

## EVALUATION THE RELATIONSHIP BETWEEN RESOURCE DEPENDENCE THEORY IS BASED ON THE ISO9000 WITH OPERATING PERFORMANCE IN ISO9000 CERTIFICATED COMPANIES; (CASE STUDY: GILAN PROVINCE)

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### Abstract

The purpose of this study is Evaluation the relationship between resource dependence theory is based on the ISO9000 with operating performance in ISO9000 certificated companies;(Case Study: Gilan Province).This is a descriptive-analysis study and is a survey; also it has an applied goal. The study population consisted of 78 ISO9000 certificated companies in Gilan province. They are selected in random sampling. In this study, the relationship between (Relationship with Customer, relationship with Suppliers, Internal Processes) with Operating Performance were examined. We use questionnaire to collect data. Content validity of the questionnaire was approved by faculty advisors and the reliability of the questionnaire was confirmed by using Cronbach's alpha coefficient; The collected data are analyzed by the Lisrel software. So in order to test this Hypotheses we use Confirmatory factor analysis test and path analysis. findings shows that except The extent to which supplier relationships are based on ISO9000 principles to operating performance, other hypotheses (The relationship between internal processes and operating performance, customer relationships to operating performance, customer relationships internal processes, supplier relationships to operating performance, supplier relationships to internal processes, the relationships with suppliers and relationships with customers) have significant and positive relationship with operating Performance.

**keywords:** Iso9000, Resource dependence theory, Operating performance, Relationship with Customer, relationship with Suppliers, Internal Processes.

### Introduction

Today, More than 900,000 organizations worldwide have registered to the ISO 9000 quality management standard. ISO 9000 is a set of international standards which consists of requirements and recommendations for the design and evaluation of systems to manage. ISO 9000 certification can only be obtained when systems, processes and procedures meeting the requirements of the standard are documented and put in practice; and the practice outcomes are

recorded and presented as evidence of implementation (Kumar, 2010, p. 438). Resource dependence theory enhances understanding and appreciation for the standard, and provides clarity on how the standard benefits organizations (Singh et al, 2011, p.49). According to the resource dependence theory, the impact of this standard shows the ability of an organization to manage all the range of support and resources. The ISO standards process is designed to collect input and periodically revise standards to maintain their relevancy. Studying the implementation process will lead to new insights, which may help to evolve future versions of ISO 9000. In addition, as companies emerge from the global financial crisis of 2008, issues related to globalism and global competitiveness are important to study (Bell, 2010, p. 9). This study shows that corporate managers how to manage the affairs of ISO 9000 as a tool to use in your organization and how resource dependence theory can be justified in the functional basis for the analysis of individual phenomena. The ultimate goal of this system to improve quality, productivity, increased motivation, facilitating communication and information flow, and ultimately achieve Total Quality Management. In this study, we integrate the literature by proposing a theoretical basis that could account for its widespread interest. The theoretical basis is achieved through: (1) identification of a theory that integrates existing literature on the duality of ISO 9000; (2) development of a model based on the identified theory; and (3) empirical testing of the theory-based model. (Singh et al, 2011, p. 50).

### ***Literature Review***

#### **Internal process**

A "Process" can be defined as a "set of interrelated or interacting activities, which transforms inputs into outputs". These activities require allocation of resources such as people and materials (ISO 9000: 2008, p. 3). Often the output from one process directly input to the next process. Effective performance of organization relates to management a number of activities associated with each other. In An efficient organization, inter organizational process is integrated and harmonized. Internal processes of organization are vital because are used to measure the effectiveness of organization from the organization's resources (El Daft, 1998, p.72).

#### **Operating performance**

Over the past few years, numerous studies have demonstrated the operational performance of ISO 9000 certification. Since, ISO 9000 is a structured and documented quality system, good documentation can create more effective work instructions and control all aspects of the manufacturing process, leading to reduced costs and better control of the business (Huang et al., 1999; McAdam and McKeown, 1999). Joubert (1998) presented evidence that ISO 9000 positively impacts product/service quality, saves costs, reduces manufacturing lead time, and improves the overall efficiency of operations. According to Yahya and Goh (2001), the dimensions of operational benefits for ISO 9000 include: scrap/rework, inter-company communications, Framework for ISO 9000 motivation 199 departmental/cross functional

cooperation, documentation, measurement systems, cultural change, quality awareness and prevention. Furthermore, Lipovatz et al. (1999) noted that one important perceived benefit in companies with ISO 9000 certification is the improvement in the production process. According to Beattie and Sohal (1999), reducing production costs is one of the main benefits of implementing ISO 9000 standards. Based on a survey conducted in Saudi Arabia, Magd (2006) showed that the three most important benefits achieved from implementing ISO 9000 are the improved efficiency of the quality system, better documentation procedures, and increased quality awareness within the firms. Naveh and Marcus (2005) concluded that the use of ISO 9000 is positively related to operating performance (Yuh Jang & I Lin, 2008, pp 199-200).

### **Relationships with suppliers**

ISO 9000 incorporates supplier relationships as one of its eight principles, stating that “an organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value” (ISO 9004, 2000, p. 5). Relating to RDT, this statement clearly reflects the standard working as “social–legal apparatus” (Pfeffer and Salancik, 1978, p. 2), facilitating and recognizing that all trading partners are part of “larger social systems” (Pfeffer and Salancik, 1978, p. 193).

Supply chain management has developed as a field from the integration of operations and marketing management (Flynn and Flynn 2005). As a result, linkages with upstream firms – which was once the domain of purchasing has been elevated in importance. The quality management precedence for this is found in Deming’s fourth point, ‘End the practice of awarding business on the basis of price tag alone. Instead, minimize total cost. Move towards a single supplier for any one item, on a long-term relationship of loyalty and trust’. This has resulted in a merging of quality management and supply chain management principles. Those who handle purchasing and logistics functions have gained a more quality-minded approach, and operations managers have increased their external focus on customer satisfaction (Foster and Ogden 2008). However, more work is needed as this merger is still far from complete and quality practices must advance even further from a traditional firm-centric and product-based mindset to an inter-organisational supply chain orientation involving customers, suppliers, and other partners (Robinson and Malhotra, 2005). Miller (2002) stated that one of the key issues needing exploration was how supply chain management integrates with other operational performance initiatives such as lean manufacturing, quality management, and new product development (Foster et al, 2011, p. 2286 ).

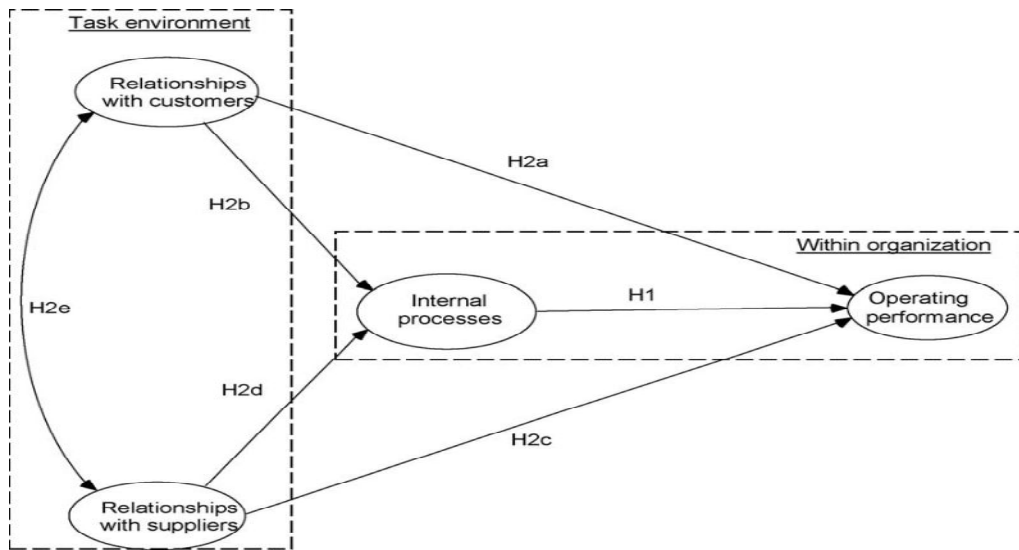
### **Relationships with customers**

Newer definitions understand CRM as a broader term, e.g. Peelen (2005, p. 6) states: “CRM is to be regarded as a business strategy that is aimed towards developing long-term, mutually profitable, individual customer-supplier relationships and is placed on an IT infrastructure to be developed, one that enables well-defined and controlled processes, and places capable personnel in a position to function optimally.” Many authors agree to CRM being an important

business strategy, e.g. Buttle (2009, p. 22) wrote: “CRM is the core business strategy that integrates internal processes and functions, and external networks, to create and deliver value to targeted customers at a profit (Heczková and Stoklasa, 2010, p. 82). A continuous review and re-design of processes to meet the changing requirements of customers can therefore be facilitated by implementation of the ISO 9000 standard. The standard therefore can serve as a formal mechanism for dependencies to be formed between an organization and its customers through creating legitimacy, promoting stability of demand, and creation of resource based linkages (i.e., the supplying organization becomes a ‘resource of choice’) (Singh et al, 2011, p.54 ).

**Conceptual Model**

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**Fig. 1. Theoretical model.**

**Hypotheses**

**H1.** The extent to which internal processes are based on ISO 9000 principles is positively related to operating performance.

**H2a.** The extent to which customer relationships are based on ISO 9000 principles is positively related to operating performance.

**H2b.** The extent to which customer relationships are based on ISO 9000 principles is positively related to the extent to which internal processes are based on ISO 9000 principles.

**H2c.** The extent to which supplier relationships are based on ISO 9000 principles is positively related to operating performance.

**H2d.** The extent to which supplier relationships are based on ISO 9000 principles is positively related to the extent to which internal processes are based on ISO 9000 principles.

**H2e.** There is a positive association between the relationships with suppliers and relationships with customers for ISO 9000 registered organization.

## Research methods

### *Reliability*

One estimate of reliability was obtained – alpha reliability coefficients for all four constructs. Table 2 shows that the coefficients range from 0.721 to 0.838 confirmed reliability of the questionnaire

**Table 1. Output for the Reliability**

<b>variables</b>	<b>Internal processes</b>	<b>Relationships with customers</b>	<b>Relationships with suppliers</b>	<b>Operating performance</b>
<b>alpha reliability coefficients</b>	<b>0.838</b>	<b>0.791</b>	<b>0.721</b>	<b>0.746</b>

### *Questionnaire*

The descriptive statistics and quantitative methodologies on survey data collected by questionnaire (Singh et al, 2011). The final questionnaire consisted of two parts. The first part contained questions regarding the companies' profiles (Size of companies & experience in adopting ISO 9000(years) in the manufacturing industry in province of Gilan) . The second part contained statements ISO 9000 based RDT and operating performance. Respondents were asked to indicate their degree of agreement or disagreement with these statements (regarding importance) using a five-point Likert-type scale (1 = “strongly disagree”; 5 = “strongly agree”).

### *Sample*

The questionnaire was distributed to the senior manager in charge of quality management in each of 78 Gilan service companies. Data were collected, revised, coded, and then fed to SPSS 13 and Lisrel 8.5 and required outputs were extracted. 1881535

### Findings

Descriptive statistical analysis of data indicated that 62.8% of the Companies have more than 100 personnel and 37.2% have less than 100 personnel. In the view point of the variable of “Record on Gaining the ISO 9000 Certificate”, 66.7% of the Companies have the record of ISO 9000 Certificate more than 5 years and 33.3% have ISO 9000 Certificate less than 5 years.

Output of Table 2 shows amount of Minimum, Maximum, Mean, Standard Deviation and Variance for Variables for 78 companies.

**Table 2. Output for Descriptive statistics**

variable	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Relationship with Customer	78	2.83	5	4.5021	0.572	0.382
Relationship with Supplier	78	1	5	4.3077	0.737	0.544
Internal Process	78	2.33	5	4.05	0.516	0.266
Operating performance	78	2.43	4.43	3.69	0.422	0.178

### Confirmatory Factor Analysis

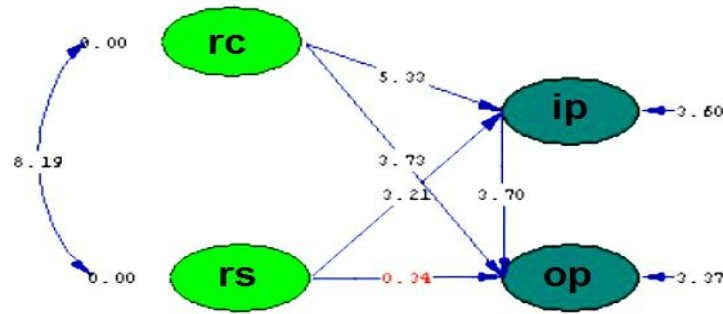
A number of commonly reported indices were obtained to assess the goodness-of-fit of models with data. For our revised CFA model, these fit indices were as follows,  $df = 318$ ,  $\chi^2 = 672.22$ ,  $\chi^2/df = 2.11$  with  $p$ -value = 0.000; goodness-of-fit index (GFI) = 0.89; adjusted goodness-of-fit index (AGFI) = 0.86; comparative fit index (CFI) = 0.90; and, root mean square error of approximation (RMSEA) = 0.054.

**Table 3. Output for Confirmatory factor analysis**

Hypothesis	Standard estimation	T-value	Result
H1	0.47	3.70	Significant
H2a	0.40	3.73	Significant
H2b	0.53	5.33	Significant
H2c	0.03	0.34	Not significant
H2d	0.27	3.21	Significant
H2e	0.49	8.19	Significant

With consideration to the Model Diagram, in a significant status, it is seen that the amount of  $t$ -value in the H1, H2a, H2b, H2d and H2e hypotheses are more than 1.96. Consequently, we can

accept the being significant of the relations. The amount of t-value in the H2c hypothesis is 0.34, less than 1.96. So this hypothesis is not significant.



Chi-Square=672.22, df=318, P-value=0.00000, RMSEA=0.054

**Fig.2. Model Diagram**

**DISCUSSION AND CONCLUSION**

This study attempts to provide a stronger theoretical basis for the registration and operation of the ISO 900 standard. Our results suggest that managers should improve the results of operations and increase awareness of personnel because it will reduce customer complaints. , paying attention to importance of data, suitable and accurate turning of data that will cause to effective and operative process. Interest in mutual cooperation, promotion of cooperation atmosphere between supplier and customer, tendency to solve the problems in direction of having communication with each other and economic and psychological satisfaction can improve the relationship between customers and suppliers. Our results show that the extent to which supplier relationships are based on ISO 9000 principles on operating performance is not significant. It can be because of lack of concentration of the Company on qualification of the product by the supplier, geographical spread and economic factors.

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