

**ASSESSING JOINT SERVICE OPPORTUNITIES THROUGH A CONSIDERATION OF
THE MOTIVATING AND CONSTRAINING FACTORS**

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ABSTRACT

In a wide range of industries services are increasingly being developed, or evolving, to support groups of organisations. Not all such joint service initiatives though have been successful. The paper aims to highlight potential issues that need to be addressed when investigating the introduction of a joint service by identifying the motivators and constraints. The approach outlined draws upon network externality theory to provide the motivation for a joint service, and resource based and dependency theories to highlight the constraining factors. Three instances of joint services – in the Banking, Telecommunications and Travel sectors – are subsequently examined. It is concluded that as well as providing externality benefits joint service initiatives can also improve the terms of access to a service – in particular through realising economies of scale. Furthermore it would appear that organisations will have to think carefully about the best way to create, structure and manage a joint service initiative – including who to partner with – given their own particular circumstances, as multiple alternative approaches, with potentially differing ramifications, are available.

Keywords: Joint service, resource based theory, resource dependency theory, externalities, economies of scale.

INTRODUCTION

Historically a number of information and communication technology (ICT) enabled applications, or activities, have evolved over time to support an industry rather than an individual firm; for example automated teller machines in banking and SABRE, a reservation system, in airlines. More recently organisations have begun to actively seek opportunities where existing services could be provided jointly. In the finance sector a number of banks and Unisys have established a joint cheque processing venture (Roberts, 2004) while in the global lodging sector a joint distribution consortia – TravelWeb – has been created (Tedeschi, 2003).

Not all joint service initiatives though are likely to be successful. Kambil and van Heck (2002) supply a long list of failures across a range of sectors. There are also significant potential risks for participants when a third party serves as the joint service provider. The benefits may, for example, primarily accrue to that provider (Clemons and Kleidorfer, 1992). The Economist (2005) acknowledges such a risk with regard to third party joint service providers in the travel industry. When investigating joint service opportunities it would therefore be useful for organisations to have an understanding of the factors that should be considered. Building upon research examining business process outsourcing (BPO) the current paper seeks to present an approach to assist organisations examine and assess joint service opportunities. The results of a case study of three different joint service initiatives, examined under the aegis of that approach, are then presented. The focus of the research is at the strategic, rather than the implementation, level and ensuring that a joint service contributes to an organisation's strategic objectives and competitive position. The paper contributes to the literature in two principal ways. Firstly, by providing an approach by which organisations can evaluate joint service opportunities. Secondly, by identifying that there are benefits beyond those associated with network externalities, such as improving the *terms of access* to a service, the paper suggests that the research agenda should be extended beyond the historical focus on market like initiatives.

BUSINESS PROCESS OUTSOURCING AND JOINT SERVICE PROVISION

Joint services can in many ways be considered as a specific manifestation of outsourcing whereby a group of organisations come together to obtain a common service (Gallivan and Oh, 1999). As such in examining joint services this paper will draw from the outsourcing literature, and in particular that concerning BPO, to address the questions of why adopt a joint service approach and for what activities.

BPO has been defined as “the delegation of one, or more, information and communication technology intensive business processes to an external service provider” (Tornbohm and Andrault, 2005, p3). While research examining the motivation for, and objective of, outsourcing draws from many theoretical perspectives, two are particularly relevant with regard to determining what to outsource from a strategic perspective: resource based theory and resource dependency theory (Dibbern et al, 2004; Lee and Kim, 1999). The resource based and resource dependency theories both view a firm's resources as being the foundation for its strategy and do not inherently conflict with each other (Duncan, 2002) but rather can be seen as complementary (and have previously been combined, for example by Grover et al, 1994). Here they are synthesised so that the decision regarding what areas to enter into joint service arrangements for takes into account both the strategic

contribution of an activity to an organisation and the relationship with the ultimate supplier. Transfer of the field of investigation from BPO to the development of joint services though also requires an additional consideration – that a joint approach offers advantages over an individual one. It is proposed that network externality theory can be used to identify such circumstances.

Network externality theory

Network externality theory suggests that the “value of a unit of a [network] good increases with the number of units sold” (Economides, 1996, p678). The classic example is telecommunications where the value increases as the number of customers, and hence potential connections, grows. The work of Katz and Shapiro (1994) suggests that joint services may be beneficial for activities where there are network effects that are either direct – where the joint service facilitates connectivity – or indirect – where the value of a unit of the good increases with the number of units sold; for example as a consequence of the wider availability of complementary goods. The underlying proposition in this paper is that externality benefits provide the motivation for joint service initiatives – that the value of, for example, airline reservation systems is greatly enhanced if users are able to search and book flights from multiple airlines rather than just one.

Resource based theory

Resource based theory is founded in the work of Penrose (1959) and has subsequently been developed by authors such as Rumelt (1984), Wernerfelt (1984) and Barney (1986). It suggests that firms secure success by utilising their unique resources comprised of intangible and tangible assets that are tied semi-permanently to the firm (Wernerfelt, 1984). However such resources provide a sustained competitive advantage only when competitors are unable to acquire and deploy similar resources (Mata et al, 1995). Furthermore, according to Coyne (1986), to provide an advantage the resources must contribute to “a consistent difference in important attributes between the producer’s product and those of his competitors” (p51). From the resource based perspective, success is maximised where organisations focus their attention on those areas where their distinctive capabilities lie (Hagel and Seely Brown, 2001) and rely on others for the provision of ancillary activities. Joint service initiatives, as with other more traditional outsourcing ventures (Dibbern et al, 2004), can free up organisations to concentrate on their core capabilities. There is of course, the added complexity of having to ensure that none of the likely varied, distinctive capabilities of the multiple organisations involved is compromised.

Resource dependency theory

Resource dependency theory states that organisations are dependent upon their environment and are faced with choices regarding how they manage that dependency (Thompson, 1967). Organisations seek to adopt strategies to manage their dependency on external parties (Pfeffer and Salancik, 1978) and ensure access to the resources those parties supply is stable and secure (Kotter, 1979) with the objective of enhancing their competitive position vis-à-vis those parties. According to Teng et al (1995) the extent of any dependency is determined by a combination of the importance of the resource, the number of potential suppliers available and the cost of switching suppliers. Of particular interest here is the management of the relationship with the joint service provider to ensure that the benefits realised are not appropriated by that provider (Katz, 1987). Managing dependency may be of particular concern from a joint service perspective given the existence of network externalities which may ultimately lead to a single service provider rising to dominance. Casciaro and Piskorski (2005) have argued that one way in which organisations can limit dependencies is through actions that “bypass the source of constraint by .. cultivating alternative

sources of supply” (p167). Fundamental questions are whether such an approach is viable when externalities are present, and are there other dependency limiting options available in a joint service context.

Taken together the externality, resource based and resource dependency theories provide a basis by which joint service opportunities can be evaluated. Essentially they suggest that joint service ventures will be appropriate if they generate benefits that the organisations involved are able to appropriate, as opposed to those benefits accruing to the joint service provider, and do not weaken the distinctive resource based competitive advantage of any of those organisations (see Figure 1).

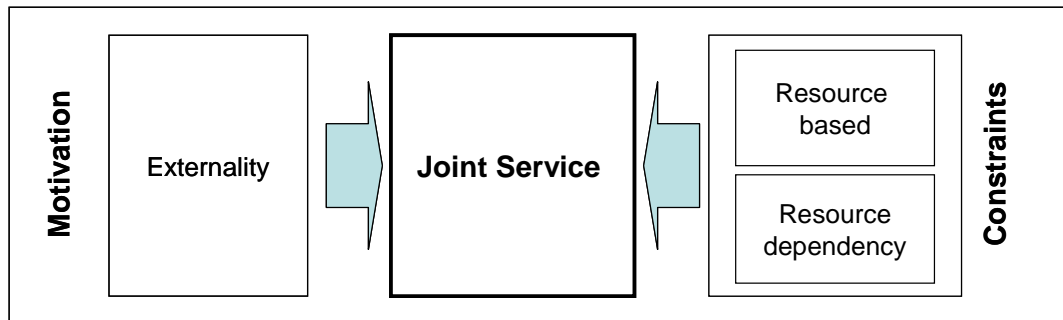


Figure 1. Motivators and constraints for joint services

METHODOLOGY

Having proposed an approach to assess joint service opportunities in theory, three cases were conducted and assessed using that approach to determine whether it would be useful in practice. The cases can be seen as principally explanatory in nature (Yin, 1984) and draw upon the work of Yin (1984) and Dubé and Paré (2003) with regard to the approach followed. Internal and public domain documents (primarily websites, press reports and annual reports) were used to maximise understanding of each case study before interviews were conducted and to corroborate and augment items raised during those interviews. The interviews themselves followed a semi-structured approach to ensure consistency while enabling unique insights to be followed up on. The use of multiple sources of evidence was seen as maximising the likely accuracy of the understanding developed for each case study (Yin, Bateman and Moore, 1983). Following the approach of Ciborra (2000) the intention has been to provide sufficient information to readers, alongside the author’s interpretation, to allow readers to draw their own conclusions alongside the ones presented here. The specific cases – eMobile, eBreak and eBank – were selected on the basis of reflecting the variety of roles, functionality and services that can be provided¹.

eMobile

eMobile commenced operations with an application for mobile phones that provides users in shopping centres with targeted information from retailers such as special offers or movie times. The

¹ All cases spoke on the condition of anonymity

service is based upon a combination of Bluetooth (to determine location) and GPRS technologies (for the transfer of information). Users have to register with eMobile to use the service and pay an access fee – AU\$1.25 per day or AU\$5 per month. Users also have to pay their mobile operator's standard rates for GPRS use. Any additional, information related, charges depend upon the type of information accessed and are billed via eMobile.

eMobile is carrier and network agnostic and is currently being trialled in a major shopping centre in Sydney Australia. eMobile has also launched a second, adjacent service which allows users to access information regardless of location via GPRS. Again the service is network and carrier agnostic. eMobile argue that being accessible to all mobile phone users regardless of carrier will be a key advantage over alternative carrier specific services which often create walled gardens of content for users². With eMobile users will be provided with the ability to access a wider array of content while information providers will gain access to a broader potential user base.

eBreak

eBreak acts as an independent online aggregator for “time sensitive” short break products providing an additional distribution channel and booking mechanism for accommodation providers. The company's primary distribution channel is via the Internet; though two call centres provide support, answering user questions and maintaining relations with accommodation providers. Accommodation providers place details of their individual inventory offers and pricing on the eBreak website for a limited future time frame – typically seven days. Potential customers can search all available inventory using criteria such as location and are provided with details of the qualifying accommodation including availability, prices and inclusions. Bookings take place via the Internet. Details are received initially by eBreak and then passed on to the accommodation providers. Payment, by credit card, is to eBreak who reimburse accommodation providers periodically via aggregated invoice. Both users and accommodation providers pay a per transaction service fee to eBreak. eBreak had grown to become the third most popular travel website in Australia by early 2005 and is currently used by over 6000 hotels, motels, serviced apartments, resorts, guesthouses and bed & breakfasts. Over time eBreak has extended its product offering to include other types of bookings, gifts and toys.

eBank

eBank comprises two separate but related initiatives. Both operate as member owned companies. The first – CUA – was founded in 1996 by credit unions³ to licence and customise a core banking system (CBS) to support deposits, loans, cards management and collections. The second initiative – CUB – was established to operate a computer bureau that would host CBS. Over time the membership of both companies has varied as has their remit. CUA now has 10 credit unions as shareholders and responsibility for the development or licencing of a range of technology applications beyond CBS. CUB has 35 shareholders and hosts a variety of applications in addition to CBS. A credit union can choose to be a member of one initiative or both depending upon its particular needs. A number of the original founders of CUA have subsequently withdrawn as they have discovered over time that CBS is more complex and expensive to operate than required by their operations. Baseline stakes and fees payable with regard to CUA and CUB are determined by reference to a credit union's customer and capital base. Shareholders of CUA and CUB can

² The leading telco in Australia for example was providing access to a total of 210 websites in April 2005.

³ A credit union is a member-owned financial co-operative

however vary the level of functionality and service they receive and this is reflected in the actual fee payable. Input into the decision making process – ie the votes available to be cast – is proportionate to a credit union's stake.

For each joint service interviews were conducted with the joint service provider as well as the organisations that use it. Two interviews were conducted with eMobile – with the general manager and the sales and marketing manager – together with three interviews with companies currently using the service (each with retail managers). Three interviews were conducted with eBreak – with the Chief Executive Officer (CEO), Chief Operating Officer (COO) and the senior IT manager – together with two at accommodation providers (with the person responsible for marketing). One interview was conducted with eBank – with a Director and two with the CEOs of Credit Union users⁴. While the underlying rationale of the interviews was purposeful, to collect data pertinent to the theoretical approach proposed it was deliberately non-directive so as not to preclude the emergence of concepts not previously considered (Patton, 2002). As such it is in line with the methodology presented by Eisenhardt (1989). With regard to analysis, data was first reviewed and coded in line with the principal dimensions of each theoretical lens⁵. Descriptive codes were used and interview transcripts coded in sentence or multi-sentence chunks. It was possible for the same piece of text to be multi-coded if it related to more than one perspective and proposition. Such an approach is in accord with the recommendations of Miles and Huberman (1994) who suggest that the level of coding detail should be aligned with the objectives of the research. As also suggested by Miles and Huberman (1994) the data was then collated into conceptually clustered data displays in order to make it readily accessible. Where interview data did not code to the concepts identified a priori as of interest it was further assessed to determine if additional concepts could be formed. Appendix 1 is a summary data display table.

RESULTS: MOTIVATION

Network externality

Both eMobile and eBreak exhibit actual, or potential, network externalities. eMobile is positioned as a platform that enables communication regardless of mobile telephony provider, offering potential network benefits to information providers. Without such a platform it would be necessary to develop separate interfaces to each mobile telephony provider further adapted for each model of mobile phone supported. By enabling across network compatibility, eMobile maximises the reach of information providers to users and vice versa.

“If you sign with [Telco] you only get access to the content they have signed up. If you want to go to the movies with your friends and want to check out what's on you can't if you are all with different carriers” eMobile – General Manager

“If we work with [Telco] we cut out everybody else.. what works for them doesn't work for us” eMobile – Retailer 1

⁴ The eBank and eBreak cases reported here are components of larger ongoing research studies

⁵ For example codes related to Resource Dependency theory included: RD-S(significance), RD-A(Alternatives), RD-C (Cost of change)

Combined, the effects increase the attractiveness of delivering information to mobiles and the likelihood of attaining a sustainable critical mass. It should also be noted that the willingness of eMobile to invest, develop and facilitate the service was seen as critical to the information providers, none of whom would have initiated such a service individually. Turning to eBreak, the key proposition is that it extends the distribution reach of accommodation providers – that aggregation makes eBreak more attractive to users than any individual property could be.

“I can not afford to pay to get that sort of coverage” eBreak – Accommodation provider 2

One of eBreak’s providers however did suggest that the reality might differ somewhat from the promise with eBreak primarily serving as an access point for existing customers rather than attracting new ones.

“bookings are from corporates who have an established relationship and corporate rate using them as a convenient booking mechanism. We are not getting new customers but now have to pay commission” eBreak – Accommodation Provider

It is clear though that network externalities are not the only motivating force. This is especially apparent with eBank where the principal benefits of joint provision do not appear to be related to improvements to the service itself but rather come from improving the *terms of access*. In essence eBank *aggregates* the demand of individual credit unions. With CUA this aggregation results in a body of demand that delivers volume discounts and ensures that the input and views of credit unions are taken into consideration as the application is updated by its provider over time. Clearly the larger the demand, the greater the leverage.

“If three or four of the large Credit Unions chose to go their own way there would be problems in sustaining this” eBank – Director

“transaction stuff is volume based and we’re simply not going to get the discounts that the bigger ones can if we were to go on our own” eBank – Credit Union 1

With regard to CUB, a joint approach provides access to services that would not be viable for many of the credit unions if they acted individually.

“[when Credit Unions] moved into mainline banking systems to handle the transaction volumes...evident needed to come together to handle 24/7 operations, backup and recovery.. none of us had the resources” eBank – Credit Union 2

It should be noted however that there are warning signs regarding the future sustainability of eBank. As competition in the overall Financial Services sector has increased there has been an increasing reluctance on the part of many of the larger credit unions to cross subsidise smaller ones.

“While we accept the cooperative basis of Credit Unions, as competition with the banks and others has stepped up we need we need to ensure any cross subsidy is not too large” eBank – Credit Union 2

In addition the needs of the larger credit unions have started to be recognised as different to those of the rest of the sector. One result has been the withdrawal of a number of smaller and mid-sized credit unions from CUA.

“32 signed up.. only 10 turned on.. large number put their money in .. realised that the system requires you to be larger to run it .. high maintenance system.. a lot that signed up for it realised that they can’t afford to go on” eBank – Director

RESULTS: CONSTRAINTS

Resource based

From a resource based perspective, eMobile, as an advertising medium, is not seen as impinging upon the ability of information providers to differentiate themselves⁶. eMobile by managing the technical and many of the operational aspect of the service is viewed as freeing up users to focus on their core businesses as compared to if they were to operate the service themselves.

“we simply fax our offers through to them and they load it up” eMobile – Retailer 2

Accommodation providers viewed eBreak as one among many distribution channels. There was some disagreement though regarding whether it limited or liberated them. On the positive side was the view that the core capabilities of accommodation providers lie in their location, brand, facilities, service and star rating. On the negative was that providers often considered themselves indistinguishable on these bases and saw eBreak as focusing competition on price by facilitating comparison.

“There are typically many, similar providers in close proximity...[and] comparison consequently causes downward pressure on rates” eBreak – Accommodation Provider 2

A variety of core capabilities were identified by the credit unions interviewed including customer service and the development of compelling financial products. eBank by supporting operational and transactional aspects of the business was universally seen as allowing them to better focus on these areas. In addition eBank was also seen as making available capabilities that some small and mid-sized credit unions might not otherwise be able to support individually.

“advantage in terms of new releases .. we do not have to go first and wear the pain.. can also piggyback and access to features that others have funded at below cost price” eBank – Credit Union 1

One of the credit unions also suggested that it was not a particular concern even if differentiation between credit unions was reduced since their competitors were not other credit unions but the banks.

“each credit union has its core constituency be it by geography or job .. [and] we do not actively target the markets of other[s]” eBank – Credit Union 2

Resource dependency

Information providers have no concerns regarding dependency on eMobile seeing it as a minor additional advertising channel. For their part, Credit Unions suggested that multiple alternatives were available to them for both aspects of the service provided by eBank if they wanted to use them.

⁶ In addition many of the retailers using the service operate in different sectors.

One did note however that there would likely be a significant cost incurred with any changeover – arising from both technical and contractual perspectives.

“When we merge with other Credit Unions we look to move them over to our systems .. [in one case] it would have cost \$8m to end the existing contract... [with data] is often too hard and risky to migrate so we simply set up all their customers as new customers”
eBank – Credit Union 2

Any concern, at least with regard to CUB, was also mitigated through its ownership by a consortium of credit unions. However this was also seen as having drawbacks.

“actually created the entities that we outsourced to.. unique thing about having our own cooperative is that we would never sue [if service level agreements were not met] .. the costs go back to us.. circular thing” eBank – Credit Union 1

For eBreak dependency was also seen as limited due to the number of alternatives that are both available and used⁷. However it was suggested – by eBreak as well as an accommodation provider – that as eBreak moved to offer a service that integrated with internal IT systems “to realise back-end efficiencies” consolidation was likely as providers would choose to work with fewer services. Furthermore not only would choice be reduced but so would the ability to move services due to the cost and difficulty of porting integrations from one provider to another.

“everybody has their own systems and works with multiple distributors.. integration would be expensive, complex and restraining.. The more extensive the functionality provided the more complex the integration.. [customers] would likely have to cut the number of distributors they use” eBreak – COO

DISCUSSION

When considering why organisations engage in joint services, network externalities do not appear to be the only motivation. The cases suggest an additional driving force related to improving the *terms of access* to a service⁸. Such improvements largely appear to be derived from economies of scale; specifically the ability to defray fixed costs over a larger production base (Romer, 1990). eBank and eMobile for example enable costs to be spread over a number of parties to the extent of enabling access to capabilities that few of the organisations involved would be able to realise individually.

Clearly for most scenarios that can be envisaged the existence of externalities will be associated with *terms of access* benefits; after all as the group of users grows it is likely that the cost of servicing each individual will fall. Consider, for example, airline reservation systems such as SABRE which become more useful as more airlines and agents subscribe but also benefit from economies of scale as costs can be defrayed over a large user base. What is important though is that the example of eBank suggests that joint services can be warranted where only *terms of access* benefits exist.

⁷ Both accommodation providers used other similar services to eBreak – one used five and the other seven

⁸ externalities improve the *utility* of that service

The cases also suggest that there are likely to be *limits* to the number of users of a joint service. One reason, as evidenced by eBank, is due to the difficulty of aligning common interests and maintaining that alignment over time as the organisations involved follow differing development paths. A second reason is that the benefits of adding extra users may not continue indefinitely. For example, with regard to externalities, authors such as Liebowitz and Margolis (1994) have argued that once the group of users reaches a critical mass there is little additional benefit from securing additional users. The existence of diseconomies of scale is also well documented (see for example Coase, 1937; Arrow, 1974; Williamson, 1975). One might speculate that such a scenario has eventuated with eBreak resulting in a variety of competing services exist in tandem⁹. Furthermore as the number of accommodation providers with similar offerings using any particular service has risen, price based competition has increased¹⁰. The optimum membership size is likely to vary across contexts and may also be complicated by the existence of multiple distinct users groups – with potentially differing requirements and equilibria. eMobile for example requires, and facilitates, interaction between a minimum of three distinct groups – mobile service providers, information providers and end users.

In terms of organisations that use joint services ensuring that they retain their core capabilities and manage their dependency on the provider, the results are broadly positive though there are some concerns. The ability of organisations using eBreak to differentiate themselves, for example, may be inhibited by the imposition of a standard template to describe accommodation. For eMobile's information providers there may be both positives and negatives related to bundling. While a bundle may be more attractive than the elements individually it also ties a provider in with others. With regard to dependency on the joint service provider the main strategy adopted appears to be to ensure there are alternatives available. For information providers using eMobile it is simply a case that eMobile is only one of many different advertising channels. For eBreak it is that there are many different similar services available and used¹¹¹². The cases also illustrate that there are different approaches possible with respect to the establishment, funding and ownership of a joint service. For eMobile and eBreak an independent third party established and paid for the joint service with organisations joining individually. eBank, by contrast, is a cooperative created and owned jointly by its credit union members. In the latter case dependency is likely to be less of a concern¹³. One further factor influencing dependency may be the degree of systems integration. Integration – as signalled by eBreak – may increase the likelihood of lock-in. Interestingly the eBank case suggests that dependency concerns may extend beyond managing the relationship with the service provider, with dependencies also created with other users. In eBank's case of prime concern is the impact if one or more credit unions choose to leave the service. Indeed interviewees suggested that one of the most difficult tasks was managing the balance between the individual credit union and the group as a whole.

⁹ If externalities were infinite it would be expected that the market would be likely to 'tip' to a single service (Shy,2002)

¹⁰ The externalities associated with eBreak potentially switching from being positive to negative.

¹¹ Such a multi-homing response – whereby consumers on one or more sides of a joint service use more than one provider (Evans, 2003) – is clearly only an option where multiple services can co-exist profitably.

¹² It is perhaps interesting that mobile service providers do not appear to have any ready opportunity to manage any dependency on eMobile since the service simply overlays their activities with no need to involve or consult them.

¹³ At the same time however such cooperatives may not have divested themselves of non core activities as fully as where the joint service is owned and operated by a third party – while they no longer have responsibility for the activity at the individual level they still do at the group level.

CONCLUSIONS AND FUTURE RESEARCH

Overall the cases suggest that the approach proposed may have some value for organisations in assessing joint service opportunities. Clearly though it needs to be amended to incorporate *terms of access* benefits as a motivating factor. From a practitioner perspective the considerations proposed form a basis to systematically assess opportunities to ensure that benefits are available, core capabilities are not impacted and dependency on the provider can be managed. The research also specifically identifies potential sources of benefits – cost savings, voice etc – and means to manage dependency – primarily ensuring alternatives are available. In addition decision makers are alerted to the need to consider with care issues of compatibility, alignment, dependency and benefit distribution regarding the *other* organisations involved in the joint service initiative. Such considerations may potentially reduce the attractiveness *ceteris paribus* of initiatives with open, as compared to selective, membership. Further contributions relate to the extent and ownership of the joint service provider. The eBank case highlights that the scope of initiatives can vary¹⁴ and that organisations should seek to select, or tailor, the one that best fits their particular circumstances. Regarding ownership, while a number of recent initiatives (Roberts, 2004; Tedeschi, 2003) have seen organisations act to retain ownership, eBank highlights that such an approach may also have disadvantages.

The principal contribution of the research from an academic viewpoint is the beginnings of a theoretical approach that considers both the motivations and constraints to joint service provision. The identification of *terms of access* benefits in addition to network externalities also highlights that the potential for joint service initiatives is broader than is typically considered in the academic literature where the focus is overwhelmingly on eMarkets and communications and exchange (Bailey and Bakos, 1997; Kaplan and Sawhney, 2000). A third contribution relates to the need to examine the joint service decision from a number of different, and potentially divergent, perspectives.

Going forward there are a number of potential opportunities for future research. A shortcoming of the current research is that it has not sought to examine in detail how the relationship between the joint service provider and the users of the service should be constructed and managed effectively. It would be desirable, for example, to look more closely at the alternative governance structures available (see Rochet and Tirole, 2003 as a potential starting point). There are also likely to be numerous organisational considerations – relating to factors such as strategy, structure, processes and culture (Newell et al, 2001; Burke and Litwin, 1992 and Scott-Morton, 1991) – when ensuring that there is an appropriate “fit” between the provider and users, and the different users themselves.

The example of eBank suggests that it might be difficult to identify a set of common interests that is stable over the long term. More extensive investigation is warranted to determine if this difficulty will be a common problem, the characteristics of joint service initiatives which are most likely to be stable and beneficial over the long term and whether there are sectoral difference that will influence the likelihood of organisations working together (as Hagedoorn (1993) might suggest). From a sectoral perspective, for example, variations in the extent of environmental uncertainty (Williamson, 1985) and the degree of competition (Porter, 1985) may have an impact. It is indeed possible that joint service initiatives will have most potential in those parts of the public sector where there is a

¹⁴ And that even for any given initiative it may be possible to vary the range of involvement or services taken.

well established ethos of collaboration and competitive pressures are less (Becker and Patterson, 2005; Gamm and Benson, 1998).

Finally it would be valuable to examine the relationships between the motivating and constraining factors and in particular the potential for tradeoffs between them – for example what is the specific impact of maintaining alternative providers – in an attempt to reduce dependency – on externality benefits.

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APPENDIX 1: SUMMARY DATA DISPLAY

	Motivation	
	Network externality	Other factors
eMobile	<ul style="list-style-type: none"> • Network agnostic not provider specific • Need multiple users to be attractive • <i>Could</i> provide consolidated and comparative demographic data 	<ul style="list-style-type: none"> • Defray costs over multiple users • Access to skills, sites and phone manufacturers
Retailer 1	<ul style="list-style-type: none"> • Need multiple users to be attractive 	
Retailer 2	<ul style="list-style-type: none"> • Need multiple users to be attractive 	<ul style="list-style-type: none"> • Cost prohibitive to implement service individually
eBreak	<ul style="list-style-type: none"> • Extend distribution reach • Ease of combining travel packages (accommodation, entertainment etc) • Greater the participation, the greater the attractiveness 	<ul style="list-style-type: none"> • Consolidation reduces cost
Accommodation Provider 1	<ul style="list-style-type: none"> • Extend distribution reach – but often existing rather than new customers • Destination for choice 	<ul style="list-style-type: none"> • Savings from outsourced bookings • Greater promotion resources
Accommodation Provider 2	<ul style="list-style-type: none"> • Destination for choice • Impact of new entrants extending from other sectors 	<ul style="list-style-type: none"> • Previously reach attainable limited by available resources
eBank		<ul style="list-style-type: none"> • Can fund development jointly • Ensure no big cross subsidy of the small by the large
Credit Union 1		<ul style="list-style-type: none"> • Cost savings • Cost sharing • Voice • Access to skills and capabilities • Not all credit unions have the same needs
Credit Union 2		<ul style="list-style-type: none"> • Access to services for small • Ensure sure no big cross subsidy of the small by the large

	Constraints	
	Resource based theory	Resource dependency theory
eMobile	<ul style="list-style-type: none"> • Provide as a platform • Users control usage • Users from multiple sectors – non competing 	<ul style="list-style-type: none"> • Subscribe to the service • No restrictions on content or format
Retailer 1	<ul style="list-style-type: none"> • Stock and pricing key 	<ul style="list-style-type: none"> • Extra channel • Limited use
Retailer 2	<ul style="list-style-type: none"> • Information service • Promulgate offers immediately 	<ul style="list-style-type: none"> • Extra channel • Limited use
eBreak	<ul style="list-style-type: none"> • Service differentiator • Brand – but often significant variation within a chain • Choice often price driven 	<ul style="list-style-type: none"> • Multiple markets and sectors • Easy to switch because little integration • Manage pricing and availability • Seeks to own the customer
Accommodation Provider 1	<ul style="list-style-type: none"> • Many comparable hotels • Standard template • Service/experience differentiator • Star rating differentiator 	<ul style="list-style-type: none"> • Customer bypass to save fees • Use top 3 sites as alternatives • Manage pricing and availability • Multiple channels
Accommodation Provider 2	<ul style="list-style-type: none"> • Serviced apartments serves as differentiator • Brand 	<ul style="list-style-type: none"> • Cheaper & more flexible than previously dominant alternatives • Impact of supply and demand • Manage pricing and availability • Use multiple services and maintain own site • Limited to distressed inventory
eBank	<ul style="list-style-type: none"> • Key differentiator is the market niche targeted 	<ul style="list-style-type: none"> • Risk of large players pulling out • Own the service provider • Alternatives available
Credit Union 1	<ul style="list-style-type: none"> • Front end IT enables differentiation but not back end • Trusted advisor as core capability 	<ul style="list-style-type: none"> • Commercial partners more responsive than credit union ones • Problems when large credit unions move off a solution • Solutions all comparable • Need for, and problems of achieving, compromise • Largest credit unions have the greatest say • Supplier relationships long term & changed infrequently • Aggregated purchasing power often sufficient
Credit Union 2	<ul style="list-style-type: none"> • Key differentiator is the market niche targeted 	<ul style="list-style-type: none"> • Risk of large players pulling out • Need for, and problems of achieving, compromise • Largest credit unions have the greatest say • Commercial partners more responsive than credit union owned ones • Cost of breaking contracts • Cost of change