

3PL USAGE, PRACTICES AND DECISION PROCESS: BANGLADESH PERSPECTIVE

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Introduction

Third-party logistics (3PL) has experienced an unprecedented growth in international business (Langley, 2012). Global 3PL revenue, for example, has increased to US\$703 billion worldwide (Langley and Caggemini, 2015). There has been a widespread use of 3PL as a strategic tool to reduce costs, improve efficiency and responsive, and expand geographic extent of business. Such rapid growth is largely driven by globalization and the resultant increased complexity of global supply chain networks (Chopra and Meindl, 2010). The spatial fragmentation of globalised production networks necessitates organisations to strategically partner with 3PL providers to help to increase market coverage, improve the levels of service, increase flexibility and customise services to specific customers' demand (Bowersox, 1990, Lieb, 1992, Sink et al., 1996). Arguably, organizations purport to gain strategic advantage by outsourcing of logistics functions that were previously performed 'in-house'. (Bowersox, 1990, Bagchi and Virum, 1998, Anderson et al., 1994, LaLonde and Cooper, 1989). However, such practices seem to vary across different markets, depending upon the economic conditions and business acumen to 3PL user or the future 3PL users. However, it is argued that every market behaves differently, so vary the use of 3PL. Thus, it is vital to gain market intelligence which will help organizations to improve decision making in a particular context. New 3PL users may have difficulties to obtain such customized information including firm specific statistics, usage patterns and trends of a specific country's 3PL market. Consequently, a considerable portion of 3PL literature considered the importance of the demographic factors (i.e. country and region) and also investigated the differences and similarities of 3PL trends, practices and decision making process among different countries and regions both from developed countries [United States (Lieb, 1992), Australia (Dapiran et al., 1996); (Rahman, 2011) UK, (Fernie, 1999); (Jaafar and Rafiq, 2005)] and developing country perspectives [Singapore (Bhatnagar et al., 1999), India (Sahay and Mohan, 2006), Ghana (Sohail et al., 2004), Saudi Arabia (Sohail and Al-Abadi, 2005) and Malaysia (Sohail and Sohal, 2003). Studies have been conducted form from the perspectives of cross-country (Sohail et al., 2006) and region (Peters et al., 1998a). However little has been known to understand the 3PL practices in the context of Bangladesh.

Bangladesh is experiencing an unprecedented growth in the garment sector where it has established itself as the textile and readymade garment powerhouse of the world, with almost all major global apparel brands outsourcing garment productions from Bangladesh. Despite this stronger export-oriented industrial base, lower-labor costs and convivial government policies for attracting foreign direct investment, the logistics cost are prohibitive and the logistics infrastructure and services to support seamless supply chains is poorly planned, build and maintained. However, little has been investigated to understand the current state of 3PL in Bangladesh and its impact on the ability of the logistic business to support an efficient and effective outsourcing future (Razzaque, 1997). The inadequate information regarding existing logistics services of Bangladesh is limiting the decision making capabilities of global logistics buyers. This implies that there is a lack of available information for global buyer to compare the logistics services of Bangladesh with other countries such as India and Pakistan who compete in the global outsourcing market on the basis of similar comparative advantage—Low labour costs. There is no comprehensive research on 3PL practices that can provide an understanding of the current status of 3PL in Bangladesh in comparison to world market practices (Razzaque, 1997). Unless it is understand, what is the current status of 3PL practices and trends in Bangladesh, it will hardly know how best to promote more informed 3PL usage and strong growth in logistics based industries compatible with global outsourcing practices.

This paper therefore, argues for conducting a comprehensive study that focus on understanding the logistics services demand patterns and 3PL usage in Bangladesh for three reasons. Firstly, Bangladesh has remarkable potential to be one of the emerging destinations for global outsourcing. Secondly, in spite of the high potential of this market, little has been explored regarding the usage pattern of 3PL services. Finally, such analysis has practical significance and policy implications for logistics practitioners and decision makers who opt for global outsourcing. This paper thus aims to

investigate the usage pattern relating to the extent of 3PL usage, 3PL decision making process, impact of 3PL and future trend of 3PL usage in Bangladesh. This paper is organized as follows. The next section presents a review of the prior literature in relation to the framework for measuring 3PL usage and practices. Subsequently, research methodology is outlined followed by the survey analysis results. Finally, the discussion and conclusion is presented.

The Framework for Measuring 3PL Usage and Practices

Extant research on 3PL practices and trend mostly explored four broad aspects: extent of the current 3PL services use, decision making process, impact of the use of 3PL services and future use 3PL of services. The four broad aspects as explored by prior research are primarily investigated through a framework based on the pioneer work of Lieb (1992). In this paper, we have adapted the framework of (Bhatnagar et al., 1999, Sahay and Mohan, 2006) so that the current 3PL practices and future usage patterns in Bangladesh can be examined. Prior empirical studies explored the extent of 3PL usage by using a number of dimensions such as employment characteristics of the 3PL user, number of 3PL provider used, length of users' 3PL usage experience, logistics services that are outsourced by the user, importance rating of logistic activities, users' commitment towards using 3PL services and amount of budget allocated by 3PL user for 3PL services (Lieb, 1992, Lieb and Bentz, 2004).

Six factors were identified in prior 3PL studies to capture the underlying 3PL decision making process. In particular, it is important to know first, firms '*reasoning*' behind outsourcing the logistics functions; second, the '*specific organizational level*' where the outsourcing decision are made; third, '*the extent of involvement*' of different functional area managers in outsourcing decision making process; fourth, '*the sources those made the 3PL user aware*' about the 3PL services; fifth, the '*managements reservations*' about using 3PL services; Sixth, the '*selection criteria*' considered by firm when selecting 3PL provider. It is important to measure the impact of 3PL use on client's business performance because a good match between the 3PL provider and the clients' corporate culture is an inevitable condition for successful contractual relationships (Bowersox, 1990). Majority of the prior research investigated the impact of using 3PL services on logistics system performance, customer satisfaction and employee morale (Lieb, 1992, Sohail and Sohal, 2003). Few prior research also investigated the types of training required for logistics personnel and percentage of full time logistic employees eliminated due to the use of 3PL services (Lieb, 1992). Measurement of client's overall satisfaction and intention to increase the 3PL use in future indicates the potential of further development of 3PL market in a single country (Bhatnagar et al., 1999, Bloomen and Petrov, 1996). Therefore information about the future trend of using 3PL services can offer valuable insights to both the clients and the 3PL providers in developing their future plans and strategies.

Research Methodology

We have adopted a quantitative approach to examine the 3PL practices and usage patterns. An online survey questionnaire is administered. This section outlines the survey questionnaire, the data collection procedures, and the respondent's demographic profile.

Survey Questionnaire

A cross-sectional 8-page self-administered questionnaire, containing 24 survey items, was conducted via survey. The questionnaire was divided in five broad sections. These include: a) characteristics of the respondent organization, b) the extent of current 3PL usage, c) impact of the use of 3PL services, d) 3PL decision making process and d) future usage intention of 3PL services. Most of the questions were presented in the multiple choice question formats. However, the questions pertaining to the impact of using 3PL services and the most cited advantages and disadvantages of 3PL usage were developed such that the responses to be given either on a five-point Likert Scale or rank order scale respectively. The survey instruments of this research were developed on the basis of the previous studies conducted by Bhatnagar et al. (1999) and Sahay and Mohan (2006).

Data Collection

During the last and first quarter of 2012 and 2013, the survey was administered. Initially an email was sent to the selected companies' contact person to collect the email address and phone number of the key personnel responsible for supply chain/ logistics operations. Soon an email containing a link of the survey questionnaire was sent to the email addresses. The respondents were requested to fill out the online survey that best capture the current 3PL practices of their organization. This results in 153 responses, manifest a response rate of 15.3 percent which is comparable with other studies

conducted both in developed and developing countries (Sahay and Mohan, 2006, Dapiran et al., 1996, Bhatnagar et al., 1999).

Survey Participants

The target population for this research are the business organizations those are registered with the federation of Bangladesh chambers of commerce and industry (FBCCI). A list of 1000 organizations was selected randomly as respondent companies. The random selection procedure was used due to the unavailability of a current and comprehensive database of Bangladeshi companies. As most of the business and economic activities are evolving around Dhaka (the capital city of Bangladesh) and Chittagong (the most important port city), the companies of these two major cities were selected as respondents. Both manufacturing and service organizations are selected and afterwards categorized under 14 industry classifications. One of the key persons responsible for supply chain/ logistics operations was approached from those organizations to participate in this research. In particular, majority of the respondents are from telecommunications, pharmaceuticals, banking, garment & textile industry. For convenience, the fourteen selected industries are broadly categorized into two: manufacturing and service industry. These two industries respectively represent 45.35 percent and 54.65 percent of respondents.

Results and Analysis

The study data is analysed by using SPSS 21 version. Frequency tables, cross tabulations, chi square test and a multiple regression are used to analyse the data. In the following we present the results of the data analysis which primarily focuses on the four broad domains.

Extent of 3PL usage

About 63 per cent of the 243 respondents indicated that their organisations use 3PL services; 37 per cent indicated that they do not use 3PL services. Among those organisations currently using 3PL services, more than 32 per cent reported that they have used them for more than five years and 31 per cent indicated that they have been using them between one to three years. Of the total respondents 49 per cent said they used 3PL for both domestic and international operations. Users of 3PL services indicated that their organisations use them for a wide variety of services, typically purchasing multiple services from one provider. Other logistic services outsourced by more than a quarter of the respondent companies include shipment consolidation, logistics information system, warehouse management, product return and packaging. However, services including carrier selection, fleet management and operations, HR recruiting, product assembly and installation are the less preferred services (less than 25 per cent of respondents use these services) for outsourcing to the 3PL providers. The use of the various available functions differed between manufacturing and service industries. In the manufacturing industry, shipment consolidation was cited as the most important 3PL service, followed by freight forwarding, warehouse management and packaging services. In the service industry, order fulfilment was the most frequently used service, followed by logistics information system, product returns and HR recruiting.

Although a significant number of organisations use 3PL, the degree of commitment to the services varies considerably. Over 42 per cent indicated that their organisation's commitment to 3PL services was moderate, while 36 per cent and 9 per cent respectively characterised the commitment as limited and very limited. Limited commitment is also reflected in each organisation's budget commitment. Up to 20 per cent of the logistics budget was allocated for 3PL use by 46 per cent of the respondent organisations; only four per cent spent more than 60 per cent. According to Lieb et al. (1993), the length of the relationship between 3PL users and their providers are positively related to the extent of 3PL use: the higher the level of relationship commitment between parties, the higher the willingness to allocate more budget to 3PL services. A chi-square test was conducted to investigate whether the level of commitment is related to the amount of budget devoted to 3PL use or the length of 3PL usage. The results show that both the relationship between the level of commitment and the amount of budget allocated to these services, and between the level of commitment toward the services and the length of 3PL use, are significant at $p < .05$ (Tables 1 and 2). In other words, organisations that are more committed to using 3PL services are more likely to allocate large proportion of their budget to finance these services. However, the value of Cramer's V is .174, which indicates a poor strength of association (Table 1). Cramer's V measures the strength of association within a value range of 0–1; a value close to 1 indicates strong association. This means that although level of commitment and budget allocation are associated with each other, the likelihood of increasing commitment with an increase of budget allocation is not very high.

Table 1: Cross tabulation of level of commitment and allocated budget to 3PL use

		Budget percentage		
		0–20%	21–40%	41–60%
Level of commitment to 3PL use	<i>Very limited</i>	7.1% (17)	1.3% (3)	.4% (1)
	<i>Limited</i>	19.6% (47)	12.5% (30)	5.6% (11)
	<i>Moderate</i>	17.9% (43)	20.4% (49)	5.6% (11)
	<i>Extensive</i>	1.7% (4)	3.8% (9)	6.2% (15)

Note: Chi-square test revealed an association between length of 3PL use and level of commitment to 3PL use when the categories 'extensive' and 'above 60%' are collapsed.

Table 2: Cross tabulation of length of 3PL use and level of commitment

		Level of commitment toward 3PL use (Percentage of use)			
		<i>Very limited</i>	<i>Limited</i>	<i>Moderate</i>	<i>Extensive</i>
Length of 3PL use	<i>Less than 1 year</i>	1.3% (3)	3.3% (8)	3.3% (8)	.4% (1)
	<i>1 to 3 Years</i>	2.5% (6)	14.6% (35)	13.3% (32)	.4% (1)
	<i>More than 3 Years</i>	2.9% (7)	11.3% (27)	10.8% (26)	3.3% (8)
	<i>More than 5 Years</i>	2.1%(5)	7.5% (18)	15.4% (37)	1.5% (18)

Note: Chi-square test (value: 25.018 and df: 9 $p < .05$) revealed an association between length of 3PL use and level of commitment toward its use. Cramer's $V = .186$.

Organisational factors affecting 3PL usage

Three organisational factors that influence the decision-making process are identified. First is the *organisational level*, where outsourcing decisions are made; second the *sources that made the 3PL user aware* of 3PL services; third the *extent of involvement* of different functional area managers in outsourcing decision making. Respondents were asked to indicate the organisational level at which the strategic decision to use 3PL services originated or was made. The majority of the respondents, over 63 per cent, indicated that the decision originated at the corporate level; 17 per cent traced it to the divisional level and 4 per cent to the local level. Another 15 per cent of total respondents indicated that their companies use multiple 3PL services and decisions to use them are made at different organisational levels. The source that made respondent organisations aware of 3PL services also varied considerably. By far the most frequently cited source was discussion with other logistics professionals (48 per cent), followed by sales contacts (40 per cent); however, it is worth mentioning that respondent organisations often were made aware of 3PL services by more than one source simultaneously. The growing integration and interdependence of logistics and other functional areas of business is clearly exhibited in the responses to a question that sought to determine whether other functional managers are actively involved in the decision to use 3PL. Typically, managers in several functional areas have shown a propensity to become involved in the decision process. More than half of the respondents indicated that managers from the marketing department are primarily involved in the 3PL decision-making process. Few organisations included legal managers in this decision. As evidenced in Table 5.3, marketing (53 per cent), purchasing (48 per cent) and information system (35 per cent) are the departments primarily involved in the selection of 3PL services and providers.

Benefits, limitations and impact of 3PL usage

The organisations using 3PL services typically appreciate multiple benefits. According to respondents' rankings, low cost (26 per cent), faster delivery (20 per cent) and accessibility to remote markets (19 per cent) are the greatest benefits. The least cited benefit is using a specialised work force; only 7 per cent of respondents mentioned about this. Other benefits reported by respondents include savings in time, being able to focusing on the core business, and having access to new technology. Almost one quarter of the respondents faced significant problems caused by 3PL providers' lack of understanding of the organisation's requirements. Leakage of competitive information (over 20 per cent) was given as the second most problematic aspect of 3PL use in Bangladesh. Lack of control over business operations, operational failures, the rise of fraudulent activities involving 3PL usage, improper documentation by 3PL providers and conflict between clients' and 3PL providers' workforces were other impediments to 3PL use mentioned. The users of 3PL services were asked to categorise the impact of 3PL services on logistics costs, internal logistic system performance, customer satisfaction and employees' morale. The use of 3PL services has a positive effect in all these areas. More than 70 per cent of the respondent organisations indicated that the effect is positive in each area except employee morale.

Future use of 3PL services

About 59 per cent of the respondents who have used 3PL services were at least satisfied with the performance of 3PL service providers. 2 per cent of the respondent organizations were very satisfied where only 1.2 percent was very dissatisfied. When the respondents were asked about how they would amend their use of 3PL services if they were given complete corporate responsibility to make that decision, more than 80 percent of respondents indicated that they would increase the use of 3PL services moderately or substantially. The remaining respondents indicated towards moderate to substantial decrease of the use of 3PL services. Chi square test between overall satisfaction and future 3PL usage revealed significant association between overall satisfaction and future tendency of 3PL use (χ^2 value: 92.102 with 12 degrees of freedom). Similar positive relationship is found between overall satisfaction and the level of commitment (Table 3 and Table 4). The satisfied respondent organizations tend to have higher commitment toward current and future use of 3PL services.

Table 3: Cross tabulation of future usage and level of satisfaction

		Level of satisfaction regarding 3PL use		
		<i>Dissatisfied</i>	<i>Neutral</i>	<i>Satisfied</i>
Use tendency in future	<i>Moderately</i> ↑	2.6% (4)	39.6% (61)	61% (94)
	<i>Substantially</i> ↑	1.3% (2)	7.2% (11)	29.3% (45)
	<i>Moderately</i> ↓	2.6% (4)	4.5% (7)	5.2% (8)
	<i>Substantially</i> ↓	2% (3)	.7% (1)	.7% (1)

Note: Chi-square test (value: 92.102 and df: 12) revealed significant association between overall satisfaction and future tendency of 3PL use (when category of 'very dissatisfied' and 'very satisfied' collapsed)

Table 4: Cross tabulation of level of commitment and level of satisfaction

		Level of satisfaction regarding 3PL use		
		<i>Dissatisfied</i>	<i>Neutral</i>	<i>Satisfied</i>
level of commitment toward 3PL use	<i>Very limited</i>	5.2% (8)	4.5% (7)	3.9% (6)
	<i>Limited</i>	2% (3)	28.6% (44)	26.7% (41)
	<i>Moderate</i>	.7% (1)	17.6% (27)	48.8% (75)
	<i>Extensive</i>	.7% (1)	1.3% (2)	16.3% (25)

Note: Chi-square test (value: 96.141 and df: 12) revealed significant association between overall satisfaction and level of commitment toward 3PL use (when category of 'very dissatisfied' and 'very satisfied' are collapsed).

A substantial number of previous studies conducted the correlation analysis to understand the extent of the relationships among the logistic system performance, end customer satisfaction employee morale and the overall satisfaction of 3PL use (Sahay and Mohan, 2006, Bhatnagar et al., 1999). The prevailing consensus of the relationships, puts forward the question whether the overall satisfaction to use 3PL services is predictable by logistics system performance, end customer satisfaction and employee morale. In response to this question, a multiple regression analysis was conducted to examine the relationship between respondent's overall satisfaction regarding 3PL services and four predictor variables: logistic costs; logistic system performance; end customer satisfaction and employee morale.

Table 5: Results of regression

Variable	Mean	Std. deviation	Regression weights		P value
			B	β	
Satisfaction 3PL usage	3.52	.501			
Logistic Costs	4.38	1.996	.012	.048	.460
Logistic System performance	4.26	1.369	.241	.658	.000**
End customer satisfaction	4.97	1.832	.005	.019	.721
Employee morale	4.41	1.237	-.066	-.163	.001*

Note: $p < .05$ ** $p < .01$ * B = Unstandardised coefficient, β = Standardized coefficients

Table 5 summarizes the descriptive statistics and regression analysis results. The multiple regression model with all four predictors produced $R^2 = .619$, $F = 95.279$, $p < .001$. As can be seen in Table 7, the logistic system performance and end customer satisfaction had significant positive regression weights, indicating 3PL user who experience higher logistic system performance are expected to have higher level of overall satisfaction regarding 3PL services, after controlling for the other variables in the model. The same also happened between end customer satisfaction and the criterion variable. This indicates, the higher the level of end customer satisfaction, the higher the tendency of high level of overall satisfaction of the 3PL user regarding 3PL services. However, the regression model produced

for overall satisfaction with 3PL usage suggests that logistics costs and employee morale do not contribute to overall satisfaction with 3PL services.

DISCUSSION AND CONCLUSION

Third party logistics is critical for the economic development of export-oriented industrialization in Bangladesh, which is aided by competitive unit labour costs in the dominating garment industry and favoured by national regulatory reform (NBU, 2014). The export-oriented industrialization also stimulated the growth of freight forwarders and third party logistics providers in Bangladesh (Narayanan, 2013). The pervasiveness of readymade garments (RMG) sector in global outsourcing market has necessitated the outbound transportation services for cross broader product delivery. It is also reflected in the findings of current 3PL practices where freight forwarding was emerged as the most outsource service by organisations in Bangladesh. Transportation, shipment consolidation, warehousing and inventory are among the other important outsourced services. This usage trend is different when it is compared to the developed countries 3PL usage. For example, warehouse management is the most widely used 3PL service in Australia and USA (Rahman, 2011, Lieb and Bentz, 2004) and shipment consolidate is the most widely used 3PL service in Europe (Peters et al., 1998b). Whereas, outbound transportation is the most outsourced 3PL service in India (Sahay and Mohan, 2006). On the basis of evidence currently available, it seems fair to claim that transportation related 3PL services are more dominant 3PL service in the developing nations.

Bangladesh is consistently consider as significant outsourcing alternatives for the apparel retailers and fashion brands such as H&M, Wal-Mart, GAP, Levi's, Tesco, Zara, Carrefour, JCPenney and many more (BKMEA, 2015). Prominent presence of these top retailers and fashion brands in Bangladesh readymade garment sector require the outsourcing of 3PL services such as transportation and warehousing for both domestic and international purposes. However, in comparisons with other countries it is found that the organisations of Singapore are utilising 3PL services mainly for domestic purposes, while Malaysian organisations have reported 3PL use more extensively for international businesses (Sohail et al., 2006). During the period of 1994 to 2013 the average growth rate of GDP in Bangladesh was 5.6 per cent (BNWP, 2015). Against the backdrop of steady growth in GDP since 1990s, the overall structure of Bangladesh economy has been increasingly transforming as service based economy where the share of agriculture in GDP as steadily declined and the manufacturing and service sectors constantly contributing to the GDP (Ahmed et al., 2009). According to the WorldBank (2014), manufacturing sector is accounted for 27 per cent of total GDP (gross domestic product) in Bangladesh whereas, 58 per cent of total GDP originates from the service sector. The current usage of 3PL services between manufacturing and service industry is complementing the trend of economic reform from agro-based to service-based economy in Bangladesh. Though it is generally assume that, the outsourcing services mostly demanded by the manufacturing industries in a developing country context like Bangladesh; however, current usage of 3PL services is dominated by the service industry. This implies that changing economic patterns in Bangladesh is also reflected in the usage of outsourcing services by business customers.

Being a developing country, small and medium-sized enterprises (SMEs) are very important players in the economy. About 90 per cent of all industry in Bangladesh SMEs, contributed about 25 per cent to the GDP, employ about 31 million people and provide 75 per cent of household income (Hossain et al., 2009). The findings suggest that vast majority of respondents who are predominantly SEMs has greater use of 3PL services in comparison to the large organisations. SEMs that use 3PL services made up 75 per cent of total respondents thereby justify the prevalence and key role of the SEMs in economic growth in Bangladesh. This findings is similar to other developing countries such as India (Sahay and Mohan, 2006) however, contradicts that of developed country such as Australia (Rahman, 2011). Compare to the growth rate of global 3PL market, Bangladesh is still in the introductory stage in terms of its length of 3PL use, commitment to 3PL services and allocation of total logistics budget to 3PL services. Though it is expected that the more the length of the 3PL uses, the more the commitment toward 3PL usage or vice versa (Lieb, 1992), however, it found to be disproportional to each other in the context of Bangladesh. The focus of global 3PL industry has evolved sequentially from market through segmented, integrated, customer, differentiation and recently consolidation (Papadoppulo and Macbeth, 1998). As the 3PL industry has matured, global 3PL providers continually enhanced their ability to drive innovation and create value for their customers. At the same time, customers have significantly refined their effectiveness as buyers by enhancing their commitment to 3PL services and allocated greater budget for outsourcing services (Langley and Capgemini, 2015). According to the 2013 annual 3PL study, 65 percent of shippers are increasing their use of 3PL

services than before (Langley and Cappgemini, 2013). Contrary to this, research findings indicate the expenditure and commitment to 3PL services by organisations in Bangladesh is moderate.

In this matured 3PL industry the users of 3PL services around the world has increasingly shifting their prime motives of outsourcing from cost reduction, emphasis on core business and improved services to operational flexibilities, accessibility of technology, techniques and expertise (Sohal and Rahman, 2013). In contrast, Bangladesh still considered low costs, accessibility to remote market and faster delivery are as the key motives of using 3PL services due to the dominance of garment and textile industry in export growth and its comparative advantage over low labor cost. Moreover, few negative attitudes toward 3PL services is posing challenges for 3PL providers of utilising logistics opportunities that can play a key role in Bangladesh's efforts to maintain strong growth in exports and logistics based industries. The leakage of competitive information by 3PL providers while serving competing companies simultaneously was emerged as major concern of 3PL use in Bangladesh.

Despite the negativity of few 3PL services, the results indicate majority of the organisations are satisfied with the 3PL services, which also implies the prospect of increased 3PL usage in future. Increased satisfaction with the performance of 3PL services is also expected to have a significant impact on the increased level of commitment and willingness of organisation's to increase future 3PL usage. A vast majority of previous 3PL studies reveals that the clients, who are satisfied/highly satisfied, intend to increase their use of 3PL services from moderate to substantial intensity in future. In particular, the study of Sohal and Rahman (2013) and Sohail et al. (2006) indicates that more than 80 per cent of the 3PL user expressed their increased interest in the future usage of 3PL. It is also found that the impact of 3PL services is positive where it reduces logistics costs, enhances customer satisfaction and improves logistics system performance. On a ranking of major logistics markets for the future, Bangladesh reached in 12th position in 2013 (NBU, 2014). According to the Agility Emerging Market Logistics Index (AEMLI) Bangladesh is considered as one of the 45 major emerging markets of the world (WTO, 2013). Therefore, there would be no compelling reason to argue that all of these findings supported the view that Bangladesh has potential to be an emerging global outsourcing destination.

This study contributed to the existing 3PL literature by a comprehensive description of 3PL environment in Bangladesh. This provide an information base for the 3PL users around the world to compare logistics practices of Bangladesh with other developing countries thereby filled an untapped perspective of logistics research in Bangladesh. It also enable decision-makers to benchmark their organisations' use of 3PL against other organisations in different countries. The use of 3PL is comparable to other countries so it is not a major concern for organisations in Bangladesh. However, the extent of 3PL use is rather limited when comparing with more developed countries such as Australia, UK and USA (Appendix 1). The results relating to the benefits and constrained of 3PL usage in Bangladesh are some of the indicators that would help the 3PL service providers to plan the depth and scope of their service offerings to user organizations in Bangladesh. Therefore, these comprehensive results related to 3PL environment coupled with further improvement in logistics infrastructure in Bangladesh can attracted more organisations to use 3PL for domestic and international business purposes. This can aided long-term development of logistics based industries and pave a way for Bangladesh to become one of the major global outsourcing destination.

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