Resourcing Strategy

Digital Strategy

2018-28

Randwick City Council
a sense of community

Contents

Executive Summary

In planning for our City's future and the Council's contribution to the outcomes in the City Plan, Council considers resourcing capability and future resourcing needs.

Council has developed an overarching Resourcing Strategy which demonstrates how Council will be resourced for the next ten years. The Resourcing Strategy outlines the integration between our finance, workforce, assets and technology.

A copy of the executive summary of Council's overarching Resourcing Strategy can be viewed on our website.

Key components of Council's resourcing capability are its assets, its financial position and outlook, existing and potential technologies and human resourcing. While we have separately documented how each of the key resourcing components will contribute to our resourcing, Council considers each component simultaneously in its overarching Resourcing Strategy as part of our long term planning.

The Integrated Planning and Reporting (IPR) framework encourages and supports the review of each of Council's resourcing strategies aligned with the review of the Randwick City Plan and at other times as required. This Information Communications Technology (ICT) Digital Strategy provides detail on Council's business systems and technology and has been prepared with a specific focus to meet the needs of the 2018-21 Delivery Program.

The ICT Digital Strategy can be read in conjunction with Council's suite of resourcing strategies. This suite includes:

- The Resourcing Strategy Executive Summary
- The Long Term Financial Plan
- The Workforce Plan
- The Asset Management Strategy
- The ICT Digital Strategy.

The ICT Digital Strategy outlines the digital strategy and major project initiatives that will give Randwick Council the technological edge to become a smart city and be a leader in the delivery of services through digital channels.

The strategies and projects from this plan will guide the delivery of actions by Council to achieve the following outcomes of the City Plan.

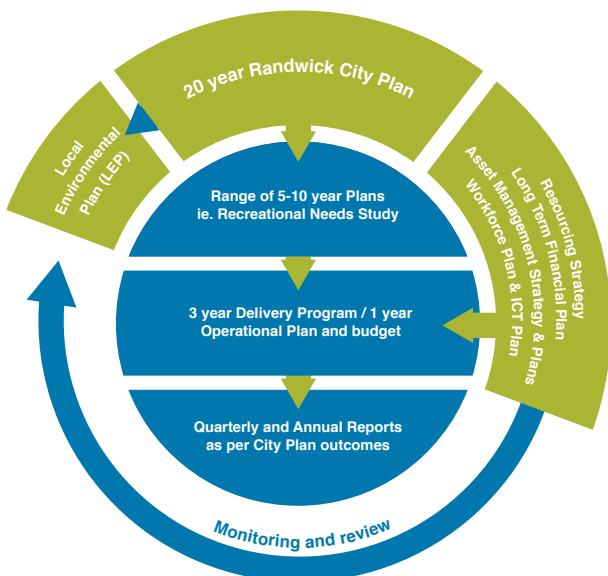## Outcome 1 – Leadership in sustainability

Direction 1b   Council is a leader in the delivery of social, financial and operational activities.

Outcome 3 - An informed and engaged community

Direction 3a   Effective communication methods and technology are used to share information and provide services.

Direction 3c.   The community has increased opportunities to participate in decision-making processes.

Through sound financial planning, proactive asset management and continuous improvement in the application of technology and the development of a strong workforce, the Council will maintain its position as an industry leader.

Diagram: Integrated Planning and Reporting framework including Local Environmental Plan (LEP), 20 year Randwick City Plan, Resourcing Strategy (Asset Management Strategy & Plans, Long Term Financial Plan, Workforce Plan & ICT Plan), Range of 5-10 year Plans ie. Recreational Needs Study, 3 year Delivery Program / 1 year Operational Plan and budget, Quarterly and Annual Reports as per City Plan outcomes, Monitoring and review.

ICT Outcomes

Council is enhancing the way we do business with our customers by adopting new technologies, work practices, and breaking free of traditional thinking. We endeavour to become the leader in providing services to our customers at any time, and from anywhere via digital channels. Even as we become more digitised, we will still be providing high quality in-person customer service.

The outcome of our vision is to provide our community with:

- better services
- better communication
- better value

and for Council to become:

- more secure and
- more efficient.

Principles

To achieve our desired outcomes, Council will keep in mind the following seven guiding principles:

Available

To provide better services to our community we need to have the services we offer available to our customers beyond just normal business hours. Our customers expect to be able to access Council information and services from any device at any time.

To meet this challenge we will not just add to the list of online services, but create a new single point portal for our customers to access to get information that relates to them and conduct business with Council.

We will design the portal with the customer in mind and they will be able to search our knowledge base, notify us of issues, and access our services either in-person, from their mobile device, or from their home computer. All services will be available through the appropriate digital channels as well as keeping the face-to-face option for customers that still want to deal with a person.

Our employees need expanded access to Council's systems and information when out in the community to provide better service to our residents and to make more informed decisions. By further expanding our business applications, implementing mobile apps, and introducing mobile devices that are connected to Council's systems, our workforce can be more efficient by reducing the need for paper-based systems and eliminate data re-entry and duplication.

Intelligent

By 2020 there will be approximately 30 billion devices connected to the internet, or collectively known as the "Internet of Things" (IOT). These devices range from major applications managing global booking systems to sensors in household appliances or even a light bulb. From Council's perspective, we can become a smart city by leveraging the IOT platform to proactively manage our assets and assist with being aware of potential situations before they affect the community. We currently use IOT in an isolated way to manage lights and irrigation systems, but there is much more potential to be able to monitor and manage waste, stormwater, sports fields, and traffic systems. However, having IOT sensors alone is not enough. To transition to a truly smart city we need to actively monitor and integrate the sensors into our line of business systems.

Council is embarking on a journey to build a smart city management platform that will receive and store data from many sources, conduct real-time data analysis and actions, carry out data health checks, and visualise the data using maps, charts, and graphs to our employees and the community. For example, if one of our gross pollution traps (GPT) that we have in place to stop stormwater pollution entering our beaches is full, the GPT could send an alert to a monitoring system, display an alert on interactive maps at the works depot, and also trigger

an event to create a service request in our Customer Relationship Management System (CRM). This would then invoke the normal flows of our business systems to alert the crew to empty the GPT and record details about the job.

Our smart city initiatives will also play a role in planning our city. We have started building a 3D model of the city and we will continue to expand the model. We aim to have the entire Council area created as a digital terrain model. By incorporating planned developments into the model, we will be able to assess the effects of visual impact, shadowing and view loss on the surrounding area. The 3D digital technologies will allow us to publish animated models in 3D and also show the plans by venturing into the world of virtual and augmented realities.

Secure

Council is a custodian of information that can be politically, commercially, and personally sensitive. We have a duty of care to protect this information from unauthorised or accidental modification, loss, release, and theft. We take this responsibility seriously.

In all ICT projects, security will be at the forefront in the decisions we make and in the business systems we introduce and integrate. By ensuring all data is encrypted in transit and that our back end systems are secure we endeavour to keep your information safe. We will continue to challenge ourselves and test the security we have in place and implement new initiatives such as data loss prevention technologies and strategies.

Information security does not just stop at the computer. We will continue our Information Security Management System where the full life cycle of information is classified, assessed for risk, and controlled with appropriate business practices and systems put in place.

Looking beyond ICT security, Council is also concerned for the safety and security of our residents and visitors. Working in cooperation with NSW Police Force's Eastern Suburbs Local Area Command, we are planning on expanding the surveillance camera system into more public areas that have been identified as potential hotspots for criminal activity or potential terrorism risks. Backing this up will be the provision of active monitoring facilities where police will be able to actively monitor nominated high risk areas throughout the City.

Connected

Collaborative communication is a key way to connect to and engage with our community and to help us successfully deliver our services. By opening up digital channels and expanding our use of social media we can partner with the community to better understand their needs and to communicate Council's services, vision, and plans. Council can connect and consult with our community by providing digital channels and applications that can enable them to engage with us and each other.

Connecting and collaborating internally is important for us too. We will grow our intranet systems to be more collaborative by allowing the sharing of ideas, documents, and skills. The mapping of our internal processes can also be managed to help us deliver accurate and consistent services to our community.

In addition to mapping our processes, we will also start to look at ways on how the emerging trend of Robotic Process Automation (RPA) systems can be used to further enhance the efficiencies and accuracy of our internal processing of information.

As we move further into the digitisation of our services, we will expand our smart phone apps, social media presence, and our community consultations and connect them into our business systems. Improving the way we connect and share information internally as well as with our community, will help us with improved decision making, create greater efficiencies, and provide more opportunities to deliver new and better service.

Located

Location sits at the core of many of our important sets of data and business systems. It is used in everything from service requests to community consultations. Council employees need up-to-date and accurate information in a format that is easily accessible and understood. Location based information can be combined with other sources of information such as financial data, service delivery data, customer information, and census information – this creates location intelligence.

By adding a spatial dimension to our business system data we can present our information in a much more user friendly way and create an enhanced place based knowledge data set. With location intelligence we can make smarter and more informed decisions about where to better target service delivery and how to increase efficiencies that can then have a benefit to our community.

Open

Government agencies across the world are opening their data to foster a community of innovation and transparency. We will join in with this initiative too by opening up our data sets for innovative use by industry, government, and other non-government entities. There are approximately 3,140,000 pages viewed on our website and 800,000 visitors (returning and new)[1], so providing the ability to see and make use of new sources of data is an important improvement in service delivery.

Selected data from our business systems as well as data from our internal monitoring and service delivery systems will be aggregated, made anonymous, and then published as "Open Data" for public use. Examples of information that may be published include: council events and news; details of our capital works program and facilities; sports field usage and status; and data from our waste, irrigation, water harvesting and solar power generation sensors.

At all times privacy and security will be the number one consideration when selecting, creating and publishing the open data sets. Data will be open in the sense that it is technically available, but with appropriate licencing frameworks in place to facilitate its release and use.

All data sets released will be in accordance with privacy legislation, licensing restrictions and the Australian Government Public Data Policy Statement.

Resilient

To be able to meet the challenges of providing digital services to employees and the community, a stable technical infrastructure is required. Resilience will be built into the supporting infrastructure by transitioning the existing on-premise data centre functions to cloud hosted solutions and providers. Cloud options will be the first choice of existing and future business solutions. It is expected that infrastructure solutions will be delivered by a combination of "Software as a Service" (SaaS) and "Infrastructure as a Service" (IaaS).

By designing the SaaS and IaaS systems with the needs of business continuity planning (BCP), a platform can be created that can transition the traditional thinking of "Disaster Recovery" to "Disaster Avoidance". By meeting the needs of redundancy and real-time replication across multiple cloud-based data centres, we can make disaster avoidance the prime goal by preventing outages from occurring in the first place for "foreseeable" disasters. Even though avoidance is the prime goal, we recognise that things can still go wrong and disaster avoidance strategies are typically more expensive. With this in mind, a combination of disaster recovery and avoidance strategies will be utilised to ensure that Council's data and systems are always backed up and recoverable in a cost effective manner.

Resources

To deliver on these initiatives and provide our community and employees with the applications and technology needed, Council will be investing further in our systems and employees over the period of this plan. The increased investment in technology resources is required to transition Council to a fully digitised service organisation.

For more information on our strategy for resourcing Council's ICT Digital Strategy, refer to the Randwick City Council's Workforce Plan 2018-28 and Long Term Financial Plan.

Major Project Initiatives

As a Council we believe that all employees can actively contribute to the innovation and direction of our technology program. As part of identifying the technology needs and encouraging innovation within Council, all employees were invited and involved to take part in a series of workshops that focused on technology and innovation. The focus was on how, by using technology, we can as individuals and as an organisation, deliver better and more efficient services to our community. An overwhelming positive response was received from all employees with over 500 ideas received. These responses were considered and then grouped into a series of projects which shall be considered as part of the implementation of the digital strategy.

1 Google analytics for 2017. Pageviews defined as total number of pages viewed and visitors defined as returning and new visitors.

Major Project Initiatives

CRM consolidation and Customer Portal

There are several different service request systems in use at Council and a number of service business processes that are not managed by a service request system. To achieve an integrated approach with greater efficiency and better reporting, the multiple service request systems that Council currently uses will be consolidated into a single CRM system. The new CRM system will provide customer relationship management with support for many channels of communication including SMS, email and notifications. All dealings with customers will be automatically routed to the record keeping system which will significantly reduce the overhead of the current customer communication methods.

The customer portal is intended to build on the new CRM and provide a service based web site where our customers can go to access all of the services that we have to offer via digital channels. The customer portal will be more than just electronic forms, but shall provide full integration to our underlying systems that we have in place.

The customer portal would consist of a number of integrated components, including:

- service orientated web site
- online forms
- eSignatures
- payments
- knowledge base
- business process automation / workflows
- integration, and
- identity management

Customer Portal Schematic
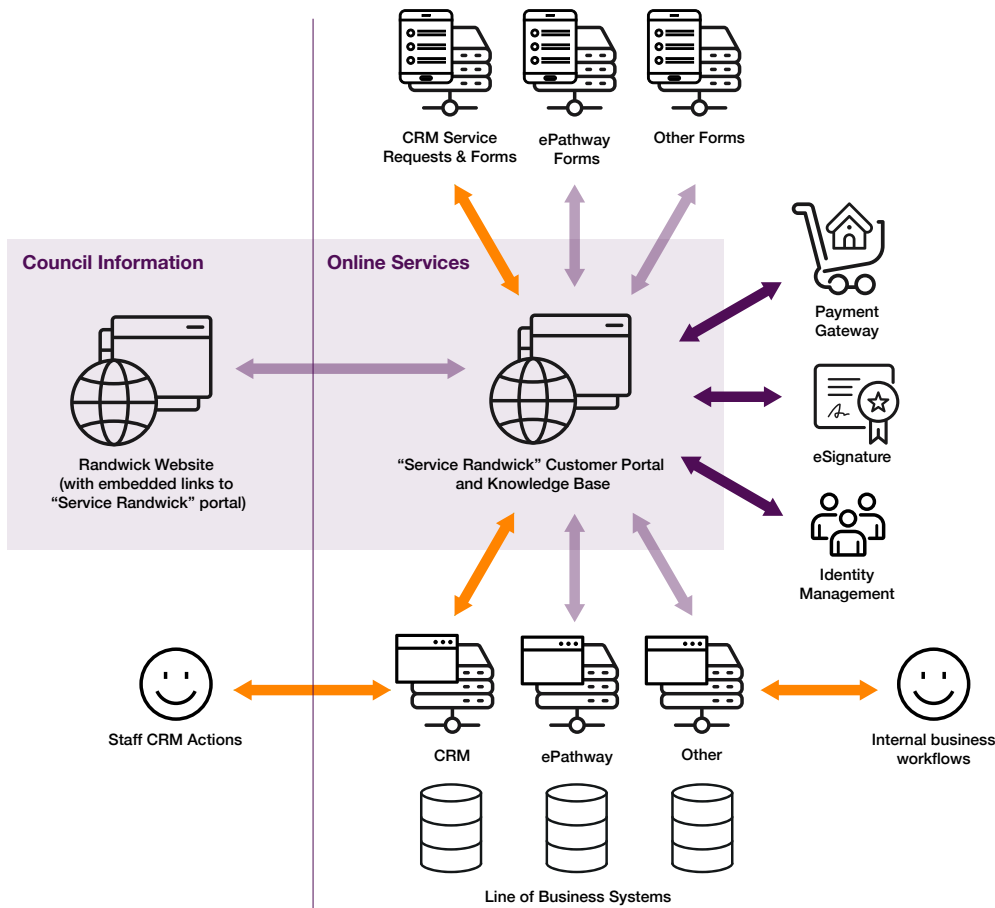
Major Project Initiatives

Mobile Workforce

There are in the order of 150 employees at Council that undertake field activities requiring access to Council's systems, such as health inspectors, engineers, works gangs, etc. To increase the efficiency of these employees and to make our services better for our customers, we will enable mobile workers with the equipment and apps they need to do what is required in the field without returning to the office to enter their work details. There are a number of components to produce a mobile workforce:

- Employees must have adequate hardware
- Mobile network connectivity needs to be established, and
- The applications must be suitable for field use and allow for native use of a devices' in-built cameras, etc.

These items have been addressed to some extent in isolation to date, however, a mobile workforce project will ensure the mobile worker is the central focus when designing solutions to address business processes using a holistic approach.

Smart City

One of the proposed projects in Council's Smart City program is an "Integrated Data and Business Intelligence Platform." The platform will be designed to incorporate the "Internet of Things" sensors and monitor events originating from them. The platform will act on the information in these events by integrating into our business systems, such as service requests, and proactively monitor and manage our assets and other operations with the aid of visual displays and operations dashboards.

Smart City Data and Event Processor Schematic
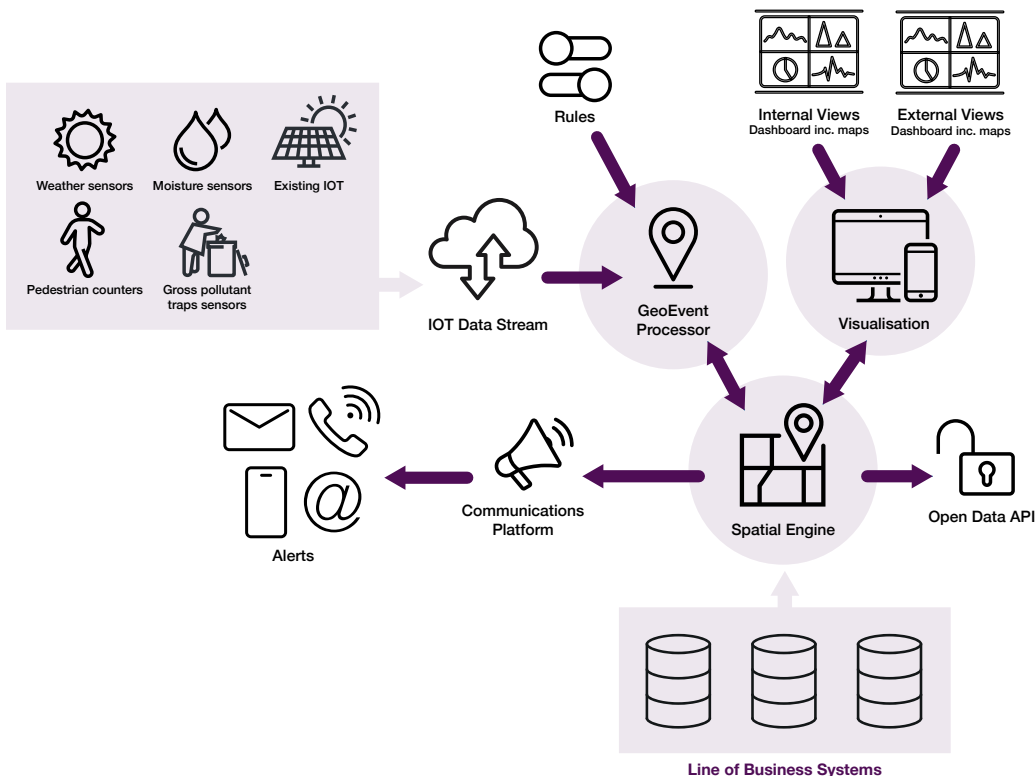
Major Project Initiatives

A number of other initiatives are planned to be included in the smart city program such as 3D planning and assessments. A separate Smart City Strategy is being developed which will outline in more detail our vision over the next three years for Council to become a smart city.

3D Web Scene

Intranet

A new intranet will be created that will add value to the installed SharePoint platform. The intranet will be collaborative and include: an integrated employee directory that will highlight employee skills; dedicated project and team sites with integrated document management; incorporate business process flows by using a process mapping tool; and include news and events.

Location Based Business Intelligence

The requirements of Business Intelligence (BI) reporting and the way we visualise data on maps are merging. To provide our employees with the information they require to make informed decisions, "location" should not be ignored. By integrating our reporting systems into our GIS system, we will be able to create and deliver "location intelligence" based dashboards and reports to employees that will allow smarter and more informed decisions about where to better target service delivery and how to increase efficiencies.

Sample BI Dashboard
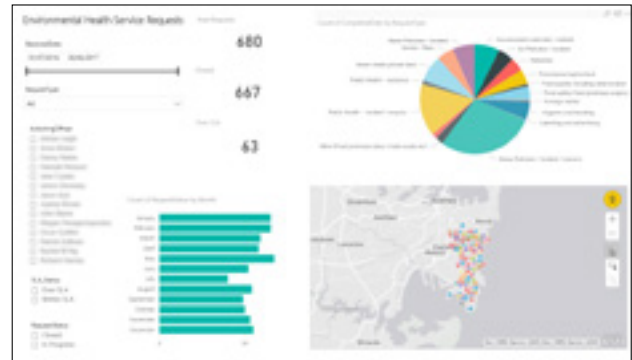
Major Project Initiatives

Data Centre Migration

The current server and storage infrastructure operating within the on-premise data centre has approximately 12-18 months remaining life. This means that all applications and servers, existing integration, and file storage systems will need to be migrated to a cloud infrastructure provider. The cloud solution will incorporate aspects of disaster avoidance strategies.

Data Centre Cloud Migration

Design Concept
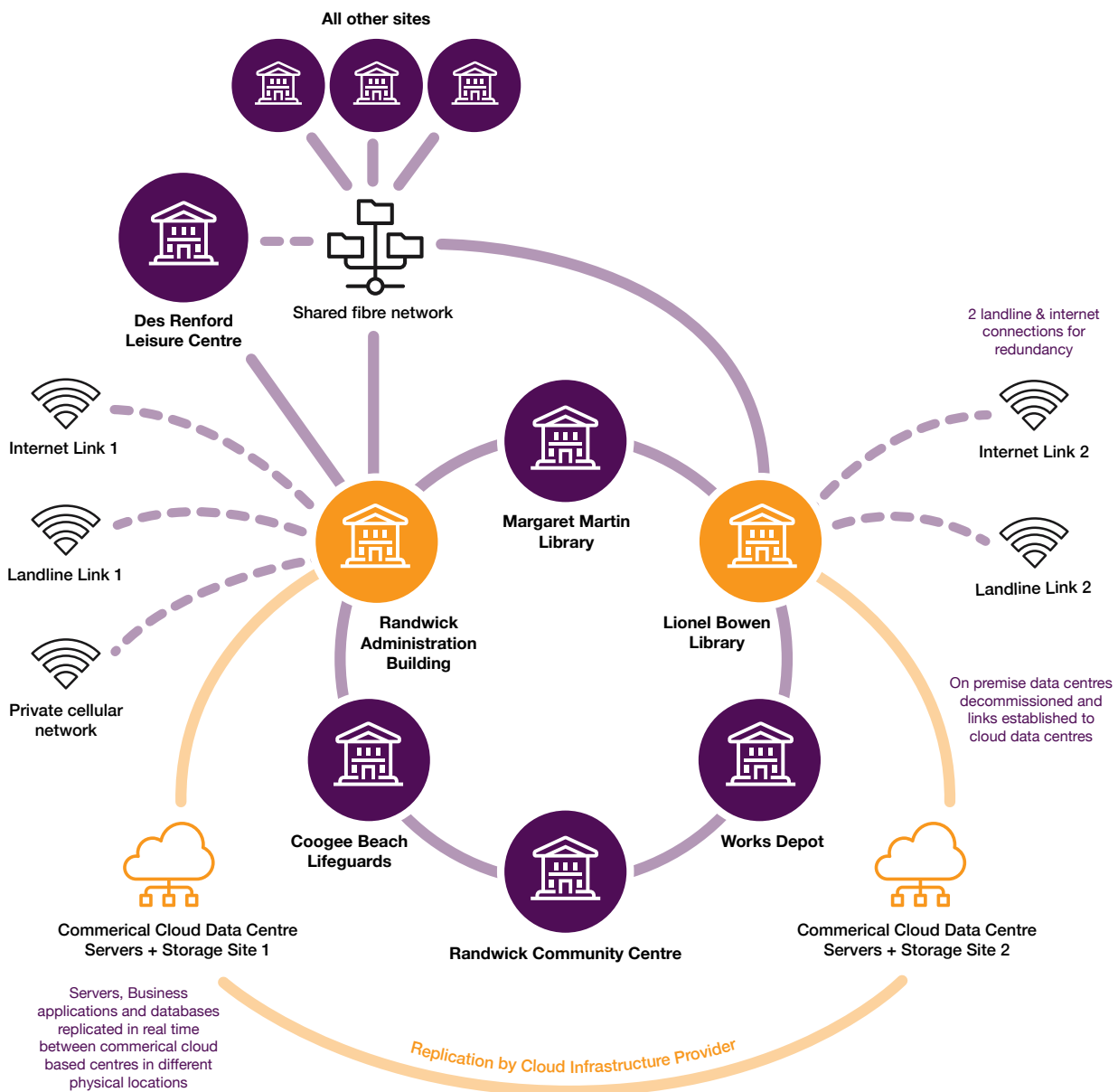
Measures

Outcome	Measures
Full business process automation	• More processes automated • Number of business system integrations
All services available via digital channels	• Number of services available via a digital channel • Number of registered online customers • Number of services initiated online
Access to information	• Dashboards and graphical reports easily and readily available to employees
Less paper usage	• Number of pages printed
Customer and employee experience	• Employee usage surveys • Number of hits to intranet and external web sites
Information security	• Number of data breaches and cyber-attacks (target of zero)
Reduced response times	• Shorter time to process services and reduced waiting times on the phone and in-person
Reduction of customer visits and phone calls received	• Number of visits and phone calls • Number of online transactions via digital channels
Data de-duplication	• Less data re-entry • Sources of truth identified
Opportunities and innovation	• Number of ideas • Number of innovations implemented
Open data	• Number of data sets available to the public
Mobile workforce	• Number of systems available to employees in the field • Number of field devices

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