

# Influence of Relational-Oriented Exchange on Outsourcing Success in Supplier-Manufacturer Relationships: A Financial Performance Perspective

Mohamad Ghozali Hassan, Abdul Aziz Othman, and Mohd Azril Ismail

School of Technology Management and Logistics, Universiti Utara Malaysia, Kedah, Malaysia

Email: {ghozali, abdaziz, azril}@uum.edu.my

**Abstract**—The role of relational-oriented exchange is an important concern of competitiveness sustainability in developing an outsourcing company. Analyzing the influence of relational-oriented exchange on the financial performance of outsourcing success enables greater business value over time. This paper aims to study the relational-oriented exchange in terms of structural and process dimensions improving the outsourcing performance among manufacturing industries. An empirical study was applying partial least square and structural equation modelling using responses from a sample list of all electric and electronic manufacturing industries in Malaysia. This is done with the help of a statistical tool, SmartPLS as a new quantitative research demonstrated to support the positive relationship between relational-oriented exchange and outsourcing success from a financial performance perspective.

**Index Terms**—outsourcing success, relational-oriented exchange, financial performance, electric and electronic manufacturing industries, SmartPLS, PLS-SEM

## I. INTRODUCTION

Outsourcing is a commonly growing practice of subcontracting useful resources out of the company [1]. The purpose of adapting this practice is to help a particular company focuses on the performance of its core business activities [2]. Nowadays, outsourcing acts as a powerful weapon especially to create the competitiveness sustainability of a company [3], [4]. Outsourcing is designed for a company to concentrate on its main development while expanding its business value ahead of competitors [5]. With the help of outsourcing partners for complementary activities, company is able to optimize its main business in this fast-paced high-tech society [6]. Thus the development of a strategic relationship is necessary to produce synergy between companies where such synergism is believed to direct and produce immediate and permanent advantages in term of financial performance.

A company that adapts outsourcing practices manages to grow stronger in a reasonable short time with higher

business profit than the one that does not [7], [8]. This is because outsourcing utilizes professional outsiders in enhancing the specific products and services effectively and efficiently based on current capability of a company [2]. Added to this, outsourcing helps to increase the productivity and flexibility of a company to handle market requirement [2]. Consequently, modern practices of outsourcing management not only results in cost reduction but also takes advantage of advanced technology, professional skill and global resources from the third parties.

In fact, outsourcing has become essential in this new era of globalization [9]. Despite the importance of outsourcing practices, only few empirical studies have been conducted but the most efficient and effective outsourcing is still remained incomplete. Additionally, empirical researches that dedicated the investigation of outsourcing performance are still few and far between [10]. Furthermore, the related findings and explanations are still vague [11]. As a matter of fact, quantitative investigation of the outsourcing performance in between the relationship of suppliers and manufacturers is lacking and consequently the understanding of outsourcing success is inadequate. Therefore, this paper intends to fill this significant research gap by analyzing the influence of relational-oriented exchange on the financial performance of outsourcing success in supplier-manufacturer relationships.

## II. THEORETICAL BACKGROUND

### A. Financial Performance of Outsourcing Success

Outsourcing success is defined as the implementation factors used to achieve the targets and goals of a company [2]. Generally, financial performance is required for the decision making of a company. Indeed, company considered its outsourcing activities unsuccessful if the managing cost among the outsourcing partners was higher than the benefits gained [12]. The financial performance of outsourcing success is described as “the tangible, measureable, hard dollar benefits to the company from outsourcing.” Financial consideration has

been applied commonly in many companies. This perspective determines the long-term business relationship.

According to the past literatures, there are three distinct stages of financial performance in outsourcing management [13]. The first stage is a process of rapid growth. This is the earliest stage of a business life cycle. In this stage, a company is said to prepare and make investments in order to start its own business. Next, the second stage is a process of sustain. Most companies are actually working on this stage. In this case, further investments are required in order to sustain the business life of each company. After that, the last stage is a process of harvest. A company is believed to harvest the investment made from the preceding two stages when the company reached its mature phase of the business life cycle. Such benefits obtained can be indicated based on three financial themes in achieving organizational business strategies [13]. These financial themes are

- a. revenue growth and mix
- b. cost reduction and productivity improvement, and
- c. asset utilization and investment strategy.

The overall success of the outsourcing practices will help to improve the company's business competitive in term of financial performance [2].

#### *B. Relational-Oriented Exchange*

The concept of relational-oriented exchange according to the structural and process dimensions is an important aspect in order to improve the performance of outsourcing success [14]. In this paper, the relational-oriented exchange is considered as a durable relation of the two parties controlled by the relational norm and ethical principles [15], [16]. The norms and principles are ways of relationship control and coordination. These relationships are divided into structural and process elements for the manufacturing industry to achieved long term relationship between supplier and manufacturer [17].

The structural dimension of relational-oriented exchange is referred to the close relationship [17]. On the other hands, the process dimension of relational-oriented exchange is referred to any long-term relationship between supplier and manufacturer [17]. In supplier-manufacturer relationships, the company's performance hinges mainly on relational exchange that provides intense cooperation, joint plan and mutual adoption of each other's requirements [18].

### **III. RESEARCH HYPOTHESIS**

Based on the literatures, company's performance is impacted by its strength to integrate, develop and reconfigure resources in a process that is known as dynamic capabilities [19]. More specifically, dynamic capabilities clarify why organizations in one industry perform in different ways. For example, dynamic capabilities are ingrained in company and comprise of a set of specific strategies and processes [20]. Another example revealed that company that is characterized by a dedicated capability in managing its internal relationships will produces higher market value than the one who is

lacking capability counterparts [21]. Thus, such company systematically investing in the development of the supplier-manufacturer relationships will results consistent performance compared to those who foregoes the investment. According to the examples discussed, the investments for developing the relational-oriented exchange is believed to promote cost reductions in coordinating and integrating relationships. Subsequently, these investments will support the company in enhancing the synergistic advantages through outsourcing practices.

Many researchers have magnified the increasing trend of outsourcing practices [22]. By outsourcing the company's complementary activities to experienced suppliers, company manages to focus on the development of its core activities [23]. The specialization of the core activities from others features the minimization of the capital base and facilitates the return on invested capital [24]. Hence, both manufacturer and supplier can be cooperated via the relational exchange efficiently on the co-ordination activities [25]. In short, relational-oriented exchanges enable company to produce greater business value [26]. In addition, these relational exchanges help to develop competitive advantage over time [27].

Eventually, outsourcing practices will lead to minimal investment in the plant and equipment of a company [28]. Moreover, the decreased investment in manufacturing capacity also reduces the fixed costs and results in a lower break-even point. Therefore, the improvement in short-run cost supports the decision to outsource, making it an attractive technique for a company to improve its business performance.

The above arguments lead to a research hypothesis.

Hypothesis I: Relational-oriented exchange positively affects the financial performance of outsourcing success significantly.

### **IV. DATA COLLECTION**

#### *A. Development of Scale*

This paper implemented postal survey for data collection. There are two important parts designed in the questionnaire. The first part contained company background of the respondents such as company ownership, type of manufacturing, type of products, number of operating years and number of employees. Besides, this part of questionnaire also provides the general information of the respondents such as working experience with multinational companies, outsourcing involvement and working position. The first part of the questionnaire is developed to collect the general profile of the companies and the respondents.

The second part of the questionnaire focused on the measurement items of the key variables. In this paper, the independent variable is relational-oriented exchange while the dependent variable is outsourcing success. Table I listed out all the question items for each variable.

TABLE I. THE MEASUREMENT ITEMS OF THE CONSTRUCTS

A. Relational-Oriented Exchange	
1	There is a coordinating activities where both of us are involved.
2	We assist customers in core activities.
3	Customers assist us in complementary activities.
4	There is a two way relationship communication.
5	Frequent information of exchange is carried out.
6	Team consciousness exists within our customers and our company.
7	We expect a long customer relationship.
8	We form long-term plans to facilitate individual sales as well as to support continuous relationship.
B. Financial Performance of Outsourcing Success	
1	We showed high performance in the sales growth.
2	We showed high performance in the profit growth.
3	We showed high performance in the overall profitability.

### B. Population and Sample

This paper collected the data by mailing the survey to the respondents. A pilot test was carried out in order to confirm the number of measurement items for each variable. Amendments and modifications of the questionnaire were conducted based on the outputs of the pilot tests before conducting a large scale of survey. Then, surveys were sent to all the 865 respondents listed from the electric and electronics manufacturing industries in Malaysia. This sample list was selected to provide invaluable responses at the rate of 15-20%, approximately 130-173 respondents. All the measurement

items are designed using a 7-point Likert scale with 1 represented as strongly disagree while 7 represented as strongly agree.

## V. RESEARCH METHODOLOGY AND DATA ANALYSIS

### A. Model Specification

This paper implemented SmartPLS as a statistical analysis tool in order to investigate the influence of relational-oriented exchange on the financial performance of outsourcing success. At first, the structural configuration of the research model was examined carefully to prevent Type I and Type II errors that contain misleading information [29]. All the reflective indicators chosen are presented in Fig. 1.

### B. Reliability and Validity Tests

First of all, this paper evaluated the internal consistency reliability of the research model through the analysis of composite reliability [30]. In this case, both relational-oriented exchange and financial performance of outsourcing success achieved 0.9772 which indicated that the scales used were reliable as their composite reliability values exceeded 0.95 [31].

After that, this paper examined the convergent validity of the research model using average variance extracted (AVE) value of each construct with a cut-off point of 0.50 [30]. From the test results, this model achieved a high AVE value, approximately 84%. This result indicated a relative high convergent validity of the measurement constructs in the research model. Furthermore, each single indicator were tested to be significant at 99% confidence interval.

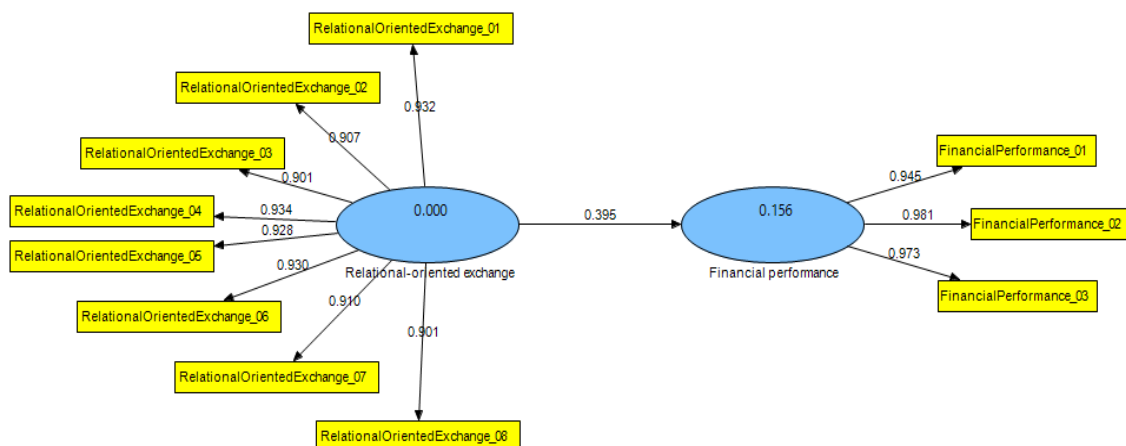


Figure 1. Research model.

### C. Path Analysis with Hypothesis Testing

The path analysis accurately represented the relationship between relational-oriented exchange and financial performance of outsourcing success. In this analysis, a bootstrapping method is recommended using 1000 sub-samples to assess the statistical significance of each path coefficient [32]. Fig. 2 showed the output of

this path analysis with T-value. Based on the result of hypothesis testing using SmartPLS, there is enough evidence to support a significant relationship between relational-oriented exchange and financial performance of outsourcing success. In other words, relational-oriented exchange is positively affects outsourcing success of a company in term of financial performance. As a conclusion, the Hypothesis I in this paper is significant.

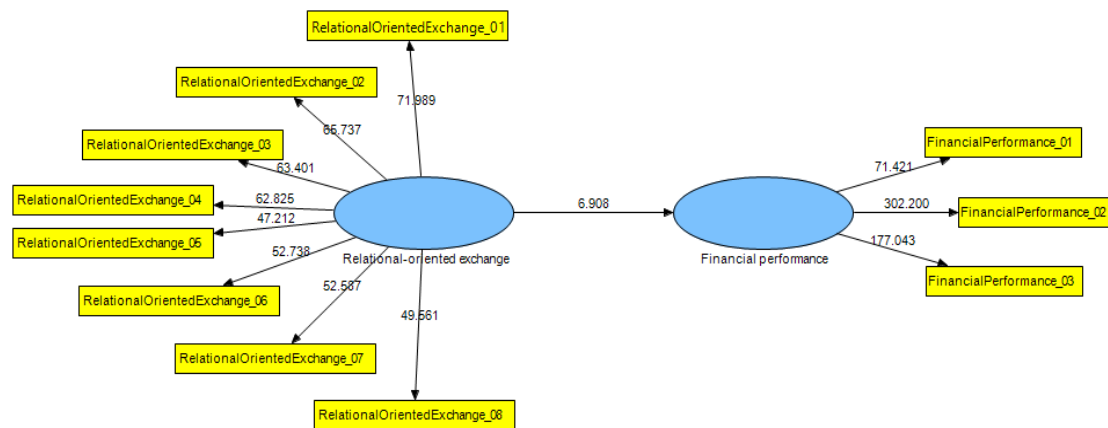


Figure 2. Path analysis with hypothesis testing.

## VI. RESEARCH CONTRIBUTIONS

This paper intends to determine the dimensions of the supplier-manufacturer relationships. This paper also contributes to identify the impact of relational-oriented exchange on outsourcing success of a company that focused on the company's financial performance via an empirical research. This empirical study demonstrated the implementation of partial least square structural equation modeling (PLS-SEM) using Smart PLS systematically, which can be guidance for other similar applications.

There are two practical contributions concerned in this paper. First, the findings suggest that the relationship orientation found between supplier and manufacturer might lead to revenue improvement of supplier. Second, these findings also suggest that the relationship orientation might increase the financial performance of an outsourcing company. In a nutshell, the outputs of this paper would provide guidance for managers in establishing similar practices and effective strategies of outsourcing management and thus, ensure an appropriate investment level in outsourcing management.

## VII. CONCLUSIONS

This paper magnified the financial performance of outsourcing success in term of implementation factors conducted by the electric and electronic manufacturing industries. Outsourcing practices is a useful tool to enhance the supplier-manufacturing relationship in achieving the expected target of a company. This investigation of the supplier-manufacturer strategic relationship was examined as a construct that manages to predict the outsourcing success of a company through PLS-SEM using SmartPLS.

In this paper, relational-oriented exchange is considered as the behavior pattern to which the supplier-manufacturer relationship is inclined towards long-term cooperation between the joint parties. A greater relational-oriented exchange allows the outsourcing partners react to the changes of business market effectively. This situation helps to lengthen the time limit for outcome evaluation of their relationships. Eventually, these relationships are protected while preventing

behavior damage to their relationships [33]. As stated earlier, suppliers perceived that their manufacturer was implementing good strategic relationship. The findings revealed that relational-oriented exchange positively affects the outsourcing success of a company. Therefore, a higher degree of relational-oriented exchange will lead to a higher level of outsourcing success.

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**Mohamad Ghozali Hassan** is a Senior Lecturer at the School of Technology Management and Logistics, Universiti Utara Malaysia. His primary teaching interests is in technology and operation management. He has taught courses of this nature, both at the bachelor and master levels for the past five years. His main research interest is in the area of inter-organizational relations, antecedent factors of supplier-manufacturer relationship, outsourcing management, and environmental dynamism. Currently, he is the Principal of Residential Colleges at UUM. He is former Director of Msc Programme, OYA Graduate School of Business, UUM (2012-2013).



**Abdul Aziz bin Othman** is the senior lecturer with the School of Technology Management and Logistics and the coordinator of COB Postgraduate Programme, Universiti Utara Malaysia.



**Mohd Azril bin Ismail** is the senior lecturer with the School of Technology Management and Logistics under Department of Logistics & Transportation and the principals of Residential Colleges at Universiti Utara Malaysia.