Cúram Software Response to the Productivity Commission

Draft Report - Disability Care and Support

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Cúram Software - Australia

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Introduction

The proposed reforms for disability and care are far reaching in policy terms and must be as far reaching in service delivery terms to ensure successful outcomes for people with disabilities and for taxpayers who will shoulder the financial burden. Recent events have demonstrated that policy is only as good as the service delivery that makes it happen.

Service delivery for new policy initiatives has attracted considerable interest in recent years, more so given systemic failures arising from policy initiatives of the Government in response to the Global Financial Crisis. Service delivery has become a policy agenda in its own right as it asks the question of how to best mobilise government and community resources to support intended outcomes. Service delivery has emerged as a major function of modern government and there is a strong case for giving it equal consideration alongside the more traditional social policy domain. The formation of the Department of Human Services in 2004 and the formal incorporation of Centrelink and Medicare within a department of state from 1 July 2011 is an example of the heightened focus on the value of service delivery to the overall standing of the government.

Efficient and effective service delivery for large scale social programs is largely a function of innovation and the quality of the enabling information technology solutions. For this reason, we believe it is appropriate for a software product company, specialising in the development of innovative solutions for social and human services organisations, to make this submission to the Productivity Commission.

Introducing Cúram Software

Cúram Software is a leading provider of social security business applications in the United States, Canada, Australia, Germany and New Zealand. Our business spans the full remit of social programming from pension and disability insurance systems, workers compensation and employment insurance through to locally orientated disability, child and adult care services including all types of needs and contributions based benefits and services.

Social protection organisations are the only organisations we work with. Most of our client organisations use Cúram to screen and intake citizen information and process eligibility for benefits and services leading to payments to customers or to third parties and providers on their behalf. Many clients use Cúram to support outcome focused case management plans including service plans and needs assessments.

Cúram Software developed the Cúram Business Application Suite (Cúram). Cúram is the leading Commercial-off-the-Shelf (COTS) software solution in the Social Enterprise Management (SEM) market sector. SEM is defined as a category of enterprise software that enables agencies in the human services, social services, social security, workers compensation and employment services sectors (hereafter referred collectively as social protection) to transform service delivery and improve organisational efficiency and effectiveness. Cúram Software's market leadership in SEM is confirmed consistently by industry leading analysts namely Forrester Research and Gartner. [1]

[1] Gartner first evaluated COTS based human services business applications in 2004 : see Kost J, **MarketScope: CRM for Government Human Services**, 2004, Research Note June 2004, Markets, M-23-0453. For the most recent update by Forrestor refer **Forrester Market Update: Human and Social Services Enterprise Software:** August 26, 2009 *Gene Leganza, Vice President and Principal Analyst, Government Research with Alex Cullen, Mimi An, Matt Czarnecki*

Our response - focus on service delivery innovation through information technology

Our response is framed from this position of industry leadership in enterprise software for the social protection industry. Our software products have been developed over a period of 20 years, based on our deep industry experience and knowledge from working with social protection organisations around the world.

While much of the current public debate is focused on the merits of the proposed schemes and the costs, in our view service delivery and leveraging information technology is an equal first order issue with policy level reform.

Designing an innovative and efficient service delivery system to deliver effective outcomes, while managing systemic risk, needs to be conducted in consultation with potential users, advocacy groups and other stakeholders from the beginning of the reform program.

The importance of service delivery reform, information technology solution design, information technology services and infrastructure sourcing, deployment and on-going maintenance, to the overall success of the reforms is largely understated in the draft report. Our response is focused accordingly on ensuring the reform program is brought to the public through a service delivery business model leveraging global industry best practice information technology solutions viz:

- Chapter 8 Delivering Disability Services, Draft Recommendations 8.1, 8.2 and 8.3.
- Chapter 10 Collecting and Using Data under the NDIS, Draft Recommendations 10.1 and 10.4

We trust that you find our input helpful as you finalise your report and we would be happy to discuss the content of this document in further detail.

Brian Lee-Archer
Director of Market Strategy, Cúram Software

Best practice policy and processes need best practice service delivery enabled by best in class information technology

Cúram Software supports the policy intent within the Productivity Commission's proposals for the introduction of a National Disability Insurance Scheme (NDIS) and the National Injury Insurance Scheme (NIIS). We note the proposals represent a significant public policy reform program likely to set new benchmarks in global best practice for care and support services to people with disabilities.

A critical success factor for the National Disability Insurance Agency (NDIA) is the service delivery business model. The heart of a innovative service delivery business model is powered by high quality, modern and efficient business applications, information technology services, and infrastructure.

The quality of the information technology systems to support the service delivery business model and processes are closely aligned. We note the Commissions observation in the preamble to the report and while it refers to the system in a business context, it is reasonable to draw parallel conclusions from the information technology context.

> *The disability support 'system' overall is inequitable, underfunded, fragmented, and inefficient and gives people with a disability little choice. It provides no certainty that people will be able to access appropriate supports when needed. While some governments have performed much better than others, and there are pockets of success, overall no disability system in any jurisdiction is working well in all of the areas where change is required.*

The information technology systems developed over many years by various state and federal governments to service disability and care programs are likely to be as underfunded, fragmented and inefficient as the business system, described above, they are designed to enable.

The implementation of the new schemes provides an opportunity to take a fresh look at the way services are delivered. For the NDIA to be world class organisation, it should avoid relying on the same fragmented systems and inefficient business development practices and services that exist today. To do otherwise will likely result in a high risk of poor service delivery outcomes, project failure and cost overruns devaluing the intent of the policy based reform program.

Based on our experience, some disability organisations in Australia are doing better than others with their use of information technology within their service delivery model but in the main the systems are inflexible with high re-development and maintenance costs. In some cases these systems are based on out-dated and/or proprietary technologies. In general, business application development and supporting information technology services and infrastructure are developed through the custom build approach using in-house information technology development teams and infrastructure, in support of a traditional organisational centric business model.

The custom build approach was the only method available for organisations in the early days of automation. This approach suited the business model where customers approached the organisation and the organisation did the work with customers placed in a position of dependency. The custom build approach has effectively run its course in the social protection industry, especially for and reforming organisations or for those implementing new social programs in line with people's rising expectations for self-management and third party interactions.

The social protection industry worldwide including Australia is encumbered with large ageing legacy systems, modified continually to meet ever changing business requirements and technological change. However these systems were never architected or designed to withstand this rate of change - in fact, they were built to meet the known requirements of the day and since then have been subjected to a patchwork of constant amendments. The maintenance costs, the inflexibility of the system and the risk of catastrophic failure increases every year.

Social protection organisations the world over, lament the inflexibility of their core systems and the time and cost it can take to implement what is often seemingly, relatively minor business changes. Ministers of Social Protection are forever impatient and demand new and innovative service delivery models and an ever faster rate of change, leading to even more short cuts and patchwork solutions.

Managing the paradox of encouraging innovation, keeping costs under control and providing flexibility to support new and changing social programs is addressed through a new generation of software designed specifically for the social protection industry. This new generation of software is based on the established COTS software model. This approach, characterised by rich embedded industry content, offers significant improvements in reliability, flexibility and cost control over the traditional custom build approach. [2] More importantly, COTS products are continually enriched with innovation - both process and technology. A competitive market for these products has emerged, led by Cúram Software.

New organisations, such as the proposed NDIA, now seek to buy rather than build their information technology needs in line with what is now recognised as industry best practice. The NDIA should step away from the build it yourself - DIY model and adopt an approach to allow the organisation to take on continual advancements in service delivery innovation and technology by buying industry leading products and services embedded with content continually updated through industry wide research and development.

In addition, adopting new and innovative technology solutions on the scale necessary to support the new schemes, requires a ready supply of highly skilled and experienced project management, systems integration and change management personnel. Project failure and time and cost overruns pose a significant risk to the service delivery of the new schemes and every possible mitigation effort should be investigated.

Accessing skilled resources across a broad range of project related disciplines is a significant risk factor for any large scale information technology project, including both DIY and COTS implementations. In our experience, even the most comprehensive program plans consider the skilled resourcing factor as an afterthought. In today's tight employment market it is imperative for skilled resourcing requirements and sourcing to be considered a fundamental and strategic project management issue. Most disability and care organisations have over stretched their existing business and IT resources supporting their complex, patchwork information technology systems and workaround business processes. The competitive forces in the market provide more options for sourcing highly skilled and experienced resources, including various offshore options.

In our view the final report should explicitly express a requirement for the NDIA to incorporate this new generation approach to business applications software to power the development of a new service delivery model for the new schemes by:

- sourcing a COTS product for core business applications early in the project - buy before build - to facilitate and fast-track the development of an innovative service delivery model based on the co-design principle and leveraging best practice; and

[2] Refer Appendix A for a description of the evolution in applications development approaches from custom build to COTS

- exploring options for sourcing the highly skilled and experienced information technology and associated change management personnel from the market via market leading service companies ahead of establishing or utilising existing in-house capability.

Recommendation 1 - Productivity Commission includes words in the report to the effect that to facilitate on-going innovation in service delivery and to mitigate the risk of project failure and cost overruns, the NDIA adopts industry best practice by testing the market when sourcing business applications and information technology services and infrastructure

Enabling the NDIA though strategic investment in information technology

We recognise the Commission's on-going efforts to promote efficiency and productivity improvements in delivering government services. In recommending the establishment of the NDIA, we expect the Productivity Commission expects the new schemes to be implemented and managed with a minimum of administrative overhead.

A major component of administrative overhead for any modern service delivery organisation is the investment in information technology products and services. Forward thinking service delivery organisations consider their information technology investments as an asset rather than a cost burden.

We note the intent expressed in the draft report to manage the schemes according to an insurance model with an actuarial approach to manage liabilities against the expected funds under management. We recognise this means a strong focus on containing costs, both administered appropriations and running costs, by managing and reporting as if it were a 'fully funded' scheme with each year's funding considered in the context of the scheme's expected future liabilities**.** By adopting a social fund/social insurance philosophy, running costs will also be a liability of the fund. With running costs a liability then 'every dollar spent on overhead is one less for benefits, services or investment'. Keeping administration costs including information technology under control will be a major performance measure for the NDIA.

We note the Productivity Commission's estimates of $12.5bn as the total cost of the schemes (predominantly for services to people with disabilities) for the NDIS. From our experience working with human services organisations, we estimate an appropriate information technology spend to support these schemes in the range of 50-100m per annum.[3]

This 'rule of thumb' assessment illustrates the ICT costs are substantial even in a cost constrained environment. It will be important for the technology related investments to be made with an eye on the future with the same degree of actuarial rigour to be applied to the management of the social fund.

These technology investments must power the innovation within the service delivery model by providing capabilities such as:

- self management - either by the person or their carer, 'let me be independent'

[3] Refer Appendix B - Estimating IT spend as a component of program spend

- light touch – the agency intervenes only when necessary and fosters the relationship between the person and the providers
- predictive service capability – offering the right assistance at the right time
- automation - assessments and calculation of benefit packages
- leverages the ecosystem – with consent information is shared across agencies and providers so people only supply information once or it is accessed at the source
- compliance - is rigorous but non-intrusive and leaves alone the majority who will do the right thing
- information rich – provides the data essential to managing the viability of the social fund
- outcomes focused - making social progress, not just transactional
- leverages the National Broadband Network (NBN) – places the internet and the social exchange enabled by this infrastructure at the centre of the service delivery model rather than within the administration of the NDIA

Social Enterprise Management (SEM) - A new direction in the industry

The software industry for social protection organisations has matured in recent years with the emergence of a competitive market for a new breed of products categorised as SEM. SEM provides organisations with a platform to break their dependence on siloed, expensive and inflexible information technology systems and deliver the service delivery capabilities described above.

SEM solutions are supported by the world's leading systems integrators and operate across a broad range of industry standard platforms from the world's leading information technology suppliers. Adopting a SEM based approach opens up a wide range of options for sourcing the supporting information technology services and infrastructure. The ageing legacy systems of today are largely supported by ageing in-house information technology teams. Modern organisations want access to the new talent pool of professionals that refreshes itself by deploying information technology solutions at the forefront of the industry.

In-house information technology teams can make the investment to build the capability to deliver SEM based solutions and some of our clients have chosen this path. However it should be recognised that the skills required to optimise the inherent value of an industry aligned COTS based product is a significant departure from the traditional custom build approach.

SEM products are designed to address the core business processes of social protection organisations. The diagram at Figure 1 overleaf illustrates the (generic) social protection business model that an SEM product must support – *from needs to outcomes* – a concept that underpins the proposed NDIS and NIIS schemes.

The *needs to outcome*s model illustrates the lifecycle of the social protection business model

1. social context – people need care and protection and have social and economic potential to realise

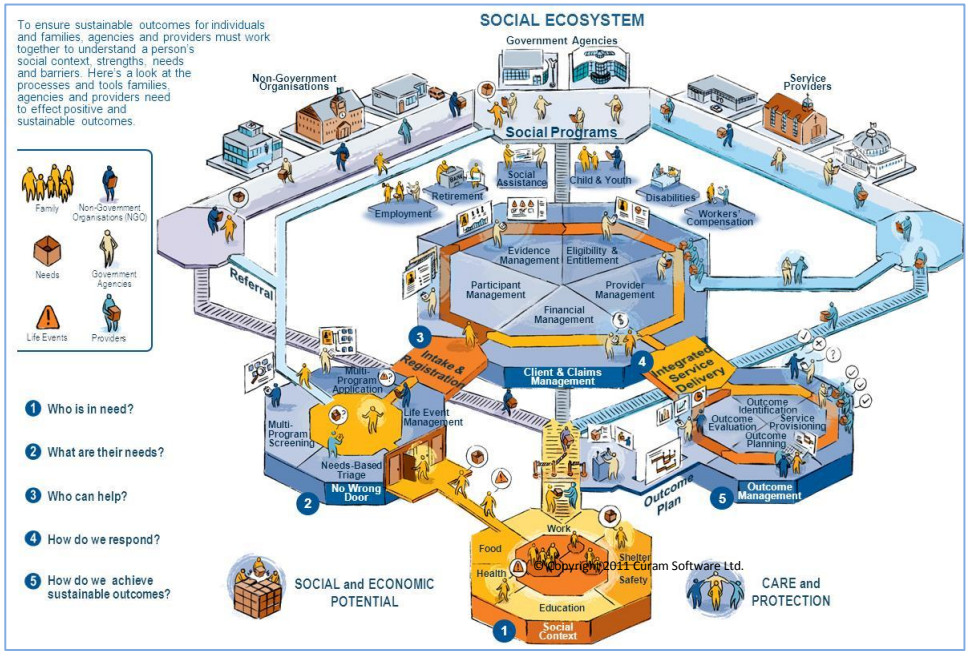
2. no wrong door – identify the real needs

3. intake and registration – who can help, what programs are available and who are they provided by

4. integrated service delivery - how do we respond by leveraging the social protection ecosystem

5. outcome management – achieving sustainable outcomes through planning, objectives and milestones

Figure 1 – The SEM Business Model – From Needs to Outcomes



A SEM product provides functionality such as (of which the NDIA will need):

- intake and registration
- needs assessments
- triage according to priority, risk and complexity
- identification and provisioning of services (directly to individuals or to providers),
- outcome-driven best practices and decision support
- holistic approach to individuals and their families
- comprehensive, secure and collaborative integrated case management
- enable multi-disciplinary teams to collaborate
- calculation of payments according to rules
- integrated provider and financial management
- integrated eligibility services & service planning
- industry standard interfaces to other organisations – connecting the ecosystem such as state governments, other federal agencies and service providers

- management of data, evidence and decisions over time for management information

The traditional approach is to build this functionality from scratch or to leverage existing systems. Innovation is usually limited to the point in time when the system is built and introducing new innovation becomes progressively more difficult. Using the SEM approach, this functionality is embedded in the base product which can be configured, extended and where necessary customised to meet specific requirements. Introducing new innovations is provided by the developer of the SEM product.

It is worth noting that two recent large scale business application projects in the federal government sector, namely the Australian Taxation Office and the Department of Immigration and Citizenship, both have COTS products contained within the overall solution. In both cases the COTS products were not industry specific but rather were designed for the commercial sector and adapted for the public sector market. There was a significant element of custom build activity in each project.

We have included an overview of Cúram Software as an example of a SEM product at Appendix C. At Appendix D we have included a list of organisations committed to the COTS approach by using Cúram for business applications.

Open Source – is this the way forward?

There is considerable interest in the marketplace towards Open Source software and reference is made to an Open Source based solution for the assessment tool in the draft report. Under the Australian Government's Open Source Software Policy, agencies must actively and fairly consider open source software in all their information and communications technology (ICT) software procurements.

The use of open source software tools for development of business applications is promoting the custom build model. The value of SEM based products is rich industry content not matched currently by open source software solutions. Notwithstanding, sourcing a COTS solution rather than leveraging Open Source based tools to undertake a custom build solution, procurement decisions should still be made on value for money. Procurement decisions should take into account whole-of-life costs, domain relevant content, security, scalability, transferability, support and manageability requirements. Compliance with Open Source principles and use of Open Source software components where applicable are reasonable factors to consider when evaluating COTS products.

It is worth noting however that SEM based products such as Cúram include Open Source technologies and tools within the COTS solution. The application code is not proprietary (it is Java and XML based), client organisations have access to key components of source code and can make extensions using the integrated development environment. The Cúram platform incorporates multiple Open Source tools, including Eclipse and BIRT, H2 database, and Apache Tomcat and Ant. Cúram also runs on the SUSE Linux operating system (SLES).

> *Recommendation 2: NDIA consider COTS based solutions within the SEM definition without prejudice to the federal government's open source policy, ahead of a custom build approach for the core business applications to support the new schemes*

Co-Design and the engagement of stakeholders

We note the intent for the scheme to commence in early 2014 with a full scale rollout in a region. This approach allows fine-tuning of the scheme with the intention to extend coverage across the nation in 2015.

This is an aggressive timetable given the scale of the reform program and the change management issues to be addressed across the political, policy, people, process and technology domains. Assuming the proposed changes are considered in the context of the 2012/13 federal budget cycle, funding to initiate the detailed planning phase would not commence until the beginning of the 2012 financial year, eighteen months or so from the proposed start date.

Given the scale of the reforms, a critical success factor is the active engagement of the target population and advocacy groups in all phases of the business and system design process. Public sector organisations such as the Australian Taxation Office, the Department of Immigration and Citizenship and the Department of Human Services, have recently embraced the co-design approach. The principle of co-design in public sector administration is embraced within the March 2010 report, A*head of the Game: Blueprint for Reform of Australian Government Administration.* [4]

Establishing a new agency will require a significant effort. Co-design with people with disabilities and advocacy groups will be key to the development of the new service delivery model with new processes and new information technology systems and infrastructure with interfaces to government agencies – federal and state as well as service providers. The new service delivery business model and the associated functionality of the business applications to support the first region roll-out will be the same functionality needed to support the Australia wide roll-out. The Australia wide roll-out after the 2014 trial region, from a service delivery and technology perspective, is a function of scalability and capacity rather than additional functionality and capability.

The initial roll-out period is likely to result in changes to processes and business requirements leading to changes to the enabling business applications. SEM products provide the opportunity for a fast start and are ideally suited to the co-design approach through their rich industry content and out-of-the-box functionality. They are designed to be readily adapted as the co-design process seeks refinements.

The co-design approach using a COTS based product with rich industry content, provides a platform to design and develop the service delivery model. Through model driven design processes and the out-of-the-box functionality, the service delivery model is designed and tested with the people who will use it. Through the use of configuration, extensions and occasionally some customisation to the base product, innovation is encouraged. The opportunity to reassure stakeholders the service delivery system will deliver to the intended outcomes is significantly enhanced.

The NDIA may seek to leverage some existing service delivery infrastructure of the federal and/or state governments. If this was to happen, the relevant federal or state agencies may seek to leverage existing information technology business applications and/or platforms, on the basis that these would provide the fast start required. As these would effectively be transfer system developments we would recommend strongly against this approach.[5]

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[4] Refer **Ahead of the Game - Blueprint For The Reform Of Australian Government Administration** - *Advisory Group on Reform of Australian Government Administration March 2010, Department of PM&C* - Recommendation 2.1– Enable citizens to collaborate with government on policy and service design

[5] Refer Appendix A – a transfer system is a derivation of the custom build approach carrying many of the same risks and costs

Recommendation 3: NDIA considers sourcing an appropriate product as per recommendation 2 at the beginning of the project to promote innovation and facilitate and fast-track the design of the service delivery model via a co-design process

Conclusion and recommendations summary

Establishing a new agency to administer new world's best practice schemes, responsible for over $12bn of funds, requires a world's best practice approach to service delivery and enabling information technology products and services. We suggest more prominence is given in the final report to the information technology needs to support a new service delivery model. By ignoring the importance of information technology in facilitating innovation in service delivery, there is an increased risk, with a high likelihood of occurrence, that a business as usual approach of custom built business applications and in-house service provision of information technology services will lead to increasing costs and inflexible systems that do not keep pace with the changing business requirements of the new schemes. The new schemes require an information technology platform capable of supporting innovation and the long term sustainability of the service delivery model.

Cúram Software recommends the:

1. Productivity Commission includes words in the report to the effect that to facilitate on-going innovation in service delivery and to mitigate the risk of project failure and cost overruns, the NDIA adopts industry best practices when sourcing business applications and information technology services and infrastructure
2. NDIA consider COTS based solutions within the SEM definition without prejudice to the federal government's open source policy, ahead of a custom build approach for the core business applications to support the new schemes
3. NDIA considers sourcing an appropriate product as per recommendation 2 at the beginning of the project to promote innovation and facilitate and fast-track the design of the service delivery model via a co-design process

These recommendations relates specifically to draft recommendations 8.1, 8.2 and 8.3 and 10.1 and 10.4

The recommendations are designed to highlight the importance of enabling innovation in the service delivery model through a strategic sourcing approach for business applications and supporting information technology services and infrastructure to:

- deliver a complete end-to-end business application ready for the first region roll-out in 2014
- take advantage of designing the new business processes during the period 2012/13 by leveraging industry best practices embedded in the out-of-the-box functionality of a COTS product – this facilitates the co-design process with people with disabilities and advocacy groups actively involved in the business and system design process
- fast-track the co-design process to enable people with disabilities, advocacy groups and providers to be involved in the design of the business application systems from the

beginning of the project by utilising out-of-the-box functionality that demonstrates best practice business processes and system design

- facilitate the achievement of cost effective outcomes for people with disabilities by adopting world best practice business processes and industry standards for software development embedded within the COTS product

- contain the total cost of ownership of information technology in line with the principle of a fully funded scheme – maximise the funds available for servicing people's needs

- maximise the efficiency of administration of the NDIA and set new productivity benchmarks for the public sector

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Appendix A

An evolution of business applications development

The draft report acknowledges that new business applications need to be developed. The challenges facing the NDIA with respect to new business applications are commonplace in the human services sector. Traditionally business applications in the human services have evolved over many years and are categorised as custom build.[6] Over the past decade the need to support new and revised social programs driven many social sector organisations to examine new ways to ensure their investment in information and communication technology deliver business efficiencies. Such decisions are not just information technology decisions: they are business-driven. The needs of the business in terms of ensuring flexibility for future legislative and policy change and to contain development and implementation risk influences how new applications are designed to support the delivery of social programs.

To build new applications social organisations have several options to consider viz:

- custom build
- transfer system
- Commercial-Off-The-Shelf (COTS)

Each approach has pros and cons however the human services industry has followed the similar evolutionary path of business application development in the commercial world. The evolutionary path towards COTS has matured and is recognised by industry analysts such as Gartner Group and Forrester as the preferred approach for human services organisations.

The characteristics of each of these options are described briefly as follows.

Custom Build

Historically human service organisations have followed the custom build software development approach. A custom build software development does present some potentially attractive features such as a "perfect fit", minimisation of organisational change, built for the existing technical environment, and maximisation of the agency's investments in technical staff training and experience.

However, there are many drawbacks and risks to custom development, particularly for large scale software projects. Some of the risks and challenges associated with custom system development include the following:

Business

- Business Process: risk of repeating current business processes and not leveraging industry best practices.
- Documentation: challenge of creating and maintaining process documentation during life of system. Resulting documentation is often incomplete or non-existent and may hinder

[6] Historically, government human services agencies have had to custom-build their mission-critical applications. Technologies available today offer a potentially faster and lower-risk approach to new more effective solutions. **New Solutions for Government Human Services : Research Note** : *Gartner Research, Sept 2003.*

knowledge transfer especially as process workarounds become embedded as a means of responding to changing service delivery requirements.

- Business requirements often replicate current environment and don't re-engineer current business processes – lost opportunity for new way of doing business.
- Codified business rules and processes: business rules and processes are buried in the code, in a format that is inaccessible to the business.
- The future : the system is right for today's requirements but is usually not designed to accommodate the rapidly changing legislative and policy environment

Resource

- Staffing: continuing dependence on original implementation team; agency staff may not have the skill sets required to maintain.
- Design Specifications: lengthy implementation process to review every business requirement to determine design specifications.
- Workforce: heavily dependent on staff that have historical knowledge and are the most 'tapped' resource; resources that are retiring.

Technical

- A custom-developed system often results in:
    - overly complex, inefficient code that is only completely understood by those involved in its development
    - system modification/enhancement: changes are labour intensive and costly to implement.
- Non-standard Technologies: technologies are often selected on the basis of the implementation team's familiarity, rather than industry standards or best-of-breed.
- Unproven Integration: higher risk than integrated, working solutions.
- Multiple Vendors/Multiple Technologies: the agency becomes heavily dependent on multiple vendors to update code when vendors release new versions of their software.
- Documentation: often incomplete or non-existent may hinder knowledge transfer.

Transfer System

In theory, transfer systems are a realistic proposition, but in practice, they have not delivered the expected results. Essentially, a transfer system is one that has been built to meet the specific needs of a specific customer at a specific time and is unlikely to suit the precise needs of the customer it is transferred to. Consequently, the benefits of a transfer system are often oversimplified. In fact, the shortcomings of the transfer system approach are significant and include the following:

Business

- Requirements: specific to previous customer; not necessarily a good fit for the NDIA
- Review: every business requirement needs to be reviewed for applicability.
- Implementation: typically ends up being more like a custom build.

Resource

- System Maintenance: system changes may require intervention by the original implementation team.
- Modifications or Enhancements: labour intensive and costly.

- Staffing: project staffing requirements similar to a custom implementation.
- Process Re-engineering: limited opportunity if changes from another state are accepted.

Technical

- Dealing with change: rarely, if ever, designed to be flexible or to cope with high levels of change, because the original implementation team did not design them to have these capabilities.
- Technology: typically out of date before implementation is complete.
- Documentation: frequently is out if date or if not, will be out of date by the time the project is completed.
- Options: lost opportunity to select preferred technology; inheriting choices of previous state/agency.
- Ongoing Support: unsupported technology – no refreshes.
- Vendor Dependency: dependent on multiple vendors for upgrades.
- Brittle: the code has become brittle as a result of maintenance and 'hacks' introduced to make the system fit the new business model.

Furthermore, the perception that transfer systems save money has been disproved by industry analysts. As the original systems are not designed by the original implementation team for re-use, the effort and cost involved in modifying the system for the target jurisdiction often exceed the cost of the original system, and in many cases, the cost of building a new system from scratch.

COTS

A COTS product approach, and in particular a COTS framework product, offers the best approach for human service agencies looking to develop modern mission-critical systems. A COTS framework solution offers the advantages of strong functional fit as characterised by a custom solution, but without the non-standardised, once-off characteristics of the custom solution approach.
In addition, a COTS framework product designed specifically for the human services market offers the domain-specific functionality espoused by transfer solutions, but without the inherent drawbacks. True COTS products are, by their nature, well documented and supported by the COTS vendor and are normally maintained by regular product releases, delivering new features and enhancements based on customer and industry feedback.

As modernisation efforts spread across various government agencies, implementing COTS-based solutions has become the approach recommended by major industry analysts, such as Gartner and Forrester. The COTS approach is recommended because it affords:

- Quicker deployments with significantly reduced risk and cost
- Better outcomes driven by industry best practice business processes and solutions
- The ability to easily extend solutions across multiple business and program areas
- Fast-tracks the co-design process through the Out-of-the-box system availability on day one that guides and stimulates service delivery design and innovation

Government agencies too are increasingly recognising that enterprise-level COTS software for human and social services provides a more mature, stable and secure software development and operational environment. Such organisations realise that COTS framework solutions take advantage of best practices in programming languages, development tools (including open source), and

methodologies and that they provide platforms capable of accommodating current and future business practices, both vertically (within) and horizontally (across) organisations.

Appendix B

Estimating information technology spend as a component of program spend

We typically see administration costs for social insurance systems in the range of 1.5-10% of the fund's annual liability. Organisations at the lower end of the scale are typically those where of eligibility rights are codified in law with benefits distributed on the basis of acquired rights through contributions or citizenship e.g. national pension schemes. Key business processes these organisations are usually highly automated thereby keeping running costs to a minimum.

Administration costs as a percentage of annual liability increase once acquired rights are replaced with means testing and/or codified eligibility rules supplemented with an assessment of needs and discretionary decision making – e.g. the relative degree a disability effects daily living. Organisations at the top end of the administrative cost to annual liability ratio typically have a high degree of means testing to determine benefit levels, elements of discretionary decision making when determining benefits, low levels of automation and a narrow range of service channels.

The NDIS will require an assessment of need (but not means testing) with elements of discretionary decision required to make a determination of the appropriate funding packages. In addition there will be some form of monitoring and review to ensure that funding packages are achieving the desired outcomes. On that basis we would expect to see administration costs move towards the mid-level of the 1.5-10% range Mitigating the potential for running costs increases is the individual funding approach with many recipients dealing directly with suppliers. We expect a high degree of automation through the use of internet based technologies leveraging the National Broadband Network. If we therefore assume a conservative figure of 4% running costs, this represents approximately $500M per annum.

In our experience, information and communication technology (ICT) costs as a percentage of administration can be in the range of 10-20% of running costs. Assuming a high degree of automation with ICT deployment a key enabler of administrative efficiency for the new scheme, ICT costs could be in the range of $50-$100m per annum – this includes infrastructure, software and people costs either in-house or through an outsourced arrangement.

In highlighting the size of the potential ICT spend, this needs to be viewed as an investment that keeps other potential high administrative costs at a much lower level than they would be if there was no investment in ICT.

Appendix C

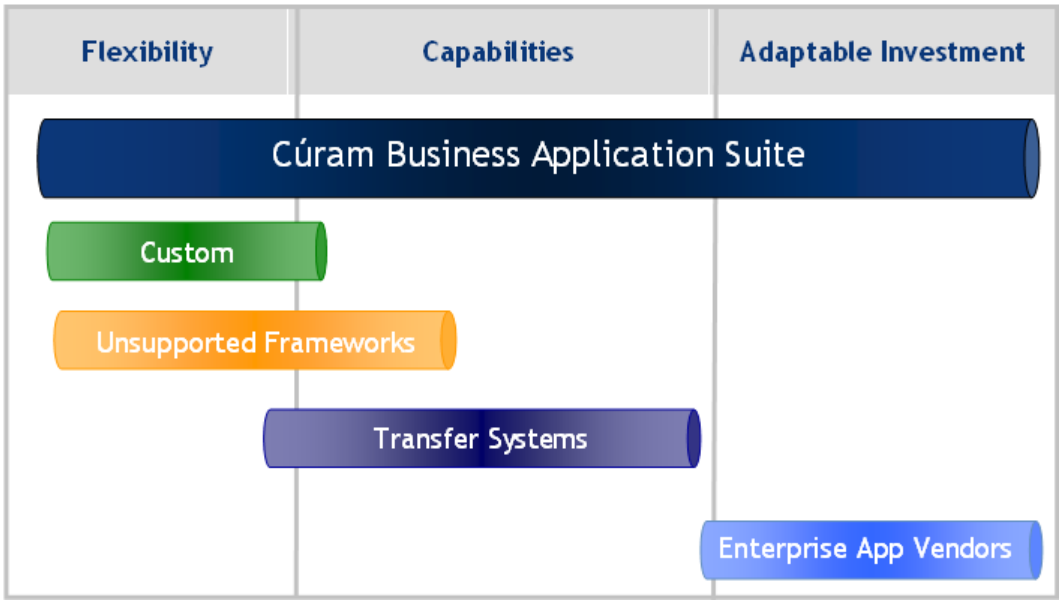
Cúram

There are products in the market today that qualify as COTS based solutions for the human services market that would be suitable candidates to consider for supporting the NDIS and the NIIS. As this market has rapidly matured in recent years, we provide the following information about Cúram to demonstrate to the Commission what is available in the market.

Cúram Software continues to maintain leadership in the market through continuous research and development and a commitment to providing best-in-class solutions for social enterprise organisations. The size of this investment in industry based research and development exceeds 2000 person years of effort.

As the market has continued to evolve and mature, it is also noteworthy that customers and analysts alike are recognising that domain expertise in both the product and implementation is the single most important critical success factor. Vertical solutions, like Cúram, that address the specific requirements of social protection enterprises are continuously outperforming horizontal solutions that have been adapted to the social protection market.

The schematic below depicts how the Cúram solution matches or exceeds each of the possible alternative strategies under the categories of flexibility, capabilities and adaptability of investment, and thus presents a more comprehensive overall offering.



Cúram performs well across all of the aforementioned critical parameters. These parameters are explained in more detail as follows.

Flexibility

- Cúram includes application source code and an integrated application development environment, thereby facilitating ready configuration and extension to meet highly specific requirements.
- The underlying technology is always kept current, ensuring the technology is not outdated when the project is complete and on into the future.
- The Cúram n-tier architecture ensures that Cúram-based systems can scale across each multiple application tiers, thereby supporting current and future capacity requirements.
- Program rules, policy and business workflow processes in the deployed system can be administered quickly and without the need for highly skilled development staff.
- Cúram is SOA compliant and readily supports integration with existing or external enterprise information systems.
- Multi-channel access is facilitated by use of open standards.

Capabilities

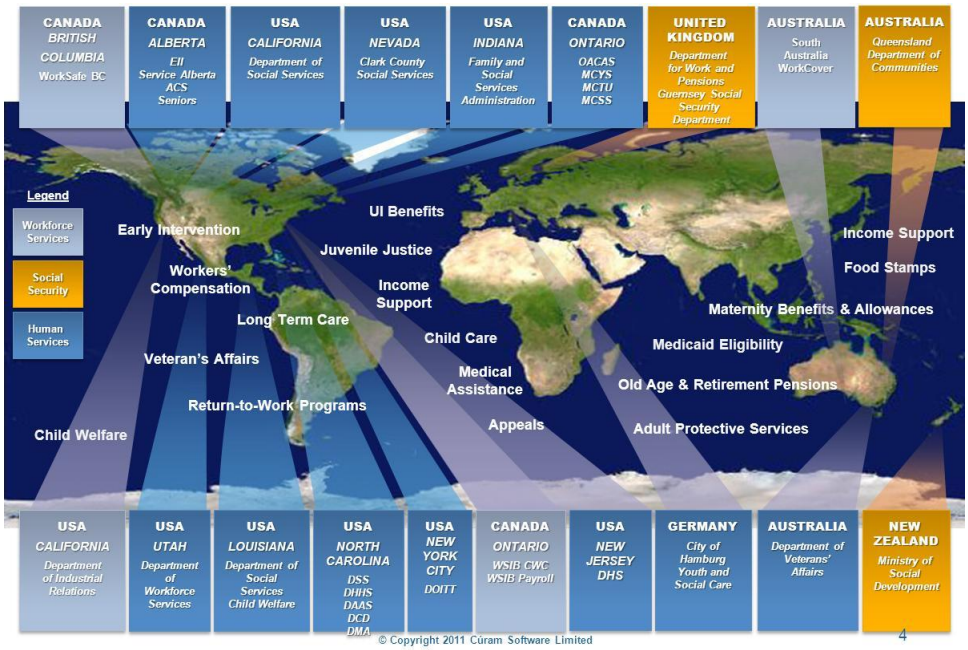
- Cúram provides pre-built modules, services, and processes targeted at the human and social services market segment, providing rich domain functionality out-of-the-box.
- Includes best-practice human and social services business processes.
- Incorporates rules based processing for performing assessments, determining eligibility, and other common agency tasks.
- Enables automation of work practices to drive efficiency and consistency in service delivery.

Adaptable Investment

- Cúram enables non-technical end-users to make changes to program rules, code tables and other system variables without the need for development resources.
- Cúram is “systems integrator independent” enabling states to determine which systems integrator(s) they would like to work with for implementation and ongoing support. Some Cúram customers to date have also chosen to act as systems integrator for their Cúram-based implementations.
- New features can be incorporated into the deployed system over time either through extensions or by availing of regular, scheduled product updates.
- Cúram is fully supported by a team of dedicated customer care professionals, providing round the clock product support.
- Complete and comprehensive documentation is provided with Cúram, including online help, entity relationship diagrams, business analysis documents, business process flow diagrams and development manuals.
- Formal product training in Cúram is provided to customers and SI partners as required.

Appendix D

Organisations committed to the COTS approach and using Cúram for business applications



In the Australia/New Zealand region, there are four organisations using Curam viz:

- Workcover South Australia
- Department of Communities Queensland
- Department of Veterans' Affairs
- Ministry of Social Development, New Zealand.

The business of the Department of Communities Queensland (DoCs) is most relevant to the proposed NDIA. This project began within Disability Services Qld (DSQ) with the implementation of a Client Management System and a Funding (Grants) Management System. When DSQ was absorbed into the DoCs this project became the basis for a broader program called Growing Stronger.

- Client Management System (CMS) – Cúram is used to provide a single source of client information (people with disabilities) for the Department using the standard out-of-the-box Participant Management functions. This replaced what was largely a manual process.
- Funding Management System (FMIS) – The Cúram solution was built to support the grant management business process
- Growing Stronger – this is a multi-phase initiative. The Growing Stronger initiative aims to provide improved matching of disability services to assessed needs by supporting the full lifecycle from intake through to service provision within an integrated solution