

ICT Metrics Report 2016-17



ICT Assurance

Executive summary

The NSW Government continues the trend of being increasingly mobile, open, collaborative and citizen focused through its use of ICT. Key findings of the 2016-17 ICT Metrics Report are:

Citizen engagement

Over 1.1 million people interact online with the NSW Government through our websites every day. Countless more interact with government via social media.

Expenditure is appropriate

Expenditure is consistent with industry benchmarks.

Digital first

In 2016-17, Service NSW led the way with 23 million online customer visits and one million 'MyServiceNSW' accounts created.

Employee engagement

Engagement with work remains strong at 72 per cent.

Open data

Volume and quantity of open data is increasing with 80,000 datasets across NSW agencies.

Customer satisfaction

Almost 8 out of 10 consumers and businesses were satisfied with online services.

ICT-enabled capabilities

A Digital NSW delivers policies and services that are easy to use and help deliver outcomes in real life situations. Government services keep pace with the quality and convenience of modern services people use today.

Customers tell government once, are reminded when they need to do something, decide who can access their data, and understand how government has used it. Public confidence and trust is maintained through government systems that are secure and resilient.

Over 1.1 million people interact online with the NSW Government through our websites every day. Countless more interact through social media platforms.

The decline in websites is indicative of government's commitment to consolidate its online presence making it easier for citizens to access online services while also reducing costs.

As the digital landscape has changed, so has the government's approach to social media.

Across government we have a record 2,096 social media accounts, this is up 13.8 per cent on 2015-16.

Service NSW digital engagement with customers has increased significantly. In 2016-17, there were 23 million online customer visits and one million 'MyServiceNSW' accounts created.

Overall trends

In 2016-17, the ICT spend totalled \$3.08 billion, which represented approximately 4.3 per cent of total agency expenditure.

This is consistent with Gartner benchmarks — 4.1 per cent (State & Local Government) or 4.6 per cent (All industries) and reflects government's determination to deliver digital transformation that improves services to citizens.

The bulk of the ICT spend comes from the Transport, Health and Justice clusters.

Delivering value for money

Reforms to the ICT procurement system have encouraged greater numbers of suppliers to compete for government business.

In 2016-17, the ICT Services Scheme grew by 733 new suppliers to 2,905, increasing in size by 34 per cent. Small to medium enterprises (SMEs), employing 200 or less FTEs within Australia, make up most suppliers.

Enterprise architecture maturity is increasing with 67 per cent (up from 59%) of respondent agencies operating a defined set of enterprise architecture processes.

Telco Authority: The Government Radio Network (GRN) geographically covers approximately 266,000 square kilometres, or about a third of NSW. During 2016/17, following significant network upgrades, GRN availability has been delivered in excess of the network Service Level Agreement (SLA) of 99.95 per cent, for the whole period.

IT Service Management (ITSM) focuses on the delivery of quality ICT services that meet the needs of customers and is delivered by an appropriate mix of people, process and information technology.

84 per cent of agencies reported using an ITSM methodology, ITIL V3 is predominantly used for Incident management (93%), Change management (86%), Service Design — Service Level Management (67%).

Contents

	Page
Executive summary	2-3
1. Introduction	6
2. ICT-enabled capabilities	7
Service accessibility	8
Community engagement	11
Human interaction	13
Information sharing	19
3. ICT Trends in NSW Government	23
Investment and expenditure trends	24
Sector capability	33
4. Delivering value for money through ICT reforms	37
ICT Assurance Framework (IAF)	38
Procurement reforms increasing the number of SMEs	39
Enterprise architecture	40
Telco strategy	41
IT Service Management	43
NSW Government policy on cloud-based services	44
GovDC	45
5. Opportunities	46
Cyber security	47
Digital Government Strategy	48
‘One Government’	49
6. Appendices	50
Appendix A: List of 2016-17 ICT Survey respondents	51
Appendix B: Service tower definitions	52
Appendix C: Cost elements definitions	53
Appendix D: Run, Grow, Transform the business	54
Appendix E: Glossary	55



1.

Introduction

Introduction

The NSW Government ICT Metrics Program is a multi-source data collection initiative that captures information and communications technology (ICT) expenditure, volumetric data and measures, to inform the NSW Government's ICT strategic direction.

Purpose of this report

The ICT Metrics Report, produced annually, highlights major trends in digital service delivery and technology uptake by tracking key focus areas of ICT expenditure, personnel, investment and service capabilities year on year.

This report provides the results from the ICT Survey and related sources for 2016–17 during which the NSW Government spent \$3.08 billion through its clusters and agencies on ICT to facilitate public sector service delivery and service reform.

Data was collected from more than 40 NSW Government agencies in 2016–17.

Benchmarking information is included to provide a comparison.

The ICT Metrics Program

The ICT metrics report has been presenting and interpreting data on ICT services and capabilities each year since 2012.

The ICT Metrics Program:

- measures the extent to which NSW Government agency ICT expenditure supports the delivery of key digital service capabilities
- provides transparent and comparable ICT expenditure reporting, to enable agency evaluation of performance against a whole-of-government perspective
- captures information on technology trends to inform the Government's ICT strategic direction.

In NSW, we are committed to using digital to put more power in the hands of citizens and deliver better services, when and where people need them. Our vision is to transform life in NSW by designing policies and services that are smart, simple and seamless.

Survey of agencies representing approximately 90 per cent of total Government expenditure

Sources

The annual NSW Government ICT Survey is the core element of the ICT Metrics Program, complemented by data from:

- Digital NSW
- Service NSW Annual report
- NSW Procurement
- Telco Authority Annual report
- Data.NSW
- OpenGov NSW
- Customer Satisfaction Survey 2017 data from Office of the Customer Service Commissioner
- Administrative Requirements Portal (ARP) from NSW Treasury
- Centre of Education Statistics and Evaluation — NSW Government
- and supporting information provided by other NSW Government agencies and websites.



2.

ICT-enabled capabilities

Service accessibility

NSW Government delivers services that are easy to use and help customers in real-life situations.

Over 1.1 million people interact online with the NSW Government through our websites every day. Countless more interact through social media platforms.

Digital interactions are transforming government, just as they are transforming the private sector.

Citizens are getting a more timely and efficient experience dealing with government. This is occurring without the limitations of place, time and device.

Our work is internal and external. We are seeking timely and cost-effective transactions that benefit citizens and government. We strive to deliver better value to taxpayers by implementing efficient operational solutions that are guided by business insights to government. We are also providing more 'open data' because it is a driver of greater innovation, productivity and economic activity.



Did you know?

1.1 million people interact with NSW Government online each day.

Doing more with less online

In 2016-17, the number of NSW Government websites fell. At the same time, citizen usage of the sites increased markedly.

A reduced number of websites is indicative of government's commitment to consolidate its online presence, making it easier for citizens to access online services while also reducing costs. This approach has contributed to increases in both customer interaction and satisfaction in 2016-17.

While growth is positive, an opportunity exists to better understand website quality to optimise user experience and minimise duplication across sites.



Figure 3 - Number of separate websites

Citizens are increasingly accessing information and services online

In the last two years there has been a 65 per cent increase in citizens accessing government services via websites. This is more than incremental growth. It points to citizens using our websites as a source for easy-to-find trusted and reliable information.

These visits do not include the many more who engage with NSW Government social media pages.



Online visits are particularly growing on smartphones and tablets, and this is a reflection of our Service accessibility.

Websites and apps most popular with citizens include:

- Opal Travel and similar apps to find travel information
- Service NSW website
- FuelCheck NSW

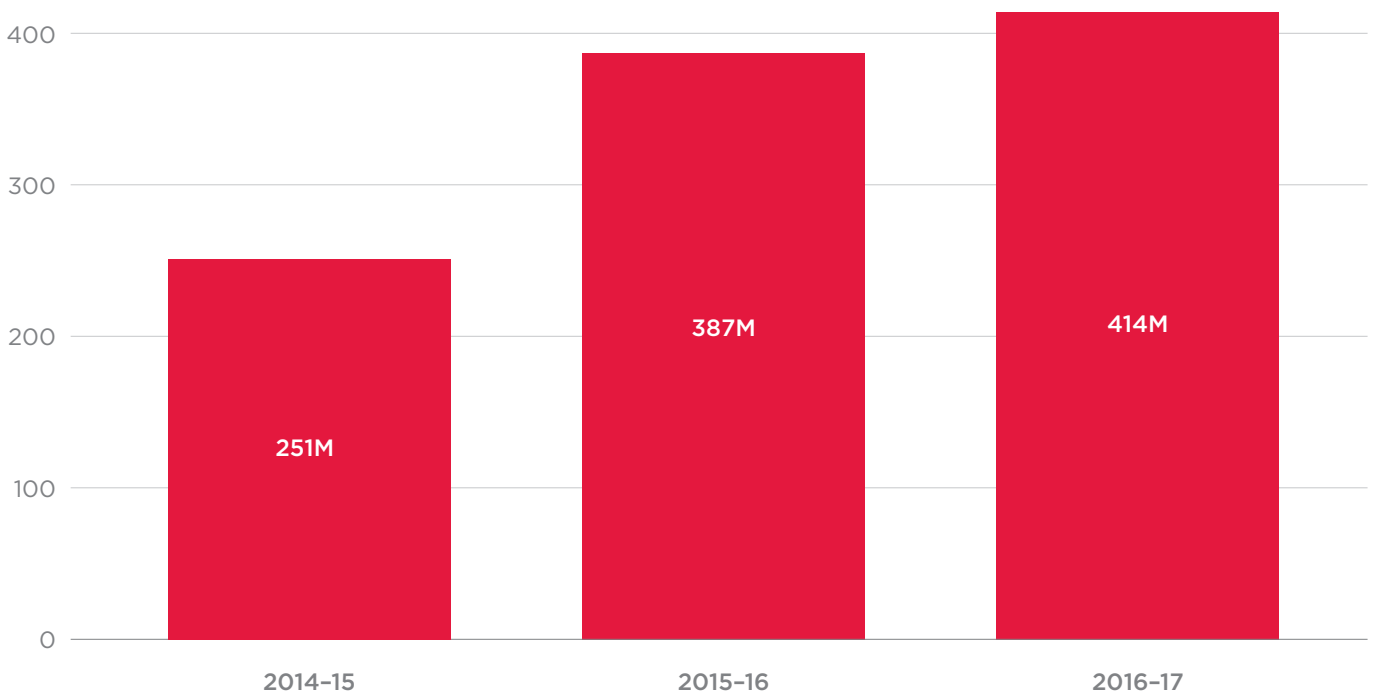


Figure 4 - Number of website visits

Community engagement

Increasing social media presence

As the digital landscape changes, so has the Government's approach to social media.

Across government, we have a record 2,096 social media accounts, up 13.8 per cent on 2016-17.

While growth has slowed in 2016-17, we have witnessed a change in the mix of social media accounts with Facebook accounting for over 62 per cent of all social media accounts.

While the numbers of LinkedIn, Twitter and YouTube accounts are relatively stable, the number of "other accounts" have risen from 161 to 245 and this appears to reflect the increasing presence on platforms such as Instagram.

Currently, the report does not measure the popularity of government social media platforms. Our focus is to provide platforms rich in trusted, reliable and timely information.

2,096
social media accounts
across government

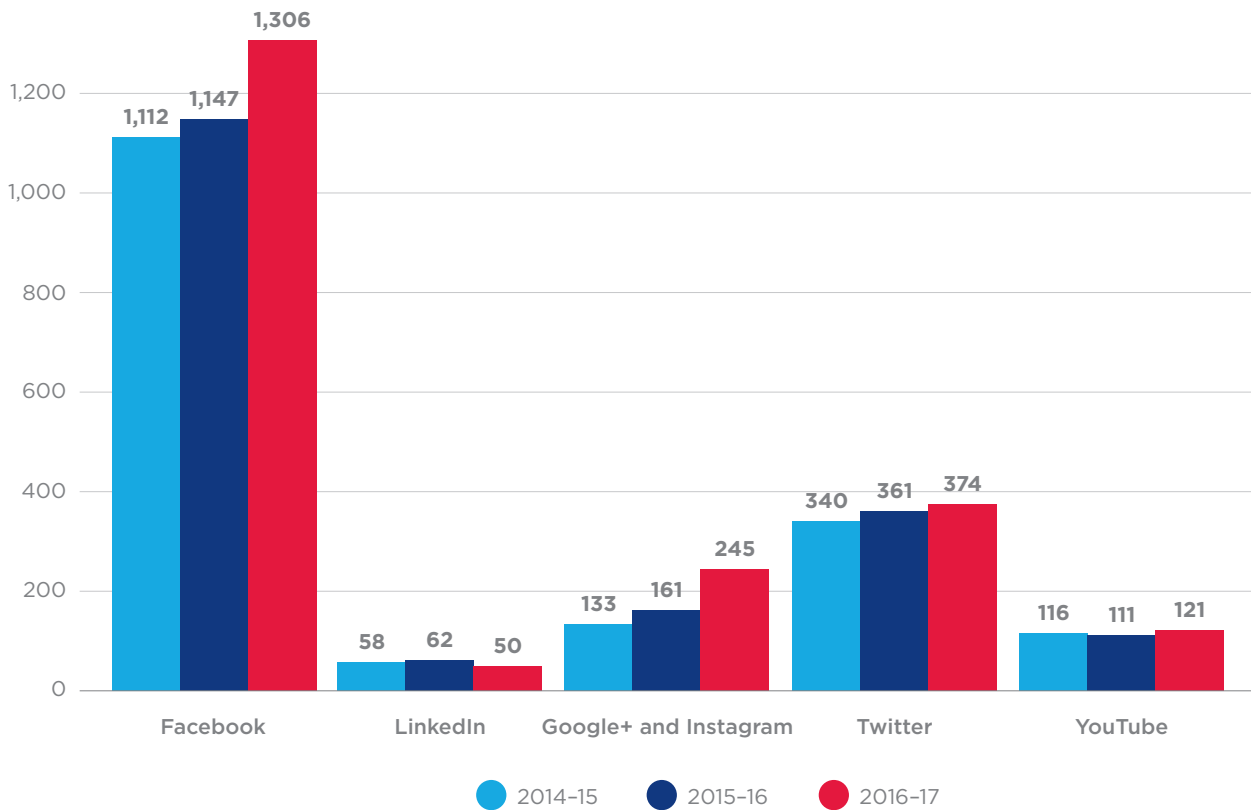


Figure 8 - Number of verified official social media accounts

Source: NSW Government ICT Metrics Survey 2016-17

Online citizen submissions made by the public

Meaningful engagement with citizens and the business community is vital in government decision making. Citizen involvement informs the design and development of Government policies and initiatives.

Increasingly, we are witnessing more submissions to government inquiries, discussion papers and various policy processes.

During 2016-17, citizens and community groups made an average of 540 submissions a week to government agencies. This is an increase of 33 per cent since 2014-15.

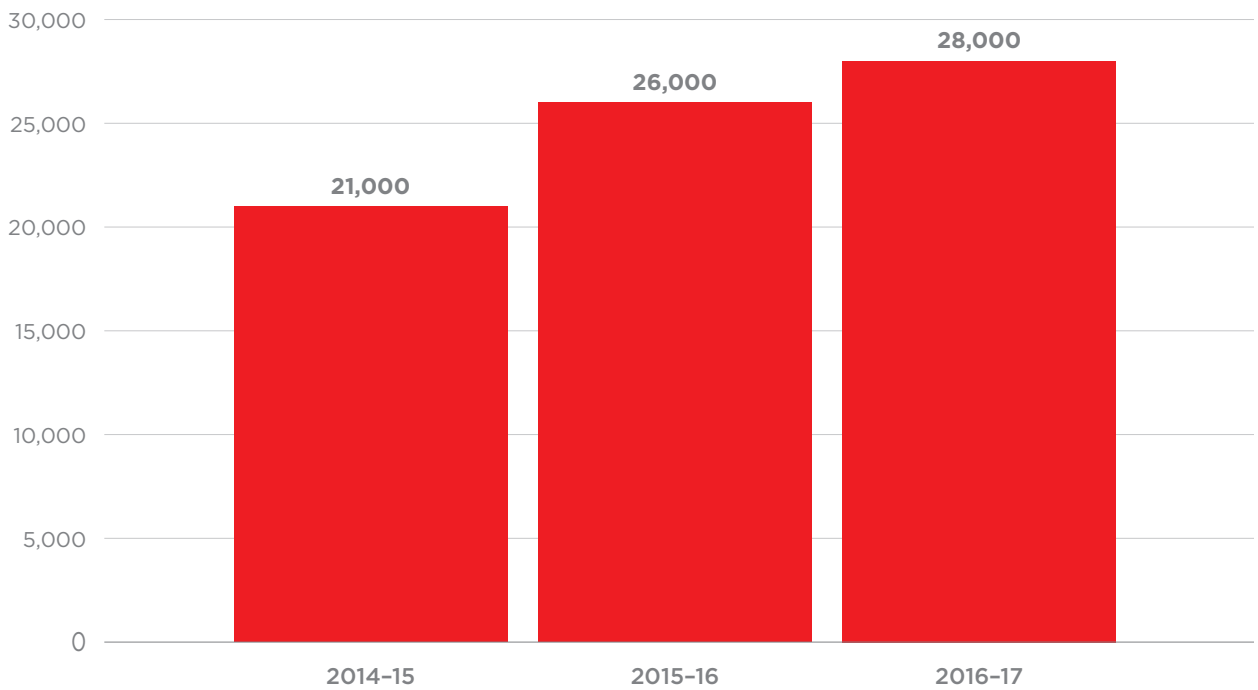


Figure 10 - Number of online submissions made by the Public

Human interaction

A strong customer-centred approach underpins the digital transformation of government

The NSW Government’s priorities in ICT investment are intended to focus on customer-centred design, value for money, and improved service delivery through digital transformation.

The evidence from customer feedback is that this approach is working and it is working better than most other forms of traditional interaction e.g. phone calls and mail.

Research on customer satisfaction

A strong customer-centred approach underpins the digital transformation of government. NSW public sector agencies regularly seek customer feedback to help improve the quality of their services.

Across the NSW public sector, the Customer Service Commissioner’s customer satisfaction measurement survey is an annual whole-of-government survey to measure customer satisfaction.

The 2017 online survey was completed by both individual and business customers and captures customer feedback on multiple NSW Government services.

In 2017, face-to-face contact remained the most commonly used and preferred contact method for both consumers and businesses. Online contact was the second most common contact method for consumers.

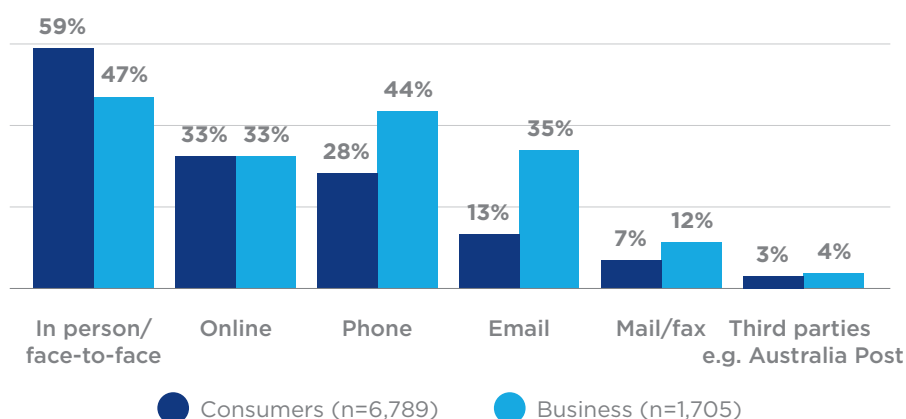


Figure 11 - Contact method for consumers and businesses in 2016-17

Customer Service Commissioner: Quarterly Pulse Check Survey

Customers who had gone online to carry out direct dealings with NSW Government services in the last 12 months were asked their overall satisfaction with using the contact method to complete their task and their satisfaction with several aspects of their online experience.

Consumer preferred method of contact

There is no one-size-fits-all model for handling citizen interactions with government. However, for actions that are routine, the interactions should be quick, cost-effective and easy to navigate.

The Pulse Check Survey indicates that customer satisfaction with the online experience has increased since 2016. As significantly, consumers are most satisfied by the currency and accuracy of content; that information is being handled securely; and that the format of content met access requirements.

This is a strong endorsement by consumers in the digital transformation work of NSW Government agencies.

Business satisfaction

For businesses, satisfaction is higher for attributes relating to secure handling of information and currency and accuracy of content, and lower for sufficient provision of content and simplicity of websites/apps.

7.7/10

average overall consumer satisfaction

7.6/10

average overall business satisfaction

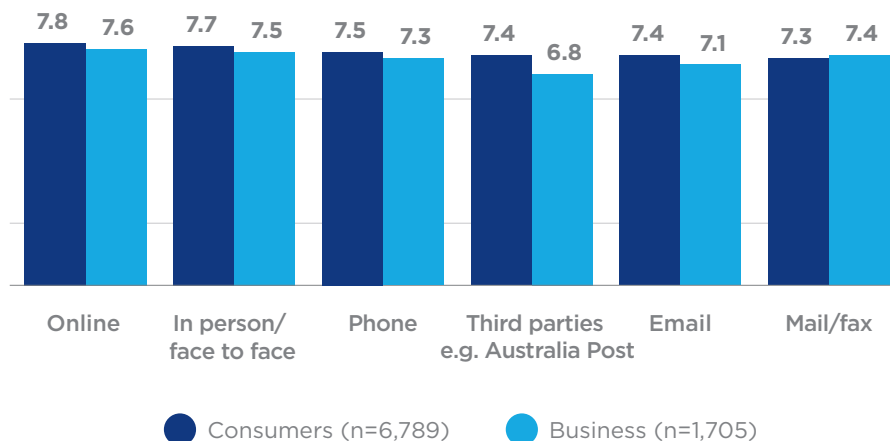


Figure 12 - Variation in overall satisfaction with contact method, scores displayed out of 10

Source: Office of the Customer Service Commissioner, Customer Satisfaction Measurement Survey 2017

Human interaction (cont.)



Almost 8 out of 10 consumers and businesses were satisfied with online services

Figure 13 - Satisfaction with the attributes of online services

Almost 8 out of 10 consumers choose to use online services

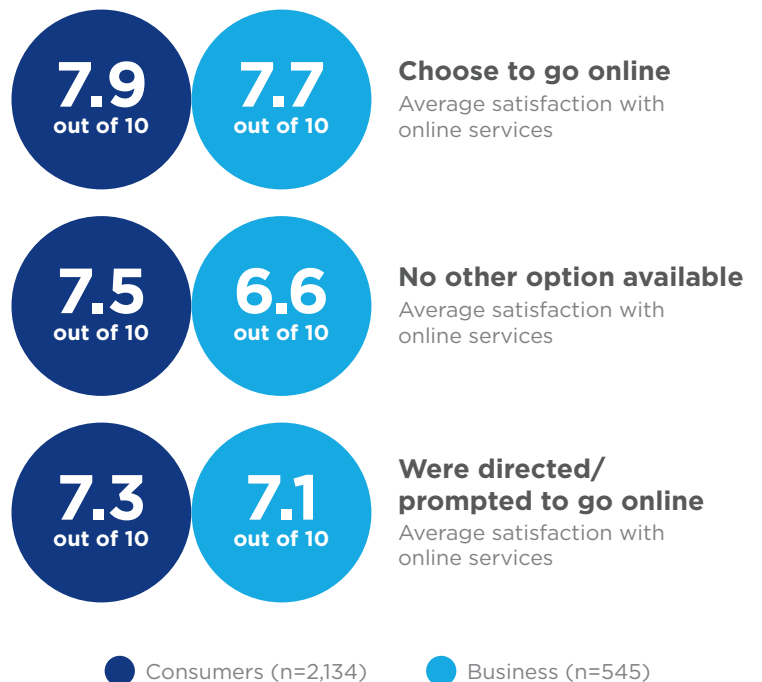


Figure 14 - 2017 Satisfaction with online services

7.5/10

in the business community feel assured
information remains confidential

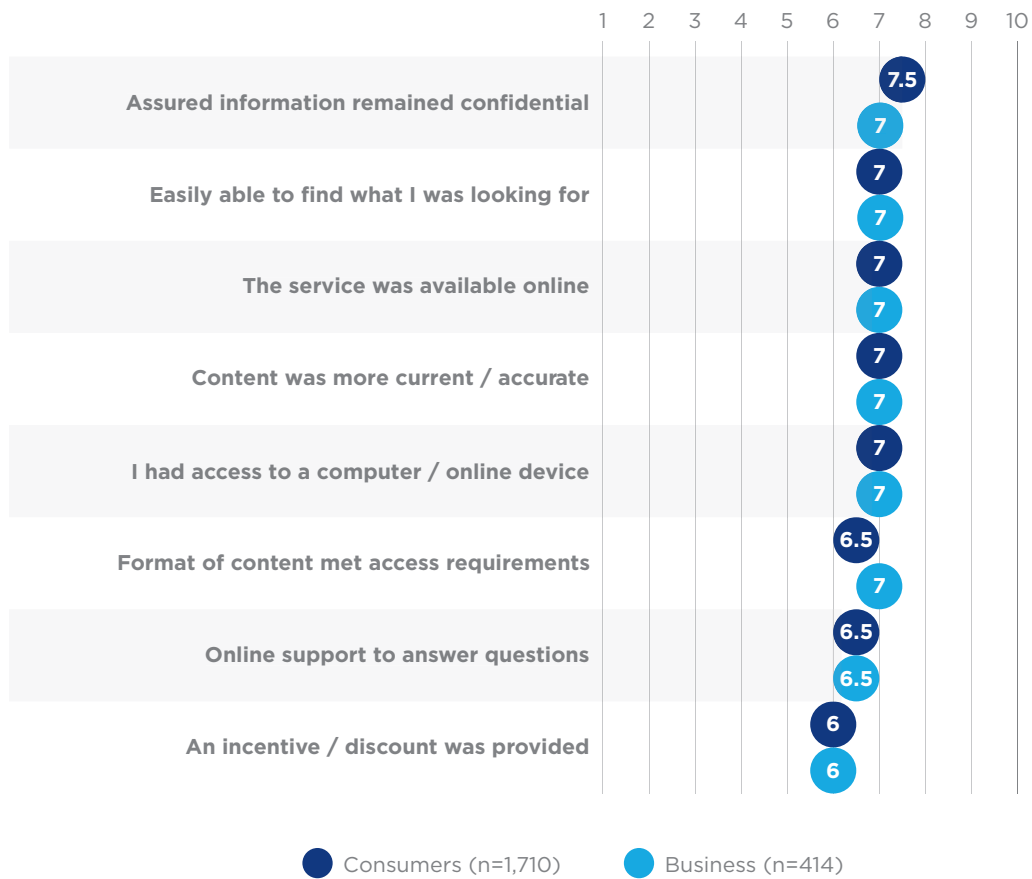


Figure 15 – Adoption of online contact methods

Across customers who had gone online to carry out their direct dealings, those who chose to go online had the highest average satisfaction with online services (8.1 out of 10 for both consumers and businesses). Customers indicating there was no other option available, recorded satisfaction levels of 7.3 out of 10 for consumers and 6.5 out of 10 for businesses.

Source: Office of the Customer Service Commissioner, Customer Satisfaction Measurement Survey 2017

Service NSW is a success story

Service NSW digital engagement with customers

As the primary vehicle for delivery of customer facing transactional services, Service NSW plays a vital role in the work towards digital government.

As at 30 June 2017, Service NSW operated 79 service centres across NSW, two contact centres, and a mature digital channel covering the web, mobile applications and API's.

Service NSW is a success story and it reflects positively on all agencies. The scope of its reach is compelling:

- **34 million customer interactions**
- Delivering services to customers and businesses through our **network of 79 service centres**
- **Fourteen of the 16 new service centres opened in 2016-17 were located in rural and regional communities**, at Cessnock, Ballina, Raymond Terrace, Bega, Ulladulla, Mittagong, Tuncurry, Nelson Bay, Taree, Griffith, Casino, Inverell, Narooma and Eden.
- Contact Centres **servicing 3.5 million customers**
- **Contact centres are located at Parramatta and Newcastle and are key employment hubs** in Western Sydney and the Newcastle region collectively they employ more than 400 team members with 270 employed on a full-time basis.

In 2016-17 our **Contact Centres served more than 3.5 million customers**. Since 2013 our Contact Centres have served over 9 million customers.

Year at a glance 2016-17



7.7M
customers served

with an average wait time of 7 minutes



23.1M online customer visits



1 million
MyServiceNSW accounts created



40 partner agencies



79 service centres

including 14 new service centres opened in regional NSW that have become key employment hubs

Digital licences — on the way to digital government

NSW currently issues more than 23 million licences each year, covering 769 different licence types.

A transition to digital formats changes not only the transaction channel but also brings in new concepts in citizen digital identity in place of traditional paper-based and plastic identity authentication.

The Digital Licence Program will make government licensing available to customers in a digital format.

The technology allows citizens to display, apply, update and renew their licences using their smartphone, with real-time information also available. The Digital Licence has security safeguards built in to preserve the integrity of the entitlement and enables authorities to more easily verify the validity of these.

In time, it will mean that citizens will not have to carry paper and plastic licences with them.

The launch of the digital licence platform means licence-holders can now access NSW government licences and permits digitally using your mobile phone or tablet device. The first licences to become available are:

- Recreational Fishing Fee
- Responsible Service of Alcohol (RSA) Competency Card
- Responsible Conduct of Gambling (RCG) Competency Card

Digital licences are available on an opt-in basis and licence-holders will still receive a physical licence or permit. When asked to display their licence or permit, licence-holders will have the choice to provide either their physical card or digital licence.

We will continue to introduce more licence types over time, with the digital Driver Licence on track to be ready in 2019.

Regional motorists can now test-drive their digital driver licence, with the NSW Government launching a trial in Dubbo.

Dubbo residents who participate in the trial, will be able to use their digital driver licence, accessible on a mobile phone, for proof of identity and proof of age to gain entry into pubs and clubs as well for roadside Police checks.

Digital licences are now closer than ever

Information sharing

Fostering better information sharing between agencies is key to improving services and strengthening government accountability. This drives better decision making, delivery of new and better services, and maximises the value of government information assets.

Key directions for reform of data sharing include:

- actively support the information management framework by demonstrating interoperability between cluster/agency systems
- investment decision-making with common definitions and an information architecture approach to the classification and collection of data.
- Expanded access to open data. Already travellers and commuters have witnessed the benefits of open data. Every day, citizens check the status of public transport. This data has improved commuter decision making and productivity.

Open data is part of the NSW Government's commitment to open government. This involves public access to open information in a variety of formats. The release of usable and up to date datasets provides benefits that apply across government, to individuals and industry, and contributes to wider social and economic benefits.

This is a central data catalogue that provides links to datasets and data portals across the NSW Government.

In 2013, the Open Data Policy was introduced to support simple and efficient compliance with The Government Information (Public Access) Act 2009 (GIPAA) and encourage the release of high-value datasets for use by industry and the community.



Did you know?

Citizens and businesses have access to over 82,000 government datasets.

Increase in datasets available to the public

80,000

datasets about the health of the NSW population on HealthStats

2,700

environmental datasets you can search spatially from Office of Environment and Heritage (OEH)

95

public education datasets from Centre of Education Statistics and Evaluation (CESE)

30

dashboards reporting on services to vulnerable people and families from Family and Community Services (FACS) statistics

There is an opportunity to significantly improve the value of open data by improving readability and interpretability

High-value datasets

Data quality is an important attribute for improving the usability of the data published.

A study of Data NSW shows that the proportion of datasets that are tabular (and machine readable) or spatially enabled is increasing, as is the number of data collections which have data quality statements.

	1 Jun 2015	1 Jun 2016	1 June 2017
Tabular	22%	27%	36.6%
Spatial	2.4%	3%	3.9%

Figure 16 - Datasets attributes

Datasets that include a data quality statement are downloaded almost twice as much as datasets without. This highlights the importance of publishing data with the appropriate metadata to enable its usability.

While the proportion of machine readable datasets and datasets with data quality statement are increasing, they are currently low. There is an opportunity to build on this foundation to significantly improve the value of open data by improving readability and interpretability.

Case study 1: Online Birth Registration System

When a baby is born, its parents must register the birth with the NSW Registry of Births, Deaths and Marriages. Right now, mum or dad enter their newborn's details into an online form, and then submit it to the Registry. From there, the form is printed, and information is entered manually into a database, which is time-consuming and costly and sometimes results in errors that must then be corrected. It also means parents must often wait up to 12 days for their child's birth certificate to be issued.

This project extends the existing Births, Deaths and Marriages (BDM) online forms system to accept birth registration details directly from parents. In the new system, birth details will be submitted online and automatically uploaded into the database for official registration.

After submission, parents can check the status of their baby's registration online and will be able to see their child's birth registered within minutes. If the hospital or midwife has already notified the Registry of the birth, and the data matching threshold is met, a birth registration will be produced instantaneously. If a certificate has also been applied for by parents, then a certificate will be produced and sent within one working day.

Automating the births registration process will offer a more streamlined user experience. It enables parents to register and apply for a birth certificate in a single transaction. Users will also be able to automatically verify their documents and print their baby's birth certificate themselves.

The new system is also much more efficient for government. It is estimated that a 70 per cent uptake in NSW will reduce costs to the Registry by around \$334,000 p.a.

Currently a Registry staff member is required to spend up to 6 hours per day sorting and then scanning forms to send digitally to the data entry provider. Online Birth Registration will see a steady reduction in the amount of paper forms coming into the Registry and all but eliminate the need for these manual tasks. A potential saving to the Registry of at least \$250,000 per year in employee-related expenses could be realised by automating the process.

Automating the births registration process offering a more streamlined user experience

The Registry has spent \$46,000 in the past 12 months printing paper forms. There are additional costs associated with sending paper forms to hospitals and midwives. The new system will significantly reduce paper waste; the Registry will no longer need to shred over 90,000 paper forms per year after births are registered.

Reduced calls to the contact centre and less paper mail to open and process, will also significantly reduce costs.

Perhaps most importantly, the Registry anticipates happier parents! Right now, around 6,500 birth certificates a year need to be amended because data entry people are tasked with deciphering parents' handwriting, and mistakes naturally happen. Now parents will enter their child's details directly and receive a preview of their certificate before submitting. It will reduce errors and make birth registration hassle-free.

Source: www.digital.nsw.gov.au/project-story/online-birth-registration-system

Case study 2: Electronic Medical Record 2

A patient's health information is often spread across a vast number of different locations and incompatible computer systems.

secure and immediate access to a patient's recent medical history and electronic medical records

eHealth NSW is connecting these disjointed systems to provide clinicians with secure and immediate access to a patient's recent medical history from across all NSW Local Health Districts and a patient's My Health Record.

As part of this, eHealth is optimising electronic medical records (eMR). The key aspects of this work are creating a consistent eMR foundation across NSW, significantly expanding and accelerating electronic medication management, delivering new functionality and increasing adoption and use.

This means that irrespective of which NSW Health service a patient attends, their treating doctors, nurses and allied health providers will have the information they need to deliver the best care. 84 per cent of in-scope facilities are already integrated into the eMR.

The result will be better patient safety with information and best practices from one Local Health District being easily transferable to any other.

Source: www.digital.nsw.gov.au/project-story/electronic-medical-record-2

3.

ICT trends in NSW Government

Investment and expenditure trends

Total spend

ICT should not be seen as a cost or drain on taxpayers. Rather, it is an investment in the capability of NSW Government agencies to provide effective and responsive services to the people of NSW. It drives performance, productivity and customer satisfaction.

Over the last five years, the NSW ICT spend has increased by 41 per cent. This reflects the Government's determination to provide customer centric services to the people of NSW.

In 2016-17, the ICT Spend totalled \$3.08 billion, an increase of 16.25 per cent from 2015-16.

ICT transformation is key to improving the effectiveness of government and thereby improving customer satisfaction.

\$3.08B

is spent on ICT in 2016-17

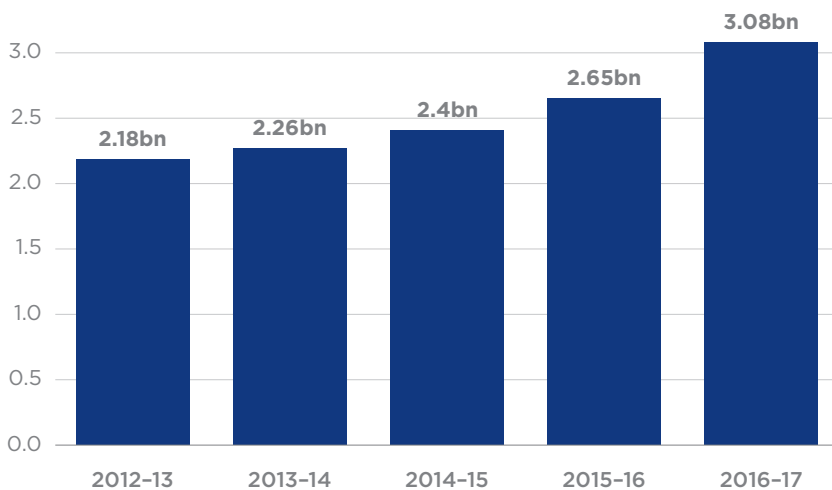


Figure 17 - Total ICT Expenditure

ICT expenditure consistent with benchmarks

To ensure we can assess the effectiveness of our spend, we benchmark ICT expenditure. ICT as a percentage of total agency expenditure increased in 2016-17 and is consistent with Industry benchmarks.⁹

The proportion of spend on ICT versus total agency expenditure was 4.3 per cent in 2016-17, which is consistent with the Gartner benchmarks of 4.1 per cent (State and Local Government) and 4.6 per cent (Cross Industry). This is a reflection of the Government's determination to 'catch-up' on ICT and to undertake ICT transformation.

This expenditure reflects the Government's investment in projects that could be considered 'catch-up' and demonstrates the determination to invest in projects that improve the capability of NSW agencies.

The 2017 Gartner Cross Industry benchmark's average IT spend per employee is approx. \$17,000. NSW Government ICT Expenditure is approximately \$7,700 per employee.

Expenditure is appropriate based on industry benchmarks

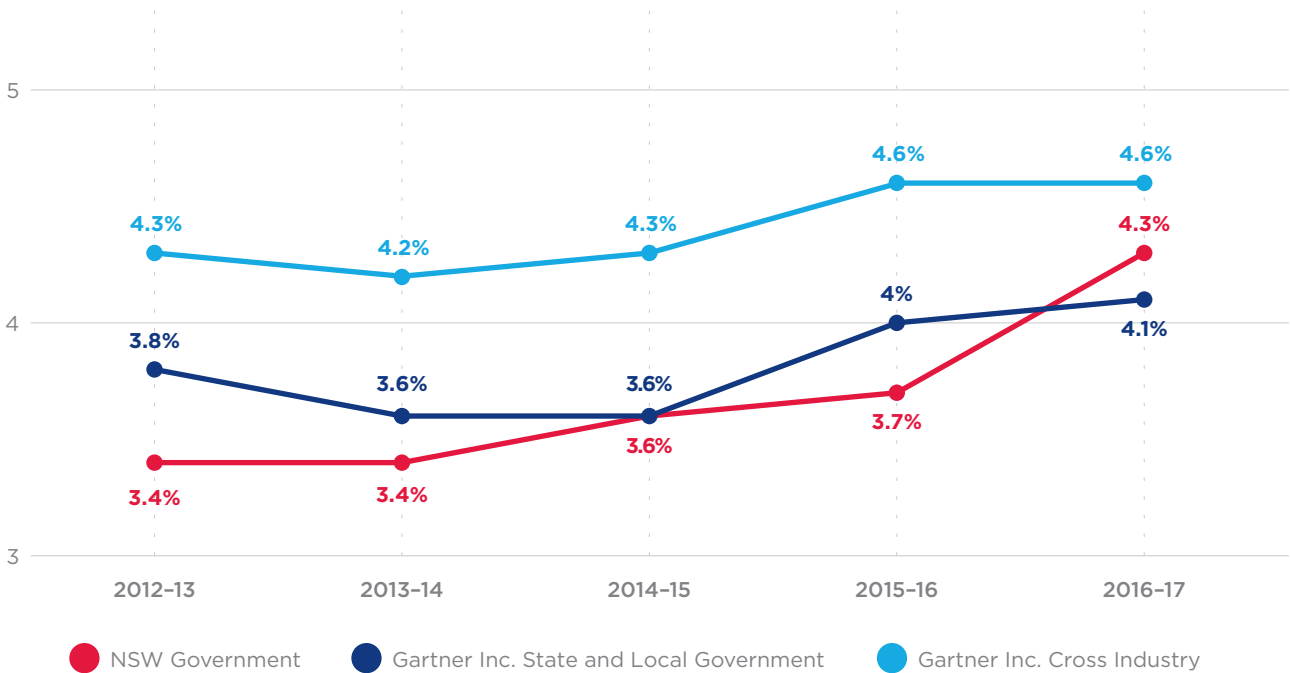


Figure 19 – ICT expenditure as a percentage of total agency expenditure

⁹ State and Local: *Gartner IT Key Metrics Data 2017: Key Industry Measures: Government – State and Local Analysis: Multiyear*. Cross Industry: *Gartner IT Key Metrics Data (December 2017)*

NSW Government Total spend : *NSW Government ICT Metrics Survey 2016-17*

* Gartner \$ figures have been converted from USD to AUD

ICT expenditure by clusters

The bulk of the ICT spend comes from the Transport, Health and Justice clusters.

This spend reflects the Government’s determination to invest in projects with clear benefits for the people of NSW.

19.4%
average increase across
Transport, Health,
Justice and Education

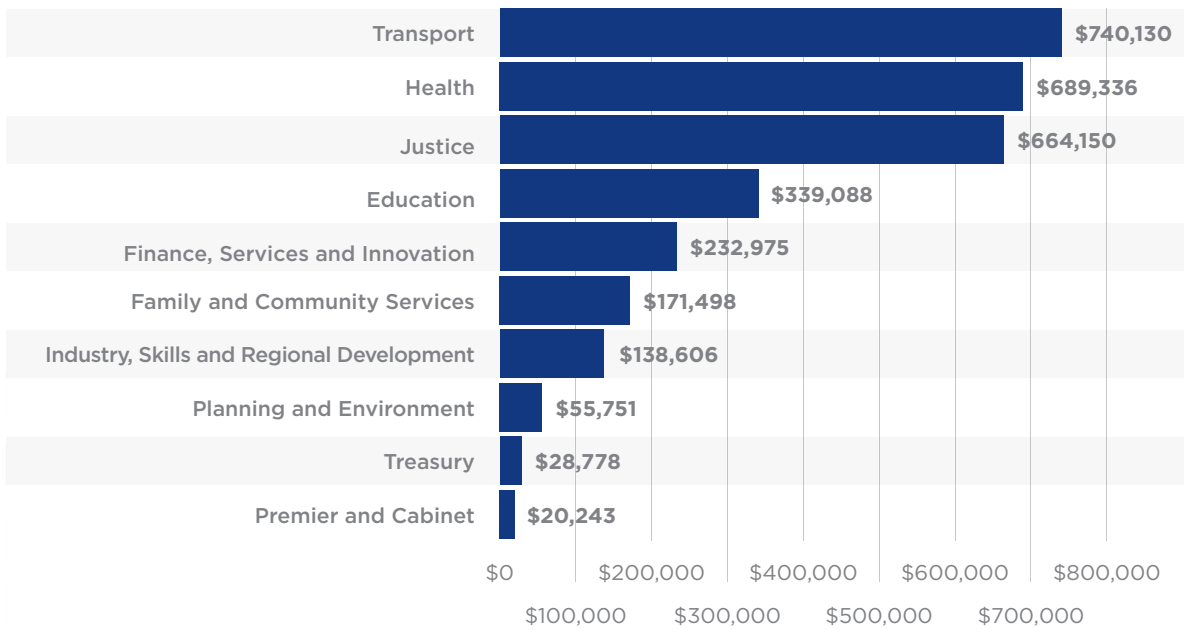


Figure 18 – ICT expenditure by clusters

Investment and expenditure trends (cont.)

45%

of service towers ICT spend is on Applications

Service tower

The service and sub-service towers represent the primary services provided by ICT departments and are aligned to skill sets and service offerings in the market. Each service tower is comprised of Cost Elements (cost definitions provided in Appendix C).

ICT spend by service towers

	ICT Expenditure (\$M)	2012-13	2013-14	2014-15	2015-16	2016-17	% of 2016-17 spend	% Change from 2015-16 to 2016-17	Compound Annual Growth Rate
Service towers	Applications	939	982	1,029	1,185	1,391	45%	17%	11%
	End User Infrastructure	280	271	312	357	431	14%	21%	11%
	ICT Corporate Functions	145	196	203	258	356	12%	38%	21%
	Network	272	285	314	367	300	10%	-18%	-1%
	Server	170	163	162	145	247	8%	71%	15%
	Voice Services	228	215	217	173	200	6%	15%	-3%
	ICT Service Desk	56	63	63	59	65	2%	10%	1%
	Facilities	55	44	55	55	49	2%	-12%	-4%
	Storage*	38	49	48	43	42	1%	-3%	-5%
Total	2,183	2,268	2,404	2,637	3,080	100%	17%	9%	
Input costs elements	Internal personnel	544	514	514	531	659	21%	24%	9%
	External personnel	267	302	323	449	615	20%	37%	24%
	Software	394	404	437	459	522	17%	14%	6%
	Hardware	306	313	363	424	462	15%	11%	8%
	Services Outsourced	334	365	375	416	452	15%	6%	6%
	Carriage	260	291	325	280	228	7%	-18%	-11%
	Others	78	79	67	77	69	2%	-10%	1%
	Radio					74	2%		
Total	2,183	2,268	2,404	2,637	3,080	100%	17%	9%	

Figure 20 - Spend by service tower¹¹

* Negative growth in agency storage is due to whole-of-government data storage/migration initiative to GovDC. (Refer to figure 32, on page 45.)

¹¹ Totals may not match the sum of the elements due to rounding and consolidation.

Source: NSW Government ICT Metrics Survey 2016-17

Investment and expenditure trends (cont.)

ICT Spend by service tower has been heavily focused on Applications in most of NSW clusters.

- A total of \$1.3 billion has been spent on Applications alone, which makes 45 per cent of the total ICT spend in NSW.
- \$431 million has been spent on End User Infrastructure ICT expenditure which accounts for 14 per cent of expenditure.
- ICT Corporate functions account for 12 per cent totalling \$356 million.
- Network ICT expenditure was \$300 million accounting for 10 per cent of service tower expenditure.

The various split by service towers is below:

Applications spend

Application spend is highest in Transport, Health, Justice and Education clusters.

Application spend makes up 52 per cent of the total ICT spend within Transport, which is comparable to 55 per cent within Health cluster (25 per cent in Justice and 32 per cent in Education).

Increased application expenditure is due to several key NSW government initiatives e.g; Intelligent Congestion Management and Enterprise Asset Management with a combined spend of \$396 million.

Server spend

Server ICT expenditure increased this year by 76 per cent (\$107 million).

This incline is primarily attributed to the Transport, Justice and Family and Community Services (FACS) Clusters.

ICT corporate function spend

Corporate function spend has increased 39 per cent this year, the increase stemming primarily from NSW Planning and Environment, Education and Justice clusters.

These increases were partially offset by the transition of ServiceFirst to GovConnect. The increase in costs is related primarily to additional investment in Hardware and Software supporting Corporate Functions.

ICT service desk spend

Service Desk spend increased by 19 per cent (\$10 million) in 2016-17.

This increase mainly came from Justice, Education and FACS clusters.

This increase correlates to a sharp increase in internal and external personnel.

Government lagging behind in moving to Opex funded transformation

Capital vs operating expenditure

The mix of capital and operating expenditure continues to change. As the major transformations are delivered, capital expenditure as a percentage of spending will fall.

ICT capital expenditure has fallen as a percentage of spending. However, it is still considerably higher than the Gartner benchmark. In 2016-17, the Gartner benchmark for capital expenditure was 19 per cent, down from 27 per cent in 2015-16.

As will be seen in the Run, Grow and Transform section, strong capital expenditure typically reflects that the Government is investing in transformation. These figures confirm that transformation across government is ongoing (see figure below).

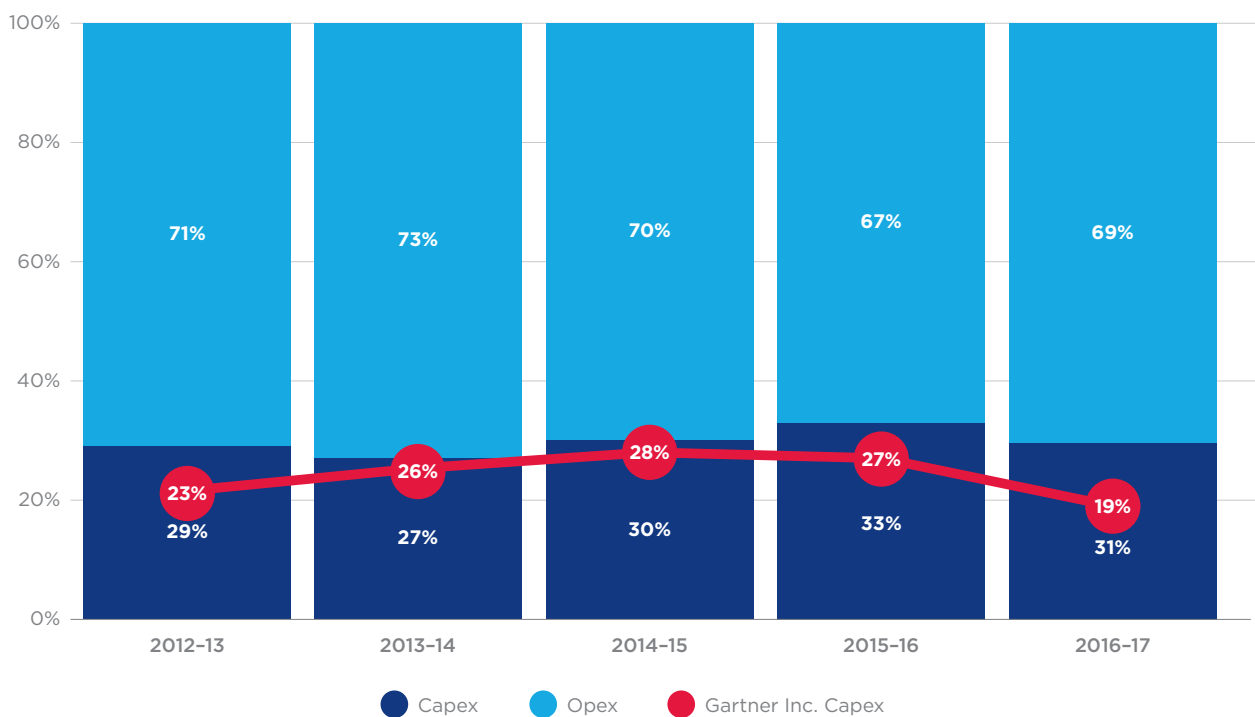


Figure 21 – Proportion of capital vs operating expenditure against benchmark¹²

¹² Gartner IT Key Metrics Data 2017: Key Industry Measures: Government – State and Local Analysis: Multiyear
 Source: NSW Government ICT Metrics Survey 2016-17

Investment and expenditure trends (cont.)

Transport

Intelligent Congestion Management

Cluster: Transport

Agency: Transport Management Centre

Priority: Customer Experience

Project Description: A program to integrate business processes and systems that support data gathering, analysis, decision support and information exchange around congestion management.

Education

Connecting Country Schools

Cluster: Department of Education

Agency: Education

Priority: Customer Service

Project Description: Improving connectivity in 914 regional and remote government schools by installing wireless access for all learning spaces within the schools. Expanding access to the internet in NSW Regional Public Schools where access is currently via satellite connection, and supporting the wireless delivery.

Health

Electronic Medical Records

Cluster: Health

Agency: eHealth

Priority: Data

Project Description: Continued rollout of Electronic Medical Records to create a consistent experience for patients in hospitals. This phase will make EMRs, including medication management, accessible in all hospitals with access to the system.

Justice

Police Body Worn Video

Cluster: Justice

Agency: Police

Priority: Data

Project Description: Body Worn Video (BWV) camera devices and supporting infrastructure to all LACs state wide and to selected Specialist Commands on an as-needs basis. Approximately 3,500 cameras and 560 BWV kiosks. Up to 450 additional locations with archive capability.

Planning and Environment

Heritage Digitisation

Cluster: Planning and Environment

Agency: State Library NSW

Priority: Customer Experience

Project Description: Digitises the Library's most iconic, at-risk and valued collections and will completely renew its underlying infrastructure and systems. Digital material will be created and preserved at scale during this 10-year program.

ICT spending distribution

ICT spend in Software and Outsourcing have clearly decreased, and there is an upward trend in expenditure on Hardware and Personnel.

Spending on outsourcing has declined from 19 per cent to 16 per cent and is less than the Gartner benchmark of 21 per cent.

Overall spend for personnel is 47 per cent in 2016-17, which is 2 percentage points higher than the Gartner benchmark.

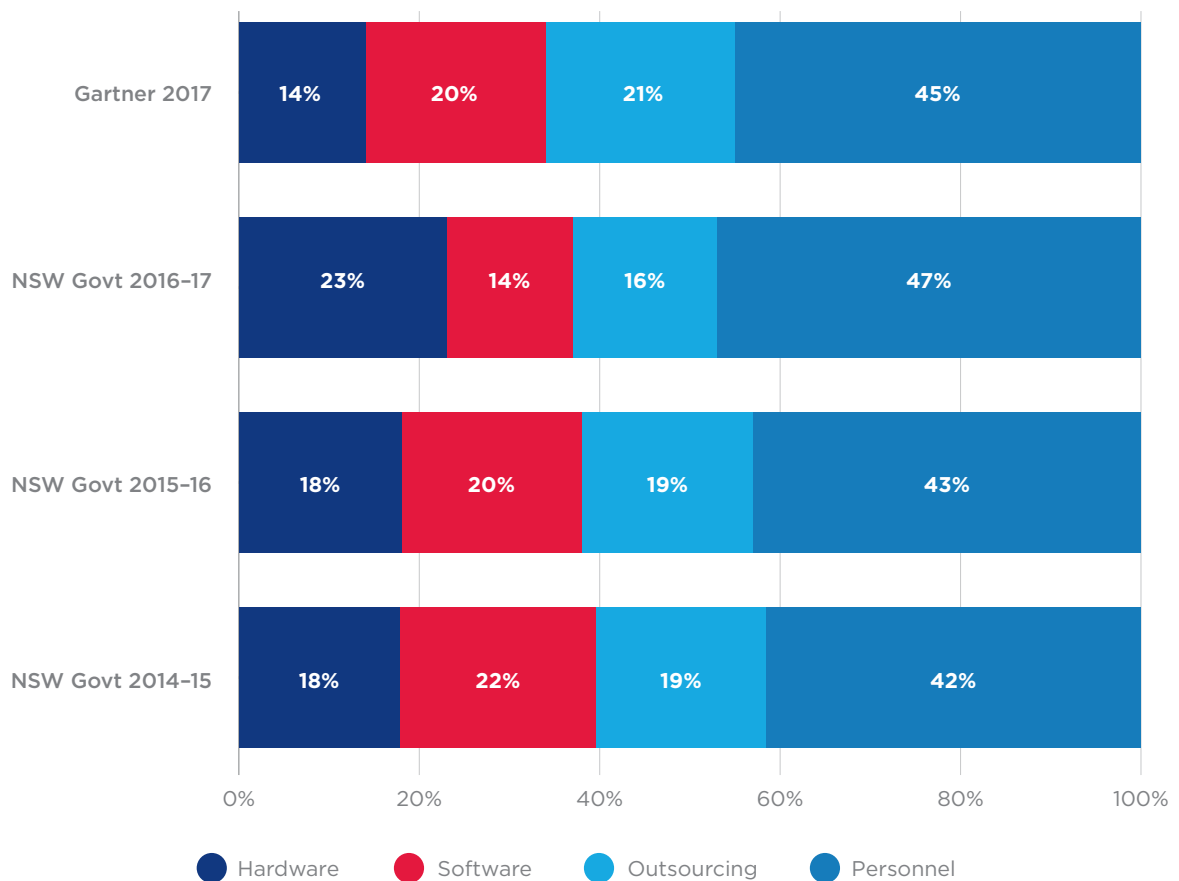


Figure 22 - ICT spending distribution

Run, Grow and Transform the business

The Run, Grow and Transform model allows organisations to assess how they are spending ICT and if the ICT spend aligns with the organisation’s strategy.

The distribution of IT spending to run the business, grow the business and transform the business provides a view of the IT investment profile to support business performance.

In some industries, it is not uncommon to see a high ‘run’ focus — typically because organisations in the industry are not planning strong changes in business model growth or high organic growth — which often translates into a more ‘cost centre’ role for IT in the industry or niche sector. IT spending is classified into categories that show the impact on business outcomes or success can aid alignment and quantify underinvestment in IT.

Year 2016–17 NSW ICT Capital expenditure is in Grow and Transform the business rather than Run the business. Run the business shows a trend towards spending more on operational expenditure consistent with last year’s data.

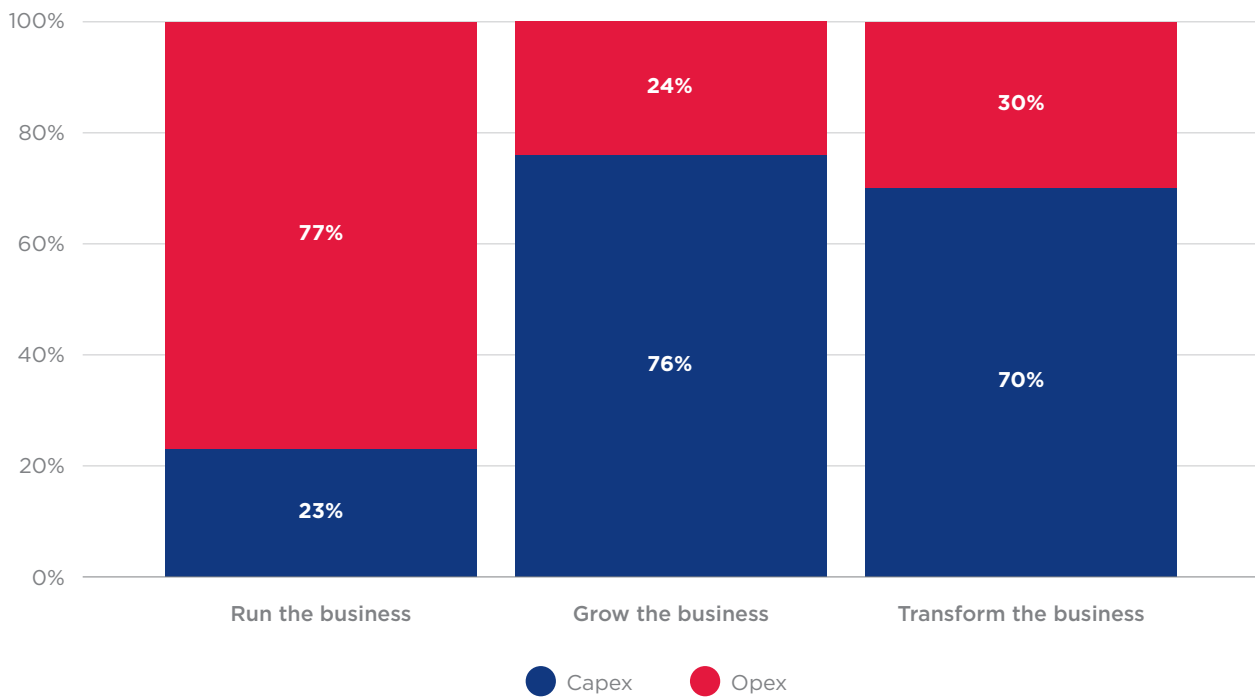


Figure 23 - Run, Grow, Transform by capital and operating Expenditure NSW Government (Definition for Run, Grow, Transform provided in appendix D)

Sector capability

People Matter Employee Survey

The NSW People Matter Employee Survey allows agencies to assess the engagement of government employees as they do their work.

The survey, with 140,063 responses was open to all employees across the NSW Government sector.

Engagement with work remains strong at 72 per cent

ICT job categories reflecting ICT trends

The number of ICT Full-Time Equivalents (FTE) rose marginally in 2016-17 to 6,779. A 2.7 per cent increase on 2015-16.

This increase reflects the major ICT investment that is underway in the large clusters.

Program and Project management roles account for 1,020 FTEs. Two-thirds of these roles are being undertaken by external contractors.

This is recognition that many ICT transformative projects, need specific skill sets, often for just a short period of time. This targeted approach to project management is a cost-effective means of ensuring the best skills are brought in to deliver specific ICT projects.

ICT transformative projects need specific skill sets, often for just a short period of time

Sector capability (cont.)

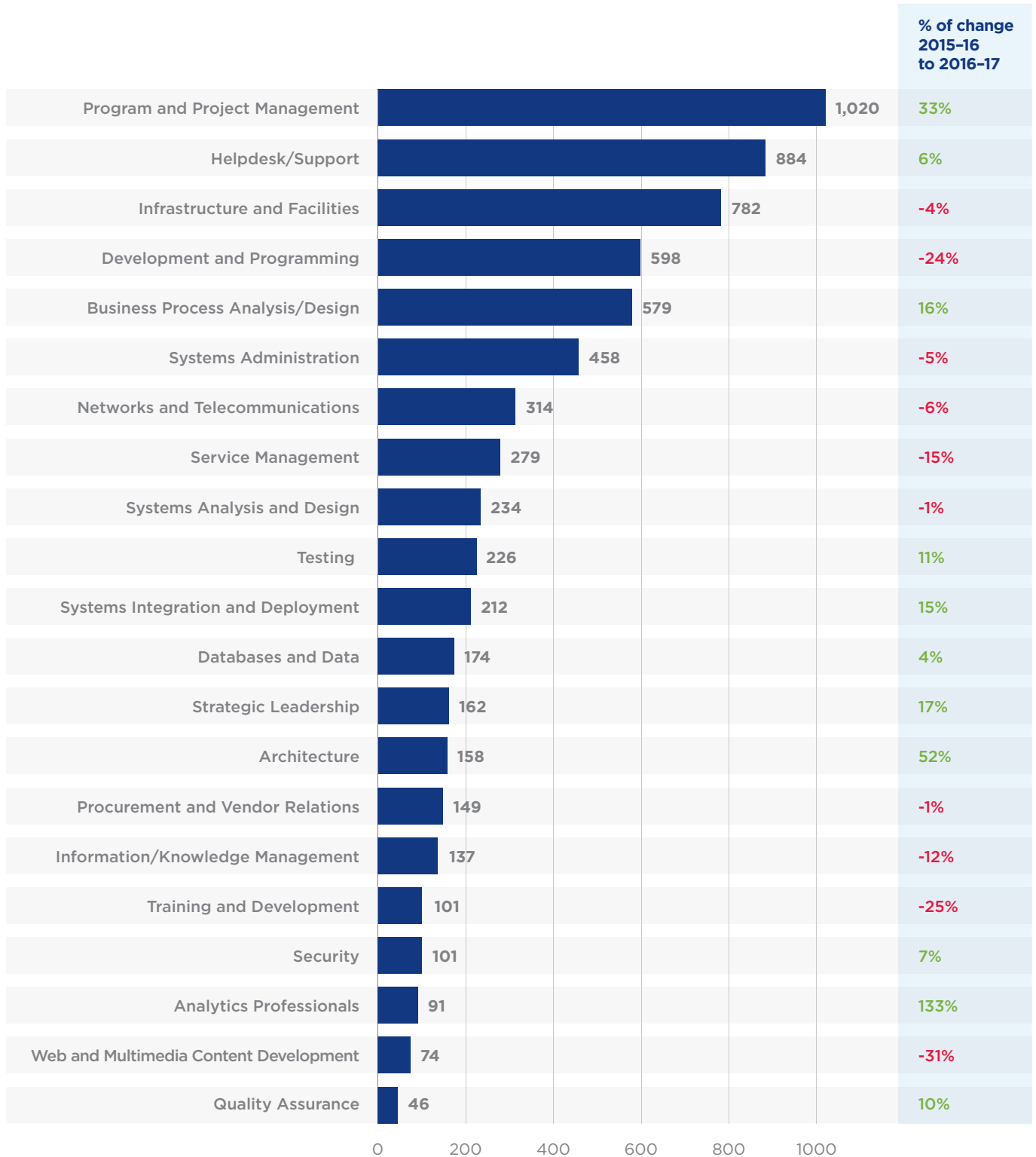


Figure 25 - Number of FTE 2016-17 by job categories

Source: NSW Government ICT Metrics Survey 2016-17

Sector capability (cont.)

In certain areas, the NSW Government is progressively outsourcing project and development roles. This is recognition that, at times, it is better to hire a specialist to respond to an ICT issue for a specific length of time than to employ an FTE on an ongoing basis.

Many solution development roles are now filled by external labour, for example, in the Development and Programming (48%), Testing (63%), Business Process Analysis and Design (48%), Web and Multimedia content development (24%), Program and Project Management with (68%) job categories.

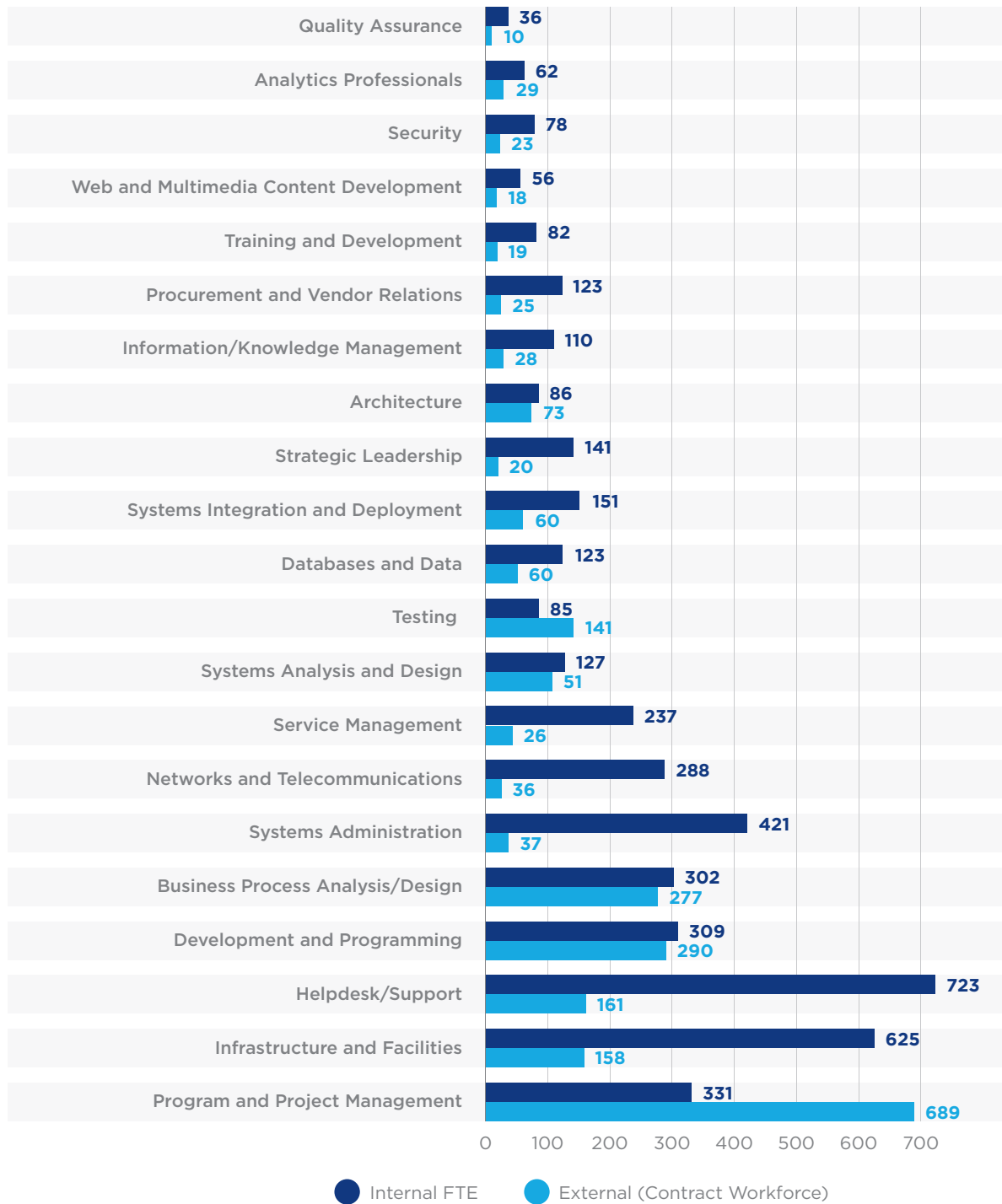


Figure 26 - Number of Full time employee by Job Family

Source: NSW Government ICT Metrics Survey 2016-17

IT fixed term employees: insourced vs outsourced

The expenditure on insourced FTE's in ICT has decreased from 71 per cent in 2015-16 to 66 per cent in 2016-17, whereas the spend on contractors has increased from 29 per cent to 34 per cent respectively.

This reflects a numbers of factors such as:

- increased competition from other sectors for highly qualified – particularly in the Greater Sydney Region
- limited availability of suitably qualified people and skillsets
- commitment by government to find the right people for specific projects.

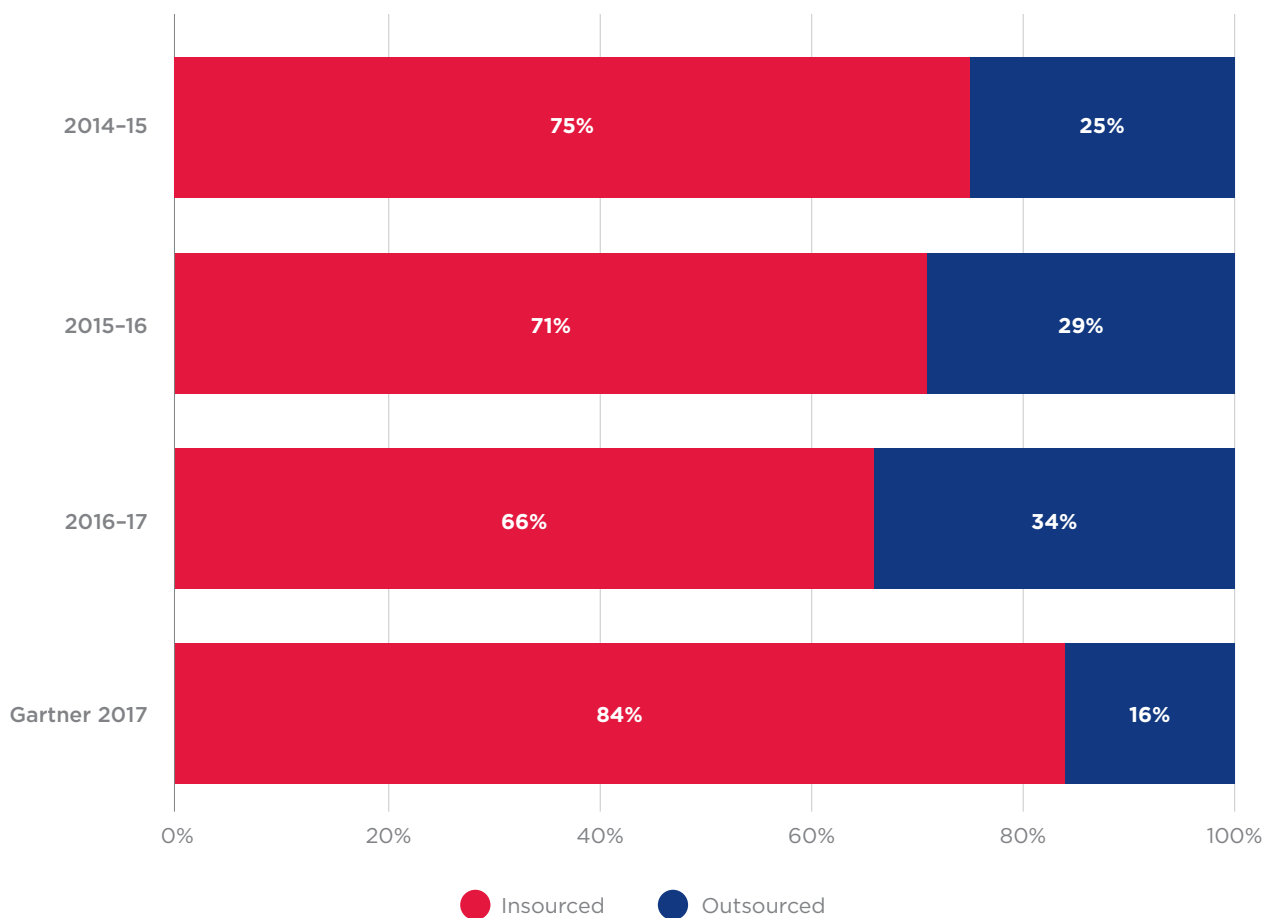


Figure 27 - IT FTE's: Insourced vs outsourced



4.

Delivering value for money through ICT reforms

ICT Assurance Framework (IAF)

NSW Government now invests over \$3.08 billion on ICT.

This investment provides citizens with better services and ensures productive and efficient business operations.

However, given the size, scope and complexity of many projects, the ICT spend requires a systematic approach to mitigate the risk of cost overruns or service disruption.

The NSW Government has developed and implemented a strengthened ICT Investment Governance Model approved by Cabinet in December 2016. This is to ensure that taxpayer funds are applied to the right technology projects for NSW, to keep them on track, and to deliver promised benefits.

A key element of this is a new ICT Assurance Framework (IAF) covering ICT projects with an estimated total cost of at least \$10 million or projects of strategic significance. The IAF is aligned with Treasury's Gateway Policy and Infrastructure NSW's Infrastructure Investor Assurance Framework.

The ICT Assurance Framework continues to support the health of the ICT delivery portfolio. The value of ICT Assurance services is evidenced by business units requesting support even when it is not required under the framework.

The ICT Assurance Framework Pre-Delivery Gateway Assessment to be launched in 2018, will:

- test business need
- ensure alignment with agency and whole-of-government directions, prevent duplication
- identify projects that require further thinking.

It will help clusters select the right project before significant investments are made.

The value that the Pre-Delivery Gateway Assessment can provide will increase significantly once the ICT & Digital Investment Plan (IDIP) and the whole-of-government reference architecture are introduced.

As funding and prioritisation processes evolve, so too must the ICT Assurance Framework.

The ICT Assurance Framework will be reviewed by the Government Chief Information & Digital Officer (GCIDO) to ensure that it supports the NSW Digital Government Strategy and IDIP.

Procurement reforms increasing the number of SMEs

Reforms to the ICT procurement system have encouraged greater numbers of suppliers to compete for government business.

Enhanced competition and greater supplier diversity are delivering better value for money to government buyers, exposing agencies to a greater range of innovative products and services. These reforms have included transitioning to always open and online pre-qualification schemes and streamlining the ICT Services Scheme. This is less onerous and rebalances the allocation of risk within the standard form contract.

The ICT Services Catalogue lists suppliers pre-qualified to deliver a range of ICT services to the NSW Government. Category Q (co-designed by industry and government) provides services and products to assist agencies in transitioning to enterprise resource planning as-a-service.

Sub-categories include professional services, human capital management and eRecruitment, GovDC as a platform, GovDC Software as-a-service, and expense management systems.

In 2016-17, the ICT Services Scheme grew by 733 new suppliers to 2,905, increasing in size by 34 per cent. Small to medium enterprises (SMEs – employing 200 or less FTEs within Australia) make up the majority of suppliers.

Figure 28 below illustrates that the most prevalent suppliers on the procurement reform scheme employs less than 100 staff.

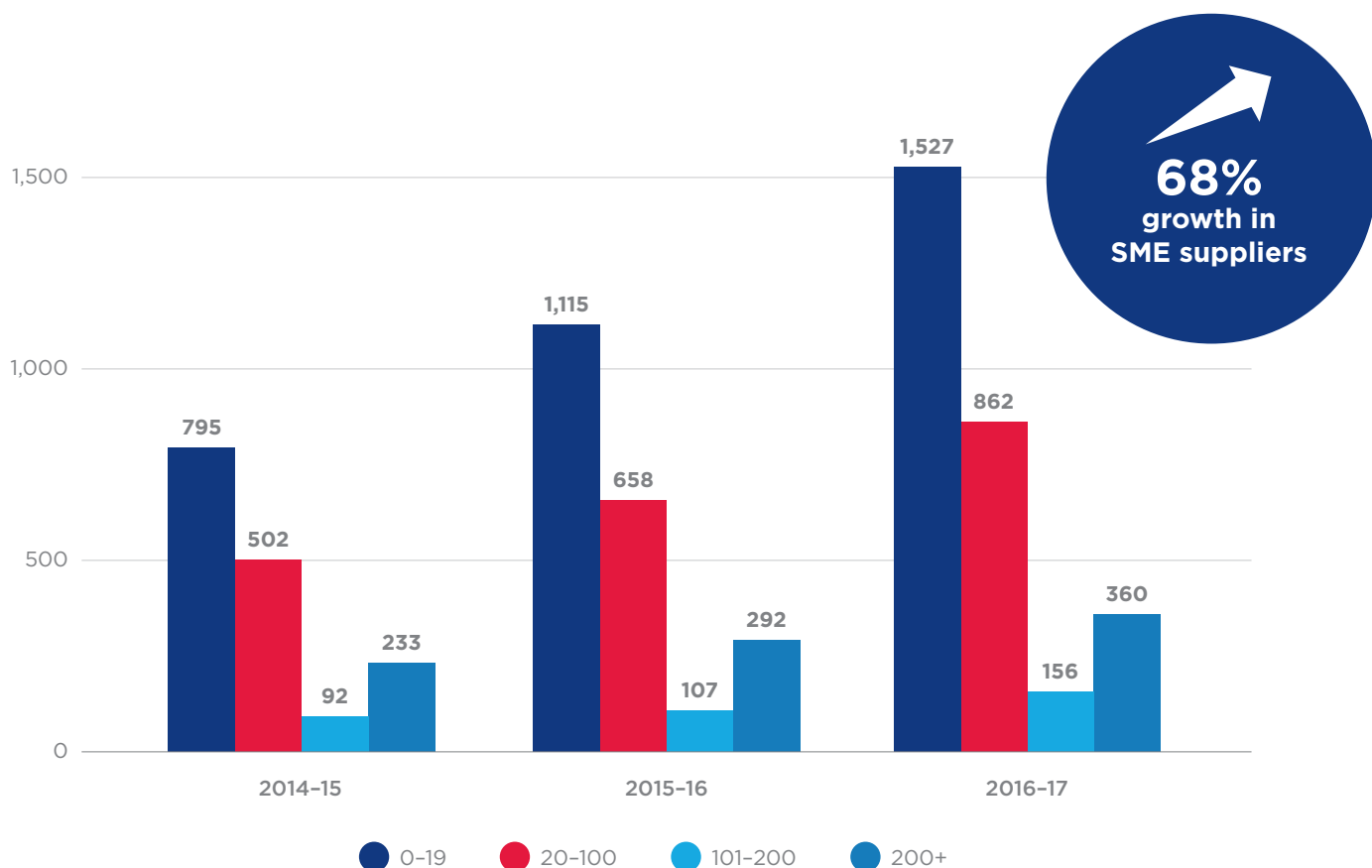


Figure 28 - ICT Services Supplier Scheme Growth

Source: NSW Procurement

Enterprise architecture

Enterprise Architecture (EA) is a design and planning discipline that helps define the structure and operation of an organisation’s business, ICT systems and processes.

The NSW Government EA Strategy provides direction and practical guidance to accelerate the development of agency enterprise architecture capability and enables a common approach to the design solutions. By driving a common approach to EA there are opportunities to deliver increased value of investment by sharing and reuse of solutions.

Agencies were asked what is the nature of their EA processes, and whether they operate a defined set of Enterprise Architecture processes at the [Plan / Build / Plan + Build] phase of the Plan/Build/Run IT Value Chain.

Enterprise architecture maturity is increasing with 67 per cent (up from 59%) of respondent agencies reporting they operate a defined set of enterprise architecture processes.

This reflects change in the ‘Plan and Build’ which has increased to 37 per cent (up from 29%) showing a maturity of the design and planning discipline throughout our IT value chain indicating the success of the NSW GEA Strategy to enable agency capability.

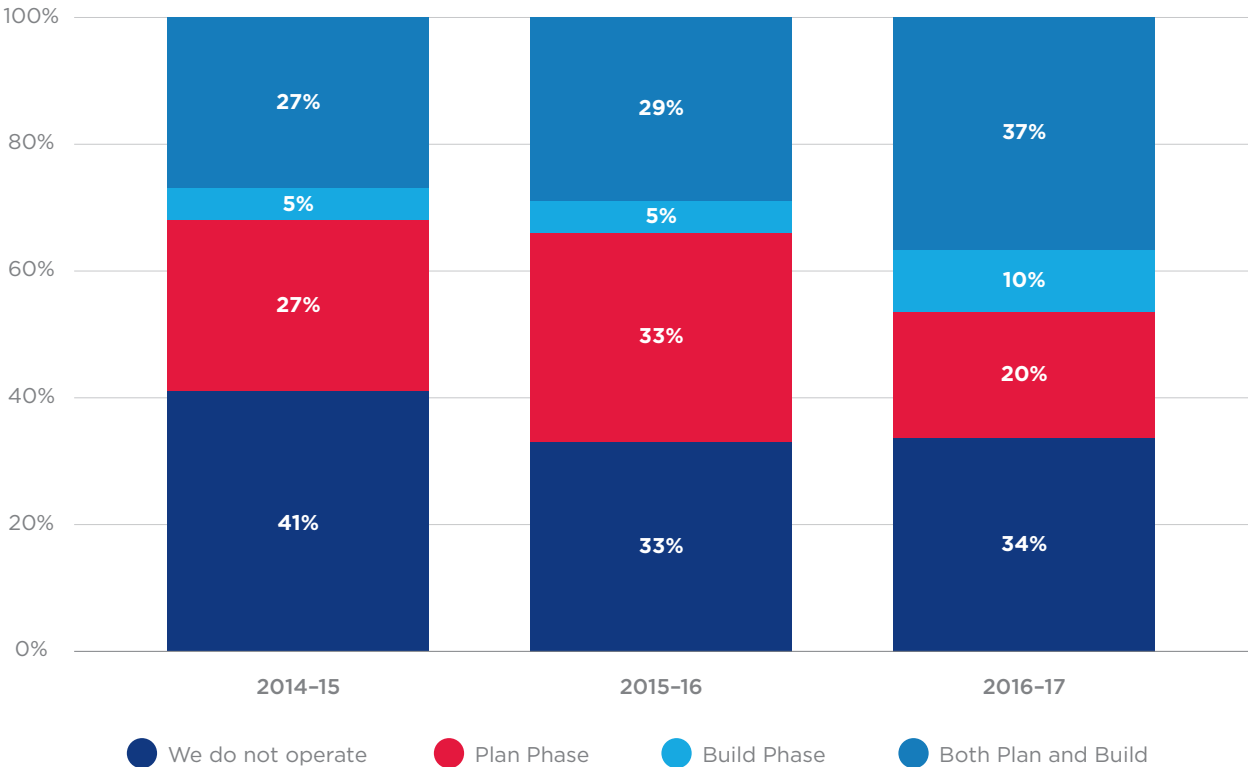


Figure 29 - Proportion of agencies that operate a defined set of Enterprise Architecture processes at each stage of the Plan/Build/Run IT value chain.

Source: NSW Government ICT Metrics Survey 2016-17

Telco strategy

The 2016–17 financial year marked the NSW Telco Authority’s fifth year of operation as a statutory authority within the Department of Finance, Services and Innovation.

NSW Government Operational Communications Strategy – An innovative NSW government is digital, lean and connected.

In 2016–17 the NSW Telco Authority continued to implement the NSW Government Operational Communications Strategy, which was approved in September 2015.

NSW Government Operational Communications Strategy – An innovative NSW government is digital, lean and connected.

In 2016–17 the NSW Telco Authority continued to implement the NSW Government Operational Communications Strategy, which was approved in September 2015.

NSW Government continued to implement two strategies to in relation to telecommunications.

1. The Operational Communications Strategy has been established to improve mission critical communications used by front line staff such as police and emergency services. Approved in September 2015, the Strategy sets out the operating models, principles and actions required to reform the government communications sector in order to improve services, eliminate unnecessary duplication and promote greater industry participation and competition. The NSW Government Operational Communications Strategy can be viewed at www.telco.nsw.gov.au. The Operational Communications Strategy is primarily concerned with radio spend as set out in the figure above.
2. The Enterprise Telco Strategy has been established improve competition and value for money associated with commodity telecommunications services such as mobile phones and connectivity between government offices and data centres. Approved in October 2016, the Telco Strategy is being implemented by DFSI’s ICT Procurement branch and is concerned with Fixed Voice, Fixed Data and Internet and Mobile spend as set out in the figure above.

\$450M

FY2017 spend

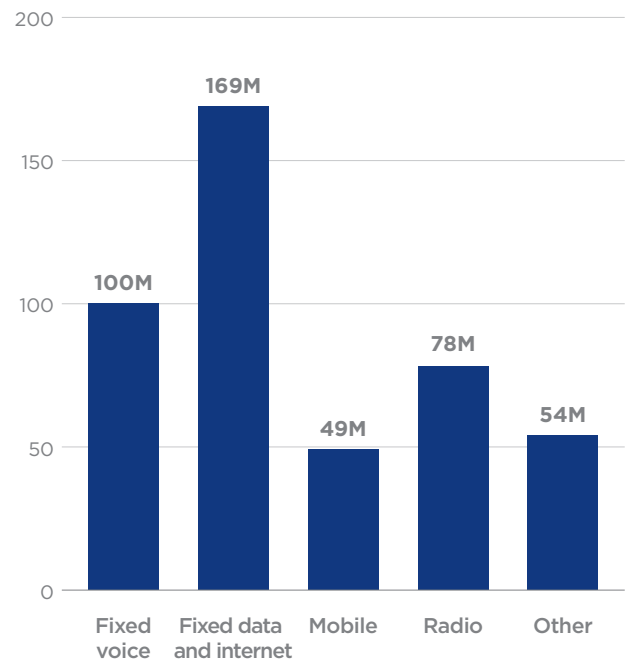


Figure 30 – Voice and Network spend for financial year 2017

Note that each category includes hardware, equipment and professional services.

Simplified, efficient service improves customer satisfaction

NSW Government Radio Network

The Telco Authority manages the NSW Government Radio Network (GRN). The GRN is used by public safety entities and other NSW government agencies for essential communications.

The GRN is used by government agencies for emergency services voice communications, special events, exercises and training

The GRN geographically covers approximately 266,000 square kilometres, or about a third of NSW.

During 2016–17, following significant network upgrades, GRN availability has been delivered in excess of the network Service Level Agreement (SLA) of 99.95 per cent, for the whole period.

The Telco Authority instigated a number of activities to improve services, user experience and the resilience of the GRN throughout 2016–17 including, building and deploying Cell on Wheels assets, upgrading site systems and upgrading the P25 core infrastructure.

Mobile Data Radio Network

In 2016–17 the Telco Authority continued to provide the Government Mobile Data Radio Network (MDRN) in partnership with the Trapeze Group Asia Pacific Pty Ltd.

The MDRN provides a shared capacity for low speed data communications used for computer-aided dispatching of data. The network is available in approximately 400 vehicles in the NSW Ambulance fleet to send information via data as opposed to voice, and is essential to achieving a rapid patient response. The MDRN was available 99.998 per cent of the 2016–17 financial year.

Key Projects

Critical Communication Enhancement Program:

During 2016–17, a state-wide audit of over 2,600 radio sites, including almost 27,000 assets across the state was undertaken as part of the Critical Communication Enhancement Program (CCEP).

The Telco Authority is developing a new, integrated blueprint to consolidate around 2,400 sites to 700 sites across NSW.

As well, the coverage footprint of the Government Radio Network (GRN) was extended in a pilot area in the north-west region. This will provide approximately 20 000 square kilometres of additional in-vehicle coverage at a public safety standard.

IT Service Management

IT Service Management (ITSM) focuses on the delivery of quality ICT services that meet the needs of customers and is delivered by the right mix of people, process and information technology.

ITSM provides a framework to plan, deliver, operate and control ICT services that are both internally provided and externally sourced 'as-a-service'.

Understanding the primary IT Service Management methodologies utilised across NSW government, and their maturities, will aid the development of a whole-of-government ITSM Framework and toolkit.

This will provide agencies with a pathway to advance their IT Service Management capability.

Key findings

84%

of agencies reported using an ITSM methodology.

ITIL V3

is predominantly used for Incident management (93%), Change management (86%), Service Design – Service Level Management (67%).

ITSM

is predominantly used for Incident management (93%), Change management (86%), Service Design – Service Level Management (67%).

40%

of agencies have done an assessment of their ITSM maturity.

NSW Government policy on cloud-based services

One of the Government's ICT investment imperatives is that projects should align to a service orientation, including as-a-service sourcing models, as a primary option.

The NSW Government takes a new and more flexible approach to ICT procurement, including 'on-tap' or 'as-a-service' solutions.

It positions the NSW Government to take advantage of two major industry trends being driven by technology commodification and the adoption of web services by consumers:

- move to service orientation by both vendors and buyers
- deployment of cloud technologies into mainstream business.

Cloud-based ICT services provide opportunities for agencies to achieve better value, flexibility and reliability, and make sustainable service delivery improvements.

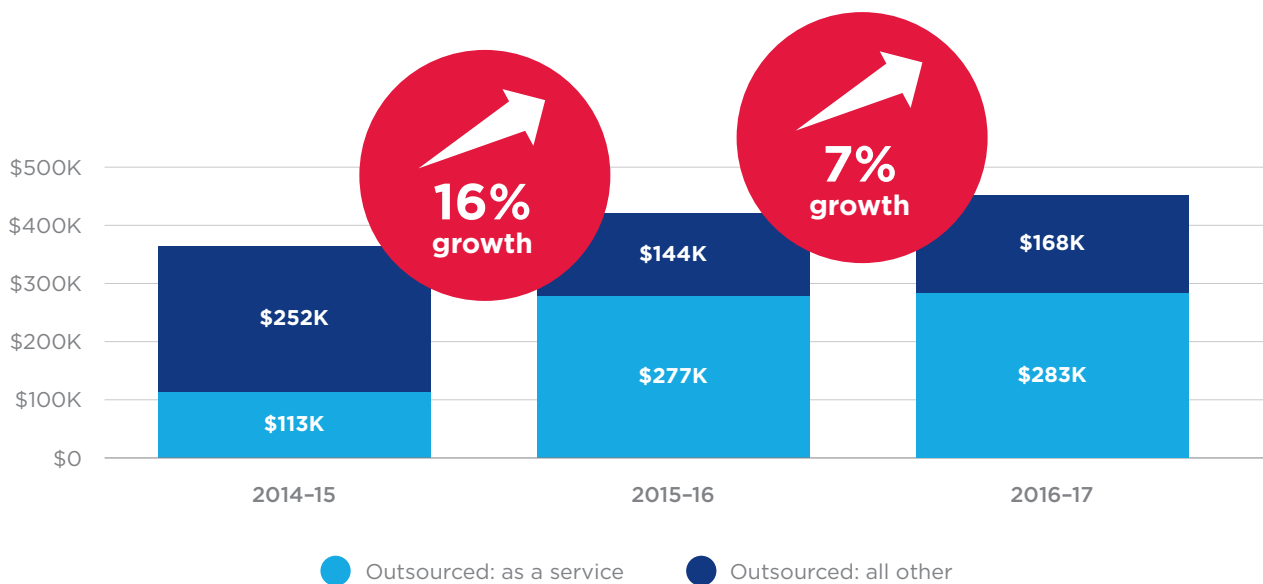


Figure 31 – Service Outsourcing: including as-a-service

Agencies continue to migrate on-premises data centres to the two world-class NSW Government data centres located in NSW. These centres support agencies to buy ICT services on demand and allow smaller agencies to access additional resources without major capital expenditure. This gives smaller agencies access to services in a way that is more effective. Public bodies can buy services from the ICT Services Catalogue including services available in the GovDC Marketplace, or from GovDC.

The migration of government data through the NSW Government's Data Centre Reform (DCR) Project is now in its fifth year.

The minimum contracted capacity has now been completed and additional capacity has also been brought online to accommodate agency needs. All Principal Departments now have services operating from GovDC.

The ICT Survey data shows that the proportion of storage and volume of storage moving to GovDC has been increasing.

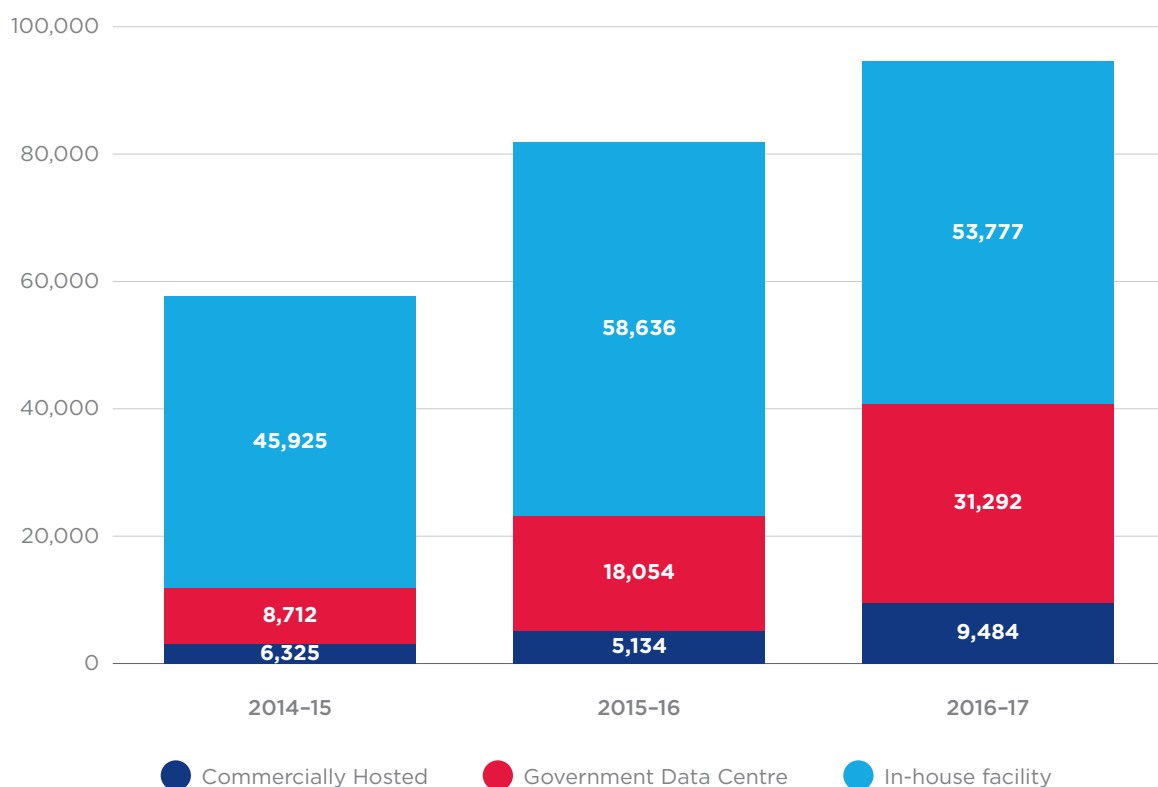


Figure 32 - Storage (TBs) hosted commercially, in-house and in Government data centres

Source: NSW Government ICT Metrics Survey 2016-17

5.

Opportunities



Cyber security

As cloud, mobile and digital take-up rates increase across government and the community, the risk to their security is growing. This is driven by the increasing sophistication and number of cyber criminals and easy access to hacking tools. Prevention, detection and response are becoming more difficult and there is an opportunity to uplift cyber security capability across the NSW public sector.

Cyber security is the defence of digital services, devices, networks and infrastructure from malicious attacks, unintentional damage or disruption, and the protection of information from loss, theft or malicious alteration.

As recognised by the NSW Digital Government Strategy (2017), effective cyber security, robust risk controls and strong information management are central to maintaining the confidence and trust of our customers. From individual transactions to critical information sharing across agencies, a strong framework for managing cyber risk is a prerequisite for any modern digital government.

NSW is working with the Australian Government to further develop our cyber security capabilities through effective partnerships with the Australian Cyber Security Centre and other government agencies.

We also work with international and state-based partners, including the private sector, to promote and grow cyber security capabilities here in NSW, ensuring our customers and public sector employees are aware of the risks and can take action to minimise them.

Robust cyber security is essential for maintaining the wide array of services provided by the government, including those essential to community safety and well-being such as health, emergency services, energy, water or transport.

The Government announced a \$2 million investment in the new NSW Cyber Security Network. It is a university-led network aimed at bolstering NSW's cyber security research and development capability and harnessing the state's growing cyber security industry.



Strengthen risk management and response by building a whole-of-government cyber security capability

Key findings

The survey data shows that the number of FTEs in the 'Security' job category are increasing, suggesting a growing capability to support agency cyber security.

Digital Government Strategy

The 2016 update of the NSW ICT Strategy, Digital+, was the last update of that strategy. The NSW Government has since pivoted to a renewed focus on Digital Government with the launch of the Digital Government Strategy in May 2017, setting a vision for a digital, responsive and agile public sector.

Three digital priorities guide the work of government agencies in digital transformation:

1. Customer experience: Improving people's experience of government policies and services through customer-centred design.
2. Data: Better policy design and service delivery through data insights.
3. Digital on the inside: Improving the way government works by simplifying and streamlining operations and processes.

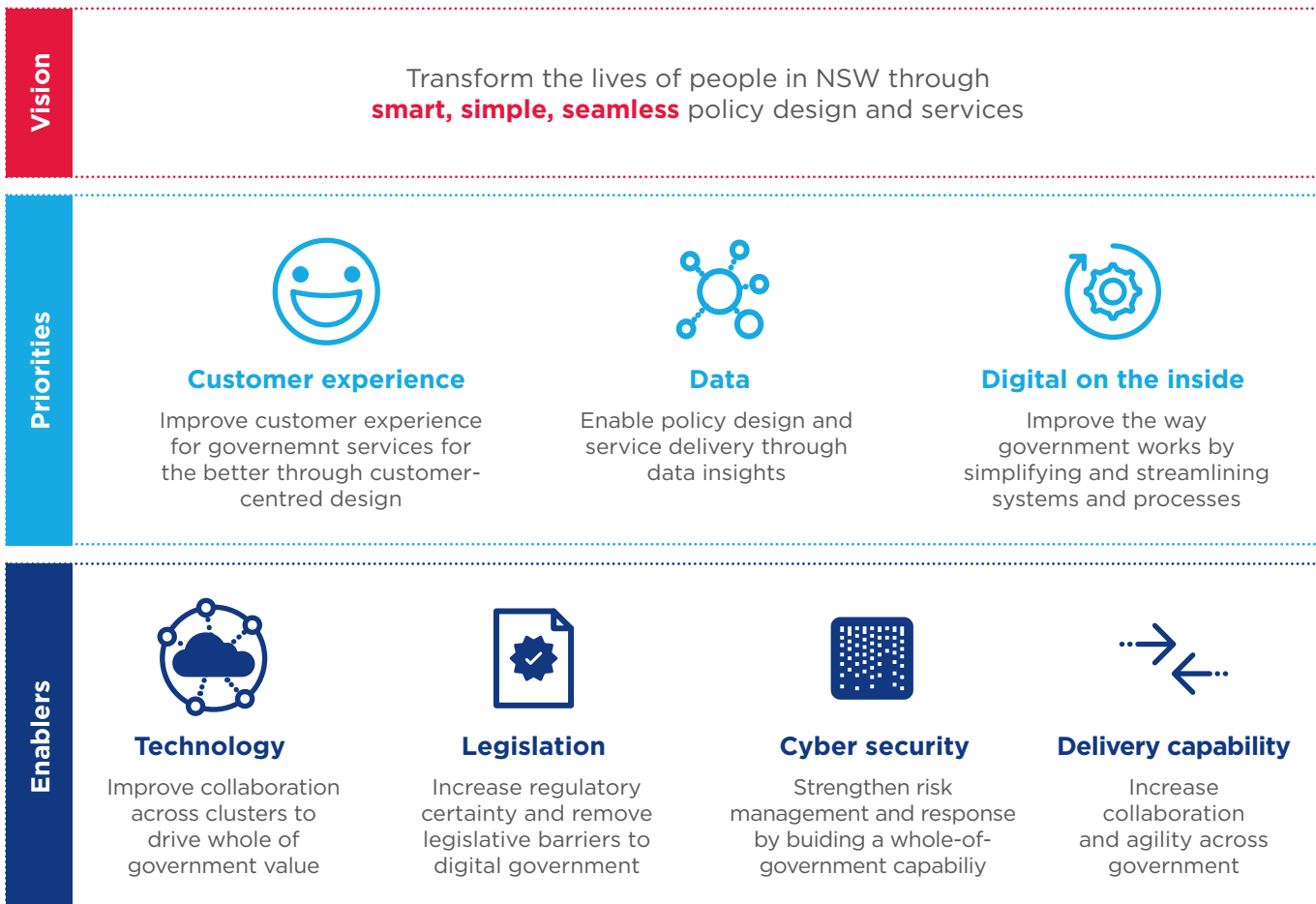
Digital NSW Accelerator

The digital.nsw accelerator is all about delivering high-impact products to citizens as fast as possible.

Launching in early 2018, the accelerator will accelerate DFSI digital projects in phase one. Once tested and refined, the accelerator will take challenges and opportunities from across the NSW public sector.

With a focus on deeply understanding customer needs using a human centred design approach, the accelerator will see NSW government departments collaborate with citizens to co-design services and products that are smart, simple and seamless.

NSW Digital Government Strategy



‘One Government’

The ‘One Government’ approach to procurement is providing real benefits to taxpayers and is resulting in greater choice for agencies and more opportunities for NSW businesses.

By making it easier to do business with the NSW Government, we are making it easier for businesses of all sizes to work with the NSW Government.

In ICT, we are leveraging the buying power of ‘One Government’ to achieve better value for money in major vendor contract negotiations. As well, we are driving innovation and productivity by reviewing and refreshing current products and services.

For example, the ICT Procurement team within DFSI used the negotiation of multiple application software modules to achieve a stronger commercial and contractual position for government’s Government Selected Application Software products as well.

Changes to telecommunication procurement arrangements for fixed voice, mobile, fixed data and internet service towers will also drive better value for money by aggregating demand and streamlining the procurement process.

6.

Appendices



Appendix A: List of 2016–17 ICT Survey respondents

Education

- Board of Studies – Teaching and Educational Standards Staff Agency
- Department of Education

Family and Community Services

- Department of Family and Community Services (cluster submission)

Finance, Services and Innovation

- Land and Property Information
- SafeWork
- Service NSW
- State Insurance Regulatory Authority
- Revenue NSW

Health

- Ambulance Service of NSW*
- Cancer Institute
- eHealth NSW
- Justice Health and Forensic Mental Health Network
- Local Health Districts
 - Far West Local Health District & Western NSW
 - Hunter New England
 - Mid North Coast
 - Northern NSW
 - Northern Sydney & Central Coast
 - South Eastern Sydney & Illawarra Shoalhaven
 - Southern NSW
 - Sydney & South Western Sydney
 - Western Sydney & Nepean Blue Mountains
- NSW Ministry of Health
- Sydney Children’s Hospitals* Network

Industry, Skills and Regional Development

- Department of Industry, Skills and Regional Development
- TAFE NSW
 - Hunter Institute
 - Illawarra Institute
 - New England Institute
 - North Coast Institute
 - Northern Sydney Institute
 - Riverina Institute
 - South Western Sydney Institute
 - Sydney Institute
 - Western Institute
 - Western Sydney Institute

Justice

- Department of Justice
- Fire and Rescue NSW
- Legal Aid Commission of NSW
- NSW Police Force
- Rural Fire Service of NSW
- State Emergency Service
- State Library of NSW
- Sydney Opera House Trust

Planning and Environment

- Office of Environment and Heritage
- Department of Planning and Environment

Premier and Cabinet

- Audit Office of NSW
- Department of Premier and Cabinet
- New South Wales Electoral Commission

Transport and Infrastructure

- NSW Trains
- Roads and Maritime Services
- State Transit Authority
- Sydney Trains
- Transport for NSW

Treasury

- NSW Treasury Corporation*
- The Treasury

* Estimation of non-reporting agencies is quantified by applying a CPI indexation of data from relevant years as reported in the ICT Survey.

Appendix B: Service tower definitions

ICT corporate functions (previously ICT Management) includes services, equipment, activities, personnel, functions and responsibilities providing cross-service tower governance, controlling, security, architecture, finance and human resources services to the ICT organisation.

Applications – all hardware, software, personnel (including the supporting documentation, media, on-line help facilities and tutorials) and outsourced services that perform user or business related information processing functions. Application Software does not include the tools, utilities, or system software used to deliver it.

Application sub-service towers:

Application – Corporate – Enterprise Resource Planning; Human Resource Management; Workforce Capability Management; Business Continuity; Corporate Governance and Strategy; Corporate Administration; Procurement; Business Transformation and Improvement; Business Intelligence and Analytics; Enterprise Content Management; Business Process Management; Unified Communications.

Applications – Common Line of Business – Product and Service Management; Marketing; Customer Relationship Management; Partner Relationship Management; Customer Accounting; Customer Service; Emergency Management and Grants Management.

Applications – Specialist Line of Business – Common Agency Functions and Agency Specific Applications.

Applications – **Other** – Data and Information Management Services; Identity and Access Management Services; Security Services; ICT Services Components and Tools; Interfaces and Integration, which are not appropriately repeated under another Service Tower.

Servers include all server types. In previous years, mainframe and midrange data was de-coupled and collected separately. Services, hardware, software, functions, personnel, activities and responsibilities involved in running server applications and with typically high I/O processing capacity, which are housed centrally in data centres or server rooms.

Storage includes cost elements, activities and responsibilities involved in providing data storage services to the business. It includes Network attached storage, storage area networks, offsite storage device and backups and external fixed attached storage on mainframe and midrange servers.

End user infrastructure includes cost elements, activities and responsibilities provided directly to end-users in an agency. Hardware includes desktop and laptop computers, thin clients etc. but excludes fixed and mobile phone, and devices with combined voice and data functions which are captured in Voice services. The category includes all processes, procedures, tools and resources necessary to support the complete lifecycle of desktop technologies and the end user computing environment.

ICT service desk (previously Helpdesk) includes buildings, infrastructure, associated technologies and fully trained staff who respond to Level 1 ICT Service Desk incidents or requests (as defined below) from end users, coordinate incident management, problem management and request management activities, and act as a single point of contact for agency end-users in regard to all service towers.

Facilities include physical facilities, including raised floor space, power supply, air conditioning, and associated utilities, as well as security and facilities monitoring and maintenance services, personnel, activities, hardware and software. Facilities are data centres which include all physical sites and infrastructure used to house computer systems (e.g. servers) and associated components, such as telecommunications and storage systems.

Networks are cost elements, activities and responsibilities associated with Wide Area Network (WAN), Local Area Network (LAN), Remote Access Services (RAS), and Gateway. In previous years, WAN, LAN, RAS and Gateway networks data were collected separately, however, it has been bundled for this survey.

Voice services are all carrier and telecommunications services and cost elements involved in providing voice services and non-IP video conferencing services to the business, including VoIP services. The category also includes equipment and associated attachments, features, accessories, peripherals and cabling supported or used to provide standard voice services to the business.

Appendix C: Cost Element Definitions

Cost elements are a resource based expenditure classification of seven elements. Cost elements build each of the nine service towers. Elements include:

Hardware – Expenditure on purchasing, leases, maintenance and repair for all physical ICT equipment, such as servers, PCs, terminals, printers, peripherals, printing equipment, networking and telecommunications equipment, materials or accessories and disaster recovery hardware.

Software – Expenditure on licenses, support and maintenance for external and standard software, systems software and standard office productivity applications at a total agency level.

Carriage – A specific cost element in the Network and Voice service towers. Carriage refers to the costs of providing digital or analogue electronic signals (including data, voice or video) over a distance. Data carriage costs and volumes should be allocated to the Network Service Tower. Voice and video carriage costs and volumes should be allocated to the Voice service tower.

Services outsourced to external provider – includes services outsourced as-a-service and managed services. Includes full function outsourcing (e.g. data centre operations, WAN operations, end user infrastructure services or application maintenance) to a third-party provider or vendor in the market.

Internal personnel – This element includes expenditure incurred for all internal full-time equivalents (FTE), i.e. employees of the agency, involved in ICT business as usual activities, includes all wages and salaries, provisions for staff entitlements and staff on-costs. See Australian and New Zealand Standard Classification of Occupations for ICT occupations.

External personnel – For all external FTEs involved in ICT activities, include all payments and allowances made to external FTE. This includes all relevant on costs that apply to contractors and consultants. See Australian and New Zealand Standard Classification of Occupations for ICT occupations.

Other expenditure – Expenditure on occupancy, facilities, utilities and other ICT expenditure not captured in hardware expenditure, software expenditure, internal personnel expenditure, external personnel expenditure, expenditure on services outsourced as-a-service, managed service or to NSW Government Shared Service Providers, and carriage expenditure (in WAN and Voice service towers only).

Appendix D:

Run, Grow, Transform the business

Run the business

This is an indicator of how much of the IT resource is consumed and focused on the continuing operation of the business. It includes all nondiscretionary expenses as part of the run-the-business cost.

Grow the business

This is an indicator of how much of the IT resource is consumed and focused on developing and enhancing IT systems in support of business growth (typically organic growth). Discretionary investments are more likely to be included in the grow-the-business or transform-the-business cost.

Transform the business

This is an indicator of how much of the IT resource is consumed and focused on implementing technology systems that enable the enterprise to enact new business models. This is very much a “venture” category and would be represented by activities such as a brick-and-mortar retailer moving to online shopping, a traditional bank offering online banking (or moving into offering insurance services), or a commercial airline offering new freight services. Gaps in business alignment can be found by examining IT spending as it relates to the day-to-day operations of a business (run), the organic growth of the business or productivity improvement (grow) and its support of major business transformation, new products, services or business models (transform).

Appendix E: Glossary

Short form	Long form		
ADS	Accelerated Delivery Strategy	HealthStats	www.healthstats.nsw.gov.au
BYO	Bring Your Own	HRM	Human resource management
Capex	Capital Expenditure	IAF	ICT Assurance Framework
CIO	Chief Information Officer	ICT	Information and Communication Technology
COBIT	Control Objectives for Information and Related Technologies	IDG	ICT and Digital Government
CPI	Consumer Price Index	IDLG	ICT and Digital Leadership Group
CSS	Corporate and Shared Services	IDIP	ICT and Digital Investment Plan
DAC	Data Analytics Centre	IT	Information Technology
Data.NSW	http://data.nsw.gov.au	ITIL	Information Technology Infrastructure Library
DCR	Data Centre Reform	ITSM	Information Technology Service Management
DFSI	Department of Finance, Services and Innovation	MP	Member of Parliament
EA	Enterprise Architecture	NGIS	Next Generation Infrastructure Systems
EAM	Enterprise Asset Management	OpenGov	www.opengov.nsw.gov.au/
ERC	Expenditure Review Committee	Opex	Operations Expenditure
ERP	Enterprise resource planning	PC	Personal Computer
FACS	Family and Community Services	RCG	Responsible Conduct of Gaming
FMT	Financial Management Transformation	RFF	Recreational Fishing Fee
FTE	Full Time Equivalent	RMS	Roads and Maritime Services
GEA	Government Enterprise Architecture	RSA	Responsible Service of Alcohol
GIPAA	Government Information (Public Access) Act 2009	VoIP	Voice over Internet Protocol
GovDC	NSW Government Data Centre	WCAG	Web Content Accessibility Guidelines
		WoG	Whole of Government

www.finance.nsw.gov.au

