the difficulties of transferring and sharing tacit knowledge, it is important to question whether it is appropriate for organisations to increase information sharing with customisation. The study resolves this problem by taking the two disparate threads of thought and using them each to provide a comprehensive model to analyse how the type of information used affects the operational requirements for firms offering different levels of customisation. The second major contribution that the study makes to existing research and theory is its confirmation through quantitative analysis that the model which was created in the process of conducting case studies is not just innovative but also generalisable.

The research was conducted in organisations from different industries. This allowed firms delivering ‘typical’ customisation strategies to be examined, which made the study robust with regard to the issue of the relativity of ‘customisation’. For example, had firms in a similar industry been examined, less significant findings may have been found supporting the
operational differences in firms offering different levels of customisation. However the use of
different industries means that recommendations made as to how firms may change their
level of customisation need to be cautious until the research objectives are achieved in a
‘within-industry’ setting.

In addition, no longitudinal analysis was possible in conducting the study. Further in-depth
case study research which examines firms that change the level of customisation would rule
out potentially spurious factors such as size, leadership and structure, which are introduced
by examining different organisations.

The study of customisation is relatively new, as is the study of information distribution and
exchange. This presents some difficulties which may be overcome in future research. While
‘customisation’ is well-delineated, the similarities between customisation and other
constructs such as flexibility and innovation might be better delineated, to avoid confusion. In
addition, operationalisation of information distribution and exchange needs to be better
established for future research, to encompass the specific actions that are associated with
information distribution and exchange (e.g. is it institutionalised? Is it formal or informal?
Does it relate to joint decision making or merely ‘bouncing ideas’ off people? These more
specific questions, which were beyond the scope of this study, might be addressed by
delineating the construct of information distribution and exchange in future research.

Other factors which increases the validity and reliability of the study are:

(a) Random selection of participants for both phases facilitated the validity of the results.
(b) A particular effort was made to reduce bias by using objective questions in both stages of the research. Participants were not ‘guided’ by the researcher, nor were they treated differently in any respect.

(c) A high participation rate was achieved, with 86% of organisations approached for the quantitative phase of the research participating. 100% of organisations approached for the qualitative research phase participated. The high participation rate was achieved by the researcher personally presenting themselves to the organisations approached, rather than using mail outs or phone calls to elicit participation.

(d) The questions used in the quantitative phase of the research were all pre-tested in previous research.
5. CONCLUSION, IMPLICATIONS AND DIRECTIONS FOR FURTHER RESEARCH

The aim of this study was to examine the relationship between service customisation and information, goal clarity and KSA’s required by customer service employees. The objectives of the study have been met and their implications detailed in the following discussion.

5.1. Conclusion

This was a comprehensive research project, which achieved initial support for the research questions in its inductive stage, which was confirmed using statistical data in its quantitative stage. The research succeeded in identifying three interrelated factors which enable an organisation to deliver customised service.

5.2. Implications

The relationship between customisation and the operational implications for service design and provision represents several challenges for organisations. These are discussed in relation to how an organisation might deliver its customer service from a marketing perspective. In addition, these factors provide organisations with a framework for ensuring that their workforces and operations possess the capacity to deliver customer service by implementing leadership and HRM approaches. In addition, the ability of an organisation to alter the levels of customisation offered is discussed.

5.2.1. Marketing Implications

The design and delivery of services comprise two distinct processes. First, the service is designed according to specifications provided by the customer or groups of customers. Second, the service is delivered usually within the visibility of the customer, which impacts
their perception of service quality and possibly their judgment of the entire organisation. The
perception of customers is particularly important, because many organisations rely on
customers’ decisions to return, or even to have a long-term relationship with the firm. The
operational requirements of different customisation levels that are discussed in this study
provide distinct strategic capabilities which enable an organisation to perform in areas which
will influence customers to continue their relationship with the organisation:

(a) **goal clarity: capitalising on what is important to the customer.** The study confirmed
that goal clarity decreases with the level of customisation offered. This means that in
organisations offering standardised services, the outcomes of which are more
quantifiable and visible to the customer, the ‘deliverables’ of the service – such as speed
and quality – need to be present for the customer to perceive that they received good
customer service. In contrast, goal clarity is generally low and does not allow the
customer to make an immediate or even medium term decision regarding the quality of
the service’s ‘content’. Rather, the experience of the customer throughout the design and
delivery of the service is conducted within their visibility (Shostack, 1987). Their
experience within the organisation is therefore possibly as significant to the customer as
is their appreciation of the service provided.

(b) **Information Distribution and Exchange.** In designing and delivering a customised
service, the customer is involved earlier in its service design and delivery. Because
clients purchasing customised services often have very specific needs, the extent to
which customer service employees are perceived to be empathetic and listen to the
customer’s needs is more important than in organisations offering standardised services.
Skills and abilities of customer service employees. It has been established in this thesis that as customisation increases, the design and delivery of the service are not distinct but ‘merge’ into one process. Thus, in organisations offering standardised services, the ‘gap’ between service design and delivery staff is significant: according to the results of this study regarding the limited upward or horizontal information flow engaged in by employees delivering customised service, the two groups are likely to have very little communication. In contrast, in organisations offering highly customised services, it is likely that one person is responsible for designing and delivering the service simultaneously, within few defined parameters but their own knowledge of the service. Therefore factors such as the credibility of customer service employees and the extent to which customers perceive that they are ‘experts’ in the area are of great importance in organisations offering higher levels of customisation. Customers might differentiate between their experience within the organisation and the satisfaction that they gain from purchasing a high quality or good value standardised service because its design is distinct from its delivery. Therefore high or low quality service delivery might be of lesser importance.

5.2.2. HRM and Leadership Implications

The operational aspects involved in designing and delivering different levels of customer service must be supported by appropriate support mechanisms that are targeted toward encouraging appropriate inputs, processes and results from employees that relate to individual organisational strategy. For example, if information distribution and exchange and teamwork are required due to the nature of the organisation’s output, HRM support mechanisms should reflect this by emphasising team-based reward systems, training etc.
These mechanisms must enable organisations to cope with the tensions resulting from the need to achieve both the ‘marketing-oriented’ behaviour of employees that is required in service organisations and the need to provide the service content with the greatest effectiveness and efficiency.

Both leadership and HRM are interdependent and rely on similar organisational aspects. For example, in organisations where it is possible to measure tangible outcomes, transactional leadership is therefore facilitated, as well as the HRM approach of rewarding for performance. These are particularly important because they combine to provide the basic control and support mechanism which facilitate the management of people at work. Leadership and HRM are discussed independently and a summary of how these have been found to support each other is presented.

5.2.2.1. Leadership implications

The work structure and information sharing processes in an organisation necessitate different leadership approaches (Perrow, 1972). Therefore, while some aspects of leadership (e.g. a minimum level of communication) are important in all situations, different leadership styles must be adopted to elicit the inclination of employees to achieve or surpass basic expectations of them (Bass & Avolio, 1990). For example, a supportive leadership style is often prescribed for organic organisations, while a directive style is employed in mechanised organisations (Burns and Stalker, 1961).

There are numerous, potentially conflicting leadership theories. Path-goal analysis (House, 1971) prescribes that ambiguous tasks require greater task initiating structure of leaders, with the converse applying to specific tasks. However, Burns and Stalker’s classic 1961 analysis of mechanistic and organic organisations prescribes that in ‘organic’ organisations
(characterised partly by low task specificity) leadership should be ‘transformational’, while in those with task specificity leadership should be transactional. House’s analysis has assumed that an unstructured task is a ‘poorly structured’ task: for example, a specific goal must be reached but the way to achieving it has not been adequately defined. However, in situations where no specific goal exists as an inherent feature of the work being done path-goal analysis cannot apply. Employees in such organisations may have internalised professional norms and may not need or want the leader to initiate structure (Keller, 1989).

Therefore, in organisations with specific goals for employees, a ‘transactional’ approach to leadership is likely to be most appropriate. In organisations with intangible or ambiguous measures for output of employees, a transactional approach cannot be implemented because of the inability to measure output and thus reward employees for achieving specific goals. In these organisations a more ‘transformational’ approach can be adopted.

Leadership can also be analysed in organisations where groups, rather than individuals, are the main unit of productivity. Therefore, a group-orientated approach must also be considered. Information in communication networks based on authority typically flows in an opposite direction to those based on information (Bass & Avolio, p.26). Therefore, in information-based networks, an authoritative approach is less appropriate.

A brief analysis of situational leadership approaches indicates that in offering ‘standardised’ services, where customer service employees engage in minimal decision-making, participate little in information sharing and possess minimal tacit knowledge relating to the service, a directive or transactional leadership style is most appropriate. In contrast, because service delivery employees in firms offering medium customisation are actively involved in
information sharing, this aspect of their positions could be served well by ‘transformational’ or supportive leadership; however the relatively high degree of goal clarity which was found to typify these services could also mean that an element of transactional leadership could be used to motivate employees. Finally, the individualism and employee expertise that is found in service employees of organisations offering high customisation could encourage a transformational leadership approach. A transactional approach in these organisations would be inappropriate because performance is difficult to define or measure for service delivery employees in such organisations.

5.2.2.2. HRM implications

Personnel functions need to be integrated with the needs of the business and employees in order to assist the organisation in achieving its goals (Schuler, 2001). While prescriptions regarding personnel management have commonly been linked to an organisation’s market position (Hamel & Prahalad, 1996; Porter, 1990), organisations must also be defined in terms of their internal operations and processes.

Organisations with difficult-to-measure throughput and output processes require less control of employees (Snell & Youndt 1995, p.713). Information-intensive firms which are characterised by an organic structure (ie. those which have a collaborative value chain and more skilled employees) therefore require a relatively informal performance management system and a focus on developing ‘expert’ employees. If performance is largely based on collaborative efforts, performance management cannot be individually-based. Rather, a focus on team building or group rewards is appropriate.

In organisations offering standardised services, in which customer service employees can easily quantify their performance and are found to work as individuals, performance based
performance management practices such as management by objectives could provide the incentives needed for customer service employees to perform. Service delivery employees in firms offering medium customisation were found in the study to be actively involved in information sharing and work in groups and also have a relatively high level of goal clarity. These aspects of their positions could be served well by group rewards which are goal based. Finally, the individualism that was found in service employees of organisations offering high customisation could encourage an HRM approach which provides them with individual rewards, however because they have low goal clarity, goal-based rewards would be inappropriate.

This discussion highlights that both leadership and human resource management are in themselves complex and wide ranging research areas which are not discussed in detail in this study. Because the operational configurations in organisations offering different levels of customisation each comprise unique and disparate combinations of ‘organic’ and ‘mechanistic’ factors, an in-depth analysis of leadership and human resource management in organisations offering different levels of customisation must be conducted to establish which approaches would be most instrumental in improving the performance of service employees in organisations offering different levels of customisation.

5.2.3. The ability of organisations to alter customisation level offered

As the study indicates, it is not any single factor that enables an organisation to offer a particular level of customisation and consideration needs to be made to the unique combination of operational requirements which enable an organisation to offer a particular level of customisation.
Many organisations have achieved standardisation by storing the knowledge of ‘experts’ in IT-based communication systems (Ritzer, 1996). As a result, communication structures in such organisations have been centralised (Garson, 1988). Information-intensive firms are increasingly replacing the knowledge of professional ‘expert’ workforces (Garson, 1988; Quinn & Gagnon, 1986, p.97; Klein, Heinz & Hirschheim, 1985, p.11) with databases and other mechanisms which are largely due to the need to sustain an advantage in the increasingly competitive environment (Scarborough, 1993, p.941). In accordance with other industries, many knowledge-intensive services have become automated, while at the same time others have adopted decentralised decision making and co-ordination (Miles, 1993, p.666; Klein, Heinz & Hirschheim, 1985, p.26).

‘Knowledge-intensiveness’ as opposed to information-intensiveness is of higher value-added (Nonaka, 1991) and, as discussed, enables an organisation to provide a high level of customisation to its clients. Therefore, while embedding knowledge in the organisation may result in cost saving and often greater initial productivity to organisations (Klein, Heinz & Hirschheim, 1985, p.28) and therefore it reduces the ability of service employees to provide a high level of customisation because their ‘tacit knowledge’ is the element which enables customer needs – which are not necessarily quantifiable – to be met through a service which is customised.

Similarly, organisations that attempt to gain an element of efficiency and deliver a high-volume, more standardised service need to adopt the re-use of information or embed it in their information and communication systems to take advantage of these efficiencies.
Therefore, in altering the level of customisation offered, or altering the structure of the value chain that enables an organisation to adopt a particular level of customisation, managers must evaluate the extent to which their chosen strategy will be facilitated by the value chain involved in delivering the service to customers.

5.2.4. Effects on employees

Knowledge-intensive firms were traditionally driven by ‘knowledge workers’. However, many industries traditionally engaging in this skilled work have shifted from ‘knowledge-intensiveness’ to ‘information-intensiveness’ (Garson, 1988) due to cost-cutting, as well as organisational innovations such as technology (Klein, Heinz & Hirschheim, 1985, p.21).

The work environment provided by an organisation can either provide the basic support framework of information which enables employees to make their own informed judgments (therefore upholding their value as experts), or it can serve as a control mechanism to standardise previously ‘knowledge-intensive’ services, thus de-skilling employees (Klein, Heinz & Hirschheim, 1985, p.74). This trend, facilitated by technology and the pressure for organisations to satisfy shareholders through profits, places the skills, as well as the welfare of employees who are involved in delivering standardised customer services at risk.

5.3. Directions for Further Research

The study contributed to management theory and practice in significant ways, through establishing that an organisation’s customisation strategy shapes the design and delivery of services. First, it identified configurations of operational factors that enable organisations to provide different levels of customisation. Additionally, it highlighted that in the absence of
linear relationships between strategy and operational factors. This highlights that models which propose simple, linear ‘2x2’ relationships between customisation strategy and organisational structure need to be critically examined before being applied to research and management problems which concern the relationship between strategy and structure.

The study was inductive and provides substantial basis for further research. First to investigate the complex processes through which different levels of customisation are best delivered through distinct structural factors as outlined in this study, a longitudinal study could be conducted which examines the process through which these configurations evolve, either through change management or through the formation of a new business. This would provide a useful insight into how organisations can offer different levels of customisation, or change their operations.

Although the study evaluated the existence of the level of customisation and operational configurations, future research should assess the performance implications of a ‘match’ between customisation level offered and the operational factors studied. For example, organisations offering high customisation and with little information distribution among service employees may be established as achieving better performance than one that attempts to capture tacit knowledge used in customizing services in an information system. Issues such as ‘what constitutes performance’ would however need to be addressed; in light of this, performance indicators between firms offering different service customisation levels may differ and it may therefore be difficult to compare them; an indepth study of firms offering a single level of customisation may therefore be more valuable.
Finally, in a similar light to the examination of a relationship between performance and ‘organisational fit’, administrative functions such as human resource management and leadership support the key success factors which an organisation needs in order to achieve its goals. An examination of the way these factors support the operational configurations could be undertaken which examines either the existence of such administrative factors, or which considers them as an intervening factor in an organisation’s achievement of success in delivering different levels of customisation.
REFERENCES


APPENDIX 1 - GUIDELINES FOR INTERVIEWS

1. Customisation

Is the variation in services offered to clients a set number or does the client have unlimited choices in what is offered? Describe the service that is offered.

Which most accurately represents the process when a new customer requests your service?

```
Client needs → Service designed

Homogeneous services → Client needs established
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How are you positioned in the market? (e.g. low cost? high cost?)

What is your approximate profitability per employee? (high or low compared to industry average?)

What is the process in customer liaison/service design/service implementation? (i.e. who does what?). Draw the ‘value chain.’ (not to be confused with the ‘chain of command’).

Why, given the output of the department, is the value chain organised this way? (detailed documentation would help).

With regard to people’s jobs, is it possible to quantify their output on a daily/weekly/monthly basis? How is this done?

Is it possible for a manager to observe a person at work and establish whether they are productive/see how they do their jobs?
What are the dominant qualifications/knowledge/skills typically used in each part of the value chain? (‘customer service’ skills such as manner/friendliness etc. assumed for all front line positions)

Broad, high-level knowledge of the complete service/industry

Detailed, high-level knowledge of part of the value chain

Some (superficial) knowledge of the services provided

Which most closely represents the relationship between functions in the value chain?

There are many joint decisions regarding the customer’s service. People work together as a ‘team’. There are formal communication mechanisms (e.g. email, information systems) which institutionalise information distribution and exchange.

People use each other’s expertise to ‘bounce ideas’ off colleagues but when it comes to making decisions they are independent.

People don’t work together much at all.
APPENDIX 2: QUESTIONNAIRE

Please indicate the answer that most applies to the primary work that you do.

| I am directly involved in customer service and I am a primary point of contact for clients. | True [ ] | False [ ] |
| I am directly involved in customer service but do not usually have direct contact with clients | True [ ] | False [ ] |

If you did answer ‘True’ to either of the above questions, please complete the rest of the questionnaire. If you did not answer true, please do not complete the questionnaire.

Please state the number of customers whose service you work on each day:

______________

Please state the industry in which your organisation is involved:

___________________________

Please indicate the statement which best describes the service your organisation offers which you are involved in.

We provide a set of standard options for customers [ ]
Existing services are modified to suit individual client needs [ ]
Our services are specifically designed for each customer [ ]

Please indicate the statement which best describes your supervisory duties
I do not supervise any employees [ ]
I am the first-line supervisor of a division of employees [ ]
I am in middle or senior management [ ]

Please indicate which statements best describe your job
My job requires particularly specialised knowledge of at
To a very [ ] To a great [ ] To some [ ] To a little [ ] To no extent [ ]
To do my job, someone would need experience to the level of....

- Several years’ experience
- 1-2 years’ experience
- Several months’ experience
- Several weeks’ experience
- 1 week or less experience

To do my job, someone would need qualifications to the level of...

- Postgraduate qualifications
- Undergraduate degree
- Diploma
- Certificate
- No formal qualifications

Please indicate the extent to which each of the following statements describes your job and the environment in which you work.

1 = To a very great extent  
2 = To a great extent  
3 = To some extent  
4 = To little extent  
5 = To no extent

People in our organisation need each other’s advice for almost every transaction made by clients.  
I use professional literature and/or journals to supplement my existing knowledge of the job.  
Standards of desirable performance are well-defined  
It’s easy to see whether I’ve done the job well  
People in my work group need to make joint decisions regarding the service we provide to clients.  
Information is shared within our work group when making decisions regarding the service we provide.  
In order to deliver our service, more than one person’s direct input is needed.
APPENDIX 3: INTERVIEW SUMMARY – KEY STATEMENTS

High Customisation

<table>
<thead>
<tr>
<th>Information type, distribution and exchange</th>
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<tbody>
<tr>
<td>We do have teams which work on projects, but often there is one associate or partner who manages the process… people might collect data and provide them with background information but ultimately they have very little input into what is actually delivered to the client. A lot of people act as support is what I’m saying…</td>
</tr>
<tr>
<td>One person needs to be on top of everything so that clients have a reliable point of contact… this can’t be achieved by different people having responsibility for different aspects of the service.</td>
</tr>
<tr>
<td>Our partner essentially makes all of the decisions when it comes to what the client gets. Sometimes I feel like a glorified research assistant…</td>
</tr>
<tr>
<td>‘It is much more effective … and efficient … to use your own knowledge and then you can perhaps hold an informal meeting where people bounce ideas off each other – but in the end you’re the one who’s answerable to the customer and that’s because you’ve got the expertise’.</td>
</tr>
<tr>
<td>‘We used to have a team-based approach, but now we work much more independently and focus on delivering what the client wants, without having to synchronise our work with someone else’s just for the sake of it.’</td>
</tr>
<tr>
<td>Sometimes we ask for someone's advice or talk about what we do over coffee… but in the end, the decision is up to me.</td>
</tr>
<tr>
<td>Clients often need to discuss issues and I am the main contact… there is no way that anyone else would have the knowledge to answer their questions and given the nature of our service, it would be impractical to expect this…</td>
</tr>
<tr>
<td>Our manager knows what we are doing and basically where we are up to but there's an element of trust… I can't pull out a document and say 'this is what I've done today…' Yes I suppose it's because the information is very specialised… even though he is an authority in the general area, there are still things he wouldn't know…</td>
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<tr>
<td>We do share information but it’s in an informal sense. There is no requirement and no formal means by which we do…</td>
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<table>
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<tr>
<th>Definition of processes</th>
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<tr>
<td>We do have a schedule that we try to work to. It’s not that important though, it’s a guide and what we achieve is the important thing.</td>
</tr>
<tr>
<td>‘Because most of our work involves making decisions about what is done for the client, our supervisors can’t really see what we’re doing because most of the work is going on in our minds... you can’t tell someone how to make a decision.’</td>
</tr>
<tr>
<td>What we do is defined in some sense… but that’s decided by me and the client, with some input from our manager. The time I allocate to a project, or the particular way I go about it is up to me.</td>
</tr>
<tr>
<td>It’s not how I do something that really matters… but what I actually achieve, that’s important… as long as we give the client what they want then everyone’s happy.</td>
</tr>
<tr>
<td>Everyone here works differently… I mean, we do have some broad processes to follow, which include what to do and say when meeting the client, providing them with a plan for what we expect to achieve… but that’s only a guide and it’s more part of the service than something that’s imposed on us.</td>
</tr>
<tr>
<td>It’s what we do and not so much how we achieve it that is important. I can work the hours that I want to within reason and as long as every so often I can demonstrate that I’m getting the work done…</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal Clarity</th>
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<tbody>
<tr>
<td>We try to map out what we’re going to achieve when we start but as we go the goal posts are often moved. Not that it’s a problem… that’s just one of the things that happen with a service like this…</td>
</tr>
<tr>
<td>‘I could have no visible output on one day and seem like I’ve been very unproductive but on another day I might do a whole report for a client… although we have deadlines no-one can look at what we do in a randomly chosen day and say ‘yes, you’ve been productive or unproductive’.”</td>
</tr>
</tbody>
</table>
Of course, I do have an idea of what I’m trying to achieve… but as far as exactly what it will look like and what the exact content will be, that becomes apparent in the process of doing it. It only really takes its form as I progress…

There is no template or anything which I would use…
KSAs Required

The youngest partner here is in his late 30s and he’s always working, he does continuing education, has a LLB/B.Comm… he’s a smart guy too.

We all have degrees… they pay you a bonus when you start if you have a double degree so they value high level skills and education. They encourage ongoing education too… or rather, it’s a necessity.

It’s really demanding – I’ve learnt a lot since joining here.

It’s not the sort of job where you can work 9 to 5 – it’s more than that.

Our clients require a very high standard of service delivery and the things I learnt during my university study are the key to being able to deliver that service

I finished my PhD years ago … I have been working here and still learn new things all the time.

You need to be able to make decisions based on a broad knowledge of what is being done and so a good knowledge of the area that we work in is needed.

No consultants are employed here with less than a master’s degree in the area. We also encourage ongoing education and people constantly need to extend their knowledge.

Other evidence: Sample job descriptions were examined and it was clear that postgraduate qualifications and/or tertiary qualifications with significant experience were required in this business unit.

Medium Customisation

**Information type, distribution and exchange**

Every recommendation that I make about what we give the customer is documented and nobody goes ahead without written word… it’s a bit cumbersome sometimes really but it’s the best way.

It’s not difficult to get the information across – in fact usually it’s a matter of black and white

What we deliver is on a large scale, so there are too many things for just one person to be on top of at the same time. Information needs to be held somewhere central because there’s no way I’d be able to remember it all or even get it all down on paper myself.

It’s fairly easy to see at a glance what is happening with a customer’s service – my assistant can go into the system and often answer their questions if they call…

Most customers use us for several semi-separate services and there is a specialist who deals with each area of a customer’s needs. These can be quite complex and so the customer usually talks to each of these people directly about what they want. I am the main contact for clients and thanks to our information system can access information that I need, when I need it.

**Process definition**

Several staff are involved in delivering the service to customers and to maintain accountability – or even just to keep track of work in progress – some prescriptive measures needed to be taken in the processes and protocols followed by staff in delivering the service.’

Because of legal ramifications, we need to document everything that is done for customers: however this is not a function of our operational needs but the nature of the service that we provide.

Consultants here are given a lot of latitude with how they achieve their work; they are professionals and are trusted to do their jobs effectively – and only they know what works best for them.

**goal clarity**

Our performance criteria are quite well defined… I know that recruitment and retention of clients and some element of volume indicate whether I’m doing OK. I basically know what to do to achieve these…

If I meet performance goals this impacts hugely on my salary.

Volume is important: and it is easy to measure in financial terms.

Because there are so many customers, we have benchmarks which can more or less consistently be met on a monthly basis – or at least
every couple of months.

We don’t have you know, monthly performance appraisals or anything and everyone knows that you might have a week where you go and have a bit of a wind down… you might only see a couple of clients in that week… but over a few months or a year, it’s pretty easy to point to performance targets and take responsibility for having met them.

It can be difficult to know that you’ve done 100% what the client needs – it’s a matter of getting the right information from them to know how you can help but I’m satisfied that I offer a high level of service – I have long term business relationships with many of my customers.

**KSAs required**

There’s a mix of skills… I am more of a generalist, as the key point of reference for customers but we have specialists who take care of the different areas under the general finance umbrella… they are, to summarise, tax, superannuation, insurance. But we are all highly knowledgeable in our own fields.

People can learn on the job … in tax we have some graduate accountants who develop their skills and we have a tax manager with a masters in tax and decades of experience. It’s a matter of them working with him to get a balance of learning and doing. In insurance we have a person without degree qualifications who’s really good too…

To do this job, you’d have to have at least a degree or similar to have the background knowledge needed to do the job. It’s not just about doing but understanding customers’ needs and having the knowledge to assess these and offer the best solution.

We all have continuing professional education.

We need knowledge of the financial arena and we’re also always having training in the information system side of things… if I couldn’t use the system then I wouldn’t be able to completely do my job. It’s not enough to just have my assistant use it for me because she’d be here doing my job for half the day. It’s a hassle in some ways – I’d like to just concentrate on the finance side of things – but overall it does allow us to provide a better service.

We need good communication skills.

It’s not just me who needs good communication skills as the main point of contact, but at some stage everyone involved in delivering the service comes in contact with customers…

**Low Customisation**

**Information type, distribution and exchange**

‘we don’t really need to talk to each other except if an exceptional circumstance arises.’

‘It’s nice to have people around because if you are upset after speaking to a really rude customer, someone will always ask if you’re okay and ask if there’s anything they can do.’

We get most of the information that we need from the system. We also input a lot of information into cyberspace.

There’s really very little opportunity to misinterpret information from customers – mostly they have requests for which a standard form can be used to action them.

There are millions of megabytes of information regarding anything and everything to do with this city… and it’s all there are our fingertips.

We essentially work alone… we are allocated calls as they come and generally use the organisation’s databases and intranet to answer questions or process requests.

It can be quite isolating really, because although we might go to our supervisor when there’s a difficult situation, I would ordinarily sit at my workstation just actioning requests over the phone. I take an average of 15 calls an hour.

While I deal with a lot of information, I wouldn’t say that it’s ‘knowledge’ exactly… I sometimes don’t know anything about what a customer is asking until I look it up on our intranet… and nobody else here would know it either.

There’s not much point remembering a lot of stuff because you need to look it up on the system to document it anyway most of the time.

Sometimes I ask people for help or chat but it’s not really information sharing that we do… it can be social and often if I don’t know how to do something people will help but that’s regarding the process and not that information which I use that relates to customers.

**Process definition**

The main thing we need to be able to do is use the computer system which has defined procedures that you have to follow.
Managers can observe or listen to the employee working (e.g. by ‘hooking in’ to their telephone conversations). We have scripts to help us and we usually follow these.

### goal clarity

‘work goals can be broken into daily measures … managers print out reports of each employee’s average call time, calls answered and time spent on breaks’.

Every day I can go home knowing whether I did a good job… the number of people I speak to, the number of issues resolved, are measurable on a daily basis.

It’s hard to quantify my friendliness … however although that is a goal, I also need to meet certain quotas which are more easy to measure – and they are more important anyway. Especially as it’s a given that nobody here is really rude to customers anyway.

### KSAs required

All the information I use is in the system and if I don’t know how to use the system – or if the system is ‘down’ for some reason, then I wouldn’t be able to provide the service that I’m here to deliver.

A lot of the learning I have done has been ‘on the job’. I think that if you have reasonable ability to learn and have the people skills to manage the people who call – well, then you’d be alright.

**Further evidence**: sample job descriptions were found to emphasise interpersonal and time management capabilities, rather than qualifications or specific knowledge.