

**Journal of Information Technology Management**

ISSN #1042-1319

**A Publication of the Association of Management**

## **IDENTIFYING THE FACTORS MOTIVATING AND SHAPING COSOURCING IN THE FINANCIAL SERVICES SECTOR**

**MARK BORMAN**

THE UNIVERSITY OF SYDNEY

[m.borman@econ.usyd.edu.au](mailto:m.borman@econ.usyd.edu.au)

### **ABSTRACT**

Cosourcing describes a situation where organisations seek to outsource services jointly. From a strategic perspective, this paper seeks to assist organisations by providing an approach that combines consideration of economies of scale with resource based and resource dependency theories to identify the motivators and shapers of the decision. Empirically tested with a case study in the financial services sector, the approach suggests that a broader set of influences is at work than first thought. Furthermore it is suggested that cosourcing is not a homogenous concept and that a variety of choices are available – with differences in scope and the depth of cooperation required.

**Keywords:** Cosourcing, finance, economies of scale, core capability, resource dependency

### **INTRODUCTION**

The creation of cooperative agreements between organisations has been common for a number of years. Often though such agreements have been restricted to pre-competitive activities or been between organisations at different positions in the value chain (see for example [21], or [5]). Recently however organisations at the same point in the value chain have started to actively seek operational opportunities. In the UK, for example, three banks formed a joint venture with Unisys for cheque processing [29]. While Gallivan and Oh [14] recognize a class of outsourcing – cosourcing – where a group of organisations come together to obtain a common service from a supplier, a review of the literature suggests that little research has been conducted on the phenomenon. It is likely that not all cosourcing initiatives will be appropriate and it would be useful for organisations to have an understanding of the factors that will contribute to success. Seddon [33] for example provides an account of the Australian Federal Government’s failed attempt to introduce IT outsourcing by “grouping government agencies (mainly departments) into clusters” (p5).

In focusing on cosourcing this paper reflects the starting point of much of the research in IT outsourcing by seeking to address the questions of *why* cosource, *what* activities should be cosourced and *how* to ensure the benefits don’t get captured by the supplier. A number of authors have suggested that these are strategic decisions [38], [28], [18]. While research examining the motivation for 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 [8] and form the core of the current research.

The remainder of the paper comprises two sections, The first outlines a multi-perspective approach to the cosourcing decision. The second assesses that approach through an empirical study of credit unions in Australia.

The paper contributes to the literature in three principal ways. Firstly it extends outsourcing research to a cosourcing context and identifies factors that shape the decision and the choices available. Secondly, the research allows comparison between organisations that have chosen to cosource and those that have chosen not to.

Thirdly it highlights a complexity of outsourcing that extends beyond total or selective outsourcing and IT outsourcing or Business Process Outsourcing (BPO) and encompasses layers of potentially intertwined decisions.

## THE COSOURCING DECISION

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 [9] but rather can be seen as complementary (and have previously been combined, for example by Grover et al [16]). As Barringer and Harrison [3] suggest the principal focus of the resource based

theory is internal to the firm while that of resource dependency is external. Here the approaches are synthesised so that the decision regarding what areas to enter into cosourcing 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 organisations outsourcing individually to cosourcing also requires the addition of an additional consideration – that cosourcing offers advantages over acting individually. As Figure 1 illustrates it is proposed that economies of scale can provide such an advantage.

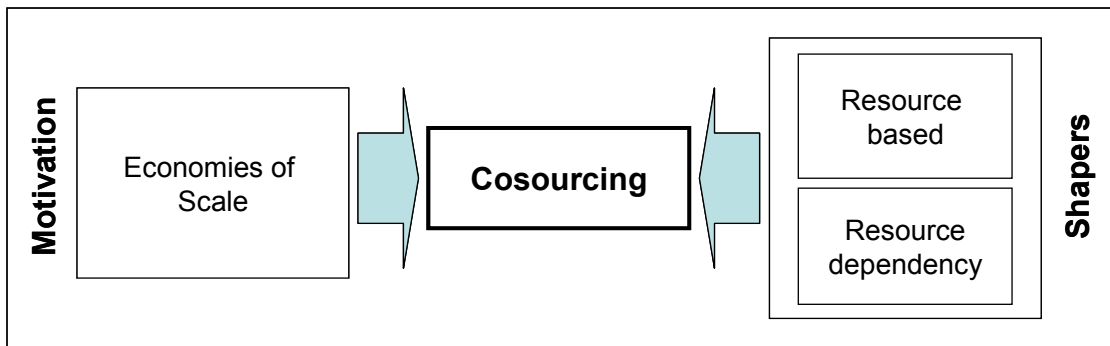


Figure 1: Motivators and Shapers of the Cosourcing Decision

### Economies of Scale

Economies of scale refer to production and distribution efficiencies which come with larger size [7]. From a supply side perspective the benefits have long been recognised as a motivation for outsourcing in circumstances where in-house production does not achieve the minimum efficient scale [38]. Cosourcing introduces a demand side dimension. As a group of organisations aggregate their demand a potential supplier should become better placed to realise economies of scale in meeting it. A key factor influencing whether economies of scale can be realised through cosourcing will be the extent to which an activity is specific to a given organisation [26]. Within a single multibusiness organisation research has identified production cost benefits from applying common resources across the various business units [12], [30]. Cosourcing requires that such benefits are also realisable across independent organisations.

*Hypothesis 1: Activities which are appropriate for cosourcing are those that are standard across multiple organisations and offer economies of scale.*

### Resource Based Theory

Resource based theory suggests that firms secure success by utilising their unique resources comprised of intangible and tangible assets that are tied semi-permanently to the firm [40]. From the resource based perspective, success is maximised where organisations focus their attention on those areas where their distinctive capabilities lie [17] and rely on others for the provision of ancillary activities. According to Barney [2] the potential of a resource to generate sustained competitive advantage is governed by the confluence of four characteristics: value, rareness, imitability and substitutability. It has been suggested [2] [27] that information system related resources are unlikely to satisfy the requirements as of themselves but may if leveraged by complementary human and business resources. Mata, Fuerst and Barney [22] however suggest that some information system related resources – for example proprietary applications – are capable of providing a sustained competitive advantage.

*Hypothesis 2: Cosourcing will be limited to those activities that do not of themselves provide a sustained*

*competitive advantage for any of the organisations involved.*

### Resource Dependency Theory

Resource dependency states that organisations need to adopt appropriate management strategies to manage their relationships with external parties to mitigate dependencies and ensure those relationships work in their favour [25], [37], [32]. Thompson [36] identified three different types of dependency – pooled, sequential and reciprocal – that present distinct management challenges. According to Teng et al [35] 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. In an outsourcing context, Rouse and Corbitt [31] also recognise that dependency may change over time as the initial decision reshapes the competitive landscape. From the perspective of this paper managing dependency provides the key as to whether organisations can prevent economy of scale benefits being appropriated by the supplier. As Katz [19] suggested it is not enough for organisations to group together to amass scale – they also have to be able to present a credible threat that they can switch suppliers or produce the good themselves

*Hypothesis 3: Organisations engaged in cosourcing will take steps to mitigate any dependency on the service supplier both in the short and the long term.*

## METHODOLOGY

The specific phenomenon of interest was successful cosourcing and an examination of the factors that motivate and shape it. The financial services sector was selected as the broad domain for the empirical work as it has been identified as well suited to outsourcing due to the repetitive nature of many processes and their information intensive nature [41]. The focus was on credit unions which are member owned financial institutions that provide a comprehensive range of retail banking products and services. Around 180 credit unions currently operate in Australia with 3.6 million members and more than \$29 billion in assets. The initial unit of analysis was the IT services that support the core banking system of credit unions. This was subsequently extended to also include the core banking system itself [42]. A core banking system is the IT application that provides the transaction processing capabilities – encompassing back office, origination, front office and teller processing activities – that enables a credit union to develop and manage its various savings and loans products. The IT

services to support the operation of a credit union's core banking system are provided either internally or by a computer bureau. Bureaus vary with regard to whether they are independent commercial providers, or collectively owned by credit unions, and whether one or multiple core banking systems are supported. Given that little research has been conducted to understand the phenomenon of cosourcing a qualitative – case study based – approach was determined to be appropriate [4], [34]. The research was primarily outcome rather than process oriented – seeking to identify the factors that influence cosourcing decisions rather than the process of making those decisions [24].

In determining the research approach it was recognised that there was a requirement to balance internal and external validity such that the research extends beyond an in depth analysis of a single organisation but also represents an analysis that is more than superficial<sup>1</sup>. It was also thought that the onset of theoretical saturation [15], whereby incremental learning becomes negligible, could be best delayed by focusing interviewing on an extended range of credit unions rather than seeking multiple interviews within a restricted range. That decision was also guided by the nature of the research which was to examine cosourcing from a strategic perspective. As such interviews needed to be conducted with members of the senior management directly involved in the cosourcing decision. However given the size of credit unions the senior decision making management body often comprised the CEO or General Manager alone. It was therefore decided that the primary locus of triangulation would be between different organisations [42]. Of course, where possible and appropriate multiple interviews were conducted within a credit union to provide internal triangulation. While not ideal such a situation is not unique and there are numerous instances of other research (for example [1], [39]) where it has not been possible or has been nonsensical to conduct interviews with multiple actors within an organisation. Furthermore in all cases it was possible to achieve a degree of internal triangulation through the review of credit union documentation – primarily annual reports and board papers.

The sampling strategy followed can be seen as a combination of intense (in that the particular instance of cosourcing selected was one that was perceived to be successful) and maximum variation (in that a diverse range of individual credit unions were selected in order to identify common factors that cut across variations) [24]. Because cosourcing was not universal amongst credit

<sup>1</sup> Such a tradeoff between depth and breadth is acknowledged by Patton [24]

unions it was possible to examine whether the factors identified influenced the decision both from the perspective of credit unions that cosourced and those that did not. This represents an extension to much of the existing case study research on outsourcing where the focus has solely been on organisations that outsource (for example, [20], [13]).

A total of 14 credit unions were interviewed representing over 25% of the total asset base of the sector. Table 1. provides details of the individual credit unions. Interviews were between one and two hours in duration and a semi-structured interview protocol was followed with questions across three principal themes: Why cosource, what factors influence the choice of activities cosourced and how are the supply arrangements configured. While the underlying rationale was purposeful, to collect data pertinent to the theoretical lenses it was deliberately non-directive so as not to preclude the emergence of concepts not previously considered [24]. As such it is in line with the methodology presented by Eisenhardt [11]. Such an approach was useful in that it allowed the initial unit of analysis to be extended to incorporate the core banking system along with the supporting IT services when it was determined that the decision making process was often intertwined. Furthermore it allowed the research to move beyond testing the proposed hypotheses to also refine understanding of the factors shaping cosourcing.

Credit Union	Total assets	Interviewees
CU1	< \$100m	General Manager
CU 2	< \$100m	General Manager
CU 3	\$100-\$500m	CEO; IT Manager
CU 4	> \$500m	CEO
CU 5	> \$500m	General Manager; Finance Manager
CU 6	\$100-\$500m	CEO
CU 7	>\$500m	CEO; General Manager
CU 8	\$100-\$500m	CEO; Corporate Manager
CU 9	>\$500m	Deputy CEO
CU 10	< \$100m	Deputy Chairman
CU 11	>\$500m	Manager IT; Manager Finance
CU 12	\$100-\$500m	CEO
CU 13	>\$500m	General Manager; Finance Manager
CU14	\$100-\$500m	CEO

Table 1: Credit Unions Details

With regard to analysis, data was first reviewed and coded in terms of its relationship to economies of scale and the resource based and resource dependency theories. Descriptive codes were used and interview transcripts coded in sentence or multi-sentence chunks. Such an approach is in accord with the recommendations of Miles and Huberman [23] who suggest that the level of coding detail should be aligned with the objectives of the research. As also suggested by Miles and Huberman [23] 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 motivating or shaping factors could be identified<sup>2</sup>.

## RESULTS

As shown in Figure 2, the interviews suggest that economies of scale were an important, but not the only, motivator for cosourcing. Furthermore cosourcing, as theorised, is limited to activities perceived as non-core and the value of managing dependency is recognised. The interviews also suggest that there are a variety of cosourcing models – differing in the depth of cooperation required and their scope.

### Motivation

Core banking platforms and the related IT services were seen by the majority of credit unions as areas where they had similar needs and could benefit from coming together to secure access to economies of scale.

*“We are a medium sized credit union and we want access to those services, we rely on some of those large credit unions to get that aggregated purchasing power so that we get a reasonable price”* CU14

While volume based cost savings were identified as the principal benefit additional advantages were suggested for small and medium sized credit unions – including access to technical and managerial capabilities and voice or the ability to get on the radar screen of suppliers.

*“small get access to new technology, large get volume based transaction discounts”* CU5

*“If I was to negotiate, number one, they’d say well who are you? How big are you? How many members do you have etc., and they’d basically put me on the bottom of the pile”* CU6

<sup>2</sup> A summary data display table is included as an Appendix

Credit unions recognised the need to ensure a satisfactory outcome for all participants if cosourcing was to be successful.

*“So we try and keep it a win/win, and you have to because that’s the commercial reality. If it’s not a win/win, then people move somewhere else”* CU5

It was also acknowledged that different credit unions have differing starting points and that this will affect the benefits they can realise.

*“We’ve got one of the highest levels of productivity per employee of any credit union in the country.. So, I don’t know of anywhere I could go to do it better than what I’m doing at the moment”* CU7

With two exceptions, credit unions perceived the approach they had adopted to be the most appropriate one and to be successful<sup>3</sup>. The two exceptions were CU7 that had chosen cosourcing after a merger as a result of the costs of breaking a pre-existing contract that one of the mergees had in place and CU6 that had started to have some doubts as to whether it was including all the relevant components in its cost comparisons. A final point of interest was that in addition to their original motivation some credit unions that had a shareholder stake in a cosourcing provider had started to recognise the potential for a new revenue stream.

*“the money is in the bureau .. if you’re making a couple of cents a transaction and you get a big customer and they’re doing, you know, 20 - 30 million transactions a year, that’s where you make your money”* CU7

## Factors Shaping

**Resource Based.** In only a few cases was the basic core banking system or supporting IT services seen as core and in those circumstances it was retained in house.

*“we have our most powerful asset on site and we control it and that is our data.. you don’t sell your most important asset and you don’t let*

<sup>3</sup> Perceptions of success were relied upon because of the difficulties in effectively measuring and comparing performance across a disparate group of credit unions – a difficulty readily acknowledged by the credit unions themselves: *“How you benchmark yourself ... because no one in the big seven group are running exactly the same model”* CU7

*other people manage it.. And I think that’s really important to this business, particularly with on-line channels to day”* CU11

The majority of credit unions saw their core banking system and related IT services as critical not core.

*“Because it’s your core banking system, everything hangs off it and everything goes through it.. you can’t run the business without it. Yes it is a tool, but it is just so critical it has got to be part of every consideration”* CU9

For these credit unions their core capabilities lay elsewhere – in areas ranging from personal service to having the best savings and loans products available in the market.

*“[key is] the service proposition, because we are still small niche players the research still tells us that our service proposition is better, more personal, more friendly”* CU4

*“core is anything that touches the members.. happy to outsource the back office – things that the customer will not notice”* CU5

The credit unions were also generally of the view that even with a common core banking platform there were considerable opportunities to configure it differently and build upon it with front end applications to develop points of differentiation.

*“with enough parameters that you can make it look and feel different and be different”* CU9

However it was also recognised that if you diverged too far from the core you could create problems for yourself.

*“the minute you are a very highly modded site it costs you much, much more to get everything bolting on the way it should”* CU11

A second reason given for not engaging in cosourcing was that it compromised flexibility.

*“Why did we remain in-house? .. It gives us flexibility.. If we want to run reports today, two days time, right this minute or whatever, we have that flexibility to run reports. Whereas if you’re with an IDPC<sup>4</sup>, you have to put in a request for work, explain why, give some priority to it. So we don’t quite have the flexibility”* CU6

<sup>4</sup> IDPC – Independent Data Processing Centre. The common term for the cosourced computer bureaus used by credit unions

*“better off being masters of our own destiny and staying in-house... enabled us to do was move very quickly with product development” CU9*

Core banking system and IT services cosourcing	
<b>Motivation</b> <ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Access to capabilities</li> <li>• Voice</li> <li>• Revenue</li> </ul>	<b>Factors shaping</b> <ul style="list-style-type: none"> <li>• Non core</li> <li>• Standardisation with differentiation</li> <li>• Dependency</li> </ul>
<b>Choices</b> <ul style="list-style-type: none"> <li>• Depth of cooperation</li> <li>• Degree of commercialisation</li> </ul>	

Figure 2: Motivators, Shaping Factors and Choices for Cosourcing by Credit Unions

**Resource Dependency.** Credit unions generally recognised the benefits of having multiple alternative suppliers.

*“they’re negotiating agreements and if we don’t like it we can find another bureau” CU14*

*“I think that first of all competition is good for price, competition is good for performance and I think competition is good for progress, you know, what development enhancements come. So I’m a great believer in competition.” CU5*

It was recognised however that decisions were long term and there were differing perceptions as to how easy actual change was.

*“do not revisit the decision often because it is such a major task to change” CU6*

*“It can be done, if the price is right, you do it. If the service level at the other place looks like it’s going to be better, you do it. We would move, if the numbers were right” CU9*

Considerable effort was therefore often put into the initial selection.

*“we have a very rigorous due diligence process we go through looking at the organization. We go and watch their directions, you know, the key people risk. What services they are providing for us and then we have a very detailed contract negotiation process as well. So contracts are put in place on what are the core terms and conditions, events of default, triggers for review, service level agreements as well as the pricing structure that then sits behind that.” CU13*

A number of credit unions felt that dependency was less of an issue, at least with regard to IT services, because they were often provided by bureaus that were cooperatively owned by the credit unions.

*“[cosourced computer bureau] is a halfway house but gives more control than if outsourced to a pure third party and confidence that they will continue to meet our needs .. still master of our own destiny” CU5*

It was however also recognised that an additional dimension to dependency is introduced with cosourcing – with other credit unions. In structuring cosourcing arrangements interviewees suggested that one of the most difficult tasks was managing the balance between the individual credit union and the group as a whole.

*“There is inherent compromise in all of these systems...” CU4*

*“I think there is always strength in numbers, but it is also making sure that the people who are then agreeing to the development, there is a common understanding and agreement of what needs to be done. I think the numbers give you benefit but it is making sure that everybody is on the right page and agreeing to the right direction and looking at it from, not only their self interest point of view, but the benefit of all parties involved.” CU13*

**Choices**

A variety of options have been taken with regard, for example, to whether the core banking system and the supporting IT services constitute an inseparable bundle,

whether additional activities will be provided and even whether the technical operations themselves will be further subcontracted out. Figure 3 illustrates the principal alternatives available with regard to the cosourcing of both IT services and core banking systems<sup>5</sup>. It should be recognised however that the distinction between aggregating demand and joint operations or development are not generally absolute but more of a continuum. For example even where the focus is on providing purchasing power there will often be a mechanism set up to manage the relationship – to a greater or lesser degree – between the group of credit unions and the supplier.

**IT services.** The cosourcing of IT services differs with regard to whether focus is primarily on buying power or operation, the service provided and whether the bureaux are owned by credit unions or third party commercial entities.

*“The host agreements are all separate .. So this is just purchasing power.. What we’re trying to do is to get as much of the cost benefit without selling your soul. We think we’ve got a half way house. So why go that extra step if you don’t have to. That’s our position. We negotiate together, but at the end of the day we are separate entities. We are separate businesses, with the same supplier. That works for us.”* CU3

Where the cosourcing is oriented towards operation there is variation with regard to the functionality provided, how much of that is further subcontracted out and how standardised the operating environment is.

*“[the bureau] have back to back contracts with [a commercial provider]– the model has been for many years for [the bureau] to have a common user agreement with each of its credit union users with a common expiry date. And back that off with a facilities management agreement with [the commercial provider] with the same expiry date.”* CU12

*“if you start running two platforms on your bureau, then it adds an extra layer of cost. It’s much more efficient to run only one platform.”* CU5

*“I think it’s [Internet banking] part of the business that they [computer bureau] don’t really want to get involved with.”* CU1

A number of the computer bureaux are actually owned by the credit unions. While some see this as providing advantages over relationships with commercial entities other credit unions are less sure seeing the ownership structure as inhibiting the development of effective management

*“Sometimes I think that familiarity breeds contempt is one way of putting it. The funny thing is that because of that I think we take liberties that you wouldn’t want a pure commercial basis ... I find that our better relationships are on a pure commercial basis with commercial companies where everything is black and white rather than the grey and you’re not stepping on toes and you’re not doing those things.”* CU14

The difference between commercial and cooperatively owned may also sometimes be semantic. Indeed one of the credit union owned computer bureaux seeks to operate as a standalone commercial vehicle.

*“the company [a cooperatively owned entity] stands up in its own right and conducts its business”* CU7

Furthermore dependency can be reintroduced as a result of the nature of the contracts struck or the membership structure.

*“you have to look at what it’s going to cost you to pay it out .. a long-term contract with IDPC .. the payout was [X] million”* CU4

**Core Banking System.** One difference between the core banking systems is how licensing is handled and development funded. For one an overarching price structure has been negotiated but credit unions sign individual licences. With the other two the head licence is owned by a credit union owned entity from whom individual credit unions take out sub-licences.

Another variation, in part a result of the structure of the core banking system itself and in part a result of credit union preferences, is the scope of the functionality provided.

*“The number of suppliers that you are dealing with brings complexity for your depth of interface and then managing, you know, if you are making changes in your core one does it*

<sup>5</sup> It should also be noted that both there are examples of credit unions that have chosen to outsource or retain inhouse one or both.

*happen in the other application. What we have tended to find is that where we sit at the moment with the number of suppliers and the interfaces*

*that it hasn't reached a point where there is an issue."* CU13

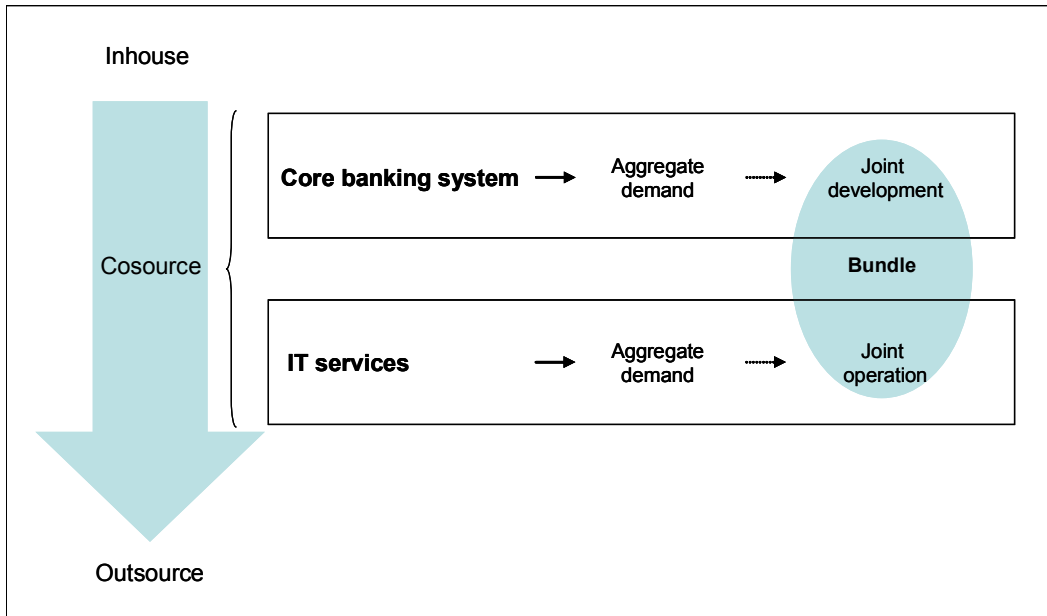


Figure 3: Principal Cosourcing Choices

The extent and structuring of joint development also varies. In one case development is funded by a subgroup of credit unions, or an individual one, though typically it is then made available to the rest of the group as part as an upgrade.

*"But the basic principle for development is a credit union customer will put in a development request ..[which] will then put that out to all of its customer base and says okay, this is what we've been asked to do. Is there anybody else interested in sharing the cost of this development? If there is then they do, and if there's not, it goes back to the person who requested it saying you're on your own, you've got to pay for it yourself if you want it .."* CU5

In another case however there seems to be more agreement up front regarding common developments.

*"so we all pay annual subs and then [head licence holder] negotiate with [the software provider] to get upgrades done which we share"* CU4

Figure 4 illustrates the range of services and options for core banking systems and IT services. What is also clear

from the interviews is that the core banking system and related IT services are but one piece in a complex outsourcing milieu that, even within the domain of transactional services, is both layered and modular (see Figure 5).

*" FDI [a payment switch provider] is still a contract that all credit unions have to ensure our cards work in every ATM and EFTPOS terminal in Australia ... [Central Bank] owns our Redicard [ATM] program, .. all our direct entries.. , our B-Pay services ... the credit card is now outsourced to Citibank"* CU4

*"Swift is our IVR telephone banking .. our website is hosted at webcentral"* CU1

*"we keep an outsource registry and I think there is about 200 outsourced activities on that register at the moment"* CU13

*" a RAN scheme at the time. Which is a ready access network scheme – where it was exactly that, credit unions had an agreement whereby anybody could go to another credit union, transact and there was a payment for doing the transaction"* CU9



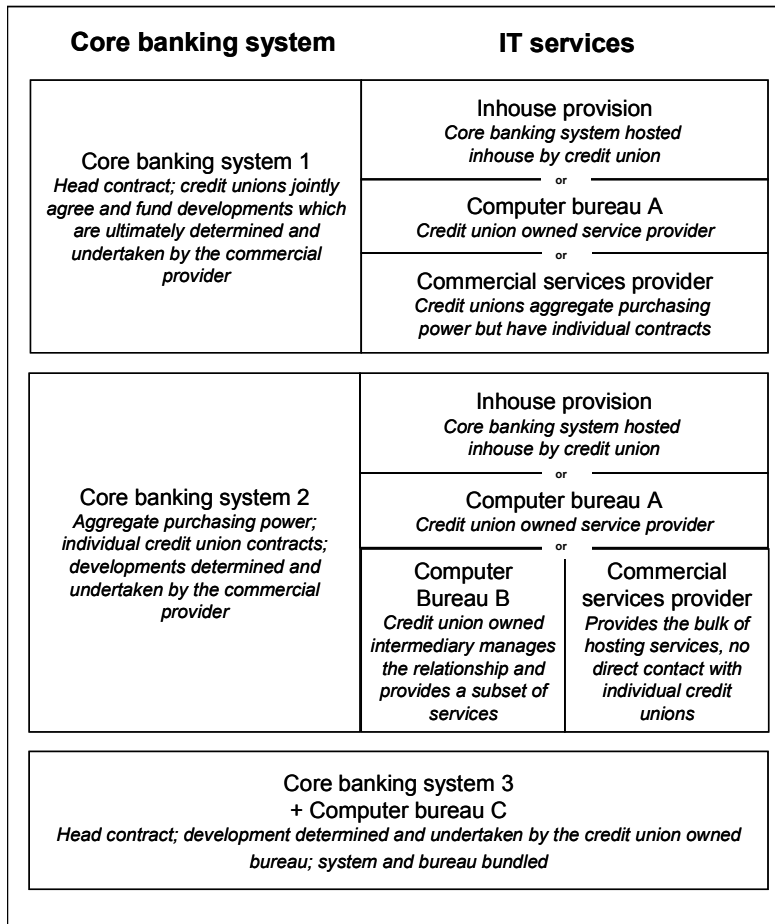


Figure 4: Core Banking System and Hosting Options

## DISCUSSION, CONCLUSION AND FUTURE RESEARCH

The basic set of motivators and shapers outlined – derived from economies of scale, resource based theory and resource dependency theory – appears potentially to have merit with regard to the cosourcing decision but also needs to be refined and extended. In terms of the specific hypotheses proposed:

*Hypothesis 1: Activities which are appropriate for cosourcing are those that are standard across multiple organisations and offer economies of scale.*

The interviews suggest that cosourcing is attractive in order to access cost benefits through economies of scale. There are likely however to also be other factors driving the decision such as voice, or the ability to get noticed by suppliers, and access to additional capabilities. As such it is likely to be worthwhile to consider the influence of other motivating factors on the

cosourcing decision. One such factor may be the presence of externalities. Network externality theory suggests that the “value of a unit of a [network] good increases with the number of units sold” [10]. According to Katz and Shapiro [19] externalities may be either direct indirect and the desire for voice may represent an example of the latter. It is also interesting that after the decision to cosource some credit unions have recognized the potential for it to provide an additional revenue stream.

In addition the possibility of extending the range of activities that cosourcing is appropriate for is raised through the ability to vary the configuration of a “standard” or “common” activity. As such it should be easier to balance the twin demands of homogeneity – to realize economies of scale – and the local contexts and needs of individual organizations.

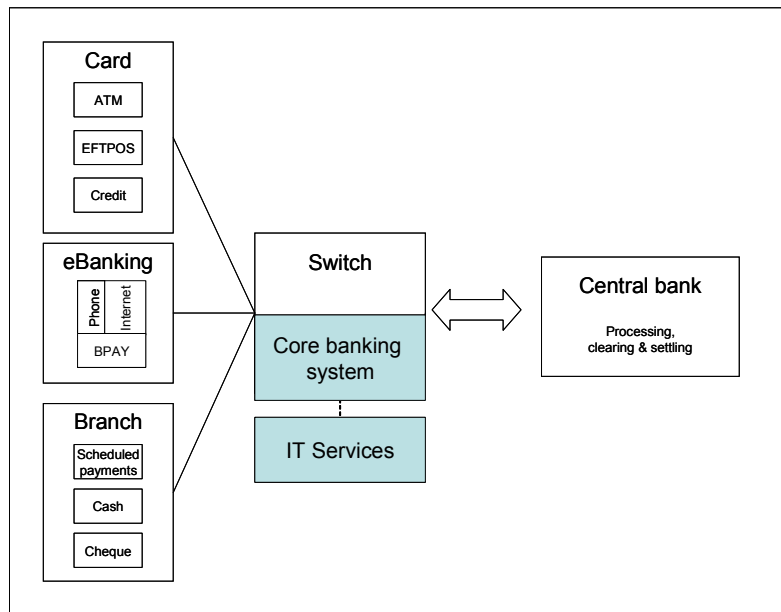


Figure 5: Simplified Map of Transaction Processing – All Elements of Which May be Outsourced

*Hypothesis 2: Cosourcing will be limited to those activities that do not of themselves provide a sustained competitive advantage for any of the organisations involved.*

The cases suggest that that the activities cosourced are non-core – though they may be critical<sup>6</sup> – and generally do not appear to meet the criteria of Barney [2].

As Figure 6 illustrates though it is somewhat simplistic to talk of cosourcing per se and that there are several flavours that vary with regard to the degree of cooperation and the scope. It is also clear that credit unions are not generic. They vary with regard to what they consider core, their costs, capabilities and the extent to which they want to control their own destiny. This suggests that the cosourcing choice will be contingent upon the organisational context – internal and external – of a specific credit union – an outcome in line with the work of Brown and Magill [6]<sup>7</sup>.

<sup>6</sup> The extension of resource based theory to include core, non-core critical and non-core categories has been made previously by Quinn and Hilmer [28]

<sup>7</sup> Of course this assumes that all of the credit unions have made decisions that are *actually* as good as they perceive them to be

*Hypothesis 3: Organisations engaged in cosourcing will take steps to mitigate any dependency on the service supplier both in the short and the long term.*

With regard to dependency multiple alternative cosourcing consortia appear to have emerged and help ensure that a supplier does not come to dominate. However there is some disagreement as to how realistic the ability to move between them is. It is also interesting that while credit unions have also often sought to manage dependency by cooperatively owning a service provider this may have a negative impact on performance.

Cosourcing also appears to introduce an additional dimension to dependency – dependency upon other credit unions, manifest in the need to compromise and reach collective agreements. The nature of that inter-credit union dependency does not appear to sit easily within any of the categories suggested by Thompson [36] in that it appears related more to a common input than the treatment of any output.

The research conducted represents a useful first attempt to identify the motivators and shapers of cosourcing. It has also established that cosourcing is not a unitary concept. Furthermore the research represents a rare, if not unique – within the domain of

outsourcing, examination of organizations that have chosen to pursue a particular option together with those that chosen not to. Finally it illustrates the complexity of

the outsourcing milieu of which cosourcing, in this instance, represents one component.

		Core banking system	
		Aggregate demand	Joint Development
IT services	Inhouse	CU6 CU9 CU11	
	Aggregate demand		CU3 CU13
	Joint operation	CU1 CU8 CU2 CU10 CU12	CU4 CU7 Not Bundled Bundled CU14 CU5

Figure 6: Sourcing Choices of Credit Unions

Future research could usefully seek to look in more detail at cosourcing structures. Is there for example an optimum number of participants beyond which the incremental transaction costs of managing the cosourcing arrangement outweigh the incremental scale benefits. Are there preferred compositions – for example that avoid or embrace the inclusion of a partner that is of a significantly larger scale than the other participants. What is the optimum number of alternative cosourcing providers and is this sustainable within a sector. It might also be of value to examine the impact of different legislative frameworks on cosourcing. Such frameworks may be more or less accommodating of cooperation per se or of initiatives that, for example, seek to limit the number of participants to the exclusion of organisations in a sector (see for example [21]). A final area of interest for future research could be a longitudinal study of those credit unions that consider cosourcing as a potential new revenue stream. Will such a stance negate some of the benefits – for example as management resource are diverted? Or could it lead to the emergence of new business models – and if so what might be the implications?

**REFERENCES**

[1] Applegate, L.M. and Elam, J.J. “New Information Systems Leaders: A Changing Role in a Changing

World,” *MIS Quarterly*, Volume 16, Number 4, 1992, pp. 469-490.  
 [2] Barney, J. “Firm Resources and Sustained Competitive Advantage,” *Journal of Management*, Volume 17, Number 1, 1992, pp.99-120.  
 [3] Barringer, B.R. and Harrison, J.S. “Walking a Tightrope: Creating Value Through Interorganizational Relationships,” *Journal of Management*, Volume 26, Number 3, 2000, pp.367-403.  
 [4] Benbasat, I., Goldstein, D.K. and Mead, M. “The Case Study Research Strategy in Studies of Information Systems,” *MIS Quarterly*, Volume 11, Number 3, 1987, pp. 369-386.  
 [5] Brandenburger, A.M. and Nalebuff, B.J., *Coopetition*, Doubleday, New York, 1996.  
 [6] Brown, C.V. and Magill, S.L. “Alignment of the IS Function with the Enterprise; Toward a Model of Antecedents,” *MIS Quarterly*, Volume 18, Number 4, 1994, pp.371-403.  
 [7] Chandler, A.D., *Scale and Scope; The Dynamics of Industrial Capitalism*, Harvard University Press, Cambridge, 1990.  
 [8] Dibbern, J., Goles, T., Hirschheim, R. and Jayatilaka, B. “Information Systems Outsourcing: A Survey and Analysis of the Literature,” *DATABASE*, Volume 35, Number 4, 2004, pp.6-102.

- [9] Duncan, N.B. "IS Integration in the Internet Age," in: Hirschheim, R., Heinzl, A., and Dibbern, J. (Eds.), *Information Systems Outsourcing*, Springer, Berlin, 2002.
- [10] Economides, N. "The Economics of Networks," *International Journal of Industrial Organization*, Volume 14, Number 6, 1996, pp.673-699.
- [11] Eisenhardt, K.M. "Building Theories from Case Study Research," *Academy of Management Review*, Volume 14, Number 4, 1989, pp.532-550.
- [12] Farjoun, M. "The Independent and Joint Effects of the Skill and Physical Bases of Relatedness in Diversification," *Strategic Management Journal*, Volume 19, Number 7, 1998, pp.611-630.
- [13] Feeny, D., Lacity, M. and Willcocks, L. "Taking the Measure of Outsourcing Providers: Successful Outsourcing of Back Office Business Functions Requires Knowing not Only Your company's Needs but Also the 12 Core Capabilities That are Key Criteria for Screening Suppliers," *Sloan Management Review*, Volume 46, Number 3, 2005, pp.41-49.
- [14] Gallivan M.J. and Oh W. "Analysing IT Outsourcing Relationships as Alliances Among Multiple Clients and Vendors," *Proceedings of the 32nd Hawaii International Conference on System Sciences*, Maui, Hawaii, 5-9 January, 1999.
- [15] Glaser, B.G. and Strauss, A.L., *The discovery of Grounded Theory*, Aldine Publishing Company, Chicago, 1967.
- [16] Grover, V., Cheon, M.J. and Teng, J.T.C. "An Evaluation of the Impact of Corporate Strategy and the Role of Information Technology on IS Functional Outsourcing," *European Journal of Information Systems*, Volume 3, Number 3, 1994, pp.179-190.
- [17] Hagel, J.III. and Seely Brown, J. "Your Next IT Strategy," *Harvard Business Review*, Volume 79, Number 9, 2001, pp. 105-113.
- [18] Jennings, D. "Strategic Guidelines for Outsourcing Decisions," *Strategic Change*, Volume 6, Number 2, 1997, pp. 85-96.
- [19] Katz, M.L., and Shapiro, C. "Systems Competition and Network Effects," *Journal of Economic Perspectives*, Volume 8, Number 2, 1994, pp.93-115.
- [20] Lacity, M.C., Willcocks, L.P. and Feeny, D.F. "The Value of Selective IT Sourcing", *Sloan Management Review*, Volume 41, Number 3, 1996, pp.13-25.
- [21] Mariti, P., and Smiley, R.H. "Co-operative Agreements and the Organization of Industry", *The Journal of Industrial Economics*, Volume 31, Number 4, 1983, pp.437-451.
- [22] Mata, F.J., Fuerst, W.L. and Barney, J.B. "Information Technology and Sustained Competitive Advantage," *MIS Quarterly*, Volume 19, Number 4, 1995, pp. 487-505.
- [23] Miles, M.B. and Huberman, A.M., *Qualitative Data Analysis: An Expanded Sourcebook*, (2nd ed.), Sage, Thousand Oaks, 1994.
- [24] Patton, M.Q., *Qualitative Research and Evaluation Methods*, (3rd ed.), Sage, Thousand Oaks, 2002..
- [25] Pfeffer, J. and Salancik, G.R., *The External Control of Organizations: A Resource Dependence perspective*, Harper and Row, New York, 1978.
- [26] Poppo, L. and Zenger, T. "Testing Alternative Theories of the firm: Transaction cost, Knowledge Based and Measurement Explanations for Make-or-Buy Decisions in Information Services," *Strategic Management Journal*, Volume 19, 1998, pp. 853-877.
- [27] Powell, T.C. and Dent-Micallef, A. "Information Technology a Competitive Advantage: The Role of Human, Business and Technology Resources," *Strategic Management Journal*, Volume 18, Number 5, 1997, pp.375-405.
- [28] Quinn, J.B., and Hilmer, F.G. "Strategic Outsourcing," *Sloan Management Review*, Volume 35, Number 4, 1994, pp.43-55.
- [29] Roberts, C. "Back-Office Central," *Business Review Weekly*, Jan 22-28, 2004, p18.
- [30] Robins, J. and Wiersema, M.F. "A Resource Based Approach to the Multibusiness Firm: Empirical Analysis of Portfolio Interrelationships and Corporate Financial Performance," *Strategic Management Journal*, Volume 16, Number 4, 1995, pp. 277-299.
- [31] Rouse, A.C. and Corbitt, B. "IT Supported Business Process Outsourcing (BPO): The Good, the Bad and the Ugly," *Proceedings of 8th Pacific Asia Conference on Information Systems*, Shanghai, China, July 8-11, 2004.
- [32] Scott, R., *Organizations: Rational, Natural and Open Systems*, Prentice-Hall, Englewood Cliffs, 1998.
- [33] Seddon, P.B. "The Australian Federal Government's Clustered-Agency IT Outsourcing Experiment,". *Communications of the Association for Information Systems*, Volume 5, Number 13, 2001.
- [34] Strauss, A. and Corbin, J., *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Sage, Newbury Park 1990.

- [35] Teng, J.T.C., Cheon, M.J. and Grover, V. "Decision to Outsource Information Systems Functions," *Decision Sciences*, Volume 26, Number 1, 1995, pp.75-103.
- [36] Thompson, R.L., *Organizations in Action*, McGraw-Hill, New York, 1967.
- [37] Tillquist, J., King, J.L. and Woo, C. "A Representational Scheme for Analysing Information Technology and Organizational Dependency," *MIS Quarterly*, Volume 26, Number 2, 2002, pp. 91-118
- [38] Venkatesan, R. "Strategic Sourcing – To make or Not to Make," *Harvard Business Review*, Volume 70, Number 6, 1992, pp. 98-107.
- [39] Watts, S. and Henderson, J.C. "Innovative IT Climates: CIO Perspectives," *Journal of Strategic Information Systems*, Volume 15, Number 2, 2006, pp.125-151.
- [40] Wernerfelt, B. "A Resource-Based View of the Firm," *Strategic Management Journal*, Volume 5, Number 2, 1984, pp.171-180.
- [41] Winter, R. "Retail Banking im Informationszeitalter - Trends, Geschäftsarchitektur und erste Beispiele," In: Leist, S., and Winter, R. (Eds.), *Retail Banking im Informationszeitalter*. Springer, Berlin, 2002.
- [42] Yin, R., *Case Study Research: Design and Methods*, Sage, Beverly Hills, 1984.

## AUTHOR BIOGRAPHY

**Mark Borman** is a Senior Lecturer in Business Information Systems in the School of Business at the University of Sydney. Prior to joining the University of Sydney he worked for a number of years in senior consulting and executive roles in the UK, USA and Australia. Mark has published in journals and presented at conferences including JIT, JORS, ISeB, ECIS, AMCIS and ACIS. His primary research interest is in understanding the *why*, *what* and *how* of services sourcing.

**APPENDIX: SUMMARY DATA DISPLAY TABLE**

	Economies of scale	Resource based theory	Resource dependency theory
CU1	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Free up management resources</li> <li>• Larger credit unions get the bulk of the savings</li> <li>• Power</li> </ul>	<ul style="list-style-type: none"> <li>• Key differentiator is the market niche targeted</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial cosourcing provider seeks to maximise profit</li> <li>• Largest credit unions have the greatest say</li> <li>• Commercial partners more responsive than CU owned ones</li> <li>• Group of small credit unions – limits bulk risk</li> <li>• Difficulty of change (also lose established process capabilities)</li> <li>• CUs moving towards competition (product &amp; market convergence)</li> </ul>
CU2	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Larger credit unions get the bulk of the savings</li> </ul>	<ul style="list-style-type: none"> <li>• Personal service as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Limited input due to small size</li> <li>• Credit unions discuss, recommend &amp; share suppliers</li> </ul>
CU3	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Cost sharing</li> <li>• Voice</li> <li>• Access to skills and capabilities</li> <li>• Not all credit unions have the same needs</li> </ul>	<ul style="list-style-type: none"> <li>• Front end IT enables differentiation but not back end</li> <li>• Trusted advisor as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial partners more responsive than CU owned ones</li> <li>• Problems when large credit unions move off a solution</li> <li>• Solutions all comparable</li> <li>• Need for, and problems of achieving, compromise</li> <li>• Largest credit unions have the greatest say</li> <li>• Supplier relationships are long term &amp; not changed frequently</li> <li>• Aggregated purchasing power often sufficient</li> </ul>
CU4	<ul style="list-style-type: none"> <li>• Access to services for small</li> <li>• Ensure sure no big cross subsidy of the small by the large</li> </ul>	<ul style="list-style-type: none"> <li>• Key differentiator is the market niche targeted</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of large players pulling out</li> <li>• Need for, and problems of achieving, compromise</li> <li>• Largest credit unions have the greatest say</li> <li>• Commercial partners more responsive than CU owned ones</li> <li>• Cost of breaking contracts</li> <li>• Cost of change</li> </ul>
CU5	<ul style="list-style-type: none"> <li>• Cost savings for the large</li> <li>• Small gain access to technology &amp; suppliers otherwise unavailable</li> <li>• Cost sharing</li> <li>• Cosourcing provider has to benefit CUs (&amp; profit themselves)</li> <li>• Cosourcing can deliver revenue to shareholders</li> </ul>	<ul style="list-style-type: none"> <li>• Core is anything that touches customers</li> <li>• Sufficient parameters to differentiate the core banking system</li> </ul>	<ul style="list-style-type: none"> <li>• Limit shareholders, maximise customers</li> <li>• Greater concentration of credit unions makes cosourcing harder</li> <li>• Large set the agenda which should meet the needs of the small</li> <li>• Alternatives provide choice if the market can support them</li> <li>• Cost of change</li> <li>• Risk of large players pulling out</li> </ul>
CU6	<ul style="list-style-type: none"> <li>• Cost savings (core banking system)</li> <li>• Voice (core banking system)</li> <li>• Flexibility of inhouse IT services</li> </ul>	<ul style="list-style-type: none"> <li>• Product offering as core capability</li> <li>• Perception of security</li> </ul>	<ul style="list-style-type: none"> <li>• Need for universal solutions</li> <li>• Commercial partners more responsive than CU owned ones</li> <li>• Cost of change</li> <li>• CUs moving towards competition (product &amp; market convergence)</li> <li>• Cost of breaking contracts</li> </ul>
CU7	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Cost sharing</li> <li>• Flexibility of inhouse IT services</li> <li>• Cosourcing can deliver revenue to shareholders</li> </ul>	<ul style="list-style-type: none"> <li>• Core banking system as critical but not core</li> <li>• Processes and efficiency as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Competition between suppliers beneficial</li> <li>• Cost of breaking contracts</li> <li>• Difficulty of change</li> <li>• Limited appropriateness – benefits need to outweigh costs</li> </ul>

## FACTORS MOTIVATING AND SHAPING COSOURCING

<b>CU8</b>	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Cosourcing can deliver revenue to shareholders</li> <li>• Access to management resources</li> </ul>	<ul style="list-style-type: none"> <li>• CBS non sensitive back office</li> <li>• Community focus</li> <li>• Trusted advisor as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Importance of compatible, non-competing partners</li> <li>• Uncertainty regarding whether paths may diverge in the future</li> </ul>
<b>CU9</b>	<ul style="list-style-type: none"> <li>• Flexibility</li> <li>• Cost savings (core banking system)</li> <li>• Cost sharing (core banking system)</li> <li>• Control of own destiny</li> <li>• Inhouse IT service provision cheaper</li> </ul>	<ul style="list-style-type: none"> <li>• Inhouse IT services enables faster product development</li> <li>• Control of data core</li> <li>• Embed business process in the technology</li> <li>• Closed bond (selective) membership – viewed as a club</li> <li>• Customer service as core capability</li> <li>• Trusted advisor as core capability</li> <li>• Sufficient parameters to differentiate the core banking system</li> </ul>	<ul style="list-style-type: none"> <li>• Choice of CBS can minimise additional third party relationships</li> <li>• CU consolidation &amp; supplier diversification risks marginalisation</li> <li>• Difficulty of change (also lose established process capabilities)</li> </ul>
<b>CU10</b>	<ul style="list-style-type: none"> <li>• Access to management resources</li> <li>• Safety in numbers</li> <li>• Voice</li> <li>• Power</li> </ul>	<ul style="list-style-type: none"> <li>• Closed bond (selective) membership</li> <li>• Customer relationships as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Largest credit unions have the greatest say</li> <li>• CUs moving towards competition (product &amp; market convergence)</li> <li>• Difficulty of gaining admittance to cosourcing arrangements</li> <li>• Difficulty of change</li> <li>• Limited appropriateness – benefits need to outweigh costs</li> <li>• Absence of visibility &amp; control</li> </ul>
<b>CU11</b>	<ul style="list-style-type: none"> <li>• Control of own destiny</li> <li>• Flexibility of inhouse IT services</li> <li>• Small benefit from cost savings, large can realise savings themselves</li> </ul>	<ul style="list-style-type: none"> <li>• Control of data core</li> <li>• Services and branding as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Danger if stray too far from the standard implementation</li> <li>• Lack of voice as customer base increases</li> <li>• Difficulty of change</li> <li>• Importance of compatible, non-competing partners</li> <li>• CU consolidation &amp; supplier diversification risks marginalisation</li> </ul>
<b>CU12</b>	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Voice</li> <li>• Frees up management resources</li> </ul>	<ul style="list-style-type: none"> <li>• Core banking system non core</li> <li>• Branch network as core capability</li> <li>• Trusted advisor as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of change</li> <li>• Difficulty of change (also lose established process capabilities)</li> <li>• Cost of managing additional third parties (for some solutions)</li> <li>• Dependency on performance of other credit unions</li> <li>• Risk of large players pulling out</li> <li>• Commercial cosourcing provider seeks to maximise profit</li> <li>• Commercial cosourcing provider more responsive</li> </ul>
<b>CU13</b>	<ul style="list-style-type: none"> <li>• Small gain access to technology &amp; suppliers otherwise unavailable</li> <li>• Access to management resources</li> <li>• Cost savings</li> <li>• Cost sharing</li> <li>• Voice</li> </ul>	<ul style="list-style-type: none"> <li>• Customer relationships as core capability</li> <li>• Trusted advisor as core capability</li> <li>• Non core</li> <li>• Retain IT strategy capability</li> <li>• Back office – does not touch the customer</li> <li>• Sufficient parameters to differentiate the core banking system</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of change of ownership of supplier</li> <li>• Importance of due diligence &amp; contract (long term pricing, SLA)</li> <li>• Cost of change</li> <li>• Difficulty of change</li> <li>• Importance of compatible, non-competing partners</li> </ul>
<b>CU14</b>	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• Cost sharing</li> <li>• Voice</li> <li>• Access to management resources</li> <li>• Frees up management resources</li> <li>• Too many alternatives reduces aggregation benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Product offering as core capability</li> </ul>	<ul style="list-style-type: none"> <li>• Modular solutions facilitate use of best of breed providers</li> <li>• Solution choice can act as deterrent to mergers</li> <li>• Reduced sector cooperation</li> </ul>