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Case Study Report
Streamlining Local Government: Evaluating an eGovernment Initiative in South East Queensland

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Streamlining Local Government: Evaluating an eGovernment Initiative in South East Queensland

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1.0   INTRODUCTION

Recent initiatives around the world have highlighted the potential for information and communications technology (ICT) to foster better service delivery for businesses. Likewise, ICT has also been applied to government services and is seen to result in improved service delivery, improved citizen participation in government, and enhanced cooperation across government departments and between government departments.

The Council of Australian Governments (COAG) (2006) identified local government development assessment (DA) arrangements as a 'hot spot' needing specific attention, as the inconsistent policies and regulations between councils impeded regional economic activity. COAG (2006) specifically suggested that trials of various ICT mechanisms be initiated which may well be able to improve DA processes for local government. While the authors have explored various regulatory mechanisms to improve harmonisation elsewhere (Brown and Furneaux 2007), the possibility of ICT being able to enhance consistency across governments is a novel notion from a public policy perspective. Consequently, this paper will explore the utility of ICT initiatives to improve harmonisation of DA across local governments.

This paper examines as a case study the recent attempt to streamline Development Assessment (DA) in local governments in South East Queensland. This initiative was funded by the Regulation Reduction Incentive Fund (RRIF), and championed by the South East Queensland (SEQ) Council of Mayors. The Regulation Reduction Incentive Fund (RRIF) program was created by the Australian government with the aim to provide incentives to local councils to reduce red tape for small and medium sized businesses. The funding for the program was facilitated through a competitive merit-based grants process targeted at Local Government Authorities. Grants were awarded to projects which targeted specific areas identified for reform (AusIndustry, 2007), in SEQ this focused around improving DA processes and creating transparency in environmental health policies, regulation and compliance.

An important key factor to note with this case study is that it is unusual for an eGovernment initiative. Typically individual government departments undertake eGovernment projects in order to improve their internal performance. The RRIF case study examines the implementation of an eGovernment initiative across 21 autonomous local councils in South East Queensland. In order to move ahead, agreement needed to be reached between councils at the highest level.

Having reviewed the concepts of eGovernment and eGovernance, the literature review is undertaken to identify the typical cost and benefits, barriers and enablers of ICT projects in government. The specific case of the RRIF project is then examined to determine if similar costs and benefits, barriers and enablers could be found in the RRIF project. The outcomes of the project, particularly in reducing red tape by increasing harmonisation between councils are explored.

2.0   LITERATURE REVIEW

This literature review outlines new initiatives of eBusiness, eGovernment and finally eGovernance as these relate to enhanced service delivery through the use of modern ICT. The espoused advantages of eGovernment over traditional service delivery are examined, together with the enablers and barriers to the implementation of eGovernment projects. This literature review identifies the key elements of successful eGovernment initiatives, which will be deployed as a framework for evaluating the attempt to improve the DA processes in South East Queensland.

2.1 DEFINITIONS

Central concepts are those of eBusiness, eGovernment and eGovernance, which are defined and explained below.

2.1.1 eBusiness

eBusiness is a generic term that refers to the use of information systems for a range of functions from data storage and data processing to sales and supply chain management within and between organisations, and between organisations and their customers, suppliers, agents, distributors that incorporates all relational activities. As a concept, eBusiness is often used interchangeably with eCommerce. While the distinction is couched in terms of the transaction focus of eCommerce versus the whole of business approach of eBusiness, eBusiness is used in this paper to mean the:

> transformation of an organisation's processes to deliver additional
> customer value through the application of technologies, philosophies
> and computing paradigm of the new economy (Andam 2003, 7).

eBusiness allows for all organisations and individuals that are linked to the internet to access a global network system. This approach opens up the scope and potential for personal and organisational participation in this global network.

According to Andam (2003, 7) eBusiness enables the development and enhancement of:

- production processes including procurement and supply chain management;
- customer focussed processes including sales and marketing; and
- internal management processes including communications, information management, accounts, and human resource management.

eBusiness has been classified by the nature of the relationships and transactions that have developed through the information technology (IT) network.

eBusiness incorporates a range of different transactions or relationships. There are business to business relationships (BSB), business to consumer (B2C) and business to government (B2G) relationships as well as permutations of the relationships between these three groups (Sensis, 2006). Hence, there is an emergence of the acronyms B2B, B2C, B2G to describe the different transactional relationships emerging through eBusiness. eBusiness not only covers external relationships it also includes relationships and information flows within organisations (the intranet). Through the mediation of ICT different ways of undertaking business emerge, as do new relationships for doing business (Andam, 2003). The application of similar technologies for government has enabled the related concept of eGovernment.

2.1.2 eGovernment

Just as eBusiness refers to the application of ICT to improve service delivery in businesses, eGovernment refers to the development and application of ICT towards the activities of the public sector. eGovernment incorporates internal transactions, information storage/retrieval/processing, and mediated electronic/ICT relationships within the public sector, and between the public sector and the community including business, consumers, citizens and NGOs. Invariably all public agencies and organisations have a web site, from public schools through to the Federal government. Through such ICT platforms public sector organisations are able to notionally operate on a continuous basis, access stakeholders very quickly and establish a reach beyond immediate jurisdictional boundaries. In turn ICT allows

for the development of new ways for delivering services, and provides for opportunities for new partnerships within the public sector and between the public sector and other sectors.

According to Becker et al (2006), eGovernment:

> entails the simplification and implementation of information, communication and transaction processes, in order to achieve, by means of information and communication technology, an administrative service, within and between authorities and, likewise, between authorities and private individuals or companies (Becker et al, 2006).

Likewise, the Audit Office of New South Wales argues that eGovernment:

> is about improving the efficiency and effectiveness of government by using the Internet and related technologies (Audit Office of New South Wales, 2001).

An important, if not central, point about eGovernment is that ICT is the platform or facilitator for systems and institutional change. By moving service delivery on line, organisations are forced to examine their own structure, examine their own policies and operating procedures, and examine how they relate to customers and other stakeholders. eGovernment is not simply about developing and implementing a technology, it is about building organisation and governance structures to support the organisational implantation of the technology. Saxena (2005) suggests that by using ICTs as an enabler, eGovernment aims to:

- improve the performance of public institutions and make them more responsive; and,
- help build a (partly) virtual and (completely) joined-up administration in which the user has to "knock at the front door" either virtually (electronically) or physically by going to a "one-stop-service counter".

 eGovernment has both fiscal and social dimensions. The fiscal dimensions are about the quality and cost of service delivery. The social dimensions are about improving citizen access to government and developing more effective and interactive mechanisms between the government and all community stakeholders. Hence the OECD (2003) argues that eGovernment is more about government and less about 'e'. ICT is the platform for development of new practices and new partnerships, and for opening up government policy making and decision making to citizens. In particular, "IT should not be considered in isolation, as it has become an essential instrument to transform the structures, cultures and operations of government" (OECD, 2003, 2). Thus for government ICT processes do more than just enhance efficiency, they enhance or enable the engagement of citizens in the process of government. This then, leads to the concept of eGovernance, which is central to the development and implementation of eGovernment.

2.1.3   eGovernance

While eGovernment provides the opportunity to rethink how the government provides services and how it links them in a way that is tailored to the users' needs, eGovernance is far more about people and politics than it is about technology and rationality (Heeks, 2001). This rethinking must necessarily include disavowal of the "build it and they will use it" mentality that infiltrates much web-enabled thinking (Davison, 2005). In essence governance is about the system of organisation and management that supports the IT systems. Governance requires public sector organisations to re evaluate their organisation, their rationale, their operations and their relationships with stakeholders. If governments can achieve this radical new conception of their role, then there is the potential for eGovernment to transform "not only the way in which most public services are delivered, but also the

fundamental relationship between government and citizen" (Symonds, 2000, p. S3). This implies, of course, not only eGovernment but also e-Governance if real power is to be devolved to citizens. (Davison, 2005)

E Governance is about organisations and socio political systems and how they can be supported by ICT. At the level of service, eGovernance promises a full service available 24 hours a day and seven days a week, greater accessibility, the capability to obtain government services without visiting government offices, and reduced service cost. At the level of basic factors (government accountability and general acceptance of state institutions), eGovernance contributes to the functioning of democracy by online provision of government information which would otherwise be difficult to obtain or unavailable, and through online debates and plebiscites (Teicher et al., 2002, 14).

An eGgovernance focus is differentiated in the literature from techno centric views of eBusiness. eGovernance is primarily a collection of political and social choices involving special technical considerations. However, most interpretations of eGovernance are techno-centric, focusing more on technology use (Bhatnagar and Schware, 2000). Consequently, many discussions of eGovernment take a techno-centric view and focus on the technical aspects of the design, capability and implementation of IT systems and processes.

Bringing a governance-centric focus, though very much desirable, is often difficult as it requires addressing a number of critical issues, some of which are given below (Saxena, 2005):

- *Defining a citizen-centric or governance-centric vision for the eGovernance projects.* Often eGovernance projects lack a clear vision in terms of their effectiveness focus, and are treated merely as "computerisation" projects for service efficiency.
- *Developing a process-oriented view of government work.* Government work is generally performed through vertical and rigid "silos" of departments (or agencies), that get on with their jobs without any collaboration between them.
- *Developing a performance management system* for efficient and effective service delivery, which continuously measures and monitors service performance.
- *Defining a flexible technology architecture that is secure*, provides easy access to users, and is scalable for high-volume operations as well as being cost-effective for the government. Many of the vendor-driven solutions for eGovernance are rigid and/or poor in one or more of these dimensions and therefore not appropriate in the long run.

## 2.2 STAGES OF EGOVERNMENT / EGOVERNANCE

Saxena (2005) discusses how e-Governance goes through three distinct phases where the first phase is using ICT for expanding access to government information, the second is to develop tools for two-way communication and the last phase is to create websites that allows users to conduct transactions on-line – what about the social aspect of eGovernance?. OECD operates with four levels of e-Government maturity (based on a model developed by the Australian National Audit Office (2000).

Figure 1 Stages of online service delivery and core service delivery objectives (Source: OECD 2003a)
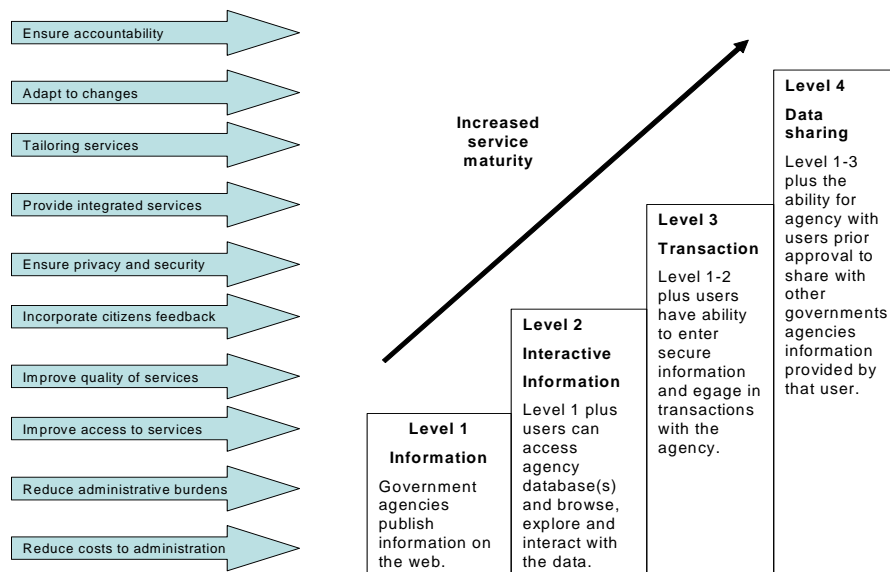
Koh, Ryan and Probytok (2005) examined knowledge management stages of e-government in a model comprising 5 stages; where citizens' participation and collaboration is increasingly important and of high value (Figure 2).

Figure 2 Model of eGovernment knowledge management functions (Source: Koh, Ryan and Probytok (2005)
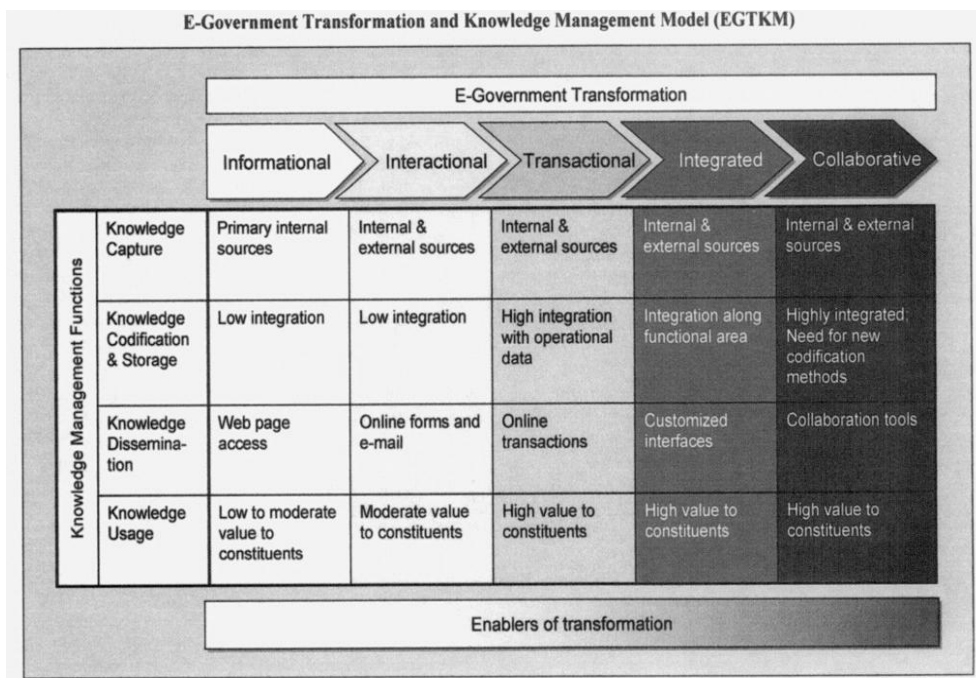
There is also a two-pronged approach, where decentralised ICT projects are used to solve specific problems and where coordination and communication between many decentralised ICT systems becomes a major issue. Other approaches include national government

implementing major centralised frameworks and then "forcing" decentralised governments to implement these systems.

Table 1 – Summary of approaches to ICT implementation

	Advantages	Disadvantages
Centralised	Higher ability to control/influence the project, minimising duplication of duties and overarching management	Time-consuming, limited ability to meet users needs, and inflexibility.
Decentralised	Greater fit between system and local needs, faster system development and perceived lower costs.	Increased barriers to sharing of data, duplication of effort, lack of learning and control and failure to achieve scale economies

2.3   COSTS AND BENEFITS OF EGOVERNMENT / EGOVERNANCE

When examining a new initiative, one useful approach is to clearly identify the costs and the benefits of the initiative. In this case, the costs and benefits of eGovernment and eGovernance initiatives are examined. Costs and benefits are not interpreted here in purely monetary terms, but in a broader sense of costs and benefits to business, consumers, government and society at large.

2.3.1   Direct Benefits of eGovernment / eGovernance

The potential advantages of eGovernment are significant in terms of financial and efficiency gains but also in terms of in the effectiveness of delivering core services and in more effectively accessing stakeholders and developing new relationships within and outside of the public sector. eGovernment may help break down government agencies boundaries and jurisdictional barriers to allow more integrated whole-of-government services across the three tiers of government in Australia (Huang et al, 2002). This breaking down of silos also applies within the same tier of government in terms of more effectively linking departments and agencies within the one tier of government. Reaching out to citizens and communities to not only deliver better quality services, but provide more service access, is an important purpose of eGovernment. Beyond these frontline objectives eGovernment provides opportunities for improved citizenship and partnerships developing within and outside of the public sector.

The Federal Government's eGovernment Benefits Study (2003, vii) stated that "the most obvious benefit of eGovernment is improving the service to people… eGovernment also saves customers money in the form of faster, easier and more convenient services. " The study summarised the key benefits of eGovernment as:
improved service delivery, reduced consumer costs and improved social benefits (such as better quality services and improved access to services). These findings are broadly supported by Huang et al (2002) who suggested that the main advantages of eGovernment are:
- Accessibility to the government and services may be increased – after hours and weekend access, even continuous access;
- Improved service quality;
- Integration of governmental agencies;
- developing inter agency collaboration and information/intelligence sharing; and,
- breaking down government agency boundaries and silos, and developing new collaborative partnerships

The OECD (2003) sets out its case for eGovernment in terms of:
- *efficiency gains* – savings in data collection, information provision, communications with clients and transaction costs
- *service improvements* – improved customer focus for service delivery and increased accessibility to services

- *improved policy outcomes* – through information sharing, interaction with citizens and explaining policies and programs
- *improved governance* – through openness and ongoing communication, greater communication with stakeholders
- *building trust* between government and citizens - through opening up policy development, explaining policies and ongoing communication

2.3.2   Indirect Benefits of eGovernment / eGovernance

The development and application of eGovernment processes in itself can generate indirect benefits that may not have initially been foreseen, but are important by-products of eGovernment.

Often the processes of developing and delivering eGovernment requires organisations to examine how they deliver services and how they relate to other divisions within the same organisation and to other organisations in the public sector. Harris and Cornelius (2003) conclude that the development of eGovernment systems leads to new organisational architecture and new ways of doing business and delivering services. In order to deliver a service differently there is often a need to restructure the organisation and to engage in dialogue within the organisation and between organisations. This contact and "opening up" of communication channels and developing co-operative arrangements in itself can lead to further synergies in terms of more information sharing, collaboration and examining new ways to effectively deliver services.

Inter agency collaboration over the delivery of one service can lead to ongoing collaboration over the delivery of additional services. Inter-agency information sharing results in offering fewer contact points for end-users of public services, thereby leading to more efficiencies in the delivery of these services to the end-users (Bajaj and Ram, 2003). In addition there is an educative and knowledge sharing process that enables separate departments and agencies to better understand what is happening elsewhere within the in one organisation or in other organisations. Information sharing can result in more effective policy design but also result in agencies and their employees developing a holistic view of service delivery. E-government allows for empowerment of citizens in being able to seek out the information they require on their own accord (Tan et al, 2005).

By reviewing the available literature on eGovernment and eGovernance, there are a number of consistent themes which emerge from the literature, which could be expected from such initiatives. Where these benefits are mentioned at least three times, they are considered to strong support form the literature. Where they are only mentioned once or twice, then these are considered to have less support from the literature. These are detailed in Table 1.

Table 2 – Benefits of eGovernment projects identified in the literature

Benefits
Inter/Intra Government Collaboration
Improved engagement of citizens
Improved service delivery
Improved access to services
Reduced cost to the consumer
Transparency of government processes

2.3.3   Costs of eGovernment and eGovernance projects

The literature noted above demonstrates the benefits that can be achieved through the implementation of e-Government initiatives. It is important to consider though, that these

initiatives have both financial and non-financial costs associated with their implementation, although these issues are not noted as prevalently in the literature as the benefits.

In relation to eGovernment, Kearns (2004) also argues that the approach to eGovernment which merely makes all government services available online may well divert efforts away from innovative and possibly effective uses of ICT, and be little more than a mechanistic process. West and Berman (2001, 237) note that information technology can create problems for managers just as it provides opportunities. Other authors make stronger assertions:

> Although the hype suggests that local governments will become more effective and efficient if they adopt eGovernment, it is clear that some of the impacts of eGovernment adoption are negative.
>
> (Holden et al, 2003, 341).

In most cases, where costs are noted, the primary focus is on the financial costs associated with an eGovernment implementation. Performance measures are usually undertaken to measure the return on investment. Yet studies by Van Thiel and Leeuw (2002, 267 cited in Tonnisson 2004, 4) have shown that an "increase of output measurement in the public sector can lead to several unintended consequences that may not only invalidate conclusions on public sector performance but can also negatively influence that performance". Tonnison (2004) notes that these dysfunctional effects include ossification, where procedures are 'set in concrete' and become very hard to change due to reliance on technology; a lack of innovation, due to the embeddedness of certain technologies; and tunnel vision, where the future potentials and opportunities are restricted to the extant technology. Consequently, when measuring costs public organisations should be wary of only considering financial measurement of costs (Tonnisson 2004), and therefore should carefully consider other forms of measures – particularly qualitative measures.

Costs associated with eGovernment / eGovernance projects were muted in the literature, with an implicit assumption that there are little or no costs involved in these types of projects. The costs of eGovernance initiatives are understated in the literature, particularly as these are not often examined in research projects, or are only examined in terms of the direct costs. Capati-Caruso and Valle (2006) probably provide the best summary of the costs associated with the adoption of new technologies by government, and distinguish between tangible or visible costs, which are termed here direct costs, and intangible or hidden costs, which are termed here indirect costs:

Table 3 – Costs associated with eGovernment projects (Capati-Caruso and Valle 2006)

Costs
Direct Costs
Hardware acquisition, development, maintenance
Software acquisition, development, maintenance
Telecommunication networks
User service provision (call centre, help line)
Indirect Costs
Staff time for new system implementation
Performance measurement and quality control
Re-organization (internal, inter-institutional)
Change and change management and the on-line and on-site training seminars required

2.4   BARRIERS AND ENABLERS OF EGOVERNMENT / EGOVERNANCE PROJECTS

Just as there are costs and benefits associated with eGovernment / eGovernance projects, there are also barriers, or impediments to their implementation, together with enablers.

2.4.1   Barriers to implementation of eGovernment / eGovernance

The barriers to eGovernment can be classified into the following areas: technological; organisational; access; and expectations.

Technological barriers cover the suitability of the software systems that are used as the platforms for particular eGovernment projects. These are issues that are linked to systems design and suitability, and also cover issues of compatibility where different IT systems are linked. The technological barriers are generally obvious at the planning and developmental stage. Issues surrounding systems compatibility are important where public agencies are linking with other agencies or with stakeholders. In some cases the technological problems may reflect inadequate training, in other cases it may be that systems are unsuitable for the assigned task or that linked IT systems are incompatible.

Organisational barriers refer to problems associated with getting departments and organisations to do business differently and to co-operate within organisations and across organisations. This may be linked to insecurity regarding power, status or job tenure, or not understanding the technological dimensions of the service delivery platform. Since eGovernment is clearly linked to intra and inter organisational change, traditional barriers to organisational change will be present in many eGovernment projects. Given the relatively new realm of e-government and the limited extent of expertise in this field, Heeks (2001) has stated that most e-government initiatives fail as a result of poor implementation and management of systems development. According to Heeks (2001), it is important to acknowledge that eGovernment systems are an integration of socio-technical systems and that such integration requires appropriate management support, including consultation and training.

Access covers several issues. First, there are linked to the compatibility of IT systems and platforms. These problems are present in terms of establishing intra and inter organisational links, and enabling users to access the system. This is largely a technological issue and is related to systems design and engineering. Access may be limited or inhibited by users either not having the capability or the know how in terms of connecting to the system. Users have to have a system that is client or user focussed, and can be readily accessed by home and office based computers and standard software systems. Internet access is not universal and there may be both financial and informational barriers that may limit citizen and community access to web pages and web links. Location in remote areas away from network access can be an inhibitor. The Sensis report on internet use by small and medium sized businesses in Australia suggests that internet use among small businesses is 90% and 100% for medium sized businesses, while household use is estimated to be 75% (Sensis, 2006). The same report suggests that access and use is growing, however, it does indicate an access gap among small businesses and in one quarter of Australian households. Here there are arguments for providing web kiosks and on line training for users. Another access barrier relates to resistance by users. This could be the result by a reluctance to change from established systems (direct service, paper based services etc) or to see the advantage of participating in eBusiness processes. Here the government needs to convince users of the benefits of e based systems (Tan et al, 2005).

Unrealistic expectations are generated where eGovernment transactions are viewed in purely technological terms. In this view, it is considered that all that is needed is an appropriate IT platform and everything else will follow. The IT systems platform often has to be supported through training, ensuring that the platform is accessible and allowing for time

lags in uptake as users become familiar with new systems. Where there is a technological orientation, as opposed to a service orientation, the expectations surrounding particular eGovernment programs may not be satisfied (Curthoys et al, 2003). Recognition of the need for adoption mechanisms to support E initiatives is important. As Leitner (2003, 98) states

> Hard, rational 'best practice in e-government project management does not seem to deliver, and needs to be tempered with a softer, more behavioural approach.

In their review of eGovernment Harris and Cornelius (2003) identified the key barriers to eBusiness as:
- Legacy problems associated with a reluctance to throw out the old system or adjust to the new, this can apply to employees, agencies and clients; users have to be convinced that the change is for the better
- Sharing and issues of ownership – within and between organisations; again there can be issues linked to status, position in an organisational hierarchy and power, all of which can be undermined by new systems
- Worker resistance arising from insecurity in dealing with new systems and processes, and as above, new systems have the potential to undermine power, status, control and authority. eGovernment can break down traditional divisional barriers and the hierarchies associated with them, it can also move from an agency focus in transactions to a client focus.

In terms of barriers, the eGovernment Benefits Study (2003) identified the following key barriers for users from a survey of users:
- useability – problems related to poor design such as poor search tools, pages that take a long period to download, pages that are difficult to navigate, and pages full of jargon and acronyms
- technology – this incorporates a range of issues including browser incompatibility, loading problems and the need to download additional software tools to support the web site
- computer access – especially in regional and remote areas
- security and privacy concerns may inhibit the provision of information and the participation in E Government processes
- skills and culture, including resistance to embracing new procedures and a fear of using ICT; this can be a particular problem for older citizens

According to the OECD (2003b) the main barriers to eGovernment are:
- *Legal and regulatory barriers that impede uptake of eGovernment.*
  - These include ensuring that e-services have the same standard/significance as the paper-processes, ensuring cross-agency accountability and legal consistency, securing citizens privacy and security.
- *Budgetary frameworks can restrict eGovernment initiatives.*
  - National budgets are often restrictive and do not offer enough flexibility for implementing eGovernment initiatives across agencies. ICT expenditures should also be seen more as an investment, where future benefits are recognised and provide certainty for future funding and focus on cost-effective solutions.
- *Adoption of eGovernment can lag behind the technical solutions.*
  - Specifications for systems should be based on performance requirements rather than technical specifications. Cross-border collaboration and harmonisation would reduce costs.
- *The digital divide will impede the benefits of eGovernment.*
  - Online access has advantages that are impossible to replicate offline. However, while the most disadvantaged have the lowest level of access, they often have the high levels of interaction with the government.

As e-Government services continue to be developed they require the collection of meta-data that will service many public service institutions. As part of this process it will be paramount to obtain quality data and be given the opportunity to give feedback on relevance and useability of services and data.

Major security issues surround authentication of users and securing the integrity of messages and data, confidentiality and privacy associated with the transmission of the information. Since these issues are also related to government agencies legal requirements of privacy and confidentiality many of these applications require significant change in government processes. One of the core issues for customers/citizens in order to develop trust in online-services was ensuring of that "Customer data will remain private".

According to OECD (2007) the next stage of e-Government activities will involve more complex set-ups involving more agencies, inter-agency collaboration, development of one-stop-shop services, and more scrutiny for correct use of taxpayer money. The barriers for implementing and also financing these large complex projects will be considerable both internally from staff, from financiers (governments) and from citizens. Benefits of better use of evaluation in e-government comprises: better frameworks to compare projects within and among agencies, developing figures that will increase transparency in decision-making, better understanding of drivers for successful e-Government projects, better understanding of the users/beneficiaries, and a positive contribution to evaluating efficiency and effectiveness of e-government programmes.

By reviewing the literature on barriers it is possible to identify themes in the literature, which are summarised in Table 3.

Table 4 – Barriers to implementing eGovernment projects identified in the literature

Barriers
Technological challenges (chiefly integration)
Organisational change required for adoption and implementation
Access to the services
Expectations being set too high for the initiative
Security of the data
Budget constraints (Resource issues)
Regulatory difficulties

2.4.2 Enablers to implementation of eGovernment / eGovernance

The facilitators for eGovernment are similar to the facilitators of eBusiness. First of all there is the growing ICT infrastructure and its capability to transform organisational effectiveness. The various platforms of delivery including mobile phone networks and the World Wide Web are being accessed by a growing share of the population. In turn the unit costs of web and mobile phone services are declining through competitive pressures and network expansion that in turn generates scale economies. Second, as with business, governments are aware of possibilities for improved service delivery, more effective service delivery and reduced costs in service delivery. Third, there are possibilities for improving existing relational capabilities and developing new relational capabilities both within government and between government and external agencies and citizens. For example, new partnerships can emerge within the public sector and between the public, private and the third sectors. Fourth, the public sector can reach citizens and communities to explain policies, receive feedback and advice and more on policy development and directly engage with stakeholders. This dialogue can improve policy design, increase policy transparency and lead to new partnerships. Here we have possibilities of eDemocracy where all levels of government can

directly engage with constituencies and citizens on a continuous basis to inform and seek direct input into policies (Curthoys et al, 2003).

eGovernment accommodates the New Public Sector Management (NPSM) model that has seen major restructuring of the public sector in many OECD countries, including Australia (Rama and Carey, 2003). This is part of what the OECD calls public sector modernisation which has been associated with efficiency drives and restructuring of the public sector through such processes such as corporatisation, privatisation and contracting out (Fairbrother et al, 2002). NPSM is also associated with new ways of delivering services, including internet delivery (OECD, 2005). Under the NPSM model the public sector is hollowed out and largely fulfils a more regulatory role while many functions are contracted out or provided through partnership arrangements with the private and third sector (Rhodes and Weller, 2001). The necessary restructuring of the public sector associated with NPSM accommodates the imperatives of ICT to develop new systems of organisation and new models of service delivery in order to take advantage of the potential that ICT offers the public sector. Business process re-engineering, associated with such practices as contracting out and service offshoring in the private sector (Srivastava and Theodore, 2006), is equally appropriate to the public sector within the NPSM context since the rationale behind NPSM is to re-engineer and restructure the public sector (Cuthoys et al, 2003). While eGovernment has a technological base, NPM has an ideological base, yet both have been important in the restructuring of the public sector. To some extent there is a synergy, the ICT platform of eGovernment has facilitated some of the major changes in public sector service delivery in Australia, notably the Jobs Network (Rama and Carey, 2003) and the development of individual workplace contracts (AWAS) (Burgess and Waring, 2006). ICT systems supported these major changes – the reach of the policies in terms of application and take up was enhanced through the various werb delivery of services

Reige and Lindsay (2006) suggest that public sector organisations are forced to change and embrace eGovernment by following four factors:
- the drive to realise efficiencies across all public services, for instance, by connecting silos of information across different levels of government and across borders.
- The need to develop new systems to improve the overall performance, and capitalize on a broader, more integrated and easier accessible knowledge base.
- To improve accountability and mitigate risk by making informed decisions and resolve issues faster, supported by access to integrated, transparent information across all organizational boundaries.
- To deliver better and more cost-effective constituent services such as enhancing partnerships with, and responsiveness to, the public, thereby clearly demonstrating a higher return on taxpayers' money.

Table 5 – Enablers to implementing eGovernment projects identified in the literature

Enablers
Internet and related technologies (eg XML)
Philosophical base (NPM)
Push for efficiencies within government

2.5   EXAMPLES OF EGOVERNMENT / EGOVERNANCE
The next section highlights examples of projects that are considered eGovernment/eGovernance successes. All levels of government in Australia have been using ICT to improve services across all areas of government from information provision to transactions and participation. The eGovernment Benefits Study (2003) reported that 50% of the population and 60% of businesses were then making use of eGovernment services, and the expected increase in service use was put at 30% per year. The report indicated that in 2003 that over 80% of internet users were also accessing eGovernment services. The

Australian Government Information Office (http://www.agimo.gov.au) facilitates eGovernment across Australia and provides examples of best practice operations of eGovernment. These best practice examples demonstrate the potential gains from eBusiness, as outlined above, through application and practice. The following list of examples provides a sample of the areas of potential where ICT can improve the efficiency of the public sector and offer potential gains for all stakeholders in the community.

Table 6 - Summary of potential benefit of eGovernment applications with examples

Benefit	Example
Providing better and extended access to services	The Australian Library Gateway provides links to libraries with internet access.
Facilitating democratic engagement	The ACT government introduced an electronic voting system in 2001.
Mechanisms to help *improve service delivery*	This is through the provision of online feedback and evaluation forms such as that available on the site of the Federal Child Support Agency
Moving away from paper systems to online systems	eCensus 2006 provided an online census form as an alternative to the paper forms; Australian Workplace Agreements can be completed and lodged online
Engaging citizens in policy and decision making processes	Seeking direct input from citizens and feedback from the community on policy development. Western Australia's Citizenscape assists those who wish to engage and participate in policy development; Your City Your Say is an online forum for the discussion of issues that affect Brisbane.
Improved and faster, efficient service delivery especially around individual needs and circumstances	Australian Jobsearch provides assistance for job seekers throughout Australia; Centelink has an online service for claims and the management of welfare services; the costs of this E iniative were recovered in 2 years with net financial gains thereafter estimated to be over $4m per year (OECD, 2007). E tax allows for online tax returns and enquiries, the net financial gain to the tax office is around $3m. per year (OECD, 2007).
Co-ordination to assist policy making	METeOR is a metadata online registry of the Australian Institute of Health and Welfare that collates and publishes data on health, community services and housing assistance, it standardises the data and in turn this feeds into committees and government departments (http://meteor.aihw.gov.au)
Developing *communities of practice* to share information, network and improve services	Intranet Peers links intranet managers throughout the public sector; the NSW Webmanagers Networking Group links web managers in the NSW public sector.

In the context of local government and development/planning permission processes, the Australian Government Information Office list two examples of local governments cited for their E innovations with respect to planning and development applications.

Hobson Bay City Council (Victoria): Greenlight Online Permit Manager. https://greenlight.e-vis.com.au/hbcc/public/main.aspx. The council developed the Greenlight Online Permit Manager for town planning and development application (DA) processes through online service delivery for the purposes of improve service, reduce delays, deliver better service

and introduce greater transparency to the approval process. This was Australia's first online development application process. The software system was developed after a process of consultation with all stakeholders. Applications could be lodged online and the applicants are able to track the evaluation and decision making procedure through all stages. The Greenlight project covered a range of approval processes including planning permits, liquor licensing, planning amendments and appeals. Moving to online service provision resulted in applicants having 24/7 access to the system. The average processing time for permit applications was reduced from 88 to 34 days. The advantages of the system were the reduction in human error as a result of improved and complete documentation; easier record storage and record access; and savings in terms of direct costs and staff time.

Shellharbour City Council (NSW) http://shellharbour.nsw.gov.au The council developed and installed an electronic DA process. The system provided for initial screening of applications, and allowed for improved transparency in the approval and assessment system. Applicants can track entries through all stages of the DA process and they have the facility to provide feedback and make diary entries online. As with Hobson Bay City Council there were gains for the council and applicants in terms of cost and time saving. The NSW Government is moving towards similar electronic delivery of DA processes across all local government areas in NSW.

eGovernment initiatives are extensive and diverse. DA processes are one area where processes are often complex, opaque and shrouded in political controversy in the context of differing stakeholder interests. E Government iniatives have the potential to simplify the process, reduce delays and complexities and make the process more transparent. Divergent stakeholder interests will still be present, however EBusiness processes offers the opportunity for stakeholders to directly participate and observe the DA process as it takes place, as in the case of the Shellharbour City Council process.

2.5.1 Key elements of eGovernment / eGovernance initiatives

In summary, eGovernment/eGovernance processes will generally incorporate the following components:

Leadership- many eGovernment projects require substantial change within organisations and new partnerships between organisations. These developments will require authority and a steering group that has the authority to develop and implement the E government project. Hence leadership is essential (OECD, 2003).

Consultation and co-operation – stakeholders need to be informed of the project and how it can benefit them; other organisations affected by the project need to be involved at the planning and development stage; consumers need to be informed and educated about new processes for doing business with the Government. Often there is a long gestation period from development to application as key stakeholders are consulted and informed. Transparent processes that facilitate effective two-way transfers of knowledge between public organizations and stakeholders are fundamental for establishing successful partnerships (Reige and Lindsay, 2006).

Trust and engagement - It is also paramount to recognise different stakeholder's interests and needs in e-Government (Tan, Pan and Lim (2005). Government needs to inform about how they want inform/market their e-services towards their citizens. Customer needs to be able to trust the systems and that adequate security and privacy requirements are in place, this will create trust and relationship to citizens. Main efforts from government must be to promote and market value-added for citizens to swap to online-services. Policies should also be adopted to try to solve the issue of many being unconnected, resulting in large ICT investments with limited uptake. Increased uptake can be ensured as result of improved

useability and adopting a "push" attitude to public service delivery. Improving citizen's engagement with online policy-making requires Timing (enough time and planned in stages), Tailoring (to fit customer's skills, requirements and interests) and Integration (integration of feedback loops and consultations processes). In order to increase citizen's use of e-Government services they need to be at a scale that they have a capacity to adopt, data and services need to be coherent across agencies. Citizens should be encouraged to participate in evaluations and feedback to ICT projects. Engaging citizens online raises expectations of improved service delivery, and needs commitments from public services sector. (OECD 2003c).

Purpose and evaluation – E projects must have a clear set of objectives that are linked to gains for public sector and its stakeholders. There must be ongoing evaluation of projects by set criteria. Such criteria include return on investment, cost benefit ratios and key performance indicators (OECD, 2007). Evaluation should incorporate financial benefits to the public sector, benefits to users and the public, social benefits and whole of government benefits such as increased transparency (OECD, 2007).

On going modification and development – E projects require ongoing modification and development in the light of operational problems, technological developments and new opportunities for applications from the same platform.

Building on new relationships and partnerships – eGovernment allows for intra and inter organisational partnerships to be built upon towards the development of new projects that deliver benefits to the public sector and stakeholders. For example, partnerships between the Federal government and the private and public sector have developed through the linking of organisations associated with the Jobs Network.
eGovernment may help break down government agencies boundaries and jurisdictional barriers to allow more integrated whole-of-government services across three tiers of government (Huang et al, 2002)

2.6 SUMMARY OF ANTICIPATED ISSUES
Drawing the literature review in its entirety, the following are the anticipated benefits, enablers, and barriers to implementing the RRIF project in South East Queensland:

2.6.1 Summary of Benefits
- Inter/Intra Government Collaboration
- Improved engagement of citizens
- Improved service delivery
- Improved access to services
- Reduced cost to the consumer
- Transparency of government processes

2.6.2 Summary of Costs
- Hardware acquisition, development, maintenance
- Software acquisition, development, maintenance
- Telecommunication networks
- User service provision (call centre, help line)
- Staff time for new system implementation
- Performance measurement and quality control
- Re-organization (internal, inter-institutional)
- Change and change management and the on-line and on-site training seminars required

2.6.3 Summary of Barriers
- Technological challenges (chiefly integration)

- Organisational change required for adoption and implementation
- Access to the services
- Expectations being set too high for the initiative
- Security of the data
- Budget constraints
- Regulatory difficulties
- Lack of transparency of process

2.6.4 Summary of Enablers
- Internet and related technologies (eg XML)
- Philosophical base (NPM)
- Push for efficiencies within government

These elements will be used in evaluating the initiative, particularly when examining any findings which confirms or extends this literature.

3.0   METHODOLOGY

Public policy case studies have been called for as a way of advancing public policy practice (Osborne & Brown 2005). A case study is "a method for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive descriptions and analysis of that instance taken as a whole and in its context" (U.S. General Accounting Office 1990, cited in Mertens 2005:237). Case studies provide for in-depth analysis of a particular issue or technology as it impacts an organisation or industry, and can provide strong recommendations for improvements in theory, technology or policy.

Two main methodologies were used in this case study to examine the RRIF project: semi-structured interviews and policy documents as primary sources.

3.1   SEMI-STRUCTURED INTERVIEWS

Semi-structured face to face interviews were conducted with individuals responsible for the implementation of the RRIF program in South East Queensland. The interviewees were selected via purposive sampling (Zikmund 2003: 383) as respondents required particular expertise concerning the implementation of the RRIF project in their local jurisdiction in order to be able to respond meaningfully to questions.

A snowball sample of six councils, out of the 21 involved in the project was undertaken. Two councils where considered small by stakeholders interviewed. Two were considered medium size, and two more were considered large. By interviewing councils which were different sizes, it was hoped that resource issues and other variables which could affect implementation of the initiative could be identified.

Semi-structured interviewing was selected as the main methodology as it ensures cross case comparability (Bryman and Bell, 2001: 346), and is important methodological tool when conducting exploratory and explanatory studies – particularly in order to find out what is actually happening in practice (Saunders, Lewis and Thornhill 2000: 245).

The interviews were then analysed using content analysis in order to code the issues raised by interviewees. Individual informants have been de-identified and any commercial in-confidence information has not been divulged. All interviews were conducted in confidentiality, and the names of interviewees have been withheld. When citing interviewees, the generic term 'interview data' is used as a means of preserving anonymity. The names of government departments, government reports, and most government policies have not been

obscured as most of this information is already freely available, either on the Internet or in public libraries. The names of individual councils interviewed were also obscured, with the aggregate findings for the size of council typically reported.

3.2   POLICY DOCUMENTS
Government policy documents were analysed as primary data sources which primarily outlined the planning and intent of the RRIF project.

3.3   CONTENT ANALYSIS

Content analysis is a technique for gathering and analysing the content of text (Neuman 2000: 292), and is an approach that has wide applicability in policy related research studies (Marinetto 1999: 68). Hesse-Biber and Leavy (2006) argue that content analysis is a hybrid technique which has the potential for both quantitative and qualitative applications.

Content analysis in this project is descriptive rather than interpretive (Bauer 2000: 135), particularly as the "concreteness of materials studied in content analysis strengthens the likelihood of reliability" (Babbie 2004: 324). One of the strengths of content analysis is that it is unobtrusive and non-reactive, and is viewed as an objective way of obtaining data of the content of various forms of communication (Marshall & Rossman 1999: 117). A key element of content analysis is the use of a coding system to quantify the data into an analysable format. Coding systems in content analysis can identify numerous characteristics of text content, such as the frequency of certain type of information (Neuman 2000).

In this study, interview content was coded according to a number of key words and concepts related to the implementation of eGovernment applications. These concepts were initially drawn from the literature review in the areas of costs and benefits, enablers and barriers of ICT projects in government. These initial sets of concepts were expanded as novel concepts were identified in the interviews. By coding the interviews by concepts, qualitative use of the interview content, in the form of quotations, was possible. Coding also enabled quantitative analysis of the data – particularly in identifying which concepts were mentioned by the majority of interviewees, and in identifying any differences in issues between the councils.

4.0   RRIF PROGRAM OVERVIEW

The Regulation Reduction Incentive Fund (RRIF) program was created by the Australian government with the aim to provide incentives to local councils to reduce red tape for small and home-based businesses. The funding for the program was facilitated through a competitive merit-based grants process targeted at Local Government Authorities. Grants were awarded to projects which targeted specific areas identified for reform (AusIndustry, 2007), in the SEQ this focused around improving DA processes and creating transparency in environmental health policies, regulation and compliance.

An important key factor to note with this case study is that it is unusual for an eGovernment initiative. Typically individual government departments undertook eGovernment projects in order to improve their internal performance. The RRIF case study examines the implementation of an eGovernment initiative across 21 autonomous local councils in South East Queensland. In order to move ahead, agreement needed to be reached between councils at the highest level.

The application process for RIFF was originally initiated and endorsed by the Council of Mayors (CoM) following in their vision of "speaking with one voice for South East Queensland". The RIFF Program in SEQ acted as a catalyst aimed at harmonizing

processes across 21 councils. The Council of Mayors as the top tier of governance within the program was unique as it provided a unified body which had agreed to implement a set of initiatives for the SEQ region. Underneath the CoM control groups were also formed to steer and provide focus to each of the initiatives that made up the RIFF program. These governance bodies were designed to bridge the gap between the Council of Mayors, project team, project implementers and the eventual users of the system. This structure is outlined in Figure 3.

Figure 3 – Governance Model
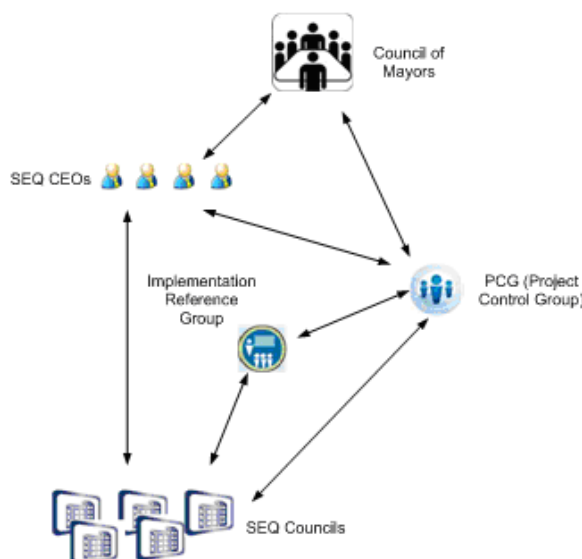
The RIFF program consisted of two projects:
1. Planning and Development Online
2. Local Government Toolbox

These projects were designed to reduce red tape in the areas of development assessment, environmental health and regulation and compliance, with an overall vision to enable customers to interact more transparently with councils through standardising the way councils operated through the various initiatives within the projects.

The two projects each incorporated three initiatives:

Table 7 - Summary of RRIF project initiatives

Planning and Development Online	Local Government Toolbox
DA Tracking	Customer Facing Information
Planning Scheme Online	Customer Service Scripting
Risk Smart	Local Law Review and Standardisation

These initiatives aim to provide:
- immediate access to relevant, up-to-date information through empowering the public to access information via the web
- improved development assessment decision-making process, in applying standardized processes throughout the 21 local councils
- creating channels by which Development Assessment information could be accessed by councils and the public alike
- standardise local law/ policies across councils, where in the past local laws may have differed in neighbouring councils
- enable easier regulatory compliance through the creation of standardisation

- reducing the number of interactions members of the public and businesses need to have with councils through the provision of increased accessibility to information on council websites, such as:
  - o the current status of the development application
  - o planning scheme information and policies
  - o environmental health requirements
  - o local law policy information
- the ability to fast track low risk development applications through the assessment process by providing better access to planning scheme information and empowering customers to confidently submit complete development applications (RIFF SEQ Program (D), 2007).

4.1 PROJECTS CONDUCTED UNDER RRIF

The two projects carried out under the RIFF program were delivered through two different approaches; each approach aimed to facilitate a model where the needed expert knowledge could be sourced to meet the project needs. Local Government Toolbox was developed as a custom made solution built in-house while an outsourced product was developed for the planning and development project (RIFF SEQ Program (A), 2007).

The implementation of each project and its associated initiatives within the SEQ RIFF program was undertaken on a council by council basis with the aim to provide a streamlined solution to be moulded to fit the needs of each council given most had been using disparate legacy systems up until this point. Given the large number of stakeholders involved, each council implementation needed to be tailored depending on council size, level of IT know-how and existence and type of legacy systems.

The benefits of using an existing product as the solution provider for Planning and Development Online ensured that the product was rigorous enough to be customised and branded for each council but had a standardised look and feel to enable harmonisation across the councils involved. The key reason for using this vendor came about as a result of a successful pilot project in Pittwater, NSW and the ability of the software to be integrated into the back-end systems that the various councils used and amalgamate that information through a common interface. With this in-mind it enabled the vendor to focus on the technical aspects of the project, while the project team could concentrate on the change management aspects given the short timeframes for project delivery and vast changes required in business processes (RIFF SEQ Program (A), 2007).

For the second project, Local Government Toolbox, the critical component for the project revolved around the ability to engage with the various councils and facilitate the process for the standardisation of local laws. An in-sourced solution enabled the council employees to drive the process for harmonisation, bringing both expert knowledge on local laws and a clear understanding of the operating environment within councils to the project.

4.1.1 Local Government Toolbox

The objective of Local Government Toolbox was to act as a knowledge base for councils with its primary aim to provide the same environmental health information and local law policies across the whole region. As part of the initiative it focused around standardising local laws regionally. The system enables customers to access one set of council requirements online, no matter under which council jurisdiction they belong.

Prior to making the information public and standardised the project team was involved in setting a process under which laws would be distributed to councils, agreed upon and signed off after which only then being loaded onto the system. The team was required to script and standardise the laws yet still ensure variance in laws across councils were met. This process of standardisation was an efficient way in which to harmonise local laws across the region and only made possible through the project team consisting of council workers with expert knowledge in this field. A summary of the process is shown in Figure 4.
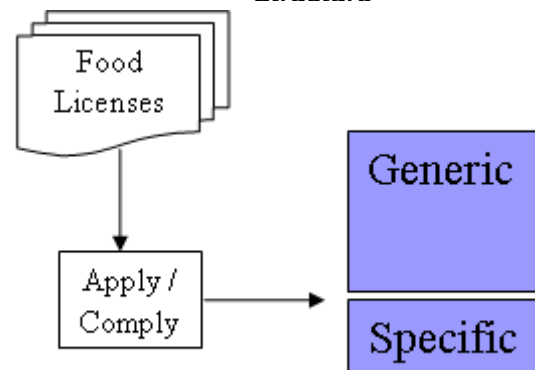
Figure 4 – Standardisation Acceptance Process
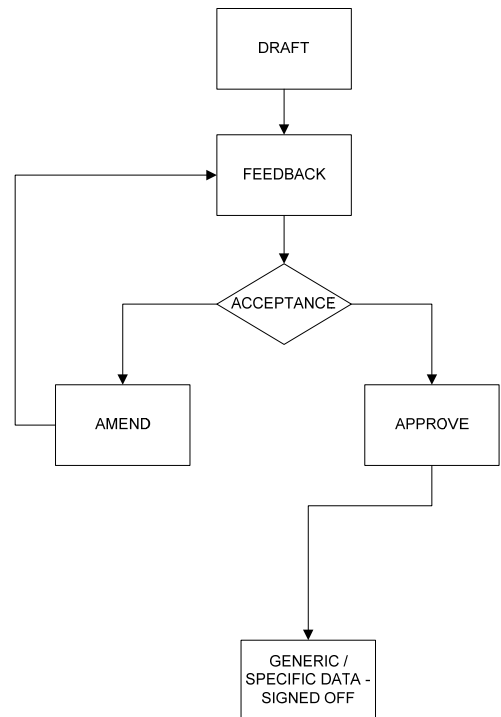
The way the application was built enabled enough flexibility to have both generic and council specific sections to accommodate for variances in local council fees and requirements.

As a web-based knowledge management system Toolbox gives council staff, individuals from the public and businesses access to regionally consistent information and standardised local law policies. Through information consistency and transparency the intent is to reduce the need for interactions with councils. This is summarised in Figure 5.

For example, conducting a query regarding food licenses displays what regulations are in place and need to be met prior to opening up a food store; user can view generic information and council specific information if relevant. From there the customer can obtain relevant documents to apply for a license. This process is show in Figure 5 above.

Figure 5 – Toolbox Content Access and Structure
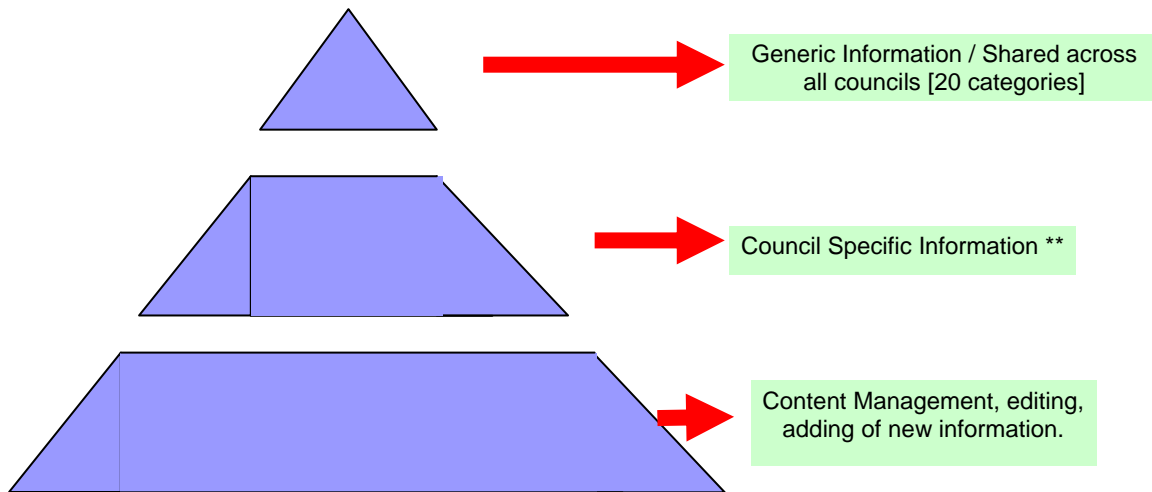

The scope of Toolbox incorporates three initiatives:
1) The customer (public) facing initiative aims to provide improved access to consistent environmental health information via councils websites to business customers, ensuring better understanding of regulatory requirements
2) The customer scripting initiative is designed to develop consistency in the way information request and enquiries made by small home-based businesses are handled by local governments across South East Queensland.

3) The Local Law Reform initiative was intended to standardise and rationalise local law policies across South East Queensland to enable consistent interpretation and improved understanding of legal requirements.

(RIFF SEQ Program (A), 2007)

Toolbox aims to bring these benefits:
- easier way to transact business across the region
- improve the understanding of environmental health requirements
- increasing effective operation of a business within the regulatory standards of government

Figure 6 – Toolbox Knowledge Framework

Generic Information / Shared across all councils [20 categories]

Council Specific Information **

Content Management, editing, adding of new information.

**Example: Outside office hours some councils do not have telephone services, this service can now be undertaken by other councils that do operate outside of business hours, through the council specific section other councils can provide this information.

A screenshot of the toolbox interface is below (Figure 7)

**Figure 7 - Screenshot of the Toolbox Website**
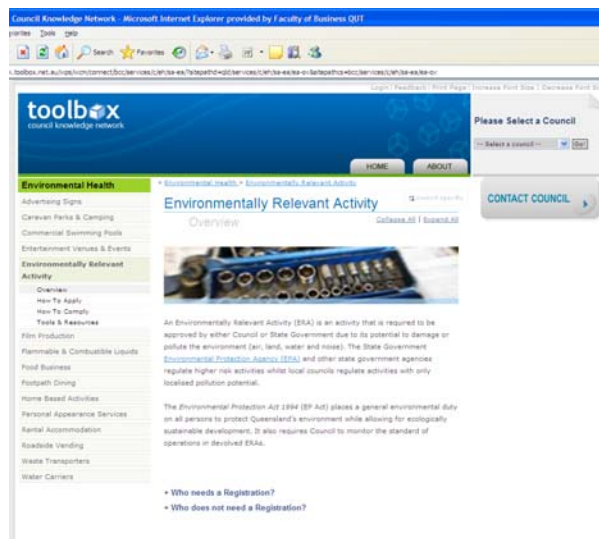
The initiatives within the second project, Planning and Development Online focused on improving DA processes through standardisation, a clearer application process and information transparency and consistency. As part of this initiative property information that had previously been paper based was made available electronically.

4.1.2   DA Tracking (DAT) – Property and Application Enquiry

The Property and Application Enquiry initiative has been designed to provide customers with the ability to firstly view property information and secondly track the progress of development applications online. Its objective is to provide basic property and mapping information to planners, developers and members of the community to aid in their preparation of a development application based on property information made available. As part of this module it provides a facility to view other development applications.

The second component in the application tracks the progress of development applications from lodgement through to determination, identifying the current status of an application, tasks undertaken as part of the assessment process and estimated assessment timeframes. In addition as part of this process it provides any associated documents that may be required. Transparency in the application process was aimed at increasing accountability in council staff and intended to speed up the application approval process through the ability to track this process. A screen shot of DA enquirer is below (Figure 8).

**Figure 8 – Screenshot of DA Tracking – Toowoomba Shire**
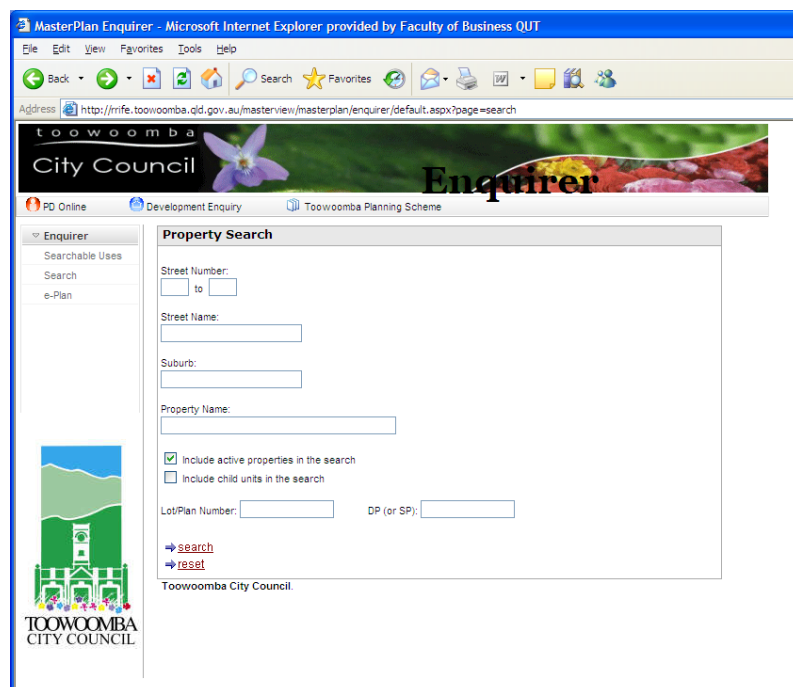
4.1.3   Planning Scheme Online

The Planning Scheme Online (PSO) initiative was developed to provide more accessible, accurate and timely planning information to planners, developers and members of the community about what levels of assessment and development controls are applicable to specific properties.

PSO was made possible through the transfer of each council's paper based planning scheme to an electronic format, integrating relevant information into the scheme online and providing tools to be used by the public to query the information presented. With all this information accessible via the web, it emphasises a shift in making the overall development application process more streamlined and seamless. Overall, the process enacted a significant shift from having to access hard copies or searching for PDF versions in the past that were quite difficult to locate.

Planning Scheme Online allows relevant planning scheme information, regulatory planning information and basic property and mapping information to be accessed with relative ease. The manner in which the application works ensures it only displays only relevant information for a development application. In turn this ensures the council's application process is more transparent and council customers can lodge their application with greater ease as they are aware of the necessary documentation required to complete the application. Through this process it is intended that the overall application process will become more efficient (see Figure 9).

Figure 9 – PIOL and DAT
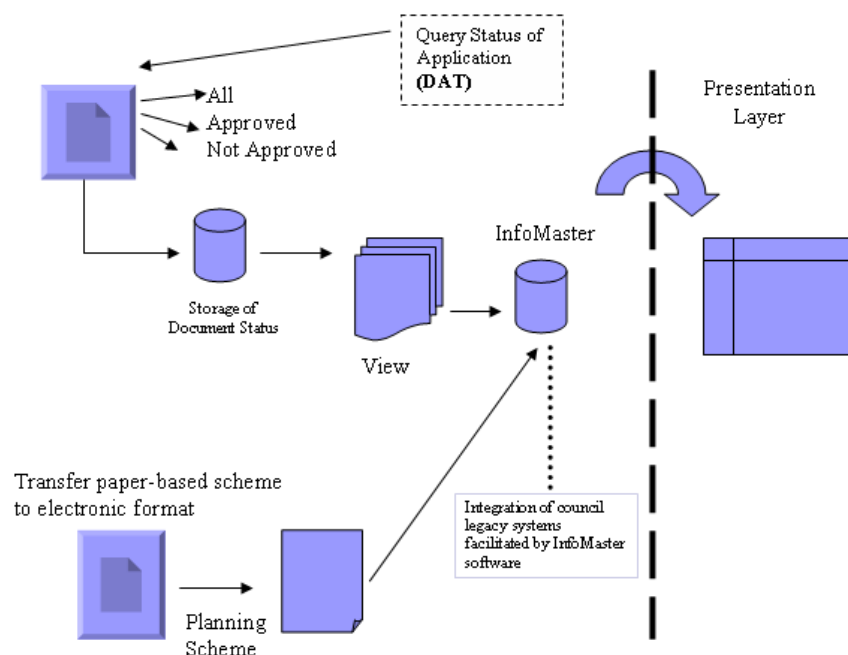
4.1.4   RiskSmart

The Risk Smart application intends to introduce a streamlined process for assessing "low risk" development applications through the use of a series of questions relating to a selected "use type" (eg. building a warehouse in an industrial area). As part of this process it qualifies the level of risk associated with a development and if deemed as low risk provides a turn-around of five working days. Formal applications still need to be submitted but the outcome is a faster assessment turnaround for customers if the application is identified as low risk, with business benefiting from time and resource savings across the region.

RiskSmart aims to deliver the following benefits to planners, developers and the community (RIFF SEQ Program (E), 2007)
- Efficient identification of the level of risk associated with applications
- Transparency of planning scheme provisions and decisions
- A front end system which alerts applicants to risks prior to the lodgement of their application
- Fast assessment/approval of low risk applications
- Provides transparency as to what requirements are needed for the submission of a quality application
- Reduction in councils' assessment time frames and duplication of effort in the assessment process.

With RiskSmart each council was required to develop their own risk frameworks and criteria for the public to utilise. Given the complexity of applications most councils implemented only one scenario under which the risk smart application process would be applicable with the intent to increase this in the future. RiskSmart is summarised in Figure 10, while a screen shot of the risk smart web site (Eidsvold Shire) follows Figure 11.
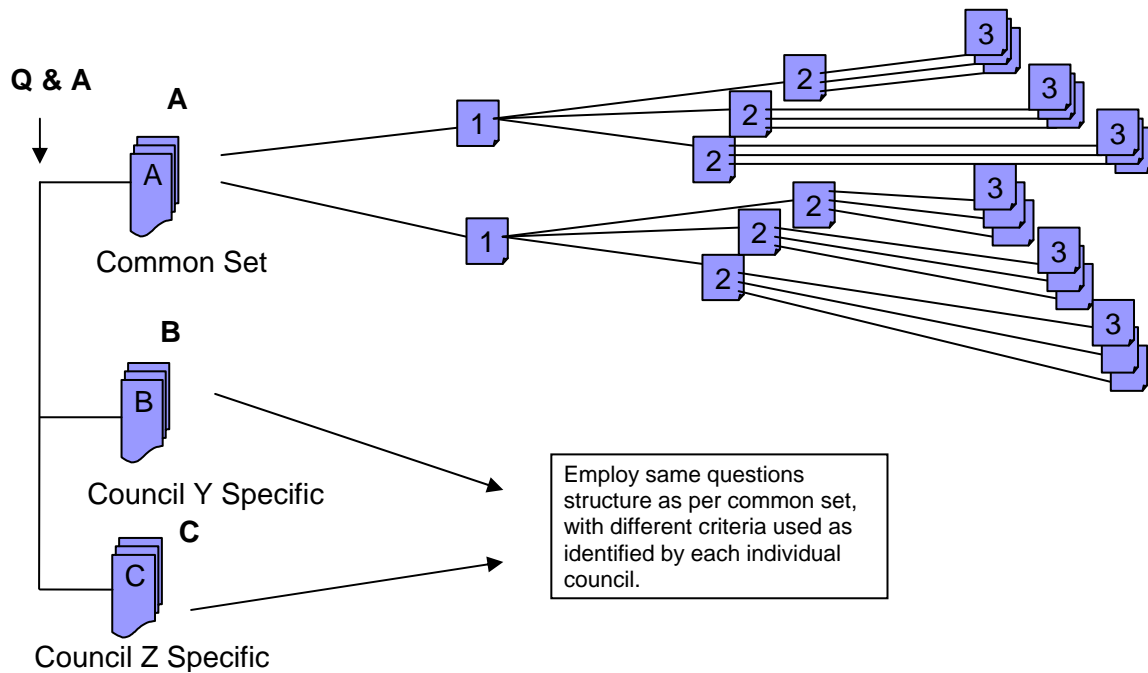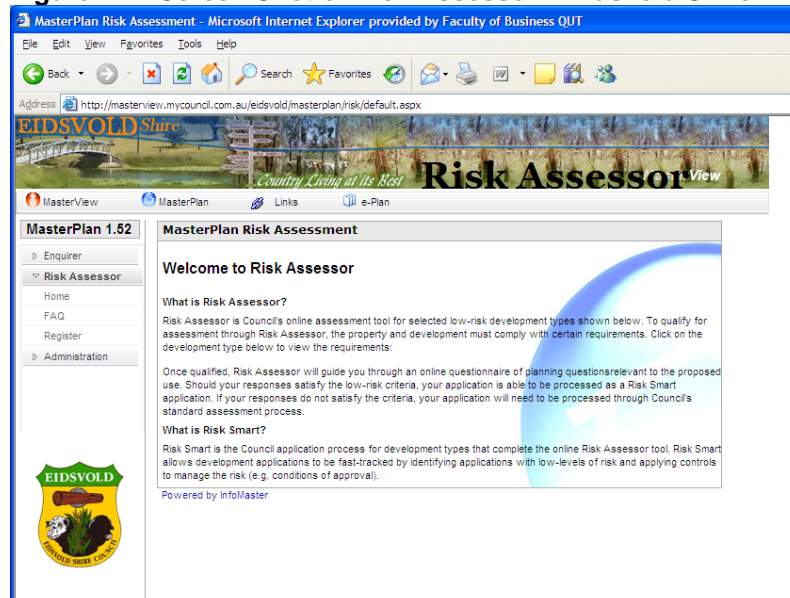
Figure 10 - RiskSmart Framework

Figure 11 – Screen Shot of Risk Assessor – Eidsvold Shire

4.1.5 Conclusion

It is important that to recognize that the initiatives undertaken formulate a platform from which business can perform transactions with councils in a simplified manner. Increased transparency, accessibility, accountability and consistency all contribute to reduce red tape in the areas identified for reform which included development assessment, environmental health and regulation and compliance.

5.0 DISCUSSION AND FINDINGS

This section will firstly outline the findings of the research, based predominantly around the interviews. An extended discussion follows which pays particular attention to the
- anticipated versus unexpected outcomes of the research;
- more detailed weighted ranking of the relative importance of each of the items identified; and a
- 'within case' comparison of how different size councils perceived the individual issues identified in the research.

As noted earlier, this case study provides a significant opportunity to examine the implementation of a framework across 21 local councils in Queensland.

5.1 FINDINGS

Interviews were conducted with officers from various councils in South East Queensland using a snowball methodology, commencing with the RRIF team which implemented the project.

Responses were coded according to area and item. Areas identified from the literature are:
- Enablers
- Barriers
- Benefits
- Costs

Enablers are those items, initiatives or resources which support the implementation of the RRIF project. Barriers are those items, initiatives which inhibit the implementation of the RRIF project. Benefits are those items which provide a positive outcome for local government, communities or clients of local government. Costs are those items which exacted a toll on the organisation implementing the initiative. Sections below are dedicated to elaborating these categories in more detail.

Items coded in the interviews, under each of these categorical areas include:

Table 8 - Summary of enablers, barriers, identified by interviewees

Enablers	Barriers
- Push for efficiencies - Resources - ICT - Advertising & Marketing - Governance - Existing collaborations in council - RIFF Team - Software vendor - Pre-existing ICT initiatives	- Organisational change - Access to technology - Expectation gap - Technological - Single use users - Lack of skilled staff - Security - Speed of implementation - Personalities - Long Holiday breaks

Table 9 - Summary of benefits and costs, identified by interviewees

Benefits	Costs
- Engagement of citizens in policy - Improved service delivery - Improved access to services and or information - Improved intra and /or inter government relations - Transparency - Reduced costs to the consumer (time or $) - Information sharing between councils - Focus on significant work - Reduced counter enquiries (due to increased data online) - Consistency across councils - Pressure to keep information up to date - Increased compliance	- Implementation took resources away from operations - Little benefit - Duplication of processes (technology or paper based systems) - Change of existing process ~ IT & business (previous system was seen as better) - Initial increase in inquiries ~ j curve implementation - Lack of technological 'fit' with existing IT systems - Internal reorganisation - Telecommunications - Training time - Hardware acquisitions - Software acquisitions

Also a number of factors where identified in the interviews which were external to the project, but which may impact the project, were identified:

1   Imminent local council amalgamations in Queensland
2   Future extension of technologies and initiatives associated with the project
3   Regulatory change, particularly how this limited the project.

Each of these items is discussed in detail below:

5.1.1 Enablers

Enablers are those items, initiatives or resources which support the implementation of the RRIF project. These are explained in more detail below.

Philosophical base (New Public Management)

While a philosophical base of deploying ICT to improve the provision of services under NPM (OCED 2005), this was not explicitly noted by any interviewees. Fine grained analysis of interview transcripts may identify constructs related to NPM, but such analysis is beyond the scope of this report.

Push for efficiencies

While the push for efficiencies was identified from literature review (Reige and Lindsay 2006), it was not mentioned by many councils as a driver or enabler of the RRIF program. Some councils located in growth corridors, indicated that there was internal pressure to find ways of achieving more efficient operations, particularly due to increasing workloads.

For example:

> One of the drivers for that … we weren't performing as best as we could, we were behind in our delivery of applications
>
> [Interview 10]

> we are under a lot of pressure to turn the DA approvals around very quickly, so yeah having an electronic system that is capable of providing information to the community has just been fantastic.
>
> [Interview 8]

ICT

ICT as an enabler of the RRIF program was mentioned by a majority of interviewees, and is also noted in the literature as one of the key enablers of eGovernment (Rama and Carey 2003). This is understandable considering the reliance on ICT to deliver outcomes for the project. For some councils, the RRIF project provided the opportunity to implement Internet based service delivery for the first time:

> We had an electronic process, but we weren't going to make it available on the internet, because that was something that was going to be a drain on our resources at this point in time, so [RIFF][1] fast tracked that process for us.
>
> [Interview 5]

Others already had Internet delivery of services, and the RRIF project enabled an expansion of these:

> Two years ago we decided to improve our service and look at our online business, so prior to the RIFF Project in our normal annual and project budgets the Council agreed to investigate online eBusiness to go with our other on line business across Council … We had an online version which was very simple… so when RIFF came along the opportunity was there to expand on that.
>
> [Interview 10]

> [Toolbox] has been built into our environment for a long time now, so the only new component to come on board was the customer service facing toolbox, and that just enabled us to open some documents to the public which we had problems delivering internally through our internal website, so it has allowed us to deliver a whole lot of documents and content via the web that we couldn't have done internally.
>
> [Interview 6]

Thus RRIF enabled, built upon or expanded existing ICT initiatives in the councils interviewed. This is a special feature of the RRIF project, and one which in fact contributed to the success of the initiative. Thus it is not the mere fact that ICT existed, but that some councils involved in the RRIF project had already rolled out elements of the system in their own environments, and the RRIF project provided an opportunity for other councils to learn from and share those experiences. This point is discussed further below.

Pre-existing ICT initiatives

In some cases the existing technology can hinder the implementation of a new ICT initiative, and examples of this are outlined in the barriers section below. However, in this case study existing ICT initiatives also proved to be an enabler of the RRIF project in a number of ways.

> Some Councils are extremely good at it [web based services], and we actually learnt from them, in fact there were two councils that were so good at it, in the end we actually tested our strategies with them first of all, because they were really on the ball when it came down to it, they helped us many times.

[1] Text located within closed brackets in a quotation, are the authors and are used to clarify context, or to protect identity of speakers

For example with the Toolbox initiative:

> Some of the outcomes [of a previous initiative] have been brought into Toolbox, for example they produced videos on compliance, how to comply with motor vehicle workshops, personal appearance services, swimming pools, temporary food stalls and they produced and developed the videos. They have also produced DVD's of it, and we have grabbed a copy of that in a stream via Toolbox as well… The outcome had to be in stream with what all the other councils were looking at, so … It had to be developed generically so that it could be rolled out to other councils and that was the intent of the funding, that other councils could pick it up.
>
> [Interview 6]

> We had already … roll[ed] out DA tracking and electronic planning scheme online, so if you like, we already had a head start … More so we were able to assist them … we already had our DA tracking system set up online so the region selectively went well [they] are doing it, it looks pretty good and these are the perimeters in their website so we will use the same, so there was that recognition for the need of consistency.
>
> [Interview 8]

Thus the pre-existing ICT initiatives enabled and fast tracked the RRIF project, by providing examples of how the initiative could be successfully rolled out in a local council environment, and also enabled the sharing of information across councils.

Existing collaborations within councils

Some councils, which had already explored ICT initiatives had overcome organisational barriers within councils and developed internal collaborations within council, primarily ensuring that their IT and Development Assessment divisions formed good working relations. These internal collaborations, while a product of previous initiatives, enabled the RRIF project to roll out fairly swiftly within certain councils.

> Again back in 2004 we established a very good working relationship with our … IT people, we recognised the need to form a good working relationship with them, if we were going to deliver, we were looking at our business needs, but we also had to work with [them] to make sure they had the resourcing.
>
> [Interview 8]

> The reason why we were so successful, is because there was serendipity and secondly, the relationship between IT and [DA section] is very high level.
>
> [Interview 10]

Software vendor

Another interesting and key element in the successful implementation of the RRIF project was the decision to purchase a product off the shelf for the DA tracking element of the program for use by all of the councils. While many other ICT initiatives involve the development of a totally new product, the RRIF project chose to purchase a ready made and tried solution.

> … if a vendor has got a solution you can tap into, that is how you can deliver by that timeframe. To go with an untested vendor who didn't have a product that was even in prototype we would have just got shot, we would never have made

it, it was difficult enough with … a product that we had to modify in the timeframe.

[Interview 2]

So [they] developed a new product for us which was not available previously, the Risk Smart tool, but the rest of their products are basically off the shelf products which we used – this quote does not really add to positives – need something specific.

[Interview 11]

While one council did not feel that they had much support from the vendor, the majority of interviewees felt that the vendor was very important to the success of the project.

I guess we shouldn't underestimate what we call the vendor in this as well. The input from the vendor was very good, it was always timely, always somebody we could contact if there was some technical issue

[Interview 10]

I know there was other interest in the region for the software vendor. I'm sure we did have a considerable head start and relationships with the vendor have been very good and very responsive to our concerns.

[Interview 8]

Governance

One of the unusual features of this project was that it was conducted across a number of local councils, which are technically autonomous from each other. As was noted in Figure 3, the RRIF project engaged the peak agency for the project which was the Council of Mayors for South East Queensland (SEQ Council of Mayors) and the CEOs of South East Queensland (SEQ CEOs), who endorsed the project at the highest level, and gave impetus and legitimacy to the RRIF program.

Having the support of the CEO's and the Mayors was beneficial. Without their support I don't know whether we would have been able to achieve the requirements as a region.

[Interview 8]

Absolutely. It certainly gave us a head of power start internally first, it gave me the authority because it came from that particular organisation through our CEO to I guess to co ordinate other departments under my control and to seek their co operation one way or another.

[Interview 10]

I think one of the things that really helped us was the Council of Mayors group and the CEO's, they really cleared the path for us to make this essentially happen… How that played out was that there were a couple of times that we needed to go back to the Council of Mayors and CEO's with when we need regional agreements for certain aspects of the project.

[Interview 11]

From a public policy perspective the SEQ Council of Mayors does not have statutory or legislative authority. It is simply a group of councils collaborating to achieve regional outcomes and share information between councils. The RRIF project is possibly the first major activity conducted by this Council.

RIFF Team

The perceived success of the RRIF project is not totally due to the pre-existing initiatives within councils however. Some interviewees felt that the RRIF project team was integral to the achievement of the program:

> Yes they were out here quite a bit, they provided us with a lot of help, particularly as well they knew we had resourcing issues in terms of staffing numbers, they assisted us where they could with a lot of things, they were very good, it was very appreciated.
>
> [Interview 5]

In particular, apart from the coordination of the project, two activities undertaken by the RRIF team seem pertinent to the project achieving its initiatives: advertising and the provision of resources.

Advertising & Marketing

Advertising and marketing of the initiative was a little slow initially, however this became important as part of the change management of the initiative.

> … we had a very good regime of keeping them informed, so making sure the communication was there, making sure they understood it was going to benefit them, so we had true consultation with them, and two way communication, that helped us with the change management issues.
>
> [Interview 8]

> the governance we had and the approaches we took with marketing, helped all the way through the project.
>
> [Interview 11]

Resources

Resources are typically noted as a barriers and costs when implementing ICT projects in government. For the RRIF project, the resources made available through a grant from the Commonwealth government overcame many of these barriers for councils. Interviewees noted resources were provided in a number of critical areas: staff to back fill positions which went offline to implement the project, provision of software, provision of expertise, the undertaking of specific tasks by bogger councils or the RRIF project that councils would other wise have had to do themselves:

> I think a lot of the leg work had already been done by the bigger councils, you know … they had probably all got together and done that before it hit us, so by the time it hit us, it looked pretty good.
>
> [Interview 3]

> the realistic outcome is that basically the smaller councils' staff are fully committed and don't have the time to go around and develop a fact sheet on this or develop a video, so it is sort of slowly falling back onto bigger councils to provide the standard procedures and so forth, which the bigger councils are happy to do but as long as the smaller councils feel a good ownership over it.
>
> [Interview 6]

> Council saw that there was money available to do the project, and being a small council, obviously funding is an issue for us so it wouldn't have been something that we would have budgeted for at this time to do that work otherwise,
>
> [Interview 5]

They helped us resource internal staff in terms of backfilling they also gave us resources in terms of change management and also project management at the start. They provided the software for free, and they provided some project management. I guess the biggest carrot was it was mostly being funded externally from the funds in Canberra, so it enabled us to get into it quicker and faster.

[Interview 10]

Thus a number of expected enablers were confirmed within this case study. These include the push for efficiencies and ICT technologies. NPM as a driver or enabler was not explicitly supported in this research. A number of novel enablers were identified, however. These include pre-existing ICT initiatives and collaborations, governance, marketing, vendor, project management team, and resources. These findings are summarised below in Table 9:

Table 10 – Enablers - Expected versus unexpected

From literature	Novel findings from the interviews	Expected / Unexpected
Push for efficiencies within government		Expected
Internet and related technologies (eg XML)		Expected
Philosophical base (NPM)		Not explicitly supported
	Pre-existing ICT initiatives	Unexpected
	Software vendor	Unexpected
	RIFF Team	Unexpected
	Existing collaborations in council	Unexpected
	Governance	Unexpected
	Advertising & Marketing	Unexpected
	Resources	Unexpected

Not everything went smoothly with the project however, and a number of barriers needed to be overcome, which are examined in the next section.

5.1.2   Barriers

Barriers are those items, initiatives which inhibit the implementation of the RRIF project. These are explained in more detail below.

Resources issues (including budget problems)

Due to the resources provided by the project team, larger councils and the Commonwealth government, lack of resources were not noted as a significant barrier to implementation by interviewees.

Technological

Harris and Cornelius (2003) noted that technology issues are a significant barrier to implementation of eGovernment projects

One of the things we had here was two projects that were being implemented from the technology point of view, in two different ways. One which was going to be hosted externally, and one which was going to be hosted in each of the 21 councils. On top of all that, all 21 councils all had different IT structures, different

IT vendors, different IT support systems and architecture. Also with different budgets and levels of reliance upon IT, so the landscape was a very difficult landscape because of that level of complexity.

[Interview 11]

For some councils the RRIF project coincided with other internal projects which involved making significant changes to areas of their IT infrastructure. They saw the opportunity to address a number of issues at the same time with the RRIF project, however this also raised the level of risk associated with the project:

I always saw that as high risk, that we were replacing front end and back end systems at exactly the same time.

[Interview 2]

Another problem was that some of the systems in place in local councils where quite old by ICT standards – some over 20 years old. Harris and Conelius (2003) identified these legacy systems as a challenge to ICT initiatives. Interviewees concurred, noting that the linking of modern software to these older systems proved challenging:

It is actually a really good system, but it is just that nobody else uses it, and it is in an older style database, so it is a little bit more difficult to integrate.

[Interview 7]

So the fact that there were 21 different ICT systems raised the levels of complexity for the project. Some councils also undertook other ICT change projects at the same time as the RRIF project. Other councils had propriety systems that were probably unique in Australia, and integrating these to a regional ICT solution proved difficult. All of these issues posed challenges for the RRIF project.

Organisational change

Heeks (2001) argued that poor implementation and management were at the core of many failures in eGovernance initiatives. While ICT posed significant challenges, many interviewees agreed with this and felt that the real challenges lay not so much with the technology, but rather with the changes necessary at an organisational level.

The IT component, although very large was only about 30% of the project, you know, it was all about changing communications and business processes. IT was a component, but not a big component in terms of what was on the radar.

[Interview 11]

The processes of Council have had to change, particularly with how we receive the applications. We have to make sure that what gets scanned is what you want the public to see in terms of the public document.

[Interview 5]

I found honestly to start with it was very hard, because typically the Risk Smart [fast tracking of applications] was probably the biggest cultural change initiative

[Interview 1]

Access to technology

While access to technology is an issue in the literature (eg Sensis 2006) only a few interviewees viewed this as a problem for the RRIF project. In a large part this is due to the significant investment in ICT throughout Australia. Councils in rural areas noted that access to broadband was a problem in certain parts of their council area:

> Computer access is an issue - with no consistent broadband available.
>
> [Interview 4]

Expectations

As the OECD (2003) noted, eGovernment requires a strong focus on governance and government. Expecting that ICT will solve all problems faced by local government is a fraught notion. While governance was given attention by the project team, expectations concerning the program were still challenging:

> I think though there are some people whose expectations were higher than that, they didn't think there would be the teething problems that there would be.
>
> [Interview 1]

This seemed to resolve itself as the program rolled out however:

> … getting them to understand the impact of those changes, and then getting them to understand the benefits of those projects. Once those benefits were understood, about midway through the Project, all of the Councils became more accepting of the project and engaged better.
>
> [Interview 11]

Security

The eGovernment Benefits Study (2003) identified security concerns as a significant barrier to implementation. Some interviewees echoed this concern:

> there is all sorts of IT security and just the complexity of our back end systems
>
> [Interview 7]

> We had to make sure there wasn't infiltration of our network from the outside, that bridged network security, so fairly on we adopted a security model …
>
> [Interview 10]

Regulatory difficulties

The OECD (2003b) identified regulatory issues that could hinder the implementation of issues similar to the RRIF project. This was not evident in any interviews concerning the RRIF project. However, one of the key future developments involved improvements to the Integrated Planning Act, particularly for the issue of electronic lodgement of applications. The RRIF project managed to avoid most of these issues, by the way in which the technological solution was implemented. Future regulatory change was seen as an important key element for harmonisation:

> each local authority is different, they have all got different planning schemes, whilst the Integrated Planning Act is the same piece of legislation, the range in terminology is quite different.
>
> [Interview 2]

> Down the track, ultimately, between the nineteen councils there will be one set of standards, rules and regulations and all that sort of business we will all work off them, but at this point of time, if we talk local laws, there could be 19 different sets of local laws
>
> [Interview 3]

The ToolBox element of the project actually achieved increased harmonisation in the area of health assessment:

> I would say three quarters of the information in toolbox is generic … Anything that is in the generic part of the toolbox has been signed off by 19 councils, they have all agreed to it.
>
> [Interview 6]

Lack of skilled staff due to building boom in Queensland

One of the barriers which is peculiar to parts of Australia at the moment is the lack of professionals within council to assist in the assessment processes – particularly town planners and engineers.

> there is a skills shortage across the nation, and we are feeling the effects of it badly
>
> [Interview 8]

> The problem was that in the resources building boom that has been happening in the last two years, you can't grab these people, it is impossible to employ them, so that was the first problem, and you had 24 councils doing it, so again, double the problem.
>
> [Interview 10]

> There was a high vacancy rate of planners at the time
>
> [Interview 7]

Single use users

One of the main beneficiaries of the RRIF program was that of repeat users. Once they knew the system, and were able to find information that they needed, then they would be able to reduce calls on counter staff. However, for some small and medium size councils, the majority of their work is with single use users – people who might submit DA to council once every fifteen years or so.

> half our work is Mums and Dads, not developers and consultants, so it is people who don't know the system,
>
> [Interview 10]

> as we have identified previously, the majority of our customers are one time customers only sort of thing, for planning information so we don't know if we will see a benefit.
>
> [Interview 5]

> No real benefit evident as not that many repeated development applications.
>
> [Interview 4]

Smaller councils felt that they may not experience real benefits of the project in the short to medium term, as they mainly have single use users of the DA systems.

Speed of implementation

Another unique challenge facing the RRIF program was that the project had to be completed within a specified time frame in order to comply with the contract and be eligible for the funding.

It was an ambitious project to get off the ground and to achieve in such a short period of time, and there were a lot of stakeholders

[Interview 8]

You've also got to do this by this time, and it was massive, because we just didn't have the set up for it, so a lot of all that internet servers had to be set up in a fairly short time.

[Interview 7]

Long Holiday breaks

One interviewee noted that the holiday breaks were a challenge:

So we had to work quickly, get the project in place fairly early, as we knew we were going to hit those two holiday periods. That is exactly what happened, and one of the smart things … we made sure we were ahead of schedule so that when it came to that period we actually were able to deliver it.

[Interview 11]

No other interviewee viewed holiday breaks as a challenge or barrier however.

In summary, there were a variety of barriers to implementing the project successfully, some of which were identified from the literature review. However, a number of the barriers identified are unique to this case study. The barriers are summarised in Table 10 below.

Table 11 - Expected versus unexpected barriers

From literature	Novel findings in the interviews	Expected / Unexpected
Data Security		Expected
Resources		Much lower than expected due to project resources
Regulatory difficulties		Constraint, not barrier.
Technological challenges		Expected
Expectations being set too high		Expected
Access to the services / technology		Lower than expected
Organisational change required		Expected
	Lack of skilled staff	Unexpected
	Single use users	Unexpected
	Long holiday breaks	Unexpected
	Speed of implementation	Unexpected

5.1.3   Benefits

Benefits are those items which provide a positive outcome for local government, communities or clients of local government. This category is explained in more detail below.

Engagement of citizens in policy

This project was primarily about the increased provision of information to consumers, and transparency of process which is discussed in detail below. DA is still the responsibility of

councils. However, some of the drivers for the RRIF project and its precursors came from engagement with stakeholders:

> So one of the ways we addressed that was that we had a workshop with developers, and one of the things they identified was a number of issues that RIFF were going to fix up: latent information, hard to get details, always asking for information which slowed them down, they had concerns about continuity across councils … a whole range of issues dealing with applications and DA ... so when RIFF came along, the opportunity was to do that on a regional basis, to achieve consistent responses to those issues, to try and cut some of the red tape and improve small business particularly
>
> [Interview 10]

Improved intra and / or inter government relations

Huang et al. (2002) argue that improved relationships within and between government agencies is a consequence of eGovernment initiatives. This is supported in the interviews:

> It was great from a collaboration point of view, because Councils don't normally get to work together so it was an opportunity for Councils to work together across Council boundaries, rather than in isolation achieving the same outcomes.
>
> [Interview 6]

> SEQ Councils we were able to deliver. We have established and built very good relationships with each other, and that is implemented very much through the regular meetings we have with DA Managers in the region. We are very strong, we are like a support group, obviously there is a lot of pressure in local government and dealing with the development industry so having the support of all of your peers in the region is very good.
>
> [Interview 8]

> In actual fact that was one of the positive outcomes of the whole RIFF process, [was that] other Councils have reported that the relationship building internally between their assessment services people and their IT people was a major positive outcome of the project … We talk more now with the other Councils … because of the project.
>
> [Interview 10]

Information sharing between councils

Bajaj and Ram (2003) argue that improved information sharing, which can lead to increased efficiencies, is also a consequence of eGovernment initiatives. This view was supported in the interviews:

> That's right, you don't necessarily have to go to a meeting to share information. You can get online and have a look at it at your own convenience basically.
>
> [Interview 5]

> Toolbox is almost like an online chat line, it has got those capabilities as well, you can chat with people, and saying I think this means this, what do you think it means? … so if [other councils] have had the same sort of problem, that sharing of information, there would be no way of knowing that data before, so [now] you can ring the guy up. You can get onto somebody and say this is the problem I am having, how did you guys handle that?
>
> [Interview 3]

Improved access to services and or information

Both OECD (2003) and Huang at al., (2002) argue that increased access to services and information is one of the likely consequences of eGovernment initiatives. This is supported in the interviews:

> I can see how that would be of benefit to the public. Like can I build a duplex on this block of land? Yes you can but you have to comply with all these things. I can see that would be a very useful thing.
>
> [Interview 7]

> Beforehand, we had applicants screaming to have that information accessible … and the benefit for us was that instead of the applicants coming in and hassling the counter staff or ringing up my planners, they could jump online and essentially download the information themselves. We have had anecdotal feedback, it is fantastic, it is easy to use, real estate agents love it, valuers love it … instead of them having to come into council and ask a series of questions they can now search for that information themselves online. The online tool provides a lot of information in relation to property.
>
> [Interview 8]

Improved access to information has had a number of consequences. Notably these include increased transparency, pressure to keep information up to date, and a reduction in counter enquiries, and improved service delivery.

Transparency

Tan et al. (2005) argues that increased information provision is empowering for citizens and is an important element in eGovernment initiatives. One particular element of the Planning and Development Online project was that it enabled increased participation in the scrutiny and comment of DA projects. Whereas before, individuals had to travel to their councils in order to view and comment on DAs, now they are able to view and comment on these applications from home. Additionally, whereas the names of people providing comment were typically kept anonymous, now the names are displayed, with a view that this may discourage vexatious submissions.

> For other councils that was new for them, and this notion that people could see submissions, but it would seem from an outsider that this would improve your transparency, this was seen as a big win out of the whole thing.
>
> [Interview 1]

> It does provide though [a] more transparent base assisting your clients.
>
> [Interview 4]

> I think it has certainly made the process that councils go through a bit more transparent, because you can actually get on and see where an application is up to, what information has been submitted with the application. If it is an impact accessible application, this council has made submissions available online, including the names and addresses of the submitters … So I think that in terms of impact of accessibility of applications, making people aware that their submission is available to the general public, they are probably less likely to make a vexatious submission.
>
> [Interview 5]

For many councils, this entailed a significant shift in philosophy and process, which suggests a move towards eGovernance, not just eGovernment. As is noted in the interviews:

Pressure to keep information up to date

A surprising element of the research was that the provision of information on line meant that there was considerable pressure within councils to ensure that their information was up to date. Moreover, this was not viewed as a negative, but rather as a benefit.

> the importance of keeping the system up to date because from now on the public will see it, so if you have finished your application and haven't updated the system. You might be getting calls from people saying "why haven't you done it?"

[Interview 7]

Improved service delivery

OECD (2003) also argued that eGovernment initiatives could result in improved service delivery to citizens. The development of ToolBox meant that the information available online, was the same as that available on the enquiry counter staff and the same for assessors.

> if we can have a 5 day turnaround for say 40% of our applications, because they are so easy to process, because there are no significant outstanding issues, they have all been addressed prior to lodgement, it is great for the industry, great for Mums and Dads, and great for the Council.
>
> [Interview 8]

> The spin off to the council should be better made applications, faster turn around because of the quality of the applications has improved
>
> [Interview 2]

> … one person would say one thing, and then another person would say something slightly different … like what does need a licence and what doesn't need a licence - it is all a matter of interpretation. But now hopefully with ToolBox we will be able to narrow that down a bit so that we are all saying the same sort of thing.
>
> [Interview 3]

Reduced costs to the consumer (time or $)

Often the logic behind implementing a eGovernment project is to reduce costs. This is true for the RRIF project, with interviewees noting savings in reduced approval times, reduced reliance on consultants, reduced adaptation costs, and reduced fees.

The first saving is in the reduced processing times

> There are huge cost savings there to streamline the DA process in particular.
>
> [Interview 1]

> We have seen the flow on results of all of that, by delivering information on how to apply to the customer we are getting better quality applications come into council which equals faster processing times because we don't have to go back out and ask for more information and which leads to faster final approval times which makes the applicant happy
>
> [Interview 6]

Reduced compliance costs

> Basically what this is coming out of, the industry partners have told us that government regulation is costing us a lot, so what we are going to do, is perhaps reduce the differences between the jurisdictions, the process of trying to get things more closer aligned with each other, will reduce adaptation costs between jurisdictions.
>
> [Interview 3]

Reduced reliance on consultants

> we don't want Mums and Dads having to engage consultants, you need $5,000 on something that might take 10 minutes online.
>
> [Interview 8]

While not a current feature, some councils are considering reducing fees in the near future:

> You lodge your da and put it through this system and answer the questions, there is a fee reduction associated with that.
>
> [Interview 1]

> We are going to encourage that next year with our fees, if you fill out those forms online, the reports and check sheets, we will provide you with a 30% fee reduction on the application and that will mean fast tracking as well. It comes in here as a completed document, gets a faster result and it is cheaper.
>
> [Interview 10]

Reduced counter enquiries (due to increased data online)

> what it will help with is the public scrutiny, the public has to have files made available, before this we actually had to pull the physical files and someone would have to stay with the public while they went through them, so they didn't nick the stuff and walk off.
>
> [Interview 7]

> instead of the applicants coming in and hassling the counter staff or ringing up my planners, they could jump online and essentially download the information themselves.
>
> [Interview 8]

> bottleneck is being reduced as evidenced at hardly any queues at the front desk.
>
> [Interview 9]

Focus on significant work

An interesting benefit for the planners is that the reduction in counter enquiries means that instead of dealing with the minutia of repetitive basic enquiries, the staff can focus on providing services that require higher order skills:

> [There are] more hybrid roles, higher skilled
>
> [Interview 9]

> I mean they were overloaded with mundane enquiries, the information is there if you just knew where to look, or how to look, you could find it yourself. What is my zoning, what can I do on this property? Well now you can do that yourself without having to ask. Their time can now be spent on more higher-order stuff, so that is good news.
>
> [Interview 10]

Increased compliance

Another interesting element is that increasing information to applicants was likely to result in increased compliance with council regulations.

It is starting to inform people about what they need to do to lodge good applications.

[Interview 2]

Once upon a time they didn't have any tools to know how to comply, so now they have got a whole range of tools to know exactly how to comply, so when an officer pops into their establishment, there is no real excuse for them to not know how to comply, they can't say I didn't know that …

[Interview 6]

We get applications all the time that are not properly filled out, they haven't paid the right fee, we have to send out an information request, we spend all our time looking at the inadequacies of the application and you get all this to-ing and fro-ing, we send out the information, then they have to respond to that, it might be a deferral … making the information available upfront we are hoping to just improve the onus and improve the responsibility of the applicant to understand what they need to do, so that it doesn't become a long and laborious approval.

[Interview 8]

Consistency across councils

The two main elements to the project achieved consistency in different ways. ToolBox was able to achieve considerable improvements in standardisation:

Every Council had their own food fit out guide, and they were all excellent guides, but it is State and National Legislation so it is no reason why every Council had to have a different one. So we picked the best bits out of every one, and everyone agreed to that one version and now for the future if there is ever a change in food legislation, that one version gets changed and 22 councils have got that updated version, so from that point of view it is brilliant.

[Interview 6]

While the Planning and Development Online did not increase the actual content of local legislation, it certainly provided a similar look and feel across South East Queensland. The project itself is the first major collaboration between many of the councils, as is noted by interviewees:

Again, I think it was just a major initiative that effected the whole region so we recognised the need to work together and collaborate on how we could as a collective unit achieve the project outcome. We really did look at the needs of the region, rather than an individual focus, and we were very supportive.

[Interview 8]

To see 18 councils in SE Qld, plus the Burnett ones, actually implement a major software system and achieve that in 9 months with the level of standardisation that there is, is a major achievement.

[Interview 10]

So there are a number of findings which confirm those found by other researchers. In particular, the research found that RRIF provided opportunities for the improved engagement of citizens, information sharing and collaboration between councils, improved access to services and improved service delivery, and transparency of government.

A series of novel findings were also found in the research. These include increased compliance, releasing staff to focus on significant work, the pressure to keep information up to date, consistency across councils, and a reduction in over the counter enquiries for councils. These findings are summaries in Table 11.

Table 12 - Expected versus unexpected benefits

From literature	Novel findings from the interviews	Expected / Unexpected
Improved engagement of citizens		Expected
Inter/Intra Government Collaboration		Expected
Improved access to services		Expected
Improved service delivery		Expected
Reduced cost to the consumer		Expected
Transparency of government processes		Expected
Information sharing between councils		Expected
	Focus on significant work	Unexpected
	Increased compliance	Unexpected
	Pressure to keep information up to date	Unexpected
	Consistency across councils	Unexpected
	Reduced counter enquiries (due to increased data online)	Unexpected

5.1.4 Costs

While there were significant benefits noted by interviewees, inevitably there were costs involved in rolling out the program. Costs are those items which exacted a toll on the organisation implementing the initiative. These are explained below.

Hardware and software acquisition, development and maintenance

Capati-Caruso and Valle (2006) argue that hardware and software acquisition are often costs associated with eGovenrment projects. While the issue of software and hardware did not get raised significantly by individuals

> But we had to purchase a new scanner obviously, but we probably needed that anyway. It has meant a little bit more work for the records staff, but this process was happening anyway, applications were being scanned into the system, it is just done a little bit differently to previously.
>
> [Interview 5]

As noted in the enablers section, the funding of the RRIF program by the Commonwealth government provided significant resources for the implementation of the project. This probably muted the comments which would have been made concerning hardware and software other wise.

Staff time - Implementation took resources away from operations

The major cost associated with the project was the staff time required to implement the technology and business changes within the council, which is noted by Capati-Caruso

and Valle (2006) as true for many eGovernment projects. This was true for all size councils, although larger councils had more capacity to cope with taking staff 'offline':

> Implementing / uptake of these systems took away resources from their day-to-day tasks … Overall … was a difficult process for [our council] as it was on top of already existing workload
>
> [Interview 4]

> you do have limited staff, so while you are doing that, something else has to be put on the back burner.
>
> [Interview 5]

> so there were three of us internally from [our council] off line, two of us for a year, and one of them for three months
>
> [Interview 6]

> a lot of IT people, planners, fairly substantial planner time, and then like your business people … business solution leads for each of the three components that we resourced and like an overall project manager here … and the steering committees and project management groups and so on
>
> [Interview 7]

> It has had resourcing implications, it is not easy to take a DA planner who is approaching a senior planner level of competency in a team, take them off line and have them in the project … [and he had] two of his workers pretty much full time on that project for a six month period, so you can only imagine the impost on his resourcing.
>
> [Interview 8]

User service provision

While the intention of the system was to reduce calls, some councils felt that this had not occurred as yet – as they needed to talk people through using the new system. Capati-Caruso and Valle (2006) note that for many eGovernment projects there are costs involved with providing services to new users of the system.

> So initially, there was resource draining because the planners might say this was supposed to lighten the load for us, and it is now, but initially it was taking time because a lot of people just didn't understand how to use the system.
>
> [Interview 8]

> What we find though is people enquiring about the enquiry system. How does it work, what is it all about?
>
> [Interview 10]

Telecommunications networks

While Capati-Caruso and Valle (2006) note that telecommunication networks may be a cost, this was not noted by any interviewees, apart from those already noted in barriers for regional councils. This may be due to the investment already undertaken by councils in the area of ICT infrastructure, or resources provided by the RRIF projects.

Quality control

Quality control is often an issue associate with eGovernment projects (Capati-Caruso and Valle 2006). This is true for the RRIF project, particularly issues around data quality and scanning quality for online documents.

> The result was that in some instances, we had information which was below par. The information wasn't extracted and displayed as required, because the web service was also new.
>
> [Interview 2]

> To have online systems showing applications we still have some issues with the quality of scanning, particularly large documents and big plans and also the volume, so there is an issue there in terms of getting the volume through.
>
> [Interview 10]

Reorganisation

While reorganisation was noted as being a cost for eGovernment projects, this was not noted by many councils – mainly focussed on the business process improvements, rather than reorganisation of the council itself.

Little benefit

The idea that a particular eGovernment initiative would not be of benefit for participating councils was not noted in the literature. For some councils, the RRIF project meant significant changes in processes and implementation costs, and yet they may not see a significant benefit in the near term:

> No real benefit evident as not that many repeated development applications.
>
> [Interview 4]

> The majority of our customers are one time customers … for planning information so we don't know if we will see a benefit.
>
> [Interview 5]

Duplication of processes (technology or paper based systems)

The duplication of processes was also not an issue identified in the literature review.

> You are pdf ing documents as they come in … so they are there [on the web] basically the next day, but we still have to keep the paper copy up to date, because people are not utilising it as much as they should I suppose.
>
> [Interview 5]

> [In order to implement RRIF we had to] duplicate the data, so we have got a lot of information that is duplicated, which isn't the best
>
> [Interview 7]

Loss of aesthetics or function ~ (previous system was seen as better)

Some councils felt that the change incurred by RRIF was not necessarily an improvement over previous systems, noting that the new software was less stable or functional than previous systems. This was also a notion missing in the literature review.

To some extent we felt we were taking a little bit of a step backwards in going with RIFF, and then we could see the advantage of the regional part, we got into it boots and all. Our planning scheme online was considered to be one of the best in the State. What we have got now is probably not as swish in its' presentation, but it is definitely usable. We were criticised because of the visual look and feel of our planning scheme isn't as impressive as our previous version.

[Interview 10]

[Our existing system] is actually a really good system … it is the volume that will kill us each time, so those [newer] systems don't handle the volume.

[Interview 7]

Lack of technological 'fit' with existing IT systems

The issue of legacy systems meant that the technology didn't fit well with the existing infrastructure and so considerable extra effort was needed to make the project work.

it is also a negative when you are trying to implement something that has been mandated, and comments back to say well that doesn't fit our infrastructure … There was a lot of re-work required and there is still work required. The web service that was built still isn't appropriate and has issues.

[Interview 2]

Table 13 - Expected versus unexpected costs

From literature	Identified in the interviews	Expected / Unexpected
Staff Time - implementation took resources away from operations		Expected
User service provision ~ Initial increase in inquiries due to implementation		Expected
Hardware acquisition, development maintenance		Lower than expected
Software acquisition, development, maintenance		Lower than expected
Telecommunication networks		Lower than expected
Performance measurement and quality control		Expected
Re-organisation		Lower than expected
Change and change management		Expected
	Little benefit	Unexpected
	Loss of aesthetics or function ~ (previous system was better)	Unexpected
	Duplication of processes (technology or paper based systems)	Unexpected
	Lack of technological 'fit' with existing IT systems	Unexpected

5.1.5 External Factors

Finally, a number of issues were prevalent in the interviews, that were potentially related to the RRIF project, but where wither outside the control of the program team, or they were seen as consequential to the project.

Also a number of factors which were external to the project, but which may have an impact on the project, where identified.

1   Council amalgamations
2   Future extension
3   Regulatory change

Council amalgamations

> The other thing which is a key challenge for the councils is the possible amalgamation
>
> [Interview 11]

Future extension of the project

Down the track, ultimately, between the nineteen councils there will be one set of standards, rules and regulations and all that sort of business we will all work off them, but at this point of time, if we talk local laws, there could be 19 different sets of local laws.
[Interview 3]

Most councils noted that there is a Queensland government initiative called Smart eDA which is a different project and beyond the scope of this project to investigate. A summary of the Smart eDA project and how it relates to the RRIF project is in Attachment A.

Regulatory change needed in the long term

While many interviewees felt that the RRIF project made gains in the area of increased harmonisation, within the constraints of existing regulatory frameworks, many noted that much work was needed in order to achieve harmonisation.

> local government planning schemes are all different
>
> [Interview 8]

> Personally, I can't see how we are going to get uniformity unless there is a uniform [planning] scheme … [there's] different terminology, like what we call a detached dwelling [another council] might call a house, or like it is just minor things. What you might consider would be allowable in one Council is not in another, like set backs and building materials and all sorts of things. There's squillions of things that are just different in different councils, so until there is uniformity at that level, I don't see how having the same look and feel on the website is going to help that much.
>
> [Interview 7]

5.2   TOP ENABLERS MENTIONED

In the previous section qualitative analysis of the interview data confirmed a number of issues which already existed in the literature. Additionally, a number of items which did not line up with the literature or where absent from the literature were outlined, together for possible reasons for this outcome were noted.

What perhaps is missing from this analysis is a comparative examination of the relative importance of each of these issues from the interviews.

With any set of findings, the relative importance of any particular item needs to be identified. Statistical software enables this to be done relatively easily with large quantitative data sets. A methodology needed to be developed for determining the relative importance of the items raised in the interviews for this report.

The following tables identify the top items for each area. Items which were mentioned by at least half of the respondents are noted:

5.2.1   Top enablers were identified in the interviews:
The relative importance of particular items within the interviews is outlined in the following table.

Table 14 – Summary of enablers

Enablers	Percentage Mentioned
Governance	82%
Advertising & Marketing	91%
Pre-existing ICT initiatives	82%
Resources (financial and in-kind)	64%
RIFF Team	64%
ICT	64%
Software vendor	55%

5.2.2   Top barriers to implementation:

Table 15 - Summary of barriers

Barriers	Percentage mentioned
Technological	73%
Organisational change	82%
Speed of implementation	55%

5.2.3   Top benefits of the project

Table 16 - Summary of benefits

Benefits	Percentage mentioned
Information sharing between councils	91%
Improved intra and /or inter government relations	91%
Consistency across councils	82%
Transparency	73%
Improved service delivery	73%
Improved access to services and or information	82%
Reduced costs to the consumer (time or $)	64%
Reduced counter enquiries (due to increased data online)	64%

5.2.4   Main costs of implementing the project

Table 17 - Summary of costs

Costs	Percentage mentioned
Implementation – took resources away from operations	91%
Change of existing process ~ IT (previous system was better)	82%
Training time	55%

5.2.5   Other factors
Table 18 – Summary of other factors

Other factors	Percentage mentioned
Future extension	91%
Regulatory change	64%

5.3   WITHIN CASE ANALYSIS – BETWEEN DIFFERENT TYPES OF COUNCILS

What the comparative analysis of the items enables is a within case analysis of the data in order to show if any items differed across different size councils.

Important as many evaluations are implementation of ICT within a single organisation, this case study is of implementation of the same set of technologies across different organisations with distinct boundaries and areas of responsibility, different sizes, different rules and regulations, differing resources and history. There is the potential for differences which needs to be examined within this study.

5.3.1   Comparisons across councils

Table 19 – Comparisons of enablers and barriers across councils

Organisational membership	Enablers	Barriers
Large Councils	58%	43%
Medium Councils	73%	43%
Small Councils[2]	33%	27%
Project Team	65%	60%

What is interesting from this analysis is that it confirms the qualitative analysis of the data.

Firstly, the smaller councils identified less enablers than other councils on average, however, they also experienced less barriers than other councils. Medium size councils noted significantly more enablers on average, than barriers. Finally large councils identified less enablers, but the same level of barriers as medium councils.

This 'quantisation' of the qualitative data confirms the sense of interviews when compared across the councils.

5.3.2   Comparison across councils

Table 20 – Comparison of costs and benefits across councils

Organisational membership	Benefits	Costs
Large Councils	63%	48%
Medium Councils	83%	39%
Small Councils	47%	36%
Project Team	42%	46%

Small councils identify nearly half of the total number of benefits, and only about a third of the total number of possible benefits. Medium councils identified the vast majority of benefits and only mentioned on average a third of costs. Large councils mentioned less benefits than medium councils, but more costs involved in implementation. The other item worthy of noting is the difference between the costs and benefits identified by the councils with the medium councils identifying twice the number of benefits compared to costs.

This result tends to confirm the sense of the qualitative data which indicated that the major beneficiaries in the short term, were the medium size councils. Larger councils had major difficulties implementing the project due to their existing IT structures. Smaller councils did not have the volume of work at this stage to see significant benefits from the project, apart from the consistency issues.

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[2] Unfortunately one of the audio tapes failed during an interviews with a local government council, and consequently the interview has been coded from notes taken in the meeting. While unavoidable, this has reduced the results for local councils in each area.

5.3.3   Comparison across councils

Table 21 – Comparisons of other factors across councils

Organisational membership	Other factors
Large Councils	58%
Medium Councils	67%
Small Councils	56%
Project Team	100%

6.0   LIMITATIONS

The scope of the study would have been improved by expanding the interview cohort to include users, but due to time constraints, recent implementation and patchy uptake across councils, this activity was not possible.

7.0   FUTURE RESEARCH

Future research could examine the estimated versus actual efficiency achieved under the project. In this way, surveys could be conducted to evaluate the project from the perspective of consumers, developers, and builders.

Moreover, some of the additional enhancements identified as being down stream from the time of the evaluation may provide some direct benefits to consumers and this avenue could be explored in future research.

8.0   CONCLUSION

E government iniatives offer the public sector an opportunity to more effectively and efficiently deliver services, and to more directly and continuously engage with stakeholders. This study of the e delivery of development applications across councils in SE Queensland demonstrated many of the standards benefits and costs associated with major E government iniatives. The case study also identified many unanticipated costs and benefits associated with such projects. Through the case study analysis the report identifies the important enables that facilitated the project and in turn the case study informs the development and application of similar projects throughout Australia. E government will further expand and develop as ICT capability and infrastructure improves and all levels of government in Australia observe the major service, organisational and citizenship gains that are possible through such projects. This case study demonstrates that online DA services will become the norm in many parts of Australia, and as such the case study provides insights into how the process can be effectively developed and implemented.

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