

A Study of the Freight Forwarding Industry in Hong Kong

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ABSTRACT *This paper reports the results of a study of the freight forwarding industry in Hong Kong. A survey questionnaire was administered to over 1,100 companies in the industry, examining their demographic profiles, capability in providing different types of logistics services, service performance and the perceived prospects of the industry. Based on 221 valid survey responses, the study results show that the industry consists mainly of small and medium-sized companies (i.e. number of employees ≤ 50). Furthermore, freight forwarding services contribute more than 60% of revenue in over 70% of the respondent companies. While many freight forwarders in Hong Kong are highly capable of providing freight forwarding and many traditional logistics services, they seem to lack the ability to provide other value-added services. Nevertheless, their self-assessments indicate that they perform well in different logistics services and that they are inclined to transform themselves into third-party logistics providers. A discussion of the findings and implications of the results are provided.*

Introduction

As a logistics hub of global importance, Hong Kong has been providing world-class logistics services and enjoys many advantages to sustain this position. These include: a prime geographic location; world-class transportation infrastructure; a wide choice of multi-modal connections with the Chinese mainland and other countries; and

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cost-effective logistics services, particularly in freight forwarding and cargo terminal operations (Feller, 2002). In fact, the volume of container cargo handled through Hong Kong by air (in terms of metric tons) and by sea (in terms of throughput in TEU) is one of the highest in the world (Hong Kong Monthly Digest Statistics, 2003a, b).

Consequent to China's accession to the World Trade Organisation (WTO), the trade volume between Hong Kong and China and other countries, and hence the associated physical product flows, are expected to jump considerably (Chou, 2002). As the cargo volume handled through Hong Kong continues to grow, it is natural for logistics service providers in Hong Kong to seek service improvements in order to satisfy fully the rising service needs of their customers. As a result, many logistics service providers in Hong Kong have been expanding their service menus and broadening the scope of their services (Lai & Cheng, 2003). They have also been making efforts to enhance their service capability by investing in logistics facilities and equipment, such as automated warehouses, materials handling equipment and logistics information systems. Their actions suggest that the market for logistics services in Hong Kong is very dynamic and that important changes will continue to occur in customer expectations, as well as in the strategy of the service providers to satisfy the requirements of the market.

As a type of logistics service provider specialising in consolidating shipments for transport as cargoes, freight forwarders (FFs) in Hong Kong face the challenge of improving their services. They must not only continuously improve their consolidation efficiency in freight forwarding, but also need to strengthen their ability to provide an expanding range of logistics services that are increasingly expected by customers. One possible explanation for FFs striving to expand their service scope is dwindling profit margins from traditional freight forwarding services due to severe competition and increased transparency of freight forwarding charges.

Although there are studies evaluating logistics services from the perspective of both the user (Daugherty *et al.*, 1996; Evers & Johnson, 2000) and the service provider (Lai *et al.*, 2004; Larson & Gammelgaard, 2001), there seems to be an absence of comprehensive studies on the freight forwarding industry in Hong Kong. To fill this void in the literature, a study was conducted to investigate the characteristics of freight forwarding companies in Hong Kong, examine their ability to provide different types of logistics services, evaluate their service performance, and obtain their views on the prospects for the industry. This paper first briefly reviews the literature on freight forwarding. The research methodology of this study is then presented, followed by an analysis of the data and an examination of the results of the study. The paper concludes with a discussion of the implications of the study's findings and of possible areas for future research.

Literature Review

According to Murphy & Daley (2001), an FF is a trade specialist that provides a variety of functions to facilitate the movement of shipments. The FF has long been considered one of the key intermediaries involved only in the transportation of cargoes from a point of origin (i.e. the shipper) to a point of destination (i.e. the consignee). The major business of an FF is to purchase transport services from various carriers and consolidate small shipments from a number of shippers into

large shipments moving to a certain destination at a lower rate. Some FFs even have their own equipment and transport carriers themselves. Typical activities of an FF include preparing relevant documents, paying freight charges, arranging for inland transportation services, etc. Because of their efficiency in consolidation, i.e. taking a number of small shipments and combining them into a single larger shipment, they can offer shippers lower rates than those the shippers could obtain directly from the transport carriers (Lambert *et al.*, 1998). Accordingly, FFs tend to be utilised by many shippers to transport their physical goods from one place to another.

The freight forwarding industry has existed for more than 100 years in Hong Kong to serve the city's booming import/export trade. The industry has, in recent years, received increased attention from the Hong Kong government and many business firms involved in trading with China. For instance, since the 1990s the Pearl River Delta (PRD) in China has evolved as a global manufacturing base. Many business firms in Hong Kong have set up production facilities there to take advantage of low costs in land and labour. Increasingly, they recognise that the services of FFs, as part of their logistics systems, are critical if their products are to reach overseas markets before the demand for them lapses. This is particularly true of products that are time-critical, such as fashion and electronic components. On the other hand, the cost savings from the efficient management of product flows can also allow companies to obtain a price advantage from their products. From this perspective, the services of FFs are important for companies striving to achieve the dual objectives of customer satisfaction (i.e. delivering products of the right condition at the right time to the right place) and cost reduction (i.e. eliminating all kinds of non-value-added activities such as double handling of cargoes and documents).

Furthermore, many manufacturers and retailers have adopted a supply chain management (SCM) focus and are increasingly outsourcing their logistics activities to service providers capable of providing a wider range of logistics services. To capture this market opportunity, many FFs have started to transform themselves into a third-party logistics service provider (3PL) by augmenting both the breadth and depth of their services. Compared with an FF, a 3PL service provider has more customised offerings, encompasses a broader range of service functions and establishes longer term, mutually beneficial relationships with customers (Murphy & Poist, 2000). In addition to freight forwarding, the service package offered by a 3PL service provider will typically include procurement, inventory and warehouse management, order management, packing and repacking, labelling and relabelling, as well as providing information technology support for user firms.

Indeed, the use of 3PL services has become a popular business approach for many large companies. In a study on the freight forwarding industry in the USA, Murphy & Daley (2001) concluded that customers of freight forwarding services are becoming more knowledgeable about international trade and are also demanding that FFs provide more than "traditional" services. One way for FFs to strive for a competitive edge is to have a customer service focus and provide the value-added services desired by the customers. Murphy & Daley (2001) speculated that the freight forwarding industry is experiencing tremendous volatility with respect to regulatory changes, technological advances, customer pressures and savvy competitors, and FFs must change continuously in order to survive and prosper.

In a study on the use of 3PL services by Australian firms over the period 1995--99, Sohal *et al.* (2002) found that, over time, firms have become more comfortable with outsourcing logistics. They also found that more firms have expanded the use of such services to include international activities and have made longer commitments to their service providers. Similarly, Lieb & Miller (2002) conducted a survey of the chief logistics executives of large manufacturers in the USA on their use of 3PL services and found that 77% of the Fortune 500 manufacturers in the USA use 3PL services. Lieb & Miller (2002) speculated that the use of 3PL will continue to grow due to the major cost savings and service improvements experienced by the users and that the breadth of the service requirements of users of logistics services will continue to expand. Accordingly, there will be increasing pressure on FFs to enhance their ability to offer a wider variety of logistics services.

Given the rising customer expectations for logistics services, it is logical to speculate that FFs in Hong Kong will seek to augment the breadth and depth of their services in order to remain competitive. Therefore, it is highly desirable to conduct a study of the freight forwarding industry in Hong Kong to benefit the industry players and the users of their services. In general, this study seeks to answer the following five broad questions:

- What are the corporate characteristics of the companies in the freight forwarding industry in Hong Kong in terms of company size and business focus?
- To what extent do FFs in Hong Kong intend to transform themselves into 3PL service providers?
- To what extent do FFs in Hong Kong have the capability to provide different types of logistics services?
- How do FFs in Hong Kong perceive their service performance?
- How do FFs in Hong Kong perceive the prospects for their industry?

Methodology

A survey questionnaire was developed to collect information from FFs in Hong Kong pertaining to their demographic characteristics, business directions, ability to provide different types of logistics services (service capability) and service performance. A total of 1,176 freight forwarders were identified from the membership list of the Hong Kong Association of Freight Forwarding and Logistics Limited (HAFFA) and from a list of freight forwarding companies published in the *Shipping Gazette*, a bi-weekly magazine published for the shipping industry in Hong Kong. The sample companies were cross-checked to avoid double mailings. The questionnaire was mailed to the general manager of the sample companies, as these target respondents were assumed to have good knowledge of the organisational characteristics, service capability and performance of their companies. Only one response was solicited from each sample company. We acknowledge that bias in data collection may stem from the use of a single respondent in this study. However, we adopted this strategy of using a key informant because such a person has the necessary knowledge to respond and is likely to be a more reliable source of information than other sources.

Each sample company received an initial mailing, which consisted of a covering letter explaining the purpose of the study, a copy of the questionnaire and a

postage-paid return envelope. Approximately 1 month later, a second mailing identical in content to the initial one was sent to the non-respondents, followed by a reminder letter 2 weeks after the second mailing. After the two mailings, 89 surveys were returned as undelivered mail because the sampled companies were either no longer in business or their address had changed. The large number of undelivered returns might be due to the volatility of the freight forwarding industry, which reduced the effective sample size of this study to 1,087.

A total of 232 responses were received after the two mailings and the follow-up reminders. Of the 232 returned questionnaires, two expressed a refusal to participate, four were returned blank, three were incomplete with significant data missing and two were received too late to be included in the data analysis. In sum, there were 221 usable responses---114 in the first mailing and 107 in the second mailing---representing an effective response rate of 20.3% (221/1,087). This response rate is comparable to those obtained in previous studies of a similar nature (Murphy & Daley, 2001).

As the survey response was less than 100%, a non-response bias could contaminate the reliability of the study's findings. Therefore, a test of non-response bias was conducted to assess the extent of the potential bias in the results (Armstrong & Overton, 1977). The non-response bias was assessed by dividing the 221 responses into two groups, namely early ($n = 114$, 51.6%) and late ($n = 107$, the remaining 48.7%) respondents. The answers of the two groups to the 24 questionnaire items that were used to measure their service capability (see Table 5) were then compared by a series of *t*-tests. The test results indicate that, at a 5% sig-

TABLE 1. Profile of the Respondent Companies ($n = 221$)

Company Characteristics	Frequency (Percentage)
<i>Number of employees</i>	
1--49	148 (67.0)
50--99	31 (14.0)
100--149	13 (5.9)
150--199	9 (4.1)
200 or above	19 (8.6)
Unknown	1 (0.5)
<i>Level of turnover (HK\$)</i>	
Below 100 million	87 (39.4)
100--199 million	46 (20.8)
200--299 million	24 (10.9)
300--399 million	11 (5.0)
399 million or above	43 (19.5)
Unknown	10 (4.5)
<i>Length of business operations</i>	
1--5 years	49 (22.3)
6--10 years	60 (27.2)
11--15 years	28 (12.8)
16--20 years	30 (13.6)
21--25 years	21 (9.5)
26--30 years	11 (5.0)
31--35 years	8 (3.7)
36 years or above	12 (3.9)
Unknown	2 (0.9)

nificance level in all 24 items, no statistical differences existed between the mean scores of the early and late respondents. Therefore, a non-response bias should not be a problem in this study.

Table 1 summarises the organisational characteristics of the respondent companies with respect to their firm size (number of employees), business volume (annual revenue) and firm age (number of years in business). Most of the 221 respondent companies were small in size, with approximately 67% employing fewer than 50 employees. Around 60% had annual revenues of less than HK\$ 200 million (approximately US\$ 1 = HK\$ 7.8). Nearly 50% had been in business for less than 10 years.

Results

In order that the nature of their business could be determined, the survey targets were requested to identify their companies as either a FF or 3PL service provider. The results in Table 2 show that, of the 221 respondent companies, 151 (68.3%) considered themselves as FFs.

The respondent companies that had identified themselves as FFs were then asked if they had any intention of transforming themselves into 3PL service providers. The results in Table 3 show that, among the 115 companies, 63 (41.7%) indicated that they intended to do so. The results suggest that FFs in Hong Kong are tending to broaden the scope of their services. Their desire to transform their business into 3PL seems to be prompted by customers that are increasingly expecting more varied services or even one-stop shopping services.

It is important to note that, even though many FFs in Hong Kong intend to transform their business into 3PL services, freight forwarding is still considered their primary business. The results in Table 4 indicate that, for nearly 80% of the respondent companies, freight forwarding services account for 90--100% of revenue. The results suggest that freight forwarding services remain the major source of income for most FFs in Hong Kong. However, many of them have revenues from other traditional logistics services such as inventory management, order management and packing and labelling. For instance, inventory management contributes 1--30% of revenue in 32.4% of the respondent companies, while order management and packing and labelling contribute 1--30% of revenue in 27.3% and 43.4% of companies, respectively.

To examine the ability of FFs in Hong Kong to provide different types of logistics services, we developed a list of 24 items covering the different logistics services that are generally expected of a 3PL service provider. The items were developed by

TABLE 2. Business Nature as Reported by the Respondent Companies ($n = 221$)

Business Nature	Frequency (Percentage)
FF	151 (68.3)
3PL	64 (29)
Unknown	6 (2.7)

TABLE 3. Intention of the Self-identified FFs to Transform into 3PLs ($n = 151$)

Intention	Frequency (Percentage)
Yes	63 (41.7)
No	84 (55.6)
Unknown	4 (2.6)

referring to previous logistics research on service and performance evaluation (Larson & Gammelgaard, 2001; Lieb & Miller, 2002; Murphy & Poist, 2000) and from discussions with academics and practitioners in logistics. The survey targets were requested to indicate, using a five-point Likert scale, where 1.0 = very low capability and 5.0 = very high capability, their view of their ability to perform each of the 24 logistics service categories. Table 5 summarises the results, ranking the service categories in descending order of the perceived capability of the respondent companies to perform the services.

In the analysis, a respondent giving a value of 3.0 or above on an item was considered as possessing the capability to perform that particular service item.

TABLE 4. Services Types and Contributions to Company Turnover ($n = 221$)

Services and Contributions to Company Turnover	Frequency (Percentage)
<i>Freight forwarding</i>	
None	7 (3.2)
1--30%	8 (3.8)
31--60%	20 (9.1)
61--90%	77 (35)
91--100%	79 (35.7)
Unknown	30 (13.5)
<i>Inventory management</i>	
None	47 (21.3)
1--30%	71 (32.4)
31--60%	4 (1.8)
61--100%	1 (0.5)
Unknown	98 (44.3)
<i>Order management</i>	
None	52 (23.5)
1--30%	60 (27.3)
31--60%	4 (1.9)
61--100%	4 (1.9)
Unknown	101 (45.7)
<i>Packaging, assembling, labelling</i>	
None	35 (15.8)
1--30%	96 (43.4)
31--60%	0 (0)
61--100%	1 (0.5)
Unknown	89 (40.3)

TABLE 5. Logistics Service Capability as Perceived by the Respondent Companies

Services	Mean	SD	1 = Very Low (%)	2 = Low (%)	3 = Moderate (%)	4 = High (%)	5 = Very High (%)	n
Freight forwarding	4.54	0.85	2.3	0.9	6.5	20.5	69.8	215
Customs clearance	3.88	1.12	4.4	6.3	23.3	28.6	37.4	206
Tracking and tracing shipment information	3.74	1.20	4.9	14.1	16.5	31.1	33.5	206
Warehousing	3.67	1.16	6.1	9.9	23.0	32.9	28.2	213
Information systems management	3.32	1.25	10.9	14.4	27.2	27.7	19.8	202
Performance reporting	3.30	1.38	17.0	11.0	19.5	30.0	22.5	200
Web-based linkages	3.23	1.31	14.8	12.8	27.1	25.6	19.7	203
Receiving/sending shipment notices using EDI	3.22	1.44	18.6	13.7	19.1	24.0	24.5	204
Logistics planning	3.21	1.24	12.1	14.1	32.0	23.8	18.0	206
Picking and packing	3.21	1.28	12.7	16.7	25.5	27.0	18.1	204
Billing function	3.18	1.41	18.7	14.1	19.2	26.8	21.2	198
Repackaging/relabelling	3.11	1.32	15.3	17.2	27.6	21.2	18.7	203
Inventory management	3.06	1.32	16.4	17.9	24.4	25.4	15.9	201
L/C compliance and negotiation	2.92	1.35	20.1	19.6	24.1	20.6	15.6	199
Order processing	2.89	1.37	22.3	15.2	28.9	17.3	16.2	197
Fleet management	2.83	1.37	22.4	20.9	23.0	18.4	15.3	196
Receiving purchase and/or sales orders from customers using EDI	2.81	1.45	28.0	15.5	20.5	19.5	16.5	200
Cross-docking	2.78	1.30	21.0	21.0	29.2	16.4	12.3	195
Assembling/reassembling	2.70	1.36	24.9	23.4	21.8	16.8	13.2	197
Customer-specific label printing	2.67	1.41	31.0	15.7	19.8	21.8	11.7	197
Bar code scanning	2.50	1.48	37.7	17.1	18.1	11.6	15.6	199
Interfacing with enterprise resource planning systems, e.g. SAP	2.49	1.42	36.3	17.4	18.4	16.3	11.6	190
Call centre operations	2.42	1.27	33.8	17.4	27.7	14.4	6.7	195
Purchasing/procurement	2.22	1.20	36.4	25.8	21.7	11.1	5.1	198

Alternatively, if a respondent gave a value of below 3.0 on an item, this was taken to mean that the respondent lacked the capability to carry out that particular service item. Items that did not have a response were treated as missing values and were not included in the analysis. The results show that, among the 24 service items, freight forwarding is the one that the respondent companies perceived that they have the highest capability of performing (mean = 4.54), followed by customs clearance (mean = 3.88), tracking and tracing shipment information (mean = 3.74) and warehousing (mean = 3.67). On the basis of the self-reported evaluation by the respondent companies, the results suggest that the respondent companies have high levels of perceived capability to perform "traditional" logistics services. However, the respondent companies seem to lack the capability to provide services in purchasing and procurement (mean = 2.22), followed by call centre operations (mean = 2.42), interfacing with enterprise resource planning systems (mean = 2.49) and bar code scanning (mean = 2.50).

To summarise, the respondent companies generally possess the capability of performing traditional logistics services such as freight forwarding, warehousing, picking, packing and labelling. They are also capable of performing logistics services involving the use of basic information technology. These services include information systems management, web-based linkages, and receiving and sending shipment notices using electronic data interchange (EDI). The results suggest that FFs in Hong Kong have been investing in basic information technology to enhance their service capability. Nevertheless, they appear to lack the capability to provide logistics services such as purchasing and procurement, call centre operations, interfacing with the ERP systems and bar-code scanning, all of which require relatively large investments in human and physical assets and in information technology infrastructures. One plausible reason for their lack of service capability in these "value-added" services is that most of the respondent companies are of small and medium size. They thus lack the financial resources and operating scale to expand the scope of their services to include these categories in their services menu.

To evaluate the service performance of the FFs, the survey targets were requested to rate on a five-point Likert scale, where 1.0 = very low and 5.0 = very high, their perceived performance on 12 questionnaire items spanning different typical performance measures for logistics services. These items were developed with reference to Daugherty *et al.* (1996) and Lai *et al.* (2002), along with discussions with academics and practitioners in logistics.

The results in Table 6 show that the respondent companies regarded themselves as performing well in all of the 12 performance measures, as they indicated scores towards the upper end of the five-point scale, i.e. mean > 3.0, where 5.0 represents the maximum positive evaluation and 1.0 the maximum negative evaluation. Among the 12 items, the respondent companies perceived that they are particularly good at helping customers to solve problems (mean = 4.60), making efforts to help in emergencies (mean = 4.50) and giving pre-alert notices of shipment or delivery problems (mean = 4.43). A closer look at the results reveals that none of the items received a value below the scale mean of 3.0. This suggests that FFs in Hong Kong recognise the different performance aspects of their services and give them equal attention when carrying them out. However, in order to maintain a "balanced" focus on their service performance, it is desirable for them to devote more effort to providing periodic performance reports to their

TABLE 6. Logistics Performance as Perceived by the Respondent Companies

Performance Measures	Mean	SD	1 = Very Low (%)	2 = Low (%)	3 = Moderate (%)	4 = High (%)	5 = Very High (%)	n
Helping customers to solve problems	4.60	0.67	0.5	0.5	6.5	23.6	69.0	216
Making efforts to help in emergencies	4.50	0.68	0.0	0.9	7.4	31.9	59.7	216
Giving pre-alert notices of shipment/delivery problems	4.43	0.72	0.0	1.9	7.9	36.0	54.2	214
Providing emergency services	4.32	0.79	0.5	1.9	11.6	37.7	48.4	215
Responding to customer requests in a flexible manner	4.31	0.72	0.0	0.9	12.6	40.9	45.6	215
Handling customer complaints	4.25	0.73	0.0	0.9	14.4	43.3	41.4	215
Adjusting operations in a flexible manner to meet unforeseen customer needs	4.21	7.65	0.0	1.9	15.3	43.1	39.8	216
Handling changes	4.19	0.75	0.0	0.9	17.6	43.5	38.0	216
Recommending alternative actions when unforeseen problems arise	4.18	0.78	0.5	1.4	16.2	44.0	38.0	216
Advising customers of potential problems in meeting their needs	4.07	0.84	0.9	2.8	18.2	44.9	33.2	214
Helping customers in value analysis, cost reductions, problem solving, etc.	3.96	0.93	1.4	5.1	21.3	40.3	31.9	216
Providing performance reports periodically	3.60	1.18	7.0	10.2	24.7	31.6	26.5	215

TABLE 7. Prospects for FF and 3PL Businesses in Hong Kong as Perceived by the Respondent Companies

	Mean	SD	1 = Very Pessimistic (%)	2 = Pessimistic (%)	3 = Neutral (%)	4 = Optimistic (%)	5 = Very Optimistic (%)	<i>n</i>
FF	2.95	1.01	7.7	24.1	39.5	22.3	6.4	220
3PL	3.33	1.00	4.1	15.4	35.5	33.9	11.3	221

customers (mean = 3.60), which they perceived as their “weakest” area among the 12 measures.

Finally, the respondent companies were requested to provide their views, on a five-point Likert scale (where 1.0 = very pessimistic and 5.0 = very optimistic), of the future prospects for freight forwarding and 3PL businesses in Hong Kong. The results in Table 7 show that less than 29% of the respondents were optimistic about the freight forwarding business in Hong Kong. However, when asked about the future prospects for 3PL business in Hong Kong, over 45% responded that they were optimistic. Similarly, fewer respondents held pessimistic views about the 3PL business (19.5%) compared with that for the freight forwarding business (31.8%). The results provide further evidence of the tendency of FFs in Hong Kong to transform themselves into 3PLs.

Discussion and Implications

This paper reports the results of a study of the freight forwarding industry in Hong Kong. The study will provide a useful reference for companies in the industry for continuously striving to improve their services. The key findings of this study are summarised as follows:

- The majority of the companies in the industry are small, with fewer than 50 employees. The implication is that they might lack the operations scale and resources to offer a wide variety of logistics services. This points to the possibility of merger and alliances as a means of achieving scale economies and improving services in the industry.
- Freight forwarding is considered the primary business of the industry. The results indicate that freight forwarding services contribute 90–100% of revenue in 80% of the respondent companies, even though they provide other logistics-related services such as inventory management, order management, packaging, assembling and labelling.
- As the industry continues to evolve, FFs in Hong Kong are increasingly broadening the scope of their services in order to satisfy rising customer expectations for varied services. This result suggests that the industry is dynamic, and facing increasing pressure to improve services as competition intensifies.
- Companies in the industry are highly capable of providing traditional logistics services such as freight forwarding, warehousing, picking and packing; but they seem to lack the capability to provide other value-added logistics services such as purchasing and procurement, call centre operations and ERP systems inte-

gration, which are generally expected of a 3PL service provider. Perhaps this is because many of them are small and lack the financial strength to invest in the physical assets (e.g. office space) and capital-intensive information technologies (e.g. ERP systems) needed to provide such services. To compete, they might seek to form alliances with other companies in the industry to expand the scale and scope economies of their operations. Merger and acquisition have also been common in the industry for achieving these ends (Lemoine & Dagnæs, 2003).

- From the self-reported evaluation of the respondent companies, the industry performs well in different performance measures. The self-assessment results in the survey indicate that they are aware of the different aspects of their service performance and have achieved a certain level of sophistication in performing their services.
- The industry tends to hold a more optimistic view of the 3PL business than the freight forwarding business. The result reinforces the view that there is an increasing tendency for companies in the industry to transform from FFs into 3PLs, as the latter seem to have more business opportunities.

While caution should be exercised in generalising the results of this study beyond Hong Kong, our findings provide important insights for FFs in Hong Kong and for users of their services. In particular, the industry players can use the results reported in this study to gauge their service capability and performance. For instance, they can use the industry average (i.e. the mean value) in each of the 24 service items on service capability and in the 12 items on service performance for benchmarking purposes in their efforts to improve their services. As a result, they can gauge whether certain areas of their service lag the industry norm. This is especially important as the market increasingly expects logistics service providers to provide a variety of services. Industry players must therefore determine how best to respond to market requirements. Given the financial resource implications of developing a broad scope of services, there is a need for FFs to understand their strengths and weaknesses and carefully decide on their logistics service mixes in the course of transforming themselves into a 3PL.

On the other hand, FFs also need to understand the different aspects of their service performance. This initial study provides insights into the current state of development of the freight forwarding industry in Hong Kong. The results can be used as benchmark information for individual companies in the industry (or those intending to enter the industry) to assess their service capability and performance in comparison to the competition. The benchmark information is also valuable for service users to evaluate whether their service providers are up to the standards of the industry in Hong Kong and are qualified to be awarded a long-term service contract.

Conclusions and Future Research

According to the results of our study, it appears that many companies in the industry are not sophisticated enough to provide the broad spectrum of services that are generally expected of a 3PL. However, their self-assessment results indicate that they perform well on different performance measures for logistics services. As customer expectations for logistics services continue to rise, there should be an increasing trend for FFs in Hong Kong to develop their businesses into 3PL service

providers. The recent call of the Chief Executive of the Hong Kong Special Administrative Region to develop Hong Kong into a global logistics hub with logistics services as a pillar industry will also accelerate this process.

Although the results of the study represent only the perspectives of the service providers, they have undoubtedly provided some indications of the current state of development of the freight forwarding industry in Hong Kong. The study also identifies some areas in which companies in the industry can improve with respect to their service capability and performance. Future research should concentrate on developing a systematic approach for industry players, particularly the small ones, to use in striving for cost and service improvements. Such a study can help them cope with the changes in this new era of the global business environment. It is also desirable that further studies be conducted. Such studies should collect data from other stakeholders, such as shippers and consignees, to understand the customer's perspectives of the capability and performance of service providers. This would lead to a better understanding of the industry, and increase the chances of success for service providers trying to improve their services. It is also desirable to conduct a longitudinal study to understand how companies in the industry evolve from an FF to a comprehensive logistics service provider, together with the performance implications. Finally, as the business scope of FF is international, it would be beneficial to replicate this study in other countries to understand the business practices of, and customer expectations for, freight forwarding and 3PL services in other cultural settings.

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