

### 1. Issue Name

Information Technology for Knowledge Management

### 2. Contributors

Manager Information Management, Service Manager Information Systems Service Unit, IM Technology Architect, Service Manager Technical Service Unit, Information Management Consultant/ Advisor

### 3. Issue Definition and Scope

Knowledge Management was identified as a strategic priority for Redland Shire Council in the Corporate Plan 2002-2006. This issues paper discusses Information Technology as it relates to knowledge management.

The Knowledge Management Strategy developed and finalised in December 2003 identified 8 programs that are to a great extent implemented through current systems, such as the Intranet and EDMS, and processes. This Issues Paper identifies further opportunities to implement this strategy, eg developing the role of RSC as a knowledge hub (program 8).

The intent of this paper is to highlight the many and varied ways that information and communication technology may be used to facilitate the increase of the intellectual capital of Council and the community.

### 4. Executive Summary

While information and communication technology improves access and useability to data and information, knowledge management is driven more specifically through succession planning (program 7), knowledge retention (program 5) and knowledge sharing (program 3). These issues will receive more attention in the People Management Issues Paper.

Information and communication technology should be considered an enabler of the Corporate Plan and all initiatives be driven by business needs.

#### Key Themes

As a precursor to specific business plans, Information Management Group have identified three key themes that have a heavy information and communication technology component, and by industry trends the potential to be business initiatives over the next few years. These will be expanded upon in Section 6 of this paper:

1. RSC website as the Shire knowledge hub incorporating:
  - community
  - business
  - tourism/ lifestyle
  - personalised information

2. Online service delivery including:
  - community and business expectations
  - Council services
  - eCommerce
  - kiosks
3. Providing information and communication technology infrastructure:
  - to remote Council sites
  - to the community and businesses
  - to a mobile workforce.

### **Regional Cooperation**

The Regional Cooperation section of this paper identifies current areas of collaboration between RSC and other Councils and outlines information and communication technology initiatives by other organisations.

### **Maximising ROI:**

Information Management Group will continue to investigate and apply measures to maximise the ROI in Council's information and communication technology investment. Processes currently under investigation are detailed in Section 6 of this paper.

## **5. Regional Cooperation**

Providing information and communication technology infrastructure to the community and businesses introduces the issue of the public's expectation for broadband internet i.e. should RSC be a facilitator? The following are initiatives by other organisations that Council may wish to consider:

- Logan City Council have tendered for a partnering with a telecommunication company to improve competition in the delivery of broadband internet services
- Department of State Development and Innovations proposal to change the Local Government Act to allow Councils to require conduits for data communications infrastructure to be laid in new land developments. Councils would then to own the conduits and be able to rent them to telecommunication companies
- Activity currently underway with Gold Coast City Council seeking funding on behalf of RSC from the Federal Government to expand broadband internet coverage to remote areas of the Shire.

RSC together with other SE Queensland Councils has recently undertaken a project to identify potential and genuine opportunities for increased collaboration in the deployment of information and information technology services across participating Councils. A report that includes indicative financial and operational considerations in adopting specific opportunities, and a possible plan to progress such opportunities will be presented to CEO's Regional Collaboration Forum later this year.

## **6. Background/ Discussion**

### **Expansion of Key Themes**

As a precursor to specific business plans, Information Management Group have identified three key themes that have a heavy information and communication technology component, and by industry trends the potential to be business initiatives over the next few years.

For each one of the themes dot point issues have been listed to assist business areas/ Council deliberate the How, Where and Responsibility of initiatives.

1. RSC website as the Shire knowledge hub incorporating:

- a) Community
  - Community groups to use Local government Online (LGOOnline) community portal
  - RSC website as search for community services with links to LGOOnline community portal
  - council's exposure by association with the LGOOnline community web sites would need to be managed
  - Cultural and Community Services Group have proposed the construction by Information Management of a community services database in 05/06 budget.
- b) Business
  - Business be encouraged to leverage off the recently released More2Redlands website.
  - Economic Development Group would maintain interaction with businesses
- c) Tourism / Lifestyle
  - Tourism and Lifestyle groups be encouraged to leverage off the More2Redlands website
  - It would need to be determined which group in Council would maintain interaction with tourism and lifestyle groups
- d) Personalised Information
  - Capture of personalised information (at the customer's request) will facilitate a move to a more customer centric approach to service delivery.
  - The RSC internet web site's myServices framework provides for future delivery of personalised information based on customer profiles i.e. what we know about the customer - what division they live in, whether they own or rent a property, if they have a pool, if they own a dog etc.

2. Online Service Delivery incorporating:

- a) Community and business expectations
  - As broadband internet access becomes more widespread and affordable, the expectation of being able to transact with Council via the internet will definitely increase
  - The myServices framework provides Council with the opportunity to meet those expectations
- b) Council services
  - Delivering Council services online, has the potential to reduce future demands on customer service staff
- c) eCommerce
  - Business to business transactions typically based around procurement of goods and services by Council
  - Depends on the ability of suppliers to participate in online catalogues and electronic fund transfers
  - Depends on integration with Finance One
  - The large number of suppliers that Council deals with makes it an unlikely solution in the next 5 years although there could be a small number of large suppliers who could comply.
- d) Kiosks
  - Self service kiosks have the potential to reduce future demand for additional customer service staff and space.
  - Leverage off current investment in Internet service delivery
  - Replicate Internet services eg payments, printing etc
  - Providing internet café style access to online services may prove more economically viable.

### 3. Providing information and communication technology infrastructure:

- a) To remote Council sites
  - Costs of connections eg fibre or microwave links required to support users at remote sites
  - The cost of remote computing technology (citrix) currently \$2750 annually per connection.
  - Importance of secure IT connections
- b) To the community and businesses
  - Public's expectation for broadband internet – should RSC be a facilitator
- c) To a mobile workforce
  - Trends indicate increasing demand for mobile computing solutions
  - Suits many of Councils compliance inspection activities
  - Suits electronic mapping solutions – replacing dated hard copy maps in the field
  - Suits maintenance work order automation
  - Potentially eliminates duplicate data entry i.e. paper in the field then computer entry back at the office
  - Potentially lessens requirement for office space eg shared desks and PCs in the office
  - Devices currently being considered – in car PCs, tablets and PDAs
  - Real time connectivity to RSC network via citrix services – depends on internet connectivity either through mobile phone networks or wireless network.
  - Wireless network will continue to improve in coming years
  - Importance of secure IT connections
  - Expectation is that mobile solutions will be task oriented rather than trying to provide a complete mobile office, although mobile printing will be a requirement.

#### **Maximising ROI:**

Information Management Group will continue to investigate and apply measures to maximise the ROI in Council's information and communication technology investment. The following processes are currently being examined:

##### ICT Asset Management

- Lengthening the asset life of capital investments from 3 years to between 4 and 15 years hence considerable reductions in depreciation. Total IT depreciation each year is now \$2.14mill.

##### Security

- Protecting IT systems from viruses and hackers

##### Project Portfolio Management

- Focusing on projects that drive down the operational costs by improved efficiency
- Saving of staff numbers but must be balanced against the need for increased IT resources
- Drive down the IT operational costs in proportion to staff numbers by investing in systems that improve IT efficiency eg remote support

##### Shared Resources

- With the emergence of web services and web hosting there are potential savings in sharing information, particularly with State Government via LGOnline
- There are potential savings in sharing IT development costs eg online application lodgement, online as constructed data lodgement and delivery
- Will necessitate adopting standard data formats eg national standard for application development data, ADAC standard for as constructed data

- Potential savings in lobbying software vendors to adopt data standards eg Technology One for data sharing solutions which can be used by all Councils using their software

#### Enterprise reporting and searching

- This is identified as a key area where investment in IT will facilitate improved knowledge management and organisational performance reporting

#### VOIP (voice over internet protocol)

- May prove to be economically beneficial when cost of internet bandwidth becomes less than phone line rentals eg current annual expenditure on phone services is \$900,000

### **Operational Outcomes**

Continuing adherence to the following principles enunciated in the IT Strategic Plan will ensure that information technology will contribute to knowledge management and successfully enable the new Corporate Plan:

- *Information Technology direction will be driven by the business.*
- *Information Management Group should be a stakeholder in new business initiatives and business process reengineering projects that contain a technology component.*
- *Information and communication technology investment should be aligned with, and enable the corporate plan.*