

# **FAST TRANSFORMATION IN E-BUSINESS ENVIRONMENTS: THIRD PARTY FULFILMENT ADAPTATION TO ONLINE RETAILER DEMANDS**

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## **ABSTRACT**

The paper extends previous UK surveys of third party e-fulfilment (3PEF) providers servicing a new segment of online retailers that has generated new sales opportunities for provision of their particular logistics needs. An index of capability transformation previously developed is applied to 6 Australian cases to determine the mechanism for this capability transformation; that is, the process and incentives for establishing new capabilities, transforming older capabilities, and also discontinuing specific capabilities. It proposes a model in which each sales transaction serves as a decision node at which a capability is established, expanded, transformed or discontinued. In this model, over a relatively short period there will be a large number of sales transactions which will drive evolution of the 3PEF at a potentially fast rate, with sales revenue as an incentive to modify capabilities transaction by transaction.

## **KEYWORDS**

Online retail, e-fulfilment, transformation, sales, e-business, e-supply chain

## **1. INTRODUCTION**

Online retailers have virtualised much of their business by using the internet to sell their products, and to perform many transactions. However, if they are selling physical products they must still be delivered to customers, and therefore the logistics of doing so is vital and growing in line with online sales as a whole (Pyke, Johnson et al. 2000; Punakivi 2002)

E-fulfilment consists of a set of traditional and novel logistics skills and outputs that has become integrated into the e-supply chain (Barsh, Crawford et al. 2000; Pyke, Johnson et al. 2000; Colin 2001; Raman 2001). It is not surprising therefore that third party e-fulfilment (3PEF) has become very important to the e-economy and the new market sectors such as OLRs, that it has enabled (Suarez-Villa 2003).

3PEF providers servicing OLRs have overlapping capabilities (Menezes 1999). Studies previously reported by the author suggests that they possess 13 core capabilities (Alexander and Burn 2004). The capabilities possessed by 3PEFs are not static but evolving, and indeed the industry as a whole is in transition (Alexander 2009).

Models suggested by Deise et al (2000), Raisinghani (2005) and others point to transformation pressures on 3PEFs activities from traditional, physical ones such as warehousing, logistics and transport to portfolios of capabilities with far more knowledge content, such as consulting, call centre management, cash collection and many non-traditional activities.

A scale of traditional v's transformed capabilities forms the basis for development of a transformation model reported previously (Alexander and Burn 2005), which recognises "traditional" capabilities offered by logistics organisations from before the emergence of the OLR sector and "novel" capabilities which are newly developed for OLRs' needs.

As previously reported in studies of a significant UK sample of 3PEFs (Alexander 2009), there has been a general increase in transformations to novel capabilities for 3PEFs since 2003. 3PEFs are making a conscious effort to align their capabilities to meet the needs of these (changing) OLR customers, and as comprehensive outsourcers capturing ownership of the end-customer relationship and investing in transformed core competencies (Alexander 2010). Some businesses do not transform their capabilities and

instead focus on physical efficiencies in distribution and logistics, doing business with those that value those efficiencies and proficiencies. Other 3PEFs adopt increased amounts of transformation to provide value chain integration with their customers.

Transformation pressures exist in 3PEFs and are represented by changes in capabilities. This study focuses on sales transactions between 3PEFs and OLRs. It looks at the sales process and motivations of decisions to provide specific capabilities. It aims to put these sale-by-sale adaptations into the context of a typical revenue cycle and produce a model that explains the transformation of capabilities.

## 2. RESULTS

Data is taken from 6 Australian in-depth case studies conducted in 2006-7, three of 3PEFs and three of customers of 3PEFs. Results were assessed qualitatively and related where appropriate to other survey data acquired through web inquiries to augment the primary data (Table 1).

Table 1. In-depth case study group (2006-7)

Case Code	Type	Business
Provider A	3PEF	National delivery, warehousing and fulfilment organisation offering door-to-door delivery Australia-wide, and with international partnerships. It also has extensive call centres and a large range of supply chain capabilities. Its customers range from small to large organisations, to which services may be specialised or generalised.
Provider B	3PEF	A national delivery organisation dominating courier and direct mail campaign delivery. Based on customer demand it has expanded into a full range of fulfilment services including warehousing, call centres. Its customers range from small to large organisations, to which services may be specialised or generalised. It is a direct competitor of Provider A.
Provider C	3PEF	Originally a direct marketing business, Provider C has built up a range of e-fulfilment services. It still emphasises the sales side of the supply chain, and also has considerable emphasis on consulting and knowledge-based services that it uses to design outsourced solutions for customers, and to manage multiple service interactions across the range of services it offers.
Customer A	OLR	Online music store, developed over the last 3 years from a successful Perth-based retail outlet. The online component was originally seen as an experimental sales channel, but is now becoming significant for national sales. It has 2 outsourcing partners for transport and some cross dock facilities, and is open to large scale outsourcing across the whole supply chain, except for marketing and cash collections.
Customer B	OLR	Large process manufacturing plant (Fertiliser) with regional deliveries requiring truck and train services. It has outsourced its complete logistics fleet. Although it is not considering further outsourcing of its supply chain, it is open to improvements in the transport and potentially despatch functions.
Customer C	OLR	Online sales of hardware. The business grew from a physical hardware store in NSW but now does most of its business nationally online, with hardware and handyman sales being the largest categories sold. It uses outsource partners and general mail to provide door-to-door delivery. It is considering outsourced supplier management through a purchasing consortium, but not call centre or warehousing facilities.

In all of the OLR cases there is growing use of e-commerce and associated technologies, which are seen as central to an expanding revenue base, and to maintaining viability. E-business capabilities appear important in both provider and customer cases analysed. Access to these capabilities is opportunistic in that the customer will acquire via outsource, a capability when and as that capability appears to be practically available. The customer is also quite likely to share these potential requirements with its outsource partners, and so provide a signal to the 3PEF that development of that capability will provide a revenue stream. Such behaviour is evident in both the Customer C and A cases, in which the e-fulfilment partners were aware of the customers' intentions. Thus, it is likely that these customer requirements will also be factored in to 3PEF capability development plans.

Three factors appear to be relevant to the approach OLRs take to accessing 3PEF capabilities. Customers may adapt supply chain capabilities in line with their outsource partners, they may take advantage of the

outsourcer’s portfolio of capabilities, its infrastructure or its expertise, and they may also seek efficiency benefits from 3PEFs rather than just innovation opportunities. They achieve this through the many sales transactions that initiate much of their revenue stream.

The most favourable 3PEF sales appear to be those which absorb all surplus capability currently possessed (that is, 100% of a physical resource or service), as this provides the best utilisation of assets by the 3PEF. The focus of sales effort thus appears to change depending on the surplus capability available to sell. Sales personnel interviewed in all three of the Australian 3PEF cases suggested that business would switch from finding new customers to building closer relationships with existing customers once their company’s resources were seen as saturated for its core capability portfolio.

Responding to customers’ needs moulds the services provided and the benefits offered by 3PEFs. It is evident in all cases that this relationship is constantly evolving, with new expectations from customers, and new capabilities being offered that are attractive because they can be exploited by those customers. OLRs in this survey are sending strong signals through sales transactions, tenders and other requests for services. They are seeking a variety of outcomes including trusted outsourcing partnership (Customer A), the potential for e-fulfilment outsourcing alliances (Customer B), and new services from their e-fulfilment supplier (Customer C).

### 3. DISCUSSION

Competitors seeking advantage through innovating and extending their traditional capabilities have evolved a large range of non-traditional capabilities. Customers of 3PEFs too, are changing, seeking alliances of some kind and (increasingly) outsourced supply chain services, though not necessarily more types of services. This even applies to organisations currently using 3PEFs for mainly traditional logistics services. Their view is that virtually all supply chain functions are open to outsourcing for the right supplier, the right partnership and the right cost-benefit formula.

As this develops all 3PEFs appear to be committing some of their business capabilities to servicing the needs of stable partners. But they may also withdraw those capabilities if they do not meet internal thresholds for return on investment, concentrating on high value capabilities; those with good rates of return.

Some 3PEFs are aligning their capabilities to existing customer needs through sales transactions. The way 3PEFs respond to sales revenue opportunities drives tactical decisions, with each event an important catalyst for response by the e-fulfilment provider. Such actions must also meet the capability needs of their customers. These pressures and responses form the basis for a model to explain the operation of transformation of capabilities (Figure 1).

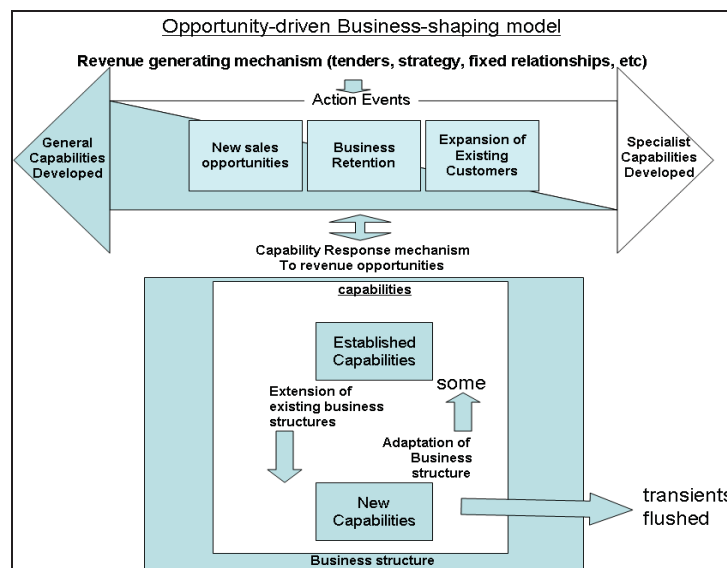


Figure 1. Opportunity-driven capability response model

In this model rational business decision makers assess what must be achieved to win specific sales. They are likely to be making statements such as “what capabilities do we have to win this sale?”, “Where are the gaps in our capability offering which we need to fill to win the sale?”, and “What current capabilities can we extend to fill those gaps?” While more strategic decision making is no doubt occurring these tactical decisions are necessary to maintain day-to-day revenue flow.

In the model, prior to a revenue-creating (sales) opportunity an e-fulfilment provider has an inventory of capabilities from which it will draw resources, assets and skills that can contribute to developing new capabilities it perceives will enhance its sales prospects. Thus it will aim to derive new capabilities from existing ones if these lead to a sale.

There is therefore an evolutionary pressure to create new capabilities which have lineage from existing ones, a process termed a “capability response” in the model. Importantly a business’s capability response provides a means to predict future competitive capabilities for specific companies and the industry in general, to indicate which 3PEFs are likely to offer particular capabilities and also to explain the process of capability development.

These mechanisms suggest that over a number of sales events a 3PEF’s overall inventory of capabilities will evolve. In an open market place where competition is aggressive, although this will result in differentiation of each business, it also is likely to lead to businesses developing capability inventories that have a family resemblance. In other words, since the pressures to develop capabilities are generated externally (from OLRs) the response from providers (the 3PEFs) will have similarities where those businesses are competing head-to-head in the same customer pool.

#### **4. CONCLUDING REMARKS**

Transformations in 3PEFs have a definite purpose; to gain and maintain a competitive advantage. The centre of focus for organisations in achieving this relates to how they use their capabilities. Transforming each capability in line with perceived revenue benefits to assist in the tactical activities of finding new customers or nurturing existing ones has been a central theme for these businesses over several years of the study. Capabilities have transformed to meet the e-business world’s requirements.

The “opportunity-driven capability response” model describes how new capabilities are developed, and how they become absorbed into the regular activities of 3PEFs, in which a capability initially outsourced or leveraged from an existing capability, proves to be commercially beneficial. Gradually the business accepts and absorbs this capability as core, committing skills and assets towards its maintenance.

Innovation will likely continue and provide fertile opportunities to create new capabilities by leveraging existing traditional ones, but there is also evidence that this pace will relax. Those new capabilities will become absorbed into the business, and traditionalisation will serve to set a new portfolio of capabilities giving rise to a stable and reproducible (new) class of 3PEFs.

In turn, these transformations impact the OLRs, and there is a mutual evolution – of both the suppliers and the providers. While it is necessary to define 3PEFs in terms of a portfolio of capabilities, it is also likely that a changing portfolio of required services will be sought by OLRs. As newly traditionalised and specialised functions serve to meet the needs of existing customers, there is likely to be stratification into several segments in the e-fulfilment business, as well as an evolution of the industry as whole. Answering both these questions provides a productive line of research, and also warrants study of transformation in other industries.

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