2002

An Empirical Investigation of Employee Perceptions of Outsourcing Success of Information Technology Operations

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An Empirical Investigation of Employee Perceptions of Outsourcing Success of Information Technology Operations

by

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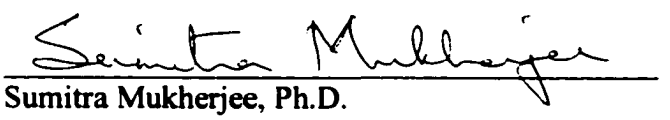
A dissertation submitted in partial fulfillment of the requirements
for a degree of Doctor of Philosophy

Graduate School of Computer and Information Sciences
Nova Southeastern University

2002

We hereby certify that this dissertation, submitted by Lynda Roberson Louis, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the dissertation requirements for the degree of Doctor of Philosophy.



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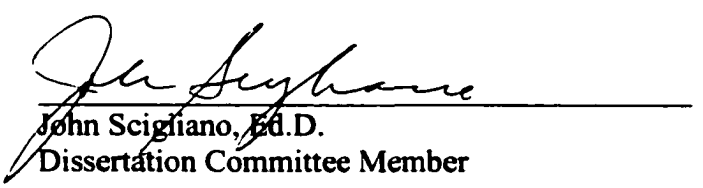

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Graduate School of Computer and Information Sciences
Nova Southeastern University

2002

Abstract

An Abstract of a Dissertation Submitted to Nova Southeastern University
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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August 2002

Outsourcing is defined as the contracting out of all or parts of a company's functional work. While most outsourcing initiatives attempt to open a line of communication between upper management and affected employees, little effort is made to assess and incorporate employee perceptions into the outsourcing deal.

Little research exists that addresses employee perceptions of outsourcing Information Technology (IT) functions and operations and the effects such outsourcing have on the employee. This study investigated the perceptions of employees directly involved in IT outsourcing deals in an effort to relate these perceptions to factors identified in earlier studies. The following human resource factors associated with outsourcing were evaluated: job security, benefits and compensation, morale, productivity, training and skills, and career opportunities. The study presented a set of four hypotheses that contended that transitioned employees benefited more from IT outsourcing. Results of this study, conducted via a survey, did substantiate the results from two previous employee perception studies of IT outsourcing. However, there was no statistical evidence to support the contention that transitioned employees benefit more from outsourcing than their counterparts. In order to assist management with addressing the issues from the employee's perspective, a Modified Management Outsourcing Adoption Model, based on an earlier employee perceptions study, is presented as a tool for use in a management plan of action to incorporate the employee perspectives into the outsourcing process and thus led to a more successful outsourcing venture.

Keywords: Outsourcing, information technology, employee perceptions.

John Ruskin, 1871: "In order that people may be happy in their work, these three things are needed: they must be fit for it; they must not do too much of it; and they must have a sense of success in it".

Acknowledgements

But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint. (Isaiah 40:31). I thank God for giving me the strength when I thought there was no more strength to be had. I also wish to thank those who have been instrumental in my endeavor to complete my studies.

First I give a most heartfelt thanks to those who are most special to me, those who provided physical and moral support over the years - support beyond support - my **family**. To my husband, **COL James E. Louis**, who is currently serving on active duty in Kuwait as part of Operation Enduring Freedom, my *love* and *thanks* to you are endless and eternal. Even in your absence, your encouragement meant the world to me. To my children, Dr. Chrystal U. Louis (pediatric resident at University of California at Davis, Sacramento, CA) and Vanessa M. Louis (a sophomore at Clark Atlanta University, Atlanta, GA), *thank you* for not giving up on me and for not complaining when my studies infringed on time we could have spent together. Know that I truly appreciate and love each and every one of you.

To my advisor, Dr. Sumitra Mukherjee, I say thanks for taking on the task of chairing my dissertation. Your guidance and support are truly appreciated. To my committee members: Dr. Steven Terrell, your help, advice and support kept me going; Dr. John Scigliano, you kept my work honest and my writing correct!

I wish to offer sincere appreciation for the support of two men whose work was the forerunner that provided impetus for this study. First to Dr. John Gundermann, EDS, and then to Dr. Mehdi Khosrowpour, University of Pennsylvania, Harrisburg, I thank you for your pioneer work and for your support in my study. You laid the groundwork, and hopefully I have added value to the questions raised from your research.

My senior management leaders at EDS, Billy Butler, George McNabb, and Mark Collins, supported my efforts with this study and I offer them a debt of gratitude. I would also like to thank Carol Haack of EDS for her support as well. Carol and Billy were there from the beginning. And to all my remaining family, friends and coworkers I thank you for your encouragement and support.

May God richly bless you all!

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Chapter 1

Introduction

Background

In recent years, the outsourcing of Information Systems (IS) or Information Technology (IT) functions has become a common business practice for small and large companies alike. Outsourcing has been loosely defined as the contracting out of all or parts of a company's functional work to one or more external vendors (Sengupta & Zviran, 1997). Loh and Venkatraman (1992) defined IT outsourcing as the significant contribution external vendors provide in the physical and/or human resources (HR) associated with either the entire IT infrastructure or specific components of it. Additionally, Hirschheim and Lacity (2000) said that IT outsourcing involves transferring IT assets, leases, staff, and management responsibility for delivery of services from internal IT functions to third-party vendors. Kakabadse and Kakabadse (2000) stated that aside from the contracting of skills, assets, and resources, outsourcing also is contracting for results, where the quality of both the vendor and the company's respective skills and resources is highly important to the success or failure of the outsourcing initiative.

Gupta and Gupta (1992) stated that outsourcing in the IT industry means using an external agency to process, manage, or maintain internal data and provide information related services. These services, also substantiated by researchers such as Hurley and Schaumann (1997) and Kakabadse and Kakabadse (2000), include, but are not limited to:

- Data processing
- Business information accessing through external databases
- Systems integration
- Facilities management
- Contract programming
- Global networking
- Configuration management
- Desktop services
- Business intelligence gathering and
- Turnkey projects implementation.

Quinn (1999) stated that outsourcing vendors are perceived to develop greater knowledge depth, invest more in software and training, be more efficient and innovative, offer higher wages and attract more highly trained people than can most companies who are choosing to develop and concentrate on core competencies. Quinn and Hilmer (1994) asserted that when properly developed, strategic outsourcing substantially lowers cost, risks, and fixed investments while expanding flexibility, innovation capabilities and opportunities while creating financial rewards for the outsourcee.

The outsourcing industry is very lucrative financially. Hirschheim and Lacity (2000) reported that the IT outsourcing market, which was worth $76 billion (US dollars) in 1995, grew to over $120 billion in 1997. Venkatraman and Loh (1994) stated that outsourcing is more prominent in cases where the IT operations are decoupled from the business operations and where there are strong financial reasons driving the decision to outsource. The following operations are key trends in IT outsourcing: data center management, personal computer (PC) procurement and services, telecommunications and network management, application development, and systems integration.

Numerous researchers, including Antonucci and Tucker III (1998), Barrett (1996), Earl (1996), Graham and Scarborough (1997), Gurbaxani (1996), Hurley and Schaumann (1997), and McFarlan and Nolan (1995), have identified various reasons why companies are choosing to outsource its IT operations. These include, but are not limited to:

- Reducing or controlling operating costs
- Making capital funds available
- Creating cash infusion
- Augmenting for lack of internal resource availability
- Obtaining access to highly trained and skilled specialists
- Divesting functions that are difficult to manage or out of control
- Improving business or company focus
- Improving service quality
- Capitalizing on access to world-class capabilities
- Accelerating reengineering benefits
- Sharing or reducing risks and uncertainties
- Increasing competition
- Freeing resources for other purposes
- Focusing on core competencies.

Three major types of outsourcing are prevalent today: total outsourcing, selective outsourcing, and insourcing. Total outsourcing involves turning over all IT responsibilities to the third-party vendor (Currie & Willcocks, 1998; Lacity, Willcocks & Feeney, 1996). Insourcing involves retaining these responsibilities as in-house functions, usually after conducting an outsourcing evaluation to determine the most strategic approach to achieving the same objectives as outsourcing IT services (Benko, 1992; Hirschheim & Lacity, 2000). Selective outsourcing is where a company will chose to outsource only part of its IT functions and retain control of the rest (Garner, 1998a; Lacity, Willcocks, & Feeny, 1996; Prager, 1998; Slaughter & Ang, 1996).

Likewise, an outsourcing initiative usually affects an employee in one of three ways. The company choosing to do the outsourcing can retain employees affected by the initiative. A second option is to transfer, or transition, employees from their payroll to that of the vendor winning the outsourcing contract. Finally the company may release some employees, either through attrition, layoffs or retirement incentives (Palvia & Parzinger, 1995).

As part of an outsourcing initiative, a systematic job analysis should be completed between the companies in order to develop a performance level statement of work. A white paper by the General Services Administration (GSA) (1998) defined this job analysis as a 7-step systematic process:

- An organizational analysis to review a firm's needs and identify the services and outputs required from the vendor.
- A work analysis to further analyze the required outputs, break down the work into its lowest functional task level and link these tasks in a logical flow of activity.
- A performance analysis and standards that assign a performance requirement to each task, to determine how a service will be measured and what performance standards and quality levels apply.
- A directives analysis which analyzes all potentially relevant directives to determine which should be utilized and to which extent.
- A data gathering to collect and analyze historical data. From this, the appropriate metrics for quantifying or forecasting expected work requirements is determined.
- A cost analysis that establishes a baseline costs for each service or output.
- An incentive analysis that establishes a positive or negative incentive that should induce better quality performance.

In 1996, DuPont Corporation entered into an outsourcing alliance with Computer Sciences Corporation (CSC) and Andersen Consulting (Mullin, 1996a, 1997a, 1997b), now Accenture. CSC was contracted to operate DuPont's global IT and computer

infrastructure, including mainframe and desktop computers and communications functions. Andersen was contracted to provide the IT applications and consulting for DuPont. This deal saw 2,600 DuPont IT employees offered positions to transition to CSC and 500 to Andersen, while the remaining 1,100 were retained at DuPont. The retained employees were to comprise the leadership and management team tasked to develop and maintain the corporate IT standards and to manage the worldwide procurement program.

In 1997, BellSouth Telecommunications, Inc. (BST) entered into a 10-year outsourcing alliance with two of America's largest outsourcing firms (Garner, 1998b). In December 1997, BST outsourced its IT Operations functions, consisting of desktop support, help desk support, and data center operations, to Electronic Data Systems, Inc. (EDS). In February 1998, BST outsourced its IT software development and software maintenance functions to Andersen Consulting (Accenture). BST retained in-house, or insourced, its IT transport functions. This consisted of IT planning, design and implementation of Local Area Networks/Wide Area Networks (LAN/WAN), WAN management, and internal communications and network infrastructure management. This type of selective outsourcing is seen as a partnership relation between the three firms involved. Lee, J.-N. and Kim, Y.-G. (1999) defined an outsourcing partnership as an interorganizational relationship to achieve the participants shared goals.

With this outsourcing, approximately 2100 management employees were transitioned to the two outsourcing firms, while approximately 1000 were retained within BST. Both of the outsourcing firms either brought over existing employees or hired new employees to fill many positions. Due to contractual restrictions, BST's non-management and union IT personnel were not allowed to transition to the outsourcers. Nearly sixty

percent (60%) of these employees, approximately 900 (Kanell, 1997), were not retained in BellSouth. In most instances, personnel had to be hired into EDS and Andersen Consulting (Accenture) to fill positions vacated by these employees.

During the BellSouth outsourcing contract negotiation process, a work analysis was conducted with the BST employees. All IT employees were contacted by a management team to provide various information which was used to document job content and individual responsibilities. Efforts were made to open a line of communication from upper management to all IT employees concerning human resource issues management felt were of concern to the affected employees who would be candidates to transition out of BellSouth. These included medical and retirement benefits, holidays and vacations, service dates, and transition bonuses. However, in this outsourcing initiative, no effort was made to assess the employees' view of the outsourcing deal and its impending impact on their IT career.

Problem Statement

The problem investigated in this study, deduced from the cases cited above (Mullin, 1996a, 1997a, 1997b; Garner, 1998b; Kanell, 1997; Lee & Kim, 1999) and based on conclusions from the literature cited below (Kessler, Coyle-Shapiro, & Purcell, 1999; Khosrowpour, Subramanian, Gunderman, & Saber, 1996), was that little emphasis is given to identifying and integrating non-upper level management employee concerns about outsourcing into the outsourcing process. Human relation issues are addressed from the perspective of upper level management and from the perceived benefits of the companies involved (Khosrowpour, Subramanian, & Gunderman, 1995; Laribee &

Michaels-Barr, 1994; and Wray, 1996). Because of this, there may be a false sense of perceived success of outsourcing from a human relations perspective.

Relevance

A study of employee perceptions of outsourcing by Khosrowpour et al. (1996) revealed that IT employees did not perceive that their welfare was key in the minds of IT management as it made decisions to outsource. Management routinely did not seek input from employees to assess the impact that the impending deal had on the employees. Khosrowpour et al. concluded that perceptions of employees might produce negative impact on the success of an outsourcing deal. This manifested itself in both low morale and low productivity. Laribee and Michaels-Barr (1994) and Wray (1996) wrote that management usually is presented with a preconceived list of human resource issues from the outsourcing firms that it readily adopts. This dissertation explored whether knowing how the employees perceive the outsourcing venture, and integrating these perceptions into the outsourcing process, may lead to a more successful outsourcing relationship.

Goal

The objective of the researcher in this study was to investigate Information Technology employees' perceptions about outsourcing IT functions in relationship to various human relation issues and to determine whether these perceptions affect outsourcing success. For this research, this perceived success was interpreted as a positive perception of the outsourcing issues under study. The researcher sought to investigate empirical hypotheses that proposed a relationship between factors associated with outsourcing that have been identified in the literature, and employee attitudes about

outsourcing effects on their careers. Furthermore, an attempt was made to validate the results of the Khosrowpour et al. (1996) study against a more specific IT population, namely IT personnel who have been directly involved in an outsourcing venture.

Research Questions

The research questions and hypotheses presented below were formulated based on the following set of questions drawn from an extensive review of outsourcing literature:

1. What effect has the outsourcing had on the employees who were outsourced (Khosrowpour et al., 1996; Wray, 1996)?

2. What effect has the outsourcing had on employees retained in the company that outsourced its IT functions (Khosrowpour et al., 1996; Wray, 1996)?

3. What are the employees perceived views of the outsourcing process: either positive or negative (Due', 1992; Gupta & Gupta, 1992; Wray, 1996)?

4. What are the perceptions of the employees involved in outsourcing of whether the move enhanced or hindered their IT career objectives (Eckerson, 1992; Khosrowpour et al., 1996; McLellan & Marcolin, 1994)?

5. What are the employees' levels of perceived change in commitment from either company (outsourcee and outsourcer) toward furthering the employees' career objectives (Barrett, 1996; Khosrowpour et al., 1996)?

6. What effects do the employees perceive that their attitudes about the outsourcing initiative will/will not impact the success of the overall outsourcing relationship between the companies (Barrett, 1996; Due', 1992; Khosrowpour et al., 1996; Richey, 1992)?

7. What is the perception that the quality of service provided by the outsourcer will be affected by the employees' attitudes toward the outsourcing (Khosrowpour et al., 1996; Richey, 1992)?

8. What are the employees perceived effects of the outsourcing initiative as a result of communication by either company - was enough communication done up front and has enough communication continued following the transition of employees to contribute to the employees' perceptions of the impact of the outsourcing? (Eckerson, 1992; Khosrowpour et al., 1996; Laribee & Michaels-Barr, 1994; Richey, 1992; Wray, 1996)

These research questions address the human resource issues of job security, benefits and compensation, morale, productivity, training and skills, employee welfare and career opportunities. These factors are identified in the literature cited above, and in the extensive literature review that follows, as important variables in employee perceptions for outsourcing. While there was a consensus amongst the researchers cited above that these are significant issues in managing IT outsourcing, no comprehensive empirical investigation of these questions has been documented in the literature.

Hypotheses

From the research questions noted above, this study sought to investigate the following set of empirical research hypotheses, presented in the alternate hypothesis format:

H_1: Outsourced IT professionals (transitioned employees) benefit more in their career opportunities than retained professionals (Questions 1 and 2).

H_2: Outsourced IT professionals have a more positive view of the outsourcing process than retained professionals (Question 3).

H_3: Outsourced IT professionals career objectives are met more by outsourcing than retained professionals (Questions 4 and 5).

H_4: Outsourced IT professionals are more satisfied with the levels of communication involved with outsourcing than retained professionals (Question 8).

Barriers, Limitations and Issues

The proposed study population was transitioned and retained employees involved in and affected by outsourcing ventures. As such, a major barrier to this research was obtaining the required data to conduct this study from the proposed population. The following IT/IS societies were identified as potential sources of participants for the study

through use of their membership roles: Society for Information Management (SIM), American Society for Information Science (ASIS), Association for Information Systems (AIS), Association for Information Technology Professionals (AITP), Institute for Operations Research and the Management Sciences (INFORMS), ISWorld Net, Information Resource Management Associations (IRMA), and the Association for Computing Machinery (ACM). Khosrowpour et al. (1996) used the membership of the Association for Systems Management (ASM) for their study. However, this organization is no longer functional as a national unit.

Another barrier was obtaining and validating an instrument to use that would encompass the criteria of the study. Criteria associated with the selection and distribution of the instrument is discussed below in Chapter 3. Khosrowpour et al. (1996) sent surveys to 1000 randomly selected members of the ASM and received a return of 146, or 14.6%. They stated that this return rate was within their expectation for this type of study.

A major limitation associated with this study was getting those identified individuals who met the criteria to actually participate in the study. Senior management for the EDS BellSouth account was contacted to become the study population. EDS indicated that its employees who transitioned to and were working on the BellSouth account could not participate in this study as the sole population. Finally, steps had to be taken not to generalize any conclusions to more than the population involved in the study unless evidence is uncovered to the contrary.

Definition of Terms

The following terms and acronyms are used within this dissertation and are significant for the purpose of and in the context of this study. Definitions are drawn from

various sources, including the literature search, business glossaries and Internet sources which are sited where applicable.

Table 1 Terms & Acronyms

Term	Definition
ABI/INFORM	Online searchable database repository of business abstracts and specialty articles. Accessed via ProQuest® Information and Learning Company (www.umi.com/proquest)
ACM	Association of Computing Machinery. (www.acm.org)
AIS	Association for Information Systems. (www.aisnet.org)
AITP	Association for Information Technology Professionals. (www.aitp.org)
Alliance	A business relationship between a supplier and a customer, or among two or more suppliers, usually involving joint product development or joint marketing efforts. (Source: http://www.sireport.com/resources/glossary.html)
ASIS	American Society for Information Science. (www.asis.org)
ASM	Association for Systems Management (Khosrowpour et al., 1996).
BST	BellSouth Telecommunications, Inc. (www.bellsouth.com)
Core Competencies	The unique internal skills and knowledge sets that define an organization's competitive advantage as seen by its customers. Usually limited in number and embodied in a product/service rather than the product/service itself. (Source: Firmbuilder.com)
Core Employees	Permanent, "traditional" employees who have the critical skills necessary for an organization's continued existence. These employees guide the company's strategies for the future. (Source: http://www.staffing.net/employers/contracting_glossary.htm)
Downsizing	Movement to reduce costs and become more competitive; reducing headcount to lower fixed costs. (Source: http://www.staffing.net/employers/contracting_glossary.htm)

Table 1 (continued)

Term	Definition
EDS	Electronic Data Systems, Inc. (www.eds.com)
Employee Benefits	An indirect form of employee compensation, in addition to wages. Employee benefits mandated by law include social security, unemployment, and workers compensation. Other employee benefits, sponsored voluntarily by employers, usually include health-care, life insurance, retirement, or other welfare benefits. (Source: http://www.staffing.net/employers/contracting_glossary.htm)
Facilities Management	The ongoing management of an entire facility, function, or department at a customer site, usually including responsibility for hiring, training, and management of staff, as well as the provision of equipment and supplies necessary to perform the contracted function by an outside vendor. Assigned staff is usually permanent employees of the service provider. (Source: http://www.sireport.com/resources/glossary.html)
GSA	General Services Administration. (www.gsa.gov)
HR	Human Resources (Wray, 1996).
INFORMS	Institute for Operations Research and the Management Sciences. (www.informs.org)
InfoTrac®	Searchable database provider of a collection of general and subject matter databases. This database is usually accessed via school and library subscription services. (infotrac.galegroup.com)
Infrastructure	The physical hardware used to interconnect computers and users. It is often viewed as everything that supports the flow and processing of information. (Source: Whatis.com) This term can refer to the underlying structure of technical facilities and institutional arrangements that supports communication. It can be defined as not only the tangible capital assets, but also the human capital necessary to realize the potential of any technical system. (Source: http://www.2400hrs.com/glossary/)
Insource/Insourcing	Retain services in-house after having gone through an outsourcing initiative (Benko, 1992; Hirschheim & Lacity, 2000).

Table 1 (continued)

Term	Definition
IS	Information Systems.
IRMA	Information Resource Management Association. (www.irma-international.org)
ISWorld	A web-based service that provides information management scholars and practitioners with a single entry point to resources related to information systems technology. (www.isworld.org)
IT	Information Technology - Includes matters concerned with the furtherance of computer science and technology, design, development, installation and implementation of information systems and applications. (Source: http://www-rohan.sdsu.edu/glossary2.html) All aspects of managing and processing information with computers within companies. (Source: http://www2.darwinmag.com/learn/glossary.cfm)
LAN	Local Area Network - A data communications network, which is geographically limited (typically to a 1 km radius) allowing easy interconnection of terminals, microprocessors and computers within adjacent buildings. (Source: http://www.cisco.com/univercd/cc/td/doc/cisintwk/ita/112.htm)
Outsourcer	Company winning an outsourcing contract. Synonymous with Vendor (Khosrowpour et al., 1996).
Outsourcee	Company that outsources components of its business to a second party vendor (Khosrowpour et al., 1996).
Outsourcing	The use of outside resources to perform non-core functions. (Source: www.outsourcing-journal.com) A long-term, results-oriented relationship with an external service provider for activities traditionally performed within the company. Outsourcing usually applies to a complete business process. It implies a degree of managerial control and risk on the part of the provider. (Source: www.firmbuilder.com)
Outsourcing initiative/ Outsourcing venture	Process of evaluating and deciding whether to outsource (Gupta & Gupta, 1992).

Table 1 (continued)

Term	Definition
Partnering	Long-term commitments focusing on "win-win" relationships between customers and suppliers (or among suppliers) which add value to both parties through increased sales, reduced expenses, and/or greater productivity. (Source: http://www.sireport.com/resources/glossary.html)
Retained employee	Employee not transitioned to the vendor but stays with the company that has outsourced portions of its services (Laribee & Michaels-Barr, 1994).
Selective Outsourcing	Decision to outsource only parts of the IT functions and retain others in-house. It is considered a results-based contract with outside service providers for selected parts of a business activity (Garner, 1998a; Lacity, Willcocks, & Feeny, 1996).
Service Provider	The organization providing the outsourced service. Synonymous to Outsourcer or Vendor (Source: http://www.isaca.org/standard/guide11.htm)
SLA	Service Level Agreement - identifies certain service levels or performance standards that the outsourcer must meet or exceed. The SLA also specifies the consequences for failure to achieve one or more service levels and may also include credits or bonus incentives for performance that exceeds targets. A defined minimum performance measures at or above which the service delivered is considered acceptable. (Source: http://www.isaca.org/standard/guide11.htm)
Statement of Work	Sets forth the work to be done. (Source: http://www.outsourcinglaw.com/glossary.html)
Strategic Outsourcing	Outsourcing to achieve better returns on investment and accelerated growth. Strategic outsourcing is approached as a redirection of the organization's resources toward its highest value creating activities - its core competencies. It involves shared investments with one or more other businesses where each organization maintains a separate revenue stream. (Source: www.firmbuilder.com)

Table 1 (continued)

Term	Definition
Total (Full) Outsourcing	Results-based contracts with outside service providers for complete business activities. All portions of the unit are outsourced (Currie & Willcocks, 1998; Lacity, Willcocks & Feeney, 1996).
Transitioned employee	Employee moved to the payroll of the company winning the outsourcing contract. These employees usually continue to provide the same services to the company that outsourced them (Laribee & Michaels-Barr, 1994).
Vendor	Company providing the outsourcing services. Synonymous with *Outsourcer* or *Supplier*. (Khosrowpour et al., 1994)
WAN	Wide Area Network - A network extending over distances greater than one kilometer usually spanning multiple geographical districts and linked by various networking devices (Source: http://www-rohan.sdsu.edu/glossary3.html).

Summary

Outsourcing has emerged as a common practice in the Information Technology world. The major reasons for outsourcing have been presented. The major types of outsourcing have been discussed. The outsourcing decisions of two major corporations have been discussed. Through the literature research of outsourcing a major gap in the process has been presented as a researchable problem, the lack of attention to identifying and integrating the perceptions of affected employees in the outsourcing process. This dissertation focused on that specific subset associated with outsourcing - the impact and affect outsourcing had on the employee, from the employee's perspective, and how that perception affects the perceived success of the outsourcing venture. As revealed in the literature review to follow, little research exists which addresses outsourcing from the viewpoint of the affected employee.

Chapter 2

Review of Literature

Introduction and Overview

An investigation into IT/IS outsourcing literature revealed that a wealth of information exists on this topic in general. A search in two (2) major reference databases, ABI/INFORM and INFOTRAC®, revealed the following results:

Table 2 Literature References on Outsourcing

Publication Years	Keywords used	Total number of articles	Total number Peer Reviewed
	ABI/INFORM		
1999-2001	Information Technology and Outsourcing	380	22
	Information Systems and Outsourcing	84	13
	Employee Perceptions and Outsourcing	1[1]	1
1986-1998	Information Technology and Outsourcing	909	62
	Information Systems and Outsourcing	1171	87
	Employee Perceptions and Outsourcing	1[2]	1
	INFOTRAC®		
1980-2001	Information Technology and Outsourcing	855	60
	Information Systems and Outsourcing	897	37
	Employee Perceptions and Outsourcing	0	0

[1] Non-IS related
[2] IS related

Hirschheim and Lacity (2000) stated that the current volume of research can be categorized as:

- Descriptive case studies and surveys of current outsourcing practices
- Surveys of practitioners' perceptions of risks and benefits of outsourcing
- Studies of determinates of outsourcing
- Identifications of best practices that identify or distinguish successes verses failures

The following discussion focuses on the various aspects and categories of IT outsourcing research. First a discussion of the general works associated with outsourcing is presented. These general works are not specific to the human resource issues and employee perspectives proposed for this study. They are mentioned to show the depth of the current level of outsourcing research.

The next section of the review addresses the human resource issues identified as relevant to this study. A general discussion of HR issues from the literature and the impact these issues have in the outsourcing initiative is presented. This is followed by a discussion of the two studies identified in Table 2 above that deal directly with employee perspectives of outsourcing.

General Works

Frameworks and strategies for achieving an outsourcing deal are presented by researchers such as Grover, Cheon, and Teng (1994b), Kini (1996), Lacity and Hirschheim (1993a), Loh and Venkatraman (1992), Ruber (1995), Venkatraman and Loh (1994), and Yesulatitis (1997). Successes and failures of outsourcing based on factors such as management of the contracts are discussed by Asbrand (1997b), Benko (1993), Guterl (1996), Lacity and Willcocks (1998), Mullin (1996b), Pinnington and Woolcock

(1997), and Tayntor (1997). Antonucci and Tucker III (1998) discussed perceived benefits from management's perspective. Alpar and Saharia (1995), Asbrand (1997a), Aubert, Rivard and Patry (1996), Grupe (1997), Jacobides (1998), and Malhotra (1995a, 1995b) presented discussions from an economic perspective. Useem and Harder (2000) discussed leadership qualities needed for implementing and managing successful outsourcing. Tayntor (2001) presented scenarios whereby a company may choose to augment its IT staff with external contractors in both an outsourced and non-outsourced environment. Altinkemer, Chaturvedi, and Gulati (1994), and Malhotra (1995a, 1995b) examined the effects of outsourcing on IS productivity.

Barrett (1996), Duncan (1995), Gerston (1997), and Quinn and Hilmer (1994) stated that often companies will outsource so that they can strategically concentrate on their core competencies, which is unusually not IT. McDermott and Handfield (2000) stated that a core competency is the organization's hidden capability of coordination and learning that cannot be easily imitated or duplicated by their competitors, and that when exploited often leads to dominance in existing markets. Lacity, Hirschheim, and Willcocks (1994) stated that senior executives view IT as a utility and not a competitive weapon, thus making IT a prime candidate for outsourcing.

Hancox and Hackney (2000) assessed the usefulness of four common conceptual frameworks - core competencies, transaction cost economics, agency theory and partnership - in a study of practices and perceptions of IT outsourcing in the United Kingdom. They found that contrary to vendor marketing material, and much of the IT outsourcing literature, core competency was not a strong motivator for IT outsourcing among the organizations it surveyed. They also reported that in one sector of their

population, employees and managers (upper level management) often had significant misgivings about outsourcing, but for different reasons. Managers were usually more concerned with the economical welfare of the enterprise, whereas the non-manager employees often felt excluded from the organization and management's decisions that affected their employment and careers. These researchers suggested that there is further need for study of the various sectors including non-managerial IT employees, transferred or redundant staff, and non-IT managers and employees.

Sengupta and Zviran (1997) studied user satisfaction in an outsourced environment in an effort to establish an outsourcing performance appraisal vehicle used to identify potential problem areas. They proposed a tool and methodology to help IT managers monitor the success and effectiveness of IT outsourcing based on the user. Kakabadse and Kakabadse (2000) stated that even with the rampant growth of outsourcing, customer satisfaction is not a guarantee. They reported that nearly 70% of companies who have undergone outsourcing stated that they are dissatisfied with one of more aspects of their supplier. They attributed this to factors such as contracting with the wrong vendor or ill-defined goals, provisions for service, contract guarantees and relationships between the companies.

Human Resource Issues

Hurley and Schaumann (1997) stated that improved access to required skills is the number one objective for IT outsourcing. McLellan (1993) identified three core personnel issues that are both economic and strategic benefits to outsourcing: cost economies, enhanced career opportunities and reduced staff turnover, and removal of the salary sub-units. McLellan and Marcolin (1994) further discussed the research of McLellan (1993).

They termed their first listed risk of outsourcing as "Technology skill stripping" (p. 99). They asserted that from the employee perspective an attractive benefit of outsourcing could be an enhanced career path outside of their existing company. This can lead to a drain of IT expertise from the employer as valuable employees move over to the vendor organization.

Lacity, Hirschheim, and Willcocks (1994) studied why outsourcing deals often fail to produce the results anticipated. They noted that while many outsourcing deals list access to technical talent as a reason for outsourcing IT functions, this tactic often backfired when a company's current perceived incompetent staff was transitioned to the vendor. They contended that the only way to ensure access to the technical skills desired was to build this requirement into the contract.

Barrett (1996) contended that ultimately outsourcing is concerned about people and jobs. He noted that in the deal between Hughes Aircraft and vendor Computer Science Corporation (CSC), 950 jobs were eliminated from Hughes but transitioned to CSC. Although Hughes made great efforts to ensure that the transitioned employees received similar benefits and pay packages with CSC, the results from this process were not without its problems. Twenty-five percent of the Hughes IT staff quit prior to the transition, one-third of the staff embraced the move and one-third hated the change.

Cooper (1999) said that the 1990's saw a move away from emphasis on enterprise culture with its emphasis on strategic alliances and privatization to a short-term culture with outsourcing, flexible workforces, and long working hours. He reported results of two *Quality of Working Life Surveys* conducted with 5000 managers ranging from junior managers through Chief Executive Officers (CEOs). These studies, conducted in 1997

and 1998, revealed that where there had been major corporate restructuring involving downsizing and/or outsourcing, there were adverse effects on employee loyalty, morale, motivation and perceived job security. However, there was a marked difference in the perceived impact of restructuring and/or outsourcing on individuals by the respondents' level in the managerial hierarchy. The perception of a substantial proportion of chairpersons, CEOs, and managing directors indicated that the initiative had increased their morale, motivation and loyalty. Senior, middle and junior managers perceived these same three factors more negatively. All levels perceived that their sense of job security had decreased due to the restructuring/outsourcing initiative.

Eckerson (1992) discussed the importance of developing an effective line of communication during the transition process. He discussed EDS' defined strategy for managing the transfer of employees to its company. EDS developed a three-phase approach to communication. During the pre-transition phase, which spans from three weeks to six months, EDS deals with details of benefits, compensation and personnel policies. The second phase goes into effect once a contract is secured. Then EDS will send in a staff to facilitate discussion groups, man hotlines, and meet individually with employees expected to transition into EDS. The post-transition phase involves the continued efforts to focus on problems and questions associated with benefits, and the beginning of training and education programs that focus on EDS company values, its mission and approaches.

Due' (1992) interviewed information systems personnel involved in the outsourcing process and uncovered several serious concerns. The most significant problems noted were that the outsourcing process had a negative effect on employee

morale and it presented uncertain effects on employee's futures. This was fueled by rumors of lay-offs, loss or reduction of benefits, transfers, and the migration to new or different technologies. These feelings led to low productivity and an exodus of personnel when the rumors were left unaddressed by management. Other employees saw opportunities for promotions, welcomed the new training opportunities and the challenge of new work that the outsourcing promised as positive benefits of outsourcing.

He concluded that one of the real costs of outsourcing is in the real emotional cost employees pay during the outsourcing process as they adjust to their new work. This is accompanied by productivity loss that unfolds during the outsourcing process. Due' suggested that this could be avoided by opening a line of communication between management and IS personnel throughout the entire outsourcing process. He suggested this means keeping the staff informed, and involving the IS staff in setting the outsourcing strategy.

Palvia and Parzinger (1995) supported the contention of Due' (1992). They reported that the outsourcing process could be counterproductive as employees begin to seek employment opportunities elsewhere. They asserted that cuts in staff during the outsourcing process caused anxiety and job insecurity for surviving employees. They reported that IS executives and their subordinates often perceived outsourcing as a threat to their career paths. This often affected productivity and morale. They stated that studies from the early 1990's showed that it usually took six months to one year for surviving personnel to recover from the outsourcing experience and return to normal work productivity levels. The authors contended that personnel matters are crucial to the negotiations and have a lasting impact on all employees. They concluded that a well-

planned and executed communication plan is vital for addressing personnel issues during and after the negotiations. They stressed the importance of allaying the fears and anxiety of retained employees through planned activities that include providing reassurance, a challenging work environment, and career paths for their growth and job fulfillment.

Khosrowpour et al. (1995) examined outsourcing problems from both an organizational and a personnel perspective. They stated that personnel problems associated with outsourcing are often reflected in employee perceptions and actions. They contended that it is important for managers to understand these perceptions regarding outsourcing so that they, the managers, can deal effectively with the problems that arise as the outsourcing evaluation or transition progresses. They listed the following seven personnel problems attributed to outsourcing:

- Emergence of "survival of the fittest" as force reductions are identified and key personnel are lost
- Perceived threats of the outsourcing firms
- Resistance of IS employees to outsourcing
- Emergence of low productivity and morale during outsourcing
- Association of causes for declining employee productivity resulting from rumors and communication of outsourcing arrangements
- Emergence of problems with force reductions especially for employees with limited skills
- Acknowledgment of client's IS employees having limited skills and training

Likewise, they offered the following eight potential remedies to these personnel problems:

- Strive to meet personnel and professional needs in a fair and consistent manner.
- Minimize staff turnover. Identify key personnel with the business and technical skills that are invaluable to the organization and make an effort to retain at least 90% of these employees.

- Control productivity declines. Recognize that low morale in the work force due to unknowns or other dissatisfactions associated with outsourcing can be detrimental to the business.
- Successfully complete outsourcing evaluation or transition within one year, depending on the scope of the effort.
- Provide ongoing financial security to employees, where possible.
- Tailor an approach to address situational variables such as age, education level, length of service, position in organization, and job functions.
- Provide choices to employees that are tailored to suit the need of the individual. This can include such items as continued benefits, new educational opportunities, or going with the outsourcing or staying with the company. Choices help employees feel they have some control over their destiny.
- Provide employee counseling to all to help manage stress and to cope with the transition

They stated that the organization can effectively address these personnel issues through effective communication of the outsourcing decision, involvement of senior IS employees in the outsourcing decision, and by maintaining credibility throughout the process.

Gupta and Gupta (1992) stated that outsourcing often results in the permanent elimination of internal IS positions. They contended that IS employees often feel threatened and demoralized by outsourcing and often become unproductive. This often will lead to a sudden exodus of talented and important IT personnel, which weakens an organization's information infrastructure. The authors stressed the need to involve key IS/IT personnel in the decision process so that the employees have a full appreciation of why outsourcing is necessary and what the implication of these decisions pose to them. The authors contended that doing so leads to a more successful outsourcing venture.

Laribee and Michaels-Barr (1994) cited examples of early outsourcing ventures that resulted in the loss of IS jobs after the transition to the vendor. They asserted that the

transition of employees affected morale and productivity. The authors contended that this emphasized the need for careful planning for employees' needs during an outsourcing transition. They noted that communication is crucial to a successful transition process. They said that the message to relay is that the decision to outsource is based on sound business objectives and that the job is valuable and appreciated.

They asserted that the three types of employees involved in outsourcing - those retained in the company, those transitioned to the vendor, and those laid off - each must be handled differently. They suggested that managers tend to ignore the feelings of employees that remain with a company. However, by ignoring the feelings of these employees who have been perceived as *safe*, there existed the chance of sharp drops in productivity by these employees.

The authors offered management advice on how to effectively handle each type of employee to ensure a smooth process. For the retained employee, this may include financial incentives to stay, training opportunities, and implementing open-door policies that allow the employee to share concerns with management. For transitioned employees, this might include highlighting the benefits of a career in a company that specialized in providing IT services, career advancement opportunities and training. For the laid off employee, the authors suggested offering extensive out-placement assistance, providing adequate advance notification, communicating the rational and criteria used for the layoff and balancing between management and non-management positions. They concluded by emphasizing the need to communicate at all stages of the outsourcing process, and that addressing the unique concerns of employees affected by outsourcing aids in attaining the wanted rewards and successes from outsourcing.

Lee, Trauth, and Farwell (1995) studied the changing face of IT and the effect this will have on future job skills and knowledge requirements. They noted that outsourcing caused a shift in the needs for IS knowledge and skills and companies and academia must adopt to this change in order to ensure a competent work force. This is supported by Prager (1998) who asserted that outsourcing was requiring new skills focusing on effective communication, peer influence, the art of persuasion, facilitation and consensus building. Symoens (1999) also asserted that outsourcing will have a profound effect on skilled IT workers, and will force a shifting of their roles in corporations and in their career models. This model change will lead to less job choice, more role specialization, and less diversification in skill sets for the IT professional.

Elmuti and Kathawala (2000) performed an exploratory empirical study associated with global outsourcing. They sought to establish a positive relationship between global outsourcing programs and organization effectiveness. Major factors associated with the success or failure of global outsourcing were fear of change, access to adequate training and skills, choice of sourcing partners, and comprehensive plans detailing expectations. Fear of job loss was seen as the most serious problem facing the global outsourcing effort. As supported by several researchers cited here, this often negatively affects employees' morale and job performance. The authors suggested that the best method to address this fear was through open and honest communication.

Longnecker and Stephenson (1997) contended that companies should develop a viable plan to deal with human resource problems associated with outsourcing. They stated that challenges to the outsourcer are change management, employees' perceived loss of control and development opportunities, training and retaining employees, career

transitions, and vendor staffing. They also asserted that communication is key to addressing and resolving these human resource issues. They said success is gained when these issues are planned for and understood early in the process.

Richey (1992) addressed the effects of corporate downsizing, including outsourcing, on employee job performance, morale and loyalty. His study sought to ascertain and compare the attitudes and perceptions of employees from three groups: laid off employees no longer working for the company studied, those on layoff notification but still working for the company, and those who where neither laid-off nor on layoff notification. He contended that those laid off or on layoff notification had a significant impact on the attitudes, perceptions, and productivity of the surviving employees. He affirmed the importance of communication as a key enabler to effectively dealing with employees. He contended that the employee perception of this communication had a definite impact on the above noted factors. He asserted that while most managers feared that giving employees too much information early on would lead to work slowdowns, sabotage or higher employee turnover, advanced and formal information usually defused rumor mills and improved morale, loyalty and job performance.

Wray (1996) discussed the role of a company's human resource (HR) department in the outsourcing process. The key, he said, is communication. He stated that HR should prepare early to address issues from employees and should interact with the vendor HR to secure as much information and identify key issues. Both HR groups should know the employee concerns and jointly develop a plan to address these issues. He asserted these issues include benefits, options, job content/requirements, and security. He contended

that by knowing the concerns, companies avoided dissatisfaction, anxiety and possible lawsuits that often result when HR was not involved in early outsourcing discussions.

Wray (1996) presented what is termed as *best practices* employed by Arthur Andersen, a leading outsourcing vendor. These include:

- Defining and communicating a transition plan that defines activities such as interview schedules, employment decision timeframes, and employment start date
- Minimizing the unknowns by keeping the transition period short, and
- Communicating with the employee to address their issues and concerns

The author maintained that these practices would reduce much of the uncertainty that often led to low morale, reduced productivity and lawsuits. He offered a plan to the employer's HR team that includes: getting involved early, working with the outsourcer's HR team closely during the transition, and actively and continually participating during and after the transition process. He concluded that the early success of outsourcing depends on effectively addressing human resources issues, and this was best accomplished when both HR departments work in partnership.

Kakabadse and Kakabadse (2000) discussed the downsizing effect of outsourcing that often leads to both positive and negative consequences. There was usually perceived improvement in organizational performances through introducing new skills and working practices, reducing staff numbers, and by modifying individual incentives, employment terms and attitudes in the workplace. These same incentives generated internal fears and employee resistance. Survivors of outsourcing, those who retain jobs with the company, suffered many negative effects as well. These included a loss in management credibility, decreased morale, increased absenteeism, and increased turnover. The authors asserted

that the impact of outsourcing on all affected personnel depended on how well the initiative had been planned, how positively it had been communicated to employees and how effectively it had been implemented within the organization.

Employee Perceptions Studies

The research cited above deals with IT outsourcing in general. Human resource issues surfaced in these citations, and the researchers and authors offered a means of addressing these issues. However, these human resource issues were not the central theme of the research from an employee perspective. Only two studies dealing specifically with employee perceptions of outsourcing were identified.

Kessler et al. (1999) performed a case study of non-IS professionals involved in an outsourcing deal in London. The study was conducted in two phases via a series of employee attitude surveys. The first was conducted several weeks after the announcement of the results of selection of an outsource vendor. The final was conducted 18 months into the contract. Their study reflected that the same issues identified in literature cited above were also prevalent in the non-IS world. They noted the lack of research of the "insiders" (p. 6) - employee voice - perspective of outsourcing. Their study sought to identify a relationship between employee perspectives as a potential impact on outsourcing success. In examining employee responses to outsourcing, they suggested that three broad factors influence how employees react to outsourcing - specifically to a change in employer.

The first factor examined how employees felt their existing employee treated them. Influences in this area were the strategy and structure of the organization and people management as it related to human resource issues and policies.

The second factor, termed the *pull* from the new employer, examined how attractive employment with the new employer was viewed. Of importance to the process was:

- The employee perceptions associated with the identity of the potential new employer
- The way the information on the potential employer was presented, gathered and communicated, and
- The employee perspectives on the substance of what the new employer was offering to the employee, including benefits, staffing concerns, and workforce reduction concerns

Lastly, the factor termed *landing* examined the reality of employee experiences following the change in employer. This focused on how employees were treated after joining the new employer.

Their study of employee perceptions centered on measuring work attitudes focusing on organizational commitment, job satisfaction, and HR practices including rewards, career development, training, communication and involvement. Their evaluation attempted to link the consequences of outsourcing on whether there was any change in employees' assessment of HR practices; on whether initial expectations of employees were met; and on the extent to which there was change to important attitudinal outcomes following the outsourcing. Their research showed that while all four HR areas showed positive results, employees had a more positive view of career development (+1.22) with the new employer. The least amount of change was in the perception of communication (+0.23). There were mixed results relating to expectations of the new employer versus fulfillment with the employer. Only two of the six factors, "work harder in the job (+0.28)"and "changes for the better (+0.16)", showed positive results. The least favorable

factors were "anxious about the future (-0.90)" and "greater career opportunities (-0.53)". The latter seemed to conflict with the measure under expectations. Lastly employees reported greater satisfaction with aspects of their job after transition to the new employer, mainly in job satisfaction and perceived organizational support.

Kessler et al. (1999) concluded that their study is but a first step in addressing employee perceptions on outsourcing success. They acknowledged the limitation of drawing conclusions from their single case study, but stated that their approach has merit in providing a method to link particular employee perceptions to identifiable developments, events and processes. They reported the need to build on this research and to develop a more robust model of the impact of outsourcing on employees. They concluded that for those seeking to shape employee perceptions as a means of facilitating the outsourcing process and contributing to outsourcing success, their research highlighted ways in which views are linked to the past, present and future.

Khosrowpour et al. (1996) studied the perceptions of IS professionals, how outsourcing affected them, and career and communications issues related to outsourcing. They stated that successful outsourcing deals effectively with the human factors and that this required management to understand what perceptions exist within the employee ranks. They asserted that this was best accomplished with communication and with employee participation in the outsourcing process. This would allow management to deal more effectively with problems as they arise during the outsourcing process.

Their research identified the following human factors as critical to this issue: attracting and retaining talented IS professionals, employee resistance to outsourcing, job security, morale, productivity, training, and opportunities and career paths. Thirty-five

percent of the respondents agreed or strongly agreed that career opportunity was better with the outsource vendor. Fifty-three percent felt compensation was better but only 33% felt job security was better with the outsource vendor. Low moral associated with outsourcing was attributed to the 81% of respondents with neutral or negative feelings about outsourcing and to the 78% of the respondents who disagreed that their welfare was considered in the outsourcing decision.

Khosrowpour et al. (1996) proposed a Management Action Plan for addressing the productivity and low morale issues. Through this proposed plan, management would devise programs and concentrate on factors that would improve or eliminate the level of productivity reduction that emerged during the adjustment period and following transition. They also proposed an Outsourcing Adoption Model for managers to use to involve employees into the four distinct phases of the outsourcing process. This model proposed a direct impact between management communication and employee participation on the employees' acceptance of outsourcing decisions and productivity.

The same set of HR issues that emerged in the two studies cited here are supported, all or in part, by Gupta and Gupta (1992), Laribee and Michaels-Barr (1994), Lee, Trauth, and Farwell (1995), Longnecker and Stephenson (1997), Richey (1992), and Wray (1996). None of these other researchers, however, offered a study addressing these factors from the employees' perspectives. The study by Kessler et al. (1999) addressed many of these issues, but in a non-IT environment and as a single company case-study. The study by Khosrowpour et al. (1996) did encompass the IT environment, but examined the perspective of the IS employee across a broad range of involvement in the outsourcing process.

Summary

The research discussed in this section demonstrated that the issues associated with outsourcing cover a wide spectrum. First the various kinds of outsourcing articles prevalent in the literature were discussed. Then the discussion focused on the human issues that have emerged from the literature that focused on the employee. Finally, the two research articles on employee perspectives of outsourcing were discussed.

An important undercurrent of most of the cited outsourcing research that addressed human resource issues was the need to communicate. Nearly all the researchers cited above, including Eckerson (1992), Khosrowpour et al. (1996), Laribee and Michaels-Barr (1994), Richey (1992), and Wray (1996), asserted that this communication is currently based on issues predetermined by upper management and the vendor companies, and not on those issues perceived by the employees. To achieve effective communication, and not adversely affect the outsourcing venture, these human resource issues cannot be ignored.

Chapter 3

Methodology

Introduction

As stated earlier, there is a wealth of information available on IT outsourcing. However, through 1998 Khosrowpour et al. (1996) had the only published study addressing employee perceptions of outsourcing. They suggested that their research could be extended by studying and comparing successful and unsuccessful outsourcing deals in relationship to the impact on people and organizations. Their research addressed the perspectives of IS professionals who may or may not have been directly involved in an outsourcing deal.

Kessler et al. (1999) followed with their study of employee perspectives and outsourcing. Their study, while not focused on the IT industry, did support the findings of Khosrowpour et al. (1996). They offered recommendations to continue their research to academia, policymakers and practitioners. They suggested that their limited case study be expanded to establish whether or not their findings represented a general response to outsourcing that might be replicated in other organizations or circumstances. For the practitioners and policymakers their results could facilitate the linkage between employee perspectives and its contribution to outsourcing success.

This research focused on how outsourcing affected retained and transitioned IT employees directly involved in the outsourcing in an attempt to identify a relationship

between the employee perceptions and factors associated with outsourcing successes and failures. As stated earlier, this research was intended to be an initial attempt to validate results from the Khosrowpour et al. (1996) study against a more specific IT population, those employees who have been or are currently involved in an outsourcing initiative. The results of this study should contribute to helping management understand the effect of human resource issues from the employees' perspective. Management should benefit in its outsourcing efforts through the use of a management plan of action to assist with integrating employee perceptions in its outsourcing decisions. Since currently there exists little empirical data on what effects the employee perspectives have on outsourcing success, these results should offer alternatives that might lead to more successful IT outsourcing ventures.

Research Method Used

Completing this dissertation involved conducting an empirical investigation of the hypotheses identified above. The research questions uncovered from the review of literature were used to design an empirical study of employee perceptions of IT outsourcing. These research questions served as the basis for developing the set of hypotheses for study. To complete the research a survey was employed.

A goal was to find a survey instrument that had been used in previous studies of employee attitudes and perceptions and adapt it to this study. The lead authors of the two employee perception studies noted above, Kessler et al. (1999) and Khosrowpour et al. (1996), were contacted for information on the instruments they used. Both of the surveys from Kessler et al. and Khosrowpour et al. were received, along with permission from the lead authors to use or modify them for this study. Other instruments were obtained from

the University of Calgary web site at address http://www.acs.ucalgary.ca/~newsted/real.htm. This site contains a list of IS related constructs with an instrument, constructs with just a citation, or the title of articles with an instrument. Finally, instruments used in unpublished dissertations by Hernandez (1997), Borchers (1996), and McLellan (1993) were obtained and evaluated.

Each of the above noted instruments was reviewed for relevancy to this study. The research questions above were used to determine the appropriate fit of each instrument to accomplishing the goal of this study. The instrument by Khosrowpour et al. (1996) was most closely linked to the research questions and the goals of this study and was used as the model for this research. The instrument was modified to address the research questions, but not do distract from the framework and validity of its original content and form as noted below in the *Reliability and Validity* section.

The survey instrument used to conduct the survey appears in Appendix A. It is divided into three major sections and is based on the same type data in these sections as the original survey. Section one elicited three types of information. First, respondents were asked to provide biographical data. Next, their involvement in IT outsourcing was requested. Finally, should the respondent meet requirements to participate in the study, their perception of outsourcing was requested. This perception was ranked as positive or negative and addressed research questions one and two.

Section two of the survey addressed research questions three through eight. Only the intended population, those who reply to item 10 was "yes", were to complete this section. It was designed to elicit feedback on those HR issues identified in the literature

based on the perceptions the employees have today about outsourcing. These items were used as the primary dependent variables in this study

Section three addressed communications issues associated with outsourcing. All respondents were asked to complete this section. However, only those meeting the requirements for inclusion in the study are included as part of the analysis of results to validate the hypotheses. The data from non-qualifying participants are used only to determine and develop further study implications.

A copy of the basic cover letter that accompanied the survey appears in Appendix B. This letter explained the intent of the study and offered instructions and alternatives for returning the survey. Respondents were offered the option to obtain a copy of survey results. Appendix C provides a mapping of each of the research questions identified above to items within the survey. This mapping was the bases for analyzing results and formulating conclusions for the hypotheses.

Additionally, both the survey instrument and the cover letter were presented to Nova Southeastern University's Institutional Review Board (IRB) for approval of usage. The relevant portion of the exemption given to use these tools appears in Appendix D.

Specific Procedures Employed

As noted in *Barriers and Issues*, employees who have been directly involved in an outsourcing initiative were the intended population for the study. The agencies noted above were the proposed sources for eliciting the study population. Each was contacted via electronic mail or through telephone solicitation to secure a copy of their membership or employee roles for this study.

Permission was received to use the list-server mailing list for IRMA as one source of study participants. This listing consisted of approximately 500+ IT professionals. For this study, the researcher adopted a base sample size of 550 IRMA professionals. Additionally, several major IT corporations involved in outsourcing were contacted for permission to use their employees as part of the population for the study. Authorization was granted by one of the companies to use a selected business unit of this company for the study. The company requested anonymity in any published outcome of results, including this dissertation, and will only be referred to in this work as Company A.

A listing of employees, approximately 2000, of the business unit of Company A was provided for the study along with permission to send the survey to the employees electronically. A further requirement was to protect the participation of the employees by sending the request to participate to each selected person individually as opposed to using a mass emailing. The listings, provided as a series of organization charts, were printed and each employee was assigned a number from 1 through the total count of employees, 2005. This was done in no specific employee order, but per printed page.

Isaac and Michael (1990) presented a table for determining a sample size of a randomly chosen sample from a given finite population of cases such that the sample proportion is within ± .05 of the population proportion, with a 95% confidence level and a chi-square of one degree of freedom relative to the desired level of confidence. They said that for a population between 2000 and 2200 the sample size should be 322 to maximize returned surveys. Per the documentation in SPSS Graduate Pack, the statistical package used for the data analysis, an acceptable sample size of 400 should provide a 5% (± 0.5) error rate. For this study the selected sample size for Company A was chosen to

be 450. This gave a total adapted sample size of 1000, which equaled that of the Khosrowpour et al. (1996) study.

To facilitate the selection of the sample size, a set of 5000 random numbers was generated in a spreadsheet. These random numbers had the following set of criteria:

Number of variables	15 (number of columns of numbers)
Number of random values	5000
Distribution	Normal
Values between	1 and 2010
Random Seed	5

The spreadsheet of random numbers was rounded to whole numbers, and two columns were added between each column of numbers: one for employee name, and one for employee email address. Using the paper copies of employees, each third number in the random list was populated with the corresponding employee name. The name was then marked in a highlighted color on the employee listing. Duplicate numbers in the spreadsheet, numbers that had already been assigned, were so designated. This process was continued until 500 names were populated in the spreadsheet. Next their email address was imported into the spreadsheet. This became the basis of the emailing that followed. The additional names were chosen so that had there been invalid email information, the next name on the list would be used to solicit participation and keep the survey sample population at 450.

Prior to officially beginning the survey, a random sample of 10 IT employees from Company A was chosen to pre-test the survey. These employees were contacted and asked for assistance to help validate only the survey's ease of use and item interpretation. From their returned surveys with comments, several adjustments were made to the

aesthetics of the survey so that all data could be entered using Microsoft Word. Since the media for the survey was to be via email, both to the IMRA mail listing and to Company A, the final survey used was converted to a form that allowed for checking boxes on items where choices were to be selected. Two exceptions were items 9 and items 36 and 37. Item 9 was edited to include dropdown boxes next to each entry with the numbers 0 through 5 where 0 was given as a default value to be interpreted as no preference and the remaining 1 to 5 to represent the rank as noted on the survey. Items 36 and 37, which elicited feedback on company actions, were textboxes that allowed the respondents to enter free text.

Emails were prepared and then sent to the list-server and to the employees of Company A. The email consisted of the cover letter as noted earlier. The IRMA listing was directed to a website to secure a copy of the survey form. The actual survey document was included in the mailing to Company A. The survey study was conducted over a three-week period. Options were given to return the survey either electronically or via US mail to an address supplied on the survey form.

A second set of random numbers was generated to assign as a case number for each returned survey. These numbers had the following set of criteria:

Number of variables	10 (number of columns of numbers)
Number of random values	2000
Distribution	Normal
Values between	0 and 1
Random Seed	5

These numbers were rounded to four decimal places and then printed. The decimal part was assigned to each returned survey, again using every third number on the

list. Each number was crossed off as it was assigned. Surveys that came through email were saved under this assigned case number, printed and the case number written on the printed copy. Those returned via US mail were assigned case numbers in like manner and the number written on the survey. No attempt was made to identify where the survey came from so as to maintain anonymity and reduce bias. All emails were deleted once a survey was saved and printed.

Format for Presenting Results

After the surveys were returned, the results were entered into a database developed in the SPSS Graduate Pack statistical software package. The value of 99 was assigned for use to indicated missing data from the respondent. Statistical analysis, appropriate with the study design, was performed on the data. This analysis, including basic descriptive statistics, crosstab analysis, and paired data for the dependent variables of the study, is presented in Chapter 4. The independent variables include *outsourced employee* (item 12=yes) and *retained employee* (item 13=yes). Additionally Independent Sample *t*-Tests were performed to analyze each of the proposed hypotheses. The *alpha* level for all analysis was .05.

The analysis followed that of the Khosrowpour et al. (1996) study. Results were used to draw conclusions against each of the appropriate hypotheses.

Projected Outcome

It was expected that this research would validate that a relationship exists between factors associated with outsourcing that have been identified in the literature, and employee attitudes about how outsourcing affects their careers. This research was expected to validate the results of the Kessler et al. (1999) and the Khosrowpour et al.

(1996) studies. It was also expected that there would be linkages made to the Khosrowpour et al. *Management Plan of Action* and their *Outsourcing Adoption Model* to provide management with valid tools for integrating employee perspectives into outsourcing decisions.

Resources Used

The resources used to complete this study were limited. They included the survey instrument that appears in Appendix A, an email listing of employees from Company A, Microsoft Word and Excel software applications, and the SPSS statistical package to perform data analysis. Access to the Internet and email also were required.

Reliability and Validity

The survey instrument for this study retained over 60% of the original content from the Khosrowpour et al. (1996) instrument. Those issues that offered no relation to the goal of this study were either eliminated or rewritten to meet this study's goal. This occurred mainly in section two of the instrument. In this section, item 16 through item 20 and item 24 are the same as the Khosrowpour et al. study. Item 25 examines the same issue as item 24 but for the employer. Items 26 and 27 expand one of the Khosrowpour et al. items again by examining this issue from both the outsourcings and contracting company perspective. The key of the Likert Scale used remained the same as that of the original instrument: from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*).

The lead author of the Khosrowpour et al. (1996) study was sent a copy of the modified survey to validate its framework and content, based on their original survey. The author provided an electronic mail confirmation, shown in Appendix E, that the modified survey is useful for the intended purpose.

Summary

Efforts were made to design this study using the research literature as a basis for the investigation of the problem associated with employee perceptions and outsourcing of Information Technology functions. The study parameters have been described. The process of acquiring, adapting and validating, and authorizing the study survey instrument was discussed. The analysis and adaptation of results to drawing conclusions based on study hypotheses and previous studies were noted. With the successful completion of this research, additional tools useful in the outsourcing process should be presented.

Chapter 4

Results

Introduction

This chapter provides the analysis of data from the outsourcing survey of employee perceptions of outsourcing success as it relates to their career. This data analysis was developed using the SPSS Graduate Pack statistical program.

The sample size used for this study included the following: 550 IRMA professionals and 450 corporate IT professionals for a sample size of 1000. Of the 1000 surveys sent, 202 were returned, with 201 valid surveys and 1 returned with no data filled in. Thus for the 201 valid surveys used in this study, the return rate was 20.1% which exceeded the 14.6% of the Khosrowpour et al. (1996) study, a return rate they stated as consistent with the expected return rate for this type of research.

Analysis

Basic descriptive statistics on sections one and three of the survey are displayed in Appendix F, Statistics – Descriptive Frequencies. General statistics for Job Functions, Functional Areas, and Industries are summarized below in Tables 3, 4, and 5 respectively.

Table 3 Job Functions

Job Function	Frequency	Percent
Executive/Upper Management	4	2.0
Middle Management	26	12.5
Group Leader/Line Management	26	12.9

Table 3 (continued)

Job Function	Frequency	Percent
Consultant	21	10.4
IS Staff Position	48	23.9
Programmer/Analyst	33	16.4
Computer Operator	3	1.5
Academic	3	1.5
Other	37	18.4
Total	**201**	**100.0**

Table 4 Functional Area

Functional Area	Frequency	Percent
Systems Development	13	6.5
Computer Operations	77	38.3
General IS Functions	70	34.8
Academic	6	3.0
Other	35	17.4
Total	**201**	**100.0**

Table 5 Industries

Industry	Frequency	Percent
Computer (non-contract)	5	2.5
IS Contract Services	119	59.2
Education	6	3.0
Government	3	1.5
Retail	1	.5
Public Utilities	42	20.9
Other		
Ebusiness	2	1
Telecommunications	19	9.4
All Others	4	2
Total	**201**	**100.0**

The large number of "other" responses, 17% to 21%, for the three items above may be an indication that these three categories should be updated in future studies to include more of the diverse IT job functions and industries prevalent today.

Feelings about Outsourcing

This study was designed to evaluate the perceptions of IT employees who have undergone an outsourcing initiative. Detailed statistical analysis of the survey appears in Appendix G, Crosstabs – Feelings During Outsourcing; Appendix H, Crosstabs – Feelings Today; and Appendix I, Crosstabs – Feelings During Outsourcing vs. Feelings Today. Table 6 below provides the breakdown of respondents involved in outsourcing and how they were affected.

Table 6 Involvement in an Outsourcing Initiative

How Involved	Frequency	% Within	% Total
Involved in Outsourcing			
Yes	150	74.6	74.6
No	51	25.4	25.4
Total	**201**	**100.0**	**100.0**
Displaced			
Yes	13	8.7	6.5
No	136	91.3	67.7
Total	**149**	**100.0**	**74.1**
Transitioned			
Yes	115	77.2	57.2
No	34	22.8	16.9
Total	**149**	**100.0**	**74.1**
Retained			
Yes	43	28.7	21.4
No	107	71.3	53.2
Total	**150**	**100.0**	**74.6**

As observed in Table 6 above, 150 of the respondents, or 74.6%, have been involved in an outsourcing initiative. Of these, 1 did not indicate how he or she was affected by the initiative; 13 have lost jobs (been displaced) due to outsourcing; 115 have been transitioned to another company due to outsourcing; and 43 have been retained by the company that outsourced its IT operations.

Since this study was based on the perceptions of those involved in an outsourcing initiative, and more specifically those retained with the outsourcing company and those transitioned to the vendor company, an important factor of these perceptions was captured in item 14 (*feelings when employee was going through the outsourcing process*) and item 15 (*feelings today when the word "outsourcing" is mentioned*). Participants were to answer the items in section two, items 16 through 31, based on their response to item 15. Tables 7 and 8 below, summarized below from Appendix I, provide statistics associated with these feelings. Each table presents the total number of responses to each measured item and the within percentage of each item based on the total number of valid (non-missing) responses to each item.

Table 7 Feelings About Outsourcing by Involvement

Feelings by Involvement	Negative	Neutral	Positive	Total
All involved (*n*=150)				
Feelings During Outsourcing	80	39	28	147
	54.4%	26.5%	19.0%	100.0%
Feelings Today	53	52	44	149
	35.6%	34.9%	29.5%	100.0%
Change (Feeling Today – Feeling During Outsourcing)	-27	13	16	
	-18.8%	8.4%	10.5%	

Table 7 (continued)

Feelings by Involvement	Negative	Neutral	Positive	Total
Transitioned (*n*=115)				
Feelings During Outsourcing	64	27	22	113
	56.6%	23.9%	19.5%	100.0%
Feelings Today	36	42	36	114
	31.6%	36.8%	31.6%	100.0%
Change (Feeling Today – Feeling During Outsourcing)	-28	15	14	
	-25.0%	12.9%	12.1%	
Retained (*n*=43)				
Feelings During Outsourcing	17	12	13	42
	40.5%	28.6%	31.0%	100.0%
Feelings Today	15	14	14	43
	34.9%	32.6%	32.6%	100.0%
Change (Feeling Today – Feeling During Outsourcing)	-2	2	1	
	-5.6%	4.0%	1.6%	

Table 7 above summarizes the responses and associated percentages associated with respondents feelings when going through outsourcing verses their feelings about outsourcing today. There is also a calculated value, *Change*, which represents the difference between the number of responses to each item. As noted in Table 7, there was an overall 10.5% increase in positive user perception of outsourcing, an 8.4% increase of neutral perceptions, and a decrease of 18.8% with negative perceptions. The figures associated with "feelings during outsourcing" tracked closely with those reported in the Khosrowpour et al. (1996) study: 19.2% positive feelings and 80.1% neutral or negative feelings.

There was a noted change between the response to perceptions when the word "outsourcing" is mentioned today: 29.5% overall with a positive perspective and 70.5% negative or neutral. The largest change in perception from negative to positive (25.0% decrease in negative feelings, 12.9% increase in neutral feelings, and a 12.1% increase in

positive feelings) was noted among those professionals who were transitioned to the outsource vendor. For those who were retained within their company the largest change, 5.6%, was noted in a decrease of negative feelings with a shift of 4% to neutral feelings and only 1.6% to positive feelings.

Table 8 Feeling During Outsourcing vs. Feeling Today

Feelings During Outsourcing	Feelings Today			Total
	Negative	Neutral	Positive	
All Involved (*n*=150)				
Negative	46	21	13	80
	57.5%	26.3%	16.3%	100.0%
Neutral	4	20	15	39
	10.3%	51.3%	38.5%	100.0%
Positive	1	11	16	28
	3.6%	39.3%	57.1%	100.0%
Total	51	52	44	147
	34.7%	35.4%	29.9%	100.0%
Transitioned (*n*=115)				
Negative	32	20	12	64
	50%	31.3%	18.8%	100.0%
Neutral	2	14	11	27
	7.4%	51.9%	40.7%	100.0%
Positive	1	8	13	22
	4.5%	36.4%	59.1%	100.0%
Total	35	42	36	113
	31.0%	33.2%	31.8%	100.0%
Retained (*n*=43)				
Negative	13	3	1	17
	76.5%	17.6%	5.9%	100.0%
Neutral	1	7	4	12
	8.3%	58.3%	33.3%	100.0%
Positive		4	9	13
		30.8%	69.2%	100.0%
Total	14	14	14	42
	33.3%	33.3%	33.3%	100.0%

Table 8 above shows the respondents change between feelings about outsourcing when the employee underwent the outsourcing and their feelings today. The trend noted here is that the majority of employees still retain their initial feelings toward the outsourcing: 57.5% still have negative feelings, 51.3% still have neutral feelings, and 57.1% still possess positive feelings. Half (50%) of the transitioned employees with negative feelings at the outset now have either neutral (31.3%) or positive (18.8%) feelings. This move toward a positive change in perception was not as high for retained employees: 76.5% still possess negative feelings, while 17.6% now have neutral and 5.9% have positive feelings. There was a comparable change between the two groups for employees who began with positive perceptions. For the transitioned employees, 59.1% retained their positive perception, while 40.9% now have neutral (36.4%) and negative (4.5%) perceptions. Likewise with retained employees 69.2% retained positive feelings whereas 30.8% now have neutral feelings. None in the retained group with positive feelings during outsourcing indicated they have negative feelings today.

Analysis of Research Questions

There were eight research questions developed from the review of literature that addressed human resource issues associated with job security, morale, productivity, training, skills, benefits and career opportunity. The following section analyzes data for each of the research questions posed in this study.

1. *What effect has the outsourcing had on the employees who were outsourced (transitioned)*?

This and research question two were evaluated using survey items 14 and 15, and all the items in section two of the survey. The perceptions of employees transitioned are

noted in Table 7 above. There was a 25% positive change from negative feelings to neutral (12.9%) or positive (12.1%) for transitioned employees. Items from section two are discussed in research questions three through eight.

2. *What effect has the outsourcing had on employees retained in the company that outsourced its IT functions?*

Table 7 shows that for retained employees, the change in perception was less than that for transitioned employee. The move from negative to neutral (4.0%) or positive (1.6%) only represented an overall change from negative feelings of 5.6%.

For the discussion that follows for research questions three through eight, the terms "agree" or "agreed" will refer to joint measures of "agree and strongly agree" and "disagree" or "disagreed" will refer to "strongly disagree and disagree", unless otherwise stated in the discussion.

3. *What are the employees perceived views of the outsourcing process, either positive or negative?*

Survey items 26, 27, and 28 were designed to address this question and are summarized in Table 9 below. This research question and those that follow are evaluated against both the transitioned and retained employees. Survey items 33 through 38 are another subset of this research question. These were evaluated against all participants and will be discussed later in this chapter.

Table 9 Percent Perceived views of Outsourcing Process

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
26. In considering outsourcing decision, the welfare of IS professional is a key factor in minds of management of the outsourcing company.					
All	19.5	36.9	16.8	24.2	2.7
Transitioned	16.7	39.5	16.7	25.4	1.8
Retained	20.9	34.9	16.3	23.3	4.7

Table 9 (continued)

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
27. In considering outsourcing decision, the welfare of IS professional is a key factor in minds of management of the contracting company.					
All	14.8	30.2	26.2	25.5	3.4
Transitioned	13.2	28.9	28.1	27.2	2.6
Retained	14.0	27.9	30.2	20.9	7.0
28. I have maintained a positive attitude about the success of the outsourcing venture.					
All	1.3	16.8	22.8	43.0	16.1
Transitioned	0.9	15.8	21.1	43.9	18.4
Retained	0	16.3	25.6	41.9	16.3

For the first two survey items listed in Table 9 above, there was only a slight difference noted in perceptions between transitioned employees and retained employees. The majority of both groups disagreed that either the outsourcing or contracting company considers their welfare when making decisions to outsource. For the outsourcing company, 56.2% of the transitioned employees disagreed, and 55.8% of the retained employees perceived this likewise. To a lesser extent, only 27.2% of transitioned employees and 28.0% of retrained employees agreed that the outsourcing company considers the welfare of the employee. For the contracting company, 42.1% of the transitioned employees and 41.9% of the retained employees disagreed with this assessment. Again to a lesser extent, 29.8% of the transitioned employees and 27.9% of the transitioned employees agreed with the assessment. In comparison, the Khosrowpour et al. (1996) study reported that 8.9% agreed, 13% were neutral, and 77.4% disagreed with the concept that IS professionals welfare was considered in the outsourcing decision.

Conversely both groups similarly agreed as to maintaining a positive attitude about the success of the outsourcing venture. On this issue 16.7% of transitioned employees and 16.3% of retained disagreed with this statement. Similarly 62.3% of

transitioned and 58.2% of the retained employees agreed with this perception. As noted in Appendix H, Crosstabs - Feelings Today, more employees who have negative feelings (13.2% transitioned and 16.3% retained) about outsourcing disagreed with the issue while more employees with positive feelings today (29.0% transitioned and 30.2% retained) agreed with the issue.

4. *What are the perceptions of the employees involved in outsourcing of whether the move enhanced or hindered their IT career objectives?*

IT career objectives were examined based on survey items 16 through 22, 26, 27, and 31. Survey items 26 and 27 were discussed under research question three. The remaining items are summarized in Table 10 below. Respondents reported a more positive (agree or strongly agree) perception of issues relative to their career except for job security.

Table 10 Percent Perceptions of IT Career Objectives

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
16. Career Opportunities for IS professionals are better in IT companies than they are in other companies.					
All	1.3	17.4	17.4	47.0	16.8
Transitioned	1.8	15.8	18.4	46.5	17.5
Retained	0	18.6	18.6	48.8	14.0
17. Compensation for IS professionals are better in IT companies than they are in other companies.					
All	6.7	21.5	34.2	31.5	6.0
Transitioned	8.8	20.2	34.2	31.6	5.3
Retained	2.3	25.6	32.6	30.2	9.3
18. Job security for IS professionals are better in IT companies than they are in other companies.					
All	10.1	32.2	33.6	22.1	2.0
Transitioned	9.6	28.1	34.2	26.3	1.8
Retained	7.0	41.9	37.2	14.0	0
19. Job satisfaction for IS professionals are better in IT companies than they are in other companies.					

Table 10 (continued)

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
All	2.0	26.2	34.9	30.9	6.0
Transitioned	2.6	21.9	37.7	32.5	5.3
Retained	0	32.6	32.6	32.6	2.3
20. My job function requires unique skills or knowledge which would be difficult for my employer to replace.					
All	4.1	26.4	21.6	37.2	10.8
Transitioned	4.4	23.7	21.1	38.6	12.3
Retained	4.8	33.3	16.7	38.1	7.1
21. My employer is as committed today to helping me improve or enhance my IS skills as at the onset of the outsourcing venture.					
All	8.1	18.2	16.2	48.0	9.5
Transitioned	8.0	16.8	14.2	51.3	9.7
Retained	4.7	18.6	18.6	51.2	7.0
22. My employer is as committed today to helping me identify and further my career objectives as at the onset of the outsourcing venture.					
All	8.8	19.0	20.4	42.2	9.5
Transitioned	8.0	18.8	20.5	42.9	9.8
Retained	9.3	14.0	16.3	53.5	7.0
31. The outsourcing venture has proved positive in advancing my IS career.					
All	11.6	17.7	25.2	32.7	12.9
Transitioned	11.4	19.3	22.8	33.3	13.2
Retained	11.9	9.5	26.2	35.7	16.7

Both groups have basically the same feelings relative to IT companies offering better career opportunities. There was a slight difference between both groups on their perceptions of this issue: disagreeing (strongly disagree and disagree, 1.0%), agreeing (agree and strongly agree, 1.2%), and neutral (0.2%). These numbers marked the largest difference in opinions between this study and the Khosrowpour et al. (1996) study. For their study 27.3% disagreed, 39.0% were neutral and only 24.6% agreed that career opportunities were better in IT companies. The Kessler et al. (1999) case study had a negative mean change in perception on this issue.

Retained employees had a more positive perception of compensation being better in IT companies than did transitioned employees (39.3% retained vs. 36.9% transitioned).

Transitioned employees were more neutral (34.2%) and negative (29.0%) than were the retained employees (32.6% neutral and 27.9% negative). Overall, respondents felt compensation was better in IT companies than in non-IT companies (37.5% positive, 34.2 neutral, and 28.2% negative). The Khosrowpour et al. (1996) study reported 36.3% positive, 42.5% neutral and 20.9% negative. The Kessler et al. (1999) case study had a positive mean change relative to compensation.

Transitioned employees view job security more favorably in IT companies than was reported by the retained employees. There was slightly more than a 50% difference in positive perception of this issue, 28.1% for transitioned employees verses 14.0% for retained employees. Even though there was this noticeable difference in positive perception of job security, the overall perception was negative (42.3% overall, 37.7% transitioned employees, and 48.9% retrained employees). Similarly the Khosrowpour et al. (1996) study reported 22% positive, 33.6% neutral, and 43.8% negative. The Kessler et al. (1999) case study reported a negative mean change in this item.

Retained employees were nearly evenly split on their perception of job satisfaction being better in an IT company: 32.6% negative and neutral, and 34.9% positive. Transitioned employees had a slightly higher positive perspective (37.8% verses 34.9%). Transitioned employees (37.7%) were more neutral on this issue than was reported overall (34.9%) or by the retained employees. This item was reported in the Khosrowpour et al. (1996) study as an important variable in determining perceptions of opportunities available with the outsourcing vendor (IT company), but they reported that "job satisfaction perceptions were not heavily weighted" (p. 91) to any preference in

feeling for this item. The Kessler et al. (1999) case study reported a positive mean change relative to job satisfaction for its study participants.

The majority of both retained (45.2%) and transitioned (50.9%) employees had a positive perception that they possessed skills or knowledge that their employers would find difficult to replace. There was a 10.0% difference in negative perceptions between the two groups. Retained employees disagreed 38.1% while transitioned disagreed 28.1% on this issue. Likewise the majority of both retained (58.2%) and transitioned (61.0%) had a positive perception that their employer still was committed to helping them improve or enhance those skills. However on this issue nearly one-fourth (24.8%) of the transitioned employees had a negative perception, whereas 23.3% the transitioned employees perceived this issue negatively.

Respondents who indicated that they had been retained by the company that outsourced its IT operations were more positive in their perception of the employer's commitment to helping them identify and further their career objectives and that the outsourcing venture had proved positive for their IT career. Retained employees (60.5%) had a more positive perception than transitioned employees (52.7%) that their employer still was committed to helping them identify and further their IT career objectives. Likewise, transitioned employees were more negative (26.8%) on this issue than were retained employees (23.3%). Of the retained employees 52.4% agreed that the outsourcing venture was more positive to advancing their IT career whereas 46.5% of transitioned employees agreed. Again transitioned employees (30.7%) disagreed more than retained employees (21.4%) with this issue. The Kessler et al. (1999) case study

reported its largest positive mean change (+1.22) on the issue of career development with the outsourcing vendor.

5. *What are the employees' levels of perceived change in commitment from either company (outsourcee or outsourcer) towards furthering the employees' career objectives?*

This research question examined the perceptions on commitment from the companies based on items 21 and 22, 26 and 27. Employer commitment to skills and career objects was discussed under research question four above. Employee welfare being key to the outsourcing company and to the contracting (vendor) company was discussed under research question 3.

6. *What effects do the employees perceive that their attitudes about the outsourcing initiative will/will not impact the success of the overall outsourcing relationship between the companies?*

This research question examined the IT professionals perceptions toward the effect of their attitudes about outsourcing on the success of the relationship based on items 24, 25 and 28. Item 28 was discussed in research question 3 above. Table 11 below details statistics for items 24 and 25.

Table 11 Percent Perceptions of Outsourcing Relationships

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
24. IS professionals providing contract services to outside companies are committed to the success of their customers.					
All	0.7	12.1	18.8	47.7	20.8
Transitioned	0.9	7.9	16.7	52.6	21.9
Retained	0	18.6	23.3	41.9	16.3
25. IS professionals providing contract services to outside companies are committed to the success of their employer.					
All	0.7	2.7	27.0	51.4	18.2
Transitioned	0.9	1.8	23.9	54.9	18.6
Retained	0	2.3	34.9	46.5	16.3

In all three of these issues, transitioned employees agreed more than retained employees with the concepts promoted. The differences in perceptions of commitment to the customer and commitment to the employer was greater between the groups than was the difference between the perceptions for maintaining a positive attitude. Of transitioned employees 74.5% agreed that they are committed to the success of their customer and 73.5% are committed to the success of their employer. Only 58.2% of retained employees view the contracting employee as committed the success of their customer and 62.8% see them committed to the success the vendor company.

7. *What is the perception that the quality of service provided by the outsourcer will be affected by the employees' attitudes toward the outsourcing?*

This research question examined the perceptions about employee attitude and quality of service provided based on item 23.

Table 12 Percent Perception of Level of Service

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
23. My attitude about outsourcing influences the level of service I provide as an IS professional.					
All	19.5	31.5	14.8	28.8	7.4
Transitioned	16.8	36.3	13.3	25.7	8.0
Retained	23.3	18.6	16.3	37.2	4.7

Table 12 above shows that retained employees agreed and disagreed evenly (41.9%) on this issue. More transitioned employees disagreed (53.5% disagreed, 33.6% agreed) that their attitude influences the level of service they provide. The implication here could be an implied notion that the transitioned IT professionals can separate their feelings about outsourcing from the level of service they provide. This could be inferred from the discussion under research question 6 and the transitioned employees positive

commitment to the success of both the customer and the employer. These results also imply that a higher negative response to this item is the more desirable reply to attribute to this outsourcing perception actually being interpreted as successful.

8. *What are the employees perceived effects of the outsourcing imitative as a result of communication by either company – was enough communication done up front and has enough communication continued following the transition of employees to contribute to the employees' perceptions of the impact of the outsourcing?*

This research question examines the perceptions of communication flow based on items 29 and 30, which examines the perceived levels of communication about the outsourcing venture.

Table 13 Percent Perceptions about Communication

Survey Item	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
29. The communication flow between companies during contract negotiations was adequate for me to develop a positive attitude about the outsourcing venture.					
All	10.1	36.9	27.5	24.2	1.3
Transitioned	12.3	36.8	23.7	26.3	0.9
Retained	2.4	34.9	46.5	16.3	0
30. The communication flow between companies since the onset of the outsourcing contract has been adequate for me to keep a positive attitude about the outsourcing venture.					
All	6.7	26.8	32.2	29.5	4.7
Transitioned	7.0	25.4	29.8	32.5	5.3
Retained	2.3	23.3	39.5	34.9	0

As shown in Table 13 above, no group agreed that enough communication was done during outsourcing to cause the employee to develop a positive attitude about outsourcing. Transitioned employees only agreed 27.2%, and retained employees only agreed 16.3%. Both groups had a high level of disagreement on this issue. Nearly half (49.1%) of the transitioned employees and 37.3% of the retained employees disagreed that enough communication was done on the front end of the contract.

There was a noticeable change in perception toward communication since the onset of the outsourcing contract that contributed to a positive attitude about the outsourcing venture. Of transitioned employees 37.8% agreed that communication had been adequate since onset, and of retained employees 34.9% (over a 50% increase) felt positive about the communication flow since onset. Both groups showed significant decreases for those who disagreed with communication flow during the initiative as noted above and communication flow since the onset of the contract: 32.8% transitioned disagree (a decrease of 16.7%) and 25.6% retained disagree (a decrease of 11.7%).

Analysis of Related Outsourcing Issues

The third and final section of the outsourcing survey retained 100% of the items from the Khosrowpour et al. (1996) study. This section of the survey examined several key factors associated with outsourcing. Unlike the items in section two of the survey, all respondents were asked to provide responses to these six items. The last two items asked the respondent to write in their opinions of what can be done to make the outsourcing experience more positive for those going through it.

Communication Flow

Item 32 asked the respondents from whom they preferred to receive communication from relative to matters that impact their IT career. Several respondents provided multiple answers to this item. The first answer in the list was recorded as the first preference, and the next was recorded as the second response. Responses recorded for first preference are shown in Table 14 below.

Table 14 Communications Preference

Preference	Frequency	Percent Within
Chief Executive	17	8.5
IS Executive	11	5.5
Department Head	50	24.9
Immediate Supervisor	107	53.2
HR Spokesperson	8	4.0
Other	8	4.0
Total	**201**	**100.0**

The majority of respondents, 53.2%, preferred to get these communications from their immediate supervisor. Khosrowpour et al. (1996) reported that those who responded to their survey preferred to get the information from their Chief Executive (32.2%). Immediate Supervisors for their study only garnered a 22.6% response. The authors noted that the reputations of the individuals selected to deliver communications had a significant impact on how the message was received Using this premise, it can be inferred that those who undergo outsourcing prefer to receive information from those closest to their level in the organization. This is evidenced by the fact that 53.3% the respondents to this study who have been involved in an outsourcing initiative prefer communication come from the immediate supervisors. The next highest preference was the department head at 24.0%.

Management Withholding Outsourcing Information

Item 33 was designed to determine whether or not the respondents felt it was appropriate for management to withhold information on an outsourcing deal until an agreement had been reached. Of the 199 respondents who answered this, 69.3% answered no and 30.7% answered yes. These numbers track closely with those of the Khosrowpour et al. (1996) study: 67% no, 33% yes.

Time to Make Decision

Item 34 asked participants to indicate how much time they felt was needed for them to make a decision on accepting a job with an outsourcing vendor. Of the respondents to this item 42.8% felt that they benefited from having one month to make such a decision. This represented 44.7% of those involved in an outsourcing initiative, 46.1% of those who have been transitioned to an outsourcing company, and 46.5% of those employees who were retained with the client company. One respondent indicated a 6-month time frame to make the decision.

Reasons to Outsource

Item 35 examined what perceptions participants had concerning the most compelling reason why a company would outsource its IT functions. While some respondents indicated both strategic and cost benefits, the overwhelming response was for cost benefits. Of the respondents 63.5% felt cost savings was the primary reason why companies outsourced, while 31.5% felt it was for strategic reasons. While there was not a noticeable difference in perceptions between transitioned and retained employees on cost benefits, there was a larger difference relative to strategic benefits: 21.9% fewer transitioned respondents felt companies outsourced for strategic reasons whereas only 13.9% fewer transitioned employees felt their companies outsourced for strategic benefits.

Company Actions

The final two items on the survey asked the participants to verbalize their opinions of what the client company and the outsourcing vendor could do to make the outsourcing experience as positive as possible for the affected IT professional. Of the 201

respondents, 88.1% provided comments for the client company and 85.1% provided comments for the vendor company. Seventy-two percent (72%) of the responses to both items centered on open, honest, and timely communication along with openly sharing of information. Fifty-two percent (52%) of the respondents voiced opinions concerning maintaining or increasing the current levels of benefits such as salary, medical, vacations, and 401K plans.

Respondents suggested that the client company should ensure that both stay and transition bonuses, applied equally to all employees, are offered. Four respondents voiced opinions that the client company should allow the affected employee to make the decision to transition or to stay instead of being forced into either option. Another key response was that the client company should educate its employees on why the outsourcing occurred, and establish a policy that would assure that transitioned employees were treated as partners. They felt this would lessen any animosity that retained employees might develop toward the outsourced employee once they show up on the job as employees of the outsourcing vendor.

Suggestions for the vendor company ran the same gamut as for the client company. Twenty percent suggested the vendor should ensure there was a smooth transition plan communicated and enforced. Key players should be retained on the account, both management and non-management. "Town hall" meetings with "swat teams" should be held before and after the contract is in effect. This allows the new employees to learn the culture of the new company, to establish expectations, and it allows the new employees to learn from the old. The vendor company's incoming management should avoid making immediate drastic changes. Instead they should learn

the account and the culture that the transitioned employees bring with them and incorporate that into the account.

Findings

In order to relate the results of the survey to the hypotheses, the SPSS data file was further filtered on the status of employees who indicated they had been transitioned only (101 respondents), retained only (29 respondents), or both (13 respondents). Those not involved in an outsourcing initiative and those who were displaced only were not included in this phase of analysis. Using the SPSS '*varstocases*' command to convert the associated variables assigned to each survey item 16 through 31 collectively into a new dependent variable, four new data files were created to analyze the hypotheses. In order to reduce the Type 1 Error rate, Independent Sample *t*-Tests were run on each new file to evaluate each of the associated hypotheses. Data was analyzed for the two groups of employees who were transitioned and retained. An *alpha* level of .05 was used for all statistical tests associated with this study. Appendix J, Statistics (Independent Sample *t*-Tests of Hypotheses) contains both the group statistics and the associated *t*-test data produced from each file for each associated hypothesis under study. Using the "Distribution of *t*" table taken from Gay (1992, p. 579) the critical *t* value required to reject the null hypotheses with $p = .05$ is 1.960, since each hypothesis has a $df > 120$. Also from Gay, using the "Distribution of *F*" table (p. 581), the critical *F* is determined as 3.84.

The hypotheses investigated in this research appear below. Each hypothesis presented in Chapter 1 is shown as the alternate research hypothesis H_{1x}, along with its equivalent null hypothesis H_{0x} (x=number of the hypothesis).

H_{11}: Outsourced IT professionals (transitioned employees) benefit more in their career opportunities than retained professionals.

H_{01}: Outsourced IT professionals (transitioned employees) benefit the same in their career opportunities as retained professionals.

This hypothesis addressed all the issues between item 16 (*career opportunities*) and item 31 (*positive career advancement*). The converted file, containing variable responses as cases, produced 1644 valid responses (non-missing responses) for transitioned employees and 462 responses for retained employees. When examining the statistics associated with the Levene's Test for Equality of Variances with equal variances assumed, it is noted that the calculated $F = 9.527$. Since the calculated value exceeds the criterion $F(1, 2104) = 3.84$, this implies that there is a significant variance ($p = .05$) in the means of the two groups, transitioned and retained. In order to determine whether this variance in means warrants rejecting the null hypothesis, the t value must be evaluated. From Appendix J, the calculated $t = 1.875$ for $df = 2104$. This value is less than the criterion $t = 1.960$, signifying that there is not enough difference in variances of the means to reject the null hypothesis.

H_{12}: Outsourced IT professionals have a more positive view of the outsourcing process than retained professionals.

H_{02}: Outsourced IT professionals have the same positive view of the outsourcing process as retained professionals.

This hypothesis addressed issues from items 26, 27 and 28. The associated converted file contained 309 valid responses for transitioned employees and 87 valid responses for retained employees. The Levene's Test for Equality of Variances produced a calculated $F = .099$. This calculated value does not exceed the criterion $F(1, 394) = 3.84$. Therefore we can conclude that there is not significant variance ($p = .05$) in the

means of the two groups and thus the null hypothesis cannot be rejected. This is supported by the *t*-value as well, since the calculated $t = .797$ is less than the criterion $t = 1.960$.

H_{13}: Outsourced IT professionals career objectives are met more by outsourcing than retained professionals.

H_{03}: Outsourced IT professionals career objects are met the same by outsourcing as retained professionals.

The hypothesis for career benefits addressed issues from items 16 through 22, 26, 27 and 31. The associated converted file for this hypothesis contained 1027 valid responses for transitioned employees and 288 valid responses for retained employees. The Levene's Test for Equality of Variances produced a calculated $F = .293$. This calculated value does not exceed the criterion $F(1, 1313) = 3.84$. Therefore we can conclude that there is not significant variance ($p = .05$) in the means of the two groups and thus the null hypothesis cannot be rejected. This is supported by the *t*-value as well, since the calculated $t = 1.422$ is less than the criterion $t = 1.960$.

H_{14}: Outsourced IT professionals are more satisfied with the levels of communication involved with outsourcing than retained professionals.

H_{04}: Outsourced IT professionals are equally satisfied with the levels of communication involved with outsourcing as retained professionals.

The fourth hypothesis addressed communications issues associated with items 29 and 30. The associated converted file for this hypothesis contained 206 valid responses for transitioned employees and 58 valid responses for retained employees. The Levene's Test for Equality of Variances produced a calculated $F = 17.465$. This calculated value far exceeds the criterion $F(1, 523) = 3.84$ and thus implies that there is significant variance ($p = .05$) in the means of the two groups. In order to determine if this variance in

means is significant enough to reject the null hypothesis, the *t*-value must be evaluated. The calculated $t = -.095$ for $df = 262$ is less than the criterion $t = 1.960$ Therefore we can conclude that there is not a significant variance ($p = .05$) in the means of the two groups and thus the null hypothesis cannot be rejected.

A fifth issue was evaluated using the same technique employed to evaluate the study hypotheses. This issue addressed whether IT professionals perceive their attitudes affect the success of the outsourcing relationship between companies and the quality of service they provided as an IT professional. These issues were drawn from items 23, 24, 25 and 28 and were based on research questions 6 and 7 discussed above. While each item already has been discussed, the researcher examined these collectively to see if there was a significant difference in means of perceptions between transitioned and retained employees. Individually each item had more positive responses from transitioned employees than from retained employees.

This issue is labeled as *Employee Attitude* in data displayed in Appendix J. The associated converted file for this issue contained 411 valid responses for transitioned employees and 116 valid responses for retained employees. The Levene's Test for Equality of Variances produced a calculated $F = .075$. This calculated value does not exceed the criterion $F(1, 525) = 3.84$. Therefore we can conclude that there is not a significant variance ($p = .05$) in the means of the two groups. This is supported by the *t*-value, since the calculated $t = 1.580$ is less than the criterion $t = 1.960$. Thus both groups of employees perceive their attitudes and quality of services provide a positive impact.

Summary

This chapter presented an analysis of the data collected from the outsourcing

survey. Results were presented based on this analysis of the research questions and the hypotheses. The results revealed that for the population under study, respondents disagreed with or were neutral on 62.5% of the items, and agreed with the remaining 37.5% of the 16 study items. These replies closely correlated with, and thus validated, those published in the Khosrowpour et al. (1996) study. However, when examining each category of response individually, there was a 68.8% overall response rate where *Agree* was the majority response and only a 31.2% rate where *Disagree* was a majority. Neutral was never a majority response for either group under study. Thus it can be concluded that the issues under study can be perceived as affecting the success of an outsourcing initiative.

The primary issue under study was whether it was perceived that outsourced employees benefited more from the outsourcing than those who were retained by the company that outsourced its IT operations. A set of four hypotheses that examined the HR issues under study was tested. From the statistical analysis performed using the Independent Samples *t*-Test, none of null hypotheses was rejected even though two hypotheses showed there was a significant variance in means between the transitioned employees and the retained. Thus for this population under study there is no evidence that outsourced (transitioned) employees gained more benefit from being outsourced than did those who were retained by their company.

Chapter 5

Conclusions, Implications, Recommendations, and Summary

Conclusions

The results of this study on employee perceptions of IT outsourcing and the associated effects on the careers of these professionals revealed that there are still major concerns with the professionals that have not fully been addressed by management since the original study of this issue emerged. Workers who have gone through an IT outsourcing initiative still have concerns today about the HR issues under study, namely job security, benefits and compensation, morale, productivity, training and skills, employee welfare, and career opportunities. While the results of this study did not show that there was evidence to support the contention that transitioned employees benefit more from outsourcing of IT functions, there is evidence to support the contention that management must do more in order to ensure that the perceptions of the employee do not adversely affect the success of the outsourcing agreement. As noted by Khosrowpour et al. (1996) and their references to Due' (1992), employee morale affects productivity. Improve the morale and productivity improves. Improve the morale and lessen the chances that employee attitudes and performances will impede the desired results from outsourcing for both the client and vendor company.

Based on the finding of this study, this researcher concurs that knowing how affected employees perceive the effects of outsourcing on their personal and professional

lives would allow management to better construct an outsourcing agreement that will benefit all parties involved. Knowing and addressing these issues from the onset of the outsourcing should lead to more successful outsourcing agreements - both financially and from the human resources perspective.

Implications

Khosrowpour et al. (1996) substantiated the opinion proposed by Due' (1992) that the most significant problem identified with outsourcing was the negative effect on morale that translated into low productivity. They attributed this low morale and productivity loss to lack of communication, neutral or negative feelings about outsourcing, and the fact that 78% of their respondents disagreed that the welfare of employees was considered in the outsourcing decision. This study validated the perceptions related to (a) feelings about outsourcing when an employee is going through the outsourcing process (80.9% negative or neutral when going through outsourcing), (b) the lack of communication (74.5% neutral or disagree on the level of effective communication during contract negotiations), and (c) the welfare of the employee being a key factor to management (73.1% disagree or neutral for the outsourcing company and 71.1% for the contracting company).

Results of this study also support Due's (1992) contention, as noted in the Khosrowpour et al. (1996) study, that the absence of actions by management during outsourcing results in a drop in productivity. The Khosrowpour et al. study presented a Management Action Plan, shown in Figure 1 below, that showed a correlation between productivity levels when management implements a plan to deal with employee perceptions and when they do not.

This action plan was based on two of the factors noted above as most critical to addressing employee perspectives: management communication and employee participation. The plan suggested that when changes are made to the environment, in this instance outsourcing, there is an assumed drop in productivity level during an adjustment period. This productivity level ultimately will increase and inevitability will exceed the original level of productivity that existed before the change was introduced. This initial change in productivity is represented by productivity curve P1. They further suggested that should management implement a plan to address employee concerns, then the decrease in productivity during the adjustment period will be significantly less than without such a plan.

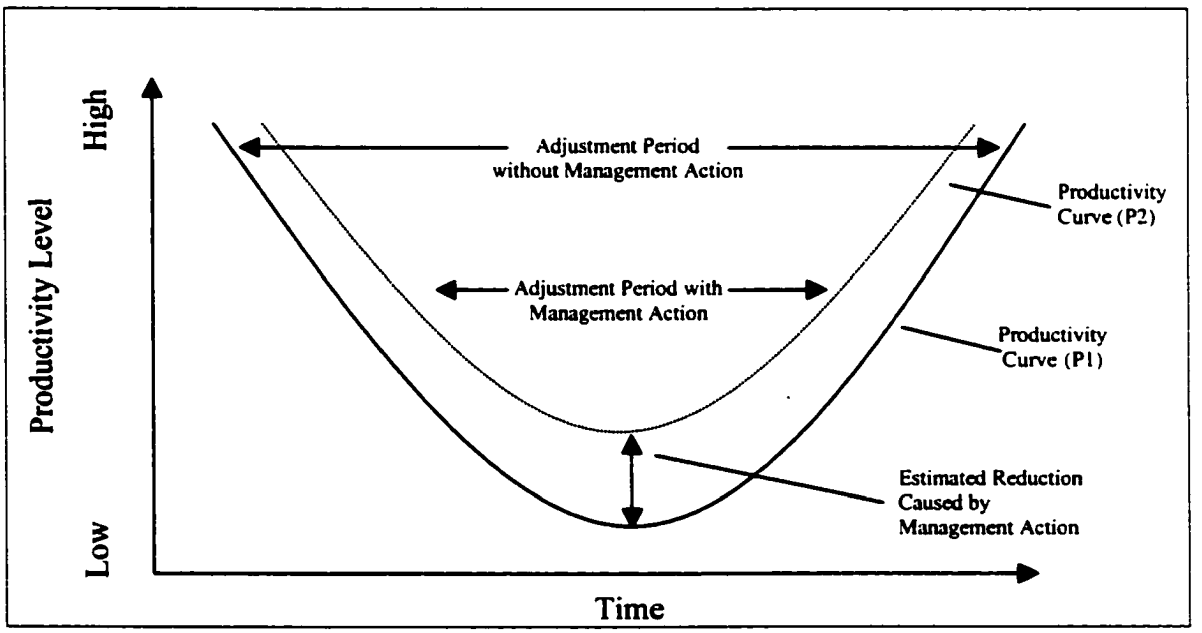


Figure 1. Management Action Plan [3]

These two factors, incorporated into the Management Action Plan, led them to incorporate the perceived effect of these factors on the four stages of outsourcing: Exploratory, Planning and Development, Implementation, and Transition and Post-

[3] Reprinted with permission from Khosrowpour et al. (1996)

implementation. Their model suggested that employee participation is low in Stage 1 but should be high in the remaining stages. Similarly, management communication about outsourcing is also low in Stage 1, but should be high during Stages 2 and 3 and taper off to medium during the final Stage 4.

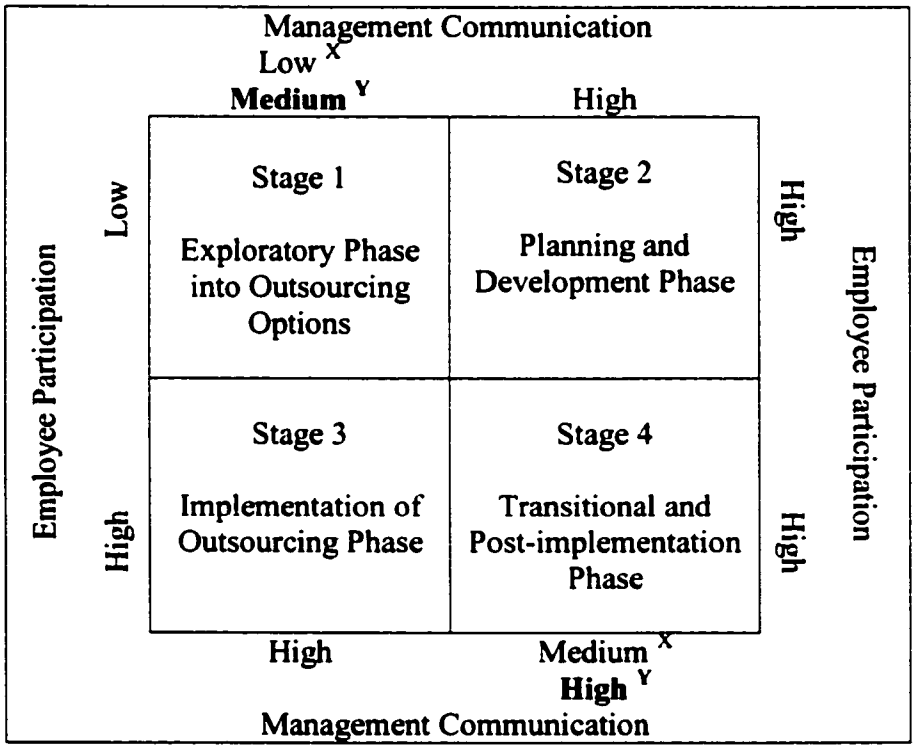


Figure 2. Modified Management Outsourcing Adoption Model

X = Khosrowpour et al. (1996) study model
Y = this research model

Comments in this current study, taken from research items 36 and 37, along with analyses of the research items, suggest a modification to the Khosrowpour et al. (1996) model. This researcher is proposing the Modified Management Outsourcing Adoption Model shown above in Figure 2. This model reflects the fact that the respondents of this study want continued communication throughout the entire process. The suggestions that management should acknowledge the company is exploring the option of outsourcing,

communicate this early and honestly to the employees, and provide periodic updates on the process suggest that Stage 1 may require medium levels of communication instead of low levels. This is evident by the fact that communication, conducted early and continually in the process, was an issue for 72% of the respondents. There was not enough evidence from this study that suggested employee involvement during Stage 1 warranted moving from low levels. The respondents did indicate that they wanted communication following the implementation of the outsourcing. Again this suggests that communication should not wane during the final stages of outsourcing, but should continue at the high levels occurring during the middle stages. This would imply that management communication should remain high during Stage 4.

This research is proposing that the management plan of action involves implementing the Modified Management Outsourcing Adoption Model tool as adapted for this study. This tool is more aligned for addressing employee concerns of outsourcing based on the results of this study. This model should more realistically allow for attaining the reduction in productivity levels by increasing the involvement of the employees and getting the concerns of the employees to management earlier in the process. Management should use the tool to definitively define steps and actions to take within each outsourcing stage that specifically address the employee concerns. These steps should be jointly constructed by both management and employee representatives.

Recommendations

Along with the recommendation for the use of the Modified Management Outsourcing Adoption Model, it also is recommended that further study can be done to determine if any one human resource issue identified has a more positive or negative

effect on outsourcing success and what the linkages to these factors may be (i.e. more communication from company up front verses employee satisfaction). Comparative studies can be conducted of early outsourcing initiatives when employees were totally left out of the process, or received minimal communication from management, to current initiatives where some attention may be given to employee perspectives in order to establish more linkages between the factors. A case study of a company that integrates the Modified Management Outsourcing Adoption Model tool into its process could further validate the results of the two previous studies as well as this study. Another study worth considering is the effects outsourcing has on those employees who work on-site at their vendor location verses those who either telecommute or support the client remotely.

Additionally the results of this research support recommendations from Khosrowpour et al. (1996) and Kessler et al. (1999). Khosrowpour et al. suggested that their research, addressed from the perspective of a general IS population, could be extended by studying and comparing successful and unsuccessful outsourcing deals in relationship to the impact on people and organizations. Kessler et al., whose study was not focused specifically on the IT industry, recommended that their research be continued to academia, policymakers and practitioners. They suggested that their limited case study be expanded to establish whether or not their findings represented a general response to outsourcing that might be replicated in other organizations or circumstances.

Contributions to the Field of Study and Advancement of Knowledge

By identifying and addressing human resource issues from the employee perspective, management should be able to construct an outsourcing arrangement that will benefit the companies financially and the employees career-wise. With the use of the

Modified Management Outsourcing Adoption Model as a tool, management should be better able to determine each employees fit in the new environment, and offer better alternatives to meet the needs of the employee, while still meeting the company objective for outsourcing.

The results of this study should contribute to helping management better understand the effect of human resource issues on outsourcing success from the employees' perspective. It should benefit management in its outsourcing efforts through the use of the Modified Management Adoption Model tool as a basis for a plan of action to assist with integrating employee perceptions into outsourcing decisions. Since currently there exists little empirical data on what effects the employee perspectives have on outsourcing success, these results offer better insight and alternatives that might lead to more successful IT outsourcing ventures.

Summary

Outsourcing of IT functions has become a common and lucrative business practice by large and small companies alike. It accounted for $120 billion in contracts in 1997 and that number has continued to grow. Outsourcing runs the gamut from total outsourcing (Currie & Willcocks, 1998; Lacity et al., 1996) where all IT functions are turned over to the vendor to manage, to selective outsourcing (Garner, 1998a; Prager, 1998) where only certain functions are contracted out while others remain in-house. Research abounds on the subject of outsourcing. These range from why companies outsource (Antonucci & Tucker, 1998; Barrett, 1996), frameworks and strategies for constructing and managing the contracts (Grover et al., 1994b; Venkatraman & Loh, 1996b), successes and failures (Benko, 1993; Guterl, 1996), case studies (Kessler et al.,

1999), leadership qualities (Useem & Harder, 2000), to the affects on factors such as productivity (Khosrowpour et al., 1996; Malhotra, 1995a).

Human resource issues associated with outsourcing emerged in research presented by Barrett (1996), Cooper (1999), Khosrowpour et al. (1995), McLellan (1993), Palvia and Parzinger (1995) and others. These factors include issues such as skills, benefits, morale, training, productivity, career opportunities and job security. Studies by Due' (1992), Khosrowpour et al. (1996), and other researchers contend that each of these factors has a direct effect on morale and productivity in the workplace when outsourcing is introduced. They also suggest that communication is another factor that affects productivity. Except for the Khosrowpour et al. (1996) and the Kessler et al. (1999) studies, all the research was presented from the perspective of upper level management, those who would ultimately make the decision to outsource or not.

This researcher found that little research existed that examined outsourcing from the perspective of the employee who is not upper level management - those who perform the day-to-day operations that fulfill the contract and are generally not involved in the contract negotiations. Only two such studies were published as of 2001. The study by Khosrowpour et al. (1996) suggested that employee perceptions of outsourcing was associated with both the amount of communication done with the employee and the amount of direct involvement of the employee in the decision to outsource. They presented a Management Action Plan that showed the relationship between involvement, communication and productivity. They also presented a Management Outsourcing Adoption Model that proposed the level of employee involvement that was perceived as needed in the four different phases of outsourcing. Only one other study was published

that examined employee perspectives of outsourcing. Kessler et al. (1999) examined employee perspectives of outsourcing using a single case study of a non-IT company.

From the literature research and from the Khosrowpour et al. (1996) study, it was observed that little emphasis had been given to identifying and integrating employee concerns about outsourcing into the outsourcing process. By not addressing these human resource issues in terms of how the non-upper level management employee perceived them, there may be a false sense of perceived success of IT outsourcing.

This study has examined the human resource issues and the relationship to IT outsourcing from the perspective of those IT professionals who have been most affected by outsourcing: those displaced, those transitioned, and those who were retained. In order to evaluate these factors, a study was designed based on the previous work of Khosrowpour et al. (1996). A set of research questions that addressed these factors was developed from the literature search. From these research questions a set of four hypotheses was proposed to determine the degree these factors were perceived as issues in outsourcing.

A survey instrument was developed based on the instrument used by Khosrowpour et al. (1996). The lead author of the original study validated the modified instrument and the Nova Southeastern University's Institutional Review Board approved the survey for use. Permission was granted by an IT related organization and a major IT service company to allow members and randomly selected employees to be included in the study. The survey was conducted over a course of three weeks. Surveys were sent via email and received by both email and U.S. Mail. There was a return rate of 20.1%, which exceeded the return rate of the Khosrowpour et al. study. Responses were entered into an

SPSS data file and various statistics were performed on the data as discussed above in Chapter 4.

The results revealed that for the population under study, respondents disagreed with or were neutral on 62.5% of the items, and agreed with the remaining 37.5% of the 16 study items. However, when examining each category of response individually, there was a 68.8% overall response rate where *Agreed* was the majority response and only a 31.2% rate where *Disagreed* was a majority. From this it can be concluded that the issues under study can be perceived as affecting the success of an outsourcing initiative.

Another major issue under study was whether it was perceived that outsourced employees benefited more from the outsourcing initiative than did those who were retained by the outsourcing company. To evaluate this supposition, a set of four hypotheses was evaluated. Each was presented in its research and null form. Data was extrapolated from the original file to meet the criterion questions that comprised the essence of each hypothesis. An Independent Sample *t*-test was performed on each of the new data sets to determine if the null hypotheses could be rejected. While there was a significant degree of variance in the means of two of the hypotheses noted when evaluating the *F* values, none of the four null hypotheses could be rejected when evaluating the *t*-value. Thus for the sample under study, it could not be concluded that outsourced employees benefited more then their retained counterparts in terms of the human resource issues under study.

A fifth issue, though not a hypotheses, examined how employees perceived their attitudes about outsourcing affected the quality of service they provide and the impact of success of the outsourcing relationship. Again there was no statistically significant

difference in the mean variance between the two groups even though transitioned employees had a more positive assessment of their perceptions than did the retained employees.

Finally, results from this research were compared to the Management Action Plan and the Management Outsourcing Adoption Model presented by Khosrowpour et al. (1996). It was concluded that the original Management Action Plan is still valid as presented. However, data from this study did suggest changes to the Management Outsourcing Adoption Model. A modified version of the model was presented that highlights where respondents to this study indicated more emphasis should be placed on management communication in concert with employee involvement. This modified model is intended as a tool for upper management to use to better integrate the perceptions of employees in the outsourcing process.

Results in this study validated the results of the Khosrowpour et al. (1996) study and substantiated some of the findings in the case study by Kessler et al. (1999). Both of these researchers have concluded that management must understand what perceptions exists within the employee ranks and develop a plan to address these issues if they want the outsourcing to be successful in all realms, and not just financially. The results of this study have substantiated this claim. The researcher has examined the human resource issues that previous research contended was most important to the employees involved in outsourcing. The difference in this study and the previous studies was that this one went to the source to substantiate these claims: those directly affected by outsourcing who primarily were not upper-level management. Knowing what these employees perceive

about outsourcing will allow management to take some of the guess work out of these human resource issues as they proceed with an outsourcing undertaking.

Appendixes

A. Outsourcing Survey

Outsourcing is defined as the contracting out of all or part of a company's information systems (IS) functions to outside parties. In many cases, the people who performed the outsourcing functions are offered employment with the outsourcing vendor. Please read the following biographical questions and provide the appropriate answer.

1. Job Function (Check one)
   - ☐ Executive/Upper Management
   - ☐ Middle Management
   - ☐ Group Leader/Line Supervisor
   - ☐ Consultant
   - ☐ IS Staff Position
   - ☐ Programmer/Analyst
   - ☐ Computer Operator
   - ☐ Academic
   - ☐ Other (Please specify) _____

2. Functional Area (Check one)
   - ☐ Systems Development
   - ☐ Computer Operations
   - ☐ General IS Functions
   - ☐ Academic
   - ☐ Other (Please specify) _____

3. Your Employer's Industry (Check one)
   - ☐ Manufacturing
   - ☐ Insurance
   - ☐ Computer (non-contract)
   - ☐ IS Contract Services
   - ☐ Health Care
   - ☐ Education
   - ☐ Banking/Finance
   - ☐ Government
   - ☐ Retail
   - ☐ Public Utilities
   - ☐ Other (Please specify) _____

4. Total number of employees in your entire company (Check one)
   - ☐ 1 - 100
   - ☐ 101 - 500
   - ☐ 501 - 1,000
   - ☐ 1,001 - 10,000
   - ☐ Over 10,000

5. Total number of Information Systems employees in your entire company (Check one)
   - ☐ 1 - 10
   - ☐ 11 - 50
   - ☐ 51 - 250
   - ☐ 251 - 1,000
   - ☐ Over 1,000

6. Age of respondent (Check one)
   - ☐ Under 30
   - ☐ 30 - 39
   - ☐ 40 - 49
   - ☐ 50 - 59
   - ☐ Over 59

7. Highest educational level attained (Check one)
   - ☐ High school
   - ☐ Associate's Degree
   - ☐ Bachelor's Degree
   - ☐ Master's Degree
   - ☐ Doctorate Degree
   - ☐ Other (Please Specify _____

8. Number of years in the Information Systems profession (Check one)
   - ☐ Less than 5
   - ☐ 5 - 10
   - ☐ 11 - 20
   - ☐ Over 20

9. Rank your sources of information on the topic of outsourcing from most significant (1) to least significant (5).

☐ Trade Publications ☐ Seminars/Conferences
☐ Employer Communication ☐ Personal Experience
☐ Coworkers/Professional Associates ☐ Other (Please specify)
_____

10. Have you ever been involved in an IS outsourcing initiative?

☐ Yes ☐ No (If "No" go to item 32)

11. Have you ever been displaced (lost your job) as a result of an outsourcing agreement of any kind? (Check one)

☐ Yes ☐ No

11a. If yes, how long ago were you displaced? _____ years/months.

12. Have you ever been transferred to another company (transitioned) as a result of an outsourcing agreement of any kind? (Check one)

☐ Yes ☐ No

12a. If yes, how long ago were you transferred? _____ years/months.

13. Have you ever been involved in an outsourcing initiative, but was neither displaced nor transferred as a result of the outsourcing agreement? (Check one)

☐ Yes ☐ No

13a. If yes, how long ago was the outsourcing initiative completed? _____ years/months.

14. Which word below most closely matched your feelings when you were going through the outsourcing process? (Check one)

☐ Negative ☐ Neutral ☐ Positive

15. Which word below most closely matches your feelings today when the word "outsourcing" is mentioned? (Check one)

☐ Negative ☐ Neutral ☐ Positive

Based on your response to item 15 above, for questions 16 - 31 check the box that most closely matches your feelings today with regard to the following statements.

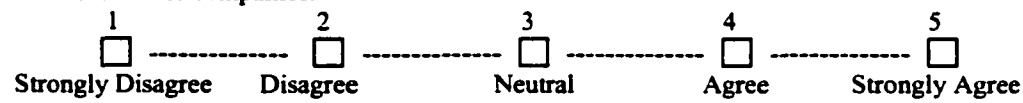
16. Career opportunities for information systems professionals are better in information technology companies than they are in other companies.

1 ☐ Strongly Disagree ---------- 2 ☐ Disagree ---------- 3 ☐ Neutral ---------- 4 ☐ Agree ---------- 5 ☐ Strongly Agree

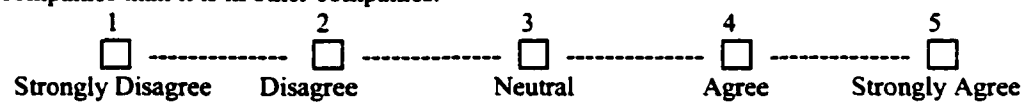
17. Compensation (salary and benefits) for information systems professionals is better in information technology companies than it is in other companies.

1 ☐ Strongly Disagree ---------- 2 ☐ Disagree ---------- 3 ☐ Neutral ---------- 4 ☐ Agree ---------- 5 ☐ Strongly Agree

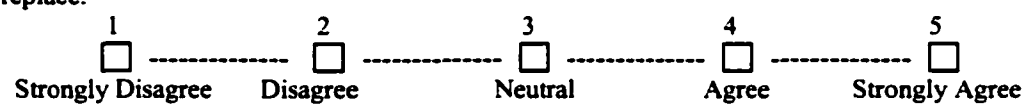
18. Job security for information systems professionals is better in information technology companies than it is in other companies.



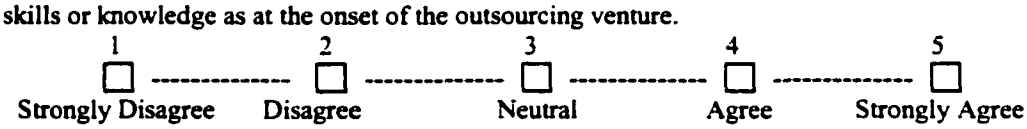
19. Job satisfaction for information systems professionals is better in information technology companies than it is in other companies.



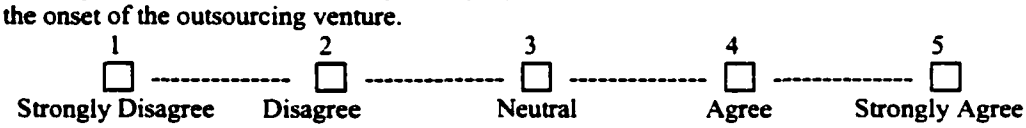
20. My job function requires unique skills or knowledge which would be difficult for my employer to replace.



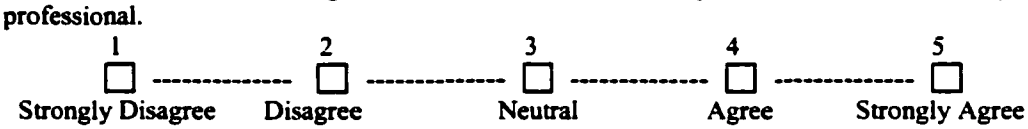
21. My employer is as committed today to helping me improve or enhance my information systems skills or knowledge as at the onset of the outsourcing venture.



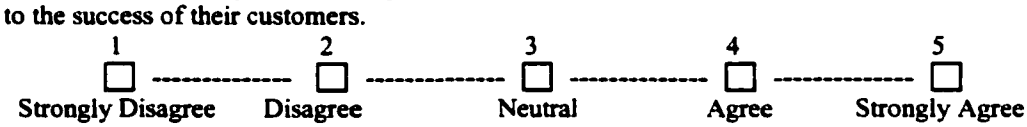
22. My employer is as committed today to helping me identify and further my career objectives as at the onset of the outsourcing venture.



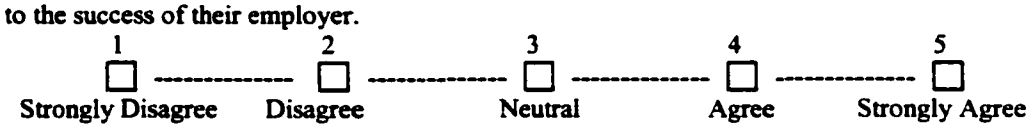
23. My attitude about outsourcing influences the level of service I provide as an information systems professional.



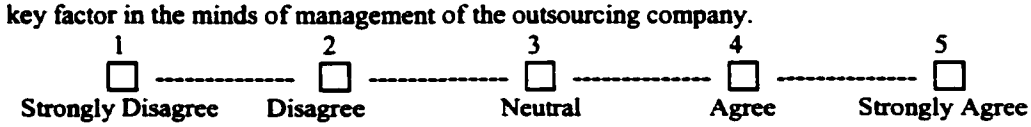
24. Information systems professionals providing contract services to outside companies are committed to the success of their customers.



25. Information systems professionals providing contract services to outside companies are committed to the success of their employer.



26. In considering any outsourcing decision, the welfare of the information systems professionals is a key factor in the minds of management of the outsourcing company.



27. In considering any outsourcing decision, the welfare of the information systems professionals is a key factor in the minds of management of the contracting company.

1	2	3	4	5
☐	☐	☐	☐	☐
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

28. I have maintained a positive attitude about the success of the outsourcing venture.

1	2	3	4	5
☐	☐	☐	☐	☐
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

29. The communication flow between companies during contract negotiations was adequate for me to develop a positive attitude about the outsourcing venture.

1	2	3	4	5
☐	☐	☐	☐	☐
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

30. The communication flow between companies since the onset of the outsourcing contract has been adequate for me to keep a positive attitude about the outsourcing venture.

1	2	3	4	5
☐	☐	☐	☐	☐
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

31. The outsourcing venture has proved positive in advancing my information systems career.

1	2	3	4	5
☐	☐	☐	☐	☐
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Please answer the follow questions 32 - 37 based on your feelings about outsourcing.

32. From what individual do you feel most comfortable receiving communications on company matters that have a substantial impact on your career?

- ☐ Chief Executive
- ☐ Information Systems Executive
- ☐ Your department head
- ☐ Your immediate supervisor
- ☐ Human Resource spokesperson
- ☐ Other (Please specify) _____

33. Do you believe it is reasonable for management to withhold information on potential outsourcing deals from employees until a final agreement is reached with an outsourcing vendor?

- ☐ Yes
- ☐ No

34. In an outsourcing situation, what do you consider an adequate amount of time to make a decision on accepting a job offer from the outsourcing vendor? (Check one)

- ☐ 1 week
- ☐ 2 weeks
- ☐ 1 month
- ☐ 2 months
- ☐ Other (Please specify) _____

35. What do you believe is the most compelling reason for a company to consider outsourcing its Information Systems functions?

- ☐ Strategic Benefits
- ☐ Cost Benefits
- ☐ Other (Please specify) _____

36. In your opinion, when a company has decided to outsource some or all of its Information Systems functions, what steps can the Client Company take to make the experience as positive as possible for the affected Information Systems professionals?

37. In your opinion, when a decision has been made to outsource, what steps can the Outsourcing Vendor take to make the transition as smooth as possible for the affected Information Systems professionals?

Thank you for participating in this study. *Please return the survey* _____ *to:*

US mail address (removed) *or via email to* ***louisl@nova.edu***

B. Letter Accompanying Survey

Winter 2002

Fellow Information Systems Professionals:

The outsourcing of information systems (IS) functions is an increasing trend in today's business environment. The implications of this trend are significant for most IS professionals.

I am a doctoral student at the School of Computer and Information Sciences at Nova Southeastern University in Ft. Lauderdale, FL (USA). For my dissertation I am studying how IS professionals who have been involved in an outsourcing initiative perceive the outsourcing experience. The objective of this study is to determine what effects these perceptions have on outsourcing ventures.

To accomplish this objective means going to someone such as yourself who can provide the information needed for this study. Your help with supplying answers on the attached survey will make a real contribution to the accuracy and usefulness of the findings. This survey should take only a few minutes of your valuable time.

Your reply will be treated in strict confidence and will be available only to my advisor, Sumitra Mukherjee, Ph.D., and me. Any publication will be of a statistical nature only, by category of Information Systems professionals. The attached survey document is a form that can be completed using Microsoft Word or printed. I ask that you return it to me at either of the addresses listed at the end of the survey by _____

Sincerely,

Lynda R. Louis
Ph.D. Candidate

P.S. If you would like a summary of the results of this survey, please provide a mailing address below and either return this page with your survey or in a separate envelope. Or you can send an email message to me at *louisl@nova.edu* with the heading "Send Survey Results."

Name _____

Address _____

City, State, ZIP _____

C. Mapping of Research Questions to Questionnaire

	Research question	Mapping to Survey Item	Objective of question
1.	What effect has the outsourcing had on the employees who were outsourced?	12 14 & 15 16 - 31	Identify Attitude variables General effects
2.	What effect has the outsourcing had on employees retained in the company that outsourced its IT functions?	13 14 & 15 16 - 31	Identify Attitude variables General effects
3.	What are the employees perceived views of the outsourcing process: either positive or negative?	14 & 15 26 - 27 32 - 37 28	Attitude Opinion on human issues Opinions on process Opinion on success of venture
4.	What are the perceptions of the employees involved in outsourcing of whether the move enhanced or hindered their IT career objectives?	16 - 19 20-21 22 31 26 - 27	Opinion on human issues Skills Objective Advancing career Opinion on welfare of employee
5.	What are the employees' levels of perceived change in commitment from either company (outsourcee and outsourcer) toward furthering the employees' career objectives?	21-22 21-22 26 - 27	Commitment from employer Change in commitment of employer Welfare of employee
6.	What effects do the employees perceive that their attitudes about the outsourcing initiative will/will not impact the success of the overall outsourcing relationship between the companies?	24 25 28	Customer Employer Employee

	Research question	Mapping to Survey Item	Objective of question
7.	What is the perception that the quality of service provided by the outsourcer will be affected by the employees' attitudes toward the outsourcing?	23	Attitude affects service, Commitment to quality service
8.	What are the employees perceived effects of the outsourcing initiative as a result of communication by either company - was enough communication done up front and has enough communication continued following the transition of employees to contribute to the employees' perceptions of the impact of the outsourcing?	29 30	Before contract signed After contract signed

D. Nova Southeastern University IRB Exemption Notification

The following is an excerpt of the exemption received from Nova Southern University's IRB:

From: Dr. Maxine Cohen [cohenm@scis.acast.nova.edu]
Sent: Sunday, March 05, 2000 12:33 PM
To: lrlouis@sprynet.com
Cc: Maxine S. Cohen; sumitra@scis.acast.nova.edu
Subject: IRB approvals

Lynda,

This note is to officially grant approval for your IRB dissertation research project titled "An empirical investigation of employee perceptions of outsourcing success of information technology operations" as EXEMPT under the rules of the NSU IRB.

Exempt does not mean the research is exempt from review. It means the research does not need to go before the IRB board for a full review. The research is still logged and recorded as human subjects research under SCIS.

Your research is exempt since it uses standard survey risk methodology with no identifying information.

I have a few minor issues that do not impact the exempt status, but you might want to clarify.

[. . . text removed . . .]

Best of luck with your research.

Maxine S. Cohen
Associate Professor
School of Computer and Information Sciences
Nova Southeastern University
Fort Lauderdale, FL
email: cohenm@scis.nova.edu
phone: 954 262 2072
web page: http://www.scis.nova.edu/~cohenm

E. Evidence of Survey Acceptability

The following is a copy of the e-mail received from Dr. Mehdi Khosrowpour:

From: Mehdi Khosrow-Pour [removed]
Sent: Monday, July 24, 2000 7:59 PM
To: louisl@nova.edu
Subject: Re: Outsourcing Instrument

Dear Lynda:

It was nice to hear from you and to learn about your plan to use our survey instrument for your research. I just reviewed your modified version and in my opinion, this survey instrument should assist you to collect some meaningful data in support of your research on the issue of outsourcing.

Good luck with your research and let me know if I can be of any further assistance.

Regards,

Mehdi Khosrow-Pour

At 05:35 PM 7/20/00 -0400, you wrote:
>Dr. Khosrowpour,
>
>This comes as a request for your assistance. In 1998 I wrote to you concerning your article Managing Information Technology with Outsourcing: An Assessment of Employee Perceptions. I requested a copy of the survey instrument that was used in this study for adaptation to my dissertation: An Empirical Investigation of Employee Perceptions of Outsourcing Success on Information Technology Operations.
>
>I have adapted your instrument for my study and need to have it validated by you, per my dissertation committee member, Dr. Steven Terrell of Nova Southeastern University. The attached copy of my survey follows the same format as yours. I have made modifications to adapt it more along the line of my research questions and my intended population. The intended population is the IT employee who has been directly involved in an outsourcing initiative.
>
>Will you please review the attached and respond as to whether you still see validity in this instrument, based on its adaptation from your instrument. If you need more information to base your assessment on, please let me know and I will forward to you.
>
>Thanks again for your assistance,
>
>Lynda R. Louis
>Doctoral Candidate
>Nova Southeastern University
>School of Computer and Information Sciences
>louisl@nova.edu
>http://scis.nova.edu/~louisl

F. Statistics (Descriptive Frequencies)

Function

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	executive/upper mgmt	4	2.0	2.0	2.0
	middle management	26	12.9	12.9	14.9
	group leader/line supervisor	26	12.9	12.9	27.9
	consultant	21	10.4	10.4	38.3
	IS staff position	48	23.9	23.9	62.2
	programmer/analyst	33	16.4	16.4	78.6
	computer operator	3	1.5	1.5	80.1
	acedimic	3	1.5	1.5	81.6
	other (specify)	37	18.4	18.4	100.0
	Total	**201**	**100.0**	**100.0**	

Functional Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	systems development	13	6.5	6.5	6.5
	computer operations	77	38.3	38.3	44.8
	general IS funtions	70	34.8	34.8	79.6
	acedemic	6	3.0	3.0	82.6
	other (specify)	35	17.4	17.4	100.0
	Total	**201**	**100.0**	**100.0**	

Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	computer (non-contract)	5	2.5	2.5	2.5
	IS contract services	119	59.2	59.2	61.7
	education	6	3.0	3.0	64.7
	government	3	1.5	1.5	66.2
	retail	1	.5	.5	66.7
	public utilities	42	20.9	20.9	87.6
	other (specify)	25	12.4	12.4	100.0
	Total	**201**	**100.0**	**100.0**	

Total Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-100	1	.5	.5	.5
	101-500	6	3.0	3.0	3.5
	501-1,000	2	1.0	1.0	4.5
	1,000-10,000	24	11.9	11.9	16.4
	>10,000	168	83.6	83.6	100.0
	Total	**201**	**100.0**	**100.0**	

IS Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-10	1	.5	.5	.5
	11-50	3	1.5	1.5	2.0
	51-250	7	3.5	3.5	5.6
	250-1,000	11	5.5	5.6	11.1
	>1,000	176	87.6	88.9	100.0
	Total	**198**	**98.5**	**100.0**	
Missing	99	3	1.5		
Total		**201**	**100.0**		

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<30	21	10.4	10.4	10.4
	30-39	48	23.9	23.9	34.3
	40-49	71	35.3	35.3	69.7
	50-59	57	28.4	28.4	98.0
	>59	4	2.0	2.0	100.0
	Total	**201**	**100.0**	**100.0**	

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	high school	25	12.4	12.4	12.4
	associate degree	26	12.9	12.9	25.4
	bachelor's degree	95	47.3	47.3	72.6
	master's degree	37	18.4	18.4	91.0
	doctorate degree	8	4.0	4.0	95.0
	other (specify)	10	5.0	5.0	100.0
	Total	**201**	**100.0**	**100.0**	

Year in IS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<5	31	15.4	15.4	15.4
	5-10	51	25.4	25.4	40.8
	11-20	66	32.8	32.8	73.6
	>20	53	26.4	26.4	100.0
	Total	**201**	**100.0**	**100.0**	

Outsource Initiative

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	150	74.6	74.6	74.6
	no	51	25.4	25.4	100.0
	Total	**201**	**100.0**	**100.0**	

Displaced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	13	6.5	8.7	8.7
	no	136	67.7	91.3	100.0
	Total	**149**	**74.1**	**100.0**	
Missing	99	1	.5		
	System	51	25.4		
	Total	**52**	**25.9**		
Total		**201**	**100.0**		

How Long Displaced (yrs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<3	6	46.2	50.0	50.0
	3 to 5	3	23.1	25.0	75.0
	6 to 10	1	7.7	8.3	83.3
	11 or more	2	15.4	16.7	100.0
	Total	**12**	**92.3**	**100.0**	
Missing	99	1	7.7		
Total		**13**	**100.0**		

Transitioned

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	115	57.2	77.2	77.2
	no	34	16.9	22.8	100.0
	Total	**149**	**74.1**	**100.0**	
Missing	99	1	.5		
	System	51	25.4		
	Total	**52**	**25.9**		
Total		**201**	**100.0**		

How Long Transitoned (yrs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<3	23	11.4	20.0	20.0
	3 to 5	85	42.3	73.9	93.9
	6 to 10	3	1.5	2.6	96.5
	11 or more	4	2.0	3.5	100.0
	Total	**115**	**57.2**	**100.0**	
Missing	99	1	.5		
	System	85	42.3		
	Total	**86**	**42.8**		
Total		**201**	**100.0**		

Retained

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	43	21.4	28.7	28.7
	no	107	53.2	71.3	100.0
	Total	**150**	**74.6**	**100.0**	
Missing	System	51	25.4		
Total		**201**	**100.0**		

How Long completed (yrs)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<3	12	27.9	28.6	28.6
	3 to 5	24	55.8	57.1	85.7
	6 to 10	3	7.0	7.1	92.9
	11 or more	3	7.0	7.1	100.0
	Total	**42**	**97.7**	**100.0**	
Missing	99	1	2.3		
Total		**43**	**100.0**		

Feelings during

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	negative	80	39.8	54.4	54.4
	neutral	39	19.4	26.5	81.0
	positive	28	13.9	19.0	100.0
	Total	**147**	**73.1**	**100.0**	
Missing	99	3	1.5		
	System	51	25.4		
	Total	**54**	**26.9**		
Total		**201**	**100.0**		

Feelings today

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	negative	53	26.4	35.6	35.6
	neutral	52	25.9	34.9	70.5
	positive	44	21.9	29.5	100.0
	Total	**149**	**74.1**	**100.0**	
Missing	99	1	.5		
	System	51	25.4		
	Total	**52**	**25.9**		
Total		**201**	**100.0**		

Who to receive comm from #1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	chief executive	17	8.5	8.5	8.5
	IS executive	11	5.5	5.5	13.9
	department head	50	24.9	24.9	38.8
	immediate supervisor	107	53.2	53.2	92.0
	HR spokesperson	8	4.0	4.0	96.0
	other (specify)	8	4.0	4.0	100.0
	Total	**201**	**100.0**	**100.0**	

Mgmt Withhold Info

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	61	30.3	30.7	30.7
	no	138	68.7	69.3	100.0
	Total	**199**	**99.0**	**100.0**	
Missing	99	2	1.0		
Total		**201**	**100.0**		

Time to make decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 week	8	4.0	4.0	4.0
	2 weeks	60	29.9	29.9	33.8
	1 month	86	42.8	42.8	76.6
	2 months	44	21.9	21.9	98.5
	other (specify)	3	1.5	1.5	100.0
	Total	**201**	**100.0**	**100.0**	

Time to make decision (other)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		198	98.5	98.5	98.5
	3 weeks	1	.5	.5	99.0
	6 months minimum)	1	.5	.5	99.5
	six months to 1 year	1	.5	.5	100.0
	Total	**201**	**100.0**	**100.0**	

Most Compelling reason to outsource

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strategic benefits	63	31.3	31.5	31.5
	cost benefits	127	63.2	63.5	95.0
	other (specify)	10	5.0	5.0	100.0
	Total	**200**	**99.5**	**100.0**	
Missing	System	1	.5		
Total		**201**	**100.0**		

G. Statistics (Crosstabs – Feelings During Outsourcing)

Outsource Initiative * Feelings during Crosstabulation

			Feelings during			
			negative	neutral	positive	Total
Outsource Initiative	yes	Count	80	39	28	147
		Total %	54.4%	26.5%	19.0%	100.0%
Total		Count	80	39	28	147
		Total %	54.4%	26.5%	19.0%	100.0%

Displaced * Feelings during Crosstabulation

			Feelings during			
			negative	neutral	positive	Total
Displaced	yes	Count	10	2	1	13
		Total %	76.9%	15.4%	7.7%	100.0%
Total		Count	10	2	1	13
		Total %	76.9%	15.4%	7.7%	100.0%

Transitioned * Feelings during Crosstabulation

			Feelings during			
			negative	neutral	positive	Total
Transitioned	yes	Count	64	27	22	113
		Total %	56.6%	23.9%	19.5%	100.0%
Total		Count	64	27	22	113
		Total %	56.6%	23.9%	19.5%	100.0%

Retained * Feelings during Crosstabulation

			Feelings during			
			negative	neutral	positive	Total
Retained	yes	Count	17	12	13	42
		Total %	40.5%	28.6%	31.0%	100.0%
Total		Count	17	12	13	42
		Total %	40.5%	28.6%	31.0%	100.0%

H. Statistics (Crosstabs – Feelings Today)

Item 16

Feelings today * Career Opportunity * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Career Opportunity					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count		16	16	16	5	53
			Total %		10.7%	10.7%	10.7%	3.4%	35.6%
		neutral	Count	1	7	8	30	6	52
			Total %	.7%	4.7%	5.4%	20.1%	4.0%	34.9%
		positive	Count	1	3	2	24	14	44
			Total %	.7%	2.0%	1.3%	16.1%	9.4%	29.5%
	Total		Count	2	26	26	70	25	149
			Total %	1.3%	17.4%	17.4%	47.0%	16.8%	100.0%

Feelings today * Career Opportunity * Displaced Crosstabulation

Displaced				Career Opportunity				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	3	5	1	10
			Total %	7.7%	23.1%	38.5%	7.7%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count				2	2
			Total %				15.4%	15.4%
	Total		Count	1	3	6	3	13
			Total %	7.7%	23.1%	46.2%	23.1%	100.0%

Feelings today * Career Opportunity * Transitioned Crosstabulation

Transitioned				Career Opportunity					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count		13	13	9	1	36
			Total %		11.4%	11.4%	7.9%	.9%	31.6%
		neutral	Count	1	4	6	25	6	42
			Total %	.9%	3.5%	5.3%	21.9%	5.3%	36.8%
		positive	Count	1	1	2	19	13	36
			Total %	.9%	.9%	1.8%	16.7%	11.4%	31.6%
	Total		Count	2	18	21	53	20	114
			Total %	1.8%	15.8%	18.4%	46.5%	17.5%	100.0%

Feelings today * Career Opportunity * Retained Crosstabulation

Retained				Career Opportunity				
				disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	3	5	4	3	15
			Total %	7.0%	11.6%	9.3%	7.0%	34.9%
		neutral	Count	3	3	8		14
			Total %	7.0%	7.0%	18.6%		32.6%
		positive	Count	2		9	3	14
			Total %	4.7%		20.9%	7.0%	32.6%
	Total		Count	8	8	21	6	43
			Total %	18.6%	18.6%	48.8%	14.0%	100.0%

Item 17

Feelings today * Compensation * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Compensation					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	7	19	15	9	3	53
			Total %	4.7%	12.8%	10.1%	6.0%	2.0%	35.6%
		neutral	Count	3	11	16	22		52
			Total %	2.0%	7.4%	10.7%	14.8%		34.9%
		positive	Count		2	20	16	6	44
			Total %		1.3%	13.4%	10.7%	4.0%	29.5%
	Total		Count	10	32	51	47	9	149
			Total %	6.7%	21.5%	34.2%	31.5%	6.0%	100.0%

Feelings today * Compensation * Displaced Crosstabulation

Displaced				Compensation				
				disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	1	5	3	1	10
			Total %	7.7%	38.5%	23.1%	7.7%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count			1	1	2
			Total %			7.7%	7.7%	15.4%
	Total		Count	1	5	5	2	13
			Total %	7.7%	38.5%	38.5%	15.4%	100.0%

Feelings today * Compensation * Transitioned Crosstabulation

Transitioned				Compensation					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	7	15	10	4		36
			Total %	6.1%	13.2%	8.8%	3.5%		31.6%
		neutral	Count	3	6	15	18		42
			Total %	2.6%	5.3%	13.2%	15.8%		36.8%
		positive	Count		2	14	14	6	36
			Total %		1.8%	12.3%	12.3%	5.3%	31.6%
	Total		Count	10	23	39	36	6	114
			Total %	8.8%	20.2%	34.2%	31.6%	5.3%	100.0%

Feelings today * Compensation * Retained Crosstabulation

Retained				Compensation					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	5	5	2	2	15
			Total %	2.3%	11.6%	11.6%	4.7%	4.7%	34.9%
		neutral	Count		6	1	7		14
			Total %		14.0%	2.3%	16.3%		32.6%
		positive	Count			8	4	2	14
			Total %			18.6%	9.3%	4.7%	32.6%
	Total		Count	1	11	14	13	4	43
			Total %	2.3%	25.6%	32.6%	30.2%	9.3%	100.0%

Item 18

Feelings today * Job Security * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Job Security					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	14	22	12	4	1	53
			Total %	9.4%	14.8%	8.1%	2.7%	.7%	35.6%
		neutral	Count	1	19	23	9		52
			Total %	.7%	12.8%	15.4%	6.0%		34.9%
		positive	Count		7	15	20	2	44
			Total %		4.7%	10.1%	13.4%	1.3%	29.5%
	Total		Count	15	48	50	33	3	149
			Total %	10.1%	32.2%	33.6%	22.1%	2.0%	100.0%

Feelings today * Job Security * Displaced Crosstabulation

Displaced				Job Security					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	2	5	1	1	1	10
			Total %	15.4%	38.5%	7.7%	7.7%	7.7%	76.9%
		neutral	Count			1			1
			Total %			7.7%			7.7%
		positive	Count			1	1		2
			Total %			7.7%	7.7%		15.4%
	Total		Count	2	5	3	2	1	13
			Total %	15.4%	38.5%	23.1%	15.4%	7.7%	100.0%

Feelings today * Job Security * Transitioned Crosstabulation

Transitioned				Job Security					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	10	15	7	4		36
			Total %	8.8%	13.2%	6.1%	3.5%		31.6%
		neutral	Count	1	13	21	7		42
			Total %	.9%	11.4%	18.4%	6.1%		36.8%
		positive	Count		4	11	19	2	36
			Total %		3.5%	9.6%	16.7%	1.8%	31.6%
	Total		Count	11	32	39	30	2	114
			Total %	9.6%	28.1%	34.2%	26.3%	1.8%	100.0%

Feelings today * Job Security * Retained Crosstabulation

Retained				Job Security				Total
				strongly disagree	disagree	neutral	agree	
yes	Feelings today	negative	Count	3	7	5		15
			Total %	7.0%	16.3%	11.6%		34.9%
		neutral	Count		8	4	2	14
			Total %		18.6%	9.3%	4.7%	32.6%
		positive	Count		3	7	4	14
			Total %		7.0%	16.3%	9.3%	32.6%
	Total		Count	3	18	16	6	43
			Total %	7.0%	41.9%	37.2%	14.0%	100.0%

Item 19

Feelings today * Job Satisfaction * Outsourcing Initiative Crosstabulation

Outsourcing Initial				Job Satisfaction					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	24	17	9	2	53
			Total %	.7%	16.1%	11.4%	6.0%	1.3%	35.6%
		neutral	Count	2	11	23	15	1	52
			Total %	1.3%	7.4%	15.4%	10.1%	.7%	34.9%
		positive	Count		4	12	22	6	44
			Total %		2.7%	8.1%	14.8%	4.0%	29.5%
	Total		Count	3	39	52	46	9	149
			Total %	2.0%	26.2%	34.9%	30.9%	6.0%	100.0%

Feelings today * Job Satisfaction * Displaced Crosstabulation

Displaced				Job Satisfaction				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	3	3	3	1	10
			Total %	23.1%	23.1%	23.1%	7.7%	76.9%
		neutral	Count		1			1
			Total %		7.7%			7.7%
		positive	Count				2	2
			Total %				15.4%	15.4%
	Total		Count	3	4	3	3	13
			Total %	23.1%	30.8%	23.1%	23.1%	100.0%

Feelings today * Job Satisfaction * Transitioned Crosstabulation

Transitioned				Job Satisfaction					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	18	11	6		36
			Total %	.9%	15.8%	9.6%	5.3%		31.6%
		neutral	Count	2	6	21	12	1	42
			Total %	1.8%	5.3%	18.4%	10.5%	.9%	36.8%
		positive	Count		1	11	19	5	36
			Total %		.9%	9.6%	16.7%	4.4%	31.6%
	Total		Count	3	25	43	37	6	114
			Total %	2.6%	21.9%	37.7%	32.5%	5.3%	100.0%

Feelings today * Job Satisfaction * Retained Crosstabulation

Retained				Job Satisfaction				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	5	6	3	1	15
			Total %	11.6%	14.0%	7.0%	2.3%	34.9%
		neutral	Count	6	5	3		14
			Total %	14.0%	11.6%	7.0%		32.6%
		positive	Count	3	3	8		14
			Total %	7.0%	7.0%	18.6%		32.6%
	Total		Count	14	14	14	1	43
			Total %	32.6%	32.6%	32.6%	2.3%	100.0%

Item 20

Feelings today * Job Functions * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Job Functions					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	3	14	9	22	5	53
			Total %	2.0%	9.5%	6.1%	14.9%	3.4%	35.8%
		neutral	Count	1	12	17	17	5	52
			Total %	.7%	8.1%	11.5%	11.5%	3.4%	35.1%
		positive	Count	2	13	6	16	6	43
			Total %	1.4%	8.8%	4.1%	10.8%	4.1%	29.1%
	Total		Count	6	39	32	55	16	148
			Total %	4.1%	26.4%	21.6%	37.2%	10.8%	100.0%

Feelings today * Job Functions * Displaced Crosstabulation

Displaced				Job Functions				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	4	2	3	1	10
			Total %	30.8%	15.4%	23.1%	7.7%	76.9%
		neutral	Count		1			1
			Total %		7.7%			7.7%
		positive	Count	2				2
			Total %	15.4%				15.4%
	Total		Count	6	3	3	1	13
			Total %	46.2%	23.1%	23.1%	7.7%	100.0%

Feelings today * Job Functions * Transitioned Crosstabulation

Transitioned				Job Functions					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	2	7	7	17	3	36
			Total %	1.8%	6.1%	6.1%	14.9%	2.6%	31.6%
		neutral	Count	1	10	11	15	5	42
			Total %	.9%	8.8%	9.6%	13.2%	4.4%	36.8%
		positive	Count	2	10	6	12	6	36
			Total %	1.8%	8.8%	5.3%	10.5%	5.3%	31.6%
	Total		Count	5	27	24	44	14	114
			Total %	4.4%	23.7%	21.1%	38.6%	12.3%	100.0%

Feelings today * Job Functions * Retained Crosstabulation

Retained				Job Functions					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	1	7	1	4	2	15
			Total %	2.4%	16.7%	2.4%	9.5%	4.8%	35.7%
		neutral	Count		4	6	3	1	14
			Total %		9.5%	14.3%	7.1%	2.4%	33.3%
		positive	Count	1	3		9		13
			Total %	2.4%	7.1%		21.4%		31.0%
	Total		Count	2	14	7	16	3	42
			Total %	4.8%	33.3%	16.7%	38.1%	7.1%	100.0%

Item 21

Feelings today * Employer committed to skills * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Employer committed to skills					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	9	18	10	16		53
			Total %	6.1%	12.2%	6.8%	10.8%		35.8%
		neutral	Count	2	7	11	28	4	52
			Total %	1.4%	4.7%	7.4%	18.9%	2.7%	35.1%
		positive	Count	1	2	3	27	10	43
			Total %	.7%	1.4%	2.0%	18.2%	6.8%	29.1%
	Total		Count	12	27	24	71	14	148
			Total %	8.1%	18.2%	16.2%	48.0%	9.5%	100.0%

Feelings today * Employer committed to skills * Displaced Crosstabulation

Displaced				Employer committed to skills					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	2	3	2	3		10
			Total %	15.4%	23.1%	15.4%	23.1%		76.9%
		neutral	Count			1			1
			Total %			7.7%			7.7%
		positive	Count				1	1	2
			Total %				7.7%	7.7%	15.4%
	Total		Count	2	3	3	4	1	13
			Total %	15.4%	23.1%	23.1%	30.8%	7.7%	100.0%

Feelings today * Employer committed to skills * Transitioned Crosstabulation

Transitioned				Employer committed to skills					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	7	12	7	10		36
			Total %	6.2%	10.6%	6.2%	8.8%		31.9%
		neutral	Count	1	6	7	24	4	42
			Total %	.9%	5.3%	6.2%	21.2%	3.5%	37.2%
		positive	Count	1	1	2	24	7	35
			Total %	.9%	.9%	1.8%	21.2%	6.2%	31.0%
	Total		Count	9	19	16	58	11	113
			Total %	8.0%	16.8%	14.2%	51.3%	9.7%	100.0%

Feelings today * Employer committed to skills * Retained Crosstabulation

Retained				Employer committed to skills					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	1	6	2	6		15
			Total %	2.3%	14.0%	4.7%	14.0%		34.9%
		neutral	Count	1	1	4	8		14
			Total %	2.3%	2.3%	9.3%	18.6%		32.6%
		positive	Count		1	2	8	3	14
			Total %		2.3%	4.7%	18.6%	7.0%	32.6%
	Total		Count	2	8	8	22	3	43
			Total %	4.7%	18.6%	18.6%	51.2%	7.0%	100.0%

Item 22

Feelings today * Employer committed to career obj * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Employer committed to career obj					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	13	15	13	11	1	53
			Total %	8.8%	10.2%	8.8%	7.5%	.7%	36.1%
		neutral	Count		12	12	25	3	52
			Total %		8.2%	8.2%	17.0%	2.0%	35.4%
		positive	Count		1	5	26	10	42
			Total %		.7%	3.4%	17.7%	6.8%	28.6%
	Total		Count	13	28	30	62	14	147
			Total %	8.8%	19.0%	20.4%	42.2%	9.5%	100.0%

Feelings today * Employer committed to career obj * Displaced Crosstabulation

Displaced				Employer committed to career obj				
				strongly disagree	disagree	agree	strongly agree	Total
yes	Feelings today	negative	Count	2	3	4	1	10
			Total %	15.4%	23.1%	30.8%	7.7%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count			1	1	2
			Total %			7.7%	7.7%	15.4%
	Total		Count	2	3	6	2	13
			Total %	15.4%	23.1%	46.2%	15.4%	100.0%

Feelings today * Employer committed to career obj * Transitioned Crosstabulation

Transitioned				Employer committed to career obj					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	9	10	11	5	1	36
			Total %	8.0%	8.9%	9.8%	4.5%	.9%	32.1%
		neutral	Count		10	8	21	3	42
			Total %		8.9%	7.1%	18.8%	2.7%	37.5%
		positive	Count		1	4	22	7	34
			Total %		.9%	3.6%	19.6%	6.3%	30.4%
	Total		Count	9	21	23	48	11	112
			Total %	8.0%	18.8%	20.5%	42.9%	9.8%	100.0%

Feelings today * Employer committed to career obj * Retained Crosstabulation

Retained				Employer committed to career obj					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	4	4	2	5		15
			Total %	9.3%	9.3%	4.7%	11.6%		34.9%
		neutral	Count		2	3	9		14
			Total %		4.7%	7.0%	20.9%		32.6%
		positive	Count			2	9	3	14
			Total %			4.7%	20.9%	7.0%	32.6%
	Total		Count	4	6	7	23	3	43
			Total %	9.3%	14.0%	16.3%	53.5%	7.0%	100.0%

Item 23

Feelings today * Attitude influence on service * Outsourcing Initiative Crosstabulation

Outsourcing Initial				Attitude influence on service					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	14	17	8	12	2	53
			Total %	9.4%	11.4%	5.4%	8.1%	1.3%	35.6%
		neutral	Count	12	18	8	14		52
			Total %	8.1%	12.1%	5.4%	9.4%		34.9%
		positive	Count	3	12	6	14	9	44
			Total %	2.0%	8.1%	4.0%	9.4%	6.0%	29.5%
	Total		Count	29	47	22	40	11	149
			Total %	19.5%	31.5%	14.8%	26.8%	7.4%	100.0%

Feelings today * Attitude influence on service * Displaced Crosstabulation

Displaced				Attitude influence on service					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	4	2	1	2	1	10
			Total %	30.8%	15.4%	7.7%	15.4%	7.7%	76.9%
		neutral	Count		1				1
			Total %		7.7%				7.7%
		positive	Count			1		1	2
			Total %			7.7%		7.7%	15.4%
	Total		Count	4	3	2	2	2	13
			Total %	30.8%	23.1%	15.4%	15.4%	15.4%	100.0%

Feelings today * Attitude influence on service * Transitioned Crosstabulation

Transitioned				Attitude influence on service					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	8	15	5	6	2	36
			Total %	7.0%	13.2%	4.4%	5.3%	1.8%	31.6%
		neutral	Count	9	16	6	11		42
			Total %	7.9%	14.0%	5.3%	9.6%		36.8%
		positive	Count	2	11	4	12	7	36
			Total %	1.8%	9.6%	3.5%	10.5%	6.1%	31.6%
	Total		Count	19	42	15	29	9	114
			Total %	16.7%	36.8%	13.2%	25.4%	7.9%	100.0%

Feelings today * Attitude influence on service * Retained Crosstabulation

Retained				Attitude influence on service					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	5	3	2	5		15
			Total %	11.6%	7.0%	4.7%	11.6%		34.9%
		neutral	Count	4	4	1	5		14
			Total %	9.3%	9.3%	2.3%	11.6%		32.6%
		positive	Count	1	1	4	6	2	14
			Total %	2.3%	2.3%	9.3%	14.0%	4.7%	32.6%
	Total		Count	10	8	7	16	2	43
			Total %	23.3%	18.6%	16.3%	37.2%	4.7%	100.0%

Item 24

Feelings today * IS Professional committed to customer * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				IS Professional committed to customer					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	1	14	12	19	7	53
			Total %	.7%	9.4%	8.1%	12.8%	4.7%	35.6%
		neutral	Count		3	12	28	9	52
			Total %		2.0%	8.1%	18.8%	6.0%	34.9%
		positive	Count		1	4	24	15	44
			Total %		.7%	2.7%	16.1%	10.1%	29.5%
	Total		Count	1	18	28	71	31	149
			Total %	.7%	12.1%	18.8%	47.7%	20.8%	100.0%

Feelings today * IS professional committed to customer * Displaced Crosstabulation

Displaced				IS professional committed to customer				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	3	1	3	3	10
			Total %	23.1%	7.7%	23.1%	23.1%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count				2	2
			Total %				15.4%	15.4%
	Total		Count	3	1	4	5	13
			Total %	23.1%	7.7%	30.8%	38.5%	100.0%

Feelings today * IS professional committed to customer * Transitioned Crosstabulation

Transitioned				IS professional committed to customer					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	7	10	13	5	36
			Total %	.9%	6.1%	8.8%	11.4%	4.4%	31.6%
		neutral	Count		2	5	27	8	42
			Total %		1.8%	4.4%	23.7%	7.0%	36.8%
		positive	Count			4	20	12	36
			Total %			3.5%	17.5%	10.5%	31.6%
	Total		Count	1	9	19	60	25	114
			Total %	.9%	7.9%	16.7%	52.6%	21.9%	100.0%

Feelings today * IS professional committed to customer * Retained Crosstabulation

Retained				IS professional committed to customer				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	6	3	4	2	15
			Total %	14.0%	7.0%	9.3%	4.7%	34.9%
		neutral	Count	1	6	6	1	14
			Total %	2.3%	14.0%	14.0%	2.3%	32.6%
		positive	Count	1	1	8	4	14
			Total %	2.3%	2.3%	18.6%	9.3%	32.6%
	Total		Count	8	10	18	7	43
			Total %	18.6%	23.3%	41.9%	16.3%	100.0%

Item 25

Feelings today * IS professional committed to employer * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				IS professional committed to employer					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	3	19	23	6	52
			Total %	.7%	2.0%	12.8%	15.5%	4.1%	35.1%
		neutral	Count		1	14	30	7	52
			Total %		.7%	9.5%	20.3%	4.7%	35.1%
		positive	Count			7	23	14	44
			Total %			4.7%	15.5%	9.5%	29.7%
	Total		Count	1	4	40	76	27	148
			Total %	.7%	2.7%	27.0%	51.4%	18.2%	100.0%

Feelings today * IS professional committed to employer * Displaced Crosstabulation

Displaced				IS professional committed to employer				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	2	6	1	10
			Total %	7.7%	15.4%	46.2%	7.7%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count			1	1	2
			Total %			7.7%	7.7%	15.4%
	Total		Count	1	2	8	2	13
			Total %	7.7%	15.4%	61.5%	15.4%	100.0%

Feelings today * IS professional committed to employer * Transitioned Crosstabulation

Transitioned				IS professional committed to employer					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	2	14	14	4	35
			Total %	.9%	1.8%	12.4%	12.4%	3.5%	31.0%
		neutral	Count			8	28	6	42
			Total %			7.1%	24.8%	5.3%	37.2%
		positive	Count			5	20	11	36
			Total %			4.4%	17.7%	9.7%	31.9%
	Total		Count	1	2	27	62	21	113
			Total %	.9%	1.8%	23.9%	54.9%	18.6%	100.0%

Feelings today * IS professional committed to employer * Retained Crosstabulation

Retained				IS professional committed to employer				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count		5	8	2	15
			Total %		11.6%	18.6%	4.7%	34.9%
		neutral	Count	1	6	6	1	14
			Total %	2.3%	14.0%	14.0%	2.3%	32.6%
		positive	Count		4	6	4	14
			Total %		9.3%	14.0%	9.3%	32.6%
	Total		Count	1	15	20	7	43
			Total %	2.3%	34.9%	46.5%	16.3%	100.0%

Item 26

Feelings today * Outsourcing Co committed to welfare * Outsourcing Initiative Crosstabulation

Outsourcing Initial				Outsourcing Co committed to welfare					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	19	23	6	5		53
			Total %	12.8%	15.4%	4.0%	3.4%		35.6%
		neutral	Count	8	20	8	15	1	52
			Total %	5.4%	13.4%	5.4%	10.1%	.7%	34.9%
		positive	Count	2	12	11	16	3	44
			Total %	1.3%	8.1%	7.4%	10.7%	2.0%	29.5%
	Total		Count	29	55	25	36	4	149
			Total %	19.5%	36.9%	16.8%	24.2%	2.7%	100.0%

Feelings today * Outsourcing Co committed to welfare * Displaced Crosstabulation

Displaced				Outsourcing Co committed to welfare				Total
				strongly disagree	disagree	neutral	agree	
yes	Feelings today	negative	Count	3	5		2	10
			Total %	23.1%	38.5%		15.4%	76.9%
		neutral	Count		1			1
			Total %		7.7%			7.7%
		positive	Count		1	1		2
			Total %		7.7%	7.7%		15.4%
	Total		Count	3	7	1	2	13
			Total %	23.1%	53.8%	7.7%	15.4%	100.0%

Feelings today * Outsourcing Co committed to welfare * Transitioned Crosstabulation

Transitioned				Outsourcing Co committed to welfare					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	12	17	2	5		36
			Total %	10.5%	14.9%	1.8%	4.4%		31.6%
		neutral	Count	7	16	8	10	1	42
			Total %	6.1%	14.0%	7.0%	8.8%	.9%	36.8%
		positive	Count		12	9	14	1	36
			Total %		10.5%	7.9%	12.3%	.9%	31.6%
	Total		Count	19	45	19	29	2	114
			Total %	16.7%	39.5%	16.7%	25.4%	1.8%	100.0%

Feelings today * Outsourcing Co committed to welfare * Retained Crosstabulation

Retained				Outsourcing Co committed to welfare					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	5	6	4			15
			Total %	11.6%	14.0%	9.3%			34.9%
		neutral	Count	2	8		4		14
			Total %	4.7%	18.6%		9.3%		32.6%
		positive	Count	2	1	3	6	2	14
			Total %	4.7%	2.3%	7.0%	14.0%	4.7%	32.6%
	Total		Count	9	15	7	10	2	43
			Total %	20.9%	34.9%	16.3%	23.3%	4.7%	100.0%

Item 27

Feelings today * Contracting Co committed to welfare * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Contracting Co committed to welfare					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	15	18	15	5		53
			Total %	10.1%	12.1%	10.1%	3.4%		35.6%
		neutral	Count	6	18	14	14		52
			Total %	4.0%	12.1%	9.4%	9.4%		34.9%
		positive	Count	1	9	10	19	5	44
			Total %	.7%	6.0%	6.7%	12.8%	3.4%	29.5%
	Total		Count	22	45	39	38	5	149
			Total %	14.8%	30.2%	26.2%	25.5%	3.4%	100.0%

Feelings today * Contracting Co committed to welfare * Displaced Crosstabulation

Displaced				Contracting Co committed to welfare				
				strongly disagree	disagree	neutral	agree	Total
yes	Feelings today	negative	Count	1	4	2	3	10
			Total %	7.7%	30.8%	15.4%	23.1%	76.9%
		neutral	Count			1		1
			Total %			7.7%		7.7%
		positive	Count		1		1	2
			Total %		7.7%		7.7%	15.4%
	Total		Count	1	5	3	4	13
			Total %	7.7%	38.5%	23.1%	30.8%	100.0%

Feelings today * Contracting Co committed to welfare * Transitioned Crosstabulation

Transitioned				Contracting Co committed to welfare					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	10	12	11	3		36
			Total %	8.8%	10.5%	9.6%	2.6%		31.6%
		neutral	Count	5	13	12	12		42
			Total %	4.4%	11.4%	10.5%	10.5%		36.8%
		positive	Count		8	9	16	3	36
			Total %		7.0%	7.9%	14.0%	2.6%	31.6%
	Total		Count	15	33	32	31	3	114
			Total %	13.2%	28.9%	28.1%	27.2%	2.6%	100.0%

Feelings today * Contracting Co committed to welfare * Retained Crosstabulation

Retained				Contracting Co committed to welfare					
				strongly disagree	disagree	neutral	agree	strongly agree	Total
yes	Feelings today	negative	Count	4	4	5	2		15
			Total %	9.3%	9.3%	11.6%	4.7%		34.9%
		neutral	Count	1	7	4	2		14
			Total %	2.3%	16.3%	9.3%	4.7%		32.6%
		positive	Count	1	1	4	5	3	14
			Total %	2.3%	2.3%	9.3%	11.6%	7.0%	32.6%
	Total		Count	6	12	13	9	3	43
			Total %	14.0%	27.9%	30.2%	20.9%	7.0%	100.0%

Item 28

Feelings today * Positive attitude of success * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				Positive attitude of success					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	2	21	16	13	1	53
			Total %	1.3%	14.1%	10.7%	8.7%	.7%	35.6%
		neutral	Count		4	14	29	5	52
			Total %		2.7%	9.4%	19.5%	3.4%	34.9%
		positive	Count			4	22	18	44
			Total %			2.7%	14.8%	12.1%	29.5%
	Total		Count	2	25	34	64	24	149
			Total %	1.3%	16.8%	22.8%	43.0%	16.1%	100.0%

Feelings today * Positive attitude of success * Displaced Crosstabulation

Displaced				Positive attitude of success					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	1	5	2	1	10
			Total %	7.7%	7.7%	38.5%	15.4%	7.7%	76.9%
		neutral	Count					1	1
			Total %					7.7%	7.7%
		positive	Count					2	2
			Total %					15.4%	15.4%
	Total		Count	1	1	5	2	4	13
			Total %	7.7%	7.7%	38.5%	15.4%	30.8%	100.0%

Feelings today * Positive attitude of success * Transitioned Crosstabulation

Transitioned				Positive attitude of success					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	14	13	7	1	36
			Total %	.9%	12.3%	11.4%	6.1%	.9%	31.6%
		neutral	Count		4	8	25	5	42
			Total %		3.5%	7.0%	21.9%	4.4%	36.8%
		positive	Count			3	18	15	36
			Total %			2.6%	15.8%	13.2%	31.6%
	Total		Count	1	18	24	50	21	114
			Total %	.9%	15.8%	21.1%	43.9%	18.4%	100.0%

Feelings today * Positive attitude of success * Retained Crosstabulation

Retained				Positive attitude of success				Total
				disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	7	4	4		15
			Total %	16.3%	9.3%	9.3%		34.9%
		neutral	Count		6	6	2	14
			Total %		14.0%	14.0%	4.7%	32.6%
		positive	Count		1	8	5	14
			Total %		2.3%	18.6%	11.6%	32.6%
	Total		Count	7	11	18	7	43
			Total %	16.3%	25.6%	41.9%	16.3%	100.0%

Item 29

Feelings today * communication flow during * Outsourcing Initiative Crosstabulation

Outsourcing Initial				communication flow during					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	7	33	9	4		53
			Total %	4.7%	22.1%	6.0%	2.7%		35.6%
		neutral	Count	6	15	19	12		52
			Total %	4.0%	10.1%	12.8%	8.1%		34.9%
		positive	Count	2	7	13	20	2	44
			Total %	1.3%	4.7%	8.7%	13.4%	1.3%	29.5%
	Total		Count	15	55	41	36	2	149
			Total %	10.1%	36.9%	27.5%	24.2%	1.3%	100.0%

Feelings today * Communication flow during * Displaced Crosstabulation

Displaced				Communication flow during					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	7	1	1		10
			Total %	7.7%	53.8%	7.7%	7.7%		76.9%
		neutral	Count			1			1
			Total %			7.7%			7.7%
		positive	Count				1	1	2
			Total %				7.7%	7.7%	15.4%
	Total		Count	1	7	2	2	1	13
			Total %	7.7%	53.8%	15.4%	15.4%	7.7%	100.0%

Feelings today * Communication flow during * Transitioned Crosstabulation

Transitioned				Communication flow during					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	6	22	5	3		36
			Total %	5.3%	19.3%	4.4%	2.6%		31.6%
		neutral	Count	6	14	13	9		42
			Total %	5.3%	12.3%	11.4%	7.9%		36.8%
		positive	Count	2	6	9	18	1	36
			Total %	1.8%	5.3%	7.9%	15.8%	.9%	31.6%
	Total		Count	14	42	27	30	1	114
			Total %	12.3%	36.8%	23.7%	26.3%	.9%	100.0%

Feelings today * Communication flow during * Retained Crosstabulation

Retained				Communication flow during				Total
				strongly disagree	disagree	neutral	agree	
yes	Feelings today	negative	Count		11	4		15
			Total %		25.6%	9.3%		34.9%
		neutral	Count	1	2	8	3	14
			Total %	2.3%	4.7%	18.6%	7.0%	32.6%
		positive	Count		2	8	4	14
			Total %		4.7%	18.6%	9.3%	32.6%
	Total		Count	1	15	20	7	43
			Total %	2.3%	34.9%	46.5%	16.3%	100.0%

Item 30

Feelings today * communication flow since * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				communication flow since					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	6	27	16	4		53
			Total %	4.0%	18.1%	10.7%	2.7%		35.6%
		neutral	Count	3	12	21	16		52
			Total %	2.0%	8.1%	14.1%	10.7%		34.9%
		positive	Count	1	1	11	24	7	44
			Total %	.7%	.7%	7.4%	16.1%	4.7%	29.5%
	Total		Count	10	40	48	44	7	149
			Total %	6.7%	26.8%	32.2%	29.5%	4.7%	100.0%

Feelings today * Communication flow since * Displaced Crosstabulation

Displaced				Communication flow since					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	1	3	5	1		10
			Total %	7.7%	23.1%	38.5%	7.7%		76.9%
		neutral	Count				1		1
			Total %				7.7%		7.7%
		positive	Count					2	2
			Total %					15.4%	15.4%
	Total		Count	1	3	5	2	2	13
			Total %	7.7%	23.1%	38.5%	15.4%	15.4%	100.0%

Feelings today * Communication flow since * Transitioned Crosstabulation

Transitioned				Communication flow since					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	4	20	11	1		36
			Total %	3.5%	17.5%	9.6%	.9%		31.6%
		neutral	Count	3	9	15	15		42
			Total %	2.6%	7.9%	13.2%	13.2%		36.8%
		positive	Count	1		8	21	6	36
			Total %	.9%		7.0%	18.4%	5.3%	31.6%
	Total		Count	8	29	34	37	6	114
			Total %	7.0%	25.4%	29.8%	32.5%	5.3%	100.0%

Feelings today * Communication flow since * Retained Crosstabulation

Retained				Communication flow since				Total
				strongly disagree	disagree	neutral	agree	
yes	Feelings today	negative	Count	1	5	7	2	15
			Total %	2.3%	11.6%	16.3%	4.7%	34.9%
		neutral	Count		4	6	4	14
			Total %		9.3%	14.0%	9.3%	32.6%
		positive	Count		1	4	9	14
			Total %		2.3%	9.3%	20.9%	32.6%
	Total		Count	1	10	17	15	43
			Total %	2.3%	23.3%	39.5%	34.9%	100.0%

Item 31

Feelings today * positive career advancement * Outsourcing Initiative Crosstabulation

Outsourcing Initiat				positive career advancement					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	13	21	12	6		52
			Total %	**8.8%**	**14.3%**	**8.2%**	**4.1%**		**35.4%**
		neutral	Count	4	3	23	19	2	51
			Total %	**2.7%**	**2.0%**	**15.6%**	**12.9%**	**1.4%**	**34.7%**
		positive	Count		2	2	23	17	44
			Total %		**1.4%**	**1.4%**	**15.6%**	**11.6%**	**29.9%**
	Total		Count	17	26	37	48	19	147
			Total %	**11.6%**	**17.7%**	**25.2%**	**32.7%**	**12.9%**	**100.0%**

Feelings today * Positive career advancement * Displaced Crosstabulation

Displaced				Positive career advancement					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	2	3	2	2		9
			Total %	**16.7%**	**25.0%**	**16.7%**	**16.7%**		**75.0%**
		neutral	Count			1			1
			Total %			**8.3%**			**8.3%**
		positive	Count				1	1	2
			Total %				**8.3%**	**8.3%**	**16.7%**
	Total		Count	2	3	3	3	1	12
			Total %	**16.7%**	**25.0%**	**25.0%**	**25.0%**	**8.3%**	**100.0%**

Feelings today * Positive career advancement * Transitioned Crosstabulation

Transitioned				Positive career advancement					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	9	17	6	4		36
			Total %	**7.9%**	**14.9%**	**5.3%**	**3.5%**		**31.6%**
		neutral	Count	4	3	19	14	2	42
			Total %	**3.5%**	**2.6%**	**16.7%**	**12.3%**	**1.8%**	**36.8%**
		positive	Count		2	1	20	13	36
			Total %		**1.8%**	**.9%**	**17.5%**	**11.4%**	**31.6%**
	Total		Count	13	22	26	38	15	114
			Total %	**11.4%**	**19.3%**	**22.8%**	**33.3%**	**13.2%**	**100.0%**

Feelings today * Positive career advancement * Retained Crosstabulation

Retained				Positive career advancement					Total
				strongly disagree	disagree	neutral	agree	strongly agree	
yes	Feelings today	negative	Count	4	4	5	2		15
			Total %	9.5%	9.5%	11.9%	4.8%		35.7%
		neutral	Count	1		5	6	1	13
			Total %	2.4%		11.9%	14.3%	2.4%	31.0%
		positive	Count			1	7	6	14
			Total %			2.4%	16.7%	14.3%	33.3%
	Total		Count	5	4	11	15	7	42
			Total %	11.9%	9.5%	26.2%	35.7%	16.7%	100.0%

Item 32

Outsource Initiative * Who to receive comm from #1 Crosstabulation

			Who to receive comm from #1						Total
			chief executive	S executive	department head	immediate supervisor	HR spokesperson	other (specify)	
Outsource Initiative	yes	Count	13	7	36	80	6	8	150
		Total %	6.5%	3.5%	17.9%	39.8%	3.0%	4.0%	74.6%
	no	Count	4	4	14	27	2		51
		Total %	2.0%	2.0%	7.0%	13.4%	1.0%		25.4%
Total		Count	17	11	50	107	8	8	201
		Total %	8.5%	5.5%	24.9%	53.2%	4.0%	4.0%	100.0%

Outsource Initiative * Who to receive comm from #1 Crosstabulation

			Who to receive comm from #1						Total
			chief executive	S executive	department head	immediate supervisor	HR spokesperson	other (specify)	
Outsource Initiat	yes	Count	13	7	36	80	6	8	150
		Total %	8.7%	4.7%	24.0%	53.3%	4.0%	5.3%	100.0%
Total		Count	13	7	36	80	6	8	150
		Total %	8.7%	4.7%	24.0%	53.3%	4.0%	5.3%	100.0%

Transitioned * Who to receive comm from #1 Crosstabulation

		Who to receive comm from #1						
		chief executive	S executive	department head	immediate supervisor	HR spokesperson	other (specify)	Total
Transitioned yes	Count	10	4	24	68	3	6	115
	Total %	8.7%	3.5%	20.9%	59.1%	2.6%	5.2%	100.0%
Total	Count	10	4	24	68	3	6	115
	Total %	8.7%	3.5%	20.9%	59.1%	2.6%	5.2%	100.0%

Retained * Who to receive comm from #1 Crosstabulation

		Who to receive comm from #1						
		chief executive	S executive	department head	immediate supervisor	HR spokesperson	other (specify)	Total
Retained yes	Count	5	2	14	18	2	2	43
	Total %	11.6%	4.7%	32.6%	41.9%	4.7%	4.7%	100.0%
Total	Count	5	2	14	18	2	2	43
	Total %	11.6%	4.7%	32.6%	41.9%	4.7%	4.7%	100.0%

Item 33

Outsource Initiative * Mgmt Withhold Info Crosstabulation

			Mgmt Withhold Info		
			yes	no	Total
Outsource Initiative	yes	Count	46	102	148
		Total %	23.1%	51.3%	74.4%
	no	Count	15	36	51
		Total %	7.5%	18.1%	25.6%
Total		Count	61	138	199
		Total %	30.7%	69.3%	100.0%

Outsource Initiative * Mgmt Withhold Info Crosstabulation

			Mgmt Withhold Info		
			yes	no	Total
Outsource Initiative	yes	Count	46	102	148
		Total %	31.1%	68.9%	100.0%
Total		Count	46	102	148
		Total %	31.1%	68.9%	100.0%

Transitioned * Mgmt Withhold Info Crosstabulation

			Mgmt Withhold Info		
			yes	no	Total
Transitioned	yes	Count	37	76	113
		Total %	32.7%	67.3%	100.0%
Total		Count	37	76	113
		Total %	32.7%	67.3%	100.0%

Retained * Mgmt Withhold Info Crosstabulation

			Mgmt Withhold Info		
			yes	no	Total
Retained	yes	Count	15	28	43
		Total %	34.9%	65.1%	100.0%
Total		Count	15	28	43
		Total %	34.9%	65.1%	100.0%

Item 34

Outsource Initiative * Time to make decision Crosstabulation

			Time to make decision					
			1 week	2 weeks	1 month	2 months	other (specify)	Total
Outsource Initiative	yes	Count	4	44	67	33	2	150
		Total %	2.0%	21.9%	33.3%	16.4%	1.0%	74.6%
	no	Count	4	16	19	11	1	51
		Total %	2.0%	8.0%	9.5%	5.5%	.5%	25.4%
Total		Count	8	60	86	44	3	201
		Total %	4.0%	29.9%	42.8%	21.9%	1.5%	100.0%

Outsource Initiative * Time to make decision Crosstabulation

			Time to make decision					
			1 week	2 weeks	1 month	2 months	other (specify)	Total
Outsource Initiative	yes	Count	4	44	67	33	2	150
		Total %	2.7%	29.3%	44.7%	22.0%	1.3%	100.0%
Total		Count	4	44	67	33	2	150
		Total %	2.7%	29.3%	44.7%	22.0%	1.3%	100.0%

Transitioned * Time to make decision Crosstabulation

			Time to make decision					Total
			1 week	2 weeks	1 month	2 months	other (specify)	
Transitioned	yes	Count	3	35	53	23	1	115
		Total %	2.6%	30.4%	46.1%	20.0%	.9%	100.0%
Total		Count	3	35	53	23	1	115
		Total %	2.6%	30.4%	46.1%	20.0%	.9%	100.0%

Retained * Time to make decision Crosstabulation

			Time to make decision				Total
			1 week	2 weeks	1 month	2 months	
Retained	yes	Count	1	13	20	9	43
		Total %	2.3%	30.2%	46.5%	20.9%	100.0%
Total		Count	1	13	20	9	43
		Total %	2.3%	30.2%	46.5%	20.9%	100.0%

Item 35

Outsource Initiative * Most Compelling reason to outsource Crosstabulation

			Most Compelling reason to outsource			Total
			strategic benefits	cost benefits	other (specify)	
Outsource Initiative	yes	Count	53	89	7	149
		Total %	26.5%	44.5%	3.5%	74.5%
	no	Count	10	38	3	51
		Total %	5.0%	19.0%	1.5%	25.5%
Total		Count	63	127	10	200
		Total %	31.5%	63.5%	5.0%	100.0%

Outsource Initiative * Most Compelling reason to outsource Crosstabulation

			Most Compelling reason to outsource			Total
			strategic benefits	cost benefits	other (specify)	
Outsource Initiative	yes	Count	53	89	7	149
		Total %	35.6%	59.7%	4.7%	100.0%
Total		Count	53	89	7	149
		Total %	35.6%	59.7%	4.7%	100.0%

Transitioned * Most Compelling reason to outsource Crosstabulation

			Most Compelling reason to outsource			
			strategic benefits	cost benefits	other (specify)	Total
Transitioned	yes	Count	41	66	7	114
		Total %	36.0%	57.9%	6.1%	100.0%
Total		Count	41	66	7	114
		Total %	36.0%	57.9%	6.1%	100.0%

Retained * Most Compelling reason to outsource Crosstabulation

			Most Compelling reason to outsource			
			strategic benefits	cost benefits	other (specify)	Total
Retained	yes	Count	18	24	1	43
		Total %	41.9%	55.8%	2.3%	100.0%
Total		Count	18	24	1	43
		Total %	41.9%	55.8%	2.3%	100.0%

Percentage Totals - Survey items 14 through 31 from crosstab tables above

Item	How Affected	% Negative	% Neutral	% Positive
14	Transitioned	56.6	23.9	19.5
	Retained	40.5	28.6	31.0
15	Transitioned	31.6	36.8	31.6
	Retained	34.9	32.6	32.6

Item	How Affected	% Disagree*	% Neutral	% Agree*
16	Transitioned	17.6	18.4	64.0
	Retained	18.6	18.6	62.8
17	Transitioned	29.0	34.2	36.9
	Retained	27.9	32.6	39.5
18	Transitioned	37.7	34.2	28.1
	Retained	48.9	37.2	14.0
19	Transitioned	24.5	37.7	37.8
	Retained	32.6	32.6	34.9
20	Transitioned	28.1	21.1	50.9
	Retained	38.1	16.7	45.2
21	Transitioned	24.8	14.2	61.0
	Retained	23.3	18.6	58.2
22	Transitioned	26.8	20.5	52.7
	Retained	23.3	16.3	60.5
23	Transitioned	53.1	13.3	33.7
	Retained	41.9	16.3	41.9
24	Transitioned	8.8	16.7	74.5
	Retained	18.6	23.3	58.2
25	Transitioned	2.7	23.9	73.5
	Retained	2.3	34.9	62.8
26	Transitioned	56.2	16.7	27.2
	Retained	55.8	16.3	28.0
27	Transitioned	42.1	28.1	29.8
	Retained	41.9	30.2	27.9
28	Transitioned	16.7	21.1	62.3
	Retained	16.3	25.6	58.2
29	Transitioned	49.1	23.7	27.2
	Retained	37.3	46.5	16.3
30	Transitioned	32.4	29.8	37.8
	Retained	25.6	39.5	34.9

Item	How Affected	% Disagree*	% Neutral	% Agree*
31	Transitioned	30.7	22.8	46.5
	Retained	21.4	26.2	52.4

*** Disagree=Strongly Disagree + Disagree**
Agree = Strongly Agree + Agree

I. Statistics (Crosstabs – Feelings During Outsourcing vs. Feelings Today)

Outsource Initiative * Feelings today * Feelings during Crosstabulation

Feelings during			Feelings today			Total
			negative	neutral	positive	
negative	Outsource Initiative yes	Count	46	21	13	80
		Total %	57.5%	26.3%	16.3%	100.0%
	Total	Count	46	21	13	80
		Total %	57.5%	26.3%	16.3%	100.0%
neutral	Outsource Initiative yes	Count	4	20	15	39
		Total %	10.3%	51.3%	38.5%	100.0%
	Total	Count	4	20	15	39
		Total %	10.3%	51.3%	38.5%	100.0%
positive	Outsource Initiative yes	Count	1	11	16	28
		Total %	3.6%	39.3%	57.1%	100.0%
	Total	Count	1	11	16	28
		Total %	3.6%	39.3%	57.1%	100.0%

Outsource Initiative * Feelings during Crosstabulation

		Feelings during			Total
		negative	neutral	positive	
Outsource Initiative yes	Count	80	39	28	147
	Total %	54.4%	26.5%	19.0%	100.0%
Total	Count	80	39	28	147
	Total %	54.4%	26.5%	19.0%	100.0%

Outsource Initiative * Feelings today Crosstabulation

		Feelings today			Total
		negative	neutral	positive	
Outsource Initiative yes	Count	53	52	44	149
	Total %	35.6%	34.9%	29.5%	100.0%
Total	Count	53	52	44	149
	Total %	35.6%	34.9%	29.5%	100.0%

Displaced * Feelings today * Feelings during Crosstabulation

Feelings during				Feelings today			Total
				negative	neutral	positive	
negative	Displaced	yes	Count	10			10
			Total %	**100.0%**			**100.0%**
	Total		Count	**10**			**10**
			Total %	**100.0%**			**100.0%**
neutral	Displaced	yes	Count		1	1	2
			Total %		**50.0%**	**50.0%**	**100.0%**
	Total		Count		**1**	**1**	**2**
			Total %		**50.0%**	**50.0%**	**100.0%**
positive	Displaced	yes	Count			1	1
			Total %			**100.0%**	**100.0%**
	Total		Count			**1**	**1**
			Total %			**100.0%**	**100.0%**

Displaced * Feelings during Crosstabulation

			Feelings during			Total
			negative	neutral	positive	
Displaced	yes	Count	10	2	1	13
		Total %	**76.9%**	**15.4%**	**7.7%**	**100.0%**
Total		Count	**10**	**2**	**1**	**13**
		Total %	**76.9%**	**15.4%**	**7.7%**	**100.0%**

Displaced * Feelings today Crosstabulation

			Feelings today			Total
			negative	neutral	positive	
Displaced	yes	Count	10	1	2	13
		Total %	**76.9%**	**7.7%**	**15.4%**	**100.0%**
Total		Count	**10**	**1**	**2**	**13**
		Total %	**76.9%**	**7.7%**	**15.4%**	**100.0%**

Transitioned * Feelings today * Feelings during Crosstabulation

Feelings during				Feelings today			Total
				negative	neutral	positive	
negative	Transitioned	yes	Count	32	20	12	64
			Total %	50.0%	31.3%	18.8%	100.0%
	Total		Count	32	20	12	64
			Total %	50.0%	31.3%	18.8%	100.0%
neutral	Transitioned	yes	Count	2	14	11	27
			Total %	7.4%	51.9%	40.7%	100.0%
	Total		Count	2	14	11	27
			Total %	7.4%	51.9%	40.7%	100.0%
positive	Transitioned	yes	Count	1	8	13	22
			Total %	4.5%	36.4%	59.1%	100.0%
	Total		Count	1	8	13	22
			Total %	4.5%	36.4%	59.1%	100.0%

Transitioned * Feelings during Crosstabulation

			Feelings during			Total
			negative	neutral	positive	
Transitioned	yes	Count	64	27	22	113
		Total %	56.6%	23.9%	19.5%	100.0%
Total		Count	64	27	22	113
		Total %	56.6%	23.9%	19.5%	100.0%

Transitioned * Feelings today Crosstabulation

			Feelings today			Total
			negative	neutral	positive	
Transitioned	yes	Count	36	42	36	114
		Total %	31.6%	36.8%	31.6%	100.0%
Total		Count	36	42	36	114
		Total %	31.6%	36.8%	31.6%	100.0%

Retained * Feelings today * Feelings during Crosstabulation

Feelings during				Feelings today			Total
				negative	neutral	positive	
negative	Retained	yes	Count	13	3	1	17
			Total %	**76.5%**	**17.6%**	**5.9%**	**100.0%**
	Total		Count	13	3	1	17
			Total %	**76.5%**	**17.6%**	**5.9%**	**100.0%**
neutral	Retained	yes	Count	1	7	4	12
			Total %	**8.3%**	**58.3%**	**33.3%**	**100.0%**
	Total		Count	1	7	4	12
			Total %	**8.3%**	**58.3%**	**33.3%**	**100.0%**
positive	Retained	yes	Count		4	9	13
			Total %		**30.8%**	**69.2%**	**100.0%**
	Total		Count		4	9	13
			Total %		**30.8%**	**69.2%**	**100.0%**

Retained * Feelings during Crosstabulation

			Feelings during			Total
			negative	neutral	positive	
Retained	yes	Count	17	12	13	42
		Total %	**40.5%**	**28.6%**	**31.0%**	**100.0%**
Total		Count	17	12	13	42
		Total %	**40.5%**	**28.6%**	**31.0%**	**100.0%**

Retained * Feelings today Crosstabulation

			Feelings today			Total
			negative	neutral	positive	
Retained	yes	Count	15	14	14	43
		Total %	**34.9%**	**32.6%**	**32.6%**	**100.0%**
Total		Count	15	14	14	43
		Total %	**34.9%**	**32.6%**	**32.6%**	**100.0%**

J. Statistics (Independent Samples *t*-Test of Hypotheses)

Syntax used:

```
T-TEST
GROUPS=how_out(2 3)
 /MISSING=ANALYSIS
 /VARIABLES=hypX*
 /CRITERIA=CIN(.95) .
```

*X = number of hypothesis tested (variable name assigned to for each 'varstocases' item)

Group statistics

Hypothesis	How Affected	N	Mean	Std. Deviation	Std. Error Mean
1	Transitioned	1644	3.12	1.142	.028
	Retained	462	3.01	1.077	.050
2	Transitioned	309	2.91	1.163	.066
	Retained	87	2.79	1.192	.128
3	Transitioned	1027	3.05	1.130	.035
	Retained	288	2.95	1.102	.065
4	Transitioned	206	2.80	1.072	.075
	Retained	58	2.81	.736	.097
Employee Attitude	Transitioned	411	3.45	1.133	.056
	Retained	116	3.27	1.122	.104

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
Hypothesis	Assumed Variance	F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	Lower	Upper
1	Equal var. assumed	9.527	.002	1.875	2104	.061	.11	.259	-.005	.228
	Equal var. not assumed			1.938	776.716	.053	.11	.057	-.001	.224
2	Equal var. assumed	.099	.753	.797	394	.426	.11	.142	-.166	.392
	Equal var. not assumed			.785	135.485	.434	.11	.144	-.172	.398

Hypothesis	Assumed Variance	Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Lower	Upper
3	Equal var. assumed	.293	.588	1.422	1313	.155	.11	.075	-.040	.254
	Equal var. not assumed			1.433	470.075	.150	.11	.074	-.039	.252
4	Equal var. assumed	17.465	.000	-.095	262	9.24	-.01	.150	-.309	.281
	Equal var. not assumed			-.116	132.167	.907	-.01	.122	-.256	.227
Employee Attitude	Equal var. assumed	.075	.676	1.580	525	.115	.19	.119	-.046	.421
	Equal var. not assumed			1.588	186.362	.114	.19	.118	-.045	.421

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