

TechnologyOne

Information Management in the Digital Age

Transforming Government in Australia



By Geoff Moore, TechnologyOne

QUALITY ENDORSEMENT - ISO9001 Quality Management Systems - Requirements | ISO27001 - Information Security Management Standard

About TechnologyOne

TechnologyOne (ASX:TNE) is Australia's largest publicly listed software company and one of Australia's top 200 ASX-listed companies, with offices across six countries. We create solutions that transform business and make life simple for our customers. We do this by providing powerful, deeply integrated enterprise software that is incredibly easy to use. Over 1,000 leading corporations, government departments and statutory authorities are powered by our software.

We participate in only seven key markets: government, local government, financial services, education, health and community services, utilities and managed services. For these markets we develop, market, sell, implement, support and run our preconfigured solutions, which reduce time, cost and risk for our customers.

For 27 years, we have been providing our customers enterprise software that evolves and adapts to new and emerging technologies, allowing them to focus on their business and not technology. Today, our software is available on the TechnologyOne Cloud and across smart mobile devices.

Copyright

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise, without the prior permission of Technology One Limited.

Supersession clause

Upon receipt of this document please ensure any earlier versions are destroyed. No earlier versions may be retained without the written permission of Technology One Limited.

Contents

Government's information and service challenge	4
1. Capturing and centralising information	5
2. Ensuring centralised information can be accessed, searched and employed	
- The value of centralised and widely accessible information	
- Saving time and money	6
3. Incorporating Government cloud computing strategy	7
4. Securely storing information to meet legislative requirements	8
Is your government agency ready for the digital age?	9
About TechnologyOne Enterprise Content Management	10

Government's information and service challenge

Smart mobile devices have fundamentally changed the way we conduct business. What's more, the types and volume of information we interact with has changed significantly in recent years. Between April and June 2014 alone, Australians collectively downloaded more than 1.3 million terabytes of data, a 52% increase from the same period in 2013¹.

This information explosion, coupled with the proliferation of devices, is forcing government agencies to transform how they capture, store and make information available to meet the requirements of employees, citizens and businesses.

Everyone now expects to be able to access services quickly and from any location through a range of mobile and fixed computing devices. According to the Australian Communications and Media Authority (ACMA), half of all adult Australians used a tablet to access the internet in the six months to May 2014².

Consequently, knowledge workers are changing the ways in which they interact with information by embracing mobile technology to work away from the office. By 2018 an estimated 35% of consumer owned tablets and smartphones will be used for work purposes³.

For government this highlights the importance of ensuring that information is readily available, making it easier for employees to find the information they need and to provide fast customer service for colleagues, citizens and other agencies.

In order to keep up with citizen and employee expectations, agencies must adapt to these challenges, and do so in a way that satisfies their increasingly complex legislative requirements. The solution is to take a comprehensive and proactive approach to all enterprise information, integrating both structured and unstructured content with a holistic information management strategy. Structured content is typically managed in an enterprise business system. Unstructured content is typically managed separately in a document management system. Enterprise Content Management (ECM) incorporates both.

ECM is a way of collecting and analysing all documents and other information that relate to an organisation and its business processes. By updating ECM for the digital era, government agencies can use it as the foundation for a brand new approach to information management.

An effective digital ECM strategy in government should focus on:

1. capturing and centralising information
2. ensuring that centralised information can be accessed, searched and used
3. incorporating government cloud computing strategy
4. securely storing information to meet legislative requirements

By following these steps, agencies will be well placed to enhance efficiency, improve customer service, and better meet employee expectations and needs. This will ultimately enable them to provide a better customer service.

1. ACMA, Communications Report 2013–14.

2. ACMA, Tablets take off: take-up and use of tablet computers in Australia, 9 December 2014.

3. Juniper Research, Mobile Security: BYOD, mCommerce, Consumer & Enterprise 2013-2018, 19 November 2013.

1. Capturing and centralising information

Ten years ago, the world of digital information was in its infancy. While email was commonplace, Facebook had only just been established, Twitter did not exist and the first iPhone was still three years away. Then the social media and mobile technology revolution hit. It's now easier than ever to create and share information in numerous formats. As a result, paper documents have been supplemented – and in many cases supplanted – by blogs, tweets, Instagrammed photos, status updates, digitised records and other types of new media.

Agencies are now confronted with information that falls into two main categories. First there is 'structured content', meaning data that resides in a fixed field within a record or file. This includes data contained in relational databases and spreadsheets. Traditional business applications deal extremely well with this type of information. On the other hand, they must also deal with 'unstructured content', which appears in an ever-increasing number of formats and is, as a result, much harder to index and analyse. Common sources of unstructured content include large graphics files, emails, blogs, geospatial information, photos, RSS feeds, social media threads, spreadsheets, live sensor information, sound files and wikis.

With so much information at hand, it is imperative that agencies have access to a powerful ECM system that allows them to collect and centralise all content, be it structured or unstructured. To enable employees to continue using familiar software, it is vital your digital ECM system can also capture information from common applications such as Microsoft Office and Exchange, Google Docs and Lotus Notes.

By collating information and making it accessible via a simple user interface, digital ECM makes it easy for those seeking information to find and contextualise relevant documents. Agencies can further maximise efficiency and encourage the free flow of information by integrating their enterprise resource planning (ERP) systems with a centralised information pool.

Information centralisation benefits employees and the public by making it easy for them to navigate vast amounts of information in multiple formats. Unlike traditional document management systems, digital ECM can adapt to new information types as they emerge, making it the best choice for knowledge workers in today's media-saturated and mobile economy.

With so much information at hand, it is imperative that agencies have access to a powerful ECM system that allows them to collect and centralise all content, be it structured or unstructured.

What is 'information'?

In the context of this white paper, we define 'information' as both structured and unstructured content generated by interactions between government employees, citizens and businesses. This includes:

1. traditional content – hard-copy and electronic documents such as contracts, invoices, policies, purchase orders and receipts
2. multimedia content – audio and video files, teleconferencing, photographs, maps and plans
3. social media content – blogs, Facebook, LinkedIn and Twitter
4. Structured business system content - data that resides in a fixed field within a database record or file



2. Ensuring centralised information can be accessed, searched and employed

For a digital ECM strategy to succeed, employees must be able to access centralised information quickly and accurately. Doing so requires various software processes, such as capturing (registration), indexing (tagging), searching and retrieving, editing and controlling versions.

Because a government agency is made up of many business units, their ECM software needs to include a faceted classification system that allows users to find the same document from different business areas⁴.

For example, imagine that your agency receives a request for information that requires a response from several different business units. Upon receipt the request needs to be assessed and distributed to the relevant parties for a response. Without the proper processes in place there is risk of multiple copies and responses being created potentially leading to version control problems, and auditing and compliance issues. Now imagine you have a single instance of the document in your ECM system, which can be 'tagged' against a case number and the relevant business units. Now all parties are working from the same document. Your version control problems are immediately eliminated and responses, comments and queries are consolidated and easily retrievable.

It is also important to consider additional costs such as training and change management. For instance, how difficult would it be to train new staff when machinery of government changes take place? Agencies should consider choosing an ECM system that can be easily used by new and existing employees without the need for significant investment in training.

The value of centralised and widely accessible information

A good example of where a centralised approach to information management can deliver business benefits is in government agencies who have workers spread across multiple floors, buildings or across the country.

If a manager requires the latest version of a document from a colleague in another business unit typically they would send that person an email, give them a call or search them out at their desk.

But what happens if their colleague isn't available? Perhaps they're not at their desk, off sick or away on business. How then does the manager get access to the critical document they need? It's likely the only option would be to wait until a time when that person returned. Situations like this are usually accepted as part of daily life but in reality they have a recurring impact on the productivity of employees who need access to information to do their jobs.

But what if, rather than being locked away on a worker's computer, that same document was stored in a centralised repository, always up to date with the latest version and accessible by the appropriate people in the organisation? After a quick search work could carry on and decisions could be made without delay.

Or perhaps a Minister needs immediate access to a piece of ministerial correspondence during a meeting. Typically such documents are put through a complex work flow requiring input from many individuals and perhaps even other agencies. With the appropriate ECM system in place that Minister could immediately search for and locate the ministerial document with a few taps of their their phone or tablet. They could rest assured in the knowledge that they were viewing the most up to date version. They could even review past versions to understand how the document had been updated by other individuals involved in the workflow. They could then make further updates to the document based on outcomes of the meeting.

A robust digital ECM system that centralises information makes all this possible. Employees can access the same pool of information from any device – anywhere, and at any time.

Security is an added benefit. Consider what would happen if an employee lost their device or had it stolen. What would happen to any critical data or documents that were on that device? Would they be lost forever? Centralised information storage removes this issue.

4. For a definition of 'faceted classification', see: <http://www.igi-global.com/dictionary/faceted-classification/10812>.

Saving time and money

The need to organise information more efficiently extends to the entire organisation.

A recent IDC study found that knowledge workers around the world spend 16 per cent of their time searching for information, and a further 10 per cent consolidating and analysing information from one or more sources⁵. This adds up to 10 hours per worker per week.

Furthermore, 61 per cent needed to access four or more different information systems on a regular basis, while 13 per cent used 11 or more systems, making workers inefficient and increasing the likelihood of human error.

Inadequate information management systems diminish efficiency in two ways: they force employees to waste time looking for information, and they make it more difficult to review an agency's wider activities. By making structured and unstructured content centralised and searchable, agencies will increase efficiency for employees as well as those who require government services.

3. Incorporating Government cloud computing strategy

It is critical for agencies to consider their approach to ECM in light of the government's cloud computing strategy which aims to reduce costs and increase efficiencies through the uptake of cloud services. The policy dictates that non-commercial Commonwealth entities must adopt cloud solutions for new ICT services, or when replacing existing ones, "where it is fit for purpose, provides adequate protection of data and delivers value for money"⁶.

According to the policy "The Australian Government recognises that the community expects government services to be responsive to their needs and available where and when they want them. Key to realising this vision is the effective use of ICT by government, including the adoption of cloud services"⁶.

Some agencies have already started to push internal systems and public services to the cloud. Usually the logical place to start is moving to new age email and authoring tools like Microsoft Office 365 or Google Docs.

However, this then raises important considerations for an agency's ECM strategy. Will my ECM be able to accept emails and documents from these new systems? What about those organisations relying on plugins and connectors to their ECM? Will they work with the new system or will there be a flood of support calls from workers who are unable to store and access information?

A futureproofed ECM system that can cater for information from these and other sources is crucial for agencies. One that aids their move to the cloud, rather than acting as a hinderance and forcing constant workarounds.

5. David Schubmehl and Dan Vesset, The Knowledge Quotient: Unlocking the Hidden Value of Information Using Search and Content Analytics, IDC, June 2014.

6. Australian Government Department of Finance, Australian Government Cloud Computing Policy – Smarter ICT Investment Version 3.0, October 2014.

4. Securely storing information to meet legislative requirements

To meet compliance and regulatory requirements, agencies require an ECM system with highly customisable security settings that allow managers to restrict access to information as required.

Agencies that intend to introduce mobile access and BYOD must also guard against potential risks to information privacy and security. They must consider how they will monitor, track and capture information from mobile devices used by their employees.

In Australia, there are currently more than 80 pieces of legislation regulating information and record creation, maintenance, management, transferral, discharge and disposal. Government leaders must be aware of the potential document privacy and security risks, as a misstep can lead to serious consequences. A flexible and customisable ECM strategy enables them to efficiently meet regulatory requirements and streamline compliance and auditing processes.

Commonwealth legislation with provisions related to information management include:

- Archives Act 1983
- Australian Information Commissioner Act 2010
- Crimes Act 1900
- Electronic Transactions Act 1999
- Evidence Act 1995
- Financial Management and Accountability Act 1997
- Freedom of Information Act 1982
- Privacy Act 1988
- Public Governance, Performance and Accountability Act 2013



Is your government agency ready for the digital age?

To assess the readiness of your agency's enterprise content management strategy, we suggest executives answer these questions.

Position	Question
Constituent representatives	<ul style="list-style-type: none"> • Can I quickly access the information I need to get up-to-date information on issues or projects? • Do I know what citizens, businesses and other stakeholders are saying about my agency on social media?
Director Generals / CEOs	<ul style="list-style-type: none"> • Do I have visibility across projects, processes and the information being used to make executive decisions? • Does our information management system comply with regulatory requirements? • Can I make it easier for employees workers to work flexibly and efficiently?
Directors	<ul style="list-style-type: none"> • How can I ensure business units share information and do not silo information? • Am I correctly capturing all business unit information? • How can I ensure business units use consistent business processes?
Business unit managers	<ul style="list-style-type: none"> • How do I ensure my team's information is protected and only accessed by the right people? • Can I access the information I need from other business units in a timely manner?
Records managers	<ul style="list-style-type: none"> • How do I ensure workers follow correct information capture protocols? • Can I quickly and efficiently complete record-keeping processes? • Are manual information management processes causing bottlenecks in auditing and other legal discovery processes?
Administration	<ul style="list-style-type: none"> • Can I quickly collate the information constituent representatives require? • Can I collate information from multiple sources and in multiple formats?

About TechnologyOne Enterprise Content Management

TechnologyOne ECM is a powerful technology solution that enables organisations to easily and efficiently capture, store, use and manage information contained within their business documents from any device, anywhere and at any time.

ECM centralises the storage of all business documents, creating profiles with multiple indexes to link documents to the business units that need them. It also standardises naming conventions to structure the way information is retrieved. Managing the items in TechnologyOne ECM means you only have to search in one place when you need to find a document.

ECM is an integral part of TechnologyOne's OneGovernment solution. Developed in collaboration with government departments and agencies, OneGovernment generates efficiencies by automating and standardising key business processes. TechnologyOne's preconfigured enterprise solution streamlines implementation to reduce time, cost and risk.

Experience the power of a single, integrated enterprise solution built on a single modern platform with a consistent look and feel.

TechnologyOne ECM enables you to:

- store all documents in a single, central repository
- access business-critical information from anywhere on any device
- provide workers with the information they need
- share information across work groups and business units
- centrally capture emails from smartphones
- reduce information processing costs
- reduce time spent searching for documents and records
- effortlessly capture and profile information
- support a mobile workforce
- adhere to regulatory and legislative requirements
- store unstructured content as part of TechnologyOne's OneGovernment solution

Learn more

For more information, visit
www.technologyonecorp.com/government



Our approach



Our enterprise vision

The power of a single, integrated enterprise solution

Experience the power of a single, integrated enterprise solution built on a single modern platform with a consistent look and feel.

Market focus and commitment

Preconfigured enterprise software solutions reduce time, cost and risk

A deep understanding and engagement with our seven key markets means we can deliver to our customers integrated, preconfigured solutions that provide proven practice, streamline implementations and reduce time, cost and risk.

The power of one

One vision. One vendor. One experience.

When you invest in a TechnologyOne solution you benefit from a direct relationship with us every step of the way. We do not use implementation partners or value-added resellers. We take complete responsibility for building, marketing, selling, implementing, supporting and running our enterprise solution for each customer to guarantee long-term success.

The power of evolution

An enterprise solution that adapts and evolves

Substantial investment into R&D each year means we provide our customers a strong, continuing competitive advantage through an enterprise solution that adapts and evolves by embracing new technologies, concepts and innovation.

Simplicity, not complexity

Enterprise software, incredibly simple

Software that embraces consumer concepts and expectations to deliver solutions that are incredibly easy to use and remove complexity.

Technology One Corporation Sdn Bhd is a wholly owned subsidiary of TechnologyOne limited. TechnologyOne (ASX:TNE) is Australia's largest publicly listed software company, with offices across six countries. We create solutions that transform business and make life simple for our customers. We do this by providing powerful, deeply integrated enterprise software that is incredibly easy to use. Over 1,000 leading corporations, government departments and statutory authorities are powered by our software.

TechnologyOneCorp.com

Australia | New Zealand | South Pacific | Asia | United Kingdom

 **technologyone**
Transforming business, making life simple