A Study towards Business Process Orientation in Wholesale Trade of Textile Industry in Erode

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ABSTRACT

Indian Textile is one of the leading industries in the world, though it is predominantly unorganized sector. But in the era of globalization there exists a tough competition due to various reasons. Indian textile supply chain has complex networks it begins with farmers and ends with customers. Business Process Orientation (BPO) is a key element of supply chain management required by every industry to enhance business performance. The study focuses on the evaluation of the BPO level among wholesalers who is a prime textile supply chain partner. This is a comprehensive study on business process orientation level adapted by the textile supply chain partner wholesalers of Erode industry. The design adapted for the study is descriptive in nature, involving primary data collection from a sample of textile wholesalers in Erode district. Data collected through survey questionnaire and analyzed statistically. The researcher developed the model to improve business performance on the basis of theoretical background and tested by using SEM techniques. The study shows that Business process orientation significantly contributes to the business performance .Thus business process orientation eliminates uncertainties and improves business performance was strongly recommended.

Introduction

Indian textile industry is a vital part of our economy next to agriculture. (Ashok Desai, 2012). It plays a significant role in contributing direct employment to around 35 million people and contributes 4% to GDP and 35% of gross export earnings.(Sabhaya R J and Jaykant GS Abhaya, 2011). India earns about 27% of its total foreign exchange through textile exports estimated of US $115 billion by the year 2012. (Dr Manoj Vaish and Rajesh Dubey, 2012). Availability of huge textile production capacity, large pool of skilled and cheap labour force, efficient manufacturing capacity, large domestic market with enormous export potential are the major strength of Indian Textile Industry. (Report of the working group on Textiles and jute industry for the eleventh five year plan (2007-2012) Govt. of India, Ministry of Textiles). Globalization poses challenges for Indian Textiles by way of imports of cheap textiles from other Asian neighbors, usage of outdated manufacturing technology, poor supply chain management and huge unorganized decentralized sector which also leads to high production cost (Pankaj Chandra, 1999; Compare Infobase Ltd, copyright 1999-09).

In India, the textile supply chain is interesting and equally complex. Focused systematic approaches are needed to promote and develop efficient and effective Supply Chain Management.

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It begins with the farmers and ends with customers. The Indian Textile industry has a long and fragmented supply chain (Velayutham, 2010). Competition is growing significantly for improving and developing potential in supply chain. The decision to link internal process between suppliers and customers is a vital criterion to determine internal business processes prevailing across all or part of the supply chain and finalizing the network to determine better configuration. (Chang Won Lee, et al. 2007). The textile network is highly complex and the increase in number of supply chain partners increases the cost. To survive and compete at a global level supply chain management is a must. As a supply chain consists of chain of processes in it, it is apt to focus on business process orientation in each level of the textile supply chain (Khan Md. Ariful Hague et al. 2011).

This paper focuses towards business process orientation as an essential requirement for supply chain management which in-turn improves business performance. The paper develops and tests the Business Process Orientation Model to improve the performance of wholesalers in a textile supply chain with reference to Erode District.

Objective

This research paper is an attempt to measure the level of Process Management and Measurement (PMM), Process Job (PJ), Process View (PV) - 3 key elements of Business Process Orientation (BPO) and the BPOs contribution to increased Business Performance (BP). This is in context of the textile wholesalers supply chain partners in Erode district.

Review of Literature

The review of literature below tries to provide a strong literature for supply chain management, BPO and the need for BPO in textile supply chain in Indian Textiles. Supply chain management is the strategic mode to attain demand fulfillment, delivery consistency and reduction of lead times related to fulfilling orders to meet the performance levels demanded by today's customers (Day 1994; Lockamy and Mc.Cormack, 2004). In supply chain process management, substantiative research has been under taken, in recent years towards more concentration is been given to BPO, maturity model and Supply Chain Operational Reference (SCOR) model (Gunasekaran et al. 2001). There are several studies on supply chain management in several industries such as automobile, apparel, chemical, computer, telecommunication, agriculture / food and grocery / Toy industry (Wong, et al. 2005; Swamynathan R, Sudharani D, 2008). Application of BPO, maturity models and SCOR model are gaining importance in every industry (McCormack, et al., 2009).

Countries like the U.S. & China bring a new set of perspectives to the textile industry which is experiencing significant changes, fierce competition and cost reduction to maintain or gain participation in specific markets (Gary Teng and Hector Jaramillo, 2005) Models are developed and adopted to select and evaluate suppliers in sourcing process. The Hong Kong textile and apparel supply chain faces additional problems of distance from customers in the US and European markets, long production lead times and minimum batch sizes for production and elimination of quota restriction in the US market. These parameters force the companies to improve efficiency and enhance competitiveness through supply chain management (Lam, Postle, 2006). The uncertainty that arises in textile supply chain is attributed to the uncertainty in demand caused by changing product variety, rate of new

product innovation, lead-time from design to production, etc., or due to supply uncertainty and manufacturing uncertainty. (Dash and Nalam, 2009). This above literature stresses that textile supply chain needs greater attention to face global competition. The enhancement of supplier management skills, co-operation in supply chain, updating information technologies is in need of the hour.

A textile supply chain essentially has three main parts : supply, manufacturing and distribution

- The supply side concentrates on how, where from and when raw materials are procured and supplied to manufacturing.
- Manufacturing converts these raw-materials to finished products and
- Distribution ensures that these finished products reach the final customers through a network of distributors, warehouses and retailers.

The chain can be said to start with the suppliers of suppliers and end with the customers of customers. To attain the complete goal each and every process execution is must for every business. The concept of business orientation is based on the work of (Davenport and Short, 1990; Hammer, 1999; and Coombs, 1996 and Hull, 1996). Mc. Cormack , (2001) conducted an empirical study to explore the relationship between BPO and enhanced business performance. Industry research results exhibited that BPO is critical in reducing chain conflict and encourages greater connectedness within an organization, while improving business performance. Moreover companies with strong measures of BPO showed better overall business performance (Mc Cormack and Lockamy III, 2004).

This study focused on textile supply chain their business process the key elements process management and measurement, process jobs and process view of business process orientation. According to Zaheer A et al., (2010) business processes are comprised of interconnected activities that transform particular inputs into customer focused outputs.

The key elements are observed and those relevant to textile supply chain process orientation are identified. Business process orientation is an essential factor which is the basement for organization process and it impact grows to maturity models and then Supply Chain Operational Reference (SCOR) model (Mc Cormack, et al., 2008)

In Indian textiles it is miles to travel to grow to the above level. Observing and evaluating the base business process orientation in textile supply chain among wholesalers is an infantile effort for great expectations and development researchers have explored various models of improving business processes within an organization such as business process engineering, business process management, business process analysis, business process efficiency, business process mapping and business orientation (Zaheer A et al., 2010; fields, 2007; Lockamy and Mc. Cormack, 2004; Mc Cormack and Rausco, 2005; Mc Cormack, 1999; Hammer and Campy, 1993) The literature lacks empirical studies on business process orientation and their impact on performance (Mc. Cormack, 1999; Skringar et al, 2008) especially in textile supply chain. The process orientation emphasis delivering value to customers by streamlining and accelerating work patterns (Schutta, 2006; Mc. Cormack and Johnson,

2001). Based upon the reviews and the theoretical support a model is proposed.

Theoretical support and hypothesis of business orientation model:

This research paper tries to apply the concept of BPO to enhance the business performance thereby efficient the existing supply chain in the textile industry with reference to the wholesalers. The key elements of business process orientation are process management and measurement, process view, process job. These first order constructs are considered for model development with their impact on business performance. These elements play a vital role in every business, based on the literature support below hypothesis were developed on an equation

BPO = fn (PMM PV PJ)

Where BPO stands for Business Process Orientation

PMM stands for Process Management and Measurement

PV stands for Process View

PJ stands for Process Job

The equation indicates BPO is the functional product of PMM, PV and PJ.

Hypothesis H1. The level of process view significantly influences the level of business performance.

The process view accentuates process thinking and process terminologies in the performance of activities in an organization (Davenport, 1993; Mc Cormack, 1999; Skrinjar et al, 2008).

Hypothesis H2. The level of process management and measurement significantly influences the level of business performance.

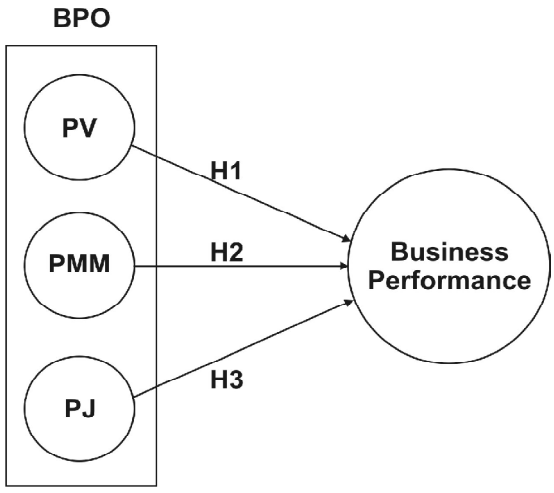
Process jobs are organizational jobs understood in terms of business processes that recognize the process owners who are responsible for them (Skrinjar et al, 2008; Mc Cormack, 1999; Mc Cormack, 2001b; Davenport, 1993; Mc Cormack & Johnson, 2001).

Hypothesis H3. The level of process job significantly influences the level of business performance.

Process jobs are organizational jobs understood in terms of business processes that recognize the process owners who are responsible for them (Skrinjar et al, 2008; Mc Cormack, 1999; Mc Cormack, 2001b; Davenport, 1993; Mc Cormack & Johnson, 2001).

Based on the above hypothesis the below model was constructed.

Figure 1 : BPO model for wholesaler



The original model of Business Process Orientation was developed by Mc Cormack (2000) to examine its impact on performance through interdepartmental connectedness and conflict. The literature indicates the positive impact of BPO on organizational performance (Fitzgerant and Murphy 1996). The researcher applied the BPO model on an important textile supply chain partner the wholesaler, to observe the improvement in business performance.

Methodology

This research study is descriptive in nature and is conducted to test the hypothesis. The business process orientation model is based on the above hypothesis.

Instrument and Measures

The researcher used a survey questionnaire based on scale items that were developed, validated, tested among the wholesalers of Erode district. The researcher conducted scheduled interviews with the wholesalers on the field and visited textile manufacturing units. The questionnaire was drafted with clarity of item wording that were comprehensible to the respondents. Initially a relevancy test was conducted to make sure about the constructs and scales, whereby it scored well about 98.2% of relevancy. The survey questionnaire consists of five parts (1) measurement of respondent's demography (2) process management and measurement, (3) process view, (4) process job which was tested with indicators relevant to textile wholesalers and (5) business performance. Likert 3 point scale was used. As a matter of uncertainty in the business the respondents were questioned with the negative approach questions. The questionnaire attempted to cover all possible functional troubles of business so that their optimal strategies towards implementation/ practice of PMM, PJ, PV, and BP were identified. The researcher used SPSS 15.0 and Visual PLS software to test statistically the model.

Sample: Wholesalers are the prime contributors for textile trading. This research focuses on their ability to practice Business Process Orientation and thus enhance their business performance. The supply chain efficiencies in textiles get proven improvement by improving BPO. The research is focused on the textile cluster of Erode which contributes close to 47% of Tamil Nadu's total textile needs and contributes significantly to the textile manufacturing of India. This cluster geographically comprises of Coimbatore, Erode, Gobichettipalayam, and Perundurai. They are in fact referred to as the textile valley of India. (Economy of TamilNadu in Wikipedia - Express India.com) Erode as an individual town is more popular for textile trading and contributes around $ 300 million of foreign exchange every year.

The population comprises of all the 2000 textile wholesalers of the district. The study has considered 147 registered members of YMWA of Erode as the sampling frame. A Judgment sampling under probability method was adopted; 40 YMWA members responded completely to the interview schedule which counts to 27% of the sample frame. The partially responded questions and those traders whose turnover was less than 1 crore per annum were summarily rejected from the analysis.

Analysis and Results

The first order construct the attributes of BPO, PMM, PV, PJ and their impact on BP was accessed in this model using Visual PLS. The validity and hypothesis were also tested. From figure 2 and table 1 it is observed that the process

view (PV has more influence on Business performance (BP) than the other two business process orientation parameters PJ & PMM. Since t value (3.542) is greater than 2 PV on BP shows statistically significant result, where as others do not.

Figure 2 : BPO model for wholesaler

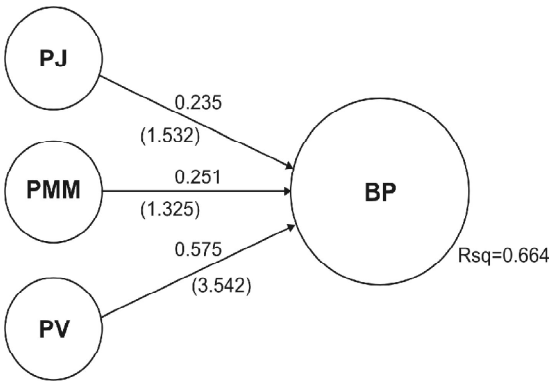


Table 1 : Results of Hypothesis

S.No	Path of construct	Hypothesis	Result
1	PJ⟶BP	H_1	NS
2	PMM⟶BP	H_2	NS
3	PV⟶BP	H_3	S

S - Significant NS - Not-Significant

The construct PV fundamentally questions on business focus, organizational structure, owners involvement and customer participation which are the important practical aspects of a wholesale trade. Statistical results confirm the same.

However, PJ and PMM results show insignificance on BP. In the textile industry the wholesalers are relatively more flexible towards cycle time, process cost and overheads variability for the prevailing uncertainties that happens in the business. Due to the practical and functional drawbacks in transporting raw material supply and labour related issues, the wholesalers have comprised in monitoring the process. Since most of the Indian manufacturing clusters are geographically concentrated and more of community developed business houses, outsourcing happens at a large scale. Any industry where outsourcing dominates in the business then the PMM and PJ automatically depend on outsource. The Erode textile cluster is also seen with the same pattern. Hence the t-values of PMM and PJ are justified. The content validity of the questionnaire is 98% yet the significance of the model is not so. The major reason for this is the failure of the respondents to have a clear demarcation on the PMM, PV and PJ aspects in their business. The reasoning was found by the researcher during the entire survey process. The respondents, the Erode wholesaler industrialist though is performing well in their business has not coped up with the scientific methods of business conduct unlike their counter parts in developed markets. The R square value of 0.664 indicates that 66.4% of BP is determined by PJ, PMM and PV. This value derived, exhibits the importance of the above said constructs in defining the success and survival of the wholesale textile trading in Erode. From table2 it is observed that the composite reliability of PJ is 0.787 and average variant is 0.465, alpha 0.75 which are strongly significant values. The table shows the moderate level of Karl Pearson's correlation coefficients.

Table 2 :
Correlation Of Latent Variables

	BP	PJ	PMM	PV
BP	1.000	-	-	-
PJ	0.419	1.000	-	-
PMM	0.586	0.334	1.000	-
PV	0.728	0.174	0.446	1.000

Table 3 : Reliability and Ave

Construct	Composite Reliability	AVE	Cronbach Alpha
BP	0.082373	0.146907	0.017660
PJ	0.787860	0.465697	0.755813
PMM	0.206207	0.143696	0.347409
PV	0.346452	0.170728	-0.040375

From table3, it is shown that construct PJ has composite reliability 0.7878 (>0.7) and average variance explained (AVE) value 0.4657(˜0.5) which are statistically sufficient to conform convergent validity of the construct. As per the VPLS BPO model, PJ shows no significant influence on BP. This variation may be due to the operational approach of the paper where the wholesalers are enquired in detail about their day to day operations rather than the conceptual understanding of the constructs.

This is again reasoned as the process view of the textile wholesalers is majorly composed of the owners involvement and buyers participation match. The questionnaire was able to capture exactly the operational view of process view PV which is supported by significant t-value. Finally the model exhibits that the key elements process job, process management and measurement, process view of business process orientation has overall significant contribution to business performance.

Conclusion

The focus of this research is to measure the level of Process Management and Measurement (PMM), Process Job (PJ), Process View (PV) - key elements of Business Process Orientation (BPO) and its contribution to increase business performance for the enhancement of textile supply chain partners in Erode District. The result shows that the wholesalers in Erode are aware of the BPO elements and the significance of it on business performance. They need improvement and application of it in a more focused nature to enhance the business performance. Even though they are not very particular about the exact theoretical definition of elements but they know the key elements that play an important role in BPO for enhancement of their business performance. Their implementation of BPO elements would bring more clarity in their business decisions and ensure higher business performance. Since Erode wholesalers are the prime contributors for the Indian textile Industry, understanding and implementing BPO would ensure higher business performance as well as create an efficient Indian textile supply chain.

The limitation of the research is that only one supply chain partner is considered and the samples were limited to registered members of Youth Cloth Merchant Association of Erode District. Further studies can be focused on more samples and all the supply chain partners for both cost effective and customer service.

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