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Price and demand: what do 3PL customers really want?

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Abstract
Successful companies understand what their customers want and are able to reverse engineer their supply chains to meet this demand in ways that make business sense. Less successful companies often find it hard to obtain a good understanding of what their customer's value, and spend considerable time hustling to do things that are not fully appreciated by their customers. The lessons here are quite straightforward; rewards accrue to those organizations that are "best" able to match "appropriate" supply chain activities to the latent needs of their customers.

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What do 3PL customers really want?

An empirical study based on new demand science

Successful companies understand what their customers want and are able to reverse engineer their supply chains to meet this demand in ways that make business sense. Less successful companies often find it hard to obtain a good understanding of what their customer’s value, and spend considerable time hustling to do things that are not fully appreciated by their customers. The lessons here are quite straightforward; rewards accrue to those organizations that are “best” able to match “appropriate” supply chain activities to the latent needs of their customers.

Plenty of ink has been devoted to the importance of customer demand but unfortunately this work has been hampered by a lack of realism regarding the way we measure what a customer wants. In the sections that follow we present the results of a study of customer demand in the 3PL industry based on a new demand science that offers an improved way to elicit and measure customer preferences. Our approach is grounded in a well tested theory of behavioral science that allows researchers to conceptualize individual choices as a process of decision rules. In other words, when selecting any 3PL product, service, or combination of both, a customer will consciously or unconsciously compare alternatives and make a decision that involves trade-offs between the components of those choices. Prior research has demonstrated that the choice predictions resulting from this method are, in general, very accurate.

What Do We Know About the 3PL Industry

One of the issues that has been of concern in the 3PL industry is the extent to which tangible product features – such as overnight or 2nd day delivery, the choice of air or ground, and even comparative costs – remain important in the design of their service offerings. These features have been the mainstay of the industry, but are now often seen as no more than the required core of a global product or service offering. The key issues for 3PL providers may now be their ability to add economic value by helping their customers to achieve reliability levels high enough to enable inventory cost savings, and to provide complete visibility and transparency throughout all aspects of the supply chain to enable their customers to meet rising expectations for customer service.

Prior work by academics and practitioners has sometimes been guilty of producing long lists of important service features that do not provide a sound basis on which managers can act. At best, the top issues may be identified, but managers can say little about what differentially matters to specific customers or their decisions. In the remaining sections we provide an analysis of customer demand based on three separate samples of decision makers with responsibility for the selection of a 3PL provider. The first sample is based on 96 Australian companies; the second comprises 171 Asia-Pacific companies, and the third, 186 Asia-Pacific companies. The distribution of customer respondents in each sample covers most of the main segments of business activity.
What Does Customer Demand for 3PL Services Look Like?

The first objective of our study was to create a rank ordering score between 21 attributes that were previously found to influence 3PL choice. The results allow managers to easily compare the relative importance of attributes across the entire sample. The interpretation of Figure 1 is important because the scores are on a relative scale. This means that reliable performance (3.82) is four times more important than relationship orientation (0.93) and twelve times more important than surcharge option (0.33). Furthermore, the logarithmic line of best fit implies that as the tail of the curve flattens out our ability to determine meaningful differences disappear. For example, the range of scores among the last 11 attributes differs by only 0.6 indicating that respondents are more or less indifferent about these attributes.

Figure 1 – Relative importance of 3PL service features

The second objective of the study was to identify the segments that best capture the way respondents vary in meaningful ways. Latent class techniques were used to identify two types of segments. Segment one includes those companies that place emphasis on attributes associated with operational performance: delivery speed, customer service support, track and trace, customer service recovery. Segment two best represents those firms that place greater emphasis on service concepts: flexibility, professionalism, proactive innovation capacity and relationships. Reliable performance is common to both segments and reflects the general strategic priority attached to this attribute by all firms. Figure 2 provides a graphical illustration.
The third objective was to capture the way customer preferences change when the levels of the attributes are allowed to vary. The results based on a sample of Australian and Chinese firms show that the combined scores for operational features are 2.6 times higher than that for relational features. An attribute by attribute comparison was then used to develop a quantitative model that supports scenario planning. Figure 3 provides an example of the decision support system. The ‘speedometers’ indicate the probability that a customer from Australia or China will choose a certain 3PL provider and the radio buttons indicate the different levels. The most optimal level for each attribute is shown below but managers can evaluate different scenarios by simply moving the radio buttons up and down.

**Figure 2: Two segment model**

**Figure 3 – Decision Support Tool for Scenario Planning**

The analysis illustrated in this article provides a simple but effective way to more accurately measure true customer demand. The findings can then be used by companies
to develop a more appropriate balance between customer expectations and supply chain delivery in a smart, cost-effective way. In simple terms this is:

*New Science, Intuitively Applied*

A more detailed report based on this research can be obtained at: http://www.uow.edu.au/~tcoltman/thirdparty.pdf

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