

Lynn University

SPIRAL

Student Theses, Dissertations, Portfolios and
Projects

Theses and Dissertations Collections

11-18-2008

Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations

Yoram Benit
Lynn University

Follow this and additional works at: <https://spiral.lynn.edu/etds>



Part of the [International Business Commons](#), and the [Strategic Management Policy Commons](#)

Recommended Citation

Benit, Yoram, "Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations" (2008). *Student Theses, Dissertations, Portfolios and Projects*. 284.
<https://spiral.lynn.edu/etds/284>

This Dissertation is brought to you for free and open access by the Theses and Dissertations Collections at SPIRAL. It has been accepted for inclusion in Student Theses, Dissertations, Portfolios and Projects by an authorized administrator of SPIRAL. For more information, please contact liadarola@lynn.edu.

**Impact of Offshore Outsourcing on Competitive Advantage of
U.S. Multinational Corporations**

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Lynn University

By

Yoram Benit

Lynn University

2008

Order Number: _____

**Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational
Corporations**

Yoram Benit

Lynn University, 2008

Copyright 2008, by Yoram Benit. All Rights Reserved

U.M.I.
300 N. Zeeb Road
Ann Arbor, MI 48106

Lynn Library
Lynn University
Boca Raton, FL 33431

Abstract

Offshore outsourcing became a common business practice by most U.S. and Western businesses after the Internet became viable. It is expected that by 2015 the U.S. market will outsource 3.3 million employment opportunities and will pay an estimated \$136 billion in salaries to Asian countries (Hemphill, 2004). Outsourcing became a necessity for corporations to reduce cost and maintain competitiveness in the marketplace, but its effectiveness in achieving superior performance and competitive advantage needs to be explored.

The relationship among offshore outsourcing, market freedom, and competitive advantage is an important issue for multinational corporations to conduct business and gain competitive advantage. National culture is also a component of the analysis based upon the role that cultural perceptions play in the cultivation of relationships with foreign nationals and representative companies. The critical analysis of theoretical and empirical literature explored the factors influencing competitive advantage, investigated the impact of offshore outsourcing on competitive advantage, and identified future areas of scholarly inquiry. This literature indicated that U.S. multinational corporations use offshore outsourcing as part of their strategy to establish competitive advantages and better performance. Sources used in this paper focus predominantly on the theoretical, empirical, and historical literature relating to offshoring and outsourcing. This dissertation focuses on U.S. multinational corporations, and discusses the relationship among offshore outsourcing, national culture, market freedom and competitive advantage.

The review of the literature suggests a strong level of ambiguity within the initial data. The ambiguity is the result of themes within the literature that contain contradictory subject matter, as well as conflict over how and why specific information is relevant to competitive advantage within the offshore outsourcing process. Problems of ambiguity are further exacerbated in respect to the research methodology used to approach these areas of research. Conflicting results are suggestive of flawed decision-making strategies (such as confusion of terms and limitations on the criteria concerning offshoring and outsourcing) used within the research methodology. It is also indicative of problems in isolating themes that are best applicable to these processes. Of note are problems in the empirical literature in which researchers presented conflicting opinions regarding successful application of offshore outsourcing. This indicates that increased inquiry is required into the study of offshore outsourcing to identify the themes within the literature, and to assess the overall impact of these processes on competitive advantage.

The analysis of variance and simple regression results used in this dissertation indicated that offshore outsourcing has no significant impact on competitive advantage. However, a positive relationship does exist. Market freedom factors and multinational corporations' offshore outsourcings are significant variables of the competitive advantage of multinational corporations. The study indicated that an increase of one unit in market freedom in China will result in an increase of competitive advantage by .37 units. Similarly, a one unit increase in market freedom in India will result in an increase of competitive advantage by .45 units.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
LIST OF TABLES	viii
LIST OF FIGUERS	ix
CHAPTER I INTRODUCTION	1
Introduction to the Literature Review	1
Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations : An Overview and Purpose	1
Organization of the Review, Scope, and Library Research Plan	7
Organization of the Review	7
Scope and Context	11
Library Research Plan and Strategy	11
Interest, Significance, and Rationale for the Critical Analysis	12
CHAPTER II REVIEW OF LITERATURE, THEORETICAL FRAMEWORK, RESEARCH QUESTIONS, AND HYPOTHESES	14
Review of the Literature About the Impact of Offshore Outsourcing on the Competitive Advantage of U.S. Multinational Corporations	14
Multinational Corporations	14
Competitive Advantage	15
Historical Background	15
Porter's Competitive Advantage of Nations	18
Theory of Competitive Advantage	22
Tseng's Multinational Corporation Global Strategy Model of Knowledge Transfer	24
Measurement of Competitive Advantage	29
Offshore Outsourcing	33
Overview and History	33
Babu's Offshore Management and Execution Models	35
CAPS and A. T. Kearny, Inc.: Strategic Offshore Outsourcing Processing Model	37
Type of Contract, Offshore Outsourcing, and Competitive Advantage	42
Assessment Measures of Offshore Outsourcing	46
Offshore Outsourcing and Competitive Advantage: Empirical Studies	49
National Culture, Outsourcing, and Competitive Advantage	52
Overview	52
Hofstede's Cultural Dimensions Model	54
Measurement of Hofstede's Cultural Dimensions of Nations	58

TABLE OF CONTENTS

(Continued)

	Page
Empirical Studies: National Culture, Outsourcing, and Competitive Advantage	60
Market Freedom, Home and Host Countries Regulations, and Legal Factors in Offshore Outsourcing	63
Political Relations and Offshore Outsourcing	63
The Impact of Regulations on the U.S. and the Offshore Outsourced Service Provider	65
Offshore Outsourcing: Legal Risks	66
Empirical Studies: Home Country Decision Factors of Offshore Outsourcing	68
Discussion of the Literature	71
Summary and Interpretations	71
Theoretical Literature	72
Empirical Literature	79
Conclusions	89
Recommendations	90
Theoretical Reformulations	94
Critical or Analytic Reviews	94
Empirical Studies	94
Methodological Studies	95
Research Questions	97
Research Hypotheses	97
Hypothesized Model	98
CHAPTER III METHODOLOGY	102
Research Design	102
Population and Sampling Plan	104
Instrumentation	107
Procedures: Ethical Considerations and Data Collection Methods	110
Methods of Data Analysis	111
Evaluation of Research Methods	119
Conclusion	120
CHAPTER IV RESULTS AND FINDINGS	122
Descriptive Statistics	122
Reliability Analysis	125
Analysis of Variance and Regression Analysis	129
Summary of Findings	140

TABLE OF CONTENTS

(Continued)

	Page
CHAPTER V DISCUSSION	142
Interpretations	143
Practical Implications	152
Conclusions	154
Limitations	155
Recommendations for Future Study	156
REFERENCES	158
BIBLIOGRAPHY	165
APPENDIX	168
Appendix A: Survey Instrument	168
Appendix B: Permission Letter from Dr. Anandavism Gopal	176
Appendix C: Permission Letter from Dr. Joao Pedro Couto	184
Appendix D: SurveyMonkey Security Policy	188
Appendix E: Institutional Review Board Approval	191
Appendix F: Curriculum Vitae	193

LIST OF TABLES

Number		Page
4-1	Descriptive Statistics for Demographic Characteristics	123
4-2	Descriptive Statistics for Market Freedom Variable	125
4-3	Reliability Analysis for Competitive Advantage	126
4-4	Reliability Analysis for Independent Variables	127
4-5	Measures of Central Tendency for Constructed Variables	129
4-6	Correlations Results for Independent Variables	130
4-7	Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing	131
4-8	Simple Regression Results for Competitive Advantage with Offshore Outsourcing	132
4-9	Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and Type of Contract	133
4-10	Simple Regression Results for Competitive Advantage with Offshore Outsourcing and Type of Contract	134
4-11	Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and National Culture	136
4-12	Simple Regression Results for Competitive Advantage with Offshore Outsourcing and National Culture	137
4-13	Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and Market Freedom	139
4-14	Simple Regression Results for Competitive Advantage with Offshore Outsourcing and Market Freedom	140

LIST OF FIGURES

Number		Page
1-1	Integrative model demonstrating the impact of offshore outsourcing on competitive advantage.	10
2-2	Hypothesized model	100

CHAPTER I INTRODUCTION

Introduction to the Literature Review

Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations: An Overview and Purpose

Offshore outsourcing became a common practice by most U.S. and Western corporations after the Internet became viable (Hemphill, 2004). It is expected that by 2015 the U.S. market will outsource 3.3 million employment opportunities and will pay \$136 billion in salaries (Hemphill, 2004). Outsourcing, which manifests in both the transfer of employment and production responsibilities, has become a necessity for corporations to reduce cost, to focus on core business and maintain competitiveness in the marketplace, but its effectiveness in achieving revenue goals needs to be explored.

In the United States, there are many companies, stakeholders within companies, the general public, and representatives from the government who are concerned about preserving jobs in the domestic economy. It is believed that the loss of employment and production revenues will have negative repercussions on the economic growth of the United States and may cause ripple effects throughout local, state, and national economies (Prestowitz, 2004). There are also concerns about the loss of incentives for technological advantage and cultivation of ingenuity within domestic corporations if much of the labor and production is outsourced overseas (Hemphill, 2004). Some argue that if these losses were to occur, the brand name identity of U.S. companies would suffer; also, the competitiveness of U.S. firms in respect to effective management of productivity, strategy, and creativity would likewise decrease (Hemphill, 2004; Prestowitz, 2004).

In spite of these concerns, the economic incentives for companies to outsource employment and production to other countries still encourage these practices to continue. Outsourcing has also occurred within Information Technology (IT), and has subsequently become part of the strategy of most American and Western European corporations.

The advantages and disadvantages of offshore outsourcing require examination. On the one hand, it is argued that offshore outsourcing promotes the status of the U.S. multinational corporation in the sense that economic stability is improved, thus enabling the organization to concentrate on new areas of research and development. Similarly, it is argued that the multinational corporation has obligations to its stockholders that demand the multinational corporation achieves specific financial goals, and that offshore outsourcing facilitates these processes (Chase, Jacobs, & Aquiliano, 2005). Conversely, arguments against offshore outsourcing include loss of economic stability through reducing employment opportunities and removing the earned income to employees, as well as considerations such as regulatory outcomes (e.g. tariffs and trade) and problems that defy quantification in the areas of ingenuity (Hemphill, 2004). This last point – that of lost capital through reducing the focus on ingenuity within a specific corporation – refers to the loss of incentive to work on new projects, and thus cannot be effectively evaluated or measured as it is a theoretical outcome as opposed to an actual outcome and falls outside of the assessment models used to determine economic performance. An exploration of themes present within the literature review explored these issues and provided increased focus on the areas of discussion in which the offshore outsourcing of both employment and production impacts the economic performance of the United States.

Definition of Terms

Theoretical Definitions

The following are key terms that are important to the research process. The definitions have been derived from the literature on offshore outsourcing.

A multinational corporation was defined in 1992 by Dunning “as any company, which owns, controls and manages income generating assets in more than one country” (as cited in Zekos, 2005, pg. 52, para. 3).

Competitive advantage, “occurs when businesses seeking advantage are exhorted to develop distinctive competences and manage for lowest delivered cost or differentiation through superior customer value. The promised payoff is market share dominance and profitability above average for the industry” (Day & Wensley, 1998, p. 1).

Outsourcing, “occurs when an organization transfers some of its tasks to an outside supplier” (Gnuschke, Wallace, Wilsow & Smith., 2004, pg. 1, para. 3).

Offshore outsourcing “occurs when these tasks are transferred to other countries. Offshore outsourcing may involve the utilization of offshore facilities and labor for the importation of goods and services into the U.S.” (Gnuschke et al., 2004, pg. 1, para. 3).

National culture “is the collective programming of the human mind that distinguishes the members of one human group from those of another. Culture in this sense is a system of collectively held values” (Brown, 1995, para. 1).

Power distance is "defined as the level of acceptance of an uneven distribution of power in the society” (Couto & Vieira, 2004, p. 20).

Individualism “is defined as the importance of the individual as compared with

collective goals and efforts” (Couto & Vieira, 2004, p. 20).

Masculinity is defined as “the level of assertiveness that is promoted in the national culture by either gender” (Couto & Vieira, 2004, p. 20).

Uncertainty avoidance "is related to the level of uncertainty with regards to future events that people from a specific national culture are willing to accept” (Couto & Vieira, 2004, p. 20-21).

Market freedom is “the degree of economic freedom and economic growth. Quite simply, when entrepreneurs are unfettered by regulation or high taxes, they are more likely to design and produce better mousetraps. When the government owns the factors of production, imposes high taxes, or tightly regulates output, there is little opportunity or incentive to design better product or pursue new technology” (Schiller, 2003, p. 36).

Industry is “the basis of firms that compete for the same customers, and not merely of firms that produce similar products” (Friese, 2005, p. 3).

Types of industries involved in outsourcing include “manufacturing, process industries and services” (Monczka et al., 2005, p.33).

Time and material contract is defined as a “hybrid type of contractual arrangement that contains aspects of both cost-reimbursable and fixed-price-type arrangements” (Wideman, 2002, para. 10). The variables used to assess arrangements of this nature are assigned through numeric values attached to exchange of resources (e.g. time, price of materials, etc.) and also agreed-upon standards for payment based upon the criteria of the labor involved (e.g. benchmarks of performance met within a specific degree of time, etc.).

Fixed price contract is “a fixed total price for a well-defined product. Fixed-price

contracts may also include incentives for meeting or exceeding selected project objectives, such as schedule targets” (Wideman, 2002, para. 8).

Operational Definition

MNC competitive advantage is measured by cost, time to market, and market share.

National culture of host country is measured by masculinity, individualism, power distance, confucianism, and uncertainty avoidance.

Type of contract is measured by time and material contract and fixed cost contract.

MNC offshore outsourcing is measured by the degree of investment in offshore outsourcing.

Market freedom scores were obtained from the Heritage Foundation website and were used to measure the impact on MNCs competitive advantage.

In this study offshore outsourcing is the independent variable. The outcome (dependent variable) is competitive advantage of U.S. multinational corporations. National culture of the host country is the contextual variable. The intervening variable is market freedom. Finally, type of contract is the mediating variable.

Research Topic and Questions

The topic area of the impact of offshore outsourcing on competitive advantage of U.S. multinational corporations was identified because of the increasing global economy and the massive jobs that are outsourced from the U.S. to non-expensive labor countries. It is theorized that continued loss of employment and production through offshore outsourcing will decrease the incentives that U.S. multinational corporations have to

invest in Research and Development (R&D). As a result, it is theorized that by 2015 U.S. multinational corporations might lose the technological advantage and their brand-name advantage due to loss of ingenuity generated through creative jobs. However, much of the literature that endorses offshore outsourcing suggests that the converse is true; the U.S. multinational corporation will be able to focus extensively on ongoing R&D due to improved productivity through offshore outsourcing. It was necessary to examine the literature on offshore outsourcing to demonstrate why this is not the case. Doing so helped provide a coherent, succinct argument against offshore outsourcing due not only to the quantifiable loss of economic revenue through displacement of jobs and production, but also helped to define and describe why the non-quantifiable outcomes found within loss of ingenuity should be targeted as serious threats to the long-term stability of the multinational corporation itself.

Some questions that were answered through this critical analysis of the literature are:

1. What are the key theories and models about outsourcing, offshore outsourcing, and competitive advantage?
2. What are the main factors causing outsourcing?
3. What are the opportunities, threats, strengths and weaknesses for multinational corporations when outsourcing?
4. What factors contribute to the success or failure of offshore outsourcing?
5. What are the patterns and trends in offshore outsourcing, including types of jobs, countries, industry, services and products?

6. In what ways do intervening (market freedom), contextual (national culture of the host country), and mediating (type of contract) variables influence the relationship between offshore outsourcing and competitive advantage of U.S. multinational corporations?

The review of the literature on offshore outsourcing identifies the factors that lead multinational corporations to outsource production and employment, and the way it impacts their competitive advantage. In recent years companies were able to reduce cost and increase revenue through outsourcing. Companies that do not outsource may not be able to compete, and are being forced to outsource or lose the business. Offshore outsourcing might continuously impact the U.S. employment rate in the coming years. In the last four years two million employees in the U.S. lost their jobs as a result of offshore outsourcing (Gnuschke et al., 2004). It is expected that by 2015, 3.3 million jobs will be outsourced from the U.S. It is recommended by some authors that it is necessary for the government to put regulations in place (similar to tariffs) to regulate certain types and amount of jobs to be outsourced (Gnuschke et al., 2004). The purpose of this review was to analyze critically the theoretical and empirical literature about the impact of offshore outsourcing on competitive advantage of U.S. multinational corporations, and to identify areas of future scholarly inquiry.

Organization of the Review, Scope, and Library Research Plan

Organization of the Review

A literature map (Figure 1-1) was used to guide the library search of this review on theoretical and empirical literature on the impact of offshore outsourcing on

competitive advantage of U.S. multinational corporations. The map shows a pattern of the major themes, using a “fishbone” type of graphic organizer. The concepts of the review explore the relationship between offshore outsourcing, market freedom, the selected offshore country, type of outsourcing contract, national culture of the outsourced country, and competitive advantage of U.S. multinational corporations.

The literature map displays the concepts, theories, and themes as follows:

1. Offshore outsourcing is the mediating variable that leads to competitive advantage of U.S. multinational corporations.
2. National culture of the host country is a contextual variable that could impact both financial performance and technological leadership of U.S. multinational corporations and competitive advantage.
3. Market Freedom is a contextual variable that could impact the ability of U.S. multinational corporations to conduct offshore business affecting their competitive advantage.
4. Time and material and fixed price contracts are explanatory contextual variables that could impact the ability of U.S. multinational corporations to achieve strategic goals. Both fixed price contracts and time and material can cause losses if it is not planned before the outsourcing engagement and eventually could impact competitive advantage.
5. Contextual, mediating, and intervening variables found within indeterminate and sociological factors (e.g. the culture of two nations involved in the offshore outsourcing process) could impact the relationships between offshore outsourcing and U.S. multinational corporations and competitive

advantage (such as improved cost, focus on business core and/or increase market share).

In addition to guiding the literature search, the integrative model serves to identify themes, theories, and concepts that will organize the Literature Review. This outline is as follows:

Multinational Corporations

Competitive Advantage

Historical Background

Porter's Competitive Advantage of Nations

Theory of Competitive Advantage

Tseng's Multinational Corporations Global Strategy Model of Knowledge Transfer

Measurement of Competitive Advantage

Offshore Outsourcing

Overview and History

Babu's Offshore Management and Execution Model

CAPS and A. T. Kearney, Inc.' Strategic Offshore Outsourcing Processing Model

Type of Contract, Offshore Outsourcing, and Competitive Advantage

Assessment Measures of Offshore Outsourcing

Offshore Outsourcing and Competitive Advantage: Empirical Studies

National Culture, Outsourcing, and Competitive Advantage

Overview

Hofstede's Cultural Dimensions Model

Measurement of Hofstede's Cultural Dimensions of Nations

Empirical Studies: National Culture, Outsourcing, and Competitive Advantage

Market Freedom, Home and Host Countries Regulations, and Legal Factors in Offshore Outsourcing

Political Relations and Offshore Outsourcing

The Impact of Regulations on the U.S. and the Offshore Outsourced Service Provider

Offshore Outsourcing: Legal Risks

Empirical Studies: Home Country Decision Factors of Offshore Outsourcing

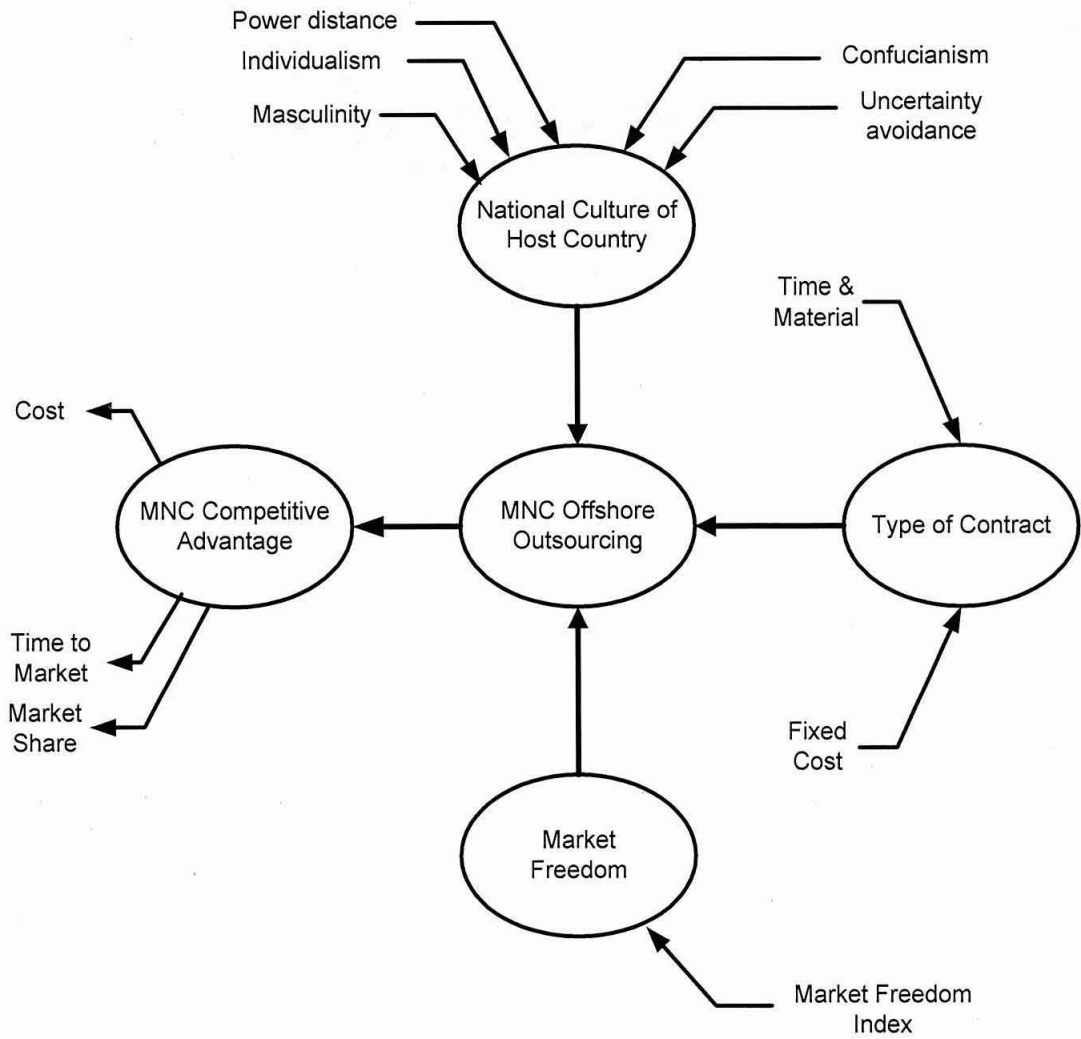


Figure 1-1. Integrative model demonstrating the impact of offshore outsourcing on competitive advantage.

Scope and Context

The scope of this literature review included offshore outsourcing of U.S. multinational corporations and its impact on their competitive advantage. The review excluded domestic outsourcing, and type of industry outsourcing. The review was limited to specific data published in peer-reviewed journals or the economic literature, and focuses specifically on the topics of offshore outsourcing, or relevant subject material.

The different forms of literature included in this review are periodical abstract in a primary source, abstracts in primary sources, abstracts in a secondary source, periodical (electronic), periodicals (hard copy), government document, non-periodical (hard copy), books, doctoral dissertations, and other electronic media. The review focused on theories from competitive business strategies, international business, offshore outsourcing, socio-cultural aspects of business, and multinational corporations. This review covered literature between the years of 1950 to 2006, when the concept of postponement and delayed product differentiation was originally introduced.

Library Research Plan and Strategy

The library search descriptors used to search the relevant databases on the topic about the impact of offshore outsourcing on competitive advantage of U.S. multinational corporation are: “multinational corporation research”, “multinational corporation meta analysis”, “multinational corporation critique”, “competitive advantage research”, “competitive advantage meta analysis”, “competitive advantage critique”, “offshore outsourcing research”, “offshore outsourcing meta analysis”, “offshore outsourcing critique”, “national culture outsourcing, competitive advantage research”, “national culture outsourcing competitive advantage meta analysis”, “national culture outsourcing

competitive advantage critique”, “market freedom in offshore outsourcing research”, “market freedom in offshore outsourcing meta analysis”, and “market freedom in offshore outsourcing critique”.

The literature was obtained from the ProQuest database, Lynn University library, and Google search engine. Types of scholarly articles include theoretical, empirical, methodological, dissertation abstracts, and critical and analytical literature that explores not only the content of the materials but also engages in critical deconstruction of its content. Some articles and reference books were obtained from the libraries of Lynn University and the University of Miami. The title of journals reviewed are: *Journal of American Academy of Business*, *Journal of Economic Issues*, *Journal of Global Information Management*, *Intellectual Property & Technology Law Journal*, *Journal of Global Information Technology Management*, *Journal of Information Technology Case and Application Research*, *Information Systems Management*, and *International Journal of Productivity and Performance Management*. The literature from ProQuest was limited to peer-reviewed journals. The search was limited to articles and scholarly journals from 2000 to 2006.

Interest, Significance, and Rationale for the Critical Analysis

As offshore outsourcing has become a major business practice by multinational corporations, it is important to understand its impact on the competitiveness of U.S. multinational corporations to compete in the marketplace, and to identify the factors that led them to outsource production and employment. Because of offshore outsourcing in recent years, many U.S. corporations decided to close down manufacturing plants across

the U.S. and outsource them to Mexico, Brazil, India, and China. Initially, it appears that U.S. corporations gained competitive advantage. However, board members and employees questioned if the companies will be able to continue to be the technological leaders in the telecommunication industry or will lose the advantage to offshore countries through reduced focus on cultivating domestic and in-company talent. It is important to reveal the advantages and disadvantages of offshore outsourcing of U.S. multinational corporations, their global competitiveness, and their ability to maintain their technological edge and leadership in the world.

The following section is a presentation of the review of the literature. The critical analysis of the literature concludes with a synopsis and interpretation of theoretical and empirical literature, conclusions, and recommendations for future scholarly inquiry on the relationship between offshore outsourcing and competitive advantage of U.S. multinational corporations.

CHAPTER II REVIEW OF LITERATURE, THEORETICAL FRAMEWORK, RESEARCH QUESTIONS, AND HYPOTHESES

Review of the Literature on the Impact of Offshore Outsourcing on the Competitive Advantage of U.S. Multinational Corporations

Multinational Corporations

Multinational corporations can be viewed from different perspectives such as management, ownership, operations, and strategy. A common working definition of the multinational corporation is one that invests in physical assets in foreign countries. The multinational corporation is able to operate in one or more foreign countries in addition to the home country of origin. Most multinational corporations have no outright ownership of their assets in foreign countries, but maintain control through subsidiaries that work within the local host country culture (Root, 1994). Therefore, if level of ownership is required, very few companies will be categorized as multinational corporations. Root also suggested that a company is multinational if the managers of the parent company are from different nationalities.

Root (1994) defines a multinational corporation as a parent company that conducts production in different countries through its foreign affiliates (e.g. subsidiaries), and establishes international strategies to conduct business in marketing, production, finance and staffing. In 1992, it was suggested that “a multinational corporation consists of a group of geographically dispersed and goal-dispersed organizations that include its head-quarters and the different national subsidiaries” (Ghoshal & Bartlett, 1990, para. 1).

Competitive Advantage

Historical Background

The expansion of Western power has characterized the last five centuries, especially in respect to exploration and economic expansion. Indeed, it is no accident that these two opportunities occurred at the same time, as it is widely recognized that the advantages of exploration and contact and communications with other cultures was a significant component in the economic growth of Western countries (Prestowitz, 2004).

The theory of absolute advantage was first explained by Adam Smith in 1776. His theory held that a country that has an absolute advantage in the production of a product could produce more of that product with a given amount of resources than another country (as cited in Edge, 1999, para. 3). In 1817, Ricardo introduced his theory on comparative advantage. He suggested that comparative advantage occurs when “one country is able to produce product at a lower opportunity cost, compared to other products produced in another country” (as cited in Edge, 1999, para. 3).

For a time, the Portuguese and the Spanish were the dominant forces effective in exploration and commerce, but the influence of these societies faded and the English and Dutch came to power. The colonial period exemplified the expansion of these societies; Great Britain, as well as the Netherlands and Germany sought to establish colonies used for trading purposes in newly-discovered regions of the world. The new territories within the U.S., South America, and Central America, formed one such territory. These investment strategies also occurred in regions such as Canada, Asia, and Northern Africa. By the end of the 18th century, these European countries had successfully established outposts throughout the world (Prestowitz, 2004). These geographically diverse outposts

ensured that the rudimentary superpowers at the time were positioned to navigate internationally and engage in trade practices with other nations.

Globalization was enhanced when the technological achievements of the United States were able to generate social and economic stability at home. The invention of the steam engine in England and new manufacturing technology increased employment opportunities for the general public globally, as industrialization provided entry into the workforce for women and children as well as men. Prestowitz (2004) suggests that the advent of the Industrial Age was a catalyst moment for economic development within the United States and Europe: in the late seventeenth century China had the most powerful economy in the world, but mass production within the Western countries through the Industrial Age created new trade economies that surpassed those found within China. By the end of the Twentieth Century, the United States and Europe had two-thirds of the world's GDP while Asia had only 20%.

Within recent memory, it appears that another shift in the economic earning power of the various world marketplaces is underway. In the late 1970s the government of China realized the only way to gain power in the market was to abandon their socialist way of thinking and establish a capitalist business environment. China and India opened their countries to foreign investments, allowing goods and capital to flow into their countries. This change is currently causing a power-shift from Europe and the United States to Asia (Prestowitz, 2004).

Today, countries in southeast Asian, India and China form the most attractive countries for manufacturing facilities. The low labor cost and the enormous number of people make these countries ideal targets for offshore outsourcing of both employment

and production needs (Babu, 2006). Also, it is important to point out that the education standards in China and India are comparatively high when contrasted to countries such as Mexico, which makes offshore outsourcing of IT employment more likely to occur in China and India. Investment in education can be identified as a component of the creation of capital, as an educated population is more likely to attract offshore investors for purposes of technology-centered productivity (Babu, 2006). China created a significant competitive advantage for multinational corporations, not only because of the low-cost manufacturing but also because of the expense of establishing Research and Development facilities. These facilities cost 10 to 15% less than similar investment strategies would cost in the West (Prestowitz, 2004). It is projected that China's current GDP of US\$3.4 trillion, and India's current GDP of US\$1.1 trillion, would grow to be US\$16 trillion and US\$5 trillion, respectively, by 2015. However, India is still not the location of choice for manufacturing, but it is definitely the location of choice for software development and call centers. Foreign investments and the flow of capital and products have increased Indian and Chinese GDP by 10% annually. It is expected that the current American GDP of US\$13 trillion would reach US\$21 trillion by 2015.

This trend shows that Asia is rapidly narrowing the gap between economic production outcomes on a per capita basis when compared to the current status of the United States. China and India are also not restricted to trading exclusively with the United States, and these countries have also defined themselves as trading partners for Japan, Korea and Europe (Prestowitz, 2004). This means that China and India can not only benefit from their trade status with the United States but these countries can also integrate additional economic opportunities into their gross domestic product (GDP)

(Babu, 2006). The outcome is one of advanced growth potential with fewer negative repercussions. For example, if the United States were to impose trade regulations on Vietnam, this country would not be inclined to comply as economic opportunities could be obtained through further expansion into South Korea.

Porter's Competitive Advantage of Nations

In 1990, Michael E. Porter introduced his theory on global economic interconnectivity in his book, *The Competitive Advantage of Nations*. His theory has since been widely accepted as a seminal work on how stakeholders within a competitive business environment are able to take positions of prominence through identification and manipulation of internal and external variables that impact the acquisition and maintenance of competitive advantage.

Porter stressed that countries and organizations that take advantage of opportunities and maintain their core strengths tend to succeed, while countries and organizations that succumb to threats and their internal weaknesses tend to fail. This theory of strategic positioning was developed by Porter after quantitative and qualitative analysis in which he assessed the outcomes of decisions made by four industries in ten countries.

Porter summarized his theories on competitive advantage by identifying the needs of specific stakeholders and the market position. He suggested that there are strategic operations that emerge from the relative positioning of specific stakeholders within a supply chain: these stakeholders can refer to individual consumers all the way through a hierarchy in which the values and needs of nations can be identified and categorized. Furthermore, Porter suggested that the assessment process of these needs can result in

improving a stakeholder's competitive advantage through informed decision-making and goal orientation. In sum, he argued that the degree to which a nation achieves international success in a particular industry is a function of domestic demand conditions, domestic rivalry, related and supporting industries, and combined impact of endowments. Porter also argued that the government can positively or negatively impact the company's competitive performance. Government can impose regulations, taxes, antitrust laws, and policy that mandate buyer needs, and influence competition in a particular industry.

Since its initial publication, Porter's *Competitive Advantage of Nations* has received positive and negative criticism. As a phenomenological study using data collected from observing patterns of behavior and outcomes from behavior, the theory of creating advantages for prosperity are subjective; if Porter's observations are seen as valid, then the subsequent analysis of outcomes is less likely to be seen as subjective. Porter also attached his perceptions to the belief that competitive advantage can be cultivated through engaging in social trends, such as developing a technological advantage through investing in computers and communications. All organizations can therefore take advantage of opportunities in the economic, political, and social climates through recognizing various aspects of these that will contribute to short-term and long-term success.

However, these generalizations are difficult to measure, where "the ambitious theoretical and empirical sweep of the analysis has been achieved at the expense of precision and determinacy" (Grant, 1991, p. 541). In 1991, Grant challenged many of Porter's theories. He suggested that the links between Porter's major premises were not fully substantiated. In addition, Grant (1991) suggested that Porter drew heavily upon a

perceived logical sense in which a myriad number of factors created a generalized outcome as opposed to following limited variables directly to a specific outcome. Moreover, Grant (1991) argued that the parallels that Porter draws between businesses and countries cannot be sustained due to the number of variables that impact a business and those that impact a country. Of note is the concept of determinacy, wherein the stated relationships between two partners is arbitrary, and the connections binding them are even more so. Finally, Grant (1992) reported that “The result is a theory which is gloriously rich but hopelessly intractable” (p 542). His theory on resources and capabilities as the foundation of companies’ strategy was based on two premises. First, the resources and capabilities of the firm provide the basic direction for its strategy, and second, the resources and capabilities are the main source of the firm’s profit.

In turn, Franklin and Fredericks (2003) indicate that Porter’s theories of competitive advantage have encouraged paradigm shifts in behavior among persons, organizations, and perhaps countries that have identified the key components of building competitive advantage as having paramount importance over other aspects of business. The researchers discovered that Porter’s ideas of competitive advantage do not take into account the realistic outcomes of competition and rely too heavily on the rhetoric of competition. Doing so suggested that Porter’s work entails “profound methodological problems which bring into doubt the validity and the reliability of the theory itself” (p. 138). Franklin and Fredericks (2003) argued that Porter perceived competition through placing inherent value on survival at the cost of another party. This perception is useful in creating a very bare-bones impression of success, wherein one party “wins” and the other “loses,” and where Porter argued that the winner attained success because it was best able

to identify and use advantageous scenarios. However, it is possible to disagree with Porter's modeling strategy by suggesting that the parallels that Porter draws between successful organisms (e.g. seeds seeking to find soil) are not universally applicable to complex organizations such as businesses and countries.

The social significance of Porter's theories has likewise been called into question. When perceived as an effective model for attaining a competitive advantage in business, this process simplifies the relationships between partners, or between one company and its competitors. In doing so, it frames all relationships as abstracts in which there are desirable outcomes. Yet, both Grant (1991) and Franklin and Fredericks (2003) stressed that the theory of competitive advantage aggressively oversimplifies most core components of human relationships into viewing these as either beneficial or undesirable, with no realistic middle ground. In this process, there is no option to form relationships without the conceptual attachment of intrinsic value. Also, globalization of production has invalidated some aspects of Porter's model.

New Keynesian economics is a diverse branch of economics research that does not come from a single source but rather refers to a general economics theory that can be used to resolve these issues. As in Porter's initial theory, the idea that competitive advantage can be obtained through optimizing decision-making processes and engaging in selective behavior is preserved. However, sub-theories within New Keynesian economics also stress that a continued focus on microanalysis factors are relevant only to a given scenario. This is arguably the attention to detail that Porter's theory lacks.

Theory of Competitive Advantage

Theories pertaining to competitive advantage tend to assess these processes from a directed starting point. Competitive advantage is best approached as the position that a given organization or company occupies in respect to other companies; positive competitive advantage refers to an advantageous position in which one company recognizes the internal and external environmental variables that can impact its success and failure, and manages these efficiently relative to other companies in the same industry (Grant 1991).

Several concepts are necessary to identify and to respond to the assessment of competitive advantage. The *knowledge base* refers to the information that an organization has towards internal strengths and weaknesses, and external opportunities and threats (Grant, 1991). The *resource base* refers to the resources that an organization can draw upon to effectively follow a specific course of action, and the ability of the firm to best exploit the internal firm resources and capabilities relative to external resources (Grant, 1991). The *brand name* of the company is the result of marketing and the quality of the product, and refers to the identity of the company as perceived by the consumers; brand name identity is recognized as a company's single most important asset and most organizations strive to cultivate a positive brand name identity regardless of cost (Grant, 1991). Finally, the *cost base* of the company refers to the market position held and the abilities to seek out and define specific outcomes, such as cost reduction, revenue generation, and market share based upon the advantages held by this company (Grant, 1991).

In his article, "The resource-based theory of competitive advantage: Implications for strategy formulation," Grant (1991) introduced his theory of resources and capabilities of a firm to sustain competitive advantage. Through assessing the positioning of specific elements within a given industry, Grant demonstrated that there is a strategic framework through which competitive advantage can be realized. Moreover, he stressed that competitive advantage can be applied within the context of specific organizations (e.g. a multinational corporation) through isolating specific processes and identifying the status of these within strategy formulation. Grant (1991) determined that the need for his theory was based on the lack of a single integrative framework, and that little effort was made to examine the implications of the company's internal resources on competitive advantage. This was facilitated through a framework in which four major constructs were identified and the processes corresponding to each were described. Grant (1991) defined these as *resources*, *capabilities*, *competitive advantage*, and *strategy*. Resources are the strength, weaknesses, and utilization of the company resource-base compared to its rivals. Capability is the ability of the company to do more than the competition. Competitive advantage is the ability of the resource-base to sustain technological edge and its potential return. Strategy is the ability of the firm to use its resources efficiently relative to external opportunities.

Components of Grant's (1991) theories draw upon previous research, particularly ideas proposed by Michael Porter in regard to effective positioning taken by companies to maximize potential outcome. Thus, the major propositions in this theory are resources and capabilities, the foundation of the firm's strategy, and the organizational resources and skills as the foundation of the firm's profitability. His views also propose a

continued assessment of the internal functionality of the company to assess whether competitive performance is actually occurring in any given set of parameters. His views are therefore socially significant, addressing essential issues about the relationship among resource-base, capabilities, competitive advantage, profitability and strategy in the discipline of competitive advantage theories as these are directly relevant to outcome. Focusing on the process of developing a competitive advantage is therefore directly connected to how easily an advantage is achieved and how well the firm is able to attain it at all. Resource-based assessment of the firm will, he concluded, connect directly to outcome.

Grant's (1991) multiple propositions relating strategy, competitive advantage, capabilities and resources, have not been confirmed within the context of his article. While he draws heavily upon the works of previous researchers, no empirical studies were done either to test his theories or to validate them; his theories seem to be heavily based on opinion and outcome based upon a perceived logical assessment, but there is no external justification of these. When Grant (1991) suggested that efficient use of the resources and the ability to understand the way competitors use their resources will lead to competitive advantage and profitability, he offered no evidence to demonstrate this. It must be concluded that Grant's (1991) views were thus based in logical opinion instead of tested documentation of specific economic processes.

Tseng's Multinational Corporation Global Strategy Model of Knowledge Transfer

In 2006, Tseng determined to explore whether international expansion among multinational corporations was assessable by the average consumer. By "assessable," Tseng (2006) sought to identify if consumers were able to identify specific trends within

productivity and outcome based upon standards of knowledge capital. Tseng (2006) also believed that these processes may address holes in the literature in respect to international expansion in which the existing representative models used to study the phenomena failed to represent the value of knowledge capital.

In his research, Tseng (2006) hypothesized that international expansion among multinational corporations could not be accurately viewed according to existing representative models, as the models tended to focus exclusively on quantifiable elements of trade and the networking of capital that emerged when these are studied. And, Tseng (2006) suggested, even when knowledge was studied, the knowledge capital created through knowledge transfer has historically been taken into account but the globalization of an increasingly knowledge-centered economy has rendered the existing models obsolete. It was therefore necessary to create an inquiry process through which multinational corporations and their role in the movement of information and knowledge could be better studied within a national context. Tseng (2006) implied that if the model was successfully rendered within a single nation (e.g. Taiwan), then the results could be successfully transferred to comparative analysis of other countries and their domestic multinational corporations.

Tseng (2006) introduced his new conceptual model that examined the relationship between global strategy and knowledge transfer. His model was based on a non-experimental, quantitative, correlation-based study about the way multinational corporations deal with their foreign subsidiaries with different external environments and different levels of skills and competencies. These processes were examined through a case study review of network theory, organizational learning theory, evolutionary theory,

and management of the process side, including multinational corporations that had established subsidiaries in Taiwan. In his literature review, Tseng (2006) found links that associated all of these functions within the scope of the multinational corporation within the global economy. The research was based on the classification of global strategies of Bartlett and Ghoshal (1990) and Yip (1995).

To test his theories, Tseng (2006) approached multinational corporations within Taiwan and assessed specific phenomenon which he associated with appropriate international strategy. Of note was effective management of knowledge transfer, wherein he hypothesized that companies that identified knowledge transfer as part of the supply chain were better able to “approach new challenges, tackle problems and answer questions as to how to manage complex multinational corporations most effectively” (p. 120). This, he rationalized, was exhibited through an international supply chain in which goods and services needed to pass through multiple geographic, cultural, and socio-economic regions. To validate his theory, Tseng (2006) conducted a quantitative, non-experimental, correlation-based (explanatory) survey research study for the purpose of examining the relationship between global strategies and knowledge transfer of the multinational corporation, and to determine whether the market factors discovered before the business engagement exists.

Data collection within the study was done through acquisition of qualitative marketing knowledge among the investment companies of interest. However, the data collection procedures were not clearly described and there appears to be a persistent gap between Tseng’s (2006) process-oriented line of questioning and the responses collected by the companies. This becomes even more problematic when his inquiry process does

not state the interactions that form the core of his data set. The population of the study included large and medium size MNCs obtained from the 2003 foreign investment database (Investment Commission of the Ministry of Economic Affairs of Taiwan), that established subsidiaries in Taiwan. However, the total number of the companies in the database was not stated, but may have been chosen for the researcher to select firms that met the eligibility criteria. A sample of 421 private foreign investment firms was selected from the database, of these, 352 questionnaires were sent to firm managers. Initial and follow-up responses resulted in a final data producing sample of 106, a response rate of 30.1%. Factor analysis was used to examine factors in the survey instrument (but the results of this analysis are not reported) and to limit the number of variables. The survey instrument was described insufficiently.

Tseng (2006) has a stated interest in knowledge management but the execution of the study does not fully explore these processes. He performed a factor analysis of similarities in markets between the home countries of the multinational corporations (when these companies were not native to Taiwan) and Taiwan, as well as the importance and the focus in Taiwan's market. Tseng (2006) theorized that the associated properties of these will cause the subsidiary in Taiwan to adopt the global or the standard knowledge transfer of the home country. The more uncertain the market is in Taiwan, the more the subsidiary will adopt the home country knowledge transfer mode. While the theory has a good balance between simplicity and complexity, contributing to its usefulness, and the theory has strong empirical support, Tseng (2006) ultimately did not create the functional parallels between knowledge transfer and performance of a multinational corporation that he intended. His demonstration of the relationship between

these processes is a data analysis, and led him to make the following hypotheses: (1) “the more accepting MNCs are of the multidomestic response strategy as their global strategy, the more likely it is that their subsidiaries in Taiwan will adopt the "home country knowledge development mode" to develop their marketing knowledge, (2) the more accepting MNCs are of the global integration strategy as their global strategy, the more likely it is that their subsidiaries in Taiwan will adopt the "global knowledge mode" to develop their marketing knowledge; (3) the more similar the Taiwan market is to other foreign markets that MNCs operate in, the more likely their subsidiaries in Taiwan will adopt the global knowledge mode or the standardized knowledge mode, (4) the more importance an MNC places on the Taiwan market, the more likely it is that the Taiwan subsidiary will adopt the global knowledge mode” (Tseng, 2006, para. 18).

There are no descriptive statistics to describe the frequency distribution of responses to survey items. To test the hypotheses a stepwise multinomial logit model was used to determine the impact of the global strategies of multinational corporations and market factors (independent variables) on the modes of knowledge transfer of multinational corporations (dependent variables). All the findings were in the direction of the hypothesized relationships between the variables for better knowledge transfer modes. Only the effect on market uncertainties did not support any of the outcome models of knowledge transfer and therefore did not support any of the hypotheses. The results were statistically significant with significance level of <0.05 , <0.005 , and <0.001 which showed positive relationship between global integrated strategy, multidomestic response strategy, market similarities, market importance, and knowledge transfer. However, when the multinomial logit model was performed to measure market

uncertainties, no significant predictive capability was found. Based on the positive results, Tseng concluded that a multinational corporation's global strategies, market knowledge and market characteristics should consider a process for international marketing knowledge transfer. A limitation reported by Tseng was that revised research may lead to different outcomes. He generated the following areas of future study: evaluation of the performance of knowledge transfers for the construction of a complete conceptual model, and to include other countries in the research of global knowledge transfer so findings and conclusions would provide further statistical significance.

Tseng's study did not study the impact of knowledge transfer on competitive advantage. In this study the impact of knowledge transfer is studied.

Measurement of Competitive Advantage

Assessments of competitive advantage have employed highly diversified processes. Methodologies selected and applied by researchers and analysts interested in measuring competitive advantage tend to be selectively focused on specific areas or themes. This is advantageous in that it facilitates a micro level of assessment in which specific variables can be isolated independently by systemic influences and examined in terms of their overall impact on competitive advantage. It is also limited in terms of its capacity to identify and integrate other elements of competitive advantage that may not be considered to be important by the researcher (Chase et al, 2005). However, the macro level of assessment in which multiple variables are examined as part of an overall systemic process is likewise limited as it does not provide an assessment of pertinent data on a highly-focused level.

Challenges are also made concerning the appropriateness of methodological assessment processes concerning competitive advantage (Chase et al, 2005). There is active dispute concerning whether qualitative, quantitative, or mixed-method assessment processes are best-suited to the study of competitive advantage (Chase et al, 2005; Smith & Flanagan, 2006). Traditionally, qualitative assessment has been an ideal choice based upon the need to evaluate economic and systems-chain processes, as these form the core of the supply chain (Porter, 1998). Yet some critics have questioned whether this research perspective is appropriate, as it tends to compartmentalize the debate over what consists of an ideal competitive advantage in numerical terms; by ignoring the human element, a large part of what it means to be competitive in market performance is missed (Smith & Flanagan, 2006). This is best exemplified in the study of customer service, in which the relationship forged between the organization and the customer creates a viable bond that encourages repeat business. Many of these variables cannot be quantified using traditional cost-benefit assessment models, as the degree of complexity represented therein is too complex, or is too abstract to be defined outright. Examples of these difficult-to-quantify variables are general perceptions of economic conditions and economic forecasting, and long-term forecasting associated with social trends (e.g. political elections, etc.). While such variables have often been given an estimated data set based upon historical outcomes and assessment of current internal and external environmental conditions, it is necessary to accept that these are guesswork and predictions instead of actual outcomes with quantifiable data.

Tools used to assess competitive advantage have been developed by researchers and organizations. The overall accuracy of these tools has been scrutinized due to the

limited data sets that are used to determine viability; most tools of this type tend to focus exclusively on assessing a limited number of variables, a strategy that leaves the impact of unrecognized or underreported variables as a free-floating data set that may be extremely significant to the overall status of competitive advantage. Recently, a performance management system (PMS) was established which include a set of financials measurements that are focused on profitability. Tangen (2003) suggested that although recent improvements were made in the development of PMS, most companies were still using the traditional financial performance measurements (Tangen, 2005, p. 726). Maskell (1991), Ghalayini et al. (1997) and Jagdev et al. (1997) suggested that many researchers exposed limitations in the traditional PMS using only financial measures (as cited in Tangen, 2005, p. 726). The seven PMS criteria identified by Sink and Tuttle (1989) are effectiveness (the actual outcome compared with the expected outcome), efficiency (the actual resources used compared to resources planned), quality, productivity (output compared to input), quality of work life, innovation for performance improvement, and profitability (as cited in Tangen, 2005, p. 728-729). Kaplan and Norton (1996) developed the balanced scorecard that helps top managers of the company to evaluate four performance areas, which are financials perspective, internal business perspective, customer perspective and innovations.

This indicates that the PMS tool is inappropriately suited to universal assessments of competitive advantage, as these assessment practices in PMS are focused on environmental specifics such as lead time, quality, and customer service. Other limitations of PMS are financial reports used were generated for only one or two months prior to when decisions were made, and reports were across all of the departments, which

did not take into consideration an individual department's needs and priorities. This caused too much focus on short term return-on-investment (ROI), thereby impacting strategic objectives. Also cost efficiency criteria pressured supervisors to achieve short term results at the expense of impacting quality. This tool, therefore, is equipped for assessment of a very limited set of data in the study of competitive advantage.

Measurement processes are also challenged in regards to the weight given to specific factors by the researcher or organization. This suggests a hierarchy of perceived priorities associated with the success or the failure of a company, wherein specific perceived advantages and disadvantages are identified and a measurement framework built to test these items exclusively. This narrow focus has been attached to the study of items prioritized in a company's mission statement, suggesting that the company attaches value to specific processes and outcomes. This perceived value may have actual intrinsic worth, but the company's decision to prioritize it above other items within their protocols and operations processes strongly suggests that items attached to this perceived value will receive a higher ranking when itemized within a competitive advantage framework. Typically, performance measurement in a competitive advantage framework incorporates at least three different disciplines: economics, management and accounting. The appropriate performance measurements that should be considered by a particular organization are the purpose of the measurement, the level of detail required, the time available for the measurement, the existence of available predetermined data, and the cost of measurement (Tangen, 2005, p. 735-736). For example, Neely et al. (1995) suggested that measurement should lead to efficiency and effectiveness of action. The researchers defined performance measurement as the efficiency and effectiveness of an action,

performance measure as efficiency and/or effectiveness of an action, and PMS as a set of metrics to quantify efficiency and effectiveness of an action (as cited in Tangen, 2005, p. 727). In this framework, a PMS should “support strategic objectives, have an appropriate balance, balance against sub-optimization, have a limited number of performance measures, be easily accessible, and consist of performance measures that have comprehensible specifications” (as cited in Tangen, 2005, p. 727-728). When contrasted against the perceived importance of efficiency and/or effectiveness of action, these views suggest a prioritization of objectives that are important to a limited number of participants as opposed to having unlimited objectives or relevance within the assessment framework.

All the above studies did not study the impact of national culture, market freedom, and the degree of offshore outsourcing on MNC’s competitive advantage. In this study the impact of national culture, market freedom, and the degree of offshore outsourcing were studied. The questionnaire in this study was designed to examine the impact of these variables on competitive advantage. The dependent variables, cost, time to market, and market share were measured.

Offshore Outsourcing

Overview and History

Offshore outsourcing has become an important business practice by companies to reduce cost, focus on core businesses, and gain competitive advantage in the marketplace. Others see offshore outsourcing as a threat to jobs, companies, and the economy (Monczka, Markhan, Carter, Blascovich & Slaight, 2005). Ahlawat (2006) reported that outsourcing of “production and services” continued to be a beneficial strategy for

American companies. Not only was the financial status of the company improved, but additional technological advantages such as the Internet and global transmission of data worked to improve the status and the outcomes of economic achievement among individual countries. Thus, the link between IT and offshore outsourcing is not merely one of economic advantage but is also influenced through convenience, where the role of the company and the capabilities of the technology that services it appear to provide effective management of status and provide opportunities for improvement and advancement.

In the 1960s and 1970s, a lack of skilled IT personnel and affordability of computers caused outsourcing of employment to become a vital business practice in time sharing for operational support and finance. In the 1980s companies kept IT knowledge in-house since it was perceived as a key value element for the company's success. Companies developed a customized IT infrastructure that addressed the need of every business function in the corporation. In the 1990s the market matured and companies started outsourcing IT, call centers, finance and some of their operations. Today most multinational corporations are using outsourcing as a leverage tool for a total solution in Business Processes Outsourcing (BPO), in Application Service Provider (ASP), and in other business functions such as e-business hosting (Ramanujan & Jane, 2006). In this setting, outsourcing of technical or IT employment also is a mainstay of the offshore outsourcing process. This is due to increased opportunities for education and technical proficiency of developing countries. It is in the economic interests of companies who engage in offshore outsourcing to invest in hiring foreign workers and outsourcing staffing services in addition to production and manufacturing positions (Zekos, 2005).

Babu's Offshore Management and Execution Models

The increasing body of data on employment and production offshore outsourcing is helping to develop the breadth and depth of the available research in this area of inquiry. Researchers are increasingly learning from the mistakes made by their predecessors in the assessment processes, wherein criticism of flawed or inappropriate methodologies has resulted in improvements in the inquiry and analysis phases (Mitchell & Coles, 2004). A new book by economist K. Mohan Babu (2006) entitled *Offshoring IT Services: A Framework for Managing Offshoring* identifies historical processes common to employment offshoring and indicates changes in traditional strategies that show ongoing evolution in response to earlier, problematic inquiries.

Babu (2006) indicated that offshoring in the production of goods and the services sectors share many similarities but are ultimately governed by separate management processes. Through a mixed-method assessment of management approaches in the Information Technologies (IT) services, Babu (2006) was able to identify critically the variables that play a role in specific industrial relationships (e.g. within the IT sector exclusively), knowledge management, economics management, and globalization. Babu (2006) not only used industry data and specific case studies to explore these three core topics, but he also interviewed persons working within the industry. This helped to support his theory of an Offshore Managing Framework (OMF). This framework was designed to facilitate management of the organization by removing the vendor from the management processes; while Babu (2006) stated that the relationship between the organization and the vendor plays a critical role in the economic success, he noted that many management models tend to take this to an unjustified extreme and therefore will

suffer penalties. His alternative is a practice-based method of management through which an executive management structure is replaced with a co-habitation management structure. This helps frame the organizations involved in offshoring as two halves of a whole as opposed to a dominant and a subordinate; all too often, Babu (2006) wrote, the company that initiated employment offshore outsourcing identifies the offshoring facility as a warehouse and workers who labor at the whim of the superior organization. This process not only fosters tension but also undermines an equal relationship between partners.

Babu's (2006) theory of OMF stressed equality; meeting global needs cannot be accomplished in an environment in which competition occurs. It also was designed to eliminate many of the assessment strategies typical to other data analysis and management analysis strategies; Babu (2006) noted at several points in the text that previous management strategies for offshoring based success upon quantifiable financial outcomes and productivity indicators. Instead, Babu (2006) found that the data indicated that determinants of success for market freedom to promote competitive advantage require successful resolution of conflict and shared prioritization of goals.

Babu's (2006) theories are markedly different from those of his predecessors. More than 12 years earlier, Kidane (1994) argued that business and management strategies stressed competitive advantage through using offshore outsourcing as a beneficial financial investment. This occurred through framing offshoring as exploitation of the conditions found within the host country.

Although Babu suggested a co-habitation management structure, he did not study the impact of the host country culture on competitive advantage. In this study the impact of the host country culture on competitive advantage was studied.

CAPS and A.T. Kearney, Inc.: Strategic Offshore Outsourcing Processing Model

Monczka, Markham, Carter, Blascovitch and Slaight (2005) developed a prescriptive model to help companies to achieve better performance through outsourcing. The model was developed based on their previous experience in assessing offshore outsourcing and identifying value-based judgments within corporations. The five-phase model of strategic outsourcing started with strategy and planning, analysis and decision making, structuring the relationship and contract, transitioning and implementing, and ongoing management and measurement. The authors identified 24 factors of strategic outsourcing that were linked to the five-phase model. They developed a series of questions to rate the factors by the level of performance contribution towards the outsourcing goals. They used exploratory factor analysis for the factors identified and the model. The analysis led them to construct a three-phase model that yields better statistical validity. The three-phase strategic outsourcing model includes strategy and planning, contracting and relationship development, and implementation. The finding of the three-phase model was that the factors within each phase are highly interrelated and can be integrated in groups. The results of the analysis of the three-phase model can be used by companies to predict strategic outsourcing performance. This theory is socially significant addressing essential issues about offshore outsourcing performance. The authors believed that the factors included in the three-phase model affect the company's performance in offshore outsourcing. Their belief is supported through statistical analysis

and the significant correlation between the three-phase model and the level of results achieved. This is the predominant theory used to examine companies' offshore outsourcing performance with well-developed propositions and strong empirical support. The results confirm the a priori hypothesis that post-contracting activities positively impact cost saving through outsourcing (p-value <0.0001). Based on the positive results, Monczka et al. (2005) concluded that a company's performance depends on strategy and planning, contracting and relationship development, and implementation. Although they provided some positive findings, they were very cautious about the process of companies that acquired improved economic positioning through offshore outsourcing. They stressed that it was inappropriate to link economic outcomes directly to competitive advantage, as the claims that one led directly to the other were not proven by the data. Instead, Monczka et al. (2005) stated that although their findings showed that offshore outsourcing is used by many companies, these companies did not see any evidence of outsourcing being used to gain competitive advantage. This created a problematic distinction between offshore outsourcing as a strategic business decision and the possibility that offshore outsourcing was in fact a popular trend in the organizational culture. If the latter point is true, this would suggest that the investment in offshore outsourcing is not valid and that decisions made to invest in offshore outsourcing are done specifically as a response to perceived value as opposed to actual value.

The researchers chose to test these concepts through exploring many distinctive patterns found within the literature on outsourcing. Monczka et al. (2005) explored the state of outsourcing currently found within the global community in general and the American business structure in particular. This was accomplished through assessing the

prevalence of offshore outsourcing and the depth of penetration in major companies. Additionally, the researchers sought to identify the rationale used by these companies to qualify specifics of outsourcing. Of interest is the question as to whether or not the companies believed that offshore outsourcing was an asset to their productivity and profitability (the majority of companies noted that outsourcing was an asset but did not have data to substantiate this statement).

Monczka et al. (2005) conducted a non-experimental, exploratory correlational and predictive study, using mixed methods (quantitative and qualitative design)) to examine the outsourcing trend, the way decisions are made for offshore outsourcing, and the main factors for companies to achieve their goals when offshore outsourcing. The study was for constructing and testing their model. To accomplish this, basic profiles of the companies involved (e.g. respondents to the inquiry process) were compiled. It was also necessary to create a theoretical framework through which perspectives on offshore outsourcing could be tested; the model is the Perspective Model for Strategic Outsourcing and it was based upon the researchers' prior exploration of offshore outsourcing. The model is "a five-phase model" that examines "the strategic outsourcing process" and identifies "a number of activities that take place within each phase." (p. 92). These five phases are portrayed as a linear process that comprises 1) strategy and planning, 2) analysis and decision-making, 3) structuring the relationship and contracts 4) transitioning and implementation, and 5) ongoing management and measurement. When used as an assessment and monitoring device, the decisions made by organizations and subsequent actions taken based on these decisions can be archived in the associated phase of the model.

The authors conducted a literature review that provided a background to the question, as well as the significance for the study as demonstrated by the increased offshore outsourcing trend and its impact on competitive advantage. However, Monczka et al's literature review was not comprehensive and did not thoroughly test all of the five components defined in their model. This creates a state of disassociation between the purpose of the study – the generation of a model used to test the feasibility and value of outsourcing – and the lack of evidence used to justify it. Therefore, the literature review could have been more current in comparing and contrasting theories related to the problem, application of theories in empirical studies, and results from empirical studies of the effectiveness of offshore outsourcing. Also, as no other studies were presented in the review, it is not clear how Monczka et al's (2005) study is different from others; the reader is given the impression that this is a landmark research attempt, but this is only due to the lack of comparisons provided.

The Perspective Model for Strategic Outsourcing was used as the basis of the survey. The major proposition examined in this study is to “help guide companies toward superior results through strategic outsourcing” (Monczka et al. 2005). The proposition does lead to the hypothesis tested. The directional hypothesis stated after the purpose is clear and contains two dependent variables; however, the statement of the independent variables is unclear and this makes it difficult to determine these when reading the study. There are no research questions. The dependent variables, time to savings and range of savings, are clearly stated. The theoretical definition of most of the variables is clearly stated. The study has good internal and external validity using exploratory-correlational models. Data collection procedures were clearly described.

Monczka et al.'s (2005) target population for the survey was clearly identified and included 1,000 companies. All were invited, and it was a self-selected sample of 165 companies (a 16.5 percent response rate), that constituted the final data producing sample for the survey. Based on the questionnaire responses, the researchers selected 15 companies for interviews for a deeper understanding of the strategic outsourcing approach (qualitative component). The 24 factors that are related to the process of outsourcing were used to create the prescriptive model, and to help to define the effectiveness of offshore outsourcing as a business venture.

The Regression Analysis Technique was used to measure the impact of the factors in each phase on outsourcing performance. The result was statistically significant with a significance level of $p < 0.0001$, which showed a positive relationship among implementations and contracting and relationship development, and the magnitude of cost savings. However, when regression analysis was performed to measure "time to savings", no significant predictive capability was found. The researchers suggest that this indicates a lack of overall effectiveness in the use of offshoring of manufacturing and employment as a means of improving the specific financial earnings of the company, stating that "enhanced performance within the phases did not predict a decrease – or an increase – in the time to savings" (p. 32). However, while this indicates that outsourcing may not have a predicted financial return based upon the measurement criteria put forth by the current model, the authors were also quick to note that "there may be other variables that more specifically impact time to savings," suggesting that either the current modeling strategy was insufficient to compensate for all variables involved, or that there are unknown constants that have impacted the successful integration of the five-phase

model (p.32). These unknown constants may be significant in future research as a means of helping to promote improved comprehension of the data involved with outsourcing. However, the researchers did not provide any information that would help clarify what these unknown constants may be.

Limitations reported by Monczka et al. were domestic insourcing and captive offshoring that were not tested in their model. They generated the following areas of future study: the factors that lead to greater or lesser growth than forecast; the processes companies apply for new insourcing work and work that is already outsourced; the country, region, specific trend in domestic versus international outsourcing; the dominant model by the end of the decade; the additional factor for long-term strategy; and the conditions that could lead to the demise of a company. The recommended future studies somewhat contradict the recommended outsourcing findings of the research; it appears that Monczka et al. (2005) argue in favor of offshore outsourcing despite their persistent reporting on negative outcomes – or, at the very least – a lack of clear advantages acquired through offshore outsourcing. By suggesting that additional research examine these products and processes, the authors argue that it is necessary to focus on the information contained within the offshore outsourcing strategies as indicative of other outcomes that were not reported in the study. This is difficult to accept in light of the body of research contained in the study.

Type of Contract, Offshore Outsourcing, and Competitive Advantage

To eliminate ambiguities associated with identifying specific themes and processes found within the assessment of effective outsourcing, contract management has been used as a measurement tool. It is necessary to use contract management as an

assessment tool as the contract is a legally binding document that exists between multinational corporations and functions both within the legal parameters of the host and the target company, as well as illustrates agreement between the multinational corporations that have agreed to participate within the contract. As such, contract assessment can be used as a benchmark from which analysis of the position of the multinational corporations can be derived; this leads to information relevant to competitive advantage.

Contract assessment offers opportunities to identify input and output associated with specific offshore outsourcing processes. The use of contract assessment helps facilitate research efforts in identifying which aspects of organizational culture and performance are deemed important to one or more participants involved in the process. Moreover, contracts integrate the organization's stated acknowledgement of external factors that have a potential impact on exchange of goods and labor (e.g. tariffs and liens). For example, in 2002, Wideman suggested:

Time and material is a hybrid type of contractual arrangement that contains aspects of both cost-reimbursable and fixed-price-type arrangements. Time and material contracts resemble cost-type arrangements in that they are open ended, because the full value of the arrangement is not defined at the time of award. Thus, time and material contracts can grow in contract value as if they were cost-reimbursable type arrangements. Conversely, time and material arrangements can also resemble fixed-unit arrangements when, for example, the units rates are preset by the buyer and seller, as when both parties agree on the rates for the category of senior engineers (para. 10).

The preceding citation illustrates the associations that can be determined through contract assessment in which relationships between variables are stated; while the use of a contract does not guarantee that the terms governing association between the parties

will come to pass, the contract does provide a binding, obligatory framework that can be used to identify the scope of their relationship. In this sense, the contract that determines the legal constraints of specific operational guidelines and outcomes within the offshore outsourcing process are directly correlated to the status of the company engaged in the offshore outsourcing process. The management of the contract is a critical component in achieving competitive advantage in this setting, where the use of the contract helps to define and to describe the specific status of the multinational corporation, the subsidiaries through which the corporation works, and other factors that may influence the transfer of resources (e.g. tariffs, trades, etc.).

Gopal, Sivaramakrishnan, Krishnan and Mukhopadhyay (2003) conducted a non-experimental, correlational explanatory quantitative study, to examine the effectiveness of contract choice on project profit of offshore outsourcing software development in India. The title, *Contracts in Offshore Software Development: An Empirical Analysis*, does not adequately describe the study's purpose because the outcome (dependent) variable, project profit is not present. The title is more clearly represented in the study's purpose and the study could have been titled: *The Impact of Choice of Contracts in Offshore Software Development on Project Profit: An Empirical Study*.

Gopal et al's literature review (part of the introduction section) provided background to the problem and significance for the study depicted by the outsourcing challenges companies are facing because of the inability to monitor the development of the project in the offshore country. However, the literature review was not thorough, and could have been more current in comparing and contrasting theories related to the problem, application of theories in empirical studies, and results from empirical studies of

the effectiveness of contract choice on project profit. Gopal et al. stated that their study was one of the first attempts to study empirically the impact of contract choice on project outcome. It is not clear how Gopal et al's contract choice study is different from others reported in the literature.

The population of the study included project managers and marketing or business managers who dealt with 93 projects completed between 1995 and 1998, by a leading Indian software development company. A probability, systematic sampling plan resulted in the data producing a sample of 55 time and material and 38 fixed price projects. The number of questionnaires sent and received is unknown. However, to ensure validity of the answers received from the project managers and business managers, several questionnaires were created for the perceptual variables, and two or more people answered the same questionnaire of a particular project independently. If a clear gap between two or more questionnaire was identified, the project was dropped from the analysis. Two statistics models were applied to use as the research instruments: the *Ordinary Least Squares* model to measure the impact of choice of contract (independent variable) on project profit (dependent variable), and the *Treatments Effect* model was also used to measure the impact of contract choice on project profit to avoid a false result, due to an endogenous variable (vendor has a preference for a contract type due to high profit expectations). Data are clearly presented in tables. All the findings were in the direction of the hypothesized relationships of the outcomes for better decision of contract choice. Results supported the hypotheses of task uncertainty on contract choice, which indicates that projects with uncertain requirements are subject to a time and material contract due to the risk that the vendor might have. Some of the hypotheses were supported, some

were partially supported, and there were some not supported. They only reported significant findings in relation with the two contract types (time and material and fixed price), which indicated that time-and-materials contracts are statistically larger than fixed-price ($t = 2.861$, $p < 0.005$). Gopal et al.'s interpretation of these findings was that vendors gain high profit from time and material contracts. Based on the positive results, Gopal et al. concluded that time and material contracts yield higher profit to the vendor, and the contract is not efficient for the company when the variables of the work to be done by the vendor are known during the contracting process.

Limitations reported by Gopal et al. are a lack of first hand data on clients, a lack of information on contract prices, no permission to contact clients, data is susceptible to recall bias, and the limitation to two contract choices. The revised research may lead to different outcomes. They generated the following areas of future study: (1) empirical study on combination of a fix-price contract which includes penalty and reward structure with the vendor in relation to cost and project schedule, (2) the impact of contract type on project profit in domestic outsourcing, and (3) the differences between domestic outsourcing and offshore outsourcing in relation to contract type and project performance. Future studies should include other countries in the research of contract choice so findings and conclusions would provide further statistical significance.

In this study Gopal's model was used to incorporate type of contracts to competitive advantage.

Assessment Measures of Offshore Outsourcing

Measurements of offshore outsourcing correspond to measurements of competitive advantage in the seemingly arbitrary assignment of quantifiable data sets to

various factors. This indicates that the assessment of advantages and disadvantages that are used to comprise the measurement systems for offshore outsourcing are in large part founded upon the views of involved participants. The measurements should be founded upon experienced procurement managers and supply chain managers involved in offshore cooperative activities.

Presentation of measurement within the literature on offshore outsourcing also reflects this core challenge. In a critical article of methodologies used to assess offshore outsourcing, Panagariya (2004) challenged assumptions made by other researchers who seek to identify specific trends resulting from operations related to offshore outsourcing. Panagariya (2004) indicated that other researchers not only tend to assign inappropriate assessment strategies but also indicate a failure to attach the appropriate designations to the fixed variables in the measurement process. He noted that any company that employs

The standard Ricardian model, which assumes two countries (called America and China), two goods (called 1 and 2) and one factor of production (called labor). Because the endowment of labor is taken as fixed in the Ricardian model, any change in the *total* national income are reflected fully in the change in the real wage. If the real wage rises, real incomes of all individuals and therefore the nation rise. Alternatively stated, the wage also represents the per-capita income in the model (para. 5).

Yet while this fixed model of assessment is frequently used as a measurement of success or failure (e.g. if the per-capita income rises, this indicates a successful offshoring outsourcing venture), Panagariya (2004) emphasized that this assessment is based on false premises. There are assumptions that both countries are engaged in what he refers to as “free trade equilibrium” and that there is a predictable process through which goods and services are traded between both countries (para. 8). These assumptions

mean that it is only when there is a shift in the free trade equilibrium that there are negative consequences (e.g. job loss), as the movement of goods based upon supply is met by demand. This, Panagariya (2004) finds, was a flawed analysis in which a hypothetical constant is maintained to get desirable results; under the Ricardian model, unwanted or unbalanced variables can be removed when these do not fit into the three assumptions that form the core of the model.

Kirkegaard (2004) found that the assessment process is more appropriate when framed according to “the degree of uncertainty regarding international trade data in areas affiliated with offshore outsourcing” (p. 22). He did not specify in his research document whether the type of offshore outsourcing is based on labor or production, which is a flaw in his research as he implied that the factors that influence both types of offshore outsourcing are identical. Cost-benefit analysis, he wrote, did not appropriately quantify overall tradeoffs that can result from processes such as job loss from secondary service sector outlets, or from process that are not quantified such as the streamlining of new technology within various areas of job creation. He wrote that “measurement of trade in services is inherently more difficult than measurement of trade in goods” and a broader strategy to incorporate both trade service data and data collection processes corresponding to both goods and services within not only the affected countries but in those who act as secondary and tertiary suppliers. The author was not clear whether he referred specifically to the trade in goods or the trade in employment, or whether his use of the term “offshore outsourcing” applied to both practices. Because of this ambiguity, as a result, the scope of measuring offshore outsourcing cannot be quantified according to fixed models such as the Ricardian model but instead must encompass qualitative and

quantitative analysis that incorporates multi-tiered levels of analysis from economic and service sector outcomes.

Furthermore, even Kirkegaard's (2004) multi-tiered assessment process failed to incorporate a leadership component. Mitchell and Coles (2004) found that business models that continue to perform well over time have a strong central leadership that is not compromised; however, while stable and reliable, this central leadership is able to identify areas of change and respond to these in a timely and appropriate manner. This degree of leadership cannot be incorporated into the measurement process as it is influenced by internal and external environmental factors, the majority of which cannot be isolated as these are neither reported as formal problems requiring intervention, nor handled according to formal policy. Most leadership involves direct, community-oriented interaction and these are not successfully translated into a value-based assessment.

The above studies did not focus on the three main competitive advantage outcomes. In this study, competitive advantage variables, cost, market share, and time to market were studied.

Offshore Outsourcing and Competitive Advantage: Empirical Studies

Carmel and Agarwal's (2002) exploration of information technology, "The Maturation of Offshore Sourcing of Information Technology Work," found that offshore outsourcing has entered a new phase, where offshore outsourcing is now a known and quantitative practice that can be evaluated according to specific themes and outcomes. The researchers identified the themes of information technology and information

development and noted that while the majority of offshore outsourcing in IT tends towards production – specifically, the manufacturing of technology hardware – the trend is increasingly towards information and labor. This is significant in respect to the development of information-specific programs such as computer software, which is uniquely reliant on human programmers to code the data into the product. To this end, while the study of software production is certainly part of the study of production and offshore outsourcing, it is also almost exclusively dependent on educated labor.

The evolution of offshore outsourcing reflects patterns of growth within other economic and production models, such as those defined by Michael Porter. There are four stages of maturity, and each of these has associated criteria that impact the degree to which the interest in offshoring affects the context in which it is staged, as well as the degree to which production occurs. Carmel and Agarwal (2002) described these as an offshore bystander phase, in which there is no offshore outsourcing; a reactive/experimental phase, in which the country or domestic companies begin to dabble in offshoring; a proactive phase in which cost and expenses are the focus and all strategies found tend to identify the process phase to enhance efficiency; finally, a proactive strategic focus explores the many diverse environments and circumstances in which offshore outsourcing occurs and this enables strategic positioning in order to maximize competitive advantage.

The authors found that offshore outsourcing has entered the proactive strategic focus stage of maturity. This indicated that there was a phase shift away from experimentation and towards positioning of resources towards maximizing competitive advantage. This is the position where most companies seeking to maximize the benefits

of offshore outsourcing want to be; these companies are secure enough to have passed through the experimental phases and are seeking to create a substantial return on their investment. This, then, suggests that a “new product begins with highly skilled entrepreneurial activities, moving to foreign direct investment in low-wage (offshore) nations, and then, as the product standardized, it is mass-produced with cheap low skilled labor” (p. 13). In this sense, Carmel and Agarwal (2002) focus specifically on the role of offshore outsourcing of labor as opposed to production, or labor in addition to production.

The researchers then sought to identify these properties and to test the validity of their views on offshore outsourcing through testing a diverse sample population comprised of companies in different stages of the outsourcing process. The researchers “spoke with non-technology companies in manufacturing and service sectors that [needed] to support their internal Information Systems activities” (p. 3). They found that patterns of maturity could be expressed through the priorities expressed by these companies. However, the methodology of this study is highly questionable; instead of using a traditional data presentation format, the researchers attached their methodologies in an appendix. They used a stratified sample to identify and to select companies from “among the largest U.S. firms from both technology and non-technology groups” (p. 17). The study appears to follow a qualitative interview-based research method, where the researchers interviewed 20 executives from 13 different corporations. The number of interviews is not given. The position of the “executives” is not given. The researchers use the ambiguous statement “we examined the interview transcripts using two distinct lenses: the first lens was constructed based on research questions stated a priori, i.e., we

sought “factual” data related to the extent of sourcing, the decision drivers, the rationale for siting decisions, and the internal corporate dynamics” (p. 17). This is not a clear reference to study methodology, nor does it reflect positively on the findings. While extremely intriguing and relevant to the current study, the data collected and presented by Carmel and Agarwal (2002) are insufficiently suited to draw effective, representative conclusions and must therefore be considered to demonstrate a hypothetical set of maturity stages as opposed to a tested, valid series of data sets. A better-constructed follow-up study would be of great interest, but could not be located in a subsequent review of the literature.

National Culture, Outsourcing, and Competitive Advantage

Overview

In early 1917, Robert Lowie defined culture as “the sole and exclusive subject-matter of ethnology, as consciousness is the subject-matter of psychology, life of biology, electricity as a branch of physics” (Kuper, 1999, p. ix). In 1925, Albert Edward Wiggam defined culture as “getting along with other people, or get along-ability (Rubin, 1992, p. 29), while a 2002 document from the United Nations agency UNESCO states that culture is the “set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs” (UNESCO, 2002, para. 5).

Data indicate that while offshore outsourcing has commonalities regardless of the host (originator of the offshore outsourcing contract) or the target (recipient of the

offshore outsourcing contract) countries involved, there are specific cultural traits that can be directly associated with the process of outsourcing. In a review of the offshore outsourcing practices used by target offshore outsourcing organizations located within New Zealand and India, authors Mathrani et al. (2005) found that there are cultural traits that can be considered indicative of outsourcing within these countries. The study “Dynamics of Offshore Software Development Success: The Outsourcers’ Perspective” compared India and New Zealand using the rationale that these countries are both heavily engaged in the development and production of software as a large component of their respective GDPs. Using conceptual modeling to identify the processes of outsourcing, the authors found that the methods used in India and New Zealand are relatively similar with very little observable differences within areas that reflect prioritization. However, in a case study of companies in both New Zealand and India, the researchers identified how and to what extent specific cultural components influence aspects of outsourcing and industry performance. They concluded that “the Indian company emphasized extensive use of documentation, prior domain experience of developers, formal meetings with the clients, a centralized test case repository, and the use of standardized templates for project management.” Here, “clients” refers to those stakeholders in the offshore outsourcing process who originated the contract and who instigated the labor. In contrast, “cases selected from New Zealand organizations had less rigid or sometimes no practices defined for certain variables.” This led the researchers to conclude that there may be distinctive cultural paradigms that affect the methods through which companies approach offshore outsourcing and engage in practices that reflect these.

Hofstede's Cultural Dimensions Model

Geert Hofstede (2003) proposed a cultural dimension model comprised of five components used to assess the value found among distinctive criteria in all relationships. Links between offshore outsourcing and Hofstede's Cultural Dimensions model are found within the need to find a point of synchronicity between cultures participating in offshore outsourcing, or to recognize the unique cultural concerns that typify a specific population. A significant amount of research has been done to define and describe the potential problems that can result if two or more cultures are unable to identify successfully a strategy through which they can work together. Hofstede suggested that all culturally-dependent associations – that is to say, all forms of relationships between persons – manifest this dependence within five dimensions of culture. These five dimensions are:

- *Distance between loci of power*: All cultural organizations (e.g. countries, business, etc.) have some degree of distance between the highest members of the hierarchy and the lowest members of the hierarchy. However, the cultural organization can only withstand a limited degree of distance before its structure can no longer accept various forms of strain (e.g. problems in effective communication or the decision on the part of the lower classes to rise up against the highest classes).
- *Individualism versus collectivism*: All cultures have some degree of entitlement built into its framework. This dimension measures this degree of entitlement and seeks to determine the extent of assumptions concerning how and to what extent entitlement occurs. Cultures with low levels of entitlement can be perceived as

highly collective and working towards community goals; cultures with high levels of entitlement express individualism and work towards goals that benefit a fewer number of persons.

- *Aggressiveness versus emotion*: Also referred to as *masculinity versus femininity*, this dimension refers to the modes through which the culture approaches problem-solving. These modes can be expressed through strength of purpose and dominance (i.e. aggression) or through commitment to the quality-of-life of the community (i.e. emotion).
- *Long-term versus short-term*: This dimension deals with time. The study of goal orientation suggests that some cultures have goals that require a long time frame to accomplish, while others rely heavily on short-term goal orientation. This is not only perceived in the expression of goals to be fulfilled (e.g. a “five-year plan”), but is also found within the organization’s attitude towards concepts that require commitment (e.g. respect towards ancestors, etc.).
- *Uncertainty avoidance*: This dimension incorporates the degree to which members of an organization accept uncertainty. Cultures with high levels of avoidance will accept a small level of uncertainty and will be unable to function once this tolerance has been exceeded, while cultures with low levels of avoidance will accept significant uncertainty.

Hofstede has used this model in many separate works, the most notable of these being *Culture’s Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. He notes that “the concept of dimensions of culture is introduced through an inquiry into the philosophical opposition between the specific and

the general, the different and the similar,” (Hofstede, 2001, p.1). The comparison of different and distinctive traits within cultures can, according to Hofstede, be reviewed and defined when these five dimensions are used because these are fundamental to all cultures. Moreover, these five dimensions are mutable; even when a culture is in a state of change, these can be used to assess the current state of the culture; if tolerance for extrapolation is permitted, these five dimensions can also be used to predict future outcomes within the culture.

Hofstede’s instrumentation has evolved dramatically since his first empirical research efforts. The evolution of his instrumentation has taken place in survey form, wherein the respondents are asked to report their personal perspectives in respect to specific questions used to test outcome and status within a selected cultural setting. Many distinctive survey and questionnaire forms have been developed, and the most frequently used of these is the Hofstede’s Value Survey Module. This survey is flexible in its application and has been used not only in surveying the attitudes and perspectives of persons within the same cultural setting but also has been used to define data to be used in cross-cultural comparisons. The variables that are tested in these modules identify the degree to which the five standard variances are identified – again, these are the *power distance index*, *individualism*, *masculinity*, *uncertainty avoidance*, and *long-term orientation* that have already been discussed – and indicate the prevalence of or the disparity between these within the self-reported information acquired from the subjects.

Much of what Hofstede did in identifying and utilizing these five dimensions is to determine cultural relativism. Specifically, if the dimensional assignments common to two cultures are identified, these cultures can then be compared according to the values

and outcomes associated with these dimensions. However, Hofstede's theories have been challenged on the grounds that there are multiple spurious assumptions in determining these assignments. The researcher using Hofstede's model can determine cultural value based upon selected examples is achieved through flawed methods, specifically cherry-picking data that will help identify and encourage specific outcomes. For example, Hofstede approaches organizations such as IBM in which it is theorized that a single organizational culture is predominant, but also purposefully removes aspects of the study that are relevant to the sample, such as the country of origin of the workers surveyed.

McSweeney (2002) wrote in "Hofstede's Model of National Cultural Differences and Their Consequences: A Triumph of Faith – A Failure of Analysis" that Hofstede utilized sweeping generalizations as the basis of his model. "Hofstede generalizes about the entire national population in each country solely on the basis of analysis of a few questionnaire responses. [...] What evidence does he have that they were nationally representative? None. He just assumes it. Sometimes he supposes that every individual in a nation shares a common national culture" (McSweeney, 2002; para. 2). This is true even when examining persons within different countries who work for the same company. Hofstede surveys opinions and attitudes within different international branches of the multinational company, IBM, which Hofstede believes will yield distinctive differences in perceptions among employees located throughout the globe. McSweeney (2002) suggests that this perspective is self-limiting and inherently flawed.

If somehow the "average tendency" of IBM employees in each country - constructed by statistical averaging of highly varied responses - is assumed to be nationally representative, and this is Hofstede's assumption - then with equal plausibility, or rather equal implausibility, it must also be assumed that each Hofstedian average tendency was, and continues to be, the same as the average tendency in every other part of a country, in every

company, tennis club, knitting club, political party, and massage parlour (para. 4).

To be fully effective in measuring cultural differences, a wide sample of the population needs to be used in which multiple measurements of the five dimensions are integrated, compared, contrasted, and a statistical mean developed.

In this study, the impact of Hofstede's five dimensions of culture on competitive advantage were measured.

Measurement of Hofstede's Cultural Dimensions of Nations

In their study "Cross-cultural research in management control systems design: A review of the current state," Harrison and McKinnon (1999) assessed the feasibility of Hofstede's model to test cross-cultural research in management control systems (MCS) in a critical review of the research on MCS in English-speaking countries over a ten-year time period. Management control systems are processes selected by an organization to promote specific behaviors, attitudes, and outcomes within management and decisions made by management. Harrison and McKinnon (1999) determined that a qualitative comparison review of the literature was necessary as multiple companies were utilizing the research findings as the rationale for implementing sweeping systems change. This caused the researchers to comment on the attachment of corporate culture to published documentation on management. While well-reasoned systems change can be justified by referring to empirical research, the studies explore specific environments with unique traits and the reassignment of data to any other organization on the merits of desirable portrayal of outcomes is irresponsible.

These spurious associations are made worse when offshoring, outsourcing, and other forms of international expansion strategies come into play. MCS have traditionally

been isolated from cross-cultural research, on the basis that these systems tend to function within closed environments and do not have connections to broader systems. Harrison and McKinnon (1999) determined that the data on cross-cultural exploration of MCS is still in the exploratory phase and the findings from multiple sociological and business-oriented disciplines need to be reconciled.

In a tabulated review of culture-theoretic studies from 1980 to 1999, Harrison and McKinnon (1999) theorized that the reliance on Hofstede's model has been derived from an acceptance of the model that assumes that past validity testing is (a) still relevant to the model cultural setting, and (b) takes into account paradigm shifts within civilizations. Harrison and McKinnon (1999) suggested that Hofstede's model is poorly suited to many multicultural encounters and stress that analysis of the context in which the model is applied must be revisited to test for validity.

To prove their theory, the authors aggregated the data and found points of convergence in Hofstede's model that demonstrate a lack of substantial oversight and validity. Four dominant weaknesses are found within these:

- 1) failure to consider the totality of the cultural domain in the theoretical development of some studies; 2) an almost universal tendency to not consider explicitly the differential intensity of cultural norms and values across nations, resulting in a failure to distinguish between core and peripheral values in theoretical exposition; (3) a tendency to treat culture simplistically both in the form of its representation by a limited set of aggregate value dimensions, and in the assumption of a uniform and unidimensional nature of those dimensions; and (4) an excessive reliance on the value dimensional conceptualization of culture which has produced a highly restricted conception and focus on culture, and placed critical limits on our extent of understanding (p. 484).

Integrated into these weaknesses is the “almost total adoption of the (psychology based) work of Geert Hofstede” as the foundation for cross-cultural comparison (p. 484). While Harrison and McKinnon (1999) concurred that Hofstede’s model is an effective means of engaging in cross-cultural comparison, numerous problems occur from the lack of integration of other systems, models, or processes. Through exploring the psychological dimensions of culture, there is an exclusion of other cultural perspectives (e.g. sociology, anthropology, and history). The researchers noted that as the literature on which their study was based relied almost exclusively on Hofstede’s model, this by default narrowed the scope of their own review and analysis.

The data demonstrates that there are shortcomings in using Hofstede’s model to the point of excluding others. The principle criticism is that Hofstede’s model excludes other theoretical dimensions. The researchers suggest that other models, which have been put forth are better able to integrate multiple cultural dimensions, including the five first proposed by Hofstede. Moreover, as cultures express different traits, entering into a culture with the expectation that certain dimensions will be expressed predisposes the researcher to purposefully exclude any information that they feel is irrelevant to Hofstede’s five dimensions.

Empirical Studies: National Culture, Outsourcing, and Competitive Advantage

Couto and Vieira (2004) conducted a quantitative, non-experimental, causal comparative and correlational study for the purpose of examining the effect of national culture on the research and development (R&D) and innovations of subsidiaries of multinational corporations, and to determine whether national culture dimensions influence research and development activities of the offshore vendor. The title, *National*

Culture and Research and Development Activities, adequately describes the study, because national culture does impact a multinational corporation's (the offshore outsourcing initiator, or the *home*) decision to outsource their R&D activities to an offshore country (the recipient of the offshore outsourcing process, or the *host*). The researchers also referred to the target country as a "subsidiary," a term that is not duplicated in other literature, and tends to confuse the clarity of their research. The sample used in the study consisted of 222 subsidiaries located within five European countries, and sought to test the prevalence of cultural dimensions including "individualism, masculinity, power distribution, and uncertainty avoidance" and also to identify the management models that were used within these organizational cultures (p. 211).

Couto and Vieira's (2004) literature review provided a background to the problem. The significance of the study was the demonstration of the importance of the relationship between national culture and R&D. National culture can lead to advantages of a specific phase of the process. The review was thorough, current and detailed in comparing and contrasting theories about the relationship between national culture and innovations and R&D. Couto and Vieira based their research study on numerous studies on the impact of national culture on innovations, and studies on the impact of national cultures on R&D. Studies on the impact of national culture on innovation "have suggested that low power distance and uncertainty avoidance and high masculinity and individualism can foster higher innovation" (Couto & Vieira, 2004, p. 21). Nakata and Sivakumar in 1996 conducted a study on the relationship between national culture and R&D and found that selection of location is the selection of national culture. In 1987,

Hofstede's cultural dimensions, "power distance", "individualism", "masculinity", "uncertainty avoidance", and "Confucianism" were also introduced in the literature. They based their study on their literature review and previous findings. The data collection procedure was not clearly described.

The population of the study included analysis of five European countries. 1,000 questionnaires were sent out. The data produced a sample of 222 subsidiaries, a response rate of 23.1%. Two statistical methods were applied: (1) *Average, Standard Deviation and Correlation* was used among Hofstede's national culture dimensions, location of home company's subsidiary (independent variables), and R&D, which is measured by the total funds invested in research and development (dependent variable), and (2) *Ordered Probit Model* of both estimation results and marginal effect on the same independent and dependent variables. Data are clearly presented in tables. Findings supported the hypothesis that "cultural dimensions of the host country influence the type of research and development performed by the foreign subsidiaries" (Couto & Vieira, 2004, p. 29). Findings also supported the second hypothesis that "the type of management model, associated with the origin of the multinational company can also influence the nature of research activities performed by the subsidiaries (Couto & Vieira, 2004, p. 29). The findings from the Ordered Probit Model to estimate the results suggested that the results were statistically significant (<0.01), which the researchers interpreted as evidence of positive relationship between the independent variables, national culture dimensions, innovations and R&D. The results were in accordance with the literature.

Couto and Vieira's (2004) interpretation of these findings was that culture dimensions and the management model of the host country impact the types of R&D

performed by the vendor. Based on the results, Couto and Vieira concluded that in terms of R&D, there is substantial connection between multinational culture and the host company national culture. A limitation reported by Couto and Vieira was the small number of countries participated in their study. The researchers emphasized Confucianism as a necessary area for future study but did not specifically note why this cultural trait was relevant to research in Western countries. This created an ambiguous approach to information management in respect to why relevance was placed on specific cultural traits as opposed to others. The researchers also noted that future studies should include other multinational corporations from both European countries and from the United States.

***Market Freedom, Home and Host Countries Regulations, and Legal Factors in
Offshore Outsourcing***

Political Relations and Offshore Outsourcing

The literature indicates that geo-political positioning has an impact on offshore outsourcing. Lyengar (2004) explored these issues in a review of case study information collected from technology companies that were active in outsourcing in foreign countries. Technology companies were used as the model due to the prevalence of international mobility concerning software innovations. Not only is software a commodity but “the ability to conceptualize, develop, deploy, and manage software” are affected by the degree to which global software companies perceive these as commodities (Lyengar, 2004, p. 2).

Companies are most likely to attract customers but are also more likely to experience geopolitical pressures when they produce high-quality products in widespread use. This is, Lyengar (2004) noted, especially true in software development where standardization of software product use facilitates data movement, and execution of high-quality products helps to facilitate willingness of software use. However, there are risks associated with creating a product for distribution on a worldwide scale. Countries have distinctive legal, cultural, and social codes that impact what a salable product can contribute, and if these codes are somehow broken then there are associative penalties. These penalties are wide-ranging; the author focuses on cost (e.g. loss of customers) but there are legal penalties for infringement. Moreover, those working within Information Technologies often focus specifically on ensuring that the product delivers what it is designed to do (e.g. provide specific utilities or applications) and do not concentrate on creating software that is universally acceptable within all regions and appeals to all customers. Lyengar (2004) did not state this outright, but there is an implicit open-ended question as to whether this latter form of software can actually exist and still meet all demands and expectations of quality and performance.

The significance of political system and ideology are also important for more than the company in question. Arndt (1997) found that there are pressures unique to offshore outsourcing based upon criteria established by not only the countries involved but also the perception of offshore outsourcing as expressed within various populations. This is of critical interest to countries which follow democratic rule. The decisions made by politicians are intended to follow the will of the populace, and this indicates that there may be a consensus of opinions and attitudes that need to be expressed by politicians

during policymaking. Yet Ardnt (1997) found that it is difficult to create a single holistic process through identifying trends in behaviors and the adoption of globalization. Certain populations and countries appear to reflect distinctive attitudes towards globalization, while others do not demonstrate consensus. He proposed a modeling process that can be used to assess the various criteria involved, where he notes that products, capital, and labor can be measured. If evaluation of the “input-output combinations for the two industries [are] evaluated at the same cost,” this creates a viable model through which the perception of value for commodities can be plotted (Ardnt, 1997; p. 72). This model also allows for assessment of the impact of global sourcing, wherein “subcontracted activities or components can be products or services,” and each of these has an accompanying value. When framed according to the value attached to these by the local community or the nation in which outsourcing occurs (be it the supplier or the host), similar values can be attached that indicate the impact of such pressures.

The Impact of Regulations on the U.S. and the Offshore Outsourced Service Provider

Multinational corporations experience significant challenges relating to the offshore outsourcing processes. Clarke (2006) reflected upon these issues in the study of corporate scandal as it reflects upon the provider of outsourcing, wherein the decisions made concerning the availability and applicability of outsourcing are often undermined on the grounds of illegitimate or misplaced concerns. Regulatory effects in the wake of scandals and promotion of work displacement as the result of outsourcing, Clarke (2006) writes, create sweeping change in the strategies applied to regulation of offshore outsourcing. However, these changes are often grounded in emotional reasoning as

opposed to value-based or data-based reasoning, a process that affects outcomes through skewing the perceived outcomes associated with the offshore outsourcing processes.

Clarke (2006) reported that the perceptions of incumbent directors in the offshore outsourcing environment provide a valuable perspective into how misconceptions and misperceptions can impact regulatory efforts imposed on offshore outsourcing by both host and target countries and their respective governments. The data indicated that the regulatory processes focus on punishing the multinational companies as opposed to promoting reform. Punishment and retribution do not have sensible outcomes and are often “knee-jerk” responses based upon a desire to force restitution for perceived harms (Clarke, 2006; p. 6). Yet Clarke (2006) also cautioned that it is inappropriate to identify these outcomes as inherently valid, as the director of a multinational company has a vested self-interest in the effectiveness and sustainability of his or her institution. This may suggest that self-reporting perceptions made by this sample population do not accurately report true outcome associated with regulatory efforts.

Offshore Outsourcing: Legal Risks

In their examination of legal risks and perspectives, Romanuian and Jane (2006) took the position that offshoring occurs when a company sets up an "existing business function or division in a foreign country" (Introduction section, para. 2). Outsource offshoring happens when the contracting company contracts part or the whole project to a third party contractor in a foreign country (para. 4). To be successful, companies engaged in offshore outsourcing have to evaluate financial problems such as budgeting and fiscal outcome, intellectual property rights, compliance, legal issues, privacy and data security before they decide to offshore the business to a foreign country (Romanuian &

Jane, 2006). They divided offshore outsourcing into two categories, offshoring and outsource offshoring. Offshoring is defined as “setting up company's existing business function or division in a foreign country”, and outsource offshoring “happens when the outsourcing vendor go offshore for contracting part or whole project to third party vendor situated in another country” (Romanuian, 2006, para. 3). The status of legal controls is difficult to qualify. There are no universal terms of business law and this indicates shortcomings associated with finding and attaching criteria used to assess the effectiveness of certain business practices. The authors provided a detailed literature review in which they demonstrate how interactions between countries can create legal conflict due to the existing legal standards within each respective organization, and the degree to which legal conflict can impact successful business interactions.

Romanuian and Jane (2006) suggested that the best way to manage an overview of these broad considerations is to deconstruct the issues at hand and identify the specific legal qualities associated therein. In outsourcing, particularly offshore outsourcing, a number of legal phenomena is identified including “information security, privacy, intellectual property, copyrights, patent, and trade secrets” (para. 1). The authors used an analytical literature review to qualify four specific forms of interaction “based upon the nature of [the] contract” established between countries. Separation according to criteria is difficult to manage, as the authors stress that definitions of these terms are dependent upon the type of setting created by the countries involved and the organizations engaging in offshoring. However, analysis and comparison are possible if the structure of the contract is explored as opposed to the terminology used to define the contract. When this occurs, the relationships among the vendor, the country, and the core business activities

form the basis for exploration.

While Ramanujan and Jane (2006) did not delve into the specifics of legal risks associated with these four forms of organizational associations, they did provide a working foundation upon which legal risks can be explored. They suggested that the objectives of the vendor may be in conflict with the legal standards established by either the host country or the vendor's native country. Specific legal risks can then be assessed according to these standards, as well as through assessment of the contract governing business strategy and the practices undertaken by the involved parties.

The exploration of the data by Ramanujan and Jane (2006) is lacking in substance. The specifics of how and to what extent these practices can occur is defined and described, but these are not sufficient in creating a broad profile of outcomes based upon the information. However, the document is clearly written and is effective as a means of informing its audience of the possibility of legal risks due to associative properties found in those participating in the offshoring or outsourcing process. While not a stand-alone research effort, it is a valuable introduction to the basic issues.

Empirical Studies: Home Country Decision Factors of Offshore Outsourcing

In their study, "Success factors for offshore information system development," Jennex and Adalakun (2003) conducted a quantitative, non-experimental, exploratory study for the purpose of examining the factors that affect the success of small and medium companies that offshore software development. This study is significant to the current research effort because it indicates that smaller companies are increasingly engaged in offshore outsourcing and that smaller companies can be considered "multinational" in that they may have extensive connections through partnerships formed

with business practitioners. Also, as offshore outsourcing is often used as a benchmark for companies to evaluate whether they want to invest in permanent expansion, it could be argued that offshore outsourcing may be a trial experience for companies seeking to expand but not yet ready to make the commitment to expansion.

The title adequately describes the study, since the factors represent the independent variables identified by Jennex and Adalakun (2003). These consist of people factors, technical infrastructure, client interface, and business infrastructure and regulatory interface, which the authors describe as impacting the success (dependent variable) of companies when outsourcing.

The literature review by Jennex and Adalakun (2003) provided a background to the problem and significance for the study depicted by lack of research findings on the critical success factors that outsourcing companies need to meet in order to be successful. The goal in their research was to identify a small set of factors that small and medium companies should focus on in order to be successful. To identify these factors, they suggested three research questions that were in line with the research methodology. The review was thorough, current and detailed in comparing and contrasting theories about the relationship between outsourcing and success factors. Through the literature review, it is clear that previous studies were focused on the success factor in India. However, Jennex and Adalakun (2003) expanded it to companies located in Eastern and Western Europe

The population of the study included outsourcers and European client companies from the software development and Information Technology (IT) industry. The population was expanded also to outsourcers in the U.S. to check if there are differences

between outsourcers in the U.S. and outsourcers in Europe. A probability, systematic sampling plan resulted in the data producing a sample of 201 outsourcers companies. A total of 210 questionnaires was sent, 201 were usable, a response rate of 95.7%. Two statistic models were applied. The Outsourcer Success Factor Model was used to group success factor and to identify key success factors groups that support the relationship between client and outsourcers. The second analysis used was an *ANOVA* test to determine if same critical success factors apply for both outsourcers and outsourcing clients. Data is clearly presented in tables. The data collection procedure was clearly described. Six critical success factors were identified; general knowledge skills of outsource workers, telecommunication infrastructure, technical skills of outsource workers measured by the quality of their work (e.g. software is delivered on time with non critical software bugs), client knowledge base, trusting relationship, and intellectual property rights. The results were statistically significant with a significant mean value greater than 4.0 in a five point scale. Reliability and validity criteria were established. Survey respondents were allowed to add key success factors to the survey. Jennex and Adalakun's (2003) interpretation and conclusion of these findings were that there are six key success factors for outsourcing, and companies in different countries do not agree on the importance of all the critical success factors. Technical skills and general knowledge skills of outsource workers affect the ability of the outsource company to understand the client company needs. Knowledge client contact and trust are the other two critical factors that are controlled by both the outsourcer and the client. Establishing good relationships and trust between the outsourcer and the client is important for outsourcing success. The last two key success factors, intellectual property right protection and the

telecommunications infrastructure, were identified as factors that are not controlled by the outsourcer and the client. These two factors are controlled by the government of the outsourced company. The only factor that was included in the model but was not one of the critical factors for success was cost.

Limitations reported by Jennex and Adalakun were that a single item instead of three was used to measure success factors, the study Type I error rate is inflated which questions the reliability of the findings, and the selection of the participants. They generated the following areas of future study: expanding the sample range to identify regional differences, and to have two different sample groups, one for executives and one for workers, to identify differences in critical success factors perceptions. Future studies should focus on the relationship factor on the success of outsourcing.

Discussion of the Literature

Summary and Interpretations

The purpose of this review is to analyze critically the theoretical and empirical literature about the impact of offshore outsourcing on competitive advantage of U.S. multinational corporations, and to identify areas of future scholarly inquiry. The major finding of this literature review is that the discipline of offshore outsourcing is extremely important for a company's competitive advantage. One of the outcomes of globalization of businesses is offshore outsourcing for better profitability, to gain market share, and to be competitive in the market place. A company's performance depends on strategy and planning, contracting and relationship development, and implementation of offshore outsourcing strategies. However, studies have questioned the success of companies that

outsource and the significant logistical challenges as they attempt to put forth a strategy that is not successfully met by the situation at hand. It is fundamental that the resources and capabilities of the home country company are recognized as important factors for multinational corporations to generate and sustain competitive advantage. The organization of this summary and the interpretations are in line with selected and pertinent themes from the literature map, which also organized the body of the review. A synopsis of the latest theoretical and empirical literature on outsourcing and competitive advantage outcomes follows. A presentation of what is known and unknown will also be discussed, with possible strategies to approach the upcoming research paper used to frame the outcome of what was learned during the research and review of the literature presented herein.

Theoretical Literature

One of the problems encountered in the review of the literature was a lack of internal and external validity. While many of the research studies consulted did place an emphasis on validity as a means of justifying the themes and methods used in the execution of their documents, it remains unclear as to whether this validity was actually present. This was illustrated in detail in the criticism of Geert Hofstede's work and the many distinctive research efforts that have been drawn from his original theories. In exploring Hofstede's work, authors Harrison and McKinnon (1999) challenged not only the original model of cross-cultural comparison that was first proposed by Hofstede but also called into scrutiny the work by other researchers that relied upon this model of cross-cultural analysis. As a result, the validity of Hofstede's model is called into question, while it remains the dominant paradigm for use in cross-cultural analysis. This

creates conditions in which the outcome of the research is subject to scrutiny, as the original assumptions used to explore some may have been misaligned or inappropriately attached.

Examples of such research efforts are those by Couto and Vieira (2004), who engaged in a multi-dimensional study of the relationships forged among research and development (R&D), innovative outcomes, and the cultural setting. To participate in this research effort, the researchers recognized that they would need to engage a large number of potential respondents and would have to use a strict governing methodology as a means of carefully defining limiting variables and expressing these variables within the data acquired from the respondents. This process utilized Hofstede's (1987) model of cultural dimensions as the governing framework for cultural analysis, and Couto and Vieira (2004) bracketed their findings against this framework. While Hofstede's model of cross-cultural analysis was the only one with significant questions of validity attached, it nevertheless remains important to isolate, identify, and assess the other assumptions used in the research studies to see if similar questions can be raised. If so, this in turn suggests that the data analysis and the results sections are problematic as well. If not, this implies that the challenge of validity has been successfully met.

Competitive Advantage. In the domain of competitive advantage, the theoretical literature about competitive advantage focuses on a process or model for companies that use outsourcing as part of their business strategy. Competitive advantage can be approached through many distinctive perspectives. The literature review used existing theoretical analysis to introduce this topic, and segued into the relevant areas of

competitive advantage that have become components of offshore outsourcing. These areas of competitive advantage appear to be:

- Improved financial returns due to costs saved on production and labor;
- Monopolization of resources;
- Improved brand-name positioning through improved quality; and
- Enhanced opportunities for technology.

Several common themes were expressed in the literature. Resources and capabilities of a firm are important factors of multinational corporations to sustain competitive advantage (Grant, 1991). Also, Tseng (2006) suggested that adoption of multinational corporations to global strategies will lead to a better knowledge transfer from the host company to the offshore subsidiary. Both theories tend to provide companies with a model or a guide to follow for successful offshore performance. If resources and skills are measured internally and externally (competitors), and weaknesses and strengths are known, the company will be able to leverage them for better performance.

However, the question of validity emerged again. Grant's (1991) theory has no empirical validity, suggesting that his propositions and the model generated from these propositions need to be examined. In contrast, Tseng's (2006) theory of global strategy and knowledge transfer has strong empirical validity. Although there is no validation of both theories, most multinational corporations use processes that are presented (although not originating) in both documents in the context of outsourcing to gain competitive advantage through utilizing opportunities available through the offshore outsourcing processes. This suggests that a study based on Grant's theories would help create

empirical validity. The potential for a study modeled after a mix of both Grant's and Tseng's theories on global positioning could integrate selective desirable processes taken from the works of both researchers. This would also reduce the stated liabilities in Grant's study and promote the collection of substantial literature and original data.

Offshore Outsourcing. In the domain of offshore outsourcing, the study of specific logistics practices takes precedence. It appears necessary to identify how and to what extent specific outcomes occur before the rationale that governs them is assessed. The study of offshore outsourcing appears to frame the practice as a constant and then explores the feasibility of the decisions that are made in respect to it. This type of exploratory model is difficult to validate because it does not take into consideration the strategies or the rationale that emerged before the practice was put into place, but tends to frame the decisions, practices, and outcomes in terms of the results generated. In doing so, comparisons between different types of offshore outsourcing (e.g. different plans used in different companies; different plans used by different countries, etc.) tends to be retrospective and frames the outcomes according to perceived successes and failures. As is evident in the literature review, it is clear that many of these studies take these limitations into account when approaching the data and note that their reviews are retrospective, such as that of Carmel and Agarwal's (2002) assessment of information technologies and offshore outsourcing. Therefore, the studies highlight the limitations of the data used to monitor the progress of offshore outsourcing and merely frame and criticize events based upon limited availability of data. It is quite possible that exploration of the procedures when offshore outsourcing was in the consideration and

implementation phases would have transformed this discussion to some degree through providing insight into the process side.

Strategies reviewing offshore outsourcing have illustrated the prominence of this business practice being important for companies seeking to reduce cost, focus on core businesses, and gain competitive advantage. The theory of offshore outsourcing, introduced by Robinson and Kalakota in 2004, suggested three major categories of offshore outsourcing, entry, development, and integration. They also presented three offshore outsourcing models which were based on relationship, ownership, and geographical location. More detailed assessment put forth by A.T. Kearney, Inc. and written up by Monczka et al. in 2005 elaborated on these three main categories, which integrated assessment of information of strategic placement. Monczka et al. (2005) suggested a three phase strategic model which included strategy and planning, contracting and relationship development, and implementation. Both theories were based on the authors' experience and not on previous theoretical models. However, they constructed an empirical study to validate their theories, and suggested that companies seeking competitive advantage use their processes.

National Culture, Outsourcing and Competitive Advantage. The assessment of outsourcing as a business strategy needs to take into account the specifics of the setting in which outsourcing occurs. This creates an increased focus on the national culture of the countries in which outsourcing participants are found. This literature review has demonstrated two clear but separate themes in the study of offshore outsourcing and culture. The first of these is in the study of how two companies with different cultures can relate to each other when joined by the shared venture of offshore outsourcing. The

second of these is the study of how cultures influence the offshore outsourcing process and the extent to which specific outcomes are generated by internal cultural traits. As a result, perceptions on national culture, outsourcing, and competitive advantage appear to be founded in assumptions of performance and attached cultural expectations.

The study of culture is recognized as an important component within the broader overall examination of relationships between different nations (Hofstede, 1987; McSweeney, 2002; Couto & Vieira, 2004). As such, it is relevant to the study of offshore outsourcing as the relationships formed between persons from distinctive countries with unique cultures are expected to work within the parameters of partnerships. Analysis of cultural traits, themes, and predilections is advantageous in studying the effectiveness of offshore outsourcing, where persons from two or more countries that potentially may have distinctive cultural backgrounds will bring their own cultural expectations to the negotiation processes.

Culture is indicative of the traits within a population and the priorities and significance to specific perceptions, attitudes, and behaviors expressed within that population. This not only reflects on the status of the residents of the country but is expressed in the decisions and communication strategies found within domestic businesses. The study of culture was formalized in 1987 when Hofstede introduced his five criteria for measuring cultural dimensions, which were power distance, individualism, masculinity, uncertainty avoidance, and Confucianism. Using these as modeling variables, researchers seeking to identify the degree to which cultural norms are expressed within a specific population are able to do so through studying social

engagements and the priorities that representative members of the population attach to these five cultural dimensions.

In a comparison of management strategies regarding offshore outsourcing in New Zealand and India, specific behaviors were attributed to the workers and managers within either country. Similarly, a research study by Couto and Vieira (2004) indicates that the research and development phase of a project or portfolio development is likewise impacted by the national culture expressed in the business. This strongly suggests that the expression of workplace habits is in some ways indicative of the culture in which the business resides. It may also be possible to argue that the manager expresses traits that have been cultivated by his or her personal upbringing within a specific culture, although none of the literature consulted focused on this.

Using Hofstede's model, it is possible to explore these trends through identifying the cultural relativism of a population, or even by establishing cultural relativism between two distinctive cultures. This process can also be used to determine outcomes within the culture, wherein cultural norms can be used to predict cultural expectations, which in turn can be used as a correlate to behaviors expressed within a culture. However, while Hofstede's model is widely used, it is challenged in terms of its ubiquitous nature in the research literature. McSweeney (2002) suggests that while Hofstede's model does allow for the study of cultural dimensions, it has been too widely integrated into the research methods processes and therefore has influenced researchers to assume that it is the only effective model through which cultural dimensions can be framed. This perspective limits the potential research options that could occur from the use of another model, or even from using Hofstede's model of cultural dimensions in conjunction with other

cultural modeling frameworks. Regardless, McSweeney concurs that the study of cultural dimensions is a fundamental component in understanding motivational forces within specific populations. His study helps to develop further the rationale that can be used to study existing behaviors and predict possible outcomes based upon known variables.

Empirical Literature

The study of cultural dimensions and competitive advantage tends to incorporate Hofstede's model into a known setting with unknown cultural influences. These cultural influences, and their impact upon the environment, are then framed within the study and efforts are taken to identify how and to what extent these influences impact the decisions made by persons within it. The empirical literature demonstrates that management control systems (MCS) tend to illustrate specific cultural influence native to the countries in which these systems are implemented. This occurs regardless of common unifying themes such as language, and also suggested that companies which outsourced tended to adapt MCS that reflect native culture as opposed to assimilating the culture of an external country. However, when this occurs strictly through the use of Hofstede's model, many influences that could impact outcome are lost or otherwise overlooked. This reflects the earlier concern by McSweeney (2002) that the majority of cultural assessment research compiled while using Hofstede's model may not be positioned appropriately to reflect all relevant aspects of culture.

The empirical studies using Hofstede's model exist in great quantity. Marrison and McKinnon (1999) conducted a mixed-methods study designed to test the effectiveness of this model, specifically in terms of its appropriateness as a tool used to create generalizations between different organizations in regards to culture. The study indicated

that modeling methods used to test and assess both the presence and the impact of culture within organizations are insufficiently suited to the task. This strongly implies that the traditional approaches towards surveying culture create assumptions towards what should be found. This predisposes the researcher to interpret specific outcomes within the research process and also unintentionally excludes dimensions that may be seen as irrelevant or non-existent within the discussion of culture.

This is significant in the study of culture and management in that there is a strong implication that the existing empirical literature is insufficient. In the study of offshore outsourcing, this is a serious limitation because it calls into question the empirical validity of the research process and the data acquired via the research process. It also reduces the general understanding of how culture influences organizations that consist of a single culture or integrate multiple cultures. This confuses the issue of offshore outsourcing in terms of comprehending how and to what extent these processes impact the existing culture. There is also confusion concerning how the native culture of the host country in which offshore outsourcing occurs impacts the relationship with the country in which outsourcing was initiated.

Competitive Advantage. Assessment of competitive advantage within the framework provided by culture, in relation to the effect of offshore outsourcing on competitive advantage of a company, is difficult to achieve when the basic framework used to form the basis of the majority of research is inappropriate or otherwise flawed. Similarly, many of the studies surveyed appeared to attach assumptions to competitive advantage. These assumptions are drawn from earlier research efforts and from observational contextualization of the offshore outsourcing process. An example of this

is Grant's (1991) study of competitive advantage in which resources, capabilities, and strategy were classified as the main components of competitive advantage. Grant's study did not use any original research but instead appeared to modulate the theories of previous economists such as Michael Porter. This suggests that Grant's theories may in fact be the next stage of intellectual discovery in respect to the offshore outsourcing process, but it would be better to see Grant's theories in a framework in which these were tested for validity and reliability. As it stands, Grant contributed to the theoretical literature when he stressed that there is a relationship between competitive advantage and the methods employed to take advantage of positioning; however, he does not contribute to the actual empirical or analytical literature on this topic.

Similarly, Tseng's (2006) study of multinational corporations and phenomenon-based offshore outsourcing criteria are also flawed but in dramatically different ways. In contrast to Grant's (1991) study, Tseng entered into the debate by breaking from traditional models of inquiry in studying a total of 106 private investment firms through a model of his own making. The data collected from these firms was assessed through Tseng's own factor analysis strategies, which helped to provide a basis for a logic model that could then be applied to similar surveys of other companies. Yet Tseng did not fully describe this model that he has created; his data from the use of the new model receives the greatest attention within the study, but the methods he used to acquire the data are barely mentioned. Not only does this reduce the future use of Tseng's personal methodology for researchers seeking to conduct similar research practices, but it also reduces the validity of Tseng's own empirical results. As the methods were unclear, the result should be suspect.

The study of competitive advantage therefore cannot be theoretical nor strictly analytical unless the processes used to conduct studies of these types are effectively reconciled with the outcomes. Chase et al. (2005) were able to do this through suggesting that competitive advantage could not be deconstructed based on a framework of theories or of components associated with competitive advantage, but with the more practical strategy of assessing advantage through economic performance. This process intentionally shifts the focus of the research effort from the strategies that the companies made to attain profitability and productivity (e.g. the supply chain, etc.), but can provide an immediate, accessible portrait of which companies have attained greater success. Yet this, too, is limited. Chase et al's (2005) strategy failed to incorporate a focus on how and why success develops within organizations. Ultimately, this means nothing. At its core, anyone can compare two numbers and make a snap judgment on which company is more successful. The numbers reflect a certain time without context. In the study of organizations and cultures, it is the context that matters if other parties seek to identify how and why a given organization is successful. Performance management systems (PMS) and other analytical tools are useful in this respect, but these tools still provide data that is indicative of failed or otherwise misplaced programs.

Offshore Outsourcing. Monczka et al. (2005) developed a survey to test their new perspective model of outsourcing. They identified 24 factors that were linked to the initial five-phase model which included strategy and planning, analysis and decision making, structuring the relationship and contract, transitioning and implementation, and ongoing management and measurements. After using exploratory factor analysis, the results led them to reduce the five-phase model to a three phase model. The three phase

model includes strategy and planning, contracting and relationship development, and implementation. The factors within each phase of the model were highly interrelated and could be integrated in groups. The contracting and relationship development phase was also examined by Gobal et al. in 2003. Gopal et al. conducted a non-experimental, correlational explanatory quantitative study to examine the effectiveness of contract choice on project profit of offshore outsourcing software development provider in India. They used Ordinary Least Squares and Treatments Effect analysis to measure the impact of choice of contract on project profit. Their finding indicated that projects with uncertain requirements are subject to a time and material contract due to the risk the vendor might incur, and that time and material contracts are statistically larger than fixed-price contract ($t=2.861$, $p<0.005$). Monczka et al's findings (using regression analysis technique) presented a positive relationship between implementation and contracting and relationship development with a significance level of <0.0001 .

Limitations reported by Monczka et al. were domestic insourcing and captive offshoring. Lack of first hand data on clients, lack of information on contract price, no permission to contact clients, and the limitation to two contract choice were reported by Gopal et al. Although there is strong statistical validity of both models, a revised research may lead to different outcomes.

Offshore Outsourcing and Competitive Advantage. Data indicates that the process of offshore outsourcing is difficult to identify as a causal factor in providing indisputable competitive advantage. The data on competitive advantage has already demonstrated methodological flaws when approached from a theoretical position, an empirical research position, or a mixed-methods position. The decision to engage in

distinctive execution models as a means of effecting improved positioning is likewise founded on this information, specifically the assumption that certain strategies that govern competitive relationships can be applied to the processes used to manage competitive advantage (Kidane, 1994; Babu, 2006). Moreover, the data on competitive advantage as it refers to offshore outsourcing is conflicting and is based in large part upon the methods used by the researcher to acquire and package the data for readers. One example of this is the three-phase strategic outsourcing processing model that was developed by Monczka et al. (2005), wherein a comprehensive model that allowed for a flexible assessment of the components inherent in strategic outsourcing was used to identify competitive advantage. The methodology developed was richly detailed and complex in terms of its applicability to the subject matter, and the data that was derived from its use suggest positive outcomes for strategic outsourcing. Unfortunately, the limitations that were reported by the researchers themselves within the context of the study suggest that the modeling process cannot fit the requirements of assessment in all corporations. This limits the terms of use for this particular model and even calls into question its effectiveness if wrongfully applied.

This leads to the conclusion that the research efforts studied in this paper to identify competitive advantage are simply not comprehensive enough to provide a coherent look at the larger picture. These issues are highly significant in the attempt to identify whether offshore outsourcing is actually an advantage for a company, as the data used to support or disprove it contains persistent problems in the methodology. This in turn makes it impossible to justify the successes or failures of offshore outsourcing in respect to competitive advantage.

National Culture, Outsourcing, and Competitive Advantage. The measurement processes used to determine the synthesis of offshore outsourcing, national culture, and competitive advantage have yielded results that are suggestive but are not conclusive. The data indicates that researchers do not have a consensus concerning many of the elements of the research process; this is especially true in regards to developing and using measurement methods and conceptual frameworks that can be used to explore and identify the core constructs that serve as the primary areas of inquiry. If there is no understanding of what culture or what competitive advantage is, then there is no feasible strategy that will help explore these concepts in a succinct and unified fashion.

What is important to note, however, is that this may actually be a beneficial outcome. This paper has explored literature and original research on these topics with the purpose of clarifying themes within these and establishing which strategies may be best suited to the current business setting of offshore outsourcing used by a large number of multinational corporations. This paper has demonstrated that there is no one perspective or one single viewpoint on these issues, and the diverse nature of the topics are associated with outcome are representative of the complexity of variables that is found within all organizational systems. The concepts proposed herein strongly suggest that there is no one way to examine the factors involved with offshore outsourcing, or even to identify which patterns of business strategies are effective in facilitating a strong competitive advantage for a single company in regards to offshore outsourcing.

This outcome, while frustrating from the process of reviewing the literature, is evocative in terms of how offshore outsourcing can occur. This process does not happen in isolation and it invokes a large number of variables within a multifaceted environment.

This literature review has also shown the dangers of oversimplification, wherein even the most complex study cited in this paper (Monczka et al., 2005) was not sufficient in providing a conclusive set of outcomes that can be used in the analysis process.

It is perhaps for the best that these data sets will not yield an efficient synopsis of the information, or provide a single path towards resolution. Doing so would suggest that there is a single formula for engaging in offshore outsourcing in such a manner as to maximize competitive advantage regardless of circumstances. This is clearly not the case. The exploration of topics that correspond with the study of different themes and distinctive environments helps to illustrate the complexity of the issues involved. It also helps to demonstrate that there is a subjective nature taken in the analysis process, where different authors emphasize different factors, variables, and themes as having greater importance to their studies. This results in a setting in which the study of multiple aspects of offshore outsourcing, national culture, and competitive advantage are forcibly assessed using different strategies; some of these appear to have greater value than others, but the ability to view these and appreciate the fundamental diversity stresses that all literature and empirical studies on this subject are valuable.

Competitive Advantage and Planning Procedures. Specifically, one of the themes that this paper has attempted to address is that of temporary and long-term positioning in respect to competitive advantage. An initial assumption of this research effort is that the motility of labor that is associated with offshore outsourcing is one of the factors influences multinational corporations to seek out lower costs through hiring laborers in target countries for lower wages. This process has been demonstrated as a financially viable one for the multinational corporations involved, and possibly has

beneficial outcomes for the host countries in terms of immediate financial gains that can be used to promote improved investment in essential aspects of the corporation such as research and development.

Data from the literature review reveals that the emphasis on offshore outsourcing refers to the exchange of immediate costs and benefits associated with the process. There is very little data that explores long-term planning and outcome scenarios associated with the offshore outsourcing process. The planning and inception of offshore outsourcing indicates a heavy emphasis on immediacy, specifically a focus on immediate returns (e.g. cost benefits). Furthermore, the literature indicates that the rationale that underlies the offshore outsourcing process is validated through the results. If offshore outsourcing is done specifically to improve a company's competitive advantage through increasing productivity while reducing the associated costs, then offshore outsourcing achieves these ends.

Competitive advantage is also improved through offshore outsourcing. Not only is a company allowed to sell its products or offer its services for reduced cost, but some of the savings can be funneled back into the delivery line to improve overall quality and enhance customer service relationships. The outcome is one in which the brand name of the multinational organization can be enhanced.

Cultural advantages of offshore outsourcing are likewise competitive advantages. In the increasingly global society, commerce is dependent almost exclusively on the relationships that are formed by stakeholders at all levels of a transactional hierarchy. From communication between individual workers up through tariff and trade regulations imposed by the host and the target countries, the roles of individual stakeholders,

collective organizations, and the nations themselves form critical components of offshore outsourcing. All of these appear to be focused on the end goal of improved relationships to influence competitive advantages.

However, one of the deficits of the literature is that the information examines the short-term advantages and disadvantages of offshore outsourcing. Beyond ambiguous statements in which long-term outcomes are suggested – and generally in a cautionary tone - but rarely fully developed, there is no quantified data on long-term projections of how offshore outsourcing is relevant to competitive advantage. Thus, the literature on assessment of offshore outsourcing and the planning processes found therein are lacking exploration of how transfer of information and designation of labor and production between friendly host and target countries can shift the power structures associated with these. Assessment of competitive advantage is, at its most fundamental level, the study of power and how to best attain a position through which power is attained and maintained. The literature demonstrates that the authors are focusing on immediate positioning without consideration for long-term outcomes. The amount of knowledge transfer is one of the long-term outcomes that, if not considered or planned, could cause the company to lose its competitive advantage in the long run.

International Relationship in Offshore Outsourcing. Jennex and Adelakun's (2003) studies on offshore information system development indicate effective establishment and maintenance of relationships within the offshoring process. This article also stresses a need to identify and maintain two forms of relationships: systemic relationships refer to the processes involved within the many distinctive aspects of offshore outsourcing, while human-centered relationships involve the networking created

between persons involved in offshore outsourcing. The study stresses that these relationships are fundamental to success and cannot be overlooked when assessing if a given offshore outsourcing program has been effective. However, the cultural concerns that emerged in the criticism of Hofstede's (2003) work in cultural dimensions can be applied to this study; Jennex and Adalakun (2003) were specifically narrow in their selection of persons used in the sampling process but suggest that the resulting data be applied successfully to general communities in which these processes occur.

Relationships forged between partners within the offshore outsourcing process can and should be taken into account during the assessment process. The modeling strategy that has been suggested and used by Jennex and Adalakun (2003) consists of statistical models that were appropriately suited to the framework of the authors' study but cannot be applied for general use in all conditions. With that said, the use of the *ANOVA* test did demonstrate high degrees of flexibility and effectiveness within the context of the study.

Conclusions

The information on competitive advantage in respect to offshore outsourcing indicates that there are different assumptions regarding how and why competitive advantage is defined and executed. First and foremost, the literature emphasizes competitive advantage in a contemporary setting; one of Porter's main tenets of competitive advantage is the necessity to identify current influencing factors on a routine basis, but also that realistic assessment of information and possible outcomes helps to form appropriate rationale for decision-making.

The information on offshore outsourcing also indicates confusion between production and employment when offshore outsourcing. These two terms appear as interchangeable within the literature and can typically be clarified only through analysis of context (e.g. whether the article refers to production or employment, etc.). In the assessment of cultural influences and organizations, even this distinction is difficult to identify. As such, areas of study in offshore outsourcing appear to demonstrate confusion in clarity, even if purpose can be inferred through exploration and identification of context.

The literature on offshore outsourcing indicates that modeling processes used to assess the properties of offshore outsourcing may likewise be inconsistent; effectiveness is determined by criteria established by the researchers within the parameters of the study. While this allows for flexibility in analysis of themes and content, it also makes it challenging to identify themes and modeling within the research that achieve optimal effectiveness in the analysis process.

Recommendations

Recommendations drawn from the review of the literature are myriad and have implications for offshore outsourcing process. First and foremost, it is recommended that the study of offshore outsourcing be confined to the study of companies with similar purposes. The literature review indicates that the modeling processes used to explore specific aspects of offshore outsourcing are confused through the inclusion of multiple variables. This confusion can be significantly minimized if the number of variables under exploration is purposefully limited. The proposed setting for the current study will comprise of an archival, analytical review of multinational companies that are involved in

technology and have decided to outsource the production aspect of their products to offshore manufacturing firms. To limit the focus of this research project better, the companies selected will all be involved in communications technologies. This will integrate both the IT aspect of offshore outsourcing and will help to form a cross-cultural comparison of themes that are designated as important within effective offshore outsourcing among multinational corporations with similar purposes.

In assessing the impact of offshore outsourcing on competitive advantage of multinational companies, the degree and the reasons for engagement in outsourcing for a company need to be identified. If outsourcing has occurred, it is inferred that this has occurred because the companies identified that outsourcing leads directly to improved competitive advantage. The rationale that governs this decision-making process is therefore important in assessing how and why outsourcing – especially offshore outsourcing – is considered.

To this end, it is important to assess the business method of offshore outsourcing that is used. It needs to be asked whether the telecommunication companies identify competitive advantage in offshoring to specific aspects of the development phase (e.g. components, materials, etc.) or whether the product as a whole is assembled offshore. Tradeoffs will need to be noted, such as the costs of shipping versus the costs of assembly, and so on.

A limitation of this research process has already been noted but must be restated. The data on offshore outsourcing tends to be retrospective, where companies publish information following the inception period. This means that it is highly unlikely that data explaining the buildup and implementation phases will be readily available. Rhetoric and

opinions on the rationale prior to implementation will likely be the best initial sources of information available. As a result, the literature can be used to provide a retrospective analysis of the rationale and the outcome, as opposed to data indicating appropriate decision-making during the process.

As the findings in the review of the literature indicate, the majority of documentation occurs to assess outcome as opposed to ongoing progress, it is therefore necessary to include information that denotes process but the focus of the research effort will ultimately provide a review of the final product. Also, it will be intriguing to note which models these companies have used in determining how and in what direction the company seeks to identify competitive advantage. Questions that need to be asked in this area of inquiry are (1) Which models of assessment are used, and is Porter's Competitive Advantage of Nations applicable to the assessment of competitive advantage in modern and projected offshore outsourcing procedures? Similarly, is Tseng's Global Strategy Model of Knowledge Transfer a comparable outcome? And (2) which policies and practices have been put into effect in respect to ensure competitive advantage? Do these policies allow the company that participates in offshore outsourcing to benefit from their decisions?

Finally, it must be asked whether competitive advantage is the same in all instances. According to Porter, competitive advantage is a quantifiable process that can be isolated through assessment of viable factors. However, it is plausible that companies competing in the same general industry and using the same outsourcing processes will have similar views towards competitive advantage. Then again, it is also possible that competitive advantage for one company differs dramatically from the others (both in the

same industry), specifically for this reason, and the deviant company seeks to capitalize on alternative opportunities. These are questions that are essential to the final research project.

The literature review also indicates that the majority of data in assessing offshore outsourcing comes from in-house documentation and demonstrates a one-way assessment of the information associated with offshore outsourcing. To clarify, the availability of information from the companies under scrutiny on the subject of offshore outsourcing tends to focus on the home company and responsiveness to certain limiting factors put forth by the partner in offshore outsourcing. This, again, reflects upon problems of validity illustrated in the literature; the information that is available identifies the role of another country as framed by these companies' assessment and evaluation policies. In order to achieve specific goals in assessment of offshore outsourcing and its effectiveness, this indicates that the review of in-house policies and progress will be inherently limited and one-sided. Recommendations for the resolution of these problems during the formal research process involve an enhanced focus on external literature to support internal documentation. Cross-checking information using multiple sources is advantageous in that it facilitates improved accuracy and focuses attention on consistency (or lack thereof) in the internal literature. Flaws in consistency and accuracy may still be identified but these can thereafter be identified as such.

Finally, the study of offshore outsourcing needs to take into account the practices that are used in the offshore outsourcing process. As with the previous two areas of inquiry, it is necessary to identify and compare the companies' policies with those presented in the literature. It is necessary to identify whether Grant's (1991) theories on

decision-making and outcome in respect to competitive advantage are applicable or whether these are simply – as believed – inapplicable based upon the lack of validity inherent within the theory itself. Through framing the processes of offshore outsourcing against other models, such as Porter's (1990) assessment of competitive advantage, the outcomes of decisions made in respect to offshore outsourcing can be reviewed and applied in practice.

Theoretical Reformulations

1. The resource base theory of internal resources and capabilities of a firm to sustain competitive advantage needs to be validated.
2. The perspective model of outsourcing needs to be formulated to separate inshore outsourcing and captive offshore.

Critical or Analytic Reviews

Future areas of scholarly inquiry using critical analyses of the theoretical and empirical literature are needed in the areas of internal resource base and capabilities of the company and competitive advantage. Analytical reviews of theories and studies examine the impact of resource-base and capabilities on competitive advantage and need to be included in this study. The review should contain recent work (after 1991). The study should define variables, and reviewed articles should be based on similar theories and measurement tools.

Empirical Studies

Empirical studies are needed to explore how competitive advantage is determined within multinational corporations. Areas of future study should include a variety of variables and focus on the effect of different decisions-making processes and distinctive

outcomes selected by multinational corporations in order to facilitate improved competitive advantage. The study needs to provide detailed information about data collection procedures and instrument validity.

As illustrated in the study by Clarke (2006), the data acquired from the multinational corporations suggests that these companies are vested in the application and continuation of offshore outsourcing and that it is necessary to perpetuate this process. Similarly, data by McFarlane (2005) indicates that the systems that are inherent within the offshore outsourcing process have already become entrenched. It appears that entrenchment and acceptance appear to perpetuate the idea of inherent validity. In layman's terms, this process suggests that the existence of these concepts means that they have the right to exist and also that the manner in which they exist is appropriate. It is necessary to identify whether this association between acceptance and validity has any merit.

Methodological Studies

Methodological study is another area of future scholarly inquiry where design, sample size, populations studied, and measurement of variables are needed. The studies reviewed in this paper have all been critically defined in terms of the methods selected, the populations studied, and the type of instrumentation used. These studies have clearly demonstrated distinctive and different strategies used to approach similar problems: the study by Carmel and Agarwal (2002) to identify and explore the processes of offshore outsourcing utilized a literature review process that examined the data for multiple companies involved in offshore outsourcing and identified four common points among these. Such an approach is a qualitative phenomenology method and this strategy helps

to isolate phenomena (e.g. the proactive strategic focus described by the authors) emergent in the literature. Similarly, the book by Babu (2006) on offshore outsourcing of products takes the form of a critical literature review in which many distinctive companies competing within the field of Information Technology can be reviewed and assessed according to a framework of his own design. Through applying this model to the literature, Babu (2006) was able to elaborate and expand upon his original thesis and draw out new information from existing literature.

Other studies have determined that different methods better fit their desired outcomes. These include studies by Monczka, Markham, Carter, Blascovitch and Slaight (2005) in which original qualitative and quantitative data was collected in a mixed-method design of the researchers' choice. The researchers identified that existing models were insufficiently structured to achieve their research goals and created a new five-phase model, which they then chose to test using detailed statistical analysis of the performance of multiple companies. While the methodology of analysis was achieved using a standard rate of deviation as an indicator of statistical significance, the labeling strategies that Monczka et al. (2005) used to acquire the information in the first place indicate that the attachment of terms and the applicability of specific modeling processes (i.e. the "Perspective Model for Strategic Outsourcing") are fundamental in achieving a successful methodology.

Consideration of the methods found in the literature review suggests multiple potential strategies that can guide the final research effort. The consideration of these methods involves (1) desired format of the study; (2) availability and legitimacy of available sources of data; and (3) areas that will need to be covered in the study process.

As previously stated, the three areas of study in the research paper are: (1) *competitive advantage*, (2) *offshore outsourcing* in respect to the selected companies, and (3) how these companies choose to conduct their overseas business affairs. As this information is now known and recognized, it is possible to move forward and identify potential research strategies for future scholarly work.

Research Questions

To address the before mentioned objectives of the study, two research questions were developed. Each one was developed so that one would be able to assess different relationships between the dependent and independent variables. The research questions are as follows:

Research Question 1: What impact does offshore outsourcing have on the competitive advantages of an MNC?

Research Question 2: What factors of offshore outsourcing (contracts, national culture and market freedom) have an impact on U.S. MNC competitive advantage?

Research Hypotheses

In connection with the research questions, hypotheses have been formulated to address the research questions by using statistical analyses. The hypotheses are:

H1: Offshore outsourcing has a significant positive impact on the competitive advantage of an MNC.

H1a: Types of offshore outsourcing contracts (time and material, and fixed cost) and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H1b: National culture factors of host country (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance) and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H1c: Market freedom factors and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H2: The degree of offshore outsourcing of multinational corporations is a positive explanatory variable of competitive advantage.

Hypothesized Model

The research model used to assess the data compiled information from a few major multinational companies that engage in offshore outsourcing practices. The working definition of a “major” multinational company is one that employs no fewer than 5000 domestic and/or foreign laborers. Data was collected from these companies using a questionnaire for business managers and procurement managers. The ANOVA data analysis instrument was used to test the differences of response as denoted within the questionnaire. Phenomena has been identified by bracketing core concerns and deconstructing these to isolate the empirical data contained therein. Once completed, regression analysis was used to test the hypotheses.

Hofstede's model was used to incorporate culture to competitive advantage.

Monczka et al.'s (2005) study was used to measure time to market, market share, and cost.

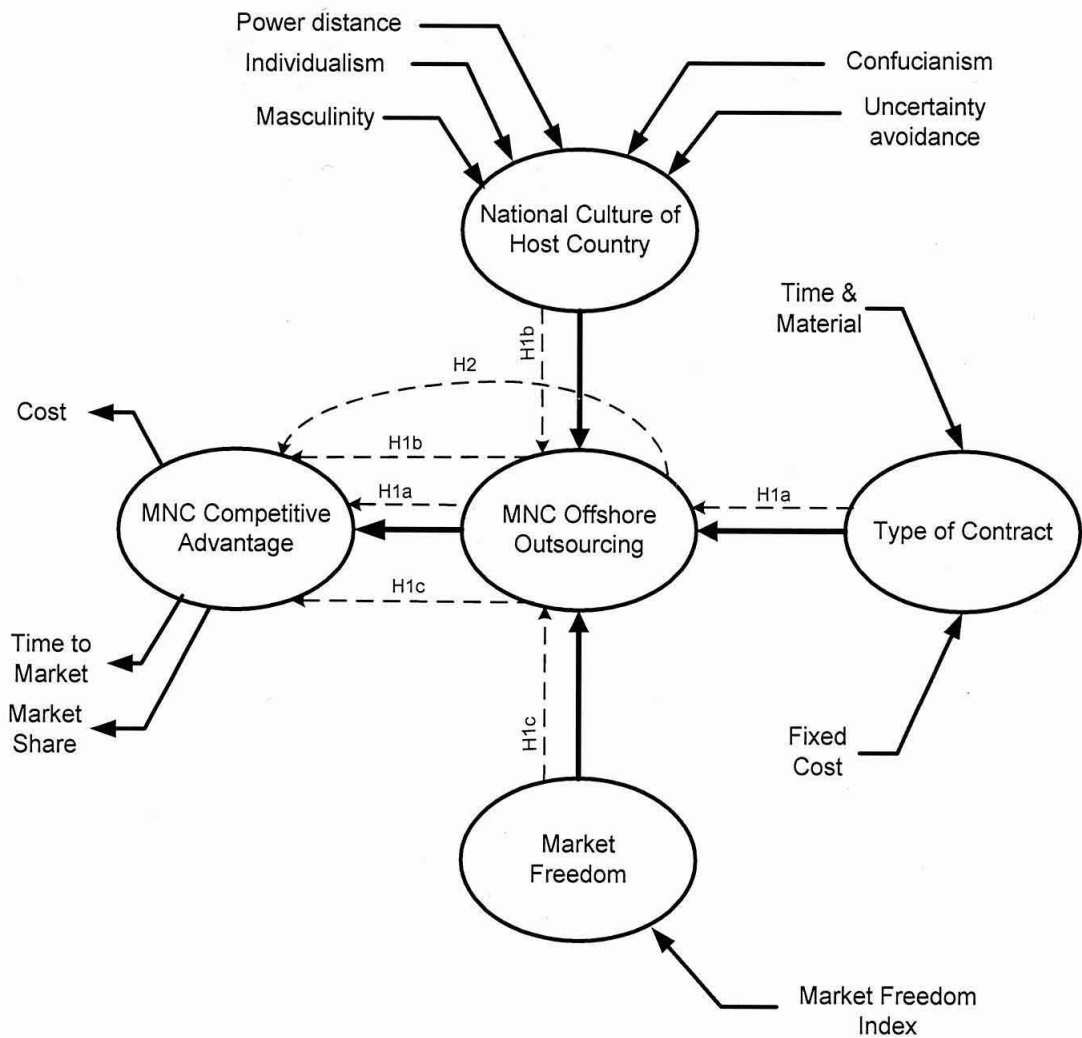


Figure 2-2. Hypothesized model.

Summary

The review has been used to explore the impact of offshore outsourcing on competitive advantage. The major findings of this literature review are that there is a significant relationship among offshore outsourcing, national culture, choice of contract, and market freedom and legal factors on competitive advantage. The research strategy also can help understand the choice of different types of contracts, the selected offshore country, and the required knowledge and skills of the offshore country to perform the work. The above research strategy is researchable because only a few studies measured and discussed the same or similar research on offshore outsourcing. This research strategy is critical for future development of company's competitive advantage when offshore outsourcing.

CHAPTER III

METHODOLOGY

The objective of the study was to examine how multinational corporations' (MNC) offshore outsourcing affects the competitive advantage of these corporations. The competitive advantage of the MNC was measured by three items, time to market, cost and market share and is used as the dependent variable in the study (Monczka et al. (2005). Competitive advantage was then modeled against a number of independent variables that allowed an examination of the relationships that exist between MNC offshore outsourcing and their competitive advantage. The remaining parts of this chapter detail the research design for the current study, the population and sampling plan employed to gather the data, the instrumentation that is used to collect the data and the statistical methods implemented in the analysis for the study.

Research Design

The research design for this study was a quantitative descriptive design rather than a qualitative or mixed research design. Traditionally speaking qualitative studies have been used in the past to obtain a measure of competitive advantage in corporations, but it has been argued by some that the qualitative method tends to compartmentalize the debate over what consists of an ideal competitive advantage into numerical terms (Porter, 1998; Smith & Flanagan, 2006).

For this reason, a quantitative research design was implemented for the study because one is able to obtain information directly on a certain measure, which can then be

further analyzed using numerical and statistical techniques. The advantage of the quantitative method is that information can be measured and accessed, and results can be easily interpreted. This study was quantitative in the nature that data was collected via a questionnaire where subsequently the results from the questionnaire were analyzed using various statistical techniques. This is also a descriptive study in which mean, median, minimum, maximum, and standard deviation for each one of the items on the survey was calculated to provide some evidence as well as insight of the data distribution.

The data analysis techniques that were implemented to obtain the results of the study include analysis of variance (ANOVA) and simple regression analysis. The ANOVA is appropriate for the current study because it is able to explain how much of the variation in the dependent variable is explained by the independent variable. Therefore, in order to determine whether or not a variable has a significant effect on the dependent variable (i.e. the effect is different from zero), the ANOVA was able to provide that information. This is then extended to simple regression analysis. Simple regression analysis is appropriate in this context because it allows one to determine the strength of effect each independent variable has on the dependent variable. This means that one would be able to determine whether different independent variables have a significant positive effect on the competitive advantage of MNC offshore outsourcing.

To perform the statistical analyses of the research questions, the data was collected via a survey instrument that is made up of three sections. The questionnaire used in the current study is one that is adapted from Gopal (2003) and Couto (2004). The sections of the questionnaire include; *demographic* questions that obtain personal information on the participants (age, gender, ethnicity and so forth), *MNC* questions that

are used to collect information regarding the MNC and its relations with other countries (Couto, 2004), *national culture* questions (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance) (Couto, 2004) and *contract type* questions (time and material, and fixed cost) (Gopal, 2003) and a market freedom database from the *Heritage Foundation* website. The *MNC* questions were used to address H1, H1a, H1b, H1c and H2 to see if MNC offshoring actions have a significant impact on the competitive advantage of the corporation. The *national culture* questions were used to assess H1b to determine if the *national culture* variables have a significant effect on the competitive advantage of the corporation. The *contract type* questions were used to address H1a to determine if the type of contract will have a significant effect on the competitive advantage of the corporation. The data collected from the *Heritage Foundation* website is used to address the significance impact of market freedom on competitive advantage. Some part of the data collection was obtained through a survey, some other part was through using historical data of market freedom from the Heritage Foundation.

Population and Sampling Plan

Target Population

The target population for the current study included telecommunication MNCs based in the United States. The MNCs that were selected for the study employ no less than 5000 full or part time laborers. These MNCs are among corporations that maintain a certain level of offshore outsourcing through China and India. Within each one of the corporations selected in the study, a random number of employees was selected to

participate in the study. For the employees to qualify for the study they had to have a managerial position within the company so that information regarding the offshore outsourcing from the corporation can be used.

Accessible Population

The population that was accessible for the current study was the population of telecommunication MNCs that currently have projects that are outsourced. Not only are the projects outsourced, but they are also outsourced to either India or China.

Sampling Plan

Data was collected from the telecommunication companies using a questionnaire targeted to business managers, procurement managers, and assistant managers who deal with outsourcing in India and China. The surveys were distributed to a random sample of the above employees, who have access to information about their corporations' offshore outsourcing projects. An e-mail based sampling plan was used.

Sample Size

The sample size of any experiment is an important consideration, as having a large enough sample size makes it possible to generalize to the target population as well as have enough statistical power to be confident of the results. Because of this, the minimum sample size for the current study was calculated by using the statistical power calculator G*Power. To calculate the sample size for the study, there are several criteria that have to be considered. These criteria include the power, effect size and number of predictor variables in the model. The power of the study is defined as the probability of rejecting a false null hypothesis while the effect size is the magnitude or strength of relationship between the predictor and dependent variables that is desired. As for the

number of predictor variables, the most that will be in a model at any given time were national culture factors of host country (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance) and MNC offshore outsourcing which gives 6 predictor variables. In this case, the minimum sample size that would be required is 98. This is for a power of 0.80 and an effect size of 0.15.

This means that the required number of participants would have to be 98 in the study. This would allow for appropriate analyses based on the statistical procedures implemented. Assuming a 5% response rate to the surveys that are distributed to the target population, the minimum number of surveys that are required to be distributed would be 1,960. To ensure a sample of 98 participants, the number of surveys that was distributed was 5000.

Inclusion Criteria

The inclusion requirements for this study were as follows:

1. The person is employed by a large telecommunications MNC.
2. The person is a business manager, procurement manager, or assistant manager that would have access to the corporation's offshore outsourcing projects.
3. The person is 21 years old or older.

Exclusion Criteria

1. The person does not work for a large telecommunications MNC.
2. Managers with no direct contact or decision making capabilities were excluded from the sample.
3. The person is under 21 years old.

Instrumentation

Two methods of data collection were used in this study, questionnaire and historical data. The questionnaire for the current study was modified from different surveys by Gopal (2003) and Couto (2004). The information collected from Gopal includes information regarding data collected for types of contracts used by the MNC. Couto's survey includes information for the national culture and indicates a measurement of offshore outsourcing of MNC. The second method of data collection is the market freedom scores of India and China that were obtained from the Heritage Foundation Website.

Contract Type Questionnaire

Description: The adapted questionnaire used to look at the different contract types for the MNC in the study was that of Gopal (2003). The items that were used for the construction of the survey used in the current study include "There was a clearly known way to convert offshore supplier into requirements specifications", "Established processes could be relied upon to convert offshore supplier needs into requirements specifications", "There was a clearly known way to develop software that would meet these functional requirements", "There were established procedures and practices that could be relied upon to develop software to meet these requirements", "It was difficult to hire trained people for this project", "There was a shortage of trained people for this project in the company", "It was difficult to provide training to employees in the skills required for this project", "The offshore supplier's MIS department was very experienced with handling outsourcing projects", "The offshore supplier MIS was technically capable of managing outsourced projects like the present one", "The offshore

supplier company had a very capable MIS department”, “The project could have been as successfully executed by the MIS department of the offshore supplier organization”, “The offshore supplier company was very experienced with the process of outsourcing software for its operations”, “A significant part of the offshore supplier’s IT needs were outsourced to various vendors, both onshore and offshore”, “Employee turnover from the project teams was a major problem during the execution of this project” and “It was difficult to retain people with the skills required for this project within the company”. These are ranked using a 5-point Likert type scale that goes from 1 “strongly disagree” to 5 “strongly agree”.

Validity

The validity of the instrument was ensured by creating several questionnaire items for the different constructs included on the survey (Gopal, et al., 2003). By including multiple items for each of the created constructs in the survey, the validity of the construct will increase (Gopal, et al., 2003). Also by adding more items to the survey, the reliability of the questionnaire increases.

Reliability

The reliability of the instrument was examined by using Cronbach’s alpha scores. It was found for the different constructs that reasonable reliability scores were observed. The lowest reliability score was 0.56 for the client experience construct with the highest reliability score resulting for the requirements uncertainty (alpha = 0.90) (Gopal, et al., 2003).

National Heritage Questionnaire

For Couto's questionnaire there was a total of nine questions that had several sub-questions used to answer the question of interest. Most of the questions were modeled as a Likert type scale that had three to five different levels. For the questions that contained three different levels, there were three scores: a score of 1, activity not performed by subsidiary; a score of 2, activity performed in a single country by subsidiary; and a score of 3, activity performed in multiple countries by subsidiary. These scores were converted into a 5 point scale to remain consistent with the remaining questionnaires. Other three point Likert scales were also converted to a five point scale to measure the variables of interest.

For the four point scales in the survey, they included a range from a score of 1, "this does not apply at all", to a score of 4, "this applies fully". These scales were converted to a 5 point scale: a score of 1, "this does not apply"; a score of 5, "This applies fully". The remaining five point scale was used to gather information on the decision making process of the company as well as the expectations on the financial, sales and marketing side of the company. The questions on this survey were adapted to take into consideration the effect MNCs have with regards to national culture. Also used from this questionnaire are questions to obtain demographic information on the company or in the case of the current study the MNC.

MNC Questionnaire

The questionnaires by Couto (2004) and Gopal (2006) were used to obtain information regarding MNC offshore outsourcing. Some of the items in the original surveys were modified to obtain information regarding the offshore outsourcing of

MNCs. The original questionnaire consisted of questions that indicate various sources of financing at the end of December 2004 with options for the amount from local and foreign sources. This is adapted so that information regarding the current years' financing is obtained. Also included in the survey is information regarding marketing strategies, inventory management, production management and other functional areas of the corporation and whether or not these are conducted locally or whether they are conducted by outsourcing to foreign countries, such as India or China. Questions concerning the profit and sales figures of the MNCs were also obtained from the survey to measure the amount of money made by outsourcing to India and China. In each case, the items on the MNC questionnaire are measured using a five point Likert type scale that ranges from 1 to 5.

The MNC questionnaire was also used to obtain a measurement of cost of the corporation as well as the time to market the product, and the corporation's market share. The production cost of the corporation is measured in millions of dollars and indicates the amount of money that is spent during the production stage.. The time to market is a measure used to determine the amount of time it takes the product to be released to the market and is measured as a continuous variable in weeks. The market share is also operationalized as a continuous variable that measures the percentage of the market being served by the corporation.

Procedures: Ethical Considerations and Data Collection Methods

As discussed above, data was collected from telecommunication companies using a questionnaire targeted to business managers, procurement managers, and assistant

managers who deal with outsourcing in India and China. Included with the survey there is a discussion of why the study is being undertaken: (1) to gather information on the competitive advantages of MNCs that use offshore outsourcing and (2) to complete the requirements for a doctoral degree. SurveyMonkey was used to distribute the survey electronically via email to the participants. Participants were informed that the information returned via the survey would not be used in any means considered to be unnecessary or inappropriate. There was also a confidentiality agreement included with the survey so the individual knew that the information gathered for the study was for research purposes and thus would not have an effect on their current position in the company. They were made aware that no names or addresses are included so no one would be able to figure out who the participants were. Once the participants had read through the consent form and had agreed to take part in the study they started to answer the study by saying yes to the questionnaire. Anyone who did not wish to complete the survey had the option of quitting at anytime during the survey and no information was recorded. When someone agreed to take part in the study, the participants answered all the questions in the survey. Once the surveys were completed, a thank you message appeared expressing the appreciation of the researcher for taking part in the study.

Methods of Data Analysis

The information from the survey was then returned to the researcher where it was subsequently input into a computer spreadsheet for future analyses. In the spreadsheet each row represented a single observation, which is a single participant, while each column represented each one of the results that were selected for the different questions

in the survey. To maintain confidentiality for the subjects, any information pertaining to their names or addresses was removed from the spreadsheet and replaced by a numbered identification code. This allowed the researcher to keep track of the different participants and their responses while adhering to the privacy policy of the study.

For the descriptive statistics part of the analysis, frequency tables and summary statistics were used to illustrate the distribution of select variables in the model. For example, the frequency tables show how many people have selected a certain item for a particular question on the survey instrument. Similarly, by using the summary statistics one is able to have a better sense of how the answers to each one of the questions were distributed. This was done by including mean, median, minimum, maximum and standard deviations for each one of the questions in the survey. By doing this one would be able to determine whether the distribution of selected items was in fact skewed or normally distributed. If the selected items were normally distributed then it would be expected that the number of participants that selected a certain item for a question would follow a bell shaped curve with fewer individuals selecting the extreme values and more individuals selecting values closer to the middle. If on the other hand, it was observed that a higher number of individuals selected higher scores or lower scores then it could be concluded that the distribution was in fact skewed. Using descriptive statistics was a good means of measurement getting an idea of what the data looked and behaved liked.

The ANOVA procedure was then implemented with competitive advantage as the dependent variable and the other variables as independent variables. The ANOVA was appropriate for this study as it allowed for observation of how much of the variation in the competitive advantage of the MNC was explained by the independent variables in the

model. In other words, it examined whether each one of the independent variables in the model have a significant effect on the competitive advantage of the MNC. If it was found that there was a significant relationship between one and/or all of the variables, then the test statistic obtained from the analysis would exceed a critical value based on the results in the ANOVA table. For the ANOVA, the test statistic that was used to assess the relationship was the F-statistic which comes from the F-distribution. If the test statistic is found to be greater than a critical F-value on $k-1$ and $n - p - 1$ degrees of freedom (where k is the number of categories for the independent variable, p is the number of parameters that are estimated in the model and n is the total number of observations), then it could be concluded that the independent variable has a significant effect on the competitive advantage of the MNC.

The advantage of simple regression analysis is that it was possible to determine the individual effect each one of the independent variables has on the dependent variable while holding the other variables in the model constant. In terms of the study parameters, it was possible to say how each one of the individual national culture factors effect the response variable and whether they had a positive or negative effect. Simple regression also assists in the prevention of confounding variables. Confounding variables are those that are both highly correlated with the independent and dependent variables. If it is found that two or more of the independent variables are highly correlated with one another then it could be determined whether they should be kept in the analysis or whether they should be removed.

To assess the first hypothesis that “Offshore outsourcing has a significant positive impact on the competitive advantage of MNC” the variable that was looked at is the

MNC variable that is used to represent the offshore outsourcing of that corporation. If it is found that the F-statistic obtained from the ANOVA is greater than the critical F-value, then it could be concluded that offshore outsourcing does in fact have a significant positive impact on the competitive advantage of MNC. Similarly, if the critical F-statistic is less than the critical F-value, then it could be concluded that offshore outsourcing does not have a significant positive impact on the competitive advantage of an MNC.

To assess the second hypothesis that “Types of offshore outsourcing contracts is a significant explanatory variable of the competitive advantage of multinational corporations” the variable that was looked at is type of offshore outsourcing contracts used by the corporations. If it is found that the F-statistic obtained from the ANOVA is greater than the critical F-value, then it could be concluded that types of offshore outsourcing contracts are a significant explanatory variables of the competitive advantage of multinational corporations. Similarly, if the critical F-statistic is less than the critical F-value, then it could be concluded that types of offshore outsourcing contracts are not a significant explanatory variables of the competitive advantage of multinational corporations.

To assess the third hypothesis that “National culture factors of host country are significant explanatory variables of the competitive advantage of multinational corporations” the variable that was looked at is national culture of the host country used by the corporations. If it is found that the F-statistic obtained from the ANOVA is greater than the critical F-value, then it could be concluded that national culture factors of host country are in fact significant explanatory variables of the competitive advantage of

multinational corporations. Similarly, if the critical F-statistic is less than the critical F-value, then it could be concluded that national culture factors of host country are in fact not significant explanatory variables of the competitive advantage of multinational corporations.

To assess the fourth hypothesis that “Market freedom factors are significant explanatory variables of the competitive advantage of multinational corporations” the variable that was looked at is market freedom of the offshore country. If it is found that the F-statistic obtained from the ANOVA is greater than the critical F-value, then it could be concluded that market freedom factors are in fact significant explanatory variables of the competitive advantage of multinational corporations. Similarly, if the critical F-statistic is less than the critical F-value, then it could be concluded that market freedom factors are in fact not significant explanatory variables of the competitive advantage of multinational corporations.

For the analysis using the simple regression model, the effects of each one of the independent variables as stated above was looked at by using the following regression equation:

$$CA = a + b_h * MNCOO.$$

In this model b_h represents the coefficients for each one of the independent variables, which in this case is the MNC Offshore Outsourcing (MNCOO) as measured by the MNC questionnaire. The MNC Offshore Outsourcing is operationalized as a continuous variable based on the items on the MNC questionnaire. This model would be used in the assessment of H1 and H2 where the stated hypothesis is whether the types of contract and MNC offshore outsourcing have an effect on competitive advantage.

Therefore, to test the first hypothesis the coefficient that was used is b_h . If b_h was highly significant and positive, this would mean that MNC Offshore Outsourcing has a positive relationship with the CA of the corporation. In fact, the model predicted that for every unit increase in the MNC Offshore Outsourcing, the CA of the corporation also increases by b_h units, after controlling for the other variables in the model.

To assess H1a, the model that was used was:

$$CA = a + b_h * MNCOO + b_i * Contract$$

In this model the b_h and b_i represent the coefficients for each one of the independent variables, which in this case are MNC Offshore Outsourcing and the type of contract (time and material and fixed costs). To test the H1a hypothesis, the coefficient that was used was b_i . If b_i was highly significant and positive, this would mean that depending on the type of contract there will be higher or a more positive relationship with the CA of the corporation. In fact, the model predicted that for every unit increase in the contract variable, the CA of the corporation also increases by b_i units, after controlling for the other variables in the model.

To assess H1b, the model that was used was:

$$CA = a + b_h * MNCOO + b_j * National Culture$$

In this model the b_h and b_j represent the coefficients for each one of the independent variables, which in this case are the MNC Offshore Outsourcing and the national culture factors (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance). These coefficients explain how much each of the individual variables in the model effects the dependent variable after controlling for the other variables in the model. For b_j , the j represents the number of parameters that have to be

estimated for the regression model. Since there are five categories that make up the national culture variable, j had four parameters (3, 4, 5 and 6, since the number of parameter estimates for categorical variables is $k - 1$ where k is the number of levels in the category). To test the H1b hypothesis, the coefficient that was used is b_j . If b_j was highly significant and positive, this would mean depending on the type of national culture there will be a higher or a more positive relationship with the CA of the corporation. In fact, the model predicted that for every unit increase in the contract variable the CA of the corporation also increases by b_j units, after controlling for the other variables in the model.

To assess H1c, the model that was used is:

$$CA = a + b_h * MNCOO + b_m * Market Freedom$$

In this model the b_h and b_m represent the coefficients for each of the independent variables, which in this case are the MNC Offshore Outsourcing and market freedom. These coefficients explain how much each of the individual variables in the model effects the dependent variable after controlling for the other variables in the model. For b_m , the m represents the number of parameters that had to be estimated for the regression model. Since there are three categories that make up the market freedom variable, m had two parameters (7 and 8, since the number of parameter estimates for categorical variables is $k - 1$ where k is the number of levels in the category). To test the H1c hypothesis, the coefficient that was used was b_m . If b_m was highly significant and positive, this would mean that depending on the type of market freedom there will be a higher or a more positive relationship with the CA of the corporation. In fact, the model would predict

that for every unit increase in the contract variable the CA of the corporation also increases by b_m units, after controlling for the other variables in the model.

Pearson's correlation coefficients were used to illustrate the relationship that exists between two variables. Pearson's correlation coefficients show the effect each variable has on one another as well as the strength of that effect. The correlation coefficient ranges in value from -1 to $+1$. If a value of -1 is observed between two variables then it can be concluded that there is a strong negative relationship between the two variables. This means that as one variable increases the other variable will tend to decrease. On the other hand, if a value near $+1$ is observed, then it could be concluded that there is a strong positive relationship between the two variables which means that as one variable increases so too does the other variable.

The reliability of the instrument can be measured by using Cronbach's alphas. These demonstrate the internal consistency of the items in the survey instrument. These are similar to Pearson's correlation coefficients in that a higher reliability score of 1 would indicate that there is a strong correlation between the items on the survey, whereas a smaller value of around 0 would indicate that there is very little reliability amongst the items on the survey. Because the survey instrument that was used has been adapted from surveys that have been proven to be valid and reliable, it could be determined for the items which are similar to one another that there is one general construct. However, because some of the questions on the survey have been modified, a factor analysis was conducted to determine if relationships exist between the items on the survey. Whichever items are correlated with one another could then be used as a construct that measures one of the desired outcomes that is being assessed.

Evaluation of Research Methods

In this section of the report, the research methods chosen to evaluate the above hypotheses are considered. For the evaluation of the research methods, four factors were considered. These include the internal validity's strengths and weaknesses in the current study and the external validity's strengths and weaknesses in the current study.

Internal Validity: Strengths

1. The study that was conducted is a quantitative study which is better suited than a qualitative one on the basis that internal validity is greatly improved in a quantitative research design.
2. An explanatory quantitative design provides a higher degree of internal validity than does an exploratory quantitative design.
3. For the most part the questions that were used in the current study have come from a number of different research sources that have been used before.
Therefore their internal validity has been proven on a number of occasions.

Internal Validity: Weaknesses

1. The lack of evidence in the internal validity for the questions based on Couto (2004) is a concern which affects the internal validity of the study.
2. Because the study was not experimental in nature the internal validity is reduced to a certain extent.

External Validity: Strengths

1. The large sample size obtained for the study makes the sample more representative of the entire target population.

2. The questionnaires were filled out by a number of different business managers and procurement managers within several different MNCs within the telecommunications industry.

External Validity: Weaknesses

1. Only business managers, procurement managers, and assistant managers that have access to the required information were included in the study which makes for a sampling bias because there may be other employees that have access to the corporations' offshore outsourcing projects.
2. Focusing only on telecommunications MNCs limits the information on offshore outsourcing for other MNCs.
3. This is a self-report study. Therefore, it is possible that participants' answers are not be accurate or are made up.

Conclusion

Chapter 3 discussed the research methodology that was employed in the current study. This included information collected on offshore outsourcing contracts (time and material, and fixed cost), MNC offshore, national culture factors of host country (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance), and market freedom factors, and the effect these had on competitive advantages of MNC. In this chapter the research design, research questions, hypotheses, target population, sample size, instrumentation, ethical considerations, and methods of data analysis were discussed. In Chapter 4, the results for this study

are presented and assessed. In Chapter 5, interpretation, practical implications, conclusions, limitations, and recommendation for future studies are discussed.

CHAPTER IV

RESULTS AND FINDINGS

The purpose of this chapter is to present the results and findings for the statistical analyses conducted to determine which factors of offshore outsourcing had an impact on the competitive advantage of the multinational organization. This chapter is divided into three sections, which include descriptive statistics, reliability analyses and results and findings sections. The descriptive statistics section presents the breakdown for the demographic characteristics of the study population. The reliability analysis section then presents Cronbach's alpha statistics for internal consistency/reliability for the variables being used in the analysis. The final section then presents the results of the analysis of variance (ANOVA) and simple regression conducted to determine whether the offshore outsourcing significantly predicts the competitive advantage of the multinational organization.

Descriptive Statistics

Frequency distributions for the demographic characteristics of the participants in the study are presented in Table 4-1. Illustrated in Table 4-1 are the number and percentage of occurrences for each of the categories for the variables. For the management level of the participant, the most frequent response was other management rather than area manager, director, general manager or vice president (31.2%). The majority of the participants were between 35 and 54 years of age (74.6%) with a total of 62.7% of the participants being male. The majority of the participants had higher level of

education, either Bachelors degree (35.5%) or a Masters degree (43.0%), while the most frequent years at the current position was 2 to 5 years (26.5%).

Table 4-1

Descriptive Statistics for Demographic Characteristics

Variable	Frequency (N = 279)	Percentage
<i>Management Level</i>		
Area Manager	81	29.0
Director	65	23.3
General Manager	31	11.1
Other (please specify)	87	31.2
Vice President	15	5.4
<i>Age</i>		
Younger than 21	3	1.1
21-34	44	15.7
35-44	118	42.3
45-54	90	32.3
55-64	23	8.2
65 and older	1	.4
<i>Gender</i>		
Female	104	37.3
Male	175	62.7
<i>Education</i>		
Some High School	1	.4
High School Diploma	19	6.8
Associates Degree	21	7.5
Bachelors Degree	99	35.5
Masters Degree	120	43.0
Doctoral Degree	7	2.5
Other (please specify)	12	4.3
<i>Current Position</i>		
Less than 2	46	16.5
2 to 5	74	26.5
6 to 10	57	20.4
11 to 15	55	19.7
16 to 20	30	10.8
More than 20	17	6.1

The National Heritage scores for each of the participants were collected from the National Heritage website for each of the countries in which the offshore outsourcing is occurring. The National Heritage score for China was 52.8% (126th overall), which indicated that only 53% of China's market is considered to be free. The market freedom scores are based on different economic factors which include (a) Business Freedom, (b) Trade Freedom, (c) Fiscal Freedom, (d) Government Size, (e) Monetary Freedom, (f) Investment Freedom, (g) Financial Freedom, (h) Property Rights, (i) Freedom from Corruption and (j) Labor Freedom. Similarly, the market freedom for India is calculated using the same economic factors.

Based on this, India had a market freedom score of 54.2% (115th overall) indicating that 54% of India's market is considered to be free. To account for the market freedom of the organization in the analysis a dichotomous indicator variable was used. These variables were based on whether the country had a lot of involvement or substantial involvement in the offshore outsourcing of the organization. Therefore, if the organization was found to have a lot of involvement or substantial involvement in the offshore outsourcing then the participant was assigned to the more market freedom group, while if China or India did not have much, if any, involvement with the organization then the participant was assigned to the less market freedom group. The results for these variables are presented in Table 4-2. More than half of the participants were observed to have a lot of involvement or substantial involvement in the offshore outsourcing with China (55.2%), while 54.5% had a lot of involvement or substantial involvement in the offshore outsourcing with India. For both of the variables, 25 (9%) of

the participants were missing responses to these questions. The 9% of the participants that have missing values were not included in the subsequent analyses.

Table 4-2

Descriptive Statistics for Market Freedom Variable

Variable	Frequency	Percent
<i>China</i>		
Less Market Freedom	100	35.8
More Market Freedom	154	55.2
Missing	25	9.0
<i>India</i>		
Less Market Freedom	102	36.6
More Market Freedom	152	54.5
Missing	25	9.0

Reliability Analysis

To assess the internal consistency/reliability of the items used on the survey instrument to measure the variables required for analysis, Cronbach's alpha statistics were computed. The Cronbach's alpha statistics were computed for the competitive advantage of the corporation as measured by the MNC Questionnaire, the offshore outsourcing as measured by the MNC Questionnaire, the national culture as measured by the National Culture Questionnaire and the type of contract as measured by the Type of Contract Questionnaire. The results for the competitive advantage of the corporation are presented in Table 4-3. The questions that comprised the competitive advantage of the

corporation were the performance trend over the last three years questions and the corporation's performance in the current year questions. Based on the results for the competitive advantage, the questions that were used were found to be highly reliable estimates of the competitive advantage ($\alpha = .921$). This indicated that the competitive advantage of the corporations was adequately measured. Therefore, to obtain an overall measurement for the competitive advantage of the corporation, the item response scores for each question were averaged together to give an overall score. For example, if there were five questions that corresponded to the competitive advantage and the responses that were provided by a participant was 3, 4, 5, 4 and 4 then their overall score for the competitive advantage would be equal to 4, since this is the average of the five items.

Table 4-3

Reliability Analysis for Competitive Advantage

Variable	Cronbach's Alpha	Number of Items
Competitive Advantage	.921	9

The reliability analyses for the remaining independent variables are presented in Table 4-4, where once again the Cronbach's alpha and number of items for each variable are presented. Based on the results presented in Table 4-4, it was found that for the offshore outsourcing of the corporation there was a very high reliability between the items ($\alpha = .967$). This indicated that the offshore outsourcing of the corporations was adequately measured. The questions that were used for the offshore outsourcing measurement were the business areas in which the organization outsources its products to. For this variable, the scores for these 17 items were averaged together in the same fashion as the competitive advantage of the organization variable was averaged. This means that a higher score would indicate a higher degree of offshore outsourcing by the

corporation. For the national culture variables of the study, Cronbach's alpha statistics were observed to range from $\alpha = .182$ for the masculinity score up to $\alpha = .850$ for the Confucianism score. Even though low reliability coefficients were observed for three of the national culture variables, the item responses were averaged to provide an overall measurement for each of the national culture variables. Finally, for the contract type the reliability coefficients were found to be equal to $\alpha = .203$ for the fixed cost contract type and $\alpha = .714$ for the time and material contract type. For exploratory purposes as well as for the purpose of this study, the items that comprised each variable were averaged to give an overall measurement for the contract type variables.

Table 4-4

Reliability Analysis for Independent Variables

Variable	Cronbach's Alpha	Number of Items
<i>Multinational Offshore Outsourcing</i>		
Offshore Outsourcing	.967	17
<i>National Culture</i>		
Power Distance	.735	2
Individualism	.593	2
Masculinity	.182	2
Uncertain Avoidant	.456	2
Confucianism	.850	2
<i>Contract Type</i>		
Fixed Cost	.203	2
Time and Material	.714	3

To examine the distribution of the before mentioned constructed variables, measures of central tendency are presented in Table 4-5. This included the mean, standard deviation, minimum, maximum, skewness and kurtosis statistics for each of the variables. Based on the results of the summary statistics for the constructed variables, the variable that had the highest average value was the power variable from the national culture component of the study ($M = 3.79, SD = .84$). The variable with the lowest

average was then observed to be the offshore outsourcing variable from the MNC questionnaire ($M = 2.80$, $SD = 1.01$), which indicated only a moderate degree of offshore outsourcing in the sample. This is because the scores for the variables range from a low of one to a maximum of five. Based on the skewness and kurtosis statistics for each of the variables, it appeared that none of the variables had a significant amount of skewness, because the skewness statistic was $< |1|$ (Tabachnick & Fidell, 2001). For this reason, it would suggest that no transformation would be required for these variables, since there was little skewness in their distributions. It can also be gleaned from Table 4-5 that there are several missing values for the variables in the study. This is because several of the participants did not respond to the questions used in the analysis. For this reason, the results in the following section were based on the participants who had valid responses for each of the variables in the study.

Table 4-5

Measures of Central Tendency for Constructed Variables

	N	Min	Max	M	SD	Skewness	Kurtosis
Competitive Advantage	213	1.00	5.00	2.95	.85	-.183	-.577
Offshore Outsourcing	231	1.00	5.00	2.80	1.01	-.497	-.867
Power	205	1.00	5.00	3.79	.84	-.503	.514
Individualism	205	1.00	5.00	3.51	.75	-.418	.725
Masculinity	205	1.00	5.00	3.20	.79	.009	.895
Uncertainty Avoidant	205	1.00	5.00	3.30	.81	-.180	.299
Confucianism	205	1.00	5.00	2.99	1.02	-.037	-.289
Fixed Cost	201	1.00	5.00	2.95	.76	-.249	.569
Time and Materials	201	1.00	5.00	3.10	.72	-.346	1.148

Analysis of Variance and Regression Analysis

The first sets of results that are presented are for the correlation analysis between the independent variables in the study. This included the correlation among the offshore outsourcing, power, individualism, masculinity, uncertainty avoidant, Confucianism, fixed costs and time and materials. The results of the correlation analysis are presented in Table 4-6. There were several variables that were significantly correlated with one another ($p < .05$). In fact, the significant correlations between the variables ranged from a low of $r = .151$ ($p < .05$) between the fixed costs and the power of the corporation to a high of $r = .526$ ($p < .01$) between Confucianism and uncertainty avoidant. Although,

there were several significant correlations among the independent variables in the study, none of them exceeded .90 which indicated that there is little evidence of multicollinearity in the model (Tabachnick & Fidell, 2001). Multicollinearity means that the independent variables are not only highly correlated with the dependent variable, but also with the other independent variables in the model, which in turn would have an effect of the estimates obtained for the variables in the study. It was observed that there was no correlation of .90 or greater between the independent variables in the study.

Table 4-6

Correlation Results for Independent Variables

	1	2	3	4	5	6	7	8
1.Offshore Outsourcing	1							
2.Power	-0.088	1						
3.Individualism	.180**	.503**	1					
4.Masculinity	.347**	.190**	.434**	1				
5.Uncertainty Avoidant	.182**	.202**	.485**	.499**	1			
6.Confucianism	.265**	0.103	.194**	.413**	.526**	1		
7.Fixed Cost	0.126	.151*	0.122	-0.031	0.053	0.029	1	
8.Time and Materials	0.112	.224**	.378**	.230**	.409**	.241**	.307**	1

Note. ** $p < .01$, * $p < .05$

Research Question 1: What impact does offshore outsourcing have on the competitive advantages of an MNC?

To answer the above research question, the following hypotheses were examined.

H1: Offshore outsourcing has a significant positive impact on the competitive advantage of an MNC.

H2: The degree of offshore outsourcing of multinational corporations is a positive explanatory variable of competitive advantage.

To address these hypotheses an ANOVA with a simple regression analysis was used. This was done to determine whether the degree of offshore outsourcing of the corporation had a significant positive impact on the competitive advantage of the corporation. For this hypothesis the dependent variable was the competitive advantage of the corporation, while the independent variable was the offshore outsourcing of the corporation. The ANOVA results are presented in Table 4-7. There was not a significant relationship between the offshore outsourcing of the corporation and the competitive advantage of the corporation $F(1, 211) = .45, p = .50; \eta^2 < .01$. This meant that the degree of offshore outsourcing did not significantly explain the variation in the competitive advantage of the corporation.

Table 4-7

Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing

Source	SS	df	MS	F	p	η^2
Offshore Outsourcing	.327	1	.327	.452	.502	.002
Error	152.499	211	.723			

The results of the simple regression analysis are presented in Table 4-8. As was found in the ANOVA, the offshore outsourcing of the corporation did not significantly predict the competitive advantage of the corporation $t(211) = .67, p = .50$. Even though there was not a significant relationship between the competitive advantage and the offshore outsourcing, there was a positive relationship between the variables as indicated by the coefficient estimate for the regression analysis model ($B = .041$). However, it should be noted that this relationship was not significant and in fact only explained 2% of

the variation in the competitive advantage scores as indicated by the R squared value for the model.

Table 4-8

Simple Regression Results for Competitive Advantage with Offshore Outsourcing

Parameter	B	SE	t	p	η^2
Intercept	2.831	.185	15.270	.000	.525
Offshore Outsourcing	.041	.061	.673	.502	.002

Research Question 2: What factors of offshore outsourcing (contracts, national culture and market freedom) have an impact on U.S. MNC competitive advantage?

To answer the above research question the below hypotheses were examined.

H1a: Types of offshore outsourcing contracts (time and material, and fixed cost) and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

To address this hypothesis an ANOVA with a simple regression analysis was used. This was done to determine whether the offshore outsourcing contracts as well as the degree of offshore outsourcing of the company had a significant positive impact on the competitive advantage of the company. For this hypothesis the dependent variable was the competitive advantage of the corporation, while the independent variable was the offshore outsourcing of the corporation as well as the type of contracts of the corporation. This included the fixed costs and time and material contract types. The ANOVA results are presented in Table 4-9. There was not a significant relationship between the offshore

outsourcing of the corporation and the competitive advantage of the corporation $F(1, 197) = .08, p = .78; \eta^2 < .01$ and there was not a significant relationship between the fixed costs contract and the competitive advantage $F(1, 197) < .01, p = .96; \eta^2 < .01$. This meant that the degree of offshore outsourcing and the fixed costs contracts did not significantly explain the variation in the competitive advantage of the organization. There was, however, a significant relationship between the time and materials contract type and the competitive advantage of the organization $F(1, 197) = 48.77, p < .01; \eta^2 = .20$. This meant that the time and materials contract type significantly explained the variation in the competitive advantage of the organization.

Table 4-9

Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and Type of Contract

Source	SS	df	MS	F	p	η^2
Offshore Outsourcing	.045	1	.045	.078	.780	.000
Fixed Costs	.001	1	.001	.002	.961	.000
Time and Materials	27.834	1	27.834	48.772	.000	.198
Error	112.426	197	.571			

The results of the simple regression analysis are presented in Table 4-10. When examining the regression analysis results for this hypothesis, there was a significant positive relationship between the time and material variables and the competitive advantage of the organization. In fact, the model predicted that for every unit increase in the time and material contract, the competitive advantage of the organization would

increase by .54 units, after controlling for the fixed costs contract and offshore outsourcing. This meant that when the scores for the time and material contracts increased, the competitive advantage of the organization increased as well. This model was able to explain 21.8% of the variation in the competitive advantage scores as indicated by the R squared value for the model.

Table 4-10

Simple Regression Results for Competitive Advantage with Offshore Outsourcing and Type of Contract

Parameter	B	SE	t	P	η^2
Intercept	1.196	.302	3.960	.000	.074
Offshore Outsourcing	.016	.056	.280	.780	.000
Fixed Cost	.004	.074	.048	.961	.000
Time and Material	.543	.078	6.984	.000	.198

H1b: National culture factors of host country (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance) and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

To address this hypothesis an ANOVA with a simple regression analysis was used. This was done to determine whether the national culture factors as well as the offshore outsourcing of the corporation had a significant positive impact on the competitive advantage of the corporation. For this hypothesis the dependent variable was

the competitive advantage of the corporation, while the independent variable was the offshore outsourcing of the corporation as well as national culture factors of the host country. This included the power distance, individualism, masculinity, Confucianism, and uncertainty avoidance. The ANOVA results are presented in Table 4-11. There was not a significant relationship between the offshore outsourcing of the corporation and the competitive advantage of the corporation $F(1, 198) = 2.32, p = .13; \eta^2 = .01$ and there was not a significant relationship between the masculinity national culture and the competitive advantage $F(1, 198) = .23, p = .63; \eta^2 < .01$.

Similarly, there was not a significant relationship between the uncertainty avoidant national culture and the competitive advantage of the corporation $F(1, 198) = 2.40, p = .12; \eta^2 = .01$. This meant that the degree of offshore outsourcing, the masculinity or uncertainty avoidant national culture did not significantly explain the variation in the competitive advantage of the corporation. There was, however, a significant relationship between the power distance national culture and the competitive advantage of the corporation $F(1, 198) = 4.59, p = .03; \eta^2 = .02$, the individualism national culture and competitive advantage of the corporation $F(1, 198) = 16.01, p < .01; \eta^2 = .08$ and the Confucianism national culture and the competitive advantage of the corporation $F(1, 198) = 10.47, p < .01; \eta^2 = .05$. This meant that the power distance, individualism and Confucianism national culture significantly explained the variation in the competitive advantage of the corporation.

Table 4-11

Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and National Culture

Source	SS	df	MS	F	p	η^2
Offshore Outsourcing	1.283	1	1.283	2.315	.130	.012
Power	2.545	1	2.545	4.594	.033	.023
Individualism	8.871	1	8.871	16.012	.000	.075
Masculinity	.128	1	.128	.232	.631	.001
Uncertainty Avoidant	1.331	1	1.331	2.402	.123	.012
Confucianism	5.802	1	5.802	10.473	.001	.050
Error	109.694	198	.554			

The results of the simple regression analysis are presented in Table 4-12. When examining the regression analysis results for this hypothesis, there was a significant positive relationship between the individualism and Confucianism national cultures and the competitive advantage of the corporation, while there was a significant negative relationship between the power distance of the corporation and the competitive advantage of the corporation. In fact, the model predicted that for every unit increase in the individualism national culture, the competitive advantage of the corporation increased by .38 units, after controlling for the other variables in the model. This meant that when the scores for the individualism national culture increased the competitive advantage of the corporation increased as well.

Similarly, the model predicted that for every unit increase in the Confucianism national culture, the competitive advantage of the corporation increased by .20 units, after controlling for the other variables in the model. This meant that when the scores for the Confucianism national culture increased the competitive advantage of the corporation increased as well. Alternatively, the model predicted that for every unit increase in the power distance national culture, the competitive advantage of the corporation decreased by .16 units, after controlling for the other variables in the model. This meant that when the scores for the power distance national culture increased the competitive advantage of the corporation decreased. This model was able to explain 25.1% of the variation in the competitive advantage scores as indicated by the R squared value for the model.

Table 4-12

Simple Regression Results for Competitive Advantage with Offshore Outsourcing and National Culture

Parameter	B	SE	t	p	η^2
Intercept	1.290	.337	3.830	.000	.069
Offshore Outsourcing	-.092	.060	-1.522	.130	.012
Power	-.158	.074	-2.143	.033	.023
Individualism	.379	.095	4.001	.000	.075
Masculinity	.040	.083	.481	.631	.001
Uncertainty Avoidant	.137	.088	1.550	.123	.012
Confucianism	.204	.063	3.236	.001	.050

H1c: Market freedom factors and MNC offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

To address this hypothesis an ANOVA with a simple regression analysis was used. This was done to determine whether the market freedom factors as well as the offshore outsourcing of the corporation had a significant positive impact on the competitive advantage of the corporation. For this hypothesis the dependent variable was the competitive advantage of the corporation, while the independent variable was the offshore outsourcing of the corporation as well as market freedom factors. The market freedom factors included the dichotomous variables that were based on whether the corporation did a lot or substantial offshore outsourcing with China or India.. The ANOVA results are presented in Table 4-13. There was a significant relationship between the offshore outsourcing and the competitive advantage of the corporation $F(1, 209) = 10.84, p < .01; \eta^2 = .05$, the China market freedom variable and competitive advantage of the corporation $F(1, 209) = 7.10, p < .01; \eta^2 = .03$ and the India market freedom variable and the competitive advantage of the corporation $F(1, 209) = 10.58, p < .01; \eta^2 = .05$. This meant that the China and India market freedom variables as well as the offshore outsourcing variable significantly explained the variation in the competitive advantage of the corporation.

Table 4-13

Analysis of Variance Results for Competitive Advantage with Offshore Outsourcing and Market Freedom

Source	SS	df	MS	F	p	η^2
China Market Freedom	4.633	1	4.633	7.100	.008	.033
India Market Freedom	6.901	1	6.901	10.575	.001	.048
Offshore Outsourcing	7.071	1	7.071	10.835	.001	.049
Error	136.394	209	.653			

The results of the simple regression analysis are presented in Table 4-14. When examining the regression analysis results for this hypothesis, there was a significant positive relationship between the China and India market freedom factors as well as the offshore outsourcing variable and the competitive advantage of the corporation. In fact, the model predicted that for every unit increase in offshore outsourcing, the competitive advantage of the corporation increased by .23 units, after controlling for the market freedom variables in the model. This is different from what was observed in the previous hypotheses, where the offshore outsourcing was not significant. This indicated that the offshore outsourcing of the corporation may be significantly related whether the corporation outsourced to China or India as measured by the market freedom variables.

In terms of the market freedom variables, if the corporation did outsource to China or had more market freedom then the competitive advantage of the corporation would increase by .37 units when compared to the corporations that did not outsource to China or had less market freedom. Similarly, if the corporation did outsource to India or

had more market freedom then the competitive advantage of the corporation would increase by .45 units when compared to the corporations that did not outsource to India nor had less market freedom. This meant that for those who did have a lot or substantial outsourcing involvement with China or India, they would have a higher competitive advantage than those who had little or no outsourcing with China or India. Overall, this model was able to explain 10.8% of the variation in the competitive advantage of the corporation as indicated by the R squared value of the model.

Table 4-14

Simple Regression Results for Competitive Advantage with Offshore Outsourcing and Market Freedom

Parameter	B	SE	t	p	η^2
Intercept	2.029	.239	8.487	.000	.256
China – More Market Freedom	.372	.140	2.665	.008	.033
India – More Market Freedom	.454	.140	3.252	.001	.048
Offshore Outsourcing	.226	.069	3.292	.001	.049

Summary of Findings

Based on the results and findings for this study, for the first hypothesis there was not a significant relationship between the offshore outsourcing of the corporation and the competitive advantage of the corporation. For part (a) of the hypothesis, there was once again no significant relationship between the offshore outsourcing and the competitive advantage of the corporation, after controlling for the type of contract. There was, however, a significant positive relationship between the time and materials contract and

the competitive advantage of the corporation, but there was no relationship between the fixed costs and competitive advantage of the corporation.

As for part (b) of the hypothesis, the offshore outsourcing was not significantly related to the competitive advantage after controlling for the national culture variables. Similarly, there was not a significant relationship between the masculinity or uncertainty avoidant national cultures with the competitive advantage of the corporation. There was a significant negative relationship between the power distance of the corporation and the competitive advantage, while there were significant positive relationships between the individualism and Confucianism national cultures and the competitive advantage of the corporation.

Finally, for part (c) of the hypothesis, there was a significant relationship between all of the independent variables and the dependent variable in the model. This meant that the offshore outsourcing of the corporation was significantly related to the competitive advantage of the corporation after controlling for the market freedom factors of the participants. The relationship between the offshore outsourcing and the competitive advantage was positive. Similarly, there was a positive relationship between the China and India market freedom variables with the competitive advantage of the corporation. This meant that those who had a lot or substantial involvement with China or India in terms of offshore outsourcing had higher competitive advantages when compared to those who had little or no involvement with China or India in terms of offshore outsourcing.

CHAPTER V

DISCUSSION

Offshore outsourcing is commonplace among most U.S. and western corporations (Hemphill, 2004). Current technological and telecommunications advances have only fueled the growth of the use of outsourcing as a business practice. It is expected for this growth to continue and that by 2015 the U.S. market will outsource 3.3 million employment opportunities and will pay \$136 billion in salaries (Hemphill). This is an increase from the currently estimated two million jobs outsourced. With the increasing popularity of outsourcing comes an ongoing debate of whether outsourcing is good for the domestic economy and for outsourcing companies alike. Outsourcing reduces cost and allows companies to focus on core business and maintain competitiveness in the marketplace domestically. Outsourcing also eliminates jobs domestically and may result in the loss of incentives for technological advancement. Will these disadvantages be enough to deter economic growth in the United States and cause ripple effects throughout local, state, and national economies? These advantages and disadvantages of outsourcing require examination. In consequence, this non-experimental, quantitative, and correlation study determines the impact, positive or negative or otherwise, of offshore outsourcing on competitive advantage of United States multinational corporations. Chapter V is the culmination of the results and discussion of the analyses provided in Chapter IV.

In this study, several contextual, mediating, and intervening variables were examined to determine their influence on the relationship between offshore outsourcing and U.S. multinational corporations' competitive advantages. The variables, or factors,

tested for influence on competitive advantage were offshore outsourcing, power, individualism, masculinity, uncertainty avoidant, Confucianism, fixed costs, and time and materials. These variables were also analyzed to determine if there was correlation among them. Then, each variable was analyzed (in groups) for its influence on the corporation's competitive advantage. This analysis was done by both an analysis of variance results (ANOVA) and simple regression analysis. A reliability analysis was conducted for all variables in this study.

In this study, there was one main hypothesis with three sub-hypotheses. Only once, in the third sub-hypothesis, was there a significant relationship between offshore outsourcing and competitive advantage. This occurred when the market freedom factors of the participants was controlled. Factors that had a significant positive relationship with competitive advantage were time and materials, individualism, Confucianism, and market freedom variables. A significant negative relationship existed between power and competitive advantage. No significant relationship with competitive advantage was exhibited by fixed costs, masculinity, and uncertainty avoidant. The rest of Chapter V will expand on the results mentioned here and in Chapter IV.

Interpretations

Descriptive Characteristics of the Sample

Descriptive data regarding the members of the sample is available in the following categories: management level, age, gender, education, and current position. There were 279 participants in the study.

Of the 279 members of the sample, 87 or 31% classified their management level as "other." Area managers made up 29% of responders, directors made up 23%, general managers made up 11%. Vice presidents comprised the smallest management level group, making up just over 5% of the sample population.

Participants fell into six age categories. Of the 279, three participants were younger than 21 years of age and only one was older than 65. The age group with the most representation was those aged between 35 and 44 years. These participants made up nearly 43% of the sample. Thirty-two percent of participants were aged between 45 and 54 years. Nearly 16% were aged between 21 and 34 years while just 8% were in the 55-64 years category.

Nearly 63% of participants were men, while 37% were women.

Most members of the sample population either possessed a master's degree (43%) or a bachelor's degree (35.5%). Seven and a half percent had an associate's degree and nearly seven percent had only a high school diploma. Four percent classified their education level as "other," while 2.5% (or 7 members) had doctoral degrees. One participant specified having "some high school" education.

More than half of the members had been at their current position for ten years or less. Twenty-six and a half percent said they held their current positions for 2 to 5 years. Twenty percent have had their positions for 6 to 10 years and 16.5% have had their current positions for less than 2 years. Nearly 20% claimed to have their positions for 11 to 15 years and nearly 11% have been in their positions for 16 to 20 years. Six percent of members have held their current positions for more than 20 years.

The distribution of the aforementioned variables and measures of central tendency were provided in Chapter IV. Components were rated on a scale of one to five and means computed. The power variable had the highest mean value of 3.79. The offshore outsourcing variable had the lowest mean value of 2.80. The other variables ranked, highest to lowest, as follows: individualism (3.51), uncertainty avoidant (3.30), masculinity (3.20), time and materials (3.10), Confucianism (2.99), competitive advantage (2.95), and fixed cost (2.95).

These variables, less offshore outsourcing, were tested for two-way correlation among each other. The results of this analysis can be found in Table 4-6 in Chapter IV. Although significant correlations existed among the variables none of them exceeded .90 (or even came close), which is the standard for indicating multicollinearity. Thus we can conclude that multicollinearity amongst the independent variables does not exist for this study.

Descriptive Statistics for Market Freedom Variables

National Heritage scores were used for countries of interest regarding outsourcing. For this study, China and India are the primary countries in which offshore outsourcing is occurring. The National Heritage scores indicate the percentage of a country's market which is considered to be free. China's score was 52.8% and India's was 54.2%. These countries rank 126th and 115th overall respectively out of all countries ranked. The scores are based on different economic factors including (a) business freedom, (b) trade freedom, (c) fiscal freedom, (d) government size, (e) monetary freedom, (f) investment freedom, (g) financial freedom, (h) property rights, (i) freedom from corruption, and (j) labor freedom.

Each member of the sample population was asked to classify his or her company's involvement in outsourcing to China and India. If a member responded that his or her company had a lot or substantial involvement in outsourcing to a country, it was assigned the variable "more market freedom." Similarly, if a member responded that his or her company had little or no involvement in outsourcing to a country, it was assigned the variable "less market freedom."

For China, 154 responders indicated that they have a lot or significant involvement in outsourcing and were classified as "more market freedom." One hundred members responded that they had little or no involvement, and were classified as "less market freedom." Twenty-five members did not provide any data regarding outsourcing to China.

For India, 152 responders indicated that they have a lot or significant involvement in outsourcing and were classified as "more market freedom." One hundred two members responded that they had little or no involvement, and were classified as "less market freedom." Twenty-five members did not provide any data regarding outsourcing to India.

Hypotheses Testing

The overarching question of this study, how does offshore outsourcing impact companies' competitive advantages, a hypothesis and three sub-hypotheses were created and tested. This hypothesis and sub-hypotheses were testing using a combination of ANOVA analysis and simple regression analysis. The hypothesis and subsequent sub-hypothesis are:

H1: Offshore outsourcing has a significant positive impact on the competitive advantage of a multinational corporation.

H1a: Types of offshore outsourcing contracts (time and material, and fixed cost) and multinational corporation offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H1b: National culture factors of host country (power distance, individualism, masculinity, Confucianism, and uncertainty avoidance) and multinational corporation offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H1c: Market freedom factors and multinational corporation offshore outsourcing are significant explanatory variables of the competitive advantage of multinational corporations.

H2: The degree of offshore outsourcing of multinational corporations is a positive explanatory variable of competitive advantage.

The research questions of the study are answered by the testing of the hypothesis and the sub-hypotheses. The research questions are:

1. What impact does offshore outsourcing have on the competitive advantages of a multinational corporation? This question is answered by the main hypotheses, H1 and H2. The results of the testing of H1 and H2 are below.
2. What factors of offshore outsourcing (contracts, national culture, and market freedom) have an impact on U.S. multinational corporations' competitive

advantages? This question is answered by the sub-hypotheses, namely H1a, H1b, and H1c. The results of the testing of these hypotheses are below.

The overall hypotheses, H1 and H2, failed when tested. By both methods (ANOVA and simple regression) no significant relationship between offshore outsourcing and competitive advantage existed.

The first sub-hypothesis, H1a, was partially supported by the study's results. Both methods concluded a positive significant relationship exists between time and material contract methods and competitive advantage. No significant relationship was concluded between the fixed cost contract method and competitive advantage, nor was one found between offshore outsourcing and competitive advantage.

The second sub-hypothesis, H1b, was partially supported by the study's results. Both methods concluded a positive significant relationship exists between individualism and competitive advantage and also between Confucianism and competitive advantage. A negative significant relationship exists between power distance and competitive advantage. No significant relationship was concluded between masculinity, uncertainty avoidance, or offshore outsourcing and competitive advantage.

The third sub-hypothesis, H1c, was fully supported by the study's results. For the first time, a significant relationship was exhibited between the offshore outsourcing and the competitive advantage. Also, a positive significant relationship existed between the market freedom factors and competitive advantage. That is, companies who outsource (which corresponds to an increase in the freedom variable) in China and India had increased competitive advantage comparatively.

Time and Material Contracts in Explaining the Competitive Advantage

It was found that a positive significant relationship existed between the time and materials contract type and the competitive advantage of corporation. The time and materials contract type significantly explained the variation in the competitive advantage of corporation. The model predicted that for every unit increase in the time and material contract, the competitive advantage of the corporation would increase by .54 units.

Gopal, Sivaramakrishnan, Krishnan, and Mukhopadhyay (2003) concluded that time and material contracts yield higher profits for the vendor, and that contract is only efficient when the variables of the work is not known during the contracting process. These are precisely the type of situations that call for time and material contracts. This increase in profitability is consistent with the competitive advantage gained by corporations who use this type of contract.

Fixed Cost Contracts in Explaining the Competitive Advantage

It was found that no significant relationship existed between the fixed costs contract type and competitive advantage. Thus, the degree of offshore outsourcing and the fixed costs contracts did not significantly explain the variation in the competitive advantage of the corporation.

Gopal, et al. (2003) concluded that time and material contracts are superior in terms of profitability to fixed cost contracts. They also concluded that time and material contracts should be used when tasks to be performed are unknown. The result of no significant relationship between fixed cost contracts and competitive advantage is consistent with Gopal, et al.'s conclusions.

Power Distance Culture in Explaining the Competitive Advantage

It was found that a negative significant relationship existed between the power distance culture and the competitive advantage of the corporation. The power distance culture significantly explained the variation in the competitive advantage of corporation. The model predicted for every unit increase in power distance national culture, the competitive advantage of the corporation decreased by .16 units.

These findings are consistent with Couto and Vieira (2004). They said “low power distance...can foster higher innovation.” This shows a negative correlation between power distance and innovation, which would suggest a similar correlation between power distance and competitive advantage.

Individualism Culture in Explaining the Competitive Advantage

It was found that a positive significant relationship existed between the individualism culture and the competitive advantage of the corporation. The individualism culture significantly explained the variation in the competitive advantage of corporation. The model predicted for every unit increase in individualism national culture, the competitive advantage of the corporation increased by .38 units.

As with power distance culture findings, these findings are consistent with Couto and Vieira (2004). They concluded that “individualism can foster higher innovation.” This implies a positive correlation between individualism and innovation, which suggests a similar positive correlation between individualism and competitive advantage.

Masculinity Culture in Explaining the Competitive Advantage

It was found that no significant relationship existed between the masculinity national culture and competitive advantage. Thus, the degree of offshore outsourcing and

the masculinity national culture did not significantly explain the variation in the competitive advantage of the corporation.

The findings here are not consistent with Couto and Vieira (2004). Couto and Vieira claimed that “high masculinity...can foster higher innovation.” This suggests a positive relationship between masculinity and innovation and makes no implication of a nonexistent relationship.

Confucianism Culture in Explaining the Competitive Advantage

It was found that a positive significant relationship existed between the Confucianism national culture and the competitive advantage of the corporation. The Confucianism national culture significantly explained the variation in the competitive advantage of corporation. The model predicted for every unit increase in Confucianism national culture, the competitive advantage of the corporation increased by .20 units.

Couto and Vieira (2004) mention Confucianism as a recommendation for future study, but provided no analysis or result about Confucianism regarding either R&D or innovation. If their inclination was that Confucianism would promote R&D and innovation, then this study is consistent with the Couto and Vieira study.

Uncertainty Avoidant Culture in Explaining the Competitive Advantage

It was found that no significant relationship existed between the uncertainty avoidant national culture and competitive advantage. Thus, the degree of offshore outsourcing and the uncertainty avoidant national culture did not significantly explain the variation in the competitive advantage of the corporation. Again, the findings here are not consistent with Couto and Vieira (2004). Their study concluded that “low uncertainty avoidance...can foster higher innovation.” This suggests a significant relationship

between uncertainty avoidant culture and innovation and makes no implication of a nonexistent relationship.

Market Freedom Factors in Explaining the Competitive Advantage

It was found that a positive significant relationship existed between the Chinese market freedom variable and the competitive advantage of the corporation. The Chinese market freedom variable significantly explained the variation in the competitive advantage of corporation. The model predicted for every unit increase in Chinese market freedom, the competitive advantage of the corporation increased by .37 units.

Similarly, it was found that a positive significant relationship existed between the Indian market freedom variable and the competitive advantage of the corporation. The Indian market freedom variable significantly explained the variation in the competitive advantage of corporation. The model predicted for every unit increase in Indian market freedom, the competitive advantage of the corporation increased by .45 units.

This is consistent with Kidane's (1994) research which said that business and management strategies stressed competitive advantage through using offshore outsourcing as a beneficial financial investment.

Practical Implications

The results and analyses herein have helped answer questions about what elements of offshore outsourcing have a significant effect on the competitive advantage of United States multinational corporations. The results and analyses herein can be applied in practice. Some examples of the practical usage of the results and analyses are these:

1. These results could assist in what Carmel and Agarwal (2002) describe as an “offshore bystander phase.” During this stage, companies weigh their options with respect to the cost effectiveness of outsourcing in different environments. Several aspects of this study could guide prospective outsourcers in a direction which leads them to an increased competitive advantage (and steer them away from those which do not increase competitive advantage).
2. The results and analyses herein could help settle the ongoing debate of whether outsourcing is the proper measure for corporations to take to result in the economic well being of not only the corporation but the domestic economy. This study could add to the debate, however, merely giving one side of the debate more argumentative evidence.
3. The results in this study regarding national cultures impact on competitive advantage could be used to assist in finding a point of synchronicity, when links between offshore outsourcing and Hofstede’s (2003) Cultural Dimensions model.
4. The results and analyses in this study could be used for companies who are currently outsourcing to re-evaluate their position and determine the importance of their outsourcing. Companies could adjust or amend their current outsourcing plans to create more of a competitive advantage based on the relationships provided in this study. Moreover, some companies could view the results here and decide to eliminate some or all of their outsourcing.

Conclusions

The results and analyses of data in this study have led to some general and specific conclusions about the relationship between offshore outsourcing and the competitive advantage of United States multinational corporations. These conclusions include:

1. Offshore outsourcing has no significant impact on the competitive advantage of a multinational corporation. This was the subject matter of the first hypothesis which failed when tested with a combined approach made up of analysis of variance results and simple regression analysis. It should be noted that while a positive relationship did exist, it was not nearly significant. This small relationship was able to account for only .2% of the variation in the competitive advantage scores.
2. There is a positive significant relationship between the time and material contract type and the competitive advantage. For each unit increase in the time and material contract, the competitive advantage increased .54 units. No significant relationship exists when the fixed cost contract type is used. These findings are consistent with Gopal, et al.'s (2003) suggestions.
3. National culture has an effect on competitive advantage. Significant positive relationships between culture and comparative advantage existed for individualism national culture and Confucianism national culture. A significant negative relationship existed between power distance national culture and competitive advantage. Masculinity national cultures and uncertainty avoidance national cultures had no discernable relationship with

the competitive advantage. These findings are consistent with Cuoto and Vieira (2004), Nakata and Sivakumar (1996), and Hofstede (2003) in the sense that national culture matters. Discrepancies with regard to findings about particular cultures exist and are detailed earlier in this paper.

4. Market freedom factors and multinational corporations' offshore outsourcings are significant variables of the competitive advantage of multinational corporations. The model predicted that for every unit increase in offshore outsourcing, the competitive advantage of the corporation increased by .23 units, after controlling for the market freedom variables in the model. Also, more market freedom in China resulting in an increase of competitive advantage by .37 units. Similarly, a one unit increase in market freedom in India resulted in an increase of competitive advantage by .45 units. This indicates that companies which conducted outsourcing gained the largest competitive advantages.

Limitations

Some limitations of this study were inherent to its methodology. These limitations include:

1. A selection bias may exist since it can not be determined which people will respond to the distributed surveys. It is possible that other corporate employees other than managers, procurement managers, and assistant managers have access to offshore outsourcing information.
2. Responders' answers to different questions may have been conflicting.

3. Responders may not answer all posed questions on the questionnaire.
4. Responders may not answer the questions with complete accuracy, or with any accuracy at all.
5. The internal validity of the study is weakened because of a lack of evidence in the internal validity for the questions based on Couto (2004) are a concern.
6. The internal validity of the study is also weakened since the study was not experimental in nature.
7. The study's focus on telecommunications multinational corporations limits the application of the results to other multinational corporations.

Recommendations for Future Study

Any study can be expanded upon or used as the foundation or inspiration for future studies, and this study is no different. Recommendations for future study on the relationship between offshore outsourcing and the competitive advantage are listed below:

1. Because the study was conducted focusing mainly on telecommunications multinational corporations, future studies should also examine the effects of offshore outsourcing on other types of multinational corporations in an effort to develop a more clear understanding of the effects of offshore outsourcing across all multinational corporations.
2. Because a quantitative study cannot capture the essence of employees' thoughts and feelings, future studies should include a qualitative research

approach. Such an approach may reveal new theories regarding the relationship between offshore outsourcing and competitive advantage.

3. Because this study focused mainly on outsourcing to China and India, future studies could explore outsourcing to other countries. As time progresses and countries develop, other countries are sure to emerge as prime locations for outsourcing and a future study could examine outsourcing in these countries, whatever they may be.
4. Because this study was limited to United States multinational corporations, future studies should attempt to study the impact of offshore outsourcing on the competitive advantages of other nations.

REFERENCES

- Ahlawat, S., & Ahlawat, S. (2006). Competing in the global knowledge economy: Implications for business education. *Journal of American Academy of Business*, 8(1), 101-105. Retrieved January 17, 2006, from ProQuest database.
- Ardnt, S. W. (1997). Globalization and the open economy. *North American Journal of Economics and Finance*. 8 (1). 71 – 79.
- Babu, K. M. (2006). *Offshoring IT Services: A framework for managing outsourced projects*. India: Tata-McGraw-Hill.
- Brown, A. (1995). What is culture? *Organizational Culture*. Pitman: London. Retrieved January 29, 2006, from http://changingminds.org/explanations/culture/what_is_culture.htm
- Carmel, E., & Agarwal, R. (2002). The maturation of offshore sourcing of information technology work. Retrieved September 11, 2006, from http://www.stud.ifi.uio.no/~vegari/hovedfag/Offshore_Sourcing_MISQE_Submission_Jan_02.pdf
- Chase, R. B., Jacobs, F. R., & Aquilano, N. J. (2005). *Operations Management for Competitive Advantage*. New York: McGraw-Hill.
- Clarke, C. J. (2006). The sum of all fears: Do directors have valid concerns on the unintended impact of new regulations? *Corporate Governance*. Vol. 6 (1). 6 – 10.
- Competitive advantage. *WebFinance, Inc. (1997-2005)*. Retrieved January 17, 2006, from http://www.investorwords.com/998/competitive_advantage.html

- Couto, J. P., & Vieira, J. C. (2004). National culture and research and development activities. *Multinational Business Review*, 12(1), 19-35. Retrieved February 4, 2006, from ProQuest database.
- Day, G. S., & Wensley, R. (1998). Assessing advantage: A framework for diagnosing competitive superiority. *Journal of Marketing*, 52(2), 1-20. Retrieved May 4, 2006, from ProQuest database.
- Dryzek, J. (2005). Political science. *Microsoft Corporation*. Retrieved January 29, 2006, from http://encarta.msn.com/text_761569743_1/Political_Science.html
- Edge, K. (1999). The global economy is covered in the board of studies. *NSW HSC Online*. Retrieved September 24, 2007, from http://hsc.csu.edu.au/economics/global_economy/tut6/Tutorial6.html
- Franklin, P., & Fredericks, J. (2003). The origin of species 'competitive advantage.' *Strategic Change*, 12, 137 – 149. Retrieved July 15, 2006, from ProQuest database.
- Friese, H. S. (2005). Interfirm linkages and the structure and evolution of the Danish trucking industry. *Transportation Journal*, 44(4), 10-26. Retrieved January 29, 2006, from ProQuest database.
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of Management*, 15(4), 603-625. Retrieved May 16, 2007, from ProQuest database.

- Gnuschke, J., Wallace, J., Wilson, D., & Smith, S. (2004). Outsourcing production and jobs: Costs and benefits. *Business Perspectives*, 16(2), 12-17. Retrieved January 17, 2006, from ProQuest database.
- Gopal, A., Sivaramakrishnan, K., Krishnan, M. S., & Mukhopadhyay, T. (2003). Contracts in offshore software development: An empirical analysis. *Management Science*, 49(12), 1671-1683. Retrieved January 18, 2006, from ProQuest database.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: Implication for strategy formulation. *California Management Review*, 33(3), 114-135. Retrieved January 18, 2006, from ProQuest database.
- Grant, R. M. (1991). Porter's competitive advantage of nations: An assessment. *Strategic Management Journal*, 12 (7), 535 – 548. Retrieved July 18, 2006, from ProQuest database.
- Harrison, G. L., & McKinnon, J. L. (1999). Cross-cultural research in management control systems design: a review of the current state. *Accounting, Organizations, and Society*. 24. 483 – 506.
- Hemphil, T. A. (2004). Global outsourcing: effective functional strategy or deficient corporate governance? *Corporate Governance*, 4(4), 62-68. Retrieved January 18, 2006, from ProQuest database.
- Hofstede, G. (2003). *Culture's Consequences: Comparing values, behaviors, institutions, and organizations across nations* (Second. Ed.). San Francisco: SAGE Publications.

- Jennex, M. E., & Adelakun, O. (2003). Success factors for offshore information system development. *Journal of Information Technology Cases and Applications*, 5(3), 12. Retrieved February 4, 2006, from ProQuest database.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Cambridge (MA): Harvard Business School Press.
- Kidane, A. (2004). Offshore outsourcing: Business model, ROI, and best practices. *Competitiveness Review*, 14(1/2), 108-109. Retrieved January 17, 2006, from ProQuest database.
- Kirkegaard, J. F. (Summer, 2004). Offshore outsourcing: much ado about what? *CESifo Forum*. Vol. 5 (2). 22 – 30.
- Kuper, A. (1999). Culture: the anthropologists' account. *The President and Fellows of Harvard College*. Retrieved October 29, 2007, from <http://books.google.com/books?hl=en&lr=&id=lls139Ru0lkC&oi=fnd&pg=PR9&dq=anthropologists+definition+of+%22culture%22&ots=XDBsi4MeoB&sig=6bQWiDaUvnPdNh4IaNxJ-xATcc>
- Lyengar, P. (2004). Application development is more global than ever. ID No. G00124025. Gartner Research, a Division of Gartner, Inc.
- Mathrani, A., Viehland, D., & Parsons, D. Dynamics of offshore software development success: The outsourcers' perspective. Document prepared for the Institute of Information & Mathematical Sciences at Massey University, Auckland, New Zealand. Retrieved September 15, 2006, from <http://kmap2005.vuw.ac.nz/papers/Dynamics%20of%20Offshore%20Software%20Development%20success.pdf>

- McSweeney, B. (2002). "Hofstede's Model of National Cultural Differences and Their Consequences: A triumph of faith - A failure of analysis." Retrieved 14 September, 2006, from <http://geert-hofstede.international-business-center.com/mcsweeney.shtml>
- Mitchell, D. W., & Coles, C. B. (2004). Establishing a continuing business model innovation process. *Journal of Business Strategy*. Vol. 25 (3). 39 – 50.
- Monczka, M., Markham, W., Carter, J., Blascovich, J., & Slaight, T. (2005). Outsourcing strategically for sustainable competitive advantage. *CAPS and A. T. Kearney, Inc.* Retrieved January 17, 2006, from http://www.atkearney.com/shared_res/pdf/Strat_Outsourcing_S.pdf
- Panagariya, A. (2004). Why the recent Samuelson article is NOT about offshore outsourcing. Retrieved 16 August 2006 from http://www.uni-konstanz.de/FuF/wiwi/vwl/HPGrieben/download/Panagariya_response_to_Samuelson_2004.pdf
- Porter, M. E. (1998). *The Competitive Advantage of Nations (Revised)*. New York: Free Press.
- Prestowitz, C. (2004). The great reverse. *Yale Center for the Study of Globalization*. Retrieved February 8, 2006, from <http://yaleglobal.yale.edu/display.article?id=4459>
- Romanujan, S., & Jane, S. (2006). A legal perspective on outsourcing and offshoring. *Journal of American Academy of Business, Cambridge*, 8(2), 51-58. Retrieved January 18, 2006, from ProQuest database.

- Root, F. (1994). Multinational corporations. *International Trade and Investment*.
Retrieved January 31, 2006, from
http://www.econ.iastate.edu/classes/econ355/choi/multinational_corporation.htm
- Rubin, J. S. (1992). The making of middlebrow culture. *The University of North Carolina Press*.
- Schiller, B. R. (2003). *The Macro Economy Today* (Ninth. Ed.). McGraw-Hill Higher Education Publications.
- Smith, J. L., & Flanagan, W. G. (2006). *Creating Competitive Advantage: Give customers a reason to choose you over your competitors*. London (UK): Currency.
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics*. Needham Heights, MA: Allyn and Bacon.
- Tangen, S. (2005). Professional practice: Performance measurements: from philosophy to practice. *International Journal of Productivity and Performance*, 53(8), 726-737.
Retrieved February 11, 2006, from ProQuest database.
- Tseng, Y. M. (2006). International strategies and knowledge transfer experiences of multinational corporation's Taiwanese subsidiaries. *Journal of American Academy of Business*, 8(2), 120-125. Retrieved February 1, 2006, from ProQuest database.
- UNESCO, (2002). Universal declaration on cultural diversity. *UNESCO Education Webmaster*. Retrieved October 29, 2007, from
http://www.unesco.org/education/imld_2002/universal_decla.shtml

Wideman, M. (2002). Progressive acquisition and the RUP. *Rational Edge E-zine on-line magazine*, copyright 2002-2003 IBM and Max Wideman. Retrieved January 29, 2006, from

http://download.boulder.ibm.com/ibmdl/pub/software/dw/rationaledge/dec02/TheRationalEdge_Dec2002.pdf.

Zekos, G. (2005). Foreign direct investment in a digital economy. *European Business Review*, 17(1), 52-68. Retrieved January 29, 2006, from ProQuest database.

BIBLIOGRAPHY

- Carmel, E., & Nicholson, B. (2005). Small firms and offshore software outsourcing: High transaction costs and their mitigation. *Journal of Global Information Management, 13*(3), 33-54. Retrieved January 18, 2006, from ProQuest database.
- Fjermestad, J., & Saitta, J. B. (2005). A strategic management framework for IT outsourcing: A review of the literature and the development of a success factors model. *Journal of Information Technology Case and Application Research, 7*(3), 42-60. Retrieved January 18, 2006, from ProQuest database.
- Fraering, M., & Prasad, S. (1999). International sourcing and logistics: an integrated model. *Logistics Information Management, 12*(6), 451. Retrieved February 4, 2006, from ProQuest database.
- Gottfredson, M., & Philips, S. (2005). A sourcing strategy for enhancing core capabilities. *Strategy & Leadership, 33*(6), 48-49. Retrieved January 18, 2006, from ProQuest database
- Gottschalk, P., & Saether, H. S. (2006). Managing Successful IT Outsourcing Relationship. *Norwegian School of Management*.
- Gruber, A. (2005). Services acquisition panel discusses time and materials contracts. *GOVEXEC.com*. Retrieved January 18, 2006, from <http://www.govexec.com/dailyfed/0805/081805a2.htm>
- Jin, B. (2004). Achieving an optimal global versus domestic sourcing balance under demand uncertainty. *International Journal of Operations & Production*

Management, 24(11/12), 1292-1305. Retrieved January 19, 2006, from ProQuest database.

Mahnke, V., Overby, M. L., & Vang, J. (2005). Strategic outsourcing of IT services: Theoretical stocktaking and empirical challenges. *Industry and Innovation*, 12(2), 205-253. Retrieved January 19, 2006, from ProQuest database.

Matsumoto, H. (2005). Global business process/IS outsourcing to Singapore in the multinational investment banking industry. *Journal of Information Technology Case and Application Research*, 7(3), 4-24. Retrieved January 19, 2006, from ProQuest database.

McFarlan, F. W. (2005). Globalization of IT-enabled services: An irreversible trend. *Journal of Information Technology Case and Application Research*, 7(3), 1-3. Retrieved January 20, 2006, from ProQuest database.

Neuman, M., & Marquina, F. (2005). A good fit in Argentina. *Industrial Engineer*, 36(1), 40-45. Retrieved January 19, 2006, from ProQuest database.

Oza, N. V., & Hall, T. (2005). Difficulties in managing offshore software outsourcing relationships: An empirical analysis of 18 high maturity Indian software Companies. *Journal of Information Technology Case and Application Research*, 7(3), 25-41. Retrieved January 19, 2006, from ProQuest database.

Papalexandris, N., & Panayotopoulou, L. (2004). Exploring the mutual interaction of societal culture and human resource management practices: Evidence from 19 countries. *Employee Relations*, 26(5), 495-509. Retrieved from ProQuest database.

- Sen, R., & Islam, M. S. (2005/2006). Southeast Asia in the global wave of outsourcing: Trends, opportunities, and challenges. *Regional Outlook*, 75-79. Retrieved January 21, 2006, from ProQuest database.
- Siems, T. F. (2005). Who supplied my cheese? Supply chain management in the global economy. *Business Economics*, 40(4), 6-21. Retrieved January 18, 2006, from ProQuest database.
- Weber, A. (2005). Managing the reality of offshore assembly. *Assembly*, 48(3), 56-66. Retrieved January 23, 2006, from ProQuest database.

APPENDIX

Appendix A

Survey Instrument

Manager Profile

1) Management Level:

General Manager _____
Vice President _____
Director _____
Area Manager _____
Other (Please Specify) _____

2) Age:

Younger than 21 _____
21-34 _____
35-44 _____
45-54 _____
55-64 _____
65 and older _____

3) Gender: Male _____ Female _____

4) Education:

Some High School _____
High School Diploma _____
Associates Degree _____
Bachelors Degree _____
Masters Degree _____
Doctoral Degree _____
Other (Please Specify) _____

5) Years at Current Position:

Less than 2 _____
2 to 5 _____
6 to 10 _____
11 to 15 _____
16 to 20 _____
More than 20 _____

6) Country You Currently Reside In: _____

MNC Questionnaire

- 1) On a scale of 1 to 5, where 1 is "Corporation has no involvement" and 5 is "Corporation has substantial involvement", please indicate the corporation's outsourcing level in the following countries:

China	1	2	3	4	5
India	1	2	3	4	5
Other	1	2	3	4	5

- 2) On a scale of 1 to 5, where 1 is "None" and 5 is "Substantial", please respond to each of the following questions by checking one of the options:

How many projects does the corporation outsource to China during a year?

1 2 3 4 5

How many projects does the corporation outsource to India during a year?

1 2 3 4 5

How much R&D does the corporation carry out in China?

1 2 3 4 5

How much R&D does the corporation carry out in India?

1 2 3 4 5

- 3) On a scale of 1 to 5, where 1 is "None" and 5 is "Fully offshore outsourced", please indicate the degree of offshore outsourcing of the following business areas:

a) Customer service:	1	2	3	4	5
b) Overall management:	1	2	3	4	5
c) Marketing:	1	2	3	4	5
d) Procurement management:	1	2	3	4	5
e) Financial management:	1	2	3	4	5
f) Labor management:	1	2	3	4	5
g) Production management:	1	2	3	4	5
h) Inventory management:	1	2	3	4	5
i) Research and development:	1	2	3	4	5
j) Design technology:	1	2	3	4	5
k) Improvement of production technology:	1	2	3	4	5
l) Quality control:	1	2	3	4	5
m) Maintenance & repair of equipment:	1	2	3	4	5
n) Raw materials procurement:	1	2	3	4	5

- o) Manufacturing operations: 1 2 3 4 5
- p) Product distribution: 1 2 3 4 5
- q) Sales activities: 1 2 3 4 5

4) Please provide the following information regarding time to market:

- 1- Less than 20%
- 2- Between 21% and 30%
- 3- Between 31% and 40%
- 4- Between 41% and 50%
- 5- More than 50%

Offshore outsourcing has improved time to market. 1 2 3 4 5

5) Please provide the following information regarding the manufacture of products and materials within your corporation:

- 6- Less than 20%
- 7- Between 21% and 30%
- 8- Between 31% and 40%
- 9- Between 41% and 50%
- 10- More than 50%

Products that are manufactured entirely in-house. 1 2 3 4 5

Components purchased from other corporations. 1 2 3 4 5

6) On a scale of 1 to 5, where 1 is "Does not apply" and 5 is "Fully applies", please indicate the degree of coordination between the corporation and the offshore provider:

- Technological transfer to the offshore providers 1 2 3 4 5
- Marketing activity linked with the offshore providers 1 2 3 4 5
- Production activity linked with the offshore providers 1 2 3 4 5
- Purchasing activity linked with the offshore providers 1 2 3 4 5

7) On a scale of 1 to 5, where 1 is "Decreased" and 5 is "Increased", please indicate your company's performance trend over the last three years in the following areas:

- | | | | | | |
|-----------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Total Revenue | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| Cost of Revenue | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| Market Share | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |

8) On a scale of 1 to 5, where 1 is "Significantly below expectations" and 5 is "Significantly above expectations", please classify your corporation's performance in the current year in terms of:

- | | | | | | |
|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| a) Financial Results | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| b) Sales and Marketing | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| c) Manufacturing efficiency | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| d) Cost efficiency | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| e) Time to market | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |
| f) Market share | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> | 5 <input type="checkbox"/> |

Adapted from "Contracts in offshore software development: An empirical analysis (2003)". *Management Science*, 49(12), 1671-1683". Adopted with permission of Gopal, A., Sivaramakrishnan

"National culture and research and development activities (2004). *Multinational Business Review*, 12(1), 19-35. Adopted with permission of Couto, J. P.

National Culture Questionnaire

On a scale of 1 to 5, where 1 is "Strongly disagree" and 5 is "Strongly agree", please evaluate the following statements:

If there is a power conflict between the corporation and the offshore provider, your corporation will be the one which is expected to resolve the conflict.

1 2 3 4 5

The corporation is the one which usually makes all of the decisions.

1 2 3 4 5

Corporate management listens to the offshore provider and respects its wants and needs.

1 2 3 4 5

If a conflict arises between the corporation and the offshore provider, the resolution to the conflict would be based on optimal outcomes for the corporation.

1 2 3 4 5

The offshore provider should know its role in the relationship and should defer the parent company.

1 2 3 4 5

The manager of the offshore provider has the power to overrule decisions that were made by the corporation.

1 2 3 4 5

The offshore provider closely follows the corporation's rules and pays attention to the relationships within the corporation.

1 2 3 4 5

There have been no conflicts or disputes during the time in which a project has been outsourced to a different offshore provider.

1 2 3 4 5

Government relations do not effect the quality of the relationship between the offshore provider and the corporation.

1 2 3 4 5

Differing social views do not effect the quality of the relationship between the offshore outsourcing company and the corporation.

1 2 3 4 5

Adapted from "Contracts in offshore software development: An empirical analysis (2003)". *Management Science*, 49(12), 1671-1683. Adopted with permission of Gopal, A., Sivaramakrishnan

"National culture and research and development activities (2004)". *Multinational Business Review*, 12(1), 19-35. Adopted with permission of Couto, J. P.

Type of Contract Questionnaire

Fixed Cost Contract

On a scale of 1 to 5, where 1 is "Strongly disagree" and 5 is "Strongly agree", please evaluate the following statements with regard to your corporation:

The offshore provider frequently changes the amount charged for certain projects throughout the period of the contract.

1 2 3 4 5

The contract price of the offshore provider is lower than any comparable inshore provider.

1 2 3 4 5

Time & Material Contract

On a scale of 1 to 5, where 1 is "Strongly disagree" and 5 is "Strongly agree", please evaluate the following statements with regard to your corporation:

The offshore provider meets the schedule agreed upon in the contract.

1 2 3 4 5

The cost for a man-hour agreed upon with the offshore provider does not vary depending on the size of the project.

1 2 3 4 5

The amount of materials agreed upon by the offshore provider does not change during the course of the project.

1 2 3 4 5

Adapted from "Contracts in offshore software development: An empirical analysis (2003)". *Management Science*, 49(12), 1671-1683. Adopted with permission of Gopal, A., Sivaramakrishnan

Appendix B

Permission Letter from Dr. Anandavism Gopal

Robert H. Smith School of Business

University of Maryland

From: Anand Gopal [redacted] Sent: Fri 3/14/2008 11:08 AM
To: Yoram Benit
Cc: [redacted]
Subject: RE: FW: Consent to obtain and use/modify survey
Attachments:

Yoram,

You do have my consent to use and/or modify the scales from my work as you see suitable for your research. Thank you and all the best.

--Anand

Anand Gopal
Assistant Professor of Information Systems
Department of Decision, Operations and Information Technologies
Robert H. Smith School of Business
VMH 4307 Van Munching Hall
University of Maryland
College Park, MD 20742-1815

[redacted] TEL
[redacted] FAX
<http://www.rhsmith.umd.edu>

"Yoram Benit" [redacted]
03/14/2008 09:12 AM

To "Anand Gopal" [redacted]
cc [redacted]
Subject RE: FW: Consent to obtain and use/modify survey

Dear Dr. Gopal,

I left you a VM. You already gave me your consent to use/modify your scale/questions but our IRB would like you to state it.

Would you please email me your consent for "using, adopting, modifying" the scale/questions.

Thanks a lot and best regards,
Yoram

From: Anand Gopal
[Redacted]
To: [Benit Yoram-cyb005](#)
Cc: [Yoram Benit](#)
Subject: Re: FW: Consent

Sent: Tue 2/19/2008
2:36 PM

Yoram,

Yes, you have my consent to using the scales I sent you for your research.

I cannot send you the original questionnaire without express permission of the research site. In any case, the relevant parts of the questionnaire are already included in the items I have sent you. The other parts of the questionnaire pertain to information that is more specific to individual clients and client engagements and remains unpublished.

Thanks,

--Anand

-----"Benit Yoram-cyb005" <[Redacted]> wrote: -----

To: "Anand Gopal" <[Redacted]>, "Yoram Benit" <[Redacted]>
From: "Benit Yoram-cyb005" <[Redacted]>
Date: 02/18/2008 06:41PM
Subject: FW: Consent to obtain and use/modify survey

Hi Dr. Gopal,

The IRB of my university asked me to contact you for sending your consent replying to my University's email address (which is copied above). Please just reply to this email with the scale so it can go to my university inbox.

Also, you will really help me a lot if you can provide me with a the survey w/out any organizational identifiers so I can construct my survey.

Thanks again for all your help.

**Sincerely,
Yoram**

From: Anand Gopal [mailto: [REDACTED]]
Sent: Monday, February 11, 2008 12:06 PM
To: Benit Yoram-cyb005
Subject: RE: Consent to obtain and use/modify survey

Hi,

Here are the main scales used in that paper. Hope this helps.
Thanks.

--Anand

Anand Gopal
Assistant Professor of
Information Systems
Department of Decision,
Operations and Information
Technologies
Robert H. Smith School of
Business
VMH 4307 Van Munching Hall
University of Maryland
College Park, MD 20742-1815

[REDACTED] TEL
[REDACTED] FAX

<http://www.rhsmith.umd.edu>

"Benit Yoram-cyb005"
[REDACTED]

02/11/2008 12:01 PM

Dr. Gopal,

Thanked for your quick response. Your research on "**Contracts in Offshore Software Development: An Empirical Analysis**" examined the impact of contract choice (fixed price or T&M) on competitive advantage. I used the contract choice variables in my model. I needed your consent to get the survey and scales so I can use/modify it for my questionnaire. I really do not want to change my review and model. I also do not need the information of the organization but to a blank instrument/survey with the scales. I do appreciate all your help in advance.

Best regards,
Yoram Benit

From: Anand Gopal [mailto: [REDACTED]]
Sent: Monday, February 11, 2008 11:43 AM
To: Benit Yoram-cyb005
Subject: RE: Consent to obtain and use/modify survey

Benit,

Sorry for the late response - I have been traveling and got back into town last week. I have been trying to catch up on my email.

I'm not sure I understand exactly what you want - most of the items in the Mgmt Sc paper are from the public domain and you really don't need my permission or consent to use them - they are available in the papers I cite. For instance, I used many measures from Nidomolu's (1995) paper on coordination in software outsourcing. If you have specific scales you are looking for, I'd be happy to give you the original scales. I cannot send you the original questionnaire that was used because that has identifying information on it specific to the research site - it was done through the organization and so there are organizational identifiers. Let me know what you would like. Thanks and all the best.

-- Anand

Anand Gopal
Assistant Professor of Information Systems
Department of Decision, Operations and Information Technologies
Robert H. Smith School of Business
VMH 4307 Van Munching Hall
University of Maryland
College Park, MD 20742-1815

[REDACTED] TEL
[REDACTED] FAX

<http://www.rhsmith.umd.edu>

"Benit Yoram-cyb005"

< [REDACTED] >

02/11/2008 11:28 AM

Hi Dr. Gopal,

Very could be that my university's server has some issues and therefore you have not received my request.

I would appreciate if you can help me with getting the survey of your study and your consent.

I really appreciate your help in advance.

Regards,
Yoram Benit,

From: Yoram Benit
Sent: Sun 1/27/2008 5:10 PM
To: [REDACTED]
Subject: Consent to obtain and use/modify survey

January 27, 2008

Yoram Benit

[REDACTED]

[REDACTED]

Mobile [REDACTED]

Fax [REDACTED]

Dear Dr. Gopal,

My name is Yoram Benit and I am a doctoral candidate in a Ph.D. program at Lynn University in Boca Raton, Florida. My major is Global Leadership, with a specialization in corporate and organizational management. My dissertation proposal focuses on the effects of offshore outsourcing, national culture, type of contract, and market freedom on U.S. multinational corporations' competitive advantage. My topic of my research is Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations. I plan to examine the impact of

offshore outsourcing on competitive advantage of telecommunication corporations that deal with offshore outsourcing in India, China, and Brazil. A target population of 500 is planned.

While doing my literature search for the dissertation, I read the excellent article by you, Dr. Konduru Sivaramakr, Dr. M. S. Krishnan, and Dr. Tridas Mukhopadhyay, "Contracts in Offshore Software Development: An Empirical Analysis.

I am writing to request permission to obtain (and purchase if necessary) the survey and the scales of the survey.

I am also requesting permission to reproduce the above scales and related materials in my dissertation. In addition, I am requesting permission to modify the above scales for my research study. Furthermore, ProQuest Information and Learning may supply copies of the dissertation on demand and may make the dissertation accessible in electronic formats.

If you do not control the copyright for any of the above materials, it would be most appreciated if you could provide me with contact information of who might be the proper rights holder(s), including current address(es). Otherwise, your permission confirms that you hold the right to grant the permission requested here. If you control the copyright for some of the aforementioned materials, you may list the permission for this material at the end of this letter.

Permission includes non-exclusive world rights to translate the scales to use the material and will not limit any future publications-including future editions and revisions-by you or others authorized by you. If permission is granted, I will include any statement of authorization for use that you request on all scales, or provide an APA note of permission. The copyright holder will be given full credit.

I would greatly appreciate your consent to my request. If you require any additional information, please do not hesitate to contact me., I can be reached at the above postal mail address, [REDACTED], or ([REDACTED])

A duplicate copy of this request has been provided for your records. Your approval over the email will be sufficient if desire.

Sincerely,

Yoram Benit

Permission granted for the use of all the material as previously described:

Yes ? No ?

Permission is granted for the use of the following material as previously described:

Agreed to: _____

Name & Title: _____

Date: _____

Anandasivam Gopal, Ph.D.

Robert H. Smith School of Business

University of Maryland

College Park, MD 20742

Phone _____

[attachment "Gopal's Permission Letter.doc" deleted by Anand Gopal/Bmgt]

Appendix C

Permission Letter from Dr. Joao Pedro Couto

Dep. Economics and Management

University of the Azores, Portugal

From: Joao Couto
[Redacted]

Sent: Mon 2/11/2008
11:01 AM

To: Yoram Benit
Cc:
Subject: Permission letter

Dear Yoram Benit

I am grating you permission to use all the materials mentioned in your letter regarding the article on "National Culture and Research and Development Activities". If you need any addition elements please fill free to ask.

Best Regards

João Pedro Almeida Couto
Dep. Economics and Management
University of the Azores
Tel. [Redacted]
Fax. [Redacted]

From: Yoram Benit
Sent: Sun 1/27/2008 5:17 PM
[Redacted]
Subject: Consent to obtain/modify survey

January 27, 2008

Yoram Benit
[Redacted]

Dear Dr. Couto,

My name is Yoram Benit and I am a doctoral candidate in a Ph.D. program at Lynn University in Boca Raton, Florida. My major is Global Leadership, with a specialization in corporate and organizational management. My dissertation proposal focuses on the effects of offshore outsourcing, national culture, type of contract, and market freedom on U.S. multinational corporations' competitive advantage. My topic of my research is Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations. I plan to examine the impact of

offshore outsourcing on competitive advantage of telecommunication corporations that deal with offshore outsourcing in India, China, and Brazil. A target population of 500 is planned.

While doing my literature search for the dissertation, I read the excellent article by you and Dr. Jose Cabral Vieira, "National Culture and Research and Development Activities".

I am writing to request permission **to obtain** (and purchase if necessary) **the survey** and the scales of the survey.

I am also requesting permission to reproduce the above scales and related materials in my dissertation. In addition, I am requesting permission to modify the above scales for my research study. Furthermore, ProQuest Information and Learning may supply copies of the dissertation on demand and may make the dissertation accessible in electronic formats.

If you do not control the copyright for any of the above materials, it would be most appreciated if you could provide me with contact information of who might be the proper rights holder(s), including current address(es). Otherwise, your permission confirms that you hold the right to grant the permission requested here. If you control the copyright for some of the aforementioned materials, you may list the permission for this material at the end of this letter.

Permission includes non-exclusive world rights to translate the scales to use the material and will not limit any future publications-including future editions and revisions-by you or others authorized by you. If permission is granted, I will include any statement of authorization for use that you request on all scales, or provide an APA note of permission. The copyright holder will be given full credit.

I would greatly appreciate your consent to my request. If you require any additional information, please do not hesitate to contact me., I can be reached at the above postal mail address, [REDACTED], or [REDACTED]

A duplicate copy of this request has been provided for your records. If you agree with the terms as described above, please sign the release form below and fax to [REDACTED]. Your approval and the delivery of the survey over the email will be sufficient if you wish.

Sincerely,

Yoram Benit

Permission granted for the use of all the material as previously described:

Yes ? No ?

Permission is granted for the use of the following material as previously described:

Agreed to: _____

Name & Title: _____

Date: _____

Joao Pedro Couto, Ph.D.
Centre of Applied Economic Studies of the Atlantic
Department of Economics and Business
University of the Azores
Ponta Delgada, Portugal
[REDACTED]

Appendix D

SurveyMonkey Security Policy

Privacy Policy

Information Collection

We will not use the information collected from your surveys in any way, shape, or form. In addition, any other material you provide us (including images, email addresses, etc.) will be held in the strictest confidence.

In addition, we do not collect personally identifiable information about you except when you specifically provide this information on a voluntary basis. We will make every effort to ensure that whatever information you provide will be maintained in a secure environment.

However, even if you opt out of receiving any communications from SurveyMonkey.com, we reserve the right to contact you regarding your account status or any other matter that might affect our service to you and/or our records on you.

Information Use

SurveyMonkey.com reserves the right to perform statistical analyses of user behavior and characteristics. We do this in order to measure interest in and use of the various areas of the website.

SurveyMonkey.com collects IP addresses for system administration and record keeping. Your IP address is automatically assigned to your computer when you use the World Wide Web. Our servers record incoming IP addresses. The IP addresses are analyzed only in aggregate; no connection is made between you and your computer's IP address. By tracking IP addresses, we can determine which sites refer the most people to SurveyMonkey.com. (Think of an IP address like your zip code; it tells us in general terms where you're from.)

Cookies

"Cookies" are small text files a website can use to recognize repeat users. SurveyMonkey.com uses cookies to recognize visitors and more quickly provide personalized content or grant you unimpeded access to the website. With cookies enabled, you will not need to fill in password or contact information.

Information gathered through cookies also helps us measure use of our website. Cookie data allow us to track usage behavior and compile data that we can use to improve the site. This data will be used in aggregate form; no specific users will be tracked.

Generally, cookies work by assigning a unique number to the user that has no meaning outside of the Web site that he or she is visiting. You can easily turn off cookies. Most browsers have a feature that allows the user to refuse cookies or issues a warning when cookies are being sent. However, our site will not function properly without cookies. Enabling cookies ensures a smooth, efficient visit to our website.

Opting Out

Upon request, SurveyMonkey.com will allow any user to opt out of our monthly newsletter. Also, upon your request, SurveyMonkey.com will delete you and your personal information from our database; however, it may be impossible to delete all of your information without some residual data because of backups and records of deletions.

For more information regarding opting out of any mailing from SurveyMonkey.com, please visit our Help Center.

Safe Harbor and EU Data Protection Requirements

We have met the Safe Harbor requirements on 11/29/2004 02:29:37 PM SurveyMonkey.com has been placed on the Safe Harbor list of companies accordingly. This list can be found at:

<http://web.ita.doc.gov/safeharbor/SHList.nsf/WebPages/Oregon>.

General Security Policy

SurveyMonkey.com is aware of your privacy concerns and strives to collect only as much data as is required to make your SurveyMonkey experience as efficient and satisfying as possible, in the most unobtrusive manner as possible.

The foregoing policies are effective as of April 4, 2000. SurveyMonkey.com reserves the right to change this policy at any time by notifying users of the existence of a new privacy statement. This statement and the policies outlined herein are not intended to and do not create any contractual or other legal rights in or on behalf of any party.

Appendix E

Institutional Review Board Approval



Lynn University

Principal Investigator: Yoram Benit

Project Title: Impact of Offshore Outsourcing on Competitive Advantage of U.S. Multinational Corporations

IRB Project Number: 2008-021 Request for Expedited Review of Application and Research Protocol for a New Project

IRB Action by the IRB Chair or Another Member or Members Designed by the Chair:

Expedited Review of Application and Research Protocol and Request for Expedited Review (FORM 3): Approved

COMMENTS:

Consent Required: No Yes Not Applicable Written Signed

Consent forms must bear the research protocol expiration date of 08/08/09

Application to Continue/Renew is due:

- 1) For an Expedited IRB Review, one month prior to the due date for renewal
- 2) Other:

Name of IRB Chair: Farideh Farazmand

Signature of IRB Chair

A black rectangular box redacting the signature of the IRB Chair.

Date: 08/08/08

Cc. Dr. Norcio

Institutional Review Board for the Protection of Human Subjects
Lynn University
3601 N. Military Trail Boca Raton, Florida 33431

660 V1 1456

02/09/09 39800

SELL

Group