

## **Information Management**

**Queensland Government department maturity** 

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#### February 2019

Mr Peter Russo MP Chair Legal Affairs and Community Safety Committee Parliament House George Street Brisbane QLD 4000

#### Dear Mr Russo

I am pleased to present *Information Management: Queensland Government department maturity*. This report is prepared under section 131 of the *Right to Information Act 2009* (Qld).

The report outlines Queensland Government departments' assessment of their information management. This report is a snapshot of the current situation at the highest level for each department.

We acknowledge that Government departments are diverse organisations with disparate internal operations. We thank them for their cooperation in completing our survey and we acknowledge their commitment to continuous improvement.

In accordance with subsection 184(5) of the Act, I request that you arrange for the report to be tabled in the Legislative Assembly on the next sitting day.

Yours sincerely

Rachael Rangihaeata

Information Commissioner

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# **Table of contents**

1.	Summary	1
	Key findings	2
2.	Context	5
	Objective, scope and method	6
3.	Four groups of departments	9
4.	Knowledge management	13
	Conclusion	13
	Findings	15
5.	Governance and strategic planning	22
	Conclusion	22
	Findings	24
6.	Information asset management and disclosure	32
	Conclusion	33
	Findings	34
7.	Business systems and processes	42
	Conclusion	42
	Findings	44

## 1. Summary

Good information management helps Queensland Government departments exploit fully the value of information and data as a strategic asset, deliver better government, improve service delivery to the community, and meet right to information and privacy obligations.

The *Right to Information Act 2009* (Qld) requires departments to give a right of access to information in their possession or under their control unless, on balance, it is contrary to the public interest to give the access. The Act focuses on proactive release and administrative access, with formal access applications a last resort.

Aligned to the benefits of good information management and the requirements of the Right to Information Act 2009, the Queensland Government's information vision<sup>1</sup> is for

'a more informed community and a more transparent government, achieved by proactively making information both routinely available and widely accessible'.

In our compliance audits, reviews and surveys, we have found that some agencies manage information and communications technology with an almost exclusive focus on technology, and little attention to information management. We have also found that leadership is critical to an effective right to information and privacy culture.

To enable us to measure the current maturity of departmental information management practices we used an information management maturity model describing levels of maturity from unmanaged through to proactive information management.

We surveyed departments, requesting them to rank their current information management maturity compared to their desired level across four domains.<sup>2</sup> We consistently found that they ranked their current maturity lower than their desired state.

 This is the first time we have obtained this information, so we do not have benchmarks or previous information against which to assess departmental progress.

The Queensland Government Chief Information Office publishes the Information Management Strategic Framework on its website.

We present the self-assessments without in-depth analysis, for three reasons:

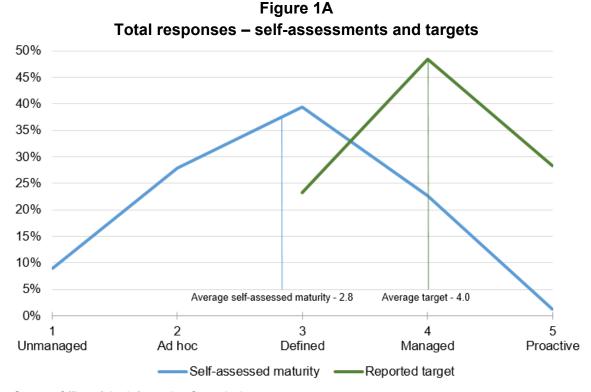
<sup>•</sup> We have not independently examined departmental information management maturity, so we cannot provide independent audit assurance as to the validity of the self-assessed reports.

The scope of this exercise is to identify self-assessed maturity at a point in time. We have not conducted a
root-cause analysis. We might explore underlying issues in collaboration with the departments in future.

## **Key findings**

We found a significant gap between departmental targets and their self-assessed maturity. Departments would like to achieve a 'managed' level of information management maturity, and on average, assess their maturity at the 'ad hoc' level.

Figure 1A shows the spread of scores.



Source: Office of the Information Commissioner

Higher levels of information management maturity require active engagement across a department. Champions at a senior level must lead this change, demonstrating how the agency values, manages and shares information and data appropriately, and how respective business units contribute. Cultural change requires clear communication of objectives and benefits for stakeholders, including for key Government priorities and services.

At the 'managed' level that departments aim for, departments would have the right information available, to the right person, in the right format, at the right time. This level of information management maturity supports proactive disclosure of information and appropriate use of data with new and emerging technology for more efficient and effective service delivery outcomes.

At the average self-assessed level of 'ad hoc', departments focus on putting structures in place, for example, writing policies and procedures. They focus less on activating

those structures, for example, promoting policies and procedures to staff through leadership and training.

At the 'ad hoc' level, practical achievements occur locally, in information silos. Information systems do not meet all business needs. An 'ad hoc' maturity does not represent a culture of proactive disclosure of information. At this level, publication of information, administrative access and information sharing would be incomplete and inconsistent.

Our survey covers four domains, containing ten topics, as depicted in Figure 1B.

Figure 1B

Domain and topic average self-assessments and targets

Dom	ains and topics	Average self- assessed maturity	Average target
	1. Knowledge management	2.9	4.1
8	· People and culture	2.9	4.2
	Information management workforce	2.8	4.1
	2. Governance and strategic planning	2.9	4.1
	· Governance, management support and performance monitoring	3.1	4.2
2/200	· Information management approach and planning	2.6	4.0
	· Compliance and risk management	3.0	4.2
	3. Information asset management and disclosure	2.8	4.0
=0	· Information asset management	3.0	4.2
	· Business needs and information quality	2.6	4.1
	· Proactive disclosure and sharing	2.8	3.9
	4. Business systems and processes	2.5	3.9
	· Information architecture and policies and procedures	2.4	3.9
	· Business processes, systems and tools	2.5	3.9

Source: Office of the Information Commissioner

The departments' responses, including ratings and comments, suggest they might have lower engagement because they:

- have not connected information management to business outcomes
- prioritise low-cost, low-return activities, and

 accept discrete systems or information silos to preserve mobility for business units, in anticipation of possible restructure of functions.

This audit demonstrates the importance of all elements of information management, including strong leadership and active engagement across departments to deliver on expectations and obligations. As departments address information management challenges and achieve their targeted maturity, they will increase their capability in related ways, including their ability to be open and accountable, engage actively with the community about its information needs, encourage better and easier access to information, and protect and safeguard personal information.

#### 2. Context

Government needs good information management to deliver on right to information and privacy. The Queensland Government recognises the importance of information management in its information management strategic framework. Information management is a way of treating government information and data as a resource. It is like other resource management systems, for example, procurement of equipment, management of accounts or recruitment of people. Increasing the flow of information to the community supports transparent, open and accountable government. It also increases trust in government, community participation in democratic processes and better informs decision-making.

The *Right to Information Act 2009* requires departments to give a right of access to information in their possession or under their control unless, on balance, it is contrary to the public interest to give the access. The *Right to Information Act 2009* focuses on proactive release and administrative access, with formal access applications a last resort. Appropriate information management also supports agencies in handling and protecting the personal information they collect, store, use and disclose in line with their obligations under the *Information Privacy Act 2009* (Qld).

Information management is the term used to describe all activities concerned with using information in all its forms, illustrated in Figure 2A.<sup>3</sup>

Information Management ... Identifies Creates Governs **Plans** Collects Organises Receives Secures Exploits the value of information to its fullest extent Exchanges Controls Maintaine Preserves Uses Disseminates Disposes Identifies value

Figure 2A
Information management activities

Source: Office of the Information Commissioner, emphasis from analysis of Information Management Strategic Framework

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The definition of 'information management' from the Queensland Government Enterprise Architecture <u>Information Management Policy Framework</u> section 2.2.4.

Queensland Government departments must manage information according to legislative requirements:

- The Right to Information Act 2009 and the Information Privacy Act 2009 require
  government agencies to make their information available subject to limited
  exceptions and exemptions. Agencies must also safeguard personal information
  in accordance with privacy principles for collection, use, disclosure, access,
  storage, security and disposal of personal information.
- The Public Records Act 2002 aims for public records to be made, managed and kept in a useable form for the benefit of present and future generations.
- The Queensland Government Enterprise Architecture requires departments to comply with the information standards, principles and policies. It describes values, beliefs and behaviours for government's management of information.<sup>4</sup>
- Legislation specific to the agency may set additional requirements.

## Objective, scope and method

Government agencies need appropriate information management to meet the requirements of the *Right to Information Act 2009* and *Information Privacy Act 2009* and to adopt good practices. We conducted this review under section 131 of the *Right to Information Act 2009*.

We asked Queensland Government departments to identify targets and self-assess their maturity in managing information using a structured self-assessment survey tool.<sup>5</sup>

We consulted with the Queensland Government Chief Information Office and with Queensland State Archives when developing the self-assessment tool.<sup>6</sup> We will continue to work in co-operation with these offices, including sharing detailed findings and data as appropriate, to inform their policy, strategy development, resources and training.

The tool covers 10 topics organised under four domains. Across the 10 topics, departments self-assessed 32 specific elements.

Departments must apply mandatory principles in the information standards and ensure their financial information management system aligns with targets in the Queensland Government Enterprise Architecture under section 27 Financial and Performance Management Standard 2009 (Qld), which is subordinate legislation per section 57 Financial Accountability Act 2009.

<sup>&</sup>lt;sup>5</sup> We present these results as reported, without independent audit assurance.

The self-assessment tool is available on our website.

We focused the self-assessment tool on aspects of information management relevant to right to information and related topics, and excluded aspects of information management explicitly covered elsewhere.

The self-assessment tool uses a 5-point scale, comparable to the *Queensland Government Enterprise Architecture's Information Management Maturity Development Resource Guideline.* 

The survey tool provides a brief description of what each rating means for each element. Figure 2B provides an example of ratings for one element of the survey.

Figure 2B
Survey example:
Knowledge management: Question 1.1 People and culture

	Accountability, roles and responsibilities
Unmanaged	We have not defined the accountabilities, roles and responsibilities for
(Score of 1)	our staff around information management and associated disciplines.
Ad hoc (Score of 2)	The accountabilities, roles and responsibilities for our staff around information management and associated disciplines are ad hoc and poorly defined.
Defined (Score of 3)	We have defined the accountabilities, roles and responsibilities for staff around information management and associated disciplines at the local level.
Managed (Score of 4)	We have documented accountabilities, roles and responsibilities for staff around information management and associated disciplines across the department.
Proactive (Score of 5)	We actively manage our information management accountabilities, roles and responsibilities across the department.

Source: Office of the Information Commissioner

Departments selected the rating statement for each element that best reflects their target for each element and their current maturity level.

We asked departments to nominate their own targets in recognition of the variation in departmental contexts and the associated risks. A specific maturity level may be suitable for one department, but not for another, for example, because the cost of managing the risks might be justified in one circumstance and not the other.

Within one department, different business units might have different levels of information management maturity. We recognise the variability within departments. For this exercise, we requested one target and one maturity rating for each element for the whole department.

Another issue for departments has been departmental restructures in 2017.<sup>7</sup> Newly formed departments have had approximately 18 months to redesign all of their systems.

The survey allowed departments to add comments and give context about their individual circumstances. 16 out of 20 departments provided additional comments.

We asked departments if they had previously assessed their information management maturity. Five departments reported making their own assessments.<sup>8</sup> The assessments led to improvement projects including:

- ensuring data is fit for purpose for specific business priorities
- improving electronic records management systems
- introducing online training for recordkeeping/information management, security and the electronic records management system
- defining the roles, responsibilities, accountabilities for specific business priorities, and
- reviewing information management and information security policies.

Other departments have taken other steps to improve their information management practices. For example, two departments have identified and appointed specialist resources dedicated to improving information management.

When governments change, they can change the way departments are organised to deliver government functions and services, known as a *machinery of government* change. The Premier of Queensland announced machinery of government changes to the Queensland Government taking effect from 1 July 2017. Details of the 2017 machinery of government changes and the process are available on the Public Sector Commission's website. We assisted one department to consolidate four self-assessments into one.

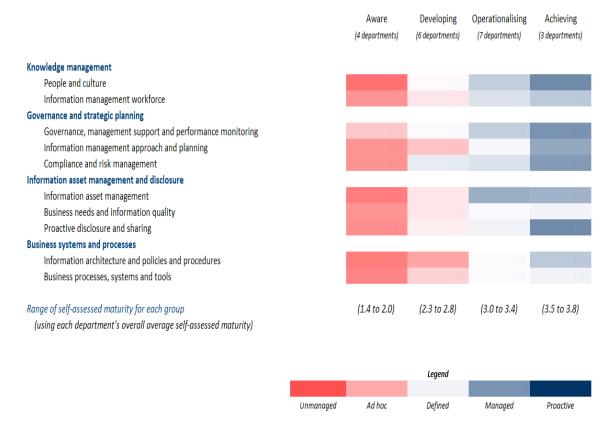
There is no correlation between conduct of a previous assessment and reported targets and results. The five departments are a mixture of high-scoring, medium-scoring and low-scoring departments.

## 3. Four groups of departments

Departmental self-assessments fall into four groups matched approximately to the first four levels of maturity – Aware ('unmanaged'), Developing ('ad hoc'), Operationalising ('defined') and Achieving ('defined') and Achieving ('defined'). No departments achieved a pattern of responses at the highest level, to be part of an Optimising group.

Figure 3A is a heat map illustrating the pattern of results for each type of department, using average scores for each topic, per group.

Figure 3A
Four groups of departments – self-assessed maturity



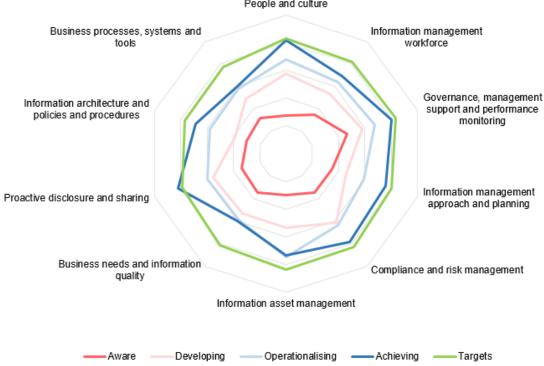
Source: Office of the Information Commissioner

Most departments are in the Developing or Operationalising groups (six departments and seven departments respectively).

Figure 3B depicts self-assessments for each group compared to the survey average targets.

Figure 3B
Results for each group and overall target

People and culture



Source: Office of the Information Commissioner

The largest gaps between targets and self-assessments in the Achieving group are in tying information management to business needs, for example, ensuring they meet all their business needs with information that is fit for purpose.

Departments in the Operationalising group have key gaps in completing information planning and mapping. The next step for this group is to move from implementation of procedures to active leadership and management of information.

Key gaps for the Developing group are using the *Queensland Government Enterprise*Architecture to guide planning, and develop policies and procedures.

The gaps between departmental targets and self-assessed maturity for the Aware group are in defining staff accountabilities, roles and responsibilities for information management, training staff, and developing policies, procedures and descriptions of information assets, systems and processes.

Each group has its own general profile, presented in Figure 3C.

Figure 3C
The four groups of departments

Factors	Aware	Developing	Operationalising	Achieving
No. of departments	4 departments (20%)	6 departments (30%)	7 departments (35%)	3 departments (15%)
Average targets	Average target is 3.9	Average target is 4.0	Average target is 4.1	Average target is 4.2
Comments on average targets for topics	Six 'defined' – four 'managed' average topic targets.  The four 'managed' targets are for topics covering  Governance, management support and performance monitoring, Compliance and risk management, Business needs and information quality, and Business processes, systems and tools.	Four 'defined' – six 'managed' average topic targets. The highest target is 4.3 for Compliance and risk management. The lowest target is 3.6 for Proactive disclosure and sharing.	Two 'defined' – eight 'managed' average topic targets.  The topics Information architecture and policies and procedures and Business processes, systems and tools average a 'defined' level (3.7 and 3.8).	One 'defined' – nine 'managed' average topic targets. One topic - Information architecture and policies and procedures – averages 3.9.
Self-assessed maturity	Average level of self-assessed maturity is 1.7	Average level of self-assessed maturity is 2.6	Average level of self-assessed maturity is 3.2	Average level of self-assessed maturity is 3.6
Comments on average self-assessed maturity for topics	Average self-assessed maturity is in the 'unmanaged' category (below a score of 2.0), except for Governance, management support and performance monitoring, which averages 2.3, the 'ad hoc' level.	Average self-assessed maturity is in the 'ad hoc' range, with two exceptions.  Information architecture and policies and procedures averages a lower 'unmanaged' score, and Compliance and risk management averages a higher 'defined' score.	Average self-assessed maturity ranges from 2.9 to 3.4, the 'ad hoc' to 'defined' range, with one exception. The exception is <i>Information asset management</i> , which these departments self-assess at a 'defined' score of 3.7.	Average self-assessed maturity is in the 'defined' level, with three topics 'managed'.  The three 'managed' topics were People and culture, Governance, management support and performance monitoring, and Proactive disclosure and sharing.
Gap - targets and self-assessed maturity	Two or more levels between current level and target maturity.	One to two level gap between current maturity and target maturity.	A gap between current maturity and target maturity of an average of one level.	No gap in some areas to one level in other areas.

Factors	Aware	Developing	Operationalising	Achieving
Most mature elements for each group	Senior management buy-in in-principle Governance, management support and performance monitoring – governance (2.8) and senior executive (2.5).	Managing for compliance Compliance and risk management – support (3.7) and risk management (3.3). Knowledge management - policies and procedures (3.5).	Policies, procedures, and systems are in place Governance and strategic planning - governance (4.0) Knowledge management - accountability, roles and responsibilities (3.7) and policies and procedures (3.7) Information asset register (3.9) and custodianship (3.7).	People are responsible for achieving results  Proactive disclosure and sharing – governance (4.3) and information sharing (4.3).  Knowledge management - accountability, roles and responsibilities (4.3).
Least mature elements for the group	Putting principles into action  Knowledge management — practice (1.3) and training and support (1.0).  Information asset management and disclosure — custodianship (1.3) and proactive disclosure (1.3).  Business processes systems and tools — information silos and flows (1.3).	Resourcing design and implementation  Business systems and processes – information architecture (1.8) and practice (1.8).  Governance and strategic planning – resourcing (1.8).	Moving beyond a procedural approach  Governance and strategic planning - information management planning (2.7).  Business systems and processes - information silos and flows (2.7) and practice (2.6).	Maximising information value to the business Business processes, systems and tools - information silos and flows (3.0), and mapping business processes (2.7). Business needs and information quality — quality management (3.0).

Source: Office of the Information Commissioner

## 4. Knowledge management



This domain relates to knowledge, skills and experience of departmental staff in relation to Queensland Government information management requirements. The topics in this domain are:

- people and culture, and
- information management workforce.

People and culture deals with the capability of all staff. *Information management workforce* looks at the capabilities of information management specialists.

#### People and culture

One of the four goals of the *Queensland Government Enterprise Architecture* – *Information Management Strategic Framework* is:

Improve our information management capability and practice – proactively improve the information management skills of staff

Departments need to educate and train their staff on all aspects of information management, including information sharing, record keeping, right to information and information privacy.

## Information management workforce

Departments need to ensure they have sufficient staff with information management skills in appropriate roles to meet their needs. They need to develop and maintain the skills of their information management professionals.

#### Conclusion

Departments rely on staff capability to achieve their information management goals.

Across the domain, departments generally self-assess their maturity above other domains, but below their targeted level of 'managed'. The higher self-assessments are in defining roles and responsibilities, developing policies and procedures and appointing information management specialists.

The highest targets in this domain are for:

- having a system or process to ensure all staff are aware of and can access up-to-date information management policies and procedures from a central repository (an average target of 4.4), and
- involving information specialists in a range of business initiatives across the department, and aligning information management workforce management and planning to business needs (an average target of 4.3).

There are elements where average targets are lower than the survey average. One third of departments aim for the lower 'defined' level of training for the two training elements. At the 'defined' level, departments would have appropriate training programs, designed with the assistance of specialists and applied consistently to all staff. At the survey-average target level of 'managed' training, departments would tailor training to staff roles and responsibilities.

The lower average targets for the two training elements contrast with the high average targets for ensuring staff awareness. In this domain, there is a higher average target for having a system or process to inform staff about information management policies. As reported elsewhere, there is a higher than average target for communicating compliance requirements to staff (4.4 for *Compliance and risk management – Support*, in the *Governance and strategic planning* domain).

An explanation might lie in resourcing. The survey responses for resourcing and training are generally consistent, compared to survey responses for resourcing and staff awareness, which do not match. This is understandable. For example, departments could make staff aware of policies, procedures or compliance obligations using an online notice, which requires less resourcing than training.

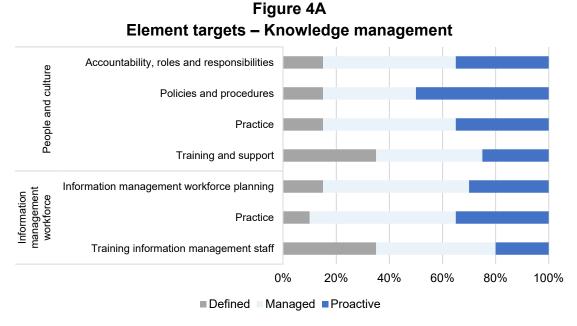
We consider all agencies should include training about right to information, information privacy and information security in their mandatory induction process for all employees. Training should be comprehensive, contemporary and tailored to the agency's context.<sup>9</sup>

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We published our report Awareness of privacy obligations: How three Queensland government agencies educate and train their employees about their privacy obligations on our website.

## **Findings**

Figure 4A illustrates departmental responses about targets for elements and topics in this domain.



Source: Office of the Information Commissioner

The average target for *People and culture – policies and procedures* (4.4) is the highest target across the survey. Half the departments target the *'proactive'* level of maturity for this element. This is consistent with the overall finding that departments focus on having structures, policies and procedures in place.

This focus also shows in departmental self-assessments, depicted in Figure 4B for the elements in the domain's two topics – *People and culture* and *Information management workforce*. The *People and culture* topic has two higher self-assessed elements – *Accountabilities, roles and responsibilities* (an average of 3.2) and *Policies and procedures* (an average of 3.3).

Three elements have lower targets than the survey average. Two of these are about training as outlined earlier.

There is a third element in this domain with lower than average targets and self-assessments – *Information management workforce planning*. It has the largest gap in the survey between an average target (4.2) and average self-assessed maturity (2.6) for an element. Half the departments drive the average self-assessment of 2.6 by self-assessing their planning at the 'ad hoc' level.

The Information management workforce topic has one higher rated element of Practice (an average of 3.1). This means that departments have appointed/identified information management specialists, and other areas of the business sometimes consult them.

Assessment of elements – Knowledge management Accountability, roles and responsibilities People and culture Policies and procedures Practice Training and support Information management workforce planning Information management workforce Training information management staff 0% 20% 40% 60% 80% 100% ■Unmanaged ■Ad hoc ■Defined ■Managed ■Proactive

Figure 4B

Source: Office of the Information Commissioner

Three of the departmental groups report strengths in the *Knowledge management* domain – the Developing, Operationalising and Achieving groups. These groups average relatively high self-assessments in the 'defined' or 'managed' range for People and culture - policies and procedures and People and culture - accountability, roles and responsibilities. This means that most departments report having documented responsibilities, policies and procedures for information management.

The Aware group self-assesses two elements in this domain at the lowest level of 'unmanaged' maturity for that group across all survey elements. These lower rated elements are People and culture - practice and People and culture - training and *support* for staff. The survey's description of these levels of maturity are:

> Business teams set and apply their own procedures relevant to their function, or not at all.

Our staff mostly receive advice informally from colleagues or technical support staff, or not at all.

The Aware group targets the high end of the 'defined' level of maturity for these elements.



All staff need to have sufficient information management capabilities to work effectively within their responsibilities, and manage and maintain their information to maximise its value.

Figure 4C depicts departmental self-assessments of their information management maturity about people and culture.

Figure 4C
People and culture

	Number of	self-asses	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Accountability, roles and responsibilities	1	3	8	7	1	3.2	4.2
Policies and procedures	2	2	5	11		3.3	4.4
Practice	3	4	9	3	1	2.8	4.2
Training and support	5	4	6	5		2.6	3.9
Overall	11	13	28	26	2	2.9	4.2
Percentage of topic ratings	14%	16%	35%	33%	3%		

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

### **Highlighted elements**

Departments self-assess at higher overall maturity in having *Policies and procedures*, and *Accountabilities*, *roles and responsibilities* compared to most elements in the survey. These average self-assessments represent the 'defined' level of information management maturity. At the 'defined' level, departments:

- define the accountabilities, roles and responsibilities for staff around information management, and
- make policies and procedures available to staff through a central repository, intranet or other curated system, which is not necessarily up-to-date.

Nearly all departments target the next level up for these elements (85% of departments target the 'managed' and 'proactive' levels).

In particular, over half the departments self-assess their *People and culture – Policies* and procedures as 'managed'. The survey's description of this level is:

We have a system or process that ensures all staff are aware of and can access up to date information management policies and procedures from a central repository.

50% of departments target the 'proactive' level for People and culture – Policies and procedures:

We actively engage with all our divisions to ensure our support, policies and procedures meet the needs of our staff and are accessible by all our staff.

In contrast, training is an element of lower focus and lower self-assessed maturity.

Departments target the 'defined' range (3.9) for *Training and support* for general staff, lower than the survey average of 'managed' range (4.0). Departments also self-assess *Training and support* of general staff at the lowest average maturity in this topic (an average of 2.6). The low average target and self-assessed maturity are due to a third of departments, including a subset of associated departments, responding at lower levels compared to the rest of the survey.

For targets, seven departments target the 'defined' level of maturity for training (35%), compared to the survey average of 23% for 'defined' responses. Four of the seven departments targeting the 'defined' level also self-assess at the 'defined' level, that is, they have achieved their targeted level.

At the survey-average target of 'managed' training, departments would tailor training to staff roles and responsibilities.

For self-assessed maturity, five departments self-assess at the 'unmanaged' level (25%, compared to the survey average of 9% for 'unmanaged' responses). At the 'unmanaged' level, the description states

We make limited information management education, training, support or knowledge sharing available to staff.

Our staff mostly receive advice informally from colleagues or technical support staff, or not at all.

At the survey-average 'managed' level, departments would tailor training to job roles. Five departments target the 'proactive' level of training. At the 'proactive' level, departments would augment comprehensive and job-specific training with a support team or knowledge sharing platform to assist staff with information management questions and issues.

The survey responses for resourcing and training generally match. 14 departments have the same targets for training and *Resourcing* (rated in the *Governance and strategic planning* domain). Departments only self-assess with 'defined' or 'managed'

maturity for training when they also self-assess with 'defined' or 'managed' maturity for Resourcing.

Conversely, staff awareness strategies are unrelated to resourcing. Departments set different targets and make different self-assessments for these elements. For example, four departments self-assessing *Resourcing* as 'unmanaged' or 'ad hoc' also self-assess at the 'managed' level for Knowledge management – policies and procedures and Compliance and risk management – Support.



## **Topic: Information management workforce**

Departments need to develop and maintain the skills of their information management professionals, by:

- knowing what skills and competencies its current information management professionals have
- ensuring they have enough information management skills, knowledge and expertise
- knowing how to access, deploy or apply any additional skills and expertise it needs
- planning to acquire appropriate information management skills, through training or recruitment, and
- including skills assessment in its recruitment practices for information management practitioners.

These strategies will ensure the department's information management skills and expertise are sufficient to develop and support good information management.

Figure 4D presents departments' self-assessments on how they manage their information management specialists.

Figure 4D Information management workforce

	Number of	self-asses	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Information management workforce planning	1	10	6	2	1	2.6	4.2
Practice		5	8	7		3.1	4.3
Training information management staff	2	6	9	3		2.7	3.9
Overall	3	21	23	12	1	2.8	4.1
Percentage of topic ratings	5%	35%	38%	20%	2%		

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

#### **Highlighted elements**

The strongest element in this topic is *Information management workforce* – practice. 75% of departments assess themselves at the 'defined' or 'managed' level. At these levels, departments have appointed information management specialists, and other areas of the business sometimes consult ('defined') or involve ('managed') information management specialists in departmental business. 90% of departments target the 'managed' and 'proactive' levels. The survey description of the 'proactive' level, targeted by 35% of departments, is:

We consult information management specialists when developing and implementing all business initiatives.

Our business areas consult information privacy specialists when developing and implementing business initiatives which collect, use or share personal information.

The element of *Information management workforce planning* has the largest gap in the survey between an average target (4.2) and average self-assessed maturity (2.6) for an element. Over half the departments target 'managed' maturity and six target the 'proactive' level.

Half the departments self-assess their planning at the 'ad hoc' level.

At this level, the survey description is:

We have limited information management workforce planning or consider it only in the context of our information and communications technology planning.

Senior management is aware that we need to develop our information management capabilities.

The element of *Training information management staff* has a similar pattern to the element of *Training and support* for general staff. Departments target '*defined*' maturity (3.9) on average for *Training information management staff*, slightly lower than the survey average of '*managed*' (4.0).

At the 'defined' level, departments would provide appropriate training programs for all information management staff.

The lower average target comes from a block of departments targeting the 'defined' level – 35% of departments target the 'defined' level of maturity, compared to the survey average of 23%.

Four departments in the Operationalising group set targets and self-assess at the 'defined' level of maturity for this element of the survey. 45% of departments self-assess at the 'defined' level, compared to the survey average of 39%.

At the next level of 'managed' training, targeted by 45% of departments, the departments would ensure that training programs for information management staff promote real world learning, performance improvement, and maturity of information management specialists in their roles and responsibilities.

The average self-assessment across all departments for this element is 2.7, the 'ad hoc' level of maturity, just below the survey average of 2.8. The survey's description of the average result of 'ad hoc' specialist training is:

We focus our training for information management staff on only key issues relating to information management.

## 5. Governance and strategic planning



This domain is about the context in which information management operates and the support it receives from management. The topics in this domain are:

- governance, management support and performance monitoring
- information management approach and planning, and
- compliance and risk management.

## Governance, management support and performance monitoring

Departmental leadership needs to actively support information management, and treat information as a core component of strategic value. Departments demonstrate leadership by assigning responsibility to a formal governance body, which actively champions information management and by having whole-of-department coordination, planning and review.

#### Information management approach and planning

Departments leading information management will encourage collaboration between business units, and capture initiatives in linked work plans to ensure information management supports business outcomes. New projects, programs and initiatives will identify information management, right to information and information privacy implications, dependencies and synergies.

## Compliance and risk management

It is the responsibility of departments to meet their obligations under the *Queensland Government Enterprise Architecture*, the *Right to Information Act 2009*, the *Information Privacy Act 2009* and other relevant legislation and standards. Departments leading in information management will hold people accountable and promote continuous improvement through performance monitoring and reporting.

#### Conclusion

Strong overall leadership and advocacy are critical for the success of information management. In general, departments recognise the importance of leadership, as shown by the 'managed' target for Governance and strategic planning, which represents active leadership, management and engagement with information.

The topic of *Governance, management support and performance monitoring* within this domain has the highest average survey target for a topic (*'managed'*, an average of 4.2 for the topic). <sup>10</sup> All but three departments aim to see executives and senior managers exercise active leadership (17 departments target the *'managed'* or *'proactive'* level across all elements).

Departmental self-assessment shows that departments generally operate at the lower 'defined' level. The survey describes the difference between the current 'defined' level and the targeted 'managed' level in terms of shifting from a procedural approach to active engagement with information management.

The issue shows in the different self-assessments for the two leadership elements in *Governance, management support and performance monitoring*:

 Governance is about having an active governance body in place at the executive level.

Fifteen departments (75%) self-assess at the 'managed' level for this element. Departments generally have an information governance structure in place.

Senior executive is about executive management practices in general.

Only six departments (30%) report that *Senior executives* generally operate at the '*managed*' level. 45% of departments report that executives and senior managers deal with information management only when needed ('*defined*'). Departments have not generally created an organisation-wide culture of active engagement with information management.

At the targeted level ('managed'), all departmental managers would encourage staff to comply with information management, right to information and information privacy policies and practices. Managers would provide whole-of-department coordination, planning and leadership.

These self-assessments are consistent with a survey-wide pattern. Departments put structures in place. To move to the next level of maturity they are targeting, they need to make the structures work in practice, through active leadership and engagement with information management.

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Note that individual elements within topics might have higher targets.

## **Findings**

Across the whole survey, this is one of the two highest rated domains, with an average target of 4.1 and an average self-assessed result of 2.9.

Targets in this domain are generally at or above the overall average target of 'managed' (4.0) for elements. Figure 5A depicts these findings. Resourcing is the exception. It has a higher percentage of departments targeting 'defined' resourcing (30%) compared to the survey average for 'defined' targets (23%).

Governance Governance, management support and performance monitoring Senior executive Performance monitoring and reporting Strategic planning Information Information management planning Resourcing Compliance and risk management Compliance Practice Support | Risk management 40% 60% 80% 100% ■ Defined Managed Proactive

Figure 5A
Element targets – Governance and strategic planning

Source: Office of the Information Commissioner

The average self-assessed maturity for this domain is just below the 'defined' level. At the 'defined' level, departments have structures and systems in place, or partly in place, that are responsive and compliant. They are not at the targeted level of 'managed' maturity, where they would actively lead information management, planning, implementing and reviewing progress, and ensure information management supports business activities and service delivery.

Figure 5B depicts departments' self-assessment for the elements in the three topics – Governance, management support and performance monitoring, Information management approach and planning, and Compliance and risk management.

Governance performance management support and Sovernance monitoring Senior executive Performance monitoring and reporting Strategic planning management approach and Information planning Information management planning Resourcing Compliance Compliance and risk management Practice Support Risk management 0% 20% 40% 60% 80% 100% ■Unmanaged ■ Ad hoc ■ Defined ■ Managed

Figure 5B
Assessment of elements – Governance and strategic planning

Source: Office of the Information Commissioner

This domain has the strongest self-assessed maturity for the Aware group of departments. They self-assessed higher than their average of 'unmanaged', that is in the 'ad hoc' range, for Governance, management support and performance monitoring – governance and senior executive. At this level, a department would have a governance body or senior official reporting to the Director-General who is accountable for information governance. Management would be aware of information management issues, but would give other issues priority for planning, action and funding. The Aware group targets a 'managed' level of maturity for these elements.

The Developing group self-assessed in the 'defined' range for some of the compliance elements, Compliance and risk management – Support and Risk management, higher than their average self-assessment at the 'ad hoc' level. Resourcing information management is an area of lower self-assessed maturity for this group. They self-assessed 'unmanaged' for Information management approach and planning – Resourcing. This group of departments targets a 'defined' level of maturity on average for Resourcing. The survey describes Resourcing at the 'ad hoc' level as operational and business-as-usual, and at the 'defined' level as linked to strategic planning.

The Operationalising group averages a 'defined' self-assessed maturity in this domain. They self-assess lower, in the 'ad hoc' range, for Governance and strategic planning - Information management approach and planning.

This level is characterised by planning and development at an individual project level or local level only. Targets for the Operationalising group average in the 'managed' level of maturity.

The Achieving group also targets a 'managed' level of maturity and self-assesses at the 'defined' level on average, except that it averages a self-assessment of 'managed' for the topic of Governance, management support and performance monitoring.



Active leadership is key to effective information management. Departments self-assess the topic of *Governance, management support and performance monitoring* strongest of any topic in the survey, as shown in Figure 5C.

Targets for the elements of *Governance, management support and performance monitoring* are '*managed*' or '*proactive*' for all except three departments (which set targets at the '*defined*' level).

Self-assessments vary across elements. In particular, departments report different results for the executive-level governance body (the *Governance* element) and general senior management understanding and activities (the *Senior executive* element).

Figure 5C
Governance, management support and performance monitoring

	Number	Number of self-assessments at each level of maturity					A
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	Average target maturity
Governance (operation of a specific executive level governance body)	1	3	1	15		3.5	4.3
Senior executive (executive level understanding and activity in general)		5	9	6		3.1	4.2
Performance monitoring and reporting	1	5	11	3		2.8	4.1
Overall	2	13	21	24		3.1	4.2
Percentage of topic ratings	3%	22%	35%	40%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

#### Highlighted elements

Fifteen departments (75%) report the *Governance* body operates at the 'managed' level. That is, three-quarters of departments report having an active senior-level governance body engaging with and supporting information management.

However, only six departments (30%) report that *Senior executives* generally operate at the 'managed' level. That is, less than a third of departments say there is evidence of whole-of-department coordination, planning and leadership. It is more common for management discussions and meetings to include information management and information privacy related topics only when needed. Fourteen departments report a 'defined' or 'ad hoc' level of information management maturity at 'Senior executive' levels.

At the 'ad hoc' level (five departments), senior management is aware of information management issues, but other issues have priority for planning, action and funding. According to their self-assessment, these departments manage information at the business unit or project level, resulting in information management silos.

The average for the element of *Performance monitoring and reporting* matches the survey average (2.8), but is the lowest maturity element in the *Government*, *management support and performance monitoring* topic.

Performance monitoring and reporting is an element where departments target active performance review, and self-assess as 'ad hoc' on average. The survey describes the targeted 'managed' level as:

We have management and reporting processes to evaluate, monitor performance effectiveness and improve governance of information management issues and activities.

We report performance review findings to a governance body for action as part of an overall planning process. We have implemented performance metrics.

At the self-assessed 'ad hoc' level, processes for monitoring and reporting focus on short term, significant information management issues, rather than being a comprehensive tool to improve information management.

The score is consistent with our other audits of right to information and information privacy, which identified performance monitoring as an area for improvement across agencies. In 2016, we reported performance monitoring and reporting as the lowest scoring area out of four areas needing improvement.<sup>11</sup>

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<sup>2016</sup> Right to Information and Information Privacy Electronic Audit Queensland public sector agencies' responses and comparative analysis with 2010 and 2013 results, available on our website.

# Topic: Information management approach and planning

When done properly, information management planning clearly articulates what the department will do with its information to support business and service delivery, and how it will do it.

The topic *Information management approach and planning* has relatively lower self-assessed maturity (2.6) as depicted in Figure 5D. The average represents a level where there is some planning and consideration of resourcing (between 'ad hoc' and 'defined'). At the targeted 'managed' level, departments would have a resourced work plan for information management, tied to business needs.

Figure 5D Information management approach and planning

	Number of s	elf-asses:	of maturity	Average	Average		
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Strategic planning	2	3	10	5		2.9	4.1
Information management planning	2	7	8	3		2.6	4.1
Resourcing	3	9	5	3		2.4	4.0
Overall	7	19	23	11		2.6	4.0
Percentage of topic ratings	12%	32%	38%	18%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

#### **Highlighted elements**

Departments do not rate the elements within the topic of *Information management approach and planning* evenly. For example, the average self-assessment for *Strategic planning* (2.9) is higher than the survey average (2.8), while the averages for the other elements are lower.

Three-quarters of departments self-assess the element of *Strategic planning* as 'defined' or 'managed', which means they link *Strategic planning* and information planning, at least partly. At this level, departmental information plans will reflect the needs of some clients and stakeholders.

Self-assessments for the other topic elements of *Information management planning* (2.6) and *Resourcing* information management (2.4) are lower.

For *Information management planning*, the 'ad hoc' or 'unmanaged' levels mean that departments do not build information management into business-as-usual activities. It

is bolted on. It is a separate process from other business planning, or done at the single project level or local level. Nine departments self-assessed at these levels.

Resourcing has the lowest rating for this topic, and is the fourth lowest ranked element in the survey. All but three departments selected a rating of 'defined' or lower for Resourcing, meaning they have not yet fully established resourcing for information management. Departments in all groups set average targets of 'managed' for resourcing, so departments consider this an area for improvement.

In particular, departments in the Developing group report Resourcing as an area of lower relative maturity (all 'ad hoc' or 'unmanaged' - a level lower than their average maturity) compared to other areas of information management maturity. A key challenge for the Developing group is resourcing:

- departments do not have processes or policies to support sustained resourcing of information management activities including planning, information architecture and information custodianship
- resourcing is limited to the operational level
- business units find it difficult to secure sufficient resources for information management activities, and
- policies for resourcing have a focus on business-as-usual operations.



## Topic: Compliance and risk management

Departments must meet their legislative obligations, including under the Right to Information Act 2009, the Information Privacy Act 2009 and the Queensland Government Enterprise Architecture. Departments meet their responsibilities effectively when they actively monitor compliance, and consistently comply with all legislative and policy requirements. They ensure staff know all applicable compliance requirements and they apply a consistent risk-based approach.

Departments target the 'managed' level, which involves systematic and consistent monitoring and reporting, and implementation of corrective action based on risk analysis and an understanding of the root causes of non-compliance.

Compliance and risk management is the second highest rated topic in the survey. The overall topic average for self-assessment of 3.0 sits at the 'defined' level of information management maturity (the overall survey average is 2.8). At this level, departments comply with legislation and have processes to monitor compliance. However, their

activities are not as consistent, up-to-date, systematic or active as they would be at the targeted 'managed' level.

The relatively high average is a combination of two average ratings and two higher ratings. Departments report higher levels of maturity for *Support* (current communication of all applicable compliance obligations to staff) and *Risk Management* (applying a risk-based approach to compliance requirements). They report average levels of maturity for two elements of *Compliance and risk management*. *Compliance* (compliance monitoring processes in place/periodically applied) and *Practice* (compliance with selected/applicable sections of legislation, policies and standards). Figure 5E depicts departmental self-assessments.

Figure 5E
Compliance and risk management

	Number of se	elf-assess	of maturity	Average	Average		
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Compliance	2	6	8	4		2.7	4.1
Practice	1	6	9	4		2.8	4.1
Support		4	5	11		3.4	4.4
Risk management	1	3	10	6		3.1	4.2
Overall	4	19	32	25		3.0	4.2
Percentage of topic ratings	5%	24%	40%	31%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

### **Highlighted elements**

No departments report being 'proactive' in managing their responsibilities for any element of Compliance and risk management. Some departments target the 'proactive' level (20% to 30% generally), but mostly departments aim for a target of 'managed' across the topic (55% to 65% generally). The general profile is departments self-assessing at the 'defined' level or below, and targeting the 'managed' level.

The element of *Support* has a different profile from the other elements, with more departments self-assessing at the 'managed' level and targeting the 'proactive' level. This element is about communicating compliance requirements to staff. Eleven departments report operating at the 'managed' level for *Support*. At this level, they communicate all applicable compliance requirements across the organisation. Seven of these 'managed' level departments aim for 'proactive' Support, which would involve assessing their situation and implementing a plan to address compliance literacy across the department targeting areas of higher risk and known issues.

The high target for communicating compliance to staff (4.4) is consistent with the target for *People and culture – policies and procedures* (4.4) in the *Knowledge management* domain, which is about communicating policies and procedures to staff.

Departments report relatively high ratings for *Risk Management* (3.1). 80% of the departments self-assess at the 'defined' or 'managed' levels. These departments apply a risk-based approach to information management.

Departments report very similar, and average, levels of maturity for the elements of *Compliance* (2.7) and *Practice* (2.8), compared to the overall survey average of 2.8. These two elements have similar patterns of responses, with the majority of departments (70% for *Compliance* and 75% for *Practice*) assessing themselves at the 'ad hoc' or 'defined' level. At these levels, departments monitor compliance periodically or partially. They focus on key legislative obligations or applicable legislation, but not consistently. At the next level of maturity, (the 'managed' level), departments would have systematic and consistent compliance activities, with audits, root cause analysis and corrective action. For both elements, there are four departments (20% of the departments) self-assessing at the 'managed' level.

## 6. Information asset management and disclosure



This domain is about managing specific information assets to meet the business needs of the department and right to information obligations. The topics in this domain are:

- information asset management
- business needs and information quality, and
- proactive disclosure and sharing.

#### Information asset management

An information asset register lists the existing information assets across all business units within a department. It enables users of information to identify the available resources from a single source. Departments assign a security classification to each information asset, which helps departments identify information suitable for publication.

#### **Business needs and information quality**

A key goal of information management is to understand business information needs and have the right information available to the right person, at the right time, in the right format, at the right place.

### Proactive disclosure and sharing

Information management is an enabler for the 'push model' of proactive disclosure of government information. It supports government departments to provide government information to the public to the maximum extent possible and appropriate. It enables departments to share government information with other departments, agencies, external stakeholders and other governments, subject to legislative and policy requirements.

Departments have a number of strategies to make information available, including:

- online information, on a department's website, publication scheme or disclosure log, or open datasets
- administrative access arrangements, including for the requestor's personal information or information that is not sensitive
- · formalised information sharing arrangements, and
- responding to an application under the Right to Information Act 2009 or Information Privacy Act 2009 as a last resort.

### Conclusion

Maturity in *Information asset management and disclosure* is about managing specific information assets to meet the business needs of the department and have the right information available for proactive disclosure, administrative release and formal access applications.

Departments aim for a 'managed' level for two out of three topics in this domain. At this targeted level, departments would

ensure the right information is available, to the right person, at the right time, in the right format, at the right place, enabling [...] improved business decisions

The topic of *Business needs and information quality* illustrates the challenge for departments in using information management to improve service delivery, by connecting information management to the business.

Overall, 81% of departments aim to meet all their identified information needs and have information quality fit for purpose (the 'managed' or 'proactive' targets for this topic). No department self-assesses at either level, that is, no department reports meeting all of their identified information needs or that their information quality is fit for purpose.

The topic of *Proactive disclosure and sharing* is critical to an effective right to information, open government and improved service delivery. For this topic, departments set a target of 'defined' on average (3.9). The difference between the 'defined' and the 'managed' levels for this topic is the difference between having proactive disclosure strategies in place, and actively managing, engaging and promoting those strategies. 'Managed' maturity would be consistent with *Right to Information Act 2009* requirements.

Examining the pattern of responses for *Proactive disclosure and sharing* is more encouraging than looking at the average target. For this topic, departments generally aim to achieve the next level of maturity compared to their current self-assessed level of maturity. We expect that once they have achieved the next level of maturity, departments will re-set targets to aim for *'managed'* or *'proactive'* maturity.

Departmental targets show that they recognise the importance of managing information to meet business needs. However, they are not fully realising their aims to support their business with the right information and data. They have not yet achieved the information management maturity needed to support proactive disclosure and sharing of information and data consistent with the community's right to information.

## **Findings**

The average target for this domain is 4.0, and the average reported result is 2.8.

Figure 6A illustrates departmental responses about targets, which appear similar to survey averages with one visible exception - the average targets for the element of *Quality management*. A higher proportion of departments target the 'managed' level (65%) for *Quality management* compared to the survey average of 48%. Only two departments target the 'defined' level (10%) for *Quality management*, compared to the survey average of 23%. At the 'managed' level, information quality would be fit for purpose and meet all business needs, accountability requirements and community expectations. At the 'defined' level, information quality would only generally meet business needs.

Targets for *Proactive disclosure and sharing* vary from survey averages with a third of targets set in the 'defined' range.

Information asset register nanagement Information Custodianship Classification Business needs and information Business information needs Quality management Proactive disclosure Governance and sharing Proactive disclosure Administrative access Information sharing 20% 40% 60% 100% 0% 80% ■ Defined Managed ■Proactive

Figure 6A
Element targets – Information asset management and disclosure

Source: Office of the Information Commissioner

Figure 6B depicts departments' self-assessed maturity for the three topics within the domain – *Information asset management, Business needs and information quality* and *Proactive disclosure and sharing.* 

Information asset register nanagement Information asset Custodianship Classification information needs and Business Business information needs quality Quality management Proactive disclosure Governance and sharing Proactive disclosure Administrative access Information sharing 20% 40% 80% 0% 60% 100% Managed Unmanaged Ad hoc Defined ■ Proactive

Figure 6B
Assessment of elements – Information asset management and disclosure

Source: Office of the Information Commissioner

Although the overall domain rating for self-assessed maturity reflects the survey average, the three topics have different and distinctive patterns of self-assessed maturity. Each topic illustrates one of the key challenges expressed in the survey.

Information asset management is the highest ranked topic in this domain at the 'defined' level (3.0) on average. This self-assessment illustrates the overall survey finding that departments generally have documented information management principles, plans and policies, and now face the challenge of managing them actively.

Proactive disclosure and sharing has a large proportion of departments reporting 'defined' maturity, and a lower than average target. Departments need to ensure all staff are actively engaged to adopt more mature proactive disclosure and information sharing practices to realise better outcomes for internal and external stakeholders, transparency and accountability.

The third topic, *Business needs and information quality*, illustrates the challenge of using effective information management to support the business of the department. Departments generally target the *'managed'* or *'proactive'* level of maturity, particularly for *Quality management*. No department reports operating at this level of maturity, that is, managing all business needs and managing information quality so it is fit for purpose (the *'managed'* or *'proactive'* levels).



# **Topic: Information asset management**

The Queensland Government Enterprise Architecture Information asset custodianship policy (IS44) requires that departments must:

- identify the department's information assets
- establish and maintain an information asset register, and
- assign role/s for the management of the department's information asset register.

An information asset register identifies the information asset custodians and users, as well as the information asset owners. Departments assign a security classification of official, sensitive or protected to each information asset. A systematic approach to identifying and classifying information holdings and datasets helps agencies determine which information is suitable for public release. It supports agencies to proactively disclose the maximum amount of appropriate information, as required by the *Right to Information Act 2009*. In addition, this approach allows the agency to identify which information assets contain personal information and implement appropriate safeguards.

Departments report on how they identify their information assets, establish and maintain their information asset register, assign role/s for the management of the register and classify their information assets. This is summarised in Figure 6C.

Figure 6C Information asset management

	Number of s	elf-asses:	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Information asset register	2	4	4	10		3.1	4.2
Custodianship	4	4	4	8		2.8	4.1
Classification	2	6	3	9		3.0	4.2
Overall	8	14	11	27		3.0	4.2
Grand Total	13%	23%	18%	45%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

Definitions are available from the glossary on the Queensland Government Chief Information Office website.

The Queensland Government Chief Information Office publishes the *Information security classification framework* (QGISCF) on its website.

#### **Highlighted elements**

All the elements' targets are at or above the overall survey average target of 4.0 for *Information asset management* (4.1 to 4.2). Over a third (35% to 40%) of targets are at the 'proactive' level – active information asset management connected to business initiatives. At this level, departments would capture all information assets, publish the information asset register, have active custodians, and use the information asset register to improve services and to engage proactively with the public and other stakeholders.

The high average self-assessment for *Information asset management* comes from just under half the departments self-assessing at a 'managed' level (45%), and just over half at the 'defined' level or below (55%). At these levels, the departments would maintain current documentation of information assets.

About a third of departments report they have not yet implemented a working version of information asset management ('unmanaged' or 'ad hoc'). At the 'unmanaged' level, the department would not have a functional information asset register, custodianship policy or information classification.

The survey description of the 'ad hoc' level states:

- the information register may be missing strategic information assets
- an information custodianship policy is not implemented, and
- staff do not consistently classify information assets.

All departments aim to operate above these levels (all departmental targets are 'defined' or higher).



# **Topic: Business needs and information quality**

Good information management supports better business operations. This concept is a feature of the *Queensland Government Enterprise Architecture Information*Management Strategic Framework. One of its four goals is to improve access to and use of information. This goal has three components:

- ensure the right information is available, to the right person, at the right time, in the right format, at the right place, enabling [...] improved business decisions
- store data in one place, to increase accuracy and reliability across all systems using the data (a single source of truth), and

make it easier to find information.

Departments report on this topic by assessing whether:

- they understand and meet business information needs, and
- the quality of their business information is fit for purpose.

While the target maturity for this topic (4.1) is similar to the survey average of 4.0, the self-assessed maturity is lower than average (an average of 2.6 compared to the overall survey average of 2.8). This topic has the largest gap between average targets and average self-assessed maturity for any topic.

Departments aim to achieve a higher level of maturity. In particular, all departments except two report they set a target of 'managed' or 'proactive' for the element of Quality management, which contrasts with the unanimously lower self-assessed status of 'defined' or lower across the topic.

Figure 6D depicts departmental self-assessments. For this topic, 68% of departmental self-assessments are in the 'defined' level. At this level, departments have analysed information needs and meet most of them, and believe the quality of their information generally meets business needs.

No departments self-assess at levels where they can say that they meet all their identified information needs and manage information quality so it is fit for purpose ('managed' or 'proactive').

Eight departments say that they have identified that their current information management infrastructure and practices do not fully meet their needs (the 'ad hoc' level for *Business information needs*).

Figure 6D
Business needs and information quality

	Number of s	elf-asses	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Business information needs		8	12			2.6	4.0
Quality management (managing the quality of	2	3	15			2.7	4.2
information) Overall	2	11	27			2.6	4.1
Percentage of topic ratings	5%	28%	68%				

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding



# **Topic: Proactive disclosure and sharing**

One of the benefits of good information management is its support for proactive disclosure of information. Departments realise benefits of proactive disclosure through:

- good governance, including a governance structure, authority for disclosure, and policies and standards
- actively promoting proactive disclosure and supporting staff to do so
- driving the use of administrative access, including schemes for specific types of information, and
- information sharing, where appropriate, with other Government departments, agencies, and external stakeholders.

Departments' self-assessments on this topic are in Figure 6E. *Proactive disclosure and sharing* has a large proportion of departments reporting 'defined' maturity (48% of departmental responses, compared to the survey average of 39% of self-assessments being 'defined'). The average targets for *Proactive disclosure and sharing* contrast with the survey averages. For example, 43% of responses target the 'defined' level compared to the survey average of 23% for the 'defined' level.

Figure 6E
Proactive disclosure and sharing

	Number of s	elf-asses	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Governance		6	9	2	3	3.1	4.0
(governance of proactive disclosure and sharing)							
Proactive disclosure	3	4	10	3		2.7	3.9
Administrative access		7	9	4		2.9	3.9
Information sharing	2	6	10		2	2.7	4.0
Overall	5	23	38	9	5	2.8	3.9
Percentage of topic ratings	6%	29%	48%	11%	6%		

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

Within the topic departments fall into three groups of high, medium and low self-assessed maturity. These groups are similar, but not identical to the overall survey groupings of Aware, Developing, Operationalising and Achieving. The groups each aim to lift up to the next level of maturity.

- Approximately a third of the departments self-assess on average at the 'unmanaged' or 'ad hoc' levels and target a 'defined' level of information management maturity – lower maturity (6 departments).
- Approximately half the departments self-assess on average at the 'defined' level and generally target the 'managed' levels mid-level maturity
  (11 departments).
- The third group self-assesses on average as 'managed' or 'proactive' and target 'managed' or 'proactive' levels higher maturity (3 departments).

Hence, although the overall average for this topic is lower than the survey average, departments generally aim to achieve the next level of maturity for *Proactive disclosure* and sharing compared to their current self-assessed level of maturity.

Three departments report 'proactive' or 'managed' maturity for Proactive disclosure and sharing. They are generally achieving at or above their targets of 'proactive' or 'managed' information management maturity.

However, 85% of departments report mid to low level maturity.

Eleven departments self-assess as 'defined' for nearly all of the elements in this topic. This group equates to the 14 departments in the 'Developing' and 'Operationalising' groups of departments, with three exceptions – one department reporting higher maturity for this topic and two departments reporting lower maturity for this topic.

The average targets for this group, reflected in half the responses, are generally at the 'managed' level, the next level up. At the 'defined' level, departments would generally have policies, systems and structures in place to facilitate proactive disclosure. They would not have the same active implementation as departments self-assessing as 'managed' or 'proactive'. For example, at this level, departments would not train frontline staff about administrative access strategies.

One of these departments comments:

"While the department has in place policies and procedures to ensure consistent and lawful information access and sharing, it hasn't fully embraced the "push model".

Similarly the department has mechanisms in place making information available to both other government agencies, to stakeholders and to the public but does not necessarily promote this."

Six departments report low levels of maturity for all the elements of proactive disclosure ('ad hoc' or 'unmanaged'). This group is the same as the 'Aware' group of departments, with two additional departments from the 'Developing group'. At the 'ad hoc' and 'unmanaged' levels for this topic, departments:

- have some processes or no processes for making information available externally or exchanging information with other government agencies and third parties
- consider for disclosure information assets required by law to publish, and otherwise do not consider or facilitate proactive disclosure of information. When they create information, they have little consideration for future proactive disclosure or sharing
- might make some information available through administrative access, most likely through local business unit arrangements, and
- do not have a standardised approach to information sharing arrangements with other departments and external stakeholders.

With a couple of exceptions for individual elements, these departments set targets at the next level up, the 'defined' level.

Departments targeting and operating at the 'proactive' and 'managed' levels of proactive disclosure will:

- mandate proactive disclosure through governance, authorization and policies
- actively identify opportunities for proactive disclosure, such as using new technologies
- authorize staff to release information and promote proactive disclosure to staff
- plan for proactive disclosure, including engaging stakeholders and the public about new projects, business systems or initiatives
- have a range of administrative access schemes covering high priority information, and promote them to the public and to staff. They would inform frontline staff about administrative access available and train them to assist the public in requesting access, and
- actively create and manage information sharing arrangements with other agencies for the benefit of citizens and the community at large.

## 7. Business systems and processes



This domain is about the systems and processes (both electronic and manual) that support the department's information management practices. The topics in this domain are:

- information architecture and policies and procedures, and
- business processes, systems and tools.

#### Information architecture and policies and procedures

Information architecture refers to the design and arrangement of information and the inter-relationships of systems. It describes:

- which systems store which data and records, and in what formats
- the relationships between different business systems
- the standards used when labelling and categorising information, and
- the design of navigation, indexing and search systems.

Without good information architecture to support maintenance, expansion, transition and trouble-shooting, a department runs the risk of system failure.

### Business processes, systems and tools

A department needs to analyse its business processes to identify what information it requires. It also needs to know what information to collect, at what time and to which quality. Other considerations include the security of the information and possible secondary uses.

The Queensland Government Chief Information Office has adopted the *APQC Process Classification Framework*. <sup>14</sup> It includes standard definitions and terminologies, <sup>15</sup> to enable a department to map its business processes and analyse them for gaps/duplications.

### Conclusion

This domain is the least mature of the four domains. The survey's lowest targets are in *Business systems and processes*, an indicator of the challenge departments face to connect business systems and processes with information management.

The American Productivity and Quality Center develops the APQC Process Classification Framework. The QGCIO adopted the APQC Process Classification Framework to replace the previous Business Process Classification Framework.

The Queensland Government Chief Information Office publishes the Queensland Government Enterprise Architecture Business process classification framework on its website.

Departmental targets show that departments seek to implement a planned and coordinated information architecture, aligned with the *Queensland Government Enterprise Architecture*. The focus is on business-critical information and significant business processes only. This is the 'defined' level of maturity.

At the 'managed' level, information architecture would be complete and integrated with the business. Information management and business needs would inform each other. Departments would ensure business needs drove the information architecture. They would also re-engineer business processes to improve information flow and efficiency.

For example, the survey description of the 'managed' level of Information architecture and policies and procedures – Practice states:

We link our information architecture to major government priorities and systems.

Business needs drive the information architecture, not just architectural purity.

We develop and deploy information management architecture, principles and policies as part of a planned, prioritised process.

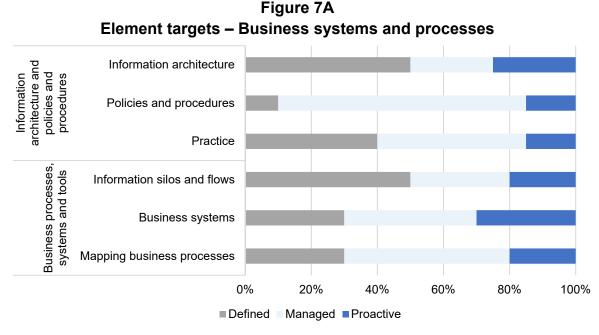
In particular, the element of *Information architecture and policies and procedures* – *Practice* has the lowest average self-assessment and target in the survey. Over half of the departments self-assess at a level which states they allow the use of local information models and information silos to continue. The element of *Business processes, systems and tools* – *Information silos and flows* also has a low average self-assessment at the 'ad hoc' level. At this level, departments have identified and planned how to re-engineer business processes to improve efficiency and reduce duplication of information, but have not yet achieved efficiencies. Lower targets and self-assessments in this domain expose departments to risks of:

- system failure if information architecture is inadequate for trouble shooting
- inefficiency and inaccuracy arising from duplicate information in silos
- inefficiency from unmapped gaps/duplication in business processes, and
- ineffectiveness if information architecture is irrelevant to business needs.

## **Findings**

This domain has a reported average maturity of 2.5 compared to the overall average of 2.8. Similarly, the reported average target (3.9) is lower than the overall average target (4.0).

Figure 7A illustrates departmental responses about targets. None of the average targets for elements exceed the survey average of 4.0.



Source: Office of the Information Commissioner

Figure 7B shows the reported results for the elements in the two topics – *Information architecture and policies and procedures* and *Business processes, systems and tools*.

Information architecture and policies and procedures has an average self-assessment of 2.4. Business processes, systems and tools has an average self-assessment of 2.5. Both topics have an average target of 3.9.

The lower scores are also visible at the next level of detail. All the elements in the domain have an average self-assessment below the overall average for the survey. The highest self-assessed level of maturity in this domain is *Policies and procedures* (2.7). Two elements, *Information silos and flows* and *Practice – Information architecture* have the lowest averages for the survey for self-assessed maturity (2.3). *Information silos and flows* also has the lowest average target (3.7).

Figure 7B Assessment of elements – Business systems and processes Information architecture architecture and Information procedures Policies and procedures Practice Business processes, systems and tools Information silos and flows Business systems Mapping business processes 0% 20% 40% 60% 80% 100%

Source: Office of the Information Commissioner

All departments, in all groups, have low self-assessments in the *Business systems and* processes domain.

■Unmanaged ■ Ad hoc ■ Defined ■ Managed



Effective information architecture means departments know what all their systems are, where they are, how they link together, and what requirements the systems need to operate. It supports usability (for example, software is set up appropriately on the correct hardware and linked efficiently to other systems) and findability (of the hardware/software) so the department can maintain the system.

When a department has mature information management, there will be a close and coordinated relationship between its information, enterprise, business and information technology architectures.

Departments do not rate this topic highly, either for targets or for self-assessed maturity. Departments target the:

- 'proactive' level 10% less than the survey average (18% of 'proactive' targets compared to the survey average of 28%), and
- 'defined' level 10% more than the survey average (33% of 'defined' targets compared to the survey average of 23%).

Departments set lower targets for the elements in this topic of *Information architecture* or for *Practice* than most other areas of information management:

- Half the departments aim to achieve a 'defined' level of maturity for Information
   architecture. This means they aim to develop and implement an information
   architecture aligned with the Queensland Government Enterprise Architecture,
   largely tied to and dependent on their information technology architecture. They
   do not aim for the higher level of 'managed', which would include their long-term
   vision and goals, information needs and strategies to meet them.
- Eight departments aim to achieve a 'defined' level of information management maturity for *Practice*. The survey describes this level as:

Our information architecture is planned and coordinated throughout the department. We are developing information management architecture, principles and policies but these are not prioritised.

The majority of self-assessment ratings (86%) are at the 'defined' level or below. Practice is particularly low, with 14 departments self-assessing at the 'unmanaged' or 'ad hoc' levels. Figure 7C shows the departments' self-assessments on each element under this topic.

Figure 7C
Information architecture and policies and procedures

	Number of s	elf-asses	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Information architecture	3	9	6	2		2.4	3.8
Policies and procedures	2	7	7	4		2.7	4.1
Practice	3	11	4	2		2.3	3.8
(information architecture)							
Overall	8	27	17	8		2.4	3.9
Grand Total	13%	45%	28%	13%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

### **Highlighted elements**

Policies and procedures scores more highly than the other two elements (2.7 on average), consistent with the overall survey pattern that departments generally ensure they have policies and procedures in place. More than half the departments (11 out of 20) self-assess as having 'defined' or 'managed' maturity for Policies and procedures. This means these departments would have appropriate information management principles and policies aligned with the Queensland Government Enterprise Architecture.

At the targeted 'managed' level, departments would connect information management to the business by reviewing information policies and procedures as part of the general policy development cycle. Departments would have fully documented and approved *Policies and procedures*.

Departments report low maturity in the element of *Information architecture – Practice*. This element has the lowest average self-assessment (2.3) and second lowest target (3.8) in the survey.

Over half of the departments (11 out of 20 departments) self-assess at the 'ad hoc' level of maturity. The survey description states:

We allow the use of local information models and information silos to continue.

Our process for developing information management architecture, principles and policies is reactive.

Of these 11 departments, four departments target the next level of maturity (the 'defined' level), and six departments target a 'managed' level of Practice.



# Topic: Business processes, systems and tools

Business processes are the underlying mechanisms that support the delivery of an organisation's day-to-day services. A business process encompasses the participants, tasks and supporting systems that work together to produce a result that is of value to the organisation.

Figure 7D shows the departments' responses on whether they know their business processes, and use this knowledge to analyse business processes for gaps/duplications and to map how they support the business strategy. Nearly all responses (95%) in this topic fall in the 'defined' level or lower.

Figure 7D
Business processes, systems and tools

	Number of s	elf-asses:	Average	Average			
	Unmanaged (1)	Ad hoc (2)	Defined (3)	Managed (4)	Proactive (5)	self-assessed maturity	target maturity
Information silos and flows	4	6	10			2.3	3.7
Business systems	2	5	11	2		2.7	4.0
Mapping business processes	1	7	11	1		2.6	3.9
Overall	7	18	32	3		2.5	3.9
Grand Total	12%	30%	53%	5%			

Source: Office of the Information Commissioner, percentages might not add to 100% due to rounding

#### **Highlighted elements**

Departments report low average self-assessed maturity in managing Information silos and flows (2.3), compared to the survey average for self-assessed maturity (2.8):

- Half the departments self-assess at the 'defined' level. The survey description of this level of maturity is that departments have eliminated some duplicate processes and improved integration of processes and information flow.
- Half the departments self-assess at the 'ad hoc' or 'unmanaged' levels of maturity. At these levels, departments might have identified opportunities to re-engineer business processes to improve efficiency, but would have taken no action. At the 'unmanaged' level, they would have evidence of overlap and/or duplication of processes and information between business units. Multiple systems, requiring different logins, may store the same information.

On average, departments set the lowest target for maturity for *Information silos and flows* (3.7) than for all the other elements of information management. Half aim for maturity at the 'managed' or 'proactive' level, and the other half aim to achieve a 'defined' level. Four departments self-assess and target the 'defined' level, meaning they have achieved their targeted level of maturity. At this level, departments would use technology to enable disparate and siloed information assets for greater integrated use across business units.<sup>16</sup>

For *Business systems* and *Mapping business processes*, 14 departments seek to operate at the 'managed' or 'proactive' level. At this level of maturity, they would effectively manage information management issues in business systems, and map processes at a whole of department level.

Although departments self-assess for these two elements at a more mature level than *Information silos and flows*, the averages of 2.7 and 2.6 are lower than the overall survey average of 2.8.

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The regularity of Machinery-of-Government changes may contribute to this policy position, particularly for departments with business units that have a history of movement. Ten departments commented on the impact of Machinery-of-Government changes.

For both *Business systems* and *Mapping business processes*, 11 out of 20 departments self-assess maturity at the 'defined' level. The survey describes this 'defined' level of maturity as focusing on business-critical information or significant business processes. Departments operating at this level would involve information technology and information management specialists in efforts to find technologies and tools to integrate information management into systems.