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Working Paper Series – Table of Contents

Editorial Comments

It gives us great pleasure to prevent the second Working Paper Series of the Business Research Group (BRG). This issue of the Working Paper Series have been contributed to by staff and Research Higher Degree students affiliated with the Business Research Group. The Business Research Group is a research group within CQUniversity's Institute for Resource Industry and Sustainability (IRIS) comprising business academics from the School of Commerce and Law and the School of Management and Marketing.

At the time of the Call for Papers for the Series papers were called for from any of the 'business' disciplines within the expertise of the BRG which include marketing, human resources management, organisational behaviour, organisational theory, finance, economics, accounting, information technology, strategy and property. This diverse group of disciplines is indicative of the scope and breadth of the BRG. It is also replicated by the papers that are presented in this issue of the Series.

The first paper titled, 'A process for building successful customer relationships with international education agents – An Australian universities perspective' is a paper submitted by a BRG Research Higher Degree student, Nadia O'Connell and Dr Ho Yin Wong and Dr Kylie Radel both academic members of the BRG from the discipline of marketing. The paper examines customer relationship management issues arising between Australian Universities and international education agents and proposes a step-by-step approach to be followed to develop customer relationships.

The second paper by Dr Ho Ying Wong and Dr Anthony Perrone (Charles Sturt University), titled, 'The antecedents of Word-of-Mouth behaviour: The service quality perspective' also comes from the marketing discipline. This paper presents the results of empirical study that was undertaken to investigate the nature and magnitude of the determinants of word-of-mouth behaviour in the context of service performance and post purchase perceptions. The paper suggests that the perception of high quality service by customers is likely to lead to positive word-of-mouth (WOM) referrals.

The third paper by Associate Professor Kristy Richardson and Mr Daryl Alcock moves from marketing to examine the use of an Audience Response System (ARS) as tool for conducting management learning research. The paper, titled, An Audience Response System: A Tool For Management Learning Research? reports on the use of an ARS within a conference setting to facilitate the exchange of 'knowledge' within the organisation.

We thank all of the authors who have responded to the Call for Papers by submitting to the Working Paper Series. Their contribution not only supports the BRG itself but showcases the expertise and breath of the academic and Research Higher Degree students with the BRG. Similarly, we thank those academics that gave freely and generously of their time to review the papers and provide their thoughts for not only how the papers might be improved for further development but provided positive and supportive comments about the projects as 'works in progress'. We hope that you, the reader, find this issue as interesting as we have.

Editors: Associate Professor Kristy Richardson and Dr Ho Yin Wong

A process for building successful customer relationships with international education agents – An Australian universities perspective

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Abstract

The aim of this paper is to explore customer relationship management particular to the business setting between Australian universities and international education agents. In a socially and culturally diverse setting, universities require effective tools to manage and enhance performance of the education agents whom they engage to recruit international students. No previous studies have examined the stages of relationship marketing development and recruitment performance enhancement between universities and education agents in the international education industry. A case study approach was adopted for this exploratory study, using multiple embedded units of analysis. In-depth, interviews were conducted with 31 industry experts from eight universities and 16 education agents to examine both sides of the relational dyad. Data were analysed using both manual qualitative data analysis techniques and Nvivo. The findings suggest that there is a seven step process flow to build an effective customer relationship with international education agents.

Summary statement of contribution

This study provides an empirically based model of a process from which universities can develop and manage their relationships with their education agents. This research provides several extensions to existing relationship development models (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995), through adding two new stages and 2 additional phases to the cumulative model previously presented by these authors. The seven step process model presented from the findings of this research fills research gaps within existing literature on customer relationship management that focuses extensively on business-to-customer relationships and demonstrates that these existing process models are therefore incomplete when applied to a principal and agent setting. Moreover, the model provides a practical, step-by-step approach for marketing managers to follow with an aim to developing and managing relationships with distribution channel intermediaries in a professional service industry.

Keywords: Relationship marketing, education agents, international education marketing, stages of relationship development, process flow, case study analysis

Introduction

This paper concentrates on the process and methodology for building successful customer relationships between universities and education agents. The international higher education industry is characterised by a highly culturally diverse environment whereby it is estimated that there are over 10,000 education agents from over 100 countries operating around the world who form an integral distribution channel through which educational institutes can recruit students (Jobson 2005; ICEF 2010).

The role of education agents is to provide students with an array of advice about studying outside of their home country and in return receive a commission from the institution for enrolling students. The industry has demonstrated effort in focusing on the social and relational aspects in order to build relationships, and is relatively unsophisticated in the information systems utilised. Further, institutions and education agents operate in a highly bureaucratic environment which is bound by substantial legislation (Gillard 2009) which stipulates a variety of contractual and relational obligations for education providers with possible sanctions when institutions do not adhere to the National Code, established under the Education Services for Overseas Students (ESOS) Act 2000 (DEEWR 2009). There has been significant debate over the use of education agents which has been highly publicised and the current Australian government has advised “education providers to pay particular attention to the education agents they select to represent them” and ensure they “are able to manage their relationship with their agents in a way that helps to enhance their own international reputation, as well as that of Australian education generally” (DEEWR 2009 p.2).

Together, these challenges result in a highly structured process of relationship management.

Through an exploratory research design using case study analysis, this paper provides a model of the stages of relationship development and relationship management that were found to be prevalent within the Australian university sector. This model is an extension to a cumulative model developed by (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995). Initially, this paper provides a brief review of extant literature that focuses on the process of relationship development. A brief overview of the research methodology and the main findings from the case studies pertaining to the stages of relationship development is then presented. Finally, a new model of relationship management for the international education industry is presented and discussed. This model contributes to current understanding of the relationship marketing processes between principal and education agent by further extending existing models of the stages of relationship development (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995), while providing insight into the social, technical and cultural environment in which the international education industry operates.

Relationship marketing contexts

The term relationship marketing was first alluded to by Thomas (1976), and first specifically used by Berry (1983 see also Zeithaml, Parasuraman and Berry 1985; Turnbull and Wilson 1989; Gronroos 1990; Lilien, Kotler and Moorthy 1992; Morgan and Hunt 1994; Berry 1995; Sheth and Parvatiyar 1995) and has been regarded as a fundamental element for business success (Biggemann and Buttle 2005). An understanding of effective business relationships has benefited from the early conceptual work of Dwyer et al. (1987) who identified a set of factors that characterised business relationships. Since then, a large number of empirical and conceptual papers have examined the concepts of building relationships in a business environment (Gupta 1983; Dwyer, Schurr and Oh 1987; Juttner and Wehrli 1994; Dion, Easterling and Miller 1995; Conway 1996; Holm, Eriksson and Johanson 1996; Ali and Birley 1998; Lin 1998; Selnes 1998; McQuiston 2001; Shi, Shi, Chan and Wang 2009).

Relationship marketing literature provides analysis of various aspects of relationships. Areas of analysis have included: the identification of factors of central importance to describe effective relationships (Anderson, Lodish and Weitz 1987; Dwyer, Schurr and Oh 1987; Anderson and Weitz 1990; Berry and Parasuraman 1991; Moorman, Gerald and Rohit 1992; Morgan and Hunt 1994; Wilson 1995; Conway and Swift 2000); discussions of how relationships are achieved (Berry and Parasuraman 1991; Berry 1995; Morgan 2000; Lin, Weng and Hsieh 2003; Palmatier, Gopalakrishna and Houston 2006; Chiu, Lee, Hsieh and Chen 2007; Lacey 2007; Liang and Chen 2009); analysis of the benefits or outcomes of relationships (Bagozzi 1975; Anderson, Jain and Chintagunta 1993; Wilson and Jantrania 1996; Gwinner, Gremler and Bitner 1998; Ford and McDowell 1999; Sweeney and Webb 2002; Biggemann and Buttle 2005); and the stages of relationship development (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Heide 1994; Wilson 1995; Blois and Grönroos 2000; Hemphill 2010). However, prominent authors in the field of relationship marketing have stressed the importance that research in this area needs to be industry-specific (e.g.Yorke 1990; Buttle 1996; Clancy 1997). Further, in order to advance theory building, research is needed to examine "different exchange characteristics and exchange contexts [which] require different types of relationship marketing" (Moller and Halinen 2000 p.48).

Considering these perspectives, and specifically in relation to this study, to date there has been limited empirical relationship marketing research of service industries, especially research of a business setting where an independent agent forms the other side of the dyad. Further, previous research has predominately been undertaken in the context of end customers rather than considering the relationships between distribution channel intermediaries within a business-to-business relationship. It has been stated (Hemphill 2010) that further empirical backing is required to validate the outcomes from previous findings to discover if such outcomes are relevant to professional service industries. To date, no academic research has been conducted regarding relationships between universities and education agents and there has been only limited research conducted that examines the independent agency relationships of professional services (Hemphill 2010) in general. Given that variations in relationships occur in contextual settings (Karantinou and Hogg 2001) it is particularly important to provide new perspectives on the ways in which effective relationships are achieved between universities and education agents.

Relationship development and management in principal and independent agent relationships

There have been several models put forward to explain the stages of relationship development, including a combination model first put forward by Scanzoni (1979) and then further developed by Levitt (1981), Dwyer et al. (1987) and added to by Wilson (1995) whose cumulative work has produced a six stage model of relationship development. Firstly, Scanzoni (1979) suggested three stages of involvement in the relationship process as:

(1) exploration;

(2) expansion; and

(3) commitment.

Scanzoni (1979; Wetzels, de Ruyter. and van Birgelen. 1998 ; Cookson 2001) suggested that exploration constituted the first stages of contact between the parties where there was mutual recognition and learning to determine the likelihood the other party can provide the resources necessary to form a mutually beneficial relationship. In the expansion stage, the partners further develop joint programs and the relationship is extended through continued communication and exchange. Finally, at the commitment stage, the parties develop the relationship over the longer term through repeated exchanges and continuing joint programs. This initial understanding of the relationship development process was then added to by Levitt (1981) and Dwyer et al. (1987) producing the following five stages in the development of a relationship:

(1) awareness;

(2) exploration;

(3) expansion;

(4) commitment; and

(5) dissolution.

The Levitt (1981) and Dwyer et al. (1987) extensions suggested a further stage of awareness which constitutes recognition that an entity is a potentially suitable exchange partner and the dissolution stage that is characterised by the potentially challenging process of disengagement or withdrawal from the exchange relationship. This model was then further extended by Wilson (1995) who added a pre-phase of search and selection where organisations actively seek appropriate partners. Wilson's (1995) model argued that factors that influence a relationship vary depending on the stage of the relationship development. This model started at the search and selection phase and stated that in this phase, the buyer may already be purchasing from the seller and consequently the seller decides to form a deeper relationship to accomplish particular goals.

While some elements of these and other models (such as the Heide (1994) model that also developed a set of standard relationship processes, which included relationship initiation, maintenance, and termination processes) may be applicable to a principal and independent agent relationship, the majority of studies regarding relationship development examine the buyer–seller perspectives and there are certain elements of such relationship development which are not relevant. For example, in a study by Blois and Gronroos (2000) the construct "fun to own," was found through their investigation of customer relationship life cycles. However, this construct is not relevant to independent agents as they are providing an intermediary service in the distribution channel rather than taking ownership of a good.

Empirical research into relationships that involve an independent agent are limited and it has been noted that much needs to be done to empirically examine how agency agreements are formed to allow for greater efficiency in managing the process (Bergen, Dutta and Walker 1992). One study that demonstrated the lack of empirical research into agency relationship formation is a recent study that used structural equation modelling to examine agency relationship formation in two services industries; real estate agents and employment agencies (Hemphill 2010). This study found that the limited literature on the topic of agency relationship development is polarised around remedial and or operational aspects of agency structures, without practical analysis provided on the point of agency relationship formation. The findings suggested that there is an absence of any substantial, agency specific, relationship development and management knowledge, prompting a need for further research into this field.

With a lack of a relationship development and management model specifically applicable to independent agency relationship formation and maintenance, the current study examined composite models developed in other contexts to investigate if further extensions can be made; specifically when viewed from a principal and agent perspective in the setting of the relationship between universities and education agents. As a result of this research, limitations were found in the previous models developed by Scanzoni (1979), Levitt (1981), Dwyer et al. (1987) and Wilson (1995) on the stages of relationship development, in that they do not appear to cover every aspect of the process relevant and specific to university and education agent relationships. This study found several extensions to the models, creating a new seven stage process model. From the perspective of universities and education agent relationships, the process required the addition of two stages and two phases including a pre-relationship, organisational examination stage, a specific review stage, a renewal phase and a potential relationship reinvigoration phase. This created a unique model of the stages of relationship development and management for this particular industry.

Previous models did not specify a specific review or renewal phase of the relationship and these phases tended to be morphed into the expansion, commitment and dissolution phases rather than being a specific phase of its own, giving the impression of an on-going analysis of the other party rather than a set period of review. For example Scanzoni (1979) discusses the continual process of review and subsequent renewal of business in a process whereby the relationship evolves from one of probing and testing each other to one whereby there is continual enlargement of the rewards partners supply one another. In the commitment phase Dwyer et al. (1987) describes a relationship in which parties discern the benefits and anticipate continued effective exchange. Wilson's (1995) extension of this model with a dissolution phase discussed how the dissolution phase begins with a one party privately evaluates dissatisfaction of the relationship. This varies from the relationship between universities and education agents in which there are a specific time, typically annually, when each contracted education agents is reviewed and a decision is made whether to renew or cancel the subsequent contract.

Research method overview

A case study research design was adopted to gain a rich and in-depth understanding of the interrelationship between universities and education agents, focusing on the perspective of universities and validating the data with the other side of the dyad. Case study analysis was deemed the most appropriate research method for this research topic for a number of reasons including, as justified by Yin (2003), that it is exploratory research, where there was not enough information available on the research subject; that the study is of realism, about a contemporary topic; it is a study asking what and why questions, that seeks to describe a real world phenomena; it is a study situation where the author has little control over events and is the study of relationships in a set business context.

A multi-case, embedded research design (Yin 2003) was selected. Multiple case design refers to conducting several case studies and the embedded multiple case design contains a number of embedded cases that each embedded case includes multiple units of analysis. It can provide robust and rigorous grounds for triangulation of data at the data analysis stage (Eisenhardt, 1989; Yin 2003). In this study, the multi-embedded cases consist of 31 university staff members from eight university international marketing departments and from the other side of the dyad sixteen education agents based within and outside Australia were interviewed to gain perspectives from both sides of the relationship. Pilot studies were conducted with one university and one education agent, then additional interviews were conducted until data saturation was met Eisenhardt 1989). Each case study was investigated and analysed on an individual basis, then case results were combined and analysed using cross case analysis.

Data was analysed both manually and digitally using Nvivo and following Miles and Huberman's (2002) and Yin's (2003) techniques for qualitative and case study data analysis. Data was rigorously examined and quality of the research was ensured through undertaking various tests for external reliability, external validity, dependability, auditability and construct validity.

Sampling units

Interviews were conducted with a total of 31 marketing staff from eight universities, who were chosen by purposeful sampling, based on the percentage of international students the institution recruited and the willingness and availability of the institution to participate and the informants for this research were key university staff from Australian universities who are heavily involved in the recruitment of international student and work directly with education agents to facilitate student recruitment through this marketing channel. The university staff were selected from a variety of universities across the Australian sector representing different styles of university operations, for example "sandstones" (considered to be the most exclusive public universities in the Australian industry offering more traditional learning and teaching practices), "regionals" (regionally or remotely based universities that utilise a number of innovative modes of learning and teaching), and "international campuses" (campuses of universities that are set up specifically for international student recruitment and service). Additional universities were selected and interviewed until no new information was emerging and data saturation was met (Eisenhardt 1989).

In addition to these key university staff, and to examine the other side of the dyad, a selection of their contracted education agents located in key source countries of international students to Australia based on international student data (Department of Education and Training International 2011) was also carried out. Preliminary, one-on-one interviews were conducted with education agents to gain a setting of opinions from this side of the dyad. A second round of additional education agents were interviewed, post data analysis of interviews with universities, to assist in the validation of findings and again to gain further opinions of the other side of the dyad.

As suggested by Yin (2003), each case was carefully selected due to their knowledge and direct vocational experience and involvement in working with either side of the dyad and their selection followed replication rather than sampling logic. Therefore, results of the research provide both similar (literal replication) and some contrasting results (theoretical replication). Other secondary sources of evidence were also found through education agent and university websites, university annual reports, government reports, conference proceedings, media reports, extant literature, Australian Vice Chancellors Committee (AVCC) benchmarking data and International Development Program (IDP) reports.

Data analysis methods

During the data analysis phase, various techniques were used to ensure internal validity. Methods included; pattern matching, explanation building, addressing rival explanations, and use of logic models to extract and express the data collected (Huberman and Miles 2002; Sobh and Perry 2006; Merriam 2009). Pattern matching

(Huberman and Miles 2002) was one of the major techniques used to analyse the data. Data was broken down into discrete parts and micro-analysed, compared for similarities and differences and questions asked about the phenomena as reflected in the data.

Categories were then discovered in the data. The researcher worked with the data and coded intensively around single categories, in doing so building up a dense texture of relationships around categories being focused on and looked for patterns in happenings and began to answer questions of why and how, about the phenomenon under scrutiny. This was done for each case separately, then cross case and cross dyad analysis was utilised to look for similarities and differences between cases and the dyad, with patterns coinciding strengthening the internal validity of the case study (Huberman and Miles 2002). Close attention was paid to ensure that that rival explanations and possibilities were considered and evidence was convergent and complete (Yin 2003).

A range of replication logic processes was used (Huberman and Miles 2002; Merriam 2009) to improve validity, reliability and quality of the research including; triangulation and member checking. Triangulation, through multiple sources of evidence was utilised in this research to help deal with potential problems of construct validity, by providing multiple measurements of the same phenomenon. Multiple sources of evidence were used in this research, with the main source of evidence coming from interviews and documents. Interviews with university staff and validated by education agents were the primary source of data collection. It was believed that interviews with these key informants would provide the richest data source, given that they exemplify the real-life phenomenon. This group of respondents work directly in the industry and have first-hand knowledge about the research problems being posed.

To further ensure validity and reliability of the data, the researcher engaged in data collection till data became saturated (the qualitative isomorph), checking for researcher bias, peer examination through discussion and presentation of findings at industry conferences (O'Connell, Clayton and Wong 2009) and discussion with industry experts. Procedures were detailed and carried out so that they could be replicated. Rich, thick descriptions and maximum variation and diversity of responses were sought though a diverse sample selection including nationality of education agents and differing university types of operations (Huberman and Miles 2002; Merriam 2009).

Case study analysis and interpretation

Based on case study analysis, the findings demonstrate a seven-stage model. These stages are diagrammatically represented in Figure 1. The italics texts are new findings that have not been identified by the existing literature.

(1) Needs analysis phase

(2) Awareness/pre-phase search and selection

(3) Exploration/ search and trial

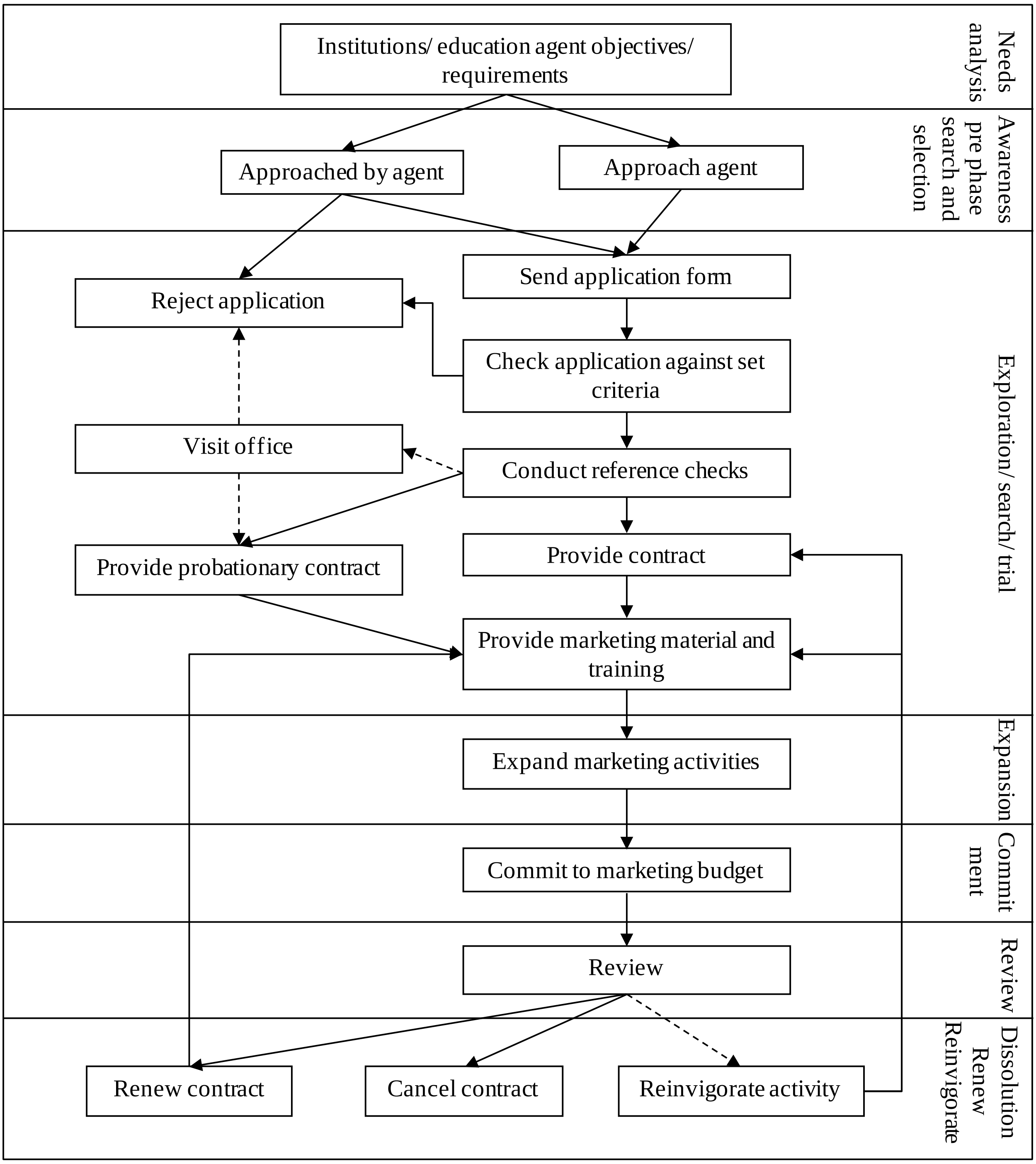
(4) Expansion

(5) Commitment

(6) Review

(7) Dissolution or *renew* or *reinvigorate*

Figure 1. Process flow of contracting and managing education agents – empirical findings from this study



Notes: A broken line indicates possible actions that could be undertaken, but were not necessarily always completed

As demonstrated by the figure, the findings showed that the relationship development process for universities and education agents in Australia included the addition of a pre-phase where an internal analysis of the needs and objectives of the organisation are first examined. The model was also extended through adding a specific review stage, where universities specifically reviewed the performance, relationship and standard of each of their contracted agents, typically on an annual basis. Two additional elements were also added to the final stage through the addition renewal and reinvigoration phases. In the renew phase contracts were again extended for a specific period. Should it be decided that the contract was not to be renewed then the dissolution process was implemented. In addition a reinvigoration phase was added to the end of the relationship development process flow, where relationships that had remained dormant for some time could be actively pursued to reinvigorate the relationship. In instances where the process flow follows a broken line (for example between the stages of conducting reference checks and visiting the office of the agent) this indicates possible actions that could be undertaken, but were not necessarily always completed. An explanation of each phase will now be provided with examples from respondents interviewed and details of the two additional extensions to the existing models.

Step 1: Needs Analysis

Building on and extending the models developed through examination of the extant literature (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Heide 1994; Wilson 1995), in this step of the process, participants advised that prior to seeking to develop relationships with education agents, it is essential that the university conducts its own needs analysis. This analysis should determine such things as: from which countries do they wish to concentrate or develop student recruitment; how many agents can they successfully manage from each market; what is their available budget to visit, train and service each education agent; what cultural mix of students are they aiming to recruit; are there countries or regions from which their degrees will be in demand; and what internal human resources do they have available to service agents. For example, as noted by the following university participants:

A: 'Before looking at contracting new agents, the university looks at various things such as what cohort of students would suit programs they offer, what is the current cultural mix, statistics of the number of students currently coming to Australia to study from those countries and what staff we have available to service these agents.'

B: 'Before seeking to engage with agents our university conducts an analysis on an annual basis of where we are going, where we see student recruitment coming from, which of our programs are in demand and which nationalities are interested in these programs. Once these objectives have been set and we have analysed our internal resources and staff capabilities we go about a process of prospecting agents who may be able to assist in reaching these objectives.'

As demonstrated by these participants, prior to engaging with education agents, universities showed signs of conducting an internal needs analysis and an external environmental analysis, looking at internal strengths and weaknesses and external opportunities and threats.

Further, the international education industry in Australia operates in a strict legislative environment under the National Code of Conduct and the Education Services for Overseas Students (ESOS) Act 2001 (Australian Education International 2011). Under this legislation, universities are responsible for the actions of education agents.

Universities are therefore conscious that they need to engage education agents who are going to represent them professionally and ensure that they are able to provide education agents with the time and training they need to be able to represent the university appropriately. As education agents are located in over 100 countries around the world (IIE 2007)the university needs to ensure they have the required human and financial resources to dedicate to each education agent they contract. Through a systematic needs analysis, universities are able to determine with whom they will develop relationships and what, where and how they are able to control to manage these relationships. The university then needs to see if they have the appropriate human resources to pursue these particular markets, what cultural and social considerations need to be taken into account to pursue these markets and whether their current staff are appropriate to undertake the task of relationship marketing and management with agents from these regions or if new staff need to be employed.

Step 2: Awareness/ Pre-phase search and selection

Once the university's objectives are set, the university can proactively seek education agents with whom they wish to work or investigate proposals forwarded from prospective agents. The findings from this research demonstrated that this step in the process combined the awareness phase as identified by Levitt (1981) and Dwyer et al. (1987) with the pre-phase search and selection process identified by Wilson (1995). This can be done by doing an analysis of their competitor's websites, to see who they are working with or through seeking information about reliable agents from Government bodies such as AEI (Australian Education International), the High Commission or by asking fellow colleagues. Universities offered the following insights into this stage of the relationship development process:

C: ‘If it was a new agent, and we had a look at it, but we saw that none of the big names [the ‘sandstones’] were working with them, we would probably say thanks, but no thanks.’

D: ‘These days institutions list who they work with, so it is any easy way to see who is working with who and who we could potentially contact to form a relationship with.’

In this phase universities form relationships or seek to have relationships with education agents who are reputable potentially using their competitors as a testimonial for the quality of the agent. Universities check which education agents their competitors are working with and use this as a source for finding appropriate agents to engage in a relationship. Another university stated that agents actively seek recommendations from other universities.

C: ‘I am drawing on my European experience, the way an agent starts in Europe is that someone has recommended you, so the people that do all the marketing and recruitment in Europe are quite close because you travel the circuit together all the time. So it might be that an agent in the UK contacts a university they work with in Australia and asks them to recommend a university in New South Wales, so generally that is how it happens.’

The above comment demonstrates that it is not only the universities who actively pursue particular education agents, but that agents are aware of this indirect testimonial process and also actively undertake investigation as to with which universities they perceive it would be appropriate to form a relationship.

Step 3: Exploration/ Search and Trial

In line with Scanzoni's (1979) original concept, the exploration, search and trial step of the process constituted the initial contact between universities and education agents. During this phase respondents stated that due diligence was performed, where agents were accessed and a vetting process was undertaken. Some universities had a standard check list with criteria that agents had to meet, such as numbers of students they recruit per year, what their promotion material was like, and the professional nature of the agency. As indicated in Figure 1, in some instances universities would take an additional step and visit the agent's premises to gauge how they ran their business.

B: 'Agents seek us out and we decide whether we are going to have a relationship with them and usually there is a kind of a process where they have to provide us with some information and some references and some things like that, and after that we individually (depending on what region we look after) look after them and that means providing all the support that they require in terms of training, making sure they understand our courses, making sure they are provided with the relevant brochures and visiting them as regularly as possible and this obviously varies from agency to agency.'

Some agents were put on an annual contract; others were put on a probationary contract which was reviewed after six months, with specific targets that agents would be required to meet.

E: 'If we do sign up a new agent it would generally be for six months on a short term contract, which is pretty much the same, but it has an end date and that is it, then we choose whether to renegotiate from there e.g. 12 months or longer.'

Another respondent stated the importance of initially vetting agents to ensure that problems are not experienced later.

F: 'The strong force is that you have selected them properly and you don't have to end up threatening them with termination later'.

The vetting process of potential education agents is performed with due diligence. Universities do not want to be in a position to be working with an education agent who is acting unlawfully, unethically or reflecting either their university or, indeed, the country in a bad light. Further, as indicated by response F above, universities alluded to the significant challenges of either managing difficult relationships or potentially dissolving the relationship in unsatisfactory situations. As a result, the vetting process to determine if a university should engage with a particular education agent has become quite bureaucratic with formalised, step-by-step procedures to ensure the university has as much information about the prospective agent as possible before issuing a contract and recruiting students.

Step 4: Expansion

Reflecting the previously defined concept of expansion (Scanzoni 1979) during this phase, the universities advised that they attempted to build the relationship by being in regular contact with the agent. University staff developed deeper relationships with agents through: participating in agent events, conducting joint marketing activities, and conducting more regular training. During this phase various relationship marketing techniques were utilised by the universities to develop the relationship. Techniques implemented by universities included: engaging through regular contact and communication; and providing efficient services to agents. It is at this stage where the relationship phase truly commences and where social, cultural and technical aspects need to be taken into consideration and addressed. As another participant noted:

> *G: 'It is all about trust and confidence. My market really values this, knowing the person and knowing they can get an answer when they need it. Other people who just walk in won't have much success till they build a relationship up'.*
>
> *H: To build a relationship we are in regular contact, doing things with them, participating in their events, making them feel they are of value.'*

During this phase a key staff member was typically assigned to a particular agent. In many cases agents were grouped into a particular region and a staff member who had particular expertise in the social and cultural business aspects of that region was assigned to manage and develop those relationships. The information systems used by the majority of universities interviewed were fairly basic and efforts appeared to be concentrated on being in the field forging and building relationships rather than having technically advanced customer relationship management systems to manage and record actions.

Step 5: Commitment

During the commitment phase, universities stated that they started to create annual joint marketing plans, provide familiarisation visits for top performing or promising agents, and provide marketing budgets to agents to conduct recruitment activities. Reflecting the commitment stage as previously conceptualised in the extant literature (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995), the universities developed stronger relationships over longer terms through developing joint programs and continuing to enter into exchange contracts. This was an important phase where various relationship marketing techniques were utilised with the aim of building the relationship and increasing student recruitment through particular education agents.

G: 'As a motivational strategy, we sponsor agents to come to Australia on a familiarisation tour – this works very well.'

J: 'It basically it got to the point where whatever they need, whatever support they need for their activities, we give it, no questions asked, but if we need anything from them they will provide it, no questions asked. We have built up and managed a very good relationship between us and their partner institutions as well. Basically it is a steady flow of students. It is that sort of a strong relationship.'

Another university mentioned preferential treatment of commission incentives for their primary and higher producing agent.

K: 'We provide more preferential treatment that really benefits them, we try and use it as a bit of a marketing tool and kind of remind them, for example, you have almost reached 10 students. So commission varies depending on being a primary or secondary agent.'

In this phase the universities appeared to have forged strong relationships with particular education agents and were implementing specific relationship marketing strategies to build and maintain these relationships for greater business success.

Step 6: Review

Universities typically reviewed agents on an annual basis. However, some of the universities conducted reviews each term, bi-annually, or every two years. During the review period the university would assess what they had provided the agent with and what were the outcomes. In some instances universities were satisfied if the agent only recruited a small number of students, but the students were of an excellent calibre, or where the students were recruited into specific programs for which they wanted to increase numbers, or simply where the agents were perceived as providing good service. As noted by one participant:

D: 'Some agents are really good little operators, who give you a small amount of really good students, so numbers are irrelevant.'

Another point that universities noted as being particularly important was the conversion rate of applications to enrolments. Universities did not want to waste valuable resources responding to applications that did not convert into enrolments. One respondent kept contracting an agent who did not recruit very many students, but was an excellent source of market intelligence.

G:'There are different measures of productivity include number of applications, number of conversions, market intelligence they provide, introductions they are able to give. I have some agents who only recruit a few students, but I keep them on as they are an excellent source of market intelligence.'

Another university had set review processes in place through conducting an annual survey.

C: 'We also do a survey for all of our agents and they basically let us know what is working well and what is not working well. We do this once a year at the end of the year. We wait till all the results come in for the year including our third semester. From that we send out the agent survey and performance their review.'

During this phase of the relationships the universities tracked how relationships with each particular agency was progressing and depending on how they felt relationships were embedded or succeeding they made decisions regarding the future strategy to pursue with that particular agent. Universities stated they used various technologies to determine business success including conversion statistics. However, in addition to actual recruitment statistics, how each agent had performed other aspects of the relationship were also taken into account such as the depth of the relationship and other value that was obtained through having the relationship as demonstrated by the previous example.

Universities tended to undertake this review process on an annual basis, when contracts were up for renewal. As this process was a set annual procedure it was felt that the existing model (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995), needed to be amended to demonstrate this specific process.

Step 7: Dissolution, renew or reinvigoration

In contrast to previous studies (Scanzoni 1979; Levitt 1981; Dwyer, Schurr and Oh 1987; Wilson 1995), the final stage of the process resulting from the findings of this research consisted of three choices that universities could make: to dissolve or cancel the contract, or to renew the contract, or to reinvigorate the relationship.

Dissolution or cancellation of the contract

In some instances if the agent was not performing, their contract was cancelled. This was typically done with some consultation to allow the agent time to perform. If agents had been found to be involved in unethical or unlawful dealings, agents were typically terminated immediately.

> *L: 'Generally agents are all monitored through our data base. We have a start date and a review date for the end date of their contract. If they are performing then no problems, go ahead with the renewal. If they are not performing we determine the factors or reasons. If they need to be terminated then we terminate them straight away. Say for example if they have not been performing over the last couple of years and you have given them a lot of notice then you need to be quite hard and say you*

either do this or the contract will be cancelled. I think all the processes needs to be done before you can terminate. But that is how we manage the contract.'

G: 'Have a review of performance at the end of the year and then give them a 6 month probation at which time the contract could be cancelled.'

F: 'Depend on nature, if bad terminate straight away, but don't think we have ever had to do this. If just an error e.g. not following procedure they need increased training or increased contact so they know the procedure. It is difficult for agents; they are dealing with 40 institutions that do things differently. Mainly we take it up with an agent to ensure it doesn't happen again.'

Contract renewal

Agents who were performing well would have contracts renewed and perhaps targets set or joint marketing plans prepared. In this phase further strategies were developed based on the existing relationship with an agent.

H: 'We look at numbers annually and don't renew if they aren't producing. We work with the ones who are working for us.'

C: 'We assess our agents on an annual basis. If they are performing then we renew their contract'

Reinvigoration of the relationship

In some cases the university would decide to reinvigorate relationships with particular agents that, for example, they had not provided much attention to in the past, or perhaps where an agent that had previously performed well, but had dropped off since a particular staff member had left.

D: 'There is an agent who has been around for a long time in Singapore and only works with Victorian universities. She had a relationship with one of our marketing staff here for quite a few years and they were good friends. That staff member retired and a new marketer came in who only did minimal work and damaged that relationship. Last week I was coming through Singapore, I stopped over for the night and actually had dinner with her. So I am trying to rebuild that relationship.'

A: 'Some relationships seem to either plateau or reduce the numbers of students that they send. In our annual review we look at these agents and determine if we think such agents have potential. If we think it is worth the effort we see if the relationship can be revived through such thing as providing greater attention or implementing joint promotional strategies together.'

In this case the university had a staff member who, through cultural and social connections, had forged a strong and productive relationship with a particular agent based in Singapore. However, when this staff member left the university the subsequent employee was new to the industry, did not have an understanding of cultural intricacies of relationship management of other countries, did not socially get to know the particular agent, did not dedicate time and effort to build the relationship and as result the agent stopped recruiting students for that university. This demonstrates the importance of ensuring that social and cultural perspectives are thoroughly considered when undertaking cross cultural relationship management and marketing. It also demonstrates that once these social and cultural aspects can be acknowledged and catered for, that relationships between organisations can be renewed, providing the right person and required effort is implemented.

Summary of process flow

Overall, universities followed a similar process of contracting their agents with some variations shown in the management style, particular to each university. A process flow of the stages of relationship development and management is depicted in Figure 1. All education agents interviewed agreed with the process flow as typical of what occurs in the industry.

Some universities appeared to be better organised in how they managed their agents, with dedicated staff for particular country regions and computer monitoring systems that agents could log in and track their student applications. There was however, a general lack of sophisticated customer relationship management (CRM) information systems to assist in the management and monitoring of agents, with the majority of universities not having a CRM. Rather, many universities simply used excel spread sheets to record the agents contact details and addresses. Other particular details of the relationships were often kept only in memories of key university employees who managed that region. This demonstrates a significant risk point for universities as shown where a key staff member left the situation and the relationship broke down as a result.

Two universities had implemented CRM systems to track discussions, visitations, feedback, promotional material supplied, email correspondence and joint promotional activities. One respondent stated that these were useful in the instance of staff turnover as the new employee could backtrack through the history of particular relationships and be able to more easily forge or continue the relationship having records and a deeper understanding of previous dealings.

Process flow of contracting and managing education agents

The process flow of contracting and managing education agents presented in Figure 1 is a new process flow constructed from the results of this research, adding to the works of other models including those developed by Scanzoni (1979), Levitt (1981), Dwyer et al. (1987) and Wilson (1995) Heide (1994). Two extra stages and two extra phases have been added as a result of the findings of this research.

The two additional stages from the previous models include a “needs analysis phase” and a “review phase” and are important additions to previous models. In the needs analysis phase the university sets out their organisational objectives including such things as the number of agents they can manage, available budget, cultural cohorts they wish to pursue, human resources available, and the targeted number of international students they wish to recruit. This needs analysis provides the foundation and direction upon which student recruitment through agents can be pursued. The review phase is a set function that universities undertake towards the end of their contract with their agents, whereby they review the agent’s performance and decide their next course of action for that particular relationship.

The other two additional phases to this model occurs at the end of the process flow and looks at the option of renewing contracts or the possibility of reinvigorating the relationship. While other models (e.g. Wilson, 1995; Heide 1994) end in termination of the relationship, the relationship between universities and education agents undergo a definite evaluation phase where a decision is made to either renew or terminate the contract and relationship typically undertaken just before contracts with their education agents expire. In addition there are often possibilities of reinvigoration of a relationship even after it has terminated or perhaps where the service has slowed down. For example, when new staff are employed who may speak the language for the country where the agent is located and are able to go back to the agency and re-establish a relationship or as in the case described above where a staff retired and the relationship was lost, only to be reinvigorated by a new manager. This process flow not only is a contribution to knowledge through extending current models, it also provides practitioners with a process flow that can be implemented to contract and manage education agents.

Managerial implications

There are considerable practical implications from the study. The study used case research to demonstrate the development of university and education agent relationships in a service industry, business-to-business context. Figure 1 provides a straightforward process flow to enable marketing managers to understand what is happening and use the model in a practical sense. The meaning of each step has been clearly explained so that marketing managers can understand them and use them to guide future customer relationship marketing activities. Of particular interest from the findings of this study, is that the process model suggests the need:

(1) to take a long term view to develop a productive relationship with an agent;
(2) to follow each step in order to build an effective relationship with an agent;
(3) to start the process with a *needs analysis*; and
(4) once a relationship is in place, alternatives to termination can be *contract renewal* or *relationship reinvigoration*.

In other words, the model renders marketing managers a practical tool, rooted in real university cases. Not only does the process model enable marketing managers to follow the steps to manage relationships with agents, but also fully understand the issues under each step.

Conclusion

In summary, a process model of building and managing customer relationships in the business-to-business context of a service industry has taken shape. Important to the development of the model are the seven steps of needs analysis, awareness or pre-phase search and selection, exploration, search and trial, expansion, commitment, review and then either dissolution, renewal or reinvigoration. Two steps and two phases are new: the first step needs analysis and the sixth step of a set review; and two additional phases of renew or the possibility of relationship reinvigoration as an addition to step seven. . This is a theoretical contribution to the customer relationship marketing literature. The addition of these elements to the existing literature provides a more comprehensive process model that can explain the nature of customer relationships within professional services industries and a practical guideline for marketing managers to follow.

At this stage the model has internal validity using the criteria of qualitative research. However, there are two limitations and opportunities for future research. The two main limitations to this research preventing generalisation to a broader context include firstly, that this research examines Australian based universities. The study does not investigate university behaviours in competing nations. Secondly, the study concentrates on recruitment of international students to universities. Interviews were not conducted in other educational sectors such as at English language schools, vocational education centres or at high schools and findings may not apply to these sectors. Further research could be undertaken in different countries and in different sectors to overcome these limitations. In addition the presented process flow of contracting and managing agents could be utilised to examine the process model in other service sectors to test its applicability in these alternative circumstances.

References

Ali, H. and S. Birley (1998). "The role of trust in the marketing activities of entrepreneurs establishing new ventures." Journal of marketing management **14**(7): 749-763.

Anderson, E., L. M. Lodish and B. A. Weitz (1987). "Resource allocation behaviour in conventional channels." Journal of marketing research **XXIV**(February): 85-97.

Anderson, J. C., D. C. Jain and P. K. Chintagunta (1993). "Customer value assessment in business markets: A state of practice study." Journal of Business to Business Marketing **1**: 3-29.

Anderson, J. C. and B. A. Weitz (1990). "Determinants of continuity in conventional industrial channal dyads." Marketing Science **8**(Fall): 62-74.

Australian Education International. (2011). "The National Code of Conduct and ESOS Act." Retrieved 27/05/11, 2011, from http://aei.gov.au/AEI/ESOS/default.htm.

Bagozzi, R. P. (1975). Marketing as Exchange. Journal of Marketing. **39**.

Bergen, M., S. Dutta and O. C. Walker (1992). "Agency relationships in marketing: a review of the implications and application of agency and related theories." Journal of marketing **56**(3): 1-24.

Berry, L. L. (1995). Relationship marketing of services--growing interest, emerging perspectives. J. Acad. Marketing Sci. **23**.

Berry, L. L. and A. Parasuraman (1991). "Marketing sevices: Competing through quality." The Free Press New York.

Biggemann, S. and F. Buttle (2005). Conceptualising Business-to-Business Relationship Value. Proceedings of the 21 st Industrial Marketing and Purchasing Group Conference, Rotterdam, Erasmus University.

Blois, K. and C. Grönroos (2000). The Marketing of Services, Oxford University Press 2000**:** 500.

Buttle, F. (1996). Relationship Marketing. Relationship Marketing: Theory and Practice F. Buttle, Paul Chapman Publishing**:** 1-16.

Chiu, H. C., M. Lee, Y. C. Hsieh and L. Y. Chen (2007). "Building customer relationships: A comparison across multiple service encounters." Advances in Consumer Research **3**: 720-725.

Clancy, I. (1997). An Exploration of Firm-Customer Relationships and the Segmentation of Consumer Retail Banking Markets. Annual Academy of Marketing: Conference Proceedings, Manchester.

Conway, A. (1996). Relationship marketing within the not for profit sector. London, Paul Chapman Publishers.

Conway, T. and J. S. Swift (2000). "International relationship marketing: the importance of psychic distance." European Journal of Marketing **34**(11/12): 1391-1413.

Cookson, P. S. (2001). A partnership for international exchange. The Tokyo Accounting Centre-Athabasca University program. North Carolina, The Technology Source.

DEEWR (2009). Using Education Agents - A guide for providers of education and training to overseas students. Department of Education Employment and Workplace Relations. Sydney, Australian Government - Australian Education International**:** 1-7.

Department of Education and Training International (2011). International education and training market update: International student data May 2011. V. E. Office.

Dion, P., D. Easterling and S. J. Miller (1995). "What is really necessary in buyer/seller relationships?" Industrial Marketing Management **24**(1): 1-9.

Dwyer, R. F., P. H. Schurr and S. Oh (1987). "Developing Buyer-Seller Relationships." Journal of Marketing **51**(2): 11.
Eisenhardt, K. M. (1989). "Building theories from case study research." The academy of management review **14**(4): 553-550.
Ford, D. and R. McDowell (1999). "Managing business relationships by analyzing the effects of value of different actions." Industrial Marketing Management **28**(5): 429-442.
Gillard, J. (2009) "Measures to safeguard education for overseas students studying in Australia." Ministers Media Centre - Education, Employment and Workplace Relations portfolio.
Gronroos, C. (1990). "Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behavior Interface." Journal of Business Research **20**(1): 3.
Gupta, M. (1983). "The basis for friendly dyadic interpersonal relationships." Small Group Behaviour **14**(1): 15-53.
Gwinner, K. P., D. D. Gremler and M. J. Bitner (1998). Relational Benefits in Services Industries: The Customer's Perspective. Journal of the Academy of Marketing Science. **26**.
Heide, J. (1994). Interorganizational governance in marketing channels. Journal of Marketing. **58**.
Hemphill, E. (2010). "Investigation of agency agreement formation: new opportunities for marketing relationship development in service industries." The Service Industries Journal **30**(2): 149-169.
Holm, D. B., K. Eriksson and J. Johanson (1996). "Business networks and cooperation in international business relationships." Journal of International Business Studies **27**(5): 1033-1052.
Huberman, M. and M. Miles (2002). The qualitative researchers companion. Thousand Oaks, CA, Sage Publications.
ICEF. (2010). "ICEF Agent Barometer." ICEF email newsletter Retrieved February 2010, from http://www.icef.com/.
IIE. (2007). "IIE Networker." Retrieved February 2011, from www.iie.org.
Jobson, D. (2005). "Migration agents risk universities' future." 8th May 2005. Retrieved 26th January 2007, 2007, from http://www.smh.com.au/news/National/Migration-agents-risk-universities-future/2005/05/08/1115491047064.html.
Juttner, U. and H. P. Wehrli (1994). "Relationship marketing from a value system perspective." International Journal of Service Industry Management **5**(5): 54-73.
Karantinou, K. M. and M. K. Hogg (2001). "Exploring Relationship Management in Professional Services: A Study of Management Consultancy." Journal of Marketing Management **17**: 263-286.
Lacey, R. (2007). "Relationship drivers of customer commitment." Journal of Marketing Theory and Practice **15**(4): 315.
Levitt, T. (1981). "Marketing Intangible Products and Product Intangibles." Harvard Business Review **May-June**: 94-102.
Liang, C.-J. and H.-J. Chen (2009). "How to lengthen, deepen and broaden customer–firm relationships with online financial services?" Journal of Financial Services Marketing **14**(3): 218-231.
Lilien, G., P. Kotler and S. K. Moorthy (1992). Marketing Models.
Lin, G. (1998). Sustaining satisfactory joint venture relationships. Chicago IL, Aldine Publishing.

Lin, N. P., J. Weng and Y. C. Hsieh (2003). "Relational bonds and customer commitment - a study on the moderating effects of web site usage." The Service Industries Journal **23**(3): 103-124.
McQuiston, D. H. (2001). "A conceptual model for building and maintaining relationships between manufacturers' representatives and their principals." Industrial Marketing Management **30**(2): 165.
Merriam, S. B. (2009). Qualitative research: A guide to design and implementation San Francisco, John Wiley and Sons.
Moller, K. K. and A. Halinen (2000). "Relationship marketing theory: Its roots and direction." Journal of Marketing Management **16**: 29-54.
Moorman, C., Z. Gerald and D. Rohit (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. Journal of marketing research. **29**.
Morgan, R. M. (2000). Relationship marketing and marketing strategy: Evolution of relationship marketing within the organization. Handbook of relationship marketing J. N. Sheth and A. Parvatiyar. CA, Thousand Oaks**:** 481-505.
Morgan, R. M. and S. D. Hunt (1994). "The commitment-trust theory of relationship marketing." Journal of Marketing **58**(3): 20.
O'Connell, N., D. Clayton and H. Y. Wong (2009). Getting the best from your agents and maintaining compliance - can it be done? Australian International Education Conference 2009, Sydney, AIEC.
Palmatier, R. W., S. Gopalakrishna and M. B. Houston (2006). "Returns on business-to-business relationship marketing investments: Strategies for leveraging profits." Marketing Science **25**(5): 477-493.
Scanzoni, J. (1979). Social exchange and behavioral interdependence New York, Academic Press.
Selnes, F. (1998). "Antecedents and consequences of trust and satisfaction in buyer-seller relationships." European Journal of Marketing **32**(3/4): 305-322.
Sheth, J. N. and A. Parvatiyar (1995). "Relationship marketing in consumer markets: Antecedents and consequences." Journal of the Academy of Marketing Science **23**(4): 255-271.
Shi, G., Y. Shi, A. Chan and Y. Wang (2009). "Relationship strength in service industries: A measurement model." International Journal of Market Research **51**(5): 659.
Sobh, R. and C. Perry (2006). "Research design and data analysis in realism research." European Journal of Marketing **40**(11/12): 1194-1209.
Sweeney, J. C. and D. Webb (2002). "Relationship Benefits: An Exploration of Buyer-Supplier Dyads." Journal of Relationship Marketing **1**(2): 77.
Thomas, K. (1976). Conflict and Conflict Management. Handbook of Industrial and Organizational Psychology. M. Dunnette and P. Alto. California, Consulting Psychologists Press**:** 889-935.
Turnbull, P. W. and D. T. Wilson (1989). "Developing and protecting profitable customer relationships." Industrial Marketing Management **18**(3): 233-238.
Wetzels, M., K. de Ruyter. and M. van Birgelen. (1998). "Marketing service relationships: the role of commitment." Journal of Business & Industrial Marketing **13**(4/5): 406-423.
Wilson, D. T. (1995). "An integrated model of buyer-seller relationships." Academy of Marketing Science Journal **23**(4): 335.
Wilson, D. T. and S. Jantrania (1996). "Understanding the value of a relationship." Asia Australia Marketing Joumal **2**(1): 55-66.

Yin, R. K. (2003). Case study research design and methods. Thousand Oaks, Sage Publications.
Yorke, D. A. (1990). "Interactive Perceptions of Suppliers and Corporate Clients in the Marketing of Professional Services: A Comparison of Accounting and Legal Services in the UK, Canada and Sweden." Journal of Marketing Management **285**(5): 307-323.
Zeithaml, V., A. Parasuraman and L. Berry (1985). "Problems and strategies in services marketing." Journal of marketing **49**(2): 33-46.

The antecedents of Word-of-Mouth behaviour: The service quality perspective

Abstract

Purpose – The aim of the study is to undertake an empirical study to investigate the nature and magnitude of the determinants of the word-of-mouth behaviour from the point of view of service performance and post purchase perceptions.

Design/methodology/approach – A quantitative study was undertaken. A theoretical model linking service quality issues and word-of-mouth behaviour was developed and tested using structural equation model modelling of 280 surveyed participants at various day spa locations.

Findings – All major fit indices from structural equation modelling method show satisfactory results for both the measurement models and the structural model. The results confirm significant relationships amongst the constructs in the model. While the quality of the product, customer service and facility atmosphere lead to customer satisfaction, it is facility atmosphere and customer satisfaction that drive Word-of-mouth behaviour.

Research limitations/implications –The results of this study provide insight to aid owners and marketing professionals in the service industry in fully understanding that the enhancement of the delivery of high quality service, an accommodating environment and instilling feelings of satisfaction with their customers will more likely lead to positive word-of-mouth (WOM) referrals. The most obvious limitation is that the survey was conducted in one country only at this stage, pending more applications.

Originality/value – The major value of this study is the establishment of the role of service quality in word-of-mouth behaviour. This research provides empirical results of the impacts of service performance and post purchase perceptions on word-of-mouth behaviour.

Article Type:

Research paper

Keyword(s):

Word-of-mouth (WOM), Services Marketing, Customer Service, Customer Satisfaction, Consumer Behaviour

Introduction

There have been studies that have shown WOM is often a strong indicator of influencing consumer judgement of the services provided by an organisation. This is so as service quality has become an increasingly indispensable aspect for service providers in managing a successful business operation in today's competitive service market (Blose, Tankersley & Flynn 2005 and Schneider, Holcombe & White 1997).

According to Chiarelli (2006, p.42), 'word-of-mouth is now the number one most-trusted source of product information on a global scale, with advertising a distant second. Seventy percent of consumers across the globe trust friends, family, or other people first when searching for information or ideas on products to buy. In the USA eighty percent of consumers cite word-of-mouth as the most trustworthy source'. The Nielsen Company (2009) found similar results in countries such as Vietnam (81%), Italy (80%), China and France (both 77 %) and Finland (50%).

WOM can be defined as the process in which clients tell others, external to the transaction, of their (dis)pleasure with a product or service provider (Swanson & Kelly 2001). Further, the delivery of service performance results are exhibited by consumers demanding more from their relationships as well as a degree of rationalism, which are perceived to exist between those relationships (Bove & Johnson 2001 and Ward & Smith 1998) with service providers as seen through WOM behaviour (Zeithaml 2000; Rust, Zahorik & Keningham 1995; Rust & Zahorik 1993; Nelson, Rust, Zahorik, Rose, Batalden & Siemanski 1992 and Koska 1990). WOM is thereby a powerful mechanism as a form of promotion that is generally accepted in the transmittal of information communicated to others (Dye 2000 and Buttle 1998). WOM communication will then play a specifically essential role for service providers, as intangibility makes the pre-purchase assessment of services unfeasible (Zeithaml, Parasuraman & Berry 1985; Zeithaml, 1981 and Berry 1980).

WOM can perform a predominantly meaningful function for those service providers who have significant credibility and visibility within a community, such as services rendered by those professional or financial organizations (Sweeney, Soutar, & Mazzarol 2008), in particular those services provided by the day spa industry as indicated in this study. This is more so the case where people, who partake in intimate, relaxing and therapeutic experiences in a day spa setting, initiate communication processes in which they will share parts of their private experiences with various social partners (Dobele, Lindgreen, Beverland, Vanhamme & van Wijk 2007). While the importance of WOM cannot be emphasised enough, research gaps remain in the issues that affect WOM behaviour from the service quality perspective.

Literature Review on WOM Behaviour

Consumers may prefer personal information sources when they are going to buy from or use a service provider due to the confidence they have in those sources (Murray 1991). Many consumers may be influenced more by WOM communications than they are, for example, by printed formats (Herr, Kardes & Kim 1991). Research, however in the WOM context has been generally regarded as opinion leadership research, or the process that an ‘opinion leader’ informally influences the actions or attitudes of others (Dobele 2006 and Schiffman, Bednall, Watson, & Kanuk 1997, p. 472). Opinion leaders could spread information concerning a service provider and their products quickly over a populous starting within their own circles. Information may then continue to spread to other circles and so on, as effective opinion leaders can easily create instant positive WOM for an organisation in this way (Walker 1995).

As WOM marketing by researcher's increases, the resulting effect has been the attention service providers have been placing on its validity within the community and their decreasing reliability in more traditional marketing techniques (Laemer 2004; Gladwell 2000; Silverman 2001a, 2001b; Hendricks 1998; Silverman 1997; Rust, Zahorik & Keiningham 1995; Wilson, A. 1994 and Wilson, J.R. 1994). Word-of-mouth marketing may therefore affect the implementation of new product categories because of consumer beliefs and preferences and the choice of products, which may decide the success or failure of those service providers' products (East, Hammond & Lomax 2008). A study by Dobele, Lindgreen, Beverland, Vanhamme & van Wijk, 2007, on viral messaging, even suggested organisations that use viral marketing messages may tap into consumer's emotions thereby linking the service provider and or its products to their recipient base as a way of spreading their viral message.

The impact of WOM on consumers has been of significant interest to researchers as it relates to consumers' actions, preferences and choices (Katz & Lazarsfeld 1955). Studies have found that WOM communication has often exerted strong influence on consumer behavioural judgements on an organisation (Herr, Kardes & Kim 1991). Researchers have identified that the quality of the experience, staff friendliness, expertise and source credibility (Dobele & Lindgreen, 2010) have also played a significant role with others reporting that the frequency of social sharing is regarded as a positive function (Derbaix & Vanhamme, 2003). Therefore service providers are placing more and more importance on WOM strategies.

Table 1 provides a sample of those researchers who have focused on the effects of WOM communication representations.

Table 1: Research on WOM communication

Researcher(s)	Research Focus
Dobele & Lingreen (2010)	Study conducted to understand consumer value in health care, focusing on one context – word-of-mouth referrals by new mothers.
De Bruyn & Lilien (2008)	Developed a model to study the influence of unsolicited electronic referrals with-in a multi-stage decision making framework.
Dobele (2006)	Studied what are the different types of positively referring clients of professional services firms and how do these types relate to the believability of the referral.
Bell & Song (2004); Garber, Goldenberg, Libai, & Muller	Studied the effects of WOM from the geographical evolution of sales data.

(2003); Foster & Rosenzweig (1995)	
Godes & Mayzlin (2004)	Demonstrated a positive relationship between online WOM and its dispersion across communities and ratings for TV shows.
Derbaix & Vanhamme (2003)	Conducted research using the critical incident technique on the emotion of surprise and its influence on word-of-mouth (WOM).
Van den Bulte & Lilien (2003); Van den Bulte & Lilien (2001); Coleman, Katz & Menzel (1966)	WOM played a significant role in the diffusion of tetracycline, and determined that a more-sophisticated decomposition of the physicians' adoption decision did, in fact, yield evidence for the role of interpersonal influence.
Biyalogorsky, Gerstner & Libai (2001)	The authors investigated the optimality of customer referral programs and show that the firm should offer rewards to customers only if they are somewhat demanding but not too demanding.
Mayzlin (2001)	The author demonstrated that the creation of anonymous online WOM may be a profitable strategy even when consumers are aware of the possibility that the firm is creating it.
Feick & Price (1987)	Suggested that there exist 'market mavens' whose influence extends across categories.
Bloch & Richins (1983); Jacoby & Hoyer (1981); King & Summers (1970); Katz & Lazarsfeld (1955)	Studied the important role played by category-level opinion leaders in the diffusion of information.
Engel, Blackwell & Kegerreis (1969); Arndt (1967); Coleman, Katz & Menzel (1966)	WOM as a key driver of service provider sales.

Through the review of the literature, it is revealed that WOM may have the biggest impact on a firm's sales because of the interpersonal relationships with acquaintances, friends and relatives. While there is argument that WOM is an important form of communication regarding customer service quality, few researchers offer insightful perspective for service providers. Opinion leaders provide information therefore interpersonal relationships with the consumer affects sales therefore marketers and service providers should market to opinion leaders. However, little guidance is offered in terms of how to actually implement this marketing strategy. In addition, there has been little research looking at WOM communication from an organisations perspective (Wangenheim & Bayon 2004). Research, in part, has focused on developing an understanding of the underlying phenomenon itself (Godes & Mayzlin 2004). Research into WOM communication has mainly occurred to establish its frequency, effect, product evaluation and social impact on relationship behavioural patterns (Alvarado 2000). Thus, there is a need to examine the antecedents of WOM to fill the research gap.

The service setting is a complex array of environmental cues which can potentially influence and affect the behavioural processes of the consumer. In the marketing literature there have been a number of theoretical focuses proposed in an attempt to assimilate environmental attributes and consumer responses into the overall framework. The delivery of performance results is exhibited by consumers demanding more from their relationships with service providers as seen through WOM behaviour (Zeithaml 2000; Rust, Zahorik & Keningham 1995; Rust & Zahorik 1993; Nelson, Rust, Zahorik, Rose, Batalden & Siemanski 1992 and Koska 1990). This research examines the relationships between various service aspects and their impacts on WOM.

Conceptual Model

As a means of measuring how the service environment relates to subsequent customer perceptions and behaviours, the conceptual model classifies these constructs into three tiers: service performance, post purchase perceptions and future customer behaviour. It is conceptualised that service performance is classified as performances conducted by the service provider that measures customer service quality; leading to post purchase perceptions, which are the basis for customer's relationship formulation with the service provider. The post purchase perceptions in turn affects future customer behaviour, which is the outcome of how customers behave in a certain way following their engagement with the service provider. Service performance consists of product delivery, customer service, and facility atmosphere; post purchase perceptions comprise customer satisfaction; and future customer behaviour comprises WOM.

WOM is the process in which clients tell others, external to the transaction, of their (dis)pleasure with a product or service provider (Swanson & Kelly 2001). It indicates a customer's future referral intention. WOM is measured by five items.

Product Delivery (PROD) is the delivery of those tangible products in which the product is to be delivered such as: glasses, plates, and the quality and selection of those products. It directly evaluates the quality of a product delivered by an organisation. In a day spa setting, it is the finished product or outcome dimension such as massages, treatments, towels and bathing areas. Eleven items were used in this study.

Customer service (CSER) is defined as the manner in which the customer receives the service product. That is the manner in which the coffee and other products were provided, which is commonly called ‘customer service’ (adapted from Grönroos 1990, 1984, 1982). Customer service quality reflects how well the organisation provides for consumers through the buyer-seller interaction. It is measured by ten items.

Facility atmosphere (ATOM) refers to the ambient atmospheric conditions of the physical surroundings of the service setting, in which the delivery of a product takes place. Facility atmosphere includes background characteristics of the environment such as: lights, temperature, and noise (Bitner 1992 and Baker 1987). It relates and measures the overall amenities of a service provider. From a performance perspective, facility atmosphere includes those physical evidences organisations efficiently utilise to represent facets of their product delivery where customers experience the entire physical environment. Five items were used in this study to measure the construct.

Customer Satisfaction (CUSATR)—Customer satisfactions are feelings and judgements of customers towards a product after it has been used or consumed (Jamal & Naser 2003). It relates to the overall satisfaction a consumer has with a service provider. Customer satisfaction was perceived as being evaluative and an emotion based response to a service encounter. Customer satisfaction reflects the degree to which a consumer believes the possession and/or use of a product evoked positive feelings. Six items were used to measure the construct.

Hypotheses Development

Effect of customer perceptions of the quality of the product on customer satisfaction.

Customers’ positive perceptions can positively affect customer satisfaction. Customers often change suppliers due to the perceived indifference of employees (Keiser 1988) as well as being influenced by the outcome of the finished product to satisfy and meet their required needs (Schiffman, Bednall, Watson & Kanuk, 1997). In today's marketplace, more businesses are increasing profits by actually saving customers' time by satisfying their wants and needs. Firms do this by training a new breed of customer-service representatives, people with the skills to get to the root cause of consumer problems and who are closely linked to the provider of the product to arrange to get the problem fixed (Womack 2006) thereby increasing customer satisfaction levels towards that service provider. Fujitsu Services of Europe, a relative newcomer to the help-desk industry, started by asking what the consumer really wants, as a means of increasing customer satisfaction, by creating a positive experience for customers (Womack 2006). Thus,

H1: customer perceptions of the quality of the service are positively related to customer satisfaction.

Effect of customer perceptions of the customer service on customer satisfaction.

Empirical results show that customer service can affect the perceptions of that service provider's quality (for example, Dann & Dann 2004**;** Schiffman, Bednall, Watson, & Kanuk, 1997; Grönroos 1990**;** Shavitt 1989; Lehtinen & Storbacka 1986; Parasuraman, Zeithaml & Berry 1985 and Grönroos 1984), which directly effects the level of satisfaction customers have towards that provider. The influence service providers can have on satisfying their customers by how they receive and experience the services or products delivered is thereby regarded as the functional service quality of an organisation (Grönroos 1990).

Customers will assess what it is they need to obtain from an organisation, such as customer service, in choosing the product they desire or assortment options and look for social interaction from staff resulting in their needs being satisfied through this functional process (Noble, Griffith & Adjei 2006). Consumers who patronise a service provider, at times making a purchase, are actually forging a satisfied relationship with that organisation (Thompson & Arsel 2004 and McCracken 1986). It shows the importance of the service staff in service encounter. Service providers can further enhance and improve relationships by hiring staff that have previous skills and training in customer service (Ng, David & Dagger 2011). Staff performing their duties professionally can expect to enhance the customer satisfaction. Thus, *H2: customer perceptions of the customer service are positively related to customer satisfaction.*

Effect of customer perceptions of the atmosphere on customer satisfaction.

Physical settings are considered 'physical evidences' that service providers can effectively use to portray the specific elements of their product delivery that they are conveying to the consumer, and consequently satisfying those consumers experiences as they relate to the physical setting in its entirety (Berry & Parasuraman, 1991). Kotler (1973) suggests the importance of atmospherics and the influencing effect it has on consumer behaviour. The term atmospherics can influence consumer behaviour, will thereby evoke a satisfying effect on those consumers. The physical surroundings are significantly important in service settings because customers are affected by their surroundings (Bitner 1992) resulting in a satisfied or dis-satisfied experience. Atmospherics show that it is not only the people dimension that can impact the customer satisfaction level, but also the physical environment than can be controlled by the marketers. With proper management of the atmospherics such as the decor and smell, customer satisfaction level can be enhanced. Thus,

H3: customer perceptions of the atmosphere are positively related to customer satisfaction.

Effect of customer perceptions of the customer satisfaction on word-of-mouth.

Overall customer satisfaction has an influencing effect on future customer behaviour through WOM communication and the retention of those consumers (Nguyen & LeBlanc 1998). Customer satisfaction reflects the degree to which a consumer believes the possession and/or use of a service evokes positive feelings and a willingness to communicate those feelings to others (Anderson & Fornell 1994; Bitner & Hubbert, 1994; Bolton & Drew 1994; Rust & Oliver 1994; Anderson & Sullivan 1993; Cronin & Taylor 1992; Fornell 1992; Oliver & Swan 1989; Oliver 1981, 1980, 1977 and Olson & Dover 1979). Perceived service quality, as cognitive judgement behaviour, allows the consumer to gain knowledge regarding an organisation through other means such as WOM communication, in addition to the usual experienced interaction a customer would have with that organisation (Liljander & Strandvik 1994). Consumers are opt to react and behave in a certain way such as referring a service provider to their friends based upon the positive service setting created by providers. Thus,

H4: customer perceptions of the customer satisfaction are positively related to word-of-mouth behaviour.

Effect of customer perceptions of the atmosphere on word-of-mouth behaviour.

The ability of the physical environment of a service setting to influence behaviour (Wall & Berry 2007) and to create an image has been particularly apparent for service providers in attracting new customers through WOM referrals such as hotels, restaurants, professional offices, banks and retail stores. The environment of a retail store, for example, can serve as an important differential or competitive advantage in attracting particular segments of shoppers through future behavioural response producing stimulus (Turley & Chebat 2002). The physical environment can offer alternative cues, which consumers may share in a social setting to recommend a service provider and to further evaluate the quality of service provided (Bitner 1992, 1990 and Berry 1983). The physical environment can provide a basis for customers to express their approval or disapproval. Thus,

H5: customer perceptions of the atmosphere is positively related to word-of-mouth behaviour.

Research Methodology

With an aim to increasing the sample size and the representativeness, the day spa industry association was contacted to help facilitate the study. Three spas agreed to participate in the study. Surveys were conducted in the three spas in a period of one and a half months. A total of 318 usable questionnaires were received. After deleting the outliers, there were 280 cases usable for further analysis.

Table 1 presents the results of the Bartlett's test of sphericity and KMO measure of sampling adequacy. All constructs achieved a significant p-value, less than 0.001 for

Bartlett's test of sphericity and more than 0.65 values for the KMO measure of sampling adequacy, satisfying De Vaus' (2001) proposed cutoff. The results of the tests suggest that the items are suitable for factor analysis.

Table 2: Test of Sphericity and Measure of Sampling Adequacy

Constructs	**KMO Measure of Sampling Adequacy**	**Bartlett's Test of Sphericity**
Quality Delivery (PROD)	0.80	Chi-Square = 1642.0 df = 55, sig. < 0.001
Customer Services (CSER)	0.92	Chi-Square = 2524.1 df = 45, sig. < 0.001
Facilities Atmosphere (ATOM)	0.71	Chi-Square = 454.2 df = 10, sig. < 0.001
Customer Satisfaction (CUSAT)	0.85	Chi-Square = 982.1 df = 15, sig. < 0.001
Word of Mouth (WOM)	0.67	Chi-Square = 972.0 df = 10, sig. < 0.001

Reliability of the items was tested by Cronbach Alpha test. Items with low item-total correction were taken out of the analysis. All Alphas are above 0.7 which indicates satisfactory internal consistency reliability (Francis, 2001; Robinson, Shaver, & Wrightsman, 1991). Table 2 shows the reliability results of all the constructs.

Table 3: Results of a Cronbach's Alpha's reliability test

Dimension	**Initial #**	**Initial**	**Items**	**Revised**	**Revised**

	of items	Alpha	Deleted	# of Items	Alpha
Quality Delivery (PROD)	11	0.72	8 (after reliability and CFA)	3	0.84
Customer Services (CSER)	10	0.93	5 (after CFA)	5	0.92
Facility Atmosphere (ATOM)	5	0.78	2 (after CFA)	3	0.71
Customer Satisfaction (CUSAT)	6	0.88	3 (after CFA)	3	0.83
Word of Mouth (WOM)	5	0.83	3 (after CFA)	2	0.94

Refer to Appendix A for all the items

Convergent validity

Convergent validity was tested using the criterion that the loadings of all items hypothesised to measure a latent variable must be statistically significant (Anderson & Gerbing, 1988; Dunn, Seaker, & Waller, 1994; Hair, Anderson, Tatham, & Black, 1998). The critical ratios (c.r.) of all the items were found significant at the 0.05 level (c.r. > 1.96 = $p < 0.05$), showing strong convergent validity of the measurement model.

Discriminant Analysis

Discriminant validity was tested by two methods. The first method was to measure the average variance extracted (AVE) in confirmatory factor analysis. If the average variance extracted (AVE) is greater than the squared correlation between pairs of factors, discriminant validity exists (Fornell & Larcker, 1981). Results of the tests were found satisfactory. All AVEs showed higher values than the squared correlations. The upper diagonal of Table 3 shows the results of the squared correlation among the constructs. The results suggested that discriminant validity was supported.

Table 4: Discriminant Valid Test Using AVE and Correlation Methods

Constructs	**AVE**	**PROD**	**CSER**	**ATOM**	**CUSAT**	**WOM**
PROD	.64	---	.17	.12	.44	.09
CSER	.70		---	.16	.44	.24
ATOM	.50			---	.41	.32
CUSAT	.61				---	.41
WOM	.84					---

The second method used to test discriminant validity is the examination of all constructs in pair in exploratory factor analysis (EFA). Discriminant validity exists if there are only two components extracted from each analysis (Anderson & Gerbing, 1988). EFA using principal components with varimax rotation was conducted. For all of the ten *pairs* of constructs in this study, there were always two components extracted for each pair of concepts. Thus, the results indicate discriminant validity.

Measurement and Structural Model Analysis

This study adopted a two-step approach in analyzing the theoretical model as suggested by Anderson and Gerbing (1988). That is a measurement model analysis was conducted before a full structural model. Hair et al. (1998) propose a guideline for establishing acceptable fit using five typical fit indices to evaluate the theoretical model; namely χ^2, AGFI, CFI, RMSEA, and SRMR. In consideration of the limitation of the χ^2 value with big sample size, normed χ^2 with a cutoff less than three instead of χ^2 should be used (Carmines & McIver, 1981; Kline, 1998). All five absolute and incremental fit indices measures performed very well for the measurement models: χ^2 / DF = 1.54, AGFI = .92, CFI = .98, RMSEA = .04, and SRMR = .04. Thus, the items were found to measure their proposed latent constructs.

Evaluation of the Full Structure Model

Based on the protocol suggested by Cheng (2001) and Anderson and Gerbing (1988), evaluation of the full model starts with assessment of the model fit. The full conceptual model was analysed by structural equation modeling method based on the indices of AGFI, RMSEA, CFI, Normed chi-square and SRMR. The results of all these indices are satisfactory, indicating an acceptance of the full model.

The results of all the fit indices for the structural model are also satisfactory: χ^2 / DF = 1.60, AGFI = .91, CFI = .98, RMSEA = .05, and SRMR = .04. The fit indices suggest an acceptance of the full model. Table 4 below summarises the values for all fit indices.

Table 5: Fit Measures for the Full Structural Model

Fit indices	**Statistics**	**Benchmark**	**Acceptable or not**
Absolute fit measures			
Chi-square	153.15 (96 df, p<0.01)	p>0.05	N/A
AGFI	0.91	>0.90	Yes
RMSEA	0.05	<0.08	Yes
Incremental fit measures			
CFI	0.98	>0.90	Yes
Measures taking into consideration of big sample size			
Normed chi-square	1.60	<3	Yes
Standardised root mean square residual (SRMR)	0.06	<0.08	Yes

Note: All five paths in the model achieved significant results statistically; all with p-values associated with the parameter coefficients less than 0.05

A graphical illustration of the fitted word-of-mouth model with correlations, the standardised regression coefficients, and the R-squared values is illustrated in Figure 1.

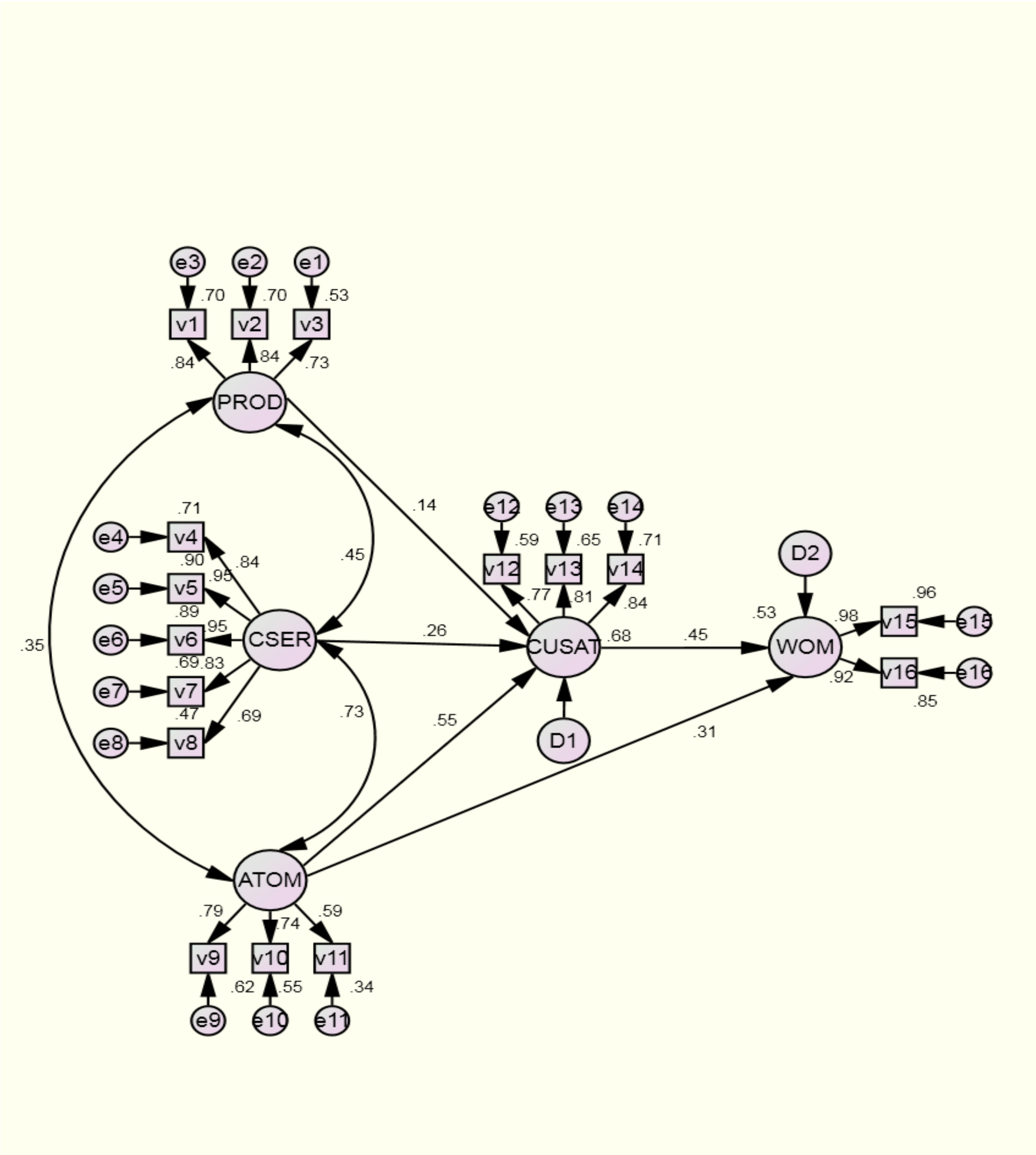


Figure 1: A fitted structural equation model of WOM

All five hypotheses in the structural model achieved statistical significant results; all with p-values less than 0.05. The paths demonstrate positive relationships *between* the constructs. The standardised coefficients of the five paths range from 0.14 to 0.55. The three most significant paths are H3 (facilities determining customer satisfaction); H4 (customer satisfaction determining word of mouth); and H5 (facility atmosphere determining word of mouth); with standardised coefficients of 0.55, 0.45 and 0.31, respectively. These results firstly indicate the importance of customer satisfaction, which can increase the word of mouth activities by 0.45 standardised points for every standardised point increase in customer satisfaction. Secondly, facility is an important determinant of customer satisfaction such that an increase of one standardised point of facility will lead to 0.55 standardised points of higher customer satisfaction. Finally, facility is a critical influence to word of mouth activities. Every single standardised point of increase in facility can lead to an increase of word of mouth by 0.31 standardised points.

The results of hypothesis testing in terms of the standardised coefficients, critical ratio (C.R.) and significant level (p-value) for the relationships between the three tiers of constructs are summarised in Table 5.

Table 6: Results of hypotheses testing

Model Hypotheses		**Results**
H1: Customer perceptions of the quality of the service are positively related to customer satisfaction	Coefficient C.R. Significant?	0.14 2.40 (p=0.017) **Significant**
H2: Customer perceptions of the customer service are positively related to customer satisfaction	Coefficient C.R. Significant?	0.26 2.93 (p=0.003) **Significant**

H3: Customer perceptions of the atmosphere are positively related to customer satisfaction	Coefficient C.R. Significant?	0.55 5.21 (p<0.001) **Significant**
H4: Customer perceptions of the customer satisfaction are positively related to word-of-mouth behaviour	Coefficient C.R. Significant?	0.45 4.32 (p<0.001) **Significant**
H5: Customer perceptions of the atmosphere are positively related to word-of-mouth behaviour	Coefficient C.R. Significant?	0.31 2.85 (p=0.004) **Significant**

Conclusion

WOM plays an important role in marketing. The impacts of WOM have been well researched, but the antecedents of WOM have been somewhat overlooked. The current study has developed a theoretical model that places service quality as the pivot of a model of WOM. The theoretical model has been tested using structural equation modelling on a sample of 280 respondents from three spas. The results reveal that the theoretical model has overall validity and that all five key paths in the model are statistically significant. The model thus offers a good explanation of WOM. Of special significance the findings confirm that WOM is affected by customer satisfaction and facility atmosphere. In addition, service performance can drive customer satisfaction. In terms of managerial implications, organisations in the service industry are encouraged to pay extra attention on managing service performance because it can directly and indirectly influence WOM; especially important is the facility atmosphere that can affect customer satisfaction and WOM directly.

This study possesses a couple of limitations. First, the samples are gathered from only three spas in Australia. Second, all three spas are located in the Victoria state. Future research could apply this model to other service industries and countries to test the validity of the model. It would also be useful to compare the model from other theoretical perspectives that could explain the WOM behaviour. Additional research might also examine the moderation effect of the macro marketing environment such as economic situation.

References

Alvarado, S 2000, *Word-of-Mouth Communication*, viewed 17 August 2011, <http://courses.wcupa.edu/foeman/foeman1.htm>.

Anderson, E & Sullivan, M 1993, 'The antecedents and consequences of customer satisfaction for firms', *Marketing Science*, vol. 12, pp. 125–43.

Anderson, E, Fornell, C & Lehman, D 1994, 'Customer satisfaction, marketing share and profitability: findings from Sweden', *Journal of Marketing*, vol.58, no. 3, p. 63–6.

Arndt, J 1967, 'Role of product-related conversations in the diffusion of a new product', *Journal of Marketing Research*, vol. 4, no. August, pp. 291–5.

Baker, J 1987, 'The role of the environment in marketing services: the consumer perspective', in J Czepiel, C Congram & J Shanahan (eds), *The services challenge: integrating for competitive advantage*, American Marketing Association, Chicago, pp. 79–84.

Bayus, B 1985, 'Word of mouth: the indirect effects of marketing efforts', *Journal of Advertising Research*, vol. 25, no. 3, pp. 31–8.

Bearden, W, Netemeyer, R & Teel, J 1989, 'Measurement of consumer susceptibility to interpersonal influence', *Journal of Consumer Research*, vol. 15, no. 4, p. 473.

Beerli, A, Martin, J & Quintana, A 2004, 'A model of customer loyalty in the retail banking market', *European Journal of Marketing*, vol. 38, no. 1/2, pp. 253–75.

Bell, D & Song, S 2004, *Social contagion and trial on the internet: evidence from online grocery retailing*, viewed 11 February 2009, http://knowledge.wharton.upenn.edu/paper.cfm?paperID=1294

Berry, L 1983, *Relationship marketing, emerging perspectives on services marketing*, American Marketing Association, Chicago, Ill.

Berry, L (1980), "Services marketing is different”, *Business*, Vol. 30 No. May/June, pp.24-9.

Berry, L & Parasuraman, A 1991, *Marketing services: competing through quality*, The Free Press, New York, NY.

Bitner, M 1990, 'Evaluating service encounters: the effects of physical surroundings and employee responses', *Journal of Marketing*, vol. 54, no. 4, pp. 69–82.

Bitner, M 1992, 'Servicescapes: the impact of the physical surroundings on customers and employees', *Journal of Marketing*, vol. 56, no. 2, pp. 57–71.

Bitner, M & Hubbert, A 1994, 'Encounter satisfaction versus overall satisfaction versus quality', in R Rust & R Oliver (eds), *Service quality: new directions in theory and practice*, Sage Publications, Inc., New York, pp. 72–84.

Biyalogorsky, E, Gerstner, E & Libai, B 2001, 'Customer referral management: optimal reward programs', *Marketing Science*, vol. 20, no. 1, pp. 82–95.

Bloch, P & Richins, M 1983, 'A theoretical model for the study of product importance perceptions', *Journal of Marketing*, vol. 47, Summer, pp. 69–81.

Blose, J, Tankersley, W & Flynn, L 2005, 'Managing service quality using data envelopment analysis', The Quality Management Journal, vol. 12, no. 2, p. 7.

Bolton, R & Drew, J 1991, 'A multistage model of customers' assessments of service quality and value', *Journal of Consumer Research*, vol. 17, pp. 375–84.

Bove, L & Johnson, W 2001, 'Customer relationships with service personnel: do we measure closeness, quality or strength?', *Journal of Business Research*, vol. 54, no. 3, pp. 189–97.
Buttle, F.A. (1998), "Word of mouth: understanding and managing referral marketing", *Journal of Strategic Marketing*, Vol. 6 pp.241-54.
Chiarelli, N 2006, 'WORD-OF-MOUTH MARKETING: The global rise of word of mouth', *Brand Strategy,* p. 42.
Coleman, J, Katz, E & Menzel, H 1966, *Medical innovation: a diffusion study,* Bobbs-Merrill, Indianapolis, Indiana.
Cronin, J & Taylor, S 1992, 'Measuring service quality: a re-examination and extension', *Journal of Marketing*, vol. 56, no. 3, pp. 55–68.
Dann, S & Dann, J 2004, *Introduction to marketing*, Wiley, Australia.
DeBruyn, A & Lilien, G 2008, ‘A multi-stage model of word-of-mouth influence through viral marketing’, *International Journal of Research Marketing*, vol. 25, no. 3, pp. 151–63.
Derbaix, C & Vanhamme, J 2003, Inducing word-of-mouth by eliciting surprise – a pilot investigation, *Journal of Economic Psychology*, vol. 24, no. 1, pp. 99-116.
Dobele, A 2006, *Positive word-of-mouth referrals*, Southern Cross University.
Dobele, A., Lindgreen, A., Beverland, M., Vanhamme, J., van Wijk, R. (2007), "Why pass on viral messages? Because they connect emotionally", *Business Horizons*, vol. 50, no.4, pp.291-304.
Dobele, A., Lindgreen, A. (2010), “Exploring the Nature of Value in the Word-of-Mouth Referral Equation for Health Care”, *Journal of Marketing Management*, Vol. 27, No.3-4, pp.269-290.
Donovan, R & Rossiter, J 1982, 'Store atmosphere: an environmental approach', *Journal of Retailing*, vol. 58, no. 1, pp. 34–57.
Dye, R. (2000), "The buzz on buzz", *Harvard Business Review*, vol. 78 no. November/December, pp.139-46.
East, R, Hammond, K & Lomax, W 2008, Measuring the impact of positive and negative word-of-mouth on brand purchase probability, *International Journal of Research Marketing*, vol. 25, no. 3, pp. 215–24.
Engel, J, Blackwell, R & Kegerreis , R 1969, 'How information is used to adopt an innovation', *Journal of Advertising Research*, vol. 9, no. December, pp. 3–8.
Feick, L & Price, L 1987, 'The market maven: a diffuser of marketplace information', *Journal of Marketing*, vol. 51, no. January, pp. 83–97.
Fishbein, M & Ajzen, I 1975, *Belief, attitude, intention, and behaviour: an introduction to theory and research,* Addison-Wesley, Reading.
Fornell, C 1992, 'A national customer satisfaction barometer: the Swedish experience', *Journal of Marketing*, vol. 56, pp. 1–18.
Foster, A & Rosenzweig, M 1995, 'Learning by doing and learning from others: human capital and technical change in agriculture', *Journal of Political Economy*, vol. 103, no. 6, pp. 1176–210.
Garber, T, Goldenberg, J, Libai, B & Muller, E 2003, 'From density to destiny: using spatial dimension of sales data for early prediction of new product success', *Marketing Science* vol. 23, no. 3, pp. 419–28.
Gladwell, M 2000, *The tipping point*, Abacus, Great Britain
Global Spa Summit, *Global Spa Economy 2007Report*, prepared by SRI International, May 2008.
Godes, D & Mayzlin, D 2004, 'Using online conversation to study word of mouth communication', *Marketing Science*, vol. 23, no. 4, pp. 545–560

Grönroos, C 1982, 'An applied service marketing theory', *European Journal of Marketing*, vol. 16, no. 7, pp. 30–41.
Grönroos, C 1984, 'A service quality model and its marketing implications', *European Journal of Marketing*, vol. 18, pp. 36–44.
Grönroos, C 1990, *Service management and marketing*, Lexington Books, San Francisco, CA.
Grönroos, C 2001, 'The perceived service quality concept – a mistake?' *Measuring Business Excellence*, vol. 5, no. 4, pp. 46–7.
Hendricks, M 1998, 'Spread the word: advertising by word-of-mouth', *Entrepreneur*, vol. 26, no. 2, pp. 120–6.
Herr, P, Kardes, F & Kim, J 1991, 'Effects of word-of-mouth and product-attribute information on persuasion: an accessibility-diagnosticity perspective', *Journal of Consumer Research*, vol. 17, no. 4, pp. 454–62.
Iacobucci, D, Grayson, K & Ostrom, A 1994, 'The calculus of service quality and customer satisfaction', *Advances in Service Marketing & Management*, vol.3, p. 1-67.
Jacoby, J & Hoyer, W 1981, 'What if opinion leaders didn't know more?: a question of nomological validity', *Journal of Marketing*, Summer, pp. 299–303.
Jamal, A & Naser, K 2003, Factors influencing customer satisfaction in the retail banking sector in Pakistan, *International Journal of Commerce & Management*, vol. 13, no. 2, pp. 29–53.
Jones, T & Sasser, W 1995, 'Why satisfied customers defect', *Harvard Business Review*, vol. 73, no. 6, pp. 88–99.
Katz, E & Lazarsfeld, P 1955, *Personal influence*, Free Press, Glencoe, IL.
Keiser, T 1988, 'Strategies for enhancing service quality', *Journal of Services Marketing*, vol. 2, pp. 65–70.
King, C & Summers, J 1970, 'Overlap of opinion leadership across consumer product categories', *Journal of Marketing Research*, vol. 7, no. 1, pp. 43–50.
Klenke, M & Trickey, P 2002, 'Super balance', *Operations and Fulfillment*, Nov., 1.
Koska, M 1990, 'High quality care and hospital profits: is there a link?' *Hospitals*, March, pp. 62–3.
Kotler, P 1973, Atmospherics as a marketing tool, *Journal of Retailing*, vol. 49, no. 4, pp. 48–64.
Laemer, R 2004, *Full frontal PR*, Bloomberg Press, Princeton.
Lehtinen, J & Storbacka, K 1986, *Service management*, Jarmo. R. Lehtinen, Veikkola, Finland.
Levesque, T & McDougall, G 1996, 'Determinants of customer satisfaction in retail banking', *The International Journal of Bank Marketing*, vol. 14, no. 7, pp. 12–20.
Libai, B, Biyalogorsky, E & Gerstner, E 2003, 'Setting referral fees in affiliate marketing', *Journal of Service Research*, vol. 5, no. 4, pp. 303–15.
Malhotra, N, Hall, J, Shaw, M & Oppenheim, P 2002, *Marketing research: an applied orientation*, Prentice Hall, Frenchs Forest, NSW Australia.
Mayzlin, D 2001, *'Promotional chat on the internet'*, Massachusetts Institute of Technology.
McCracken, G 1986, 'Culture and consumption: a theoretical account of the structure and movement of the cultural meaning of consumer goods', *Journal of Consumer Research*, vol. 13, no. 1, pp. 71–84.
Mehrabian, A & Russell, J 1974, *An approach to environmental psychology*, MIT Press, Cambridge, MA.

Morgan, R & Hunt, S 1994, 'The commitment trust theory of relationship marketing', *Journal of Marketing*, vol. 58, no. 3, pp. 20–38.
Mouawad, M & Kleiner, B 1996, 'New developments in customer service training', *Managing Service Quality*, vol. 6, no. 2, pp. 49–56.
Murray, K 1991, 'A test of services marketing theory: consumer information acquisition activities', *Journal of Marketing*, vol. 55, no. 1, pp. 10–25.
Myers, J 1966, 'Patterns of interpersonal influence in the adoption of new products', Graduate School of Business Administration, Institute of Business and Economic Research, University of California.
Nelson, E, Rust, R, Zahorik, A, Rose, R & Siemanski, B 1992, 'Do patient perceptions of quality relate to hospital financial performance', *Journal of Health Care Marketing*, vol. 12, no. 4, pp. 6–15.
Newman, A, Dennis C & Zaman, S 2006, Marketing images and consumers' experiences in selling environments, *Marketing Management Journal*, vol. fall, pp. 515-99.
Ng, S, David M & Dagger, T 2011, Generating positive word-of-mouth in the service experience, *Managing Service Quality*, vol. 21, no. 2, pp. 133 – 151.
Nguyen, N & LeBlanc, G 1998, 'The mediating role of corporate image on customers retention decisions: an investigation in financial service', *International Journal of Bank Marketing*, vol. 16, no. 2, pp. 52–65.
Noble, S, Griffith, D & Adjei, M 2006, ‘Drivers of local merchant loyalty: understanding the influence of gender and shopping motives’, *Journal of Retailing*, vol. 83, no.3, pp. 177–89.
Oliver, R 1977, 'Effect of expectation and disconfirmation on post-expense product evaluations: an alternative interpretation', *Journal of Applied Psychology*, vol. 62, pp. 480–6.
Oliver, R 1980, 'A cognitive model of the antecedents and consequences of satisfaction decisions', *Journal of Marketing Research*, vol. 17, pp. 460–9.

Oliver, R 1981, 'Measurement and evaluation of satisfaction processes in retail settings', *Journal of Retailing*, vol. 57, pp. 25–48.
Oliver, R & Swan, J 1989, 'Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach', *Journal of Marketing*, vol. 53, pp. 21–35.
Olson, J & Dover, P 1979, 'Disconfirmation of consumer expectations through product trial', *Journal of Applied Psychology*, vol. 64, pp. 179–89.
Parasuraman, A, Zeithaml, V & Berry, L 1985, 'A conceptual model of service quality and its implications for future research', *Journal of Marketing*, vol. 49, pp. 41–50.
Parasuraman, A, Zeithaml, V & Berry, L 1988, 'SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality', *Journal of Retailing*, vol. 64, pp. 12–40.
Perrone, A & Ward, T 2006, *Enhancing the Gronroos model of service quality*, paper presented to ANZMAC, Brisbane, Queensland, Australia, December.
Perrone, A 2010a, PAWs model of Future Customer Behaviour, *The International Journal of Knowledge, Culture and Change Management*, Vol. 10, no. 4, pp. 69-79.
Perrone, A 2010b, The relationship between servicescapes and customer post purchase behaviour, *i-manager’s Journal on Management*, Vol. 4, no. 4, pp. 7-31.
Piirto, R 1992, 'The influential’s', *American Demographics*, October, pp. 30–8.

Ranaweera, C & Prabhu, J 2003, 'The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting', *International Journal of Service Industry Management*, vol. 14, no. 4, pp. 374–95.

Reichheld, F 1996, *The loyalty effect: the hidden force behind growth, profits, and lasting value*, Harvard Business School Press, Boston, MA.

Rogers, E 1983, *Diffusion of innovations*, 3rd edn, The Free Press.

Rust, R & Zahorik, A 1993, 'Customer satisfaction, customer retention and market share', Journal of Retailing, vol. 69, no. 2, pp. 193–215.

Rust, R & Oliver, R 1994, *Service quality: insights and managerial implications from the frontier, service quality: new directions in theory and practice*, Sage Publications, Thousand Oaks, CA.

Rust, R, Zahorik, A & Keiningham, T 1995, 'Return on quality: making service quality financially accountable', *Journal of Marketing*, vol. 59, pp. 58–70.

Schiffman, L, Bednall, D, Watson, J & Kanuk, L 1997, *Consumer behaviour*, Prentice-Hall, Sydney.

Schneider, B, Holcombe, K & White, S 1997, 'Lessons learned about service quality: what it is, how to manage it and how to become a service quality organization', *Consulting Psychology Journal*, vol. 49, no. 1, pp. 35–50.

Scott, D 1988, *Customer satisfaction*, Crisp, Los Altos, CA.

Shavitt, S 1989, 'Products, personality and situations in attitude functions: implications for consumer behaviour', in T Srull (ed.), *Advances in consumer research*, Association for Consumer research, Provo, UT., pp. 300–5.

Silverman, G 1997, 'How to harness the awesome power of word of mouth: generating desired customer response through word of mouth', *Direct Marketing*, vol. 60, no. 7, pp. 32–6.

Silverman, G 2001(a), 'The power of word of mouth', *Direct Marketing*, vol. 64, no. 5, pp. 47–52.

Silverman, G 2001(b), *The secrets of word-of-mouth marketing: how to trigger exponential sales through runaway word of mouth*, American Management Association, New York, NY.

Sultan, P. & Wong, H.Y. (2010) ‘Service quality in higher education: A review and research agenda', *International Journal of Quality and Service Science*, 2(2), 259-272.

Swanson, S & Kelly, S 2001, 'Service recovery attributions and word-of-mouth intentions', *European Journal of Marketing*, vol. 35, no. 1/2, pp. 194–211.

Sweeney, J, Soutar, G & Mazzarol, T 2008, ‘Factors influencing word of mouth effectiveness: receiver perspectives’, *European Journal of Marketing*, vol. 42, no. 3/4, pp. 344–364.

Tehrani, R 2005, 'Offshored to death', *Customer Inter@ction Solutions*, vol. 24, no. 3, pp. 14–16.

The International SPA Association 2010, viewed November 2010, http://www.experienceispa.com/education-resources/facts-and-figures/industry-stats

The Nielsen Company 2009, ‘Personal recommendations and consumer opinions posted online are the most trusted forms of advertising globally’, Nielsen Global Online Consumer Survey, Nielsen Consumer Research, July, pp. 1-4.

Thompson, C & Arsel, Z 2004, 'The Starbucks brandscape and consumers' (Anticorporate) experiences of globalization', *Journal of Consumer Research*, vol. 31, no. 3, pp. 631–42.

Turley, L & Chebat, J 2002, 'linking retail strategy, atmospheric design and shopping behaviour', *Journal of Marketing Management*, vol. 18, no. 1/2, pp. 125–44.
Van den Bulte, C & Lilien, G 2001, 'Medical innovation revisited: social contagion versus marketing effort', *American Journal of Sociology*, vol. 106, no. 5, p. 1409–35.
Van den Bulte, C & Lilien, G 2003, *Two-stage partial observability models of innovation adoption*, Working paper, Wharton School, University of Pennsylvania, Philadelphia.
Verhoef, P 2003, 'Combining revealed and stated preferences to forecast customer behaviour: three case studies', *International Journal of Market Research*, vol. 45, no. 4, pp. 467–76.
Voss, P 1984, 'Status shifts to peer influence', *Advertising Age*, vol. 17, May, p. 10.
Wall, E & Berry, L 2007, The Combined Effects of the Physical Environment and Employee Behavior on Customer Perception of Restaurant Service Quality, *Cornell Hotel and Restaurant Administration Quarterly*, vol. 48, no. 1, pp.59-70.
Wall, J 1998, 'A call for assistance', *Small Business News*, vol. 6, no. 7, p. 37.
Wangenheim, F & Bayon, T 2004, The effect of word of mouth on services switching, *European Journal of Marketing*, vol. 3, no. 9/10, pp. 1173 – 1185.
Ward, A & Smith, T 1998, *Relationship marketing: strength of relationship time versus duration*, paper presented to European Marketing Conference, Stockholm, Sweden, Warwick Business School, University of Warwick.
Wilson, A 1994, 'Stimulating referrals', *Management Decision*, vol. 32, no. 7, p. 13–5.
Wilson, JR 1994, *Word-of-mouth marketing*, 2nd edn, John Wiley, New York.
Wirtz, J & Chew, P 2002, 'The effects of incentives, deal proneness, satisfaction and tie strength on word-of-mouth behaviour', *International Journal of Service Industry Management*, vol. 13, no. 2, pp. 141–62.
Womack, J 2006, 'The New Power Ratings', *Fast Company Magazine*, no.02, Jan-Feb, pp. 29–31.
Yavas, U, Benkenstein, M & Stuhldreier, U 2004, 'Relationships between service quality and behavioral outcomes: a study of private bank customers in Germany', *The International Journal of Bank Marketing*, vol. 22, no. 2/3, pp. 144–57.
Zeithaml, V.A. (1981), "How consumer evaluation processes differ between goods and services", in Donnelly, J.H., George, W.R. (Eds),*Marketing of Services*, American Marketing Association, Chicago, IL, pp.186-90.
Zeithaml, V.A., Parasuraman, A., Berry, L.L. (1985), "Problems and strategies in services marketing", *Journal of Marketing*, Vol. 49 No.2, pp.33-46.
Zeithaml, V 2000, 'Service quality, profitability, and the economic worth of customers: what we know and what we need to learn', *Journal of the Academy of Marketing Science*, vol. 28, no. 1, pp. 67–85.

Appendix A: Variables used to assess the five constructs

Service Quality (PROD)
1. The quality of massages were excellent (v1) 2. The selection of other treatments were excellent (v2) 3. The quality of other treatments were excellent (v3)
Customer Services (CSER)
1. I received a welcome when I arrived (v4) 2. Staff appeared neat and tidy (v5) 3. Staff were polite (v6) 4. Staff performed their duties professionally (v7) 5. I was served in an acceptable time (v8)
Facility Atmosphere (ATOM)
1. I like the decor (v9) 2. The Day Spa has a nice atmosphere (v10) 3. The Day Spa had a pleasant smell (v11)
Customer Satisfaction (CUSAT)
1. Services I received were adequate (v12) 2. I felt comfortable with the physical surroundings of the facility (v13) 3. Overall, I was satisfied with the product(s) and services(s) (v14)
Word-of-Mouth Behaviour (WOM)
1. I WILL REFER THIS Day Spa to other people (v15) 2. If asked to recommend a day Spa facility to other people, I would tell them about this Day Spa (v16)

An Audience Response System: A Tool For Management Learning Research?*

Abstract

This paper examines the use of an audience response system (ARS) as an appropriate tool for use in management learning and the researching of management learning. The ARS was used at the organization's Annual Conference and the data collected by the ARS enabled the instant sharing of the participants' views respect to some operational issues that had arisen through the course of the year leading up to the Annual Conference. The paper is an important contribution to the theory of management learning and supports the premise that an ARS is an appropriate research tool to investigate an organizational knowledge problem.

Keywords: audience response system, organizational research methods, data collection techniques, data collection technology, knowledge sharing, management learning

Introduction

Cavana, Delahaye and Sekaran (2001, 5-6) define business research as a "systematic and organized effort to investigate a specific problem or opportunity encountered in the work setting that needs a solution". They add that "the importance of business research to organizational managers is the provision of needed information that guides … informed decisions to deal successfully with organizational issues". Informed decision making necessarily rests on the quality of the organization's "knowledge". It is accepted that knowledge is "the source of sustainable competitive advantage and economic growth" (Spender 2008; Drucker 1998). Whilst this may be Spender, (2008, 159) acknowledges that unlike assets such as tangible financial and physical assets, knowledge "is intangible, a part or aspect of the organization's intellectual capital, intimately tied up with its human constituents, what people individually and collectively know and do." This necessarily requires then a process by which what an organization's people individually and collectively know can be collected. In other words, as Spender (2008, 165) proposes:

> … we might say that knowledge management begins precisely and only with the uncertainties and knowledge-failures that arrest rational decision-making and force us outside rationality's box. … knowledge management is really about managing knowledge-absences rather than knowledge-assets.

The question then becomes how knowledge-absences may be detected, understood and resolved so that the knowledge can then be managed. Fortunately for the researchers the knowledge-absence upon which the research would be based had been detected by the organization. The organization's issue was how to engage in organization knowledge moving and sharing (Spender, 2008) to "convert" the absence by

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encouraging management learning between managers within the organization (Char and Holt, 2008) but in a participatory not didactic way (Graham, Tripp, Seawright and Joeckel, 2007). The tool proposed by the researchers was the use of an audience response system (ARS). The use of ARS in educational settings (secondary and tertiary) has been the subject of a significant amount of research. The literature demonstrates that the use of an ARS can provide benefits to both students and educators by facilitating interaction between students and the material being presented (Burton, 2005; Hoffman & Goodwin, 2006; Kay & LeSage 2009). The transferability of these educational and participatory benefits in an organizational context is less well defined or reported. Notwithstanding that the education and participatory benefits in an organizational context is less well defined or reported the research project described in this paper demonstrates how the ARS can be utilized as a research tool to provide a solution a knowledge problem within an organization.

This paper is presented in four parts. The first part examines the literature of the use of ARS in educational research and how a response system may similarly be used in an organizational context. The second part examines the organization's *problem* and how the research project was designed to incorporate the ARS. Part three presents the data collected from the research project. The paper concludes with a discussion of the issues arising from the research.

Audience Response Systems (ARS)

As McCarter and Caza (2009, 122-123) explain:

> An audience response system (ARS) is an electronic device designed to allow immediate interaction between an individual presenter and a large audience. An ARS typically has two parts. The first component is a remote control (or 'clicker') that audience members use to respond to questions. The second component is an electronic receiver (or 'hub') that records, and optionally, displays individuals' responses. … Each individual response is recorded by the hub and can be displayed via projector or exported as a data file for use in other software.

When used in the educational context Burton (2005, 2) suggests that an ARS:

> … allows students who attend the lectures to respond to questions or statements posed on a powerpoint slide by pressing a button on a keypad. The questions may consist of multiple choice questions, true or false questions and yes or no questions. …. Once the audience response system has received all the responses, it can generate a pie or bar graph to display the results.

In their examination of the learning and teaching literature, Kay and Le Sage (2009a) suggest that the ARS, as a tool, contributes to the learning experienced by students in a number of ways; for example, students' attendance in class increased, students were more engaged and they participated more with their peers in class to solve problems. These advantages of using an ARS are not limited to a particular discipline or disciplines with Burton (2005) confirming that ARSs have been used in diverse educational disciplines such as law, medicine, engineering, science, mathematics, economics and psychology. Given the established benefits in an educational setting, it is pertinent to ask whether use of an ARS is transferable to other settings; particularly in organizational settings.

While the literature reporting on the use of an ARS in an organizational setting is not extensive, the transfer of an ARS from an educational setting to an organizational setting is not unheard of. For example, McCarter and Caza (2009) found marketing organizations employed ARS to receive feedback from potential customers at tradeshows, and other organizations using ARS technology in strategic planning, brainstorming, monitoring training effectiveness and ice-breaking processes. Kay and LeSage's (2009b) examination of the literature identifies only five papers investigating professionals' use of an ARS. Therefore, the project, particularly the researchers' proposal to the organization that the ARS could be used to assist with the organization's problem is unique and makes a contribution to the incomplete literature base.

The Organization's Problem

The organization involved in the research project is a large privately owned company comprising a number of smaller subsidiary companies which form the collective group of companies (The Group). The organization is involved in a wide range of activities in the construction industry. As part of their organizational processes The Group's senior management has a commitment to the timely and effective exchange of knowledge and information between their subsidiary companies and to continuing education and training for all supervisors and managers. Of particular importance is the Annual Conference which is held for company managers. Historically The Group employed the traditional lecture style of information exchange, whereby a presenter (a company manager) stood at a lectern and delivered information. Different managers were allocated a session in which they provide conference participants with information concerning their particular company within The Group.

However, Group Management was concerned that managers were not actively participating in the meeting process so not necessarily hearing any message. In other words there was concern that there was a lack of effective knowledge sharing between managers (Lee 2010). For the 2009 Annual Conference the organization approached the researchers with respect to having an interactive session where participation was built into the knowledge sharing process. The introduction and use of an ARS was proposed as the tool that could be used to get the managers actively participating in knowledge sharing during the meeting and also to show the potential of the ARS for use for data collection in management learning research.

The Research Project

As Lee, Gillespie, Mann and Wearing (2010, 475) correctly point out, "knowledge sharing in a team is not automatic, and the team's leader has the potential to strongly influence the extent of knowledge sharing." They therefore suggest that:

> By practicing the knowledge builder role, leaders create opportunities and processes that stimulate and encourage knowledge sharing amongst team members. For example, by offering new ideas, challenging technical solutions and stimulating new approaches to work, leaders instigate team discussions and review which, by their very nature, lead to team knowledge sharing. They are setting the example and signaling that the open sharing of ideas and information is important and valuable for the team. As a result of this role modeling, team

members are likely to reciprocate and share their expertise and knowledge with the team.

From this background and in the context of the organization's knowledge problem the use of an ARS, as McCarter and Caza argue (2009, 128) offered "many advantages, in terms of validity, simplicity, non-invasiveness, and the ability to give back to research participants." Further, McCarter and Caza (2009, 127) argue that the use of an ARS for academic research purposes "has the potential to overcome three of the most common and important data collection problems facing researchers: the cost-response problem, the large sample-size problem, and the data entry problem."

So far as related to the research project the relevant benefits McCarter and Caza (2009) identify with respect to the use of an ARS as a data collection tool included the ease with which the data was collected, the ability to enter into an organization to collect data within a regular business setting, the ability to collect data from large samples quickly, efficiently and accurately and the ARS can be used as a means for investigating behavioral contexts that typically are a challenge to researchers; e.g. large group, rare behavior, field experiments.

However, one obvious limitation of the data collected by an ARS is that it is only quantitative and as such the data, by itself, does not enable analysis of the full nature or context of the engagement of the participants (Myers 2009). Therefore a qualitative data collection method may also need to be considered alongside the ARS data in order to interpret the results, given the element of human participation. Myers (2009: 9) cautions that "both quantitative and qualitative research approaches are useful and needed in researching business organizations." For this particular research project qualitative data collection was unnecessary as the research project was not reliant on the data quality itself but rather the collection process (i.e. knowledge-absence assessment) and the subsequent ability of the ARS to share the knowledge as a way to encourage management learning. The research comprised having two sessions of the Annual Conference devoted to being "interactive" and that the ARS would be used to collect the data to encourage knowledge sharing. That two sessions of the Annual Conference were directed at being interactive was recognition by Group Management that one manager in particular was a "knowledge builder". As Lee, Gillespie, Mann and Wearing (2010) argue a "knowledge builder" is necessary to lead and encourage knowledge sharing.

The two sessions in which the ARS was used related to the operational processes that Group management wanted all subsidiary managers to adopt so as to ensure that the process involving the pricing of variations to building contracts worked more efficiently and effectively. There was a lack of enthusiasm for the pricing of variations within The Group. Therefore, the rationale for the session was to alert the managers to consequences (legal and financial) for The Group when variations are not completed effectively and in a timely manner. Both sessions were delivered by the same Group Manager (the acknowledged "knowledge builder") who had been trained in the use of the ARS and involved in the development of the sessions' material prior to the Conference taking place.

The material presented to the participants comprised eight actual disputes that the Group had been involved in. The disputes were presented as separate scenarios with four multiple choice answers. Participants were required to select their choice (A, B, C or D) using the ARS. Out of the four potential answers there was a *correct* answer reflecting organizational policy and procedure. After participants had nominated their answer the presenting manager followed up with an explanation of the correct answer and the consequences that flowed for The Group and discussion ensued about the case scenario. Interestingly, in some scenarios provided there was a knowledge-absence identified as the answers chosen did not reflect the *correct* answer. Importantly, the ARS provided anonymity to the participants as both answer and clicker could not be attributed to a particular participant. Any disconnect between the selected answers collated by the ARS could only be used by the presenter to generate discussion.

Each session was limited to 40 minutes and 4 to 4.5 minutes was assigned to each case scenario. This provided some flexibility at either end of each session to allow for an introduction, the use of the ARS and the presenting manager's concluding remarks. The limited time available meant that the research activity was to be secondary to the primary objective of the session. In addition, Group Management requested that the sessions not be constrained by the research process. These limitations on the research process were overcome by use of the ARS. The ARS as a data gathering tool collected data not only for the organization's knowledge sharing goals for the session but also collected the data unobtrusively. The benefits of using the ARS to meet such objectives can be demonstrated by the data collected during the two selected sessions.

The Data Collected

Whilst the scenarios used in the two sessions of the conference were the same, the composition of The Group's employees in each session was different. The two groups comprised different companies, divisions and sections from within The Group. The participants therefore had varying degrees of involvement in the variation processes of The Group. Some companies and their managers had direct and constant involvement in the variation process whilst others had less direct and less frequent involvement in the variation process. The size of each group was different. In the first session there were 16 male participants and in the second session the group was larger with 43 male and 3 female participants. The size and composition of the groups was ordained by Group management. The data collected by the ARS indicates that there was a high level of participation. Participation in this context is defined by participant response rate: in other words, the "clicks" to answers made by participants as recorded by the ARS.

The data shows that in the first session 6- of the 8- scenarios recorded responses from all participants. In the second and larger session 4- of the 8- scenarios recorded responses from all participants. None of the scenarios recorded response rates of less than 90%. These response rates reinforce the benefit of using an ARS to collect data for research purposes. The question of whether an ARS is a tool by which to facilitate participation in knowledge sharing and in an organizational context must also be answered in the affirmative. Although the data collected with respect to the response rates is quantitative it nevertheless also confirms that the role of the "knowledge builder" is integral in initiating and role modeling the knowledge sharing process (Lee, Gillespie, Mann and Wearing, 2010). Table 1 evidences the high level of participation to each case scenario in each session which demonstrates the benefits of using the ARS as a data collection tool.

Table 1. Response Rates against Session/Scenario

Scenario	Participation – Session 1		Participation – Session 2	
	Response	Percentage	Response	Percentage
1	16/16	100%	42/44	95.45%
2	16/16	100%	40/44	90.90%
3	16/16	100%	44/44	100%
4	15/16	93.75%	44/44	100%
5	15/16	93.75%	40/44	90.90%
6	16/16	100%	44/44	100%
7	16/16	100%	44/44	100%
8	16/16	100%	40/44	90.90%

ARS As A Data Collection Tool

Whilst the data collected by the ARS was not conducive to investigating participant behavior, observational tools could be put in place to add to and support the quantitative data obtained. In sum, the benefits identified by McCarter and Caza (2009) above lend support to the argument that the ARS is an appropriate data collection tool for organizational research purposes.

In the context of this particular piece of research however, there are some specific limitations. One limitation is that the research only presents data collected from one organization and only two groups with that single organization. Another is that the boundaries of the research were constrained by the organization requiring that the research be conducted in an unobtrusive way. This meant that direct feedback from participants as to their experience of the ARS was not possible. As Myer (2009: 150) highlights, “the domain of analysis can be somewhat limited and the topics narrow. … Another limitation is the tendency to be purely descriptive and to make little contribution to theory.”

Whilst these limitations are accepted the research needs to be considered in context. Whilst the topic is narrowly defined the implications for further research in organizations is not narrow at all. There is significant scope to assess the efficient and effective use of an ARS in other organizations and their contexts. Further, whilst the data collected from this project is purely descriptive the ability of a particular research question to be answered is not limited by the use of the ARS. The research project shows that the quality and nature of the questions posed to participants can be tailored to particular organizational and research problems. In this particular organizational context and setting the ARS was being used as a tool to understand where there may have been specific knowledge-absences rather than searching for participant responses to a particular research question.

Further, as Coghlan (2003) argues there is much to be said for participatory or action research in the context of its ability to contribute to organizational knowledge. Coghlan suggests that within the realm of action research there is either mechanistic or organistic-oriented research (453). He suggests that organistic-oriented research is client-centered and therefore “internal” whilst mechanistic-oriented research could be regarded as consultant-oriented and therefore “external”. As he suggests ‘in an organistic-oriented situation, the participants themselves engage in an action inquiry process in which inquiry into their own assumptions and way of thinking and acting is central to the research process.' In that way he concludes that 'organistic-oriented action research take the primary focus away from practical outcomes and more on to what is being learned, and how the process of inquiry challenges values and ways of working and enacts a transformation of being.' This was the intention of using the ARS to facilitate the sharing of management knowledge. Therefore contrary to Myer's view above it is argued that this research, despite producing quantitative data only, does contribute to management learning theory. The concession by McCarter and Caza (2009) that there has been little consideration of an ARS being used in an academic research context places this research firmly within the theory of academic research into and in particular the debate over organizational research methods. Arguably, an ARS can be used because of the data it can collect to make the link between academic research and organizational research to answer a research question. This project should then be regarded exactly for what it is; a "baby-step" towards showing the potential for ARS as a research tool to better understand and engage with organizational issues.

Consequently, and arguably of utmost importance is that the research was of benefit to the organization involved. The project, through use of the ARS, provided the organization with an alternative approach to the conduct of their conference proceedings and also to locate knowledge-absence and then share knowledge. Anecdotal feedback suggests that the session was well received and beneficial: other projects using the ARS are being considered. The collaboration demonstrates that academics can contribute to a problem faced by an organization and research can be conducted in such a way as to be beneficial (to all parties). In this way the research, and the data collected by the ARS, is both rigorous and relevant. Or put another way, as Myers (2009) suggests "it allows scholarship and practice to come together." In this way, the research as falling within the discipline of management and organizational (MOL) scholarship is "impactful" (Antonacopoulou 2009). The knowledge generated by this research is "*actionable* – that is implementable by the user whom it is intended to engage, such as academics, business practitioners and policy makers" (Antonacopoulou 2009).

Conclusion

The ARS technology is designed with interaction and participation in mind. The two components allow participants in a particular process to record their responses to issues and questions put to them. The ARS has been used to this effect for educational purposes. The transfer of the ARS into organizational settings is less well recognized. The organization at the centre of this research project wanted a way to engage participants in the meeting process during the course of its manager's conference as it was concerned that participants were not sharing the knowledge and management learning intended. The ARS provided both the researchers and the organization involved with the opportunity to examine whether an ARS was a tool by which both purposes could be served. Whilst the data presented is limited to the particular organization and the specific sessions in which the ARS was used, the data presented demonstrates how an ARS may be used as a data collection tool for organizational but also more particularly, management learning research. Ultimately this research supports the premise that an ARS can facilitate the resolution of an organizational problem and be a robust tool to by which conduct organizational research.

References

Antonacopoulou, E.P. (2009) 'Impact and Scholarship: Unlearning and Practising to Co-Create Actionable Knowledge', *Management Learning* 40(4): 421-430.

Burton, K. (2005) 'Interactive PowerPoints: Is There any Point in Giving Power to Students?', *Murdoch University Electronic Journal of Law,* 11(4), http://www.murdoch.edu.au/elaw/issues/v11n4/burton114nf.html accessed 28 January 2011.

Cavana, R. Y., Delahaye, B.L. and Sekaran, U. (2001) *Applied Business Research: Qualitative and Quantitative Methods*. Milton, Qld: John Wiley & Sons Australia.

Davidson, P. and Griffin R.W. (2003) *Management: An Australian Perspective*. Milton, Qld: John Wiley & Sons Australia.

Coghlan, D. (2003) 'Practitioner Research for Organizational Knowledge: Mechanistic- and Organistic-Oriented Approaches to Insider Action Research', *Management Learning* 34(4): 451-463.

Graham, C.R., Tripp, T.R., Seawright, L., and Jeockel, G. (2007) 'Empowering or Compelling Reluctant Participators Using Audience Response Systems', *Active Learning in Higher Education*, 8: 233-258.

Hoffman, C. and Goodwin, S. (2006) 'A clicker for your thoughts: technology for active learning', *New Library World* 107(1228/1229): 422-433.

Lee, P., Gillespie, N., Mann, L. and Wearing A. (2010) 'Leadership and Trust: Their Effect on Knowledge Sharing and Team Performance 41(4): 473-491.

Kay, R. and Le Sage, A. (2009a). 'A Strategic Assessment of Audience Response Systems Used in Higher Education', *Australasian Journal of Educational Technology*, 25(2): 235-249.

Kay, R. and Le Sage, A. (2009b) 'Examining the Benefits and Challenges of Using Audience Response Systems: A Review of the Literature', *Computers and Education*, 53: 819-827.

McCarter, M.W. and Caza, A. (2009) 'Audience Response Systems as a Data Collection Method in Organisational Research', *Journal of Management & Organisation,* 15:122-131.

Myers, M.D. (2009) *Qualitative Research in Business & Management.* London: Sage Publications.

Spender, J-C. (2008) 'Organizational Learning and Knowledge Management: Whence and Whither?', *Management Learning* 39(2): 159-176.