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# Electronic Marketplace-to-Marketplace Alliances: Emerging Trends and Strategic Rationales

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## ABSTRACT

The electronic marketplace domain has recently witnessed the joining together of a number of previously independent marketplaces and the formation of collaborative alliances between others. This study seeks to determine the nature or type of cooperative arrangements or alliances that are currently being forged between electronic marketplaces, and the strategic rationale that is leading to this observed alliance formation. The findings of the study are based upon an examination of statements made to the press by marketplaces undertaking strategic alliances. This published data was supplemented with face-to-face interviews with managers at three relevant electronic marketplaces. Three distinct types of alliance are observed; the merger between previously separate marketplaces, the acquisition of one marketplace by another and the formation of an interoperability agreement between two marketplaces. Three rationales for alliance formation were observed: an increase in the number of buyers or suppliers in a given market sector that can access the marketplace (an increase in scale of operations), an increase in the breadth or depth of services that are offered to users of the marketplace (an increase in the scope of operations) and providing the ability to exchange information across multiple tiers of a supply chain. A broader discussion of the findings is given and suggestions for further research are made.

**Keywords** : E-marketplaces; e-hubs; interoperability; strategic alliances; mergers; acquisitions

## 1. INTRODUCTION

The emergence of electronic marketplaces in the late 1990s resulted in considerable interest in this new means of facilitating

business-to-business transactions and trading (see for example; Dai and Kauffman, 2002; Barratt and Rosdahl, 2002 and Essig and Arnold, 2001). Buying organisations, it was envisioned, would use such marketplaces to access a wide range of suppliers, compare their products and prices, and switch between them if a lower price could be found (Essig and Arnold, 2001). Suppliers would find marketplaces attractive as they could use them to more easily, and cost effectively, reach a wide array of new customers. Such observations led to the suggestion that, in the future, the majority of business procurement would be undertaken via such services (Nairn, 2000). Actual adoption and usage to date has proved more modest, with, for example, approximately one quarter of the 331 manufacturing and non-manufacturing organizations surveyed by the Institute of Supply Management (2002) having used marketplaces for the purchase of goods or services. However, reports indicate that usage continues to grow, suggesting that interest in the future of these marketplaces, if less than at the height of the dot.com boom, appears to be enduring, and is therefore an important area for academic study.

The electronic marketplace domain has recently witnessed the joining together of a number of previously independent marketplaces, and the formation of collaborative alliances between others. Those within the sector often refer to these types of arrangements as marketplace-to-marketplace interoperability agreements. This study, which is exploratory in nature due to the emergent state of these arrangements, seeks to determine the nature, or type, of arrangements that are being established between marketplaces, and the strategic rationale for those arrangements. This study draws upon the extant strategic management literature relating to the formation of relationships between organisations. The literature shows that there is a wide spectrum of such relationships, ranging from single project collaboration between trusted trading parties, to full merger or acquisition. In this study the term strategic alliance is used to denote any cooperative relationship within this broad spectrum. This is illustrated in Table 1.

This paper commences with a review of both the extant literature in the e-marketplace domain, and that from the

strategic management field relating to strategic alliances, as defined in this paper. The methodology adopted for the study is then discussed. The findings of the study are presented in two parts; firstly the nature of alliances that are found to be emerging in the electronic marketplace domain are discussed and subsequently, the strategic rationales that can be identified for these alliances are presented. A summary and discussion of the study is then given, including noting the limitations of the current study, and suggestions are made for possible future research directions.

## 2. E-Marketplaces: Review of Current Literature

The development of internet based e-marketplaces began in the late 1990s and the number grew rapidly in 1999 and 2000 (Schram and Sexton, 2000). By 2001 a study by Laseter, Long and Capers (2001) identified 2,233 marketplaces. However, many of these marketplaces have not yet, and perhaps never will be, processing transactions. It has been estimated that currently there may be as few as 100 marketplaces undertaking transactions (Miller, 2001).

Due to the nascent state of internet based e-marketplaces and the significant amount of change that has occurred in their short lifetimes, there is not as yet a widely accepted definition of what constitutes an e-marketplace. Strader and Shaw (1997) define them as 'an inter-organisational information system that allows the participating buyers and sellers to exchange information about prices and product offerings' and Choudhury *et al* (1998) as 'an inter-organisational system through which multiple buyers and sellers interact to accomplish one or more of the following market-making activities; identifying potential trading partners, selecting a specific partner, and executing the transaction'. Many marketplaces offer services in addition to the buying and selling of goods, and any definition should reflect these wider services. We therefore propose the following definition, which we adopt as a basis for this study: '*e-marketplaces are web-based systems which enable automated transactions, trading or collaboration between business partners*'.

The immaturity of e-marketplaces also results in there being a paucity of published academic papers in this domain. Both Jap (2000) and Smart and Harrison (2001) investigate the specific use of e-marketplaces to undertake procurement auctions. These studies conclude that these auctions can offer benefits to both buyers and suppliers, but caution that firms using them should consider the potential impact on buyer-supplier relationships. Kaplan and Sawhney (2000) offer a useful classification of e-marketplaces based on what is being bought, that is whether it is an input to the products or services manufactured or not, and how it is bought. Essig and Arnold (2001) consider e-marketplaces from an information economics perspective and generate business models which '*demonstrate the value added by [such] e-procurement*'. Perhaps the most extensive recent academic publication is that by Dai and Kauffman (2002), in which they present a systematic study and classification of existing e-marketplaces.

In contrast to the lack of academic studies, numerous articles have appeared in the business and trade press on e-marketplaces (see for example: Chan, 2001; Karpinski, 2001; Nairn, 2000) and a number of reports have been published on the topic of e-marketplaces by consultancies and software vendors (see for example; Bonno, 2001; Brooks and Cantrell, 2001; Laseter *et al*, 2001; Laseter and Capers, 2002). Barratt and Rosdahl (2002) provide a useful overview of these articles and studies.

The first e-marketplaces tended to be based solely on aiding procurement for both buyers and suppliers. Laseter *et al* (2001) have found that only the minority of marketplaces currently offer services that go beyond aiding firms with procurement. The additional services these authors identify now being offered include; information exchange, digital catalogues, logistics services, supply chain planning and design collaboration.

A number of forecasts for the future development of electronic marketplaces have been made that are relevant to this study. Skjøtt-Larsen *et al*, (2003) suggest that the high number of electronic marketplaces in existence will result in consolidation. This is consistent with the evolution witnessed in many traditional market sectors, in which the high number of initial entrants reduces over time, as some fail and others consolidate (Christopher and McDonald, 1995). Brooks *et al* (2001) and Dagenais *et al* (2002) both suggest that there is likely to be mergers or acquisitions between existing marketplaces, for similar reasons, and that marketplaces will also look to develop interoperability agreements between themselves.

## 3. Strategic Alliances: Teachings from Strategic Management Literature

The consideration of strategic alliances and related forms of inter-organisational ventures occur in a number of academic domains. In particular; economics (transaction cost economics and agency theory), finance (valuation and financing structures), game theory, organisational theory (organisational design and motivations of individual actors such as senior management) and strategic management theory (strategic rationale and strategic fit). Since our interest in the present study is to explore the nature of alliances being formed and, in particular, the strategic rationale for those alliances, it is to the strategic management field that we turn for extant theory with which to interpret our inductive findings in this study.

The terms used to describe inter-organisational relationships are many and various, and include well-recognised terms such as mergers and acquisitions, but also include less well-understood terms such as, 'strategic network' and 'co-ompetition'. Many studies have sought to classify the different relationships that can exist, but have been limited in their success due to the multiple dimensions according to which these arrangements can be classified. The possible dimensions for classification include the rationale for establishing the alliance, the duration of the collaboration or the intended outcome. Table 1 shows the continuum of possible alliance forms and has been drawn from Child and Faulkner (1998), according to the single dimension of inter-organisational integration or interdependence effected by the alliance. The term strategic alliance is used widely in

academic and practitioner literature. In this study we use the term to include the range of interorganisational relationships denoted in Table 1.

The establishment of networks is of particular relevance to many ventures based on new technologies, and is particularly pertinent to this study of electronic marketplace alliance formation. However, the term network is often used to describe two different things. The term 'network' can be used to describe the underlying infrastructure on which the service or products provided to customers is based. Utilities such as electricity, water and gas, as well as telephony, rail and air transport services, all use such networks to provide value for customers. Increasingly, the provision of value to customers in high technology markets relies on multiple product or service providers orchestrating complementary and competitive products or services, all of which depend on the network in as a means of distribution. According to the strategic management literature, these groups of companies can also be termed a network.

In considering the value delivered to customers by the establishment of networks in the high technology sector, there are two contributing elements. One is the value that customers derive from a stand-alone use of the product or service (it's features) and the other is the value derived from being able to interact with other users of the product or service. Typically with networks, the value of this latter element is the most significant, and increases with the number of other users of the product or service. This is termed the network externality effect (Katz and Shapiro, 1986; Kauffman *et al*, 2000; Gallagher and Wang, 2002).

A significant number of studies have been undertaken in order to explore the motives that drive strategic alliances, in all of their forms (Steiner, 1975; Ravenscraft and Scherer, 1987; Trautwein, 1989; Walter and Barney, 1990). Many scholars depict alliance formation as an essentially rational and analytical process (Child and Faulkner, 1998). Contractor and Lorange (1988) identify seven objectives for the formation of alliances, shown in Table 2. However, Tallman and Shenkar (1994 p.92) note that alliance formation is not always economic and rational, but '*also a social, psychological and emotional phenomenon*'. Trautwein (1990) identifies a number of merger motives in addition to those that can be considered as purely rational, which are also shown in Table 2. In his *Empire Building theory*, he describes mergers as being planned and executed '*by managers who thereby maximise their own utility instead of their shareholders value*' (p.287). According to his *Valuation theory*, mergers are planned by managers who have better information about the target's valuation than the stock market has.

## 4. Research Objectives and Methodology

The current study seeks to determine the nature or type of cooperative arrangements or alliances that are being forged between electronic marketplaces, and the driving strategic rationale for those alliances. The alliances that the study seeks to explore are emergent, and the domain in which they are occurring, that of e-marketplaces, is itself relatively immature.

This suggests the use of inductive, qualitative research methods, rather than a more quantitative approach (Hussey and Hussey, 1997; Locke, 2001; Eisenhardt, 1989; Yin, 1989).

The research was operationalised in two phases. Firstly, an examination of statements made to the press by electronic marketplaces, undertaking some form of strategic alliance, was undertaken. The statements were used to identify the parties to the agreement, the products or services that were to be included in the agreement, the nature or type of the alliance and the stated intention or rationale of the alliance. Data was gathered on organisations that announced alliances or interoperability agreements between July 2001 and April 2003. The data was principally compiled from [www.emarketect.com](http://www.emarketect.com), a provider of information to builders, owners and operators of electronic marketplaces. Data was collected on fourteen alliance announcements, from marketplaces in a range of industry sectors. This data was then clustered into groups, firstly according to the nature of the alliance formed, and secondly the stated rationale for the alliance. The data collected, and clustered according to the strategic rationale for alliance formation, is shown in Appendix 1 to this paper.

It is recognised that there are limitations to the methodology adopted. Official statements from companies are a valid source of data, as they represent an official, and therefore authoritative view of a company (Cooper and Schindler, 2001). However, such statements may have a number of limitations including, that they are often brief, always positive in tone and are unlikely to reveal the less rational alliance motive discussed by authors such as Trautwein (1990).

In the second phase of the research, the published data was supplemented with face to face interviews with managers from three of the marketplaces identified in the previous phase. The managers interviewed were from GHX and UKprocure, which are marketplaces in the healthcare sector and SupplyOn, a marketplace in the automotive sector.

### 4.1 Study Findings

Appendix 1 shows the identified alliance announcements made by electronic marketplaces. This data was first clustered into groups according to the nature of the alliance formed, and subsequently clustered into distinct groupings according to the stated rationale for the alliance. The findings will firstly be discussed in terms of the nature of the alliance between the participating marketplaces, and then in terms of the rationale driving these alliances.

### 4.2 Nature of Alliances Established

Table 3 presents three distinct types of alliances that have been inductively derived from the data. The three forms of alliance that were identified are where one electronic marketplace acquires another, where two electronic marketplaces merge, and where two electronic marketplaces establish interoperability agreements between themselves. Each of these will be discussed in turn, using a recent case to exemplify it.

**Table 3: Nature of Alliance Agreements Identified**

Type of Interoperability Agreement	Example
The merger of two electronic marketplaces to create a single entity	www.ghx.com (an electronic marketplace for the healthcare industry) and www.medibuy.com (an electronic marketplace for the healthcare industry).
The acquisition of one electronic marketplace by another electronic marketplace to create a single entity	www.flashline.com (a software asset reuse company) by www.componentsource.com (a marketplace and community for reusable software components)
The establishment of an interoperability agreement between two electronic marketplaces	www.intelitrans.com (a supplier of logistics and supply chain optimisation solutions for process manufactures and commodity companies) and www.forrestexpress.com (an electronic marketplace for the paper and forest product industry).

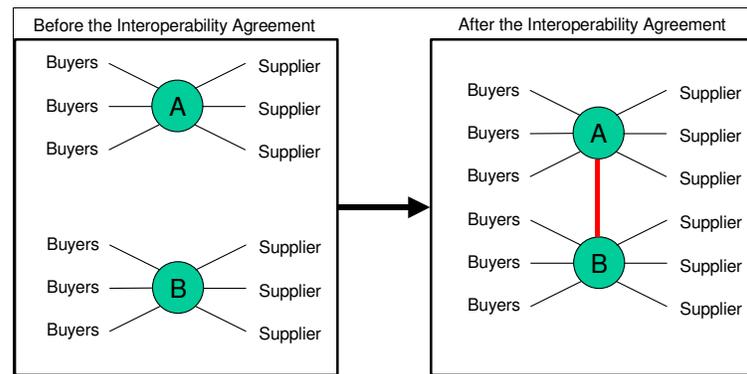
The first type of alliance is where one electronic marketplace has merged with another. An example of this is where the Global Healthcare Exchange ([www.ghx.com](http://www.ghx.com)) merged with Medibuy ([www.medibuy.com](http://www.medibuy.com)) in December 2002. The benefit of this merger for the users of these marketplaces was described ‘elimination of redundant costs associated with developing and deploying separate exchanges while making it easier and less costly for current and future users to conduct e-commerce with one another’. It is also suggested that wider benefits to the whole healthcare sector may accrue from this merger, ‘with a significant number of trading partners utilizing a single exchange and product catalogue for more of their purchasing, it will be easier for the healthcare industry to adopt industry standards’. The result of this merger is a single company called the Global Healthcare Exchange. Prior to this merger, the Global Healthcare Exchange had undertaken another merger with the healthcare marketplace, HealthNexis in November 2001.

The second type of interoperability agreement is where one electronic marketplace acquires another. An example of this is where ComponentSource, an electronic marketplace for reusable software components, acquired Flashline, an electronic marketplace, owned by a software asset reuse company, for commercial off the shelf software components. The rationale for the acquisition was described as being to make ‘ComponentSource’s global marketplace accessible through Flashline’s website’ and ‘ComponentSource furthermore broadens its market reach to an additional audience focused on reuse.’ The agreement is such that Flashline will continue to receive a percentage of all component sales that it refers to ComponentSource.

In the cases of the merger of two marketplaces, or the acquisition of one marketplace by another, there is a requirement for a change of ownership, or for a joint ownership to be established. The third type of alliance identified in this study focuses solely on interoperability, and does not require a change in the ownership of any of the entities party to the agreement. This type of agreement is based upon the establishment of an interoperability agreement between two marketplaces. The intention of such agreements is that buyers, connected to one electronic marketplace, can access suppliers connected to an interoperable marketplace, and vice versa. An example of this type of agreement is the one that exists between Forestexpress, an electronic marketplace for the paper and forest products industry, and IntelliTrans, a provider of logistics management and integrated supply-chain tracking systems. The interoperability agreement will allow ‘both ForestExpress and IntelliTrans customers will reach additional business partners

on an extended network, rather than establishing a unique connection to both service providers’. This enables customers to access an electronic marketplace that provides transaction and procurement services, along with a supply chain optimisation solution, through a single connection.

All three types of agreement presented in this section allow buyers and suppliers, who may have hitherto used one electronic marketplace, to access, through this electronic marketplace, the buyers and suppliers on another electronic marketplace. This means that they only have to invest the resources of both finance and management time in establishing and operating a connection to one such entity, incurred in activities such as catalogue management and integrating legacy information systems into the marketplace. This is shown schematically in Figure 1.



**Figure 1: Increased access to trading partners enabled by marketplace alliances**

### 4.3 Strategic Rationale for Alliances Established

Whilst these three types of alliances vary, in terms of the resulting ownership of the electronic marketplaces that are party to them (i.e. merged, sold or no change), they all endeavour to provide a common benefit to their users. That is, the provision of a single point of connection, that will enable buyers and suppliers to electronically transmit business documents and data between each other, without having the expense, or effort, of maintaining connections to multiple marketplaces.

However, from the data collected in this study, the specific rationale or motive for the alliance and hence the purpose of the provision of a single point of connection, appears to vary across alliances. Three key rationales for the establishment of an alliance have been inductively derived from the data presented in the Appendix. These are: increasing the number of buyers or sellers that an organisation has access to via the marketplace; increasing the types of services that an organisation can access via the marketplace, and facilitating connectivity between multiple echelons or tiers in the supply chain. Each of these rationales will be discussed, and exemplified from the data collected, in turn.

The first rationale for marketplace-to-marketplace alliances is to increase the number of buyers that sellers have access to, and vice versa, and is illustrated in Figure 1. Prior to the alliance being in place, a buyer or seller would be required to register,

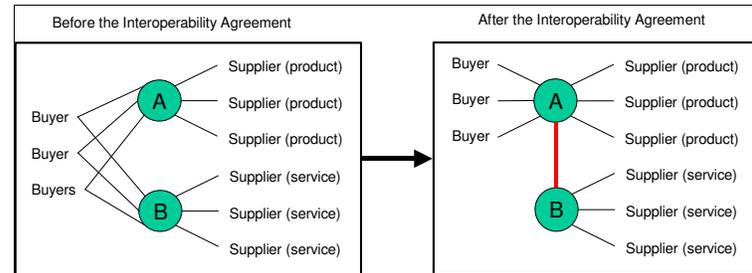
pay fees and maintain a connection to both marketplaces A and B. After the alliance, whatever its nature, a buyer or seller only needs to connect to one marketplace, either A or B, in order to procure or sell products and services to organisations on marketplaces A and B. The rationale for forming an alliance of this type is exemplified by the alliance between [www.chemconnect.com](http://www.chemconnect.com) and [www.forestexpress.com](http://www.forestexpress.com). These organisations describe how *'they will connect to each others networks, enabling member companies of each hub to exchange electronic business documents without having to establish and maintain costly one-to-one connections'*. This agreement allows customers from the chemical industry, who are using its standard for electronic business, developed by the Chemical Industry Data Exchange, and called Chem eStandards, to have their business documents translated into a number of different standards including papiNet, the paper and forest products industry standard. This broadens the number of organisations that an organisation can integrate its business processes with electronically, without having to either connect to multiple electronic marketplaces, or adopt additional standards to the ones that their own industry is using.

This first type of observed rationale for strategic alliance formation is consistent with the theory of network externalities (Katz and Shapiro, 1986; Kauffman, *et al*, 2000; Gallagher *et al*, 2002), that is, the value of a network based service will increase with the number of parties that can be accessed via that network. This agreement suggests an infrastructural nature of marketplace alliances, and suggests parallels with other infrastructural services provided to businesses such as utilities, transportation and express parcel delivery (Carr, 2003).

The second identified rationale for alliance formation is to increase the range or depth of services offered to users. Such alliances aim to allow buyers or suppliers of one marketplace access to the services of another marketplace, that offers products and services that are complimentary to those offered on the first marketplace. For example, [www.elemica.com](http://www.elemica.com), an electronic marketplace for chemical and related products, acquired [www.optimumlogistics.com](http://www.optimumlogistics.com), for the purpose of enabling *'more efficient collaboration between chemical companies and their marine Logistics Service Providers (LSPs) such as terminal operators, carriers, freight forwarders and surveyors, by providing Elemica members easier access to global marine logistics solutions'*. The benefits of this agreement are stated as being *'the Elemica-Optimum Logistics connection will enable Elemica member companies to utilize Optimum Logistics solutions via their existing connection to Elemica, thus eliminating the need to develop separate connections to multiple Logistics Service Providers'*. This agreement means that chemical industry buyers and suppliers can use [www.elemica.com](http://www.elemica.com) to both purchase products, and manage the logistics activities associated with the transportation of these products, from the supplier to their facilities. This is shown schematically in Figure 2, which illustrates how organisations, which previously would have had to connect to two marketplaces (A and B) to access multiple services, can now do so by connecting to just one marketplace (A).

The finding that strategic alliances are being formed in order to broaden the range of services offered to their users is in agreement with a recent study of e-marketplace failures by

Laseter and Capers (2002), and an earlier observation made by Miller (2001). The study by Laseter and Capers found that those marketplaces that were most likely to fail were those with limited service offerings. Marketplaces with a wide range of services offered their users, either buyers or suppliers, the most value and hence could both attract and retain these users.

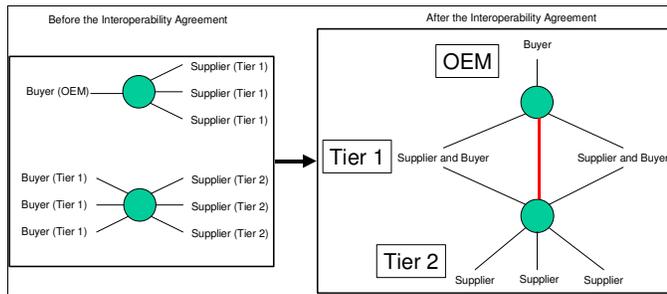


**Figure 2: Alliance Formation to Increase Range or Depth of Services Offered**

The third rationale for alliances identified in the study is the facilitation of trading between multiple tiers in a supply chain. Many industries, such as automotive, aerospace and electronics, consist of multiple tiers or echelons. Downstream in the supply chain is the Original Equipment Manufacture (OEM), such as General Motors in the automotive supply chain. Supplying to these OEM's are tier one suppliers, and supplying to tier one suppliers are tier two suppliers and so on. Automotive supply chains can often have as many as five or six tiers. Communication of information about factors such as inventory information and the status of a new product that is under development, is a major challenge for these types of industries. Alliances between electronic marketplaces positioned in-between different nodes (e.g. OEM and tier one organisations, or tier one and tier two organisations) in the supply chain are emerging as a means to facilitate this multi echelon information system integration. An example of this is an agreement that has been established between [www.supplyon.com](http://www.supplyon.com), (an electronic marketplace that is positioned in-between tier one suppliers, who are in this context buyers, and tier two suppliers to the automotive industry) and [www.vwgroupsupply.com](http://www.vwgroupsupply.com) (an electronic marketplace owned and operated by Volkswagen, an automotive industry OEM, who are buyers, with which it connects to its tier one suppliers). This agreement seeks to provide the ability for *'B2B applications, which are currently coined by heterogeneous data formats, to be made more efficient along the entire value chain in the automotive industry and thus create complete electronic communication and collaboration between the Volkswagen Group and its suppliers of various tiers ('n tiers')*. In practice this means that SupplyOn's users (tier one organisations) can send an electronic document, received from Volkswagen, directly to their own suppliers (tier two organisations), without intervention. Essential fields within the document, such as product number, volumes and unit quantities are expressed in standard data formats and standard transfer protocols are used, thus allowing multi-tier integration. This type of interoperability is illustrated schematically in Figure 3.

The third observed rationale for strategic alliance formation, that is the enablement of multi-tier supply chain integration, is in

accordance with the observations made by Choi *et al* (2002) in their study of supplier-to-supplier relationships. They observed that improvements in such relationships could have benefits to organisations downstream in the supply chain, ‘a cooperative relationship has benefits to buyers because it enables them to take advantage of the potentially creative synergy between suppliers’. However, they warn that such relationships are not well recognised and hence such benefits are being missed.



**Figure 3: Alliance Formation to Enable Multi Tier Supply Chain Integration**

## 5. Discussion of Study Findings

Given the significant number of electronic marketplaces that were launched during the late 1990s, the ability of such marketplaces to each attract a viable number of users, or to be able to earn viable returns on the capital employed in their formation seemed unlikely. Consolidation was therefore forecast by a number of observers (Skott-Larsen *et al*, 2003; Brooks *et al* 2001; Dagenais *et al*, 2002). This study seeks to determine the nature or type of cooperative arrangements or alliances that are currently being forged between electronic marketplaces, and the strategic rationale that is leading to the observed alliances.

Three distinct types of alliance are observed in this study to be occurring between electronic marketplaces. Two of the observed forms, mergers between marketplaces and the acquisition of one marketplace by another, are well known and documented forms of alliance in the strategic management field (see for example: Gancel *et al*, 2002; Bergquist *et al*, 1995; Brouthers *et al*, 1995). The third type of strategic alliance observed was one in which ownership of the two participating marketplaces remained unchanged, but they formed an interoperability agreement between themselves. Whilst benefits can accrue from the formation of mergers and acquisition, such as the formation of marketplaces that will be better resourced and hence more sustainable, as with any industry, a very high concentration ratio can result in market dominance (Hill and Jones, 1998). The formation of the third type of alliance observed, that of interoperability agreements between marketplaces, may offer the both industry and organisational level benefits, but without the risks associated with market dominance.

Three rationales for alliance formation were observed in the current study: an increase in the number of buyers or suppliers, in a given market sector, that can access via the marketplace (an

increase in scale of operations), an increase in the breadth or depth of services that are offered to users of the marketplace (an increase in the scope of operations) and providing the ability to exchange information across multiple tiers of a supply chain. A common theme to all three of the strategic rationales observed is the ability to provide greater utility to users, either buyers or suppliers, via a single point of contact or integration.

A recent empirical study by White and Daniel (2004), confirmed the observations by Dai and Kauffman (2002), when they found that the use of electronic marketplaces led to a reduction in the number of suppliers used by a buying organisation, but a deepening of the relationship with those suppliers. This suggests that those alliances between marketplaces that focus solely upon increasing the number of buyers and suppliers that are using the marketplace, may be misguided. Instead the focus of such alliances should be upon recognising who the buyers and suppliers using their marketplaces are, and who their preferred longer term trading partners are, and ensuring that these organisations are encouraged to use the marketplace. They should also consider emulation of the approach being adopted by those alliances, that are deepening the service offerings made to users, or who are enabling integration between multiple tiers of the supply chain.

As with much empirically based work, there are limitations to this current study that should be recognised when interpreting the findings presented. The alliances that this study seeks to explore are emergent, and the domain in which they are occurring, that of e-marketplaces, is itself relatively immature, hence this study is exploratory rather than confirmatory in nature. To date only a limited number of alliances have occurred which results in a limited data set from which we can induce findings. As further alliances are announced, this study will be extended to include those alliances. Additional data may allow the identification of other alliance forms or rationales for alliance formation.

The alliance announcements that formed the basis for this study are at various stages of implementation and operation. Further studies should be undertaken to see how these alliances progress. In particular, a relationship between the type of alliance undertaken, and the rationale for that alliance, and the successful future operation would be enlightening, as would the identification and exploration of factors that contribute to successful alliance operation.

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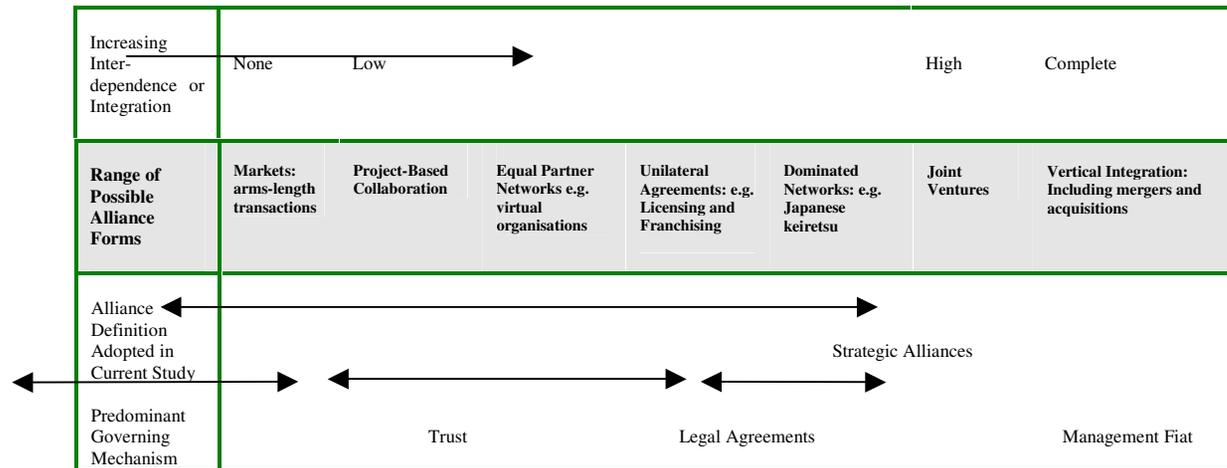
### Appendix 1 – Electronic Marketplace Mergers, Acquisitions and Interoperability Agreements

Collaborating Entities and Industry	Date Announced	Nature of Agreement	Nature of Interoperability	Impact on Connectivity within the Supply Chain	
1. Stated Rationale – Increasing the Critical Mass of Buyers and/or Suppliers					
1	<a href="http://www.componentsource.com">www.componentsource.com</a> (a marketplace and community for reusable software components) and <a href="http://www.flashline.com">www.flashline.com</a> (a software asset reuse company).	April 2003.	The acquisition of Flashline’s marketplace for commercial off the shelf software components by Componentsource.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces. This will enable access for a) 200 vendors represented on <a href="http://www.flashline.com">www.flashline.com</a> to Componentsource’s buyers and b) access to 15000 buyers on <a href="http://www.flashline.com">www.flashline.com</a> to the existing vendors that use Componentsource.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
2	<a href="http://www.chemconnect.com">www.chemconnect.com</a> (an electronic marketplace for industries that utilise the chemical industry) and <a href="http://www.forestexpress.com">www.forestexpress.com</a> (an electronic marketplace for the paper and forest product industry).	March 2003	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
	<a href="http://www.elemica.com">www.elemica.com</a> (an electronic marketplace for the buyers and sellers of chemical and related products) and <a href="http://www.rubbertnetwork.com">www.rubbertnetwork.com</a> (an electronic marketplace for the tire and rubber industry).	June 2002.	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
4	<a href="http://www.ghx.com">www.ghx.com</a> (an electronic marketplace for the healthcare industry) and <a href="http://www.neoforma.com">www.neoforma.com</a> (a developer of electronic marketplaces for the healthcare industry).	August 2001	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
5	<a href="http://www.ghx.com">www.ghx.com</a> (an electronic marketplace for the healthcare industry) and <a href="http://www.ukprocure.com">www.ukprocure.com</a> (an electronic marketplace for the UK healthcare industry)	December 2001	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
6	<a href="http://www.ghx.com">www.ghx.com</a> (an electronic marketplace for the healthcare	December 2002.	Merger of GHX and Medibuy to create a	The provision of a single point of connection that will enable buyers and suppliers to electronically	Increasing the number of buyers and suppliers

	industry) and <a href="http://www.medibuy.com">www.medibuy.com</a> (an electronic marketplace for the healthcare industry).		single entity and thus electronic marketplace	transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
7	<a href="http://www.ghx.com">www.ghx.com</a> (an electronic marketplace for the healthcare industry) and <a href="http://www.broadlane.com">www.broadlane.com</a> (an electronic marketplace for the healthcare industry).	June 2002.	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
8	<a href="http://www.ghx.com">www.ghx.com</a> (an electronic marketplace for the healthcare industry) and <a href="http://www.healthnexus.com">www.healthnexus.com</a> (an electronic marketplace for the healthcare industry).	November 2001.	Merger of GHX and Healthnexus to create a single entity and thus electronic marketplace	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Increasing the number of buyers and suppliers that have the ability to conduct business electronically on a one-to-one (dyadic) basis.
2. Stated Rationale – Increasing the Depth of Services Provided to Users					
9	<a href="http://www.intelitrans.com">www.intelitrans.com</a> (a supplier of logistics and supply chain optimisation solutions for process manufactures and commodity companies) and <a href="http://www.forrestexpress.com">www.forrestexpress.com</a> (an electronic marketplace for the paper and forest product industry).	April 2003	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections between their IS and both marketplaces. Moreover, they will be able to access procurement solutions such as electronic catalogues and sourcing tools in the same place as solutions that enable vendor managed inventory and fleet management services.	Increasing the type of services that are able to buyers and suppliers of both electronic marketplaces on a one (buyer or supplier)-to-many (buyer or supplier and logistics service provider) basis.
10	<a href="http://www.elemica.com">www.elemica.com</a> (an electronic marketplace for the buyers and sellers of chemical and related products) and Optimum Logistics (a marine logistics solution for the chemical industry).	March 2003.	The acquisition of Optimum Logistics by Elemica.	The provision of a single point of connection that will enable buyers and suppliers of both the electronic marketplace and the logistics company to be able to access the services provided by the two respective entities without having the expense of maintaining connections to both.	Increasing the type of services that are able to buyers on a one-to-many (supplier and logistics service provider) basis.
11	<a href="http://www.dairy.com">www.dairy.com</a> (an electronic marketplace for cream and condensed milk) and DairyPort (an Enterprise Resource Planning system provider for the Dairy industry).	March 2003	The acquisition of DairyPort by Dairy.com.	The provision of a single point of connection that will enable buyers and suppliers of both the electronic marketplace and the ERP vendor company to be able to access the services provided by the two respective entities without having the expense of maintaining connections to both.	Increasing the type of services that are able to buyers and suppliers are able to access via the electronic marketplace.
12	<a href="http://www.forestexpress.com">www.forestexpress.com</a> (an electronic marketplace for the paper and forest product industry) and <a href="http://www.nistevo.com">www.nistevo.com</a> (an electronic marketplace for	September 2002	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers of both the electronic marketplace and the logistics company to be able to access the services provided by the two respective entities without having the expense of maintaining connections to both.	Increasing the type of services that are able to buyers and suppliers of both electronic marketplaces on a one (buyer or supplier)-to-

	logistics).				many (buyer or supplier and logistics service provider) basis.
3. Stated Rationale – Connect Multiple Tiers of the Supply Chain					
1 3	<a href="http://www.supplyon.com">www.supplyon.com</a> (an electronic marketplace for the automotive industry) and Volkswagen (an automotive Original Equipment Manufacturer)	November 2001	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Enabling business documents to be transmitted between three tiers in the supply chain.
1 4	<a href="http://www.exostar.com">www.exostar.com</a> and the UK's Ministry of Defence's trading and communications portal, DECS.	June 2003	The establishment of an interoperability agreement between the two electronic marketplaces.	The provision of a single point of connection that will enable buyers and suppliers to electronically transmit business documents between each other without having the expense of maintaining connections to both marketplaces.	Enabling business documents to be transmitted between three tiers in the supply chain.

**Table 1: Continuum of Alliance Forms (after Child and Faulkner, 1998)**



**Table 2: Merger Motives Identified in Previous Studies**

	<b>Contractor and Lorange (1988)</b>	<b>Trautwein (1990)</b>	
1	Risk reduction		
2	Achievement of economies of scale / and or rationalisation	Efficiency theory	Net gains through synergies
3	Vertical quasi-integration, linking complementary partners in a 'value chain'		
4	Technology exchanges	Monopoly theory	Wealth transfers from customers
5	Co-opting or blocking competition		
6	Overcoming government or trade barriers		
7	Facilitating international expansion		
		Valuation theory	Net gains through private information
		Empire Building Theory	Driven by managers' personal motivations