



Local Government IT Management
Survey Report by Alan Hansell

Winds of Change Also Sweeping Local Government

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Executive Summary

Local government is not exempt from the winds of change sweeping the public sector. They are faced with:

- Rate capping legislated by state governments
- Demands to transform business operations and reduce operating expenses
- Increasing number of requests for online customer-centric services
- Pressure from state government to merge and achieve economies of scale
- Compliance with Council's IT security and procurement guidelines

Councils face an ongoing management challenge of where to invest scarce resources to head off the winds of change and take advantage of their digital capabilities.

A recent IBRS survey indicated many councils are starved of funds to replace fully amortised legacy systems as IT management competes at the Executive and with business managers and Councillors, who themselves are struggling to meet demands from ratepayers for better roads and footpaths and comply with environmental requirements. In this melting-pot there is no winner.

The survey also showed that location is a major determinant in a Council's capacity to offer enhanced online services. For instance:

- Small regional councils:
 - Struggle to improve services as skilled staff, who could develop them, are reluctant to relocate from capital cities
 - Are hampered by their inability to pay salaries comparable to those earned elsewhere
 - Find it difficult to get senior management support to invest more in IT as evidenced by well below average IT expense to revenue ratio
- Some large councils are investing in:
 - Customer-centric services to market themselves as a smart city and potential hub for investors in high-tech industries
 - Redesigning business processes to maximise efficiency, e.g. optimising waste collection routes and providing online portals with data such as the status of Development Applications, thereby minimising service counter interactions and freeing up staff for operational roles

Unsurprisingly, the survey found a gap between supply and demand for skilled IT professionals, especially business analysts.

IBRS Advice

The report contains priorities, concerns and feedback from respondents. It reflects a snapshot in time. It will be interesting to revisit the findings in a few years to find out what has changed and what has not.

The report presents survey responses in the following order for readability:

- Management issues and priorities, including IT spending
- Skills management priorities today and on the horizon
- Business and IT partnership matters

It also contains in Appendices:

- IBRS advice on skills management
- Vignette from City of Ballarat Council which illustrates what can be achieved with insightful leadership
- Qualitative feedback, including concerns and solutions adopted from respondents

Management concerns and problems, and why they occur, are identified in the report plus suggestions on how to address them by question number.



Survey Highlights

- Business analysts are in high demand, principally to support digital transformation and legacy systems replacement initiatives
- Reducing IT costs is not a priority. Rather, IT is regarded as a way to provide services efficiently and deliver online services to stakeholders
- Some councils have allocated extra financial resources (a windfall is how it was described) for business transformation initiatives
- Few vendors provide strategic advice to IT management. While a cause for concern, managers must take the initiative and get their vendor(s) to invite them to industry events
- IT literacy of business managers was regarded as low, frustrating transformation initiatives
- A large Queensland council assigned its business analysts to provide application systems training on mobile devices at the workplace from 6.30am on successive mornings. The take-up of the new system was immediate. Many of the field staff stated they had never used a keyboard previously
- One way to grow capability used by a council is to run a seminar (known as a mini-university) after close of business for IT staff. New technologies and approaches are introduced and staff who have attended a conference are expected to present what they have learned. Attendance is voluntary and sessions are recorded. It has proven effective in skills development
- **Cardinia** (Victoria) was one of the first councils in Australia to implement Activity Based Working (ABW) with a building and work spaces without hot desking. IBRS was impressed by the way the offices have been designed to facilitate workplace collaboration and make best use of the space available
- Some councils claim to have initially transformed their web-based service delivery model, leading to:
 - Fewer counter staff and call centre contacts
 - More online services available for stakeholders, e.g. property developers accessing the status of their planning applications

Interviewees

IBRS conducted phone and face-to-face interviews with 25 senior IT and non-IT managers in councils in Queensland, New South Wales, ACT, Victoria and South Australia in 4th Quarter 2016 and 1st Quarter 2017. IBRS is grateful that they shared their insights, concerns and successes.

Without their contribution, this report would not have been possible.

The Author

Alan Hansell is an IBRS advisor who focuses on IT and business management. Alan analyses and comments on IT and business management trends, ways to justify and maximise the benefits from IT-related investment, IS management development and the role of the CIO. Alan has extensive experience in IT management, consulting and advising senior managers in matters related to IT investment. He was a Director in Gartner's Executive program and adviser to over 50 CIOs and business managers. Before joining Gartner, he was a principal consultant with DMR Group and an IS professional, manager and industry consultant for IBM Australia for nearly 30 years. Alan is a CPA and Associate of Governance Institute of Australia.

About IBRS

IBRS is an Australian Advisory and Consulting company. It works with technology and business leaders to ensure they make the most informed and qualified decisions to assist in their success.

IBRS works with its clients to ensure they understand, and are ready for, the rapidly changing technology and business landscape, and are in a position to understand the opportunities, impacts and barriers to adoption of new ways of improving business delivery.

IBRS's advice and guidance is based on an understanding of global trends, but more importantly, is reflected in a deep knowledge of the Australian marketplace. Its insights are pragmatic: it partners with – and promotes dialogue with – its clients to ensure that all IBRS peers share better practices.



Survey Responses – Management

Management’s Priorities

Management priorities, which have been ranked, and a synopsis of the reasons provided, are set out in the table below.

Management Priority	Reason Nominated
1. Providing a secure environment	Cyber email is a major concern. Inability to hire security professionals, so must rely on managed security service providers
2. Enabling (digital) transformation of business processes	The strategic mandate to transform is lacking
3. Implementing business solutions on time and within budget	Project managers lack skills and are unable to implement on time
4. (equal) Integrating software and services with major systems	It is an ongoing challenge. Doing it is critical for service delivery
4. (equal) Corroborating the value of IT to Council	Hard to justify value when competing with operational demands

Note:

- Reducing costs (one of the options) was generally rated Medium to Low as management's emphasis was now on delivering quality services
- Small regional councils rated attracting and retaining skilled IT professionals as High, but it was generally rated lower by urban councils
- Managing a responsive IT infrastructure and network was rated Medium. Feedback indicated it was viewed as a commodity rather than a specialty
- Taking advantage of the Cloud was rated Medium. Many respondents stated they were waiting for the offering to mature and operating costs to decrease

IBRS Advice:

- Ways to obtain the strategic mandate to transform vary. In some councils, the elected officials must be convinced improved outcomes for ratepayers will ensue, e.g. displaying building/transport plans and the community directory line. Alternately the Executive may need to be convinced the cost of council services will be reduced, e.g. by optimising waste collection routes
- Project managers in councils must be multi-skilled and know how to expedite matters through the bureaucracy and manage activities. Engage a skilled mentor, available on demand, e.g. a retired manager who can advise the project manager on how to construct management reports, hire staff and make procurement requests, so they are approved first time



Transformation Leadership

The role of driving and taking responsibility for digital transformation within Council was ranked as set out in the table below:

Role Responsibility – Ranking	Reasons Nominated
1. IT Management	IT is taking the initiative now but must soon win over other managers
2. Executive	Aware of and understand reasons for the need for transformation and driving the program
3. Executive in partnership/ IT management	Team approach is needed to succeed
Executive in partnership/ IT management /business management	Council-wide initiative
5. Business management	Operations focus
6. Councillors	Taking leadership role

IBRS Advice:

- Develop a program to transform not only IT solutions but also business processes. Ideally the program will, at a minimum:
 - Identify quick wins, including systems that can be updated, e.g. new releases implemented to gain needed functionality
 - Redesign business processes that can be automated at minimal cost with a commercial off-the-shelf system or by selecting a vendor used widely
 - Secure capabilities and IT resources needed to implement the quick wins
 - Initiate the development of an IT Strategic Plan driven by business imperatives
 - Present a business case for the transformation program driven by the findings of the IT Strategic Plan



Transformation Outcomes

Outcomes expected from (digital) transformation, according to respondents, were:

- Business process improvements, i. e. achieving efficiencies with the same resources
- Data analysts able to access large volumes of business data to test their hypothesis, analyse the results and advise where changes are needed
- Fewer staff needed for service counters once stakeholders can access their data
- Management able to access a single point of truth (for data) leading to more informed business decisions
- Avoiding need for multiple printed reports, e.g. providing Councillors with iPads with meeting agendas, minutes and reports
- IT service delivery failures are rare and no longer a topic in office conversations
- Comprehensive and integrated record (CRM) of dealings with Council of ratepayers (clients), suppliers and stakeholders

IBRS Advice:

- Highlight the outcomes frequently to stakeholders, including Councillors
- Exploit quick wins and use the momentum to secure additional resources – see City of Ballarat Council vignette
- Ensure immediate credit is given to staff who have secured the quick wins

IT Strategic Advice from Vendors

Do vendors provide IT strategic advice? **No / Sometimes / Yes**

No:	Sometimes:	Yes:
<p>Feedback from respondents was:</p> <ul style="list-style-type: none"> ■ Some provided guidance regarding their products, e.g. servers and SANs (Storage Area Networks) ■ Vendor account managers typically lack skills to help Council implement and assimilate business systems 	<ul style="list-style-type: none"> ■ Microsoft has been active in providing strategic advice ■ We work closely with principal vendors and seek IT solutions/services providers with a good fit with Council ■ Some major (tier 1) suppliers, e.g. Oracle and Microsoft, are fortunately all things to all people, but others are focussed on their solution only 	<ul style="list-style-type: none"> ■ Council engages major consulting firms for strategic advice ■ Implementing Mulesoft Enterprise Bus software to facilitate integration with other hardware/software platforms. Vendor has delivered advice on how to integrate solutions and data when requested

Advice to Vendors:

Over 70% of the respondents answered No or Sometimes. To turn this around, implement programs to provide strategic advice to Council staff in topics such as IT security management, IT governance, Office of the Future directions, and technology trends.

The advice could be given in client meetings, at sponsored events such as user group conferences and vendor sponsored round tables, where experiences can be shared with peers in an informal setting.

Mutually beneficial outcomes will ensue as clients grow their capability and vendors position themselves to win future business.



Picture courtesy of the City of Ballarat

City of Ballarat Vignette

There is an old English saying, which predates the metric systems, that Martijn Schroder uses to describe his role in City of Ballarat. He says it is analogous to “trying to get a quart (two pints) out of a pint pot of beer”.

Martijn, who reports to the Director of Policy and Support in the CEO’s office, has been given the remit to define and implement the Council’s digital strategy and prosecute its business transformation agenda. His immediate goal is to get the Executive to fund a four-year digital transformation program.

He is optimistic that by presenting the cost optimisation project in terms management can quickly grasp, and highlighting benefits already realised, they will approve the funding. Approval, if secured, will provide impetus to continue to redesign services to realise additional benefits so, despite rate capping, the program becomes self-funding.

The program’s first major win was the creation of the Digital Transformation Team in the CEO’s office which was funded through rationalisation of spending on ICT capabilities and contracts. Early demonstrator projects undertaken included optimisation of graffiti management and introducing a lean approach to manual time-sheets.

Martijn said, “These successes fuelled enthusiasm for examining the routes taken by waste collection trucks used by the Council’s contractor. Using Lean and Systems Thinking approach, as applied by the Government of Wales UK, an internal waste hackathon (a solution design sprint with stakeholders) was conducted to analyse the collection and disposal points and routes taken.”

With the aid of data analytics, the study led to:

- Reducing the number of kilometres travelled per annum by truck for landfill waste by 3% and 9% for green waste
- Freeing the plant from Saturday operations and reducing contractor spend
- Improving the handling of missed waste bins
- Council's ability to track and improve waste collection performance

Ballarat is establishing an Innovation Centre (or hub) to act as a magnet for investors with high-tech and other innovative products. The centre sends a message that Council is serious in providing the right environment for them to succeed.

Martijn said, "My role is to deliver business optimisation projects and, as part of that, act as a bridge for business stakeholders that require ICT solutions and services. Once optimisation of business practices is determined, I hand over the design to ICT for solutioning where possible."

He added, "I have found it is important that the documentation is uncomplicated so it can be acted on straight away and a solution quickly developed."

IT Spending

The results of the survey revealed that the IT Spending (Opex + annual depreciation) as a percentage of gross revenue including grants per annum is 3.5%.

The range quoted in response was between 1.5% (small council) and 6% (large council). Small councils were consistently below the average.

Feedback from respondents, which clarifies the range, was as follows:

- Providing water and sewerage services increases the annual IT spend
- Larger councils operate mature IT services and can justify the resources to maintain them, whereas smaller councils have a limited range of services and need less to maintain them
- Smaller councils often use out-of-date and already-written-off technology and are forced to "sweat the IT assets", leading to a lower-than-average annual spend

IBRS Advice:

If the current IT spend is below the average, highlight it, the consequential risks, and their business impact to the Executive. Request extra funding during the next budget cycle and highlight how it will reduce the risks and offer to give an account to the Executive on the benefits realised.

Survey Responses – Skills Management

Skills in demand

The following skills, in order of priority, were volunteered as they are in demand:

1. Business analysts to:

- Facilitate digital transformation of workplace
- Develop better business process maps in which BU staff lack skills and knowledge of linked processes so they draw on IT's business analysts to complete them in much less time
- Pursue performance improvement initiatives
- Contribute to website development to enhance customer-facing aspects and upgrade portal to reduce phone calls to Council

2. Project managers to lead the implementation of activities such as:

- Analysis of large data volumes for predictive analysis and enable more informed decision making, e.g. regarding asset management deployment
- Developing business systems from concept to cash

3. Architects are needed now to:

- Design Hybrid Cloud solutions
- Define the organisation's current and future systems state and identify what is needed to close the gap

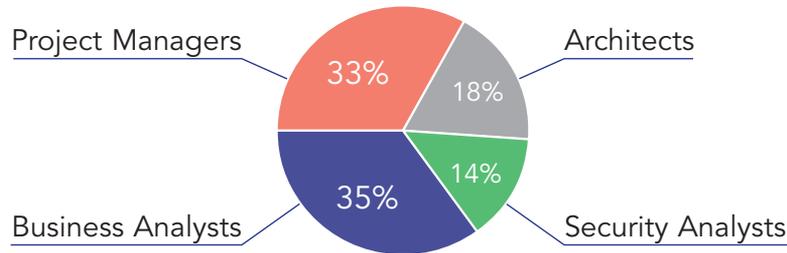
4. Security analysts to:

- Monitor and detect network intrusions using automated software
- Advise management on how to respond to the intrusion
- Create policies and a framework for protecting the organisation's information assets

IBRS Advice:

- Consider recruiting librarians and training them as business analysts. It has already been implemented successfully in a large regional council
- Assess the value proposition of managed security services providers and, if convincing, engage them instead of hiring a security analyst. Providers are aware of innovative techniques used to gain unauthorised access to systems

Additional skills required in the next five years



Amongst the responses volunteered were:

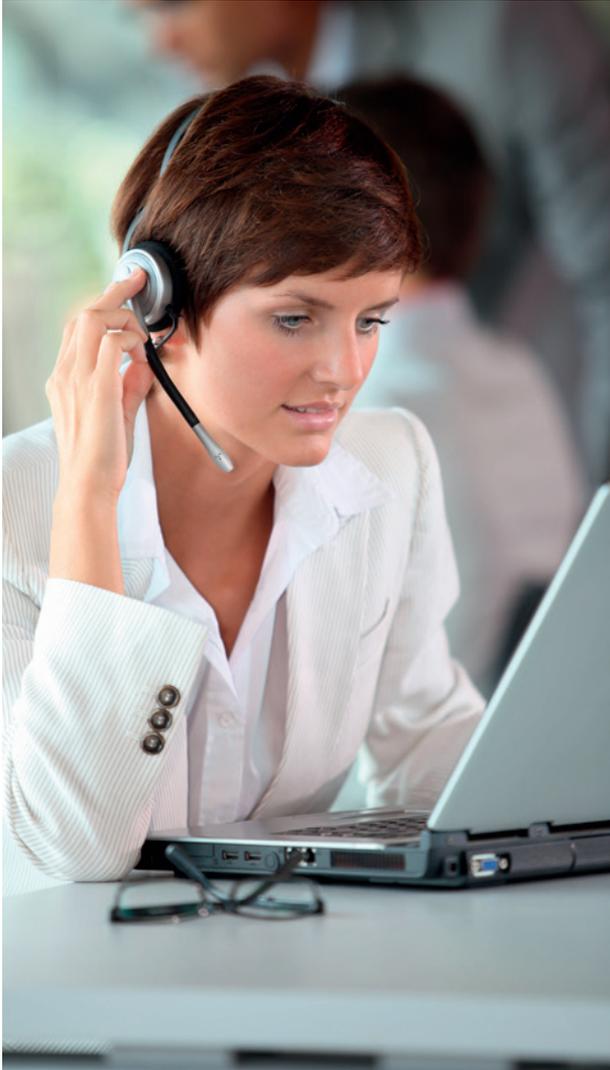
- Policy developers and administrators for implementing better governance processes
- Data Analysts (or scientists) with business insights:
 - Able to do predictive analysis on large volumes of data and
 - To identify performance improvement initiatives required
- Staff able to embrace AI (Artificial Intelligence) and machine learning techniques
- Ability to apply AI and machine learning to pre-process transactions
- Website developers who can implement online systems that enable clients to process their own queries on Council's data to reduce phone calls and counter inquiries
- Vendor relationship managers, with commercial negotiation (win/win) skills, who can negotiate contracts or broker deals with Cloud service providers
- ERP software support staff who can implement and maintain the solution
- Business process analysts/solution designers who can:
 - Create relationships with operational units
 - Broker software solutions and services from Cloud providers
 - Integrate Hybrid Cloud with in-house IT environment
- Full stack developers with back and front office software development skills
- Organisational change managers with human-centred development skills
- Business engagement managers with enhanced project management skills to ensure project success
- Specialists in managing telecommunications in remote locations
- Security professionals with knowledge of vendor (intrusion detection) software and who can manage services providers
- IOT (Internet of Future) specialists who know how to make use of the emerging solutions

IBRS Advice:

Invite IT industry specialist firms to present technology trends and directions and their ramifications at staff meetings. Set aside at least an hour for Q&A as much learning occurs during the presentation.

Hindering acquiring skills

What barriers, if any, will hinder acquiring the skills in demand today?



Barriers nominated were:

- Competition internally for resources to engage specialists
- Unfortunately, Council's focus now is on hiring town planners to facilitate housing/industry growth – not extra IT staff
- Council is subject to rate capping and operating expense reduction
- Council's reluctance to pay the cost of "upskilling" staff
- Inability to attract and appropriately pay quality applicants (right sourcing) and provide a flexible workplace

IBRS Advice:

Include business managers in risk assessment workshops. Jointly identify the risks to their performance of not having the skills needed. Present the findings to the Executive and request their support in hiring the skilled staff or contractors needed.

IT and Business Partnership

What is needed to enhance the partnership between IT and business management?

The approaches used, and which respondents stated they found helpful, were to:

- Consult widely before making strategic IT-related decisions
- Get approval for IT management to give a presentation on hot topics for the CEO and Board or let them choose topics at each event
- Convince IT staff they are enablers – not systems owners
- Engage stakeholders in systems development life cycle as early as possible, so requirements are clear and scope changes rare
- Help business managers understand what IT can and cannot deliver
- Help finance management to understand that software licence renewal expense is unavoidable, i.e. it is not a one-time expense
- Engage in joint development of a vision for IT services and seek Executive support in justifying and implementing it
- Present the contribution of IT services to Council's business performance to the Executive and Councillors
- Provide tools and business intelligence to managers to help them measure their success and identify where improvements are needed
- Change the focus from an operational (business as usual) to a strategic conversation, i.e. "to get their heads above the water"
- Promote a fast-track cultural shift from being reactive to being the source of innovation and transformation
- Increase the CIO's visibility to general managers, business managers and staff, and win over hearts and minds
- Walk the talk, i.e. find and fix "pain points" quickly and publicise how it was achieved.

Appendix A – Growing Capabilities

Possible ways to grow capabilities are set out in the table below. They are:

Strategy	Example	Expected Outcome
Cross training	Assign staff to another IT function, e.g. IT architecture or business engagement	Enhance organisational awareness and obtain assessment of skills
Business unit assignment	Reassign to HR department to better understand people management approaches	Know how the business model operates to better manage staff
Outplacement	Assign externally for a fixed period, e.g. learn how to implement DevOps	Understand other business models and how they operate
Develop soft skills, e.g. internal consulting	Conduct IT effectiveness study through interviews	Enhanced competencies
Provide exposure to senior management	Assign staff to senior manager or non-IT support team	Understand why organisational fluidity exists and how to resolve ambiguities
Assign developers to support teams	Move programmers to technical support roles, e.g. level 2/3	Able to provide advice to peers when reassigned to previous role
Coaching/mentoring	Engage an experienced manager to provide advice and guidance	Acquire insights into resolving work-related conflicts and manage staff
Industry liaison	Participate in industry events and conferences	Better able to contribute to management team deliberations
Technical skills training, e.g. using the Cloud	Attend Teach the Teacher courses and deliver them internally	Increase skill levels and competencies
Skills enhancement events	Conduct events to exchange insights in developing innovative solutions	Stimulates development of more innovative solutions
Flexible workplace	Work at home with expense allowance for network connectivity	Provide quiet place to work plus family flexibility if needed
Succession strategy	Cross-train staff so they can provide support cover for each other	To minimise impact of resignation

Appendix B – Business Analyst Role

The survey found the role in highest demand was that of the business analyst. The table below will help identify staff within Council with the (innate) attributes to become business analysts. The skills can be acquired with training. Knowledge will be gained once they are experienced and comfortable in the role.

Attributes	Skills	Knowledge
Able and articulate communicator	Report and presentation writing	Core business policies, processes and practices
Analytical thinker	Principled negotiating	Project management guidelines
Business relationship manager	Conducting business meetings	Technology awareness
Able to cope with fluidity	Managing projects, e.g. Agile	Business model and product/services life cycle
Influencer and persuader	Business problem solving	Understanding existing business systems

Set out in the table below are the roles that should be assigned to business analysts. They are indicative and not exhaustive.

Role	Description and Contribution
Gathering business requirements	Teasing out from stakeholders what must be done for a process to be automated and executed successfully
Developing business cases	Preparing the business case to justify investment in business systems
Supporting Business/IT Architecture	Providing advice to architects in the design and integration of business systems with existing solutions
Redesigning business processes	Reviewing existing business processes and determining how they can be simplified without sacrificing quality and, if feasible, automated
Administering tender panels	Acting as administrator to the procurement panel advising management of the preferred technical solution to a major business problem
Systems testing and validating (results)	Creating test scripts so functional requirements in a program can be tested and proven to operate successfully
Preparing training documents	Developing training material tailored to the proficiency of the business professionals operating the business system
Tracking benefits realised	Identifying and recording benefits realised by business managers from systems they operate

Appendix C – IBRS Observations: Topics and Optional Solutions

Hot Topics:

Topic	Optional Solutions
<p>Skills: The survey highlighted management’s concerns at the lack of skills in IT service delivery. Prominent among them were:</p> <ul style="list-style-type: none"> ■ The need for more business analysts to identify business operational and systems requirements of the transformation program and help staff assimilate new systems and processes ■ Project managers to implement systems solutions ■ IT Architects to define the future state and design the systems environment and operational capabilities needed to reach it <p>The need for these skills is not confined to local government but is exacerbated when Council:</p> <ul style="list-style-type: none"> ■ Cannot offer a competitive salary package, and ■ Is in a regional location 	<p>Whilst short-term contractors can provide an interim solution, only long-term employees, who know Council’s business context, can provide the capabilities needed.</p> <p>To close the skills gap, consider:</p> <ul style="list-style-type: none"> ■ Conducting swap-shops where systems design, programming and similar techniques are shared in open forums, e.g. brown bag at lunchtime or after work ■ Arranging for a member of staff who has attended a conference to present content likely to be of value to peers ■ Implementing internal mentoring/coaching programs where staff can acquire insights while enhancing their capabilities ■ Insisting all service providers have a program to grow capabilities and retain funds from the contract until they have done so ■ Highlighting the benefits of moving to a regional city, e.g. lower living costs and proximity to the office
<p>Migration to the Cloud: One council found ITaaS on the Cloud was an expensive option, e.g. designing hybrid Cloud environment, building firewalls, creating extra sign-ons and implementing additional network protocols.</p>	<p>Council approached their preferred hardware vendor and got a deal to upgrade their servers. The solution had a lower long-term cost and continued delivering IT services on premises (large Victorian council).</p>

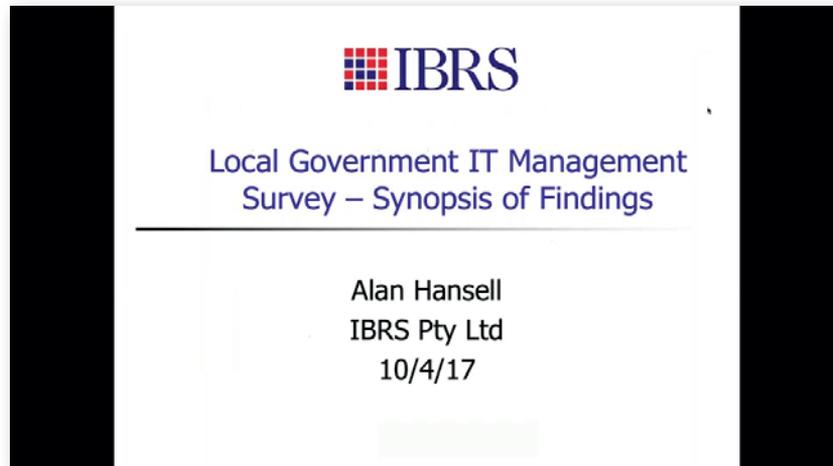
table continued

Topic	Optional Solutions
<p>Business and IT Transformation: For the transformation initiative to get traction, separate funding is needed to manage it and transfer staff from their operational role to lead the program.</p>	<p>Assign a CDO (Chief Digital Officer) to:</p> <ul style="list-style-type: none"> ■ Identify ways to reduce Council’s operational costs without compromising service delivery ■ Collaborate with Council’s Economic Development group to support their Smart City initiatives ■ Help justify more customer-centric systems for the community and property developers, e.g. current GIS created maps ■ Enhance the capabilities of Council’s management and staff so they can implement customer-focused systems solutions
<p>Business Analysts: Business analysts are in high demand, principally to support digital transformation and legacy systems replacement initiatives.</p>	<p>Remember, business analysts:</p> <ul style="list-style-type: none"> ■ Need intellectual challenge to stay in their role ■ Need recognition for their efforts and are prepared to move on if they do not get it ■ Use recruitment firms and their networks – not social media – to find the right person <p>Source: Harvey Nash, UK Business Analyst Marketplace – Pulse Survey, London UK, 2015.</p> <p>Note: If recruiting internally encourage finance professionals and librarians to apply and mentor them. It will pay off.</p>
<p>IT Resource Allocation: How do we ensure IT resources are allocated equitably, i.e. avoid funding managers who shout the loudest and get an unfair share?</p>	<p>Implement Balanced Portfolio approach as used in Funds Management industry. Contact IBRS for more details.</p>

Appendix D – Concerns Voiced

- Many IT staff have spent their working life in Council and are not motivated to seek outside employment. IT has grown organically. This was a common refrain of interviewees
- Council is evaluating whether to compete with a public utility, e.g. Post Office, to provide similar services
- Council has no forced redundancies policy which frustrates efforts to reassign staff
- Economies could be achieved by using shared IT services with other councils, e.g. payroll and financial services
- The Smart City initiative is in place but held back by Council being slow to change its IT service delivery model
- Cloud and SaaS solutions will only be approved if they can demonstrate they will reduce operating costs
- Lack of shared services capability for councils, e.g. for payroll and finance, is hindering their ability to reduce costs
- Management and staff in small councils have a wide span of control which frustrates efforts to develop capabilities and coach staff

In this short interview, Alan Hansell,
discusses the Local Government IT Management Survey



 <https://youtu.be/5qjUTpNwbEU>

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