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EXAMINING INTERNATIONAL FREIGHT FORWARDER SERVICES: THE PERSPECTIVES OF CURRENT PROVIDERS AND USERS

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The service quality literature indicates a variety of gaps between expected and perceived quality, and that service quality is a key determinant of customer satisfaction. As such, the present paper examines international freight forwarders (IFFs) and IFF customers with respect to various services which might be provided by IFFs; the paper also reports on user satisfaction with their IFFs. The study results identified several mismatches between what the forwarders are currently providing and what services the users view as important. In addition, the satisfaction ratings suggest that forwarders' performance has room for improvement.

INTRODUCTION

International freight forwarders (IFFs) are key specialists in cross-border trade. They can provide a variety of services, and are used by the great majority of companies engaged in international commerce (Johnson and Wood, 1996). Despite the important role of IFFs in efficient cross-border trade, there is relatively limited empirical information about them.

The literature has suggested (Pope and Thomchick, 1985; Murphy, Daley, and Dalenberg, 1992a) that IFFs are small companies, often employing fewer than 10 people. IFFs are becoming more diversified in their customer offerings; many contemporary IFFs provide forwarding services for both air and water shipments, and a number also

provide such multiple intermediary services as non-vessel operating common carrier service and customhouse brokerage (Murphy and Daley, 1995).

Moreover, the rapidly changing global business environment has had important implications for the forwarding industry. More specifically, the forwarding industry has been characterized by tremendous volatility over the past decade (Ozsomer, Mitri and Cavusgil, 1993), as manifested in various acquisitions, consolidations, and bankruptcies. This volatility has led some to question the continued viability of smaller forwarders. Consider the following statement from the president of a smaller IFF (Gillis, 1996): "I'm a firm believer that the smaller forwarder and broker will be extinct by 2000."

One of the key aspects in the future viability of individual IFFs is how well they can meet the needs and wants of current and future customers. While this philosophy essentially represents the **marketing concept**, providers of logistics services have not always embraced the notion of satisfying customer needs and wants, in part because logistics service providers have sometimes used a very narrow definition of "customer". As an example, international water ports (Murphy, Daley, and Dalenberg, 1992b) have appeared to understand the requirements of water carriers—traditionally considered to be the ports' primary customers—with respect to key factors in water port selection, but are not so well aligned with other customer groups such as shippers and international freight forwarders.

Furthermore, although the marketing concept stresses that service providers should satisfy customer needs and wants, the service quality research has identified a variety of gaps (Parasuraman, Zeithaml, and Berry 1985) between expected and perceived service quality, and that service quality is a key determinant of customer satisfaction. With this in mind, the present paper will examine IFFs and current users of IFFs with respect to various services which might be provided by IFFs. In so doing, the paper seeks to identify possible gaps between the services actually provided by IFFs and the services IFF users would like provided. In addition, because customer satisfaction is a desired output of service quality, the paper will report on IFF users perceived satisfaction with the general performance of the IFFs used by their respective companies.

METHODOLOGY AND PARTICIPANT PROFILES

The IFF information comes from a mail survey sent to IFFs identified in *The Official Directory of Transportation Middlemen* (now, *The Official Intermodal Guide*). Of 336 eligible IFFs, usable responses were received from 98, for an effective response rate of 29.2%. Nearly two thirds of the responding IFFs reported annual revenues of less than \$10 million, a finding consistent with

previous IFF research (Pope and Thomchick, 1985; Murphy, Daley, and Dalenberg, 1992a). Approximately 75% of the respondents classified themselves as a Vice President, President, CEO, or Owner. These senior-level managers should be quite familiar with the services provided by their companies.

The user information is drawn from a mail survey of 370 randomly selected members of the Council of Logistics Management (CLM). The CLM membership was sampled because the study objectives called for respondents who used IFFs and were likely to be knowledgeable about the variety of services IFFs can offer. Operationally, these requirements meant that responding organizations must be current users of IFFs, and would ideally be "heavy" users of IFFs. CLM members tend to be large firms, which is important because previous research by Murphy, Dalenberg, and Daley (1991) established that 1) most large firms engage in international trade, 2) most large firms use IFFs for their international shipments, and 3) about 70% of the cross-border shipments of large firms are arranged by IFFs. In short, we believed that sampling CLM members could provide a group of organizations who were not only current users of IFFs but heavy users as well.

A total of 71 responses from current IFF users were received, representing a 19.2% response rate. Significantly, a majority of these respondents utilize IFFs for at least 75% of their international shipments, and 75% have used IFFs for at least 10 years. Because a majority of the responding organizations are heavy users of IFFs and have a history of using IFFs, they should be familiar with the various services offered by IFFs.

The IFF respondents ("providers") and the CLM respondents ("users") do not represent a "matched pairs" sample, i.e., the users are not necessarily actual customers of the providers, nor are the providers necessarily being utilized by the user group. Ideally, an examination of "providers" and "users" would involve matched pairs, because their presence allows researchers to unequivocally identify agreements and

disagreements between the two parties, thus increasing the content validity of the study.

From a practical perspective, however, matched pairs research is extremely difficult to conduct, in part because of the difficulty of generating a matched pairs sample. Service providers, for example, are often reluctant to identify their customers; similarly, users of service providers are often reluctant to identify their suppliers.

Thus, while matched pairs would be desirable, studies involving non-matched pairs of service providers and users of service providers are common in logistics journals. In the carrier selection literature, for instance, there are at least six studies (Murphy, Daley, and Hall 1997) which compare both shipper and carrier perceptions of key factors in carrier selection. Significantly, *none* of these studies appear to have used matched pairs of shippers and carriers. As a result, the present's study's use of a non-matched pairs sample of service providers

and users of service providers is consistent with the logistics literature.

RESULTS

Services Offered

The IFF services to be evaluated, presented in Table 1, were drawn from numerous sources including textbooks, academic and practitioner articles, and interviews with both IFFs and IFF customers. The IFF respondents evaluated the various functions according to whether they "currently provide", "plan to provide", or "do not plan to provide" them. The results, presented in Table 2, indicate that the payment of freight charges, tracing and expediting shipments, and making routing recommendations are the most commonly provided services by IFFs. On the other hand, legal counseling, obtaining export licenses, and export packing are the least commonly provided services.

TABLE 1
SERVICES TO BE EVALUATED

Quote steamship rates
Obtain vessel space
Prepare commercial invoices
Obtain export licenses
Issue export declarations
Prepare certificates of origin
Obtain & prepare consular invoices
Compile ocean bills of lading
Compile air waybills
Obtain insurance
Pay freight charges
Obtain dock receipts
Present documents to the bank
Obtain port warehouse space
Trace and expedite shipments
Collect & submit money for shipments
Act as export consultant
Help shippers select terms of sale
Legal counseling
Export packing
Shipment consolidation
Make routing recommendations
Break bulk

Explanation for how ties were ranked: We summed the ranking positions of the tied items, and divided by the number of tied items. For example, "pay freight charges", "trace and expedite shipments", "make routing recommendations" emerge with a ranking of "2" = $[(1 + 2 + 3) = 6]$. $[6 / 3] = 2$.

Users of international freight forwarders were asked to indicate the importance of the various services along a scale from "very unimportant" to "very important". Their results, presented in Table 3, reveal four services rated either "important" or "very important" by at least 75% of the users--compiling air waybills; obtaining

vessel space; tracing and expediting shipments; compiling ocean bills of lading. On the other hand, legal counseling, export packing, and helping shippers to select terms of sale emerge as the least important IFF services.

Note that the IFFs provided information along a nominal measurement scale, while the IFF users information involved an ordinal scale. Furthermore, the IFFs offered information as to the actual provision of select functions, while the IFF users were asked to indicate the relative importance of the services. Because of these differences in measurement, care must be taken when comparing the two groups.

TABLE 2
SERVICES PROVIDED BY IFFS

Service	Percentage who currently provide	Rank
Pay freight charges	100.0	2
Trace and expedite shipments	100.0	2
Make routing recommendations	100.0	2
Issue export declarations	99.0	4.5
Prepare certificates of origin	99.0	4.5
Quote steamship rates	97.9	6.5
Obtain insurance	97.9	6.5
Obtain dock receipts	96.9	8.5
Compile ocean bills of lading	96.9	8.5
Obtain vessel space	94.9	10.5
Present documents to the bank	94.9	10.5
Act as export consultant	94.8	13
Obtain and prepare consular invoices	94.8	13
Compile air waybills	94.8	13
Collect and submit money for shipments	93.5	15
Break bulk	91.8	16
Help shippers select terms of sale	91.6	17
Shipment consolidation	89.6	18
Prepare commercial invoices	89.4	19
Obtain port warehouse space	88.4	20
Export packing	78.7	21
Obtain export licenses	70.5	22
Legal counseling	35.6	23

TABLE 3
USER IMPORTANCE OF IFF SERVICES

Service	Percentage indicating either "important" or "very important"	Rank
Compile air waybills	80.9	1
Obtain vessel space	80.0	2
Trace and expedite shipments	78.6	3
Compile ocean bills of lading	75.7	4
Obtain dock receipts	69.0	5
Act as export consultant	66.2	7
Act as export consultant	66.2	7
Make routing recommendations	66.2	7
Obtain and prepare consular invoices	64.8	9
Quote steamship rates	64.3	10
Shipment consolidation	59.2	11
Present documents to the bank	58.6	12
Pay freight charges	55.0	13
Prepare certificates of origin	50.1	14
Prepare commercial invoices	48.6	15
Collect and submit money for shipments	42.9	16.5
Break bulk	42.9	16.5
Obtain export licenses	39.4	18
Obtain port warehouse space	31.0	19
Obtain insurance	30.0	20
Help shippers select terms of sale	24.3	21
Export packing	22.5	22
Legal counseling	19.7	23

As a result, relative comparisons, using within-group rankings, were used to compare IFFs and IFF users. More specifically, the Spearman coefficient of rank correlation was used to compare the IFFs' within-group rankings to those of IFF users. The use of the *nonparametric* Spearman test is appropriate (Siegel 1956) when using nominal and/or ordinal data.

The within-group rankings for both groups of respondents are presented in Table 4; the

Spearman coefficient of .5853 is statistically significant at the .01 level. In other words, this finding rejects the hypothesis of independence between the IFF and IFF user rankings, and indicates a fairly high degree of similarity in the rankings. Indeed, Table 4's information suggests that there is a tendency for the IFFs' larger values (i.e., lower ranked items) to be paired with the IFF users' larger values (i.e., lower ranked items). For example, legal counseling is the 23rd (lowest) ranked service by both the IFFs and IFF users. Similarly, export

packing is ranked 21st by IFFs and 22nd by IFF users.

Despite the general ranking similarity between the two groups, Table 4's results indicate that there are several services with substantial (i.e., seven positions or more) ranking differences between the two groups of respondents. Three

of these services are ranked higher by IFFs, which suggests that they are providing services which are deemed as less important by IFF users. Alternatively, three of the services with the largest ranking discrepancies are ranked higher by IFF users, suggesting that IFFs are paying less attention to some services which appear to be important to their customers.

TABLE 4
COMPARISON OF IFFS AND USERS

Within group rankings

Service	IFFs	Users
Pay freight charges	2	13
Trace and expedite shipments	2	3
Make routing recommendations	2	7
Issue export declarations	4.5	7
Prepare certificates of origin	4.5	14
Quote steamship rates	6.5	10
Obtain insurance	6.5	20
Obtain dock receipts	8.5	5
Compile ocean bills of lading	8.5	2
Compile ocean bills of lading	10.5	4
Present documents to the bank	10.5	12
Act as export consultant	13	7
Obtain and prepare consular invoices	13	9
Compile air waybills	13	1
Collect and submit money for shipments	15	16.5
Break bulk	16	16.5
Help shippers select terms of sale	17	21
Shipment consolidation	18	11
Prepare commercial invoices	19	15
Obtain port warehouse space	20	19
Export packing	21	22
Obtain export licenses	22	18
Legal counseling	23	23

Spearman coefficient of rank correlation = .5853, significant at .01

Further analysis of several of the "substantial" ranking differences appearing in Table 4 reveals that **obtain insurance** tied for sixth among IFFs while ranking 20th among IFF users. This

service is provided by nearly 98% of the responding IFFs; it is regarded as either "important" or "very important" by only 30% of the IFF users, which suggests that many users

are not looking for IFFs to obtain insurance for them. Alternatively, the **compilation of air waybills** ranked first among IFF users, while only tying for the 13th most commonly provided service among IFFs--despite being provided by nearly 95% of them. These findings suggest that while IFFs, on a relative basis, are falling short of user desires with respect to air waybills, IFFs perform much stronger in absolute terms.

User Satisfaction

Because the dichotomies highlighted in the previous paragraph raise important questions about the *practical* (as opposed to *statistical*) significance of the information appearing in Tables 2-4, IFF users were asked to indicate their satisfaction with the general performance of their IFF providers. Part of the rationale for investigating user satisfaction is that service *performance* is not necessarily positively correlated with service *satisfaction*. With respect to the present study, if the IFF users express satisfaction with general IFF performance, then the observed service dichotomies may have minimal practical significance. If, on the other hand, the IFF users tend not to be satisfied, could one explanation be mismatches between the services which forwarders are providing and the services which users would like to be provided?

Thus, using a 0 (total dissatisfaction) to 100 (total satisfaction) scale, the IFF users provided information on the performance of their IFFs. The results are presented in Table 5, and indicate that the average satisfaction rating was nearly 78. Although no respondents assigned their forwarders a "0" rating, none assigned a rating of "100", either. Moreover, over 35% of the respondents assigned satisfaction ratings of less than 80; on the other hand, almost 30% of the users assigned satisfaction ratings of between 90 and 99.

The findings in Table 5 suggest that forwarders' performance has room for improvement, in part because customer expectations continue to increase through time; what was viewed as

acceptable performance five years ago might be totally unacceptable today. Consider, for example, the service expectations of 3M Corporation, where in the early 1980s, an acceptable service performance level (Schulz 1997) was 80%. Today, by contrast, their acceptable performance level is 99%!

TABLE 5
USERS' SATISFACTION WITH IFFS

Rating	Percent of respondents
0	0.0
1 - 9	4.2
10 - 19	0.0
20 - 29	0.0
30 - 39	0.0
40 - 49	0.0
50 - 59	4.2
60 - 69	6.2
70 - 79	20.8
80 - 89	35.4
90 - 99	29.2
100	0.0

0 = total dissatisfaction
100 = total satisfaction
Average rating = 77.94

Note: Approximately 1/3 of survey participants did not respond to this question.

With respect to the present study, the information in Table 2 indicates that 17 of the 23 possible services are currently provided by at least 90% of the IFFs; furthermore, 14 of the services are currently provided by 95% of the IFFs. Nevertheless, as pointed out above, none of the IFF users are completely satisfied with the forwarders used by their respective companies. In short, the satisfaction results suggest that *service performance does not equate to service satisfaction*, and that IFFs are failing to do some things which are desired by IFF users.

CONCLUSIONS AND IMPLICATIONS

The payment of freight charges, tracing and expediting shipments, and making routing recommendations are the services most commonly provided by international freight forwarders. IFF users view the compilation of air waybills, obtaining vessel space, tracing and expediting shipments, and the compilation of ocean bills of lading as the most services which can be provided by IFFs. A comparison of IFFs and IFF users suggests no statistically significant difference between the two groups' rankings on various services which can be provided by forwarders.

From a practical perspective, however, the present study discovered several mismatches between the services currently being provided by IFFs and the services that users desire. For example, nearly all the forwarders will **obtain insurance** for their customers; however, only 30% of IFF users view this service as either "important" or "very important". Such gaps in service quality may offer a partial explanation for the fact that none of the IFF users are totally satisfied with the performance of their forwarders, as well as why over 30% of the users assigned satisfaction ratings of less than 80.

These findings appear to have several managerial implications for the various parties. For one, the study highlights the potential value of examining service quality. Importantly, studies of service quality must include input from both service providers and users of service providers. Ideally, this input would be from a "matched pairs" sample, i.e., the users would be actual customers of the providers.

The study findings also suggest that managers must understand the difference between service

performance and service satisfaction. For example, even though most IFFs provide a great number of possible services, the average user satisfaction was less than 80 (out of a possible 100). And, since service satisfaction involved the degree to which services providers can meet or exceed customer expectations, IFFs would be well advised to learn about the needs and wants of their customers (rather than focusing on items which the forwarders believe to be important).

Moreover, the study's satisfaction ratings (0 = total dissatisfaction; 100 = total satisfaction) might be used as a diagnostic tool in evaluating the performance of individual forwarders. Forwarders achieving "unsatisfactory" ratings (the definition of "unsatisfactory" will be company-specific) could be encouraged to improve their performance; failure to do so within a specified time period could be cause for replacement.

Furthermore, customers are encouraged to prioritize the key services they expect their IFFs to provide--and to **clearly communicate** these expectations to their IFFs. Forwarders cannot be expected to automatically know their customers' preferences; if customers fail to communicate with their forwarders, then the forwarders are likely to provide services with which they are most comfortable, and/or most knowledgeable. As pointed out earlier, if service companies provide what their customers want/need, there is likely to be much less dissatisfaction from the customer. While this suggestion appears to be very basic, the basics, unfortunately, are frequently overlooked in many business situations. The failure of forwarders--small or large--to accomplish these basics could result in their being "extinct by 2000!"

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