Digital Kalamunda:

Digital Strategy 2022-2027

City of Kalamunda

Acknowledgement of Country

Kaya. We respectfully acknowledge the Traditional Owners, the Whadjuk Noongar People as the Custodians of this land. We also pay respect to all Aboriginal community Elders, past, present and future who have and continue to reside in the area and have been an integral part of the history of this region.

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Snapshot of the Digital Strategy

The City of Kalamunda's Digital Strategy has five strategic objectives, which when implemented will mature the City's digital and cybersecurity posture. The replacement of the City's current enterprise resource planning system, increases customer engagement and efficiencies. The establishment of a digital factory enhances staff digital proficiency and engagement. The commissioning of new digital infrastructure in the form of upgraded networks and a new datacentre will provide the backbone for the new enterprise resource planning system. A continued focus on governance and cyber security will reduce impacts from foreseeable threats.

Strategic Vision

A digitally agile organisation for the benefit of the community, offering enhanced, efficient services.

Statement by the CEO

Service to the community is at the heart of what we do and as the world changes rapidly one of the key changing dynamics for society is to receive and access information and services as fast as possible.

The only way to meet the needs of a modern technology driven society is by ensuring the City has evolved its technology systems and support to be agile, responsive and easy to use.

To achieve this goal the city will invest and develop its technology based systems through the implementation of enterprise resource systems, improved infrastructure to increase speed and access and provide protection through advanced cyber security.

The City is committed to this strategy because it will bring about welcomed change to how the City does business, will allow innovation to thrive and will automate and make many processes across the City more efficient.

After many years of investigating , scoping and listening to staff ask for better systems this strategy now marks the beginning of the new digital era for the City of Kalamunda .

Rhonda Hardy

Chief Executive Officer

Background

In 2016, the City of Kalamunda adopted its first ICT Strategy with seven strategic objectives, focusing on business applications, cyber security and IT infrastructure. Execution of this strategy has matured the City's technology capabilities from a technology only focus, to one that considers people first, and prioritises business improvement opportunities using technology throughout the organisation.

The City has continued to strive for best practice in the digital space, with significant enhancement of community engagement capabilities through the development of the Engage HQ platform in 2017, along with increasing e-commerce opportunities fo the City of Kalamunda website. The City also moved its servers to an offsite location, process mapped significant parts of the organisation's business functions, and bolstered its cyber security defences and processes.

[In 2022, the City is faced with a completely new set of strategic challenges arising from the global COVID-19 pandemic, economic uncertainty and political instability. Working from home has now become not only a mitigation tool against the spread of COVID-19, it has also become a staff recruitment and retention strategy. Supply chain disruption is causing delays in technology equipment, and in supply chains throughout other industries globally. Cyber risks have increased significantly, as cyber criminals attempt to leverage poor processes and policies which are amplified by people working from home.

This strategy will deliver a Digital Factory which will evaluate and implement a new Enterprise Resource Planning system, further mature our cyber security response and provide more online services for the community of Kalamunda. This will make the City more digitally agile and responsive to the community's needs.

Purpose

Effective governance and the achievement of corporate and business priorities depends on the City of Kalamunda's capacity to manage digital initiatives and Information Technology effectively. The City of Kalamunda's strategy supports continual improvement in our digital and Information Technology practices. It identifies strengths and weaknesses, and outlines plans for building on our strengths and addressing weaknesses. It is based on an analysis of our current Information Technology status, the need to become a digital first organisaton and establishes a plan for future progress.

This strategy utilises the integrated planning framework through the use of the City's Strategic Community Plan and Corporate Business Plan to inform its strategic objectives and priorities. Achieving the strategic objectives of the Digital Strategy will directly contribute to the achievement of strategic objectives within the Kalamunda Advancing Strategic Community Plan and Kalamunda Achieving - Corporate Business Plan.

The centrepiece of the strategy is Digital Technology (DT). DT is redefining the structure of local government and our national economy, and it is an integral part of the strategy for the City. DT tools are built upon established and emerging technologies such as smart phones, sensors, cloud computing, social media, video conferencing, data analysis and artificial intelligence (AI). DT is changing the communities we live in – through the way we interact and the structure of our social networks. The technology will allow the City to do more with less, and better respond to the needs of the community. A DT strategy creates a pathway for the City to take advantage of the digital age; and provides a more digitally connected community and enabling the City to rapidly respond to new business opportunities.

"The ICT Strategic Framework sets out the key components that need to be considered in managing a local government's information resources. It represents the key elements, and their relationships, that might be expected in an 'ideal' environment. In reality, the extent to which it is applicable will obviously depend on the size and complexity of the local government. It recognises that there will be differing capacity with the local government sector to implement ICT and to manage it in line with the IPR Framework. (Department of Local Government, Sport and Cultural Services (Insert Year)

The ICT Framework is not a compliance requirement. It is a resource that local governments can use to plan for, manage and review their information, data and technology assets."

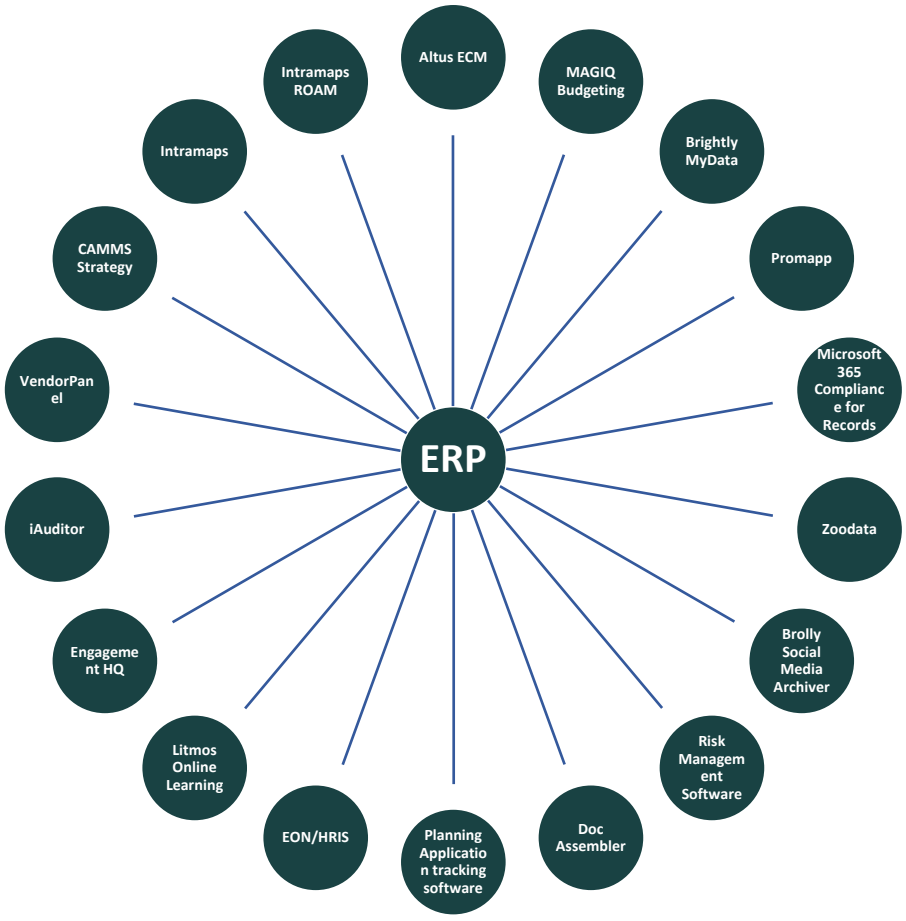
{From Dept of Local Government, Sport and Cultural Industries}

Strategic Objectives

1. Implementation of a new Enterprise Resource Planning System (ERP)

This is the centrepiece of the Digital Strategy. The ability of staff to process interactions with customers is significantly impeded by the City of Kalamunda's current systems. The City of Kalamunda's isolated systems have expanded to compensate for the lack of capability of the core ERP.

The figure below highlights the the City currently uses 18 systems which is costly and inefficient.



The City of Kalamunda will implement a new enterprise resource planning system with the following principles underpinning any selection criteria:

1. The City will buy an enterprise resource planning system before building one;

2. Prioritise software that meets the majority of the City's needs and only requires configuration, over one that requires extensive customisation;
3. Prioritise low cost functioning software, over one that contains premium features.

This will ensure costs are kept to a minimum, complexity is reduced, upgrades are seamless, support is improved, and configuration of the backend of the system is standardised. The new ERP will affect all areas of the organisation, improving transparency, capability, and efficiency.

Accessibility for residents, suppliers and partners via the internet, is an important area for improvement. Current system capability can only allow for debtors, rates, infringements, and building application payments via the internet. The capabilities of the new ERP will allow for expanded services online, that better connect the City of Kalamunda with its residents.

Delivering data analytics to enable the City of Kalamunda to design, improve and evaluate its services, operations and policies is based on good data insights.

City of Kalamunda services, operations and policy decisions need to be as intelligent as they can be. Data is a valuable asset that can help us improve the quality and efficiency of services. This means using good data insights to inform what we do, from design to delivery.

We seek to improve transparency, enable continuous improvement, and increase our flexibility in the face of change through the use of data, and data driven decisions.

2. Develop a Digital Factory

A digital factory is a "construction site" where digital change happens. People work closely together to form cross-functional teams to use repeatable processes to build specific products. A digital factory will be utilised throughout the duration of the ERP project. Its potential to be used on other projects will be undertaken on a case by case basis, and will be subject to resourcing, operational and budget requirements as agreed to by all relevant parties.

"A Digital Factory is an organisational model for creating and maintaining one or more digital products, services, or experiences. An organisation may stand up any number of Digital Factories. Each Digital Factory is composed of a vertically aligned, cross-functional team that fully addresses the lifecycle elements of

digital product creation – from business opportunity analysis and epic/user story development to backlog management, application development, testing, deployment, and ongoing operations." (Micro focus, 2023)

Small cross functional project teams working closely with the oranisation act as an internal start-up. An opt-in opportunity also allows interested stakeholders and experts to be involved, with the approval of their Business units. TheDigital Factory will help delivery of digital products and services by integrating digital and business knowledge and capabilities at the start of any digital development.

Working in the Digital Factory will increase the digital literacy and agility of our people throughout the organisation. This in turn will drive innovative practices which will improve our drive to providing digital products which are citizen centric at their core. Lastly, new skills and lessons learnt in the Digital Factory may increase staff retention throughout the organisation.

The Digital Factory's first priority will be the selection and implementation of a new ERP.

Large parts of the City's IT infrastructure and hardware which previously required a strong technology focus, now resides on cloud platforms. Through the transition to cloud, the focus of the ICT team has been less on the actual technology itself, such as physical hardware, and more on the identification and provision of digital services. To reflect this change in focus from a hardware only focus to the use of digital services to provide solutions, the business unit will be rebranded as 'Digital and Innovation Services'.

3. ENHANCE Digital Infrastructure

Digital infrastructure are foundational services that are necessary to the information technology capabilities of a city or organization.

This includes where our servers and data are stored, the networks which connect them, and how we access the services provided by the infrastructure. The refresh of our digital infrastructure environment is the first step towards enabling the implementation of a new ERP system.

By designing our Digital Infrastructure with protected backups and robust network and data management designs, we reduce our risks to Cyber attacks and increase Disaster Recovery capabilities; further stabilising our Business Continuity Plans.

The application of these new technologies, will allow us to take advantage of potential technology changes and advancements over the next 5 years of our contracted service agreements.

What will we be doing to enhance our Digital Infrastructure stance?

A major focus is on ensuring the access to this infrastructure is stable, resilient, accessible and secure. The strategy includes increases in performance by providing faster networks with faster server environments and more portable options for core staff to access the City's services. Lastly, this strategic objective ensures that all relevant and required data is recoverable.

How will we enhance the Digital Infrastructure at City of Kalamunda?

1) Datacentre Review
   a) Increase in available storage and performance increases in preparation for a new ERP
   b) Cyber-resilient backup strategy

2) Telecommunications Review
   a) Faster networks with increased resiliency

3) Disaster Recovery
   a) The ability to recover services and functionality in the event of a disaster are paramount to securing a business against loss of services and revenue. The Disaster Recovery Plan has been reviewed and we have identified opportunities for improvement.

4) Device as a Service (DaaS)
   a) The provision of a DaaS ensures that City of Kalamumda employees have modern, contemporary devices to conduct their work activities.
   b) This service will include the procurement of devices such as desktops, laptops and tablets.
   c) Further, the service includes the deployment of these devices to the organisation by a vendor, and the management of those devices over their lifecyle including their secure disposal at their end of life.

4. IT Governance and Human Capital Enhancement

What is IT Governance?

Governance in the context of IT is required to ensure that stakeholders requirements are evaluated to develop balanced, agreed upon organisation wide

objectives. Importantly, good governance sets direction through decision making and prioritisation of organisation requirements. Lastly, performance and compliance can be measured against agreed upon goals and objectives.

Why do we need IT Governance?

- In today's environment Digital transformation and technology enablement is intricately intertwined with organisational strategy. This uniquely increases the dependence of technology to the delivery of strategy while increasing the risk of using that technology.
- Good governance increases alignment between the organisation and technology requirements.
- It ensures the City's IT business unit sustains and extends the City's strategic objectives.
- Deliver accountability via clear measurement.
- Transparency via the publishing of roadmaps
- Collaboration is increased by the establishment of a formal IT Steering Committee, allowing for increased feedback

What is Human Capital?

The COVID-19 pandemic has increased the focus on technology teams and their contribution to the organisation. Ensuring appropriate technologies are in place, and supported by a highly motivated and skilled technology workforce has become a priority in the pandemic era.

There is a significant demand for technology professionals driven by record global commodity prices, driving resource companies to offer significant compensation packages. The pandemic has also forced other companies to aggressively recruit technology people, as they are forced to upgrade their systems, leverage technology allowing people to work from home, and defend against increased cyber threats.

This competitive labour market challenges the ability of the City to recruit and retain highly skilled ICT staff.

This strategy does not propose an increase in staff outside of project staff required for the ERP project. However, increasing the capability and capacity of members of the ICT team is a central strategic objective. Developing the team's skillset in the areas of business analysis, project management, vendor management and business automation, are core in ensuring the organisation leverages contemporary technologies. The team's skillset will be enhanced by attending relevant courses where approved.

We will apply IT Governance (Non Project related governance) & Human Capital at the City of Kalamunda by:

- Internal and external audits
- Clear reporting of progress utilising the Corporate Reporting System
- Quarterly reporting to Kalamunda Leadership Team
- Quarterly IT Steering Committee meetings
- Publishing of roadmaps over the course of the year.
- Defined process for the procurement of software, hardware and services which analyses business need and benefit, and considers cyber risks
- Develop capability and capacity of ICT Team in areas of business analysis, project management, and business automation.

5. Staying Safe

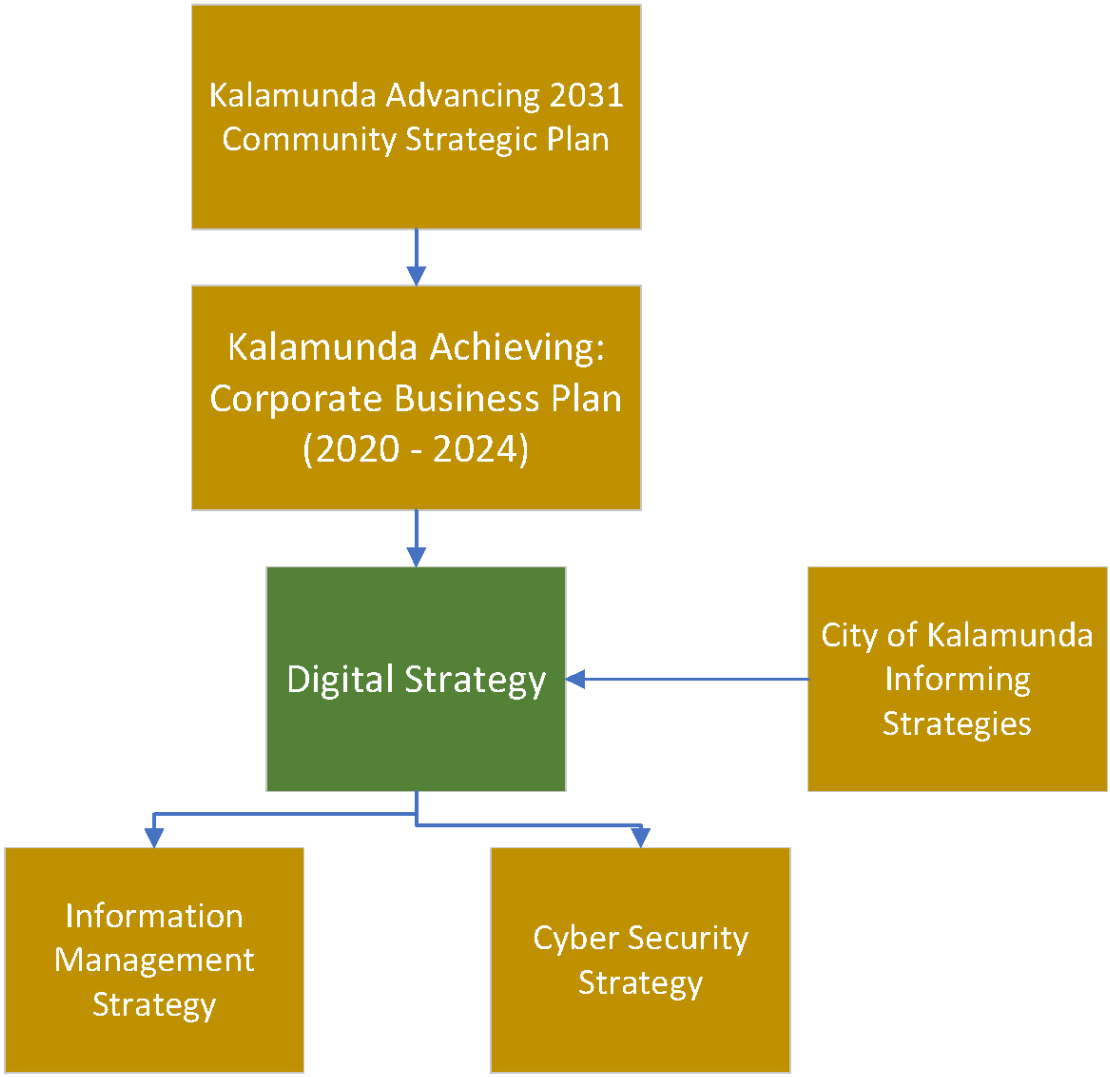
An increasing dependence on digital and technology systems has dramatically shifted how organisations and consumers function. The COVID-19 pandemic lockdowns requiring people to work from home has accelerated the adoption of technology. This technology is often provided and supported by third parties, increasing the City's vulnerability landscape.
To continue safely and securing the benefits that technology delivers, the City will focus on the following:

a) Protection against Ransomware
b) Australian Cyber Security Centre Essential Eight Cyber Security model alignment
c) Mitigation of risk of exploitation of security vulnerabilities
d) Training of City Staff
e) Update supply chain contracts with cyber security provisions
f) Business email compromise
g) Implementation of a managed cybersecurity service
h) Define and endorse the process for reviewing the onboarding of any new software, hardware and services

Relevant Strategies and Plans

The following Strategies and Plans drive the Digital Strategy:

1. Kalamunda Advancing: Strategic Community Plan 2031
2. Kalamunda Achieving – Corporate Business Plan 2021-2025



Alignment with Strategic Community Plan

The Digital Strategy directly aligns with the following objective in the Strategic Community Plan – Kalamunda Advancing

Objectives	Strategies	Success Measurement
4.1 To provide leadership through transparent governance	4.1.1 Provide good governance	
	4.1.2 Build an effective and efficient service based organisation	• Deliver Digital Strategy

The City of Kalamunda's Digital Strategy aligns with the State Government Digital Strategy 2021 - 2025, in terms of their stated strategic priorities of:

1. Better Services
2. Informed Decisions
3. Safe and Secure
4. Digitally Inclusive

These priorities underpin the City of Kalamunda's Business Drivers, and what we seek to achieve.

Strengths and weaknesses

Strengths

- Great customer service
- Staff are aware of cyber threats
- Current infrastructure allows for great working from home experience

Weaknesses

- Enterprise resource planning system is not fit for purpose or citizen centric
- Records system received strong negative feeback from ICT Survey
- Multiple systems implemented to overcome current system shortcomings
- Poor IT staff retention due to high deman for IT personnel
- Aging computers and laptops
- No centralisation of data

Opportunities

- New breed of enterprise resource planning systems entering into market
- Aritifical intelligence to improve community experience interactiing with the City
- Automation of repetitive processes
- Mobility of staff - bring the information to them
- Improved analytical tools to inform decisions
- Ability to provide information 24x7 to the community

Threats

- Cyber threats such as criminals and malicious software and ransomware
- Loss of suppport on current enterprise resource planning system
- Loss of staff due to poor experience with current enterprise resource planning system

Risk Analysis

In its current state, the City remains tied to an inflexible enterprise resource planning system, which stifles innovation and efficiency. By remaining on the current system, there is an increasing risk of:

- The City suffering data loss, or worse a data breach
- A constant increase in staffing costs, as the inefficiencies of the current systems are offset by the addition of more staff
- Duplication of effort, meaning that staff are not completing value adding work, but are working to cover the inadequacies of the current systems
- Increasing data corruption, requiring re-entry and journalling that affects audit results
- Data collected not being used in an impactful manner on future planning
- Increased exposure to cyber threats as the current system doesn't follow modern, contemporary practices, and has limited audit functions
- Lack of integration with other systems requiring the City to utilise other completely separate systems to close capability gaps

By moving to the future state through the implementation of the Digital Strategy, the City will reduce the risks identified above. Importantly, implementation will also:

- Speed up access to data and increase the integrity and reliability of data
- Make it easier to introduce new digital solutions where there is a capability gap in the new ERP
- Better protect the City's digital assets through modern security architecture
- Significantly increase the mobility of staff when working in the field
- Make use of current, contemporary disaster recovery and business continutity practices, reducing its potential downtime caused by an incident

It should be noted timeframes contain forward looking information and are subject to resourcing constraints, financial constraints, and availability of vendor responses, solutions and their implementation timeframes. While these constraints have the potential to affect timeframes in all strategic objectives, ERP is at the most risk of timeframes shifting.

Key Focus Areas

1. Key Focus Area 1 - Implementation of a new Enterprise Resource Planning System (ERP)

Strategy	Actions	Evaluation Measures	Timeframe
1.1 Engaging Change Management	1.1.1 Identify key business stakeholders and innovators who will contribute most to future digital services and will be affected by the new ERP initiative	Change management team established Change management plan endorsed Change management practices embedded Project information portal established	April 2023 April 2023 April 2023 April 2023
1.2 Establish Project Governance	1.2.1 Establish project governance that is flexible, adaptable to meet the evolving governance requirements throughout the different stages of the project.	Identify role project governance will undertake at different stages throughout project Project governance framework established Project governance team established	March 2023

Strategy	Actions	Evaluation Measures	Timeframe
		No new IT projects unless authorised by project governance team	
1.3 Business Requirements Analysis	1.3.1 Undertake City business requirements analysis	Develop a business requirements analysis roadmap, which provides visibility to the organisation as to when their requirements will be captured Identify and prioritise pain points and quick wins Ensure all relevant business processes are reviewed and mapped Develop business requirements to be used for the evaluation, selection and purchase of an ERP	March 2023
1.4. Release ERP Tender to Market	1.4.1 Procurment to advertise ERP Tender		June 2023

Strategy	Actions	Evaluation Measures	Timeframe
1.5 Enterprise Resource Planning System (ERP) purchase	1.5.1 Work with Financial Services to procure a new ERP that can be phased in over the next five years	Tender approved by Council, contract entered into with specific phased in modules, that ensure costs are absorbed over a period of time, and change management is effective.	November 2023
1.6 Implementation	1.6.1 Setup data migration, integration and automation with the new ERP	Integrate Library Management System, Facilities Management System with the new ERP. Ensure that when a legacy module has not been replaced with a new ERP module, that manual entry is reduced to the minimum.	December 2024
	1.6.2 Provide Business Analysis of current processes, modify and uplift into the new ERP	Processes are adjusted, and accepted by each Business Unit, to take advantage of the capabilities of the new ERP.	February 2024
	1.6.3 Develop Workflows to	Automation, through the ERP	December 2024

Strategy	Actions	Evaluation Measures	Timeframe
	make processes repeatable and automated to the largest extent possible	Workflows, or Power Automate, is used where repeatable processes are used	
1.7 Replacement of the Enterprise Content Management System (ECM)	1.7.1 Replace Altus ECM with a system integrated fully with the new ERP	The integrated records system will allow automatic registration of documents as staff add or create within the system.	June 2025
	1.7.2 Migrate data and documents from Altus ECM and SynergySoft to the new ECM	All documents will be centralised for searching and ease of access	June 2025
	1.7.3 Move documents from network drives to SharePoint Online or the new ECM Create a stakeholder management plan and training plan for record keeping, and the new ECM	SharePoint Online will allow for the automated compliance for staff with the State Records Act 2000 The Stakeholder management plan will provide guidance for how records staff will provide support, power user onboarding and training for staff	December 2025

Strategy	Actions	Evaluation Measures	Timeframe
1.8 Consolidation of software, to reduce costs and take full advantage of the new ERP System capabilities. A strategy of best system rather than best of breed.	1.8.1 Identify duplication of capabilities and setup a roadmap of planned additions/removal of software that is planned out with stakeholder input	Software subscriptions are reduced, and complexity removed from systems to stakeholders	January 2026
	1.8.2 Data migration of data from redundant software, to ensure no data is lost	Data is held either in the new ERP, SharePoint Online or the City of Kalamunda's SQL database. All documents are captured into the new Records System	January 2026
	1.8.3 Implementation of modules that takes full advantage of the capabilities of the system	When reviewing each software program outside of the ERP, the City will weigh the advantages of integration and seamless view for users over best of breed.	Each financial year
1.9 Improve online services for residents	1.9.1 Implement online payment capabilities of the new ERP	Residents able to pay for their Building Applications, Planning Applications, Health Permits	June 2024

Strategy	Actions	Evaluation Measures	Timeframe
		through the website, and it is automatically captured into the system	
	1.9.2 Implement online portal using the new ERP, which is a central contact point for the customers and customer service staff	Customers are able to lodge customer requests through the website, and receive updates via the portal	June 2024
	1.9.3 Implement a dynamic map of customer requests through Intramaps Public system	Customers are able to see de-identified information on other customer requests, to reduce duplication of requests.	March 2024

2 Key Focus Area 2 - Develop a Digital Factory

Strategy	Actions	Success Measures	Timeframe
2.1 Rebrand ICT to Digital and Innovation Services	2.1.2 Draft memorandum for CEO approval	Memorandum approved by CEO Review business unit position descriptions	April 2023
2.2 Develop Digital Factory	2.2.1 Identify key stakeholders Draft Digital Factory Framework	Identify, invite and meet with key stakeholders Approved Digital Factory Framework	April 2023 June 2023
2.3 Commission Digital Factory	2.3.1 Announcement of Digital Factory 2.3.2 Project Completion Review	Create SharePoint site providing details of Digital Factory Send email to organisation announcing Digital Factory Post implementation review	June 2023 On completion of project

** Timeframes contain forward looking formation and are subject to resourcing constraints, financial constraints, and availability of vendor responses, solutions and their implementation timeframes.*

3 Key Focus Area 3 - ENHANCE Digital Infrastructure

Strategy	Actions	Measurements	Timeframe
3.1 Transition to the new Datacentre	3.1.1 Move to a new datacentre in preparation for a new ERP	Complete tender process for new datacentre Migrate data to new datacentre Baseline datacentre performance Test disaster recovery and business continuity processes Go live with new datacentre Decommission old datacentre, including the cleansing of any City data from previous datacentre	April 2023
3.2 Tranistion to the new network	3.2.1 Provide faster network speeds and resiliency in support of the new ERP	Complete tender process for Telecommunications Review Migrate networks from existing provider to new provider Baseline network performance Test disaster recovery and business continuity processes	April 2023

Strategy	Actions	Measurements	Timeframe
		Go live with new network Decommission old network	
3.3 Disaster Recovery	3.3.1 Recover services and functionality in the event of a disaster	Implement system to test the failing of our Data Centre, without taking our services offline or affecting the Production environment Protect backups against Ransomware	April 2023
3.4 Device as a Service and Mobility	3.4.1 Release tender to market 3.4.2 Implement device as a service	Review leasing options for desktops, laptops and devices More portable options with laptops and BYOD Policy for staff to access the services and systems when outside of a City's site.	Dec 2023

4 Key Focus Area 4 - IT Governance and Human Capital Enhancement

Strategy	Actions	Measurements	Timeframe
4.1 Establish ICT Governance	4.1.1 Define and align to ICT Governance framework	Research, review and agree on ICT Governance Framework	December 2024
4.1 Commence ICT Governance	4.1.1 Implement agreed upon ICT Governance Framewok	Report progress on strategic objectives through the Corporate Business Plan Six monthly IT Steering Committee meetings Publishing of technology roadmaps at least annually Defined process for the procurement of software, hardware and services, which analyses organisation need and benefit, and considers cyber risks. Undertake surveys on	March 2024

Strategy	Actions	Measurements	Timeframe
		Digital team and services at least annually.	
4.2 Develop Human Capital	4.2.1 Develop capability and capacity of ICT Team in areas of business analysis, project management, and business automation.	Develop staff skills matrix and identify knowledge gaps Identify where knowledge gaps affect strategic objectives Create training plan for staff Centralise online training courses to improve access to IT courses for IT and general staff In conjunction with HR develop plans to retain IT staff Develop a succession plan	Jan 2024

5 Key Focus Area 5 - Staying Safe

An increasing dependence on digital and technology systems has dramatically shifted how organisations and consumers function. The COVID-19 pandemic lockdowns requiring people to work from home has accelerated the adoption of technology. This technology is often provided and supported by third parties, increasing the City's vulnerability landscape.

To continue safely and securing the benefits that technology delivers, the City will focus on the following:

a) Protection against Ransomware
b) Australian Cyber Security Centre Essential Eight Cyber Security model alignment
c) Mitigation of risk of exploitation of security vulnerabilities
d) Training of City Staff
e) Update supply chain contracts with cyber security provisions
f) Business email compromise
g) Implementation of a managed cybersecurity service
h) Define and endorse the process for reviewing the onboarding of any new software, hardware and services

Strategy	Actions	Measurement	Timeframe
5.1 Cyber Defences	5.1.1 Undertake two external penetration tests	Results of the two external penetration tests Correct any critical or high risk findings.	Each financial year
	5.1.2 Improve Cyber Defences	Undertake two social engineering exercises each year Undertake one security review each year focusing on an	Each financial year

Strategy	Actions	Measurement	Timeframe
		emerging or relevant issue	Each financial year
		Conduct vulnerability testing and patching	Monthly
		Purchase Cyber software as a service licence to protect against ransomware	Jan 2023
		Alignment to Australian Cyber Security Centre Essential Eight	Jan 2024
		Implementation of business email compromise risk mitigation	June 2023
		Research and evaluate implementation of managed cybersecurity service	Dec 2024
		Undertake cyber security awareness training for staff each year	Each financial year

Progress tracking

The progress tracking component of the framework is the means by which the City of Kalamunda will monitor improvements relating to the management of Information Communication Technology, data and information management practice capabilities.

Component	Description
Monthly Reporting	Reporting of progress on Actions and KPIs, reporting against responsible persons
Annual Report	Report on progress in Annual Report

Responsibilities

The Director of Corporate Services has overall responsibility for leading and monitoring the strategic direction of the City of Kalamunda's Information Communication Technology Management.

The Manager of Information Technology has direct responsibility for the strategic direction of Information Communication Technology Management.

The Coordinator Information Technology and the Coordinator Corporate Systems are responsible for implementing the strategic direction of Information Communication Technology at the City of Kalamunda.

Reporting

Monthly reports will be made to the Manager Information Technology.

Quarterly reporting through the Corporate Business Plan will be undertaken by Senior Management.

Review

The Information Communication Technology Strategy will be reviewed regularly, with actions constantly being reviewed to ensure they are still relevant and on target. A minimum of a monthly review of actions is required.

The overarching plan should be reviewed annually, to ensure that it still reflects the Strategic Direction of the City of Kalamunda.

Endorsed

Jamie Paterson – Manager Information Technology: _____

Dated:

Gary Ticehurst – Director of Corporate Services: _____

Dated:

Rhonda Hardy – Chief Executive Officer:_____

Dated:

Appendix 1 – Business Drivers Analysis

Enterprise Resource Planning

This is the City's highest strategic priority, and must be a central focus throughout the period of this strategy.

The City has been utilising its current Enterprise Resource Planning system ("ERP") since 2001. This system has now reached the end of its useful life and hampering efforts to proactively serve the City's community and customers more efficiently. In an effort to workaround weaknesses in the current system, more systems have been introduced. This has created a complicated technology landscape, with duplicated effort and poor integration.

In preparation for a new ERP the City has undertaken steps in identifying business processes and mapping them. In particular the City's Customer Service and Finance processes have been reviewed extensively. The City has also undertaken an initial review of the current market and identified there are a number of ERP modern, contemporary systems available which will meet City business and community requirements.

To be successful the City will:

- Implement a strong change management program;
- Source dedicated, appropriately skilled project resources;
- Establish an agreed upon project governance framework; and
- Ensure all areas of the organisation are consulted and involved.

A new ERP will support all areas of the organisation to focus on community needs, by allowing the City to work smarter, with more efficiency and with reduced costs. This system will support and provide improved ways of working.

New Ways of Working

The past two years have fundamentally changed the way organisations and society view traditional work practices and spaces. Work is a process that people do and not a place to go to. An emerging trend as a result of the COVID-19 social distancing requirements is physical attendance at an office does not guarantee productivity. Certainly, it has been the City's experience that its employees have adapted to new ways of working, which has increased productivity. Technology supporting collaborative practices between people and teams without needing to attend an office have matured rapidly over the past two years. Their uptake has increased significantly with Microsoft reporting on 25 January 2022 that it has surpassed 270 million monthly active Microsoft Teams users. This is up from 20 million monthly (pre-pandemic period) active Microsoft Teams users in January 2020.

Flexible working arrangements have quickly become a key recruitment value proposition. To remain competitive and attract and retain talent the City must:

1) Develop best practice cyber security policies and procedures to support employees working from home, and to protect City digital assets;
2) Enable the mobilisation of the workforce through technology such as firewalls, laptops and tablets;
3) Build and maintain technology infrastructure such as fast networks and datacentres that support a mobilised workforce;
4) Continuously review its Enterprise Resource Planning software and application landscape to ensure it is driving efficiencies and savings.

Acceleration and Consumerisation of Automation

The past two years have seen a dramatic increase in the capability and use of automation and artificial intelligence.

To successfully adopt automation in the City of Kalamunda's processes, there is a need to focus on the short-term but plan for the long-term.

With the advent of products such as Microsoft Power Automate, office automation which was previously out of reach due to limiting factors like complexity and cost, is now within reach, ready to be utilised by the City. The goals that will drive the decisions of when to automate are:

1. Reduction of duplication of work
2. Improved customer experience
3. Improved efficiency through automated tasks and movement of data
4. Increased accuracy of data

The City will implement and utilise this technology to undertake:

1. SharePoint Online integration and data centralisation
2. PowerApp development and integration, for the replacement of small databases and centralising of data
3. Integration of data with the new ERP
4. Automation of reporting through the integration of Power BI and Power Automate
5. Improving staff capability in the use of automation tools by identifying power users, and building their skills

Increased Cyber Risk

With the increased use of technology and geopolitical unrest comes an inherent increased risk from cyber threats and criminals. In the past two years threats have predominantly been either state sponsored threats, exploitation of the COVID-19 pandemic, or ransomware attacks. Of concern, has been the acceleration of exploitation of security vulnerabilities in systems.

State Sponsored Threats

Nation States and state sponsored actors regularly launch cyber attacks against other Nation States and strategic interests. Economic, policy, legal and information interests are frequently targeted to gain a strategic advantage. Nation States may also seek to disrupt or influence strategic interests via misinformation campaigns. Australia has been subjected to several of these attacks, which have increased in frequency and intensity.

In June 2020, the then Prime Minister Scott Morrison took the unprecedented step of informing the Australian public that Australian governments and industries were under sustained major attacks. Due to the level of sophistication of the attacks, it was declared these attacks against critical infrastructure and services could only come from a state sponsored or based actor.[1]

The defining features of these attacks are there levels of sophistication, high levels of available resources, patience and persistence. To successfully defend against these attacks the City would need to significantly increase its budget and testing regime.

[1] https://www.smh.com.au/politics/federal/morrison-reveals-malicious-state-based-cyber-attack-hitting-several-sectors-20200619-p5545z.html

Exploitation of the COVID-19 pandemic

During the COVID-19 pandemic, cyber criminals exploited Australians working from home due to lockdowns and social distancing requirements. Sophisticated phishing email campaigns were developed seeking to leverage COVID-19 related topics to gain access to systems or for financial gain. These campaigns have been extremely successful and have led to expanded phishing campaigns and the development of an open market for those wanting to undertake cyber crimes for financial gain. A recent development in the cyber crime space, has been the commercialisation of cyber tools and techniques, allowing non technical people to 'hire' tools and techniques.

The defining features of these attacks are the impersonation of well known brands, logos and email domains, in an attempt to gain financial or personal identity information, which can be exploited or sold on the dark web. The City utilises education and a number of systems to defend against these attacks.

Ransomware Attacks

Ransomware attacks have grown significantly within Australia during the past two years, with cyber criminals gaining access to better tools, and their willingness to attack organisations and vulnerable members of society. Attacks are delivered mainly through email and are easy to setup using tools available on the dark web. Ransoms can range from a few hundred dollars to millions of dollars.

Over the past twelve months, ransomware extortionists have evolved their strategy, and threaten to release sensitive data if victims fail to pay the ransom. Ransomware can be debilitating and potentially affect a business or organisation for months.

The defining features of ransomware attacks, are their good use of social engineering to have a person unwittingly install software on their computers, and its rapid spread across networks. The City uses software designed to prevent the rapid spread of ransomware across its networks.

Exploitation of security vulnerabilities

In previous years technology staff had a number of months to plan and implement security patches for known software vulnerabilities. Over the past two years there has been an increase in rapid exploitation of known software vulnerabilities, with attacks now occurring within hours of public disclosure.

Organisations who failed to apply security patches to their Microsoft Exchange Servers in a timely manner in early 2021, were almost certainly compromised. The City mitigates against this risk by aggressively applying critical security patches when released by software vendors.

Appendix 2 – Figures

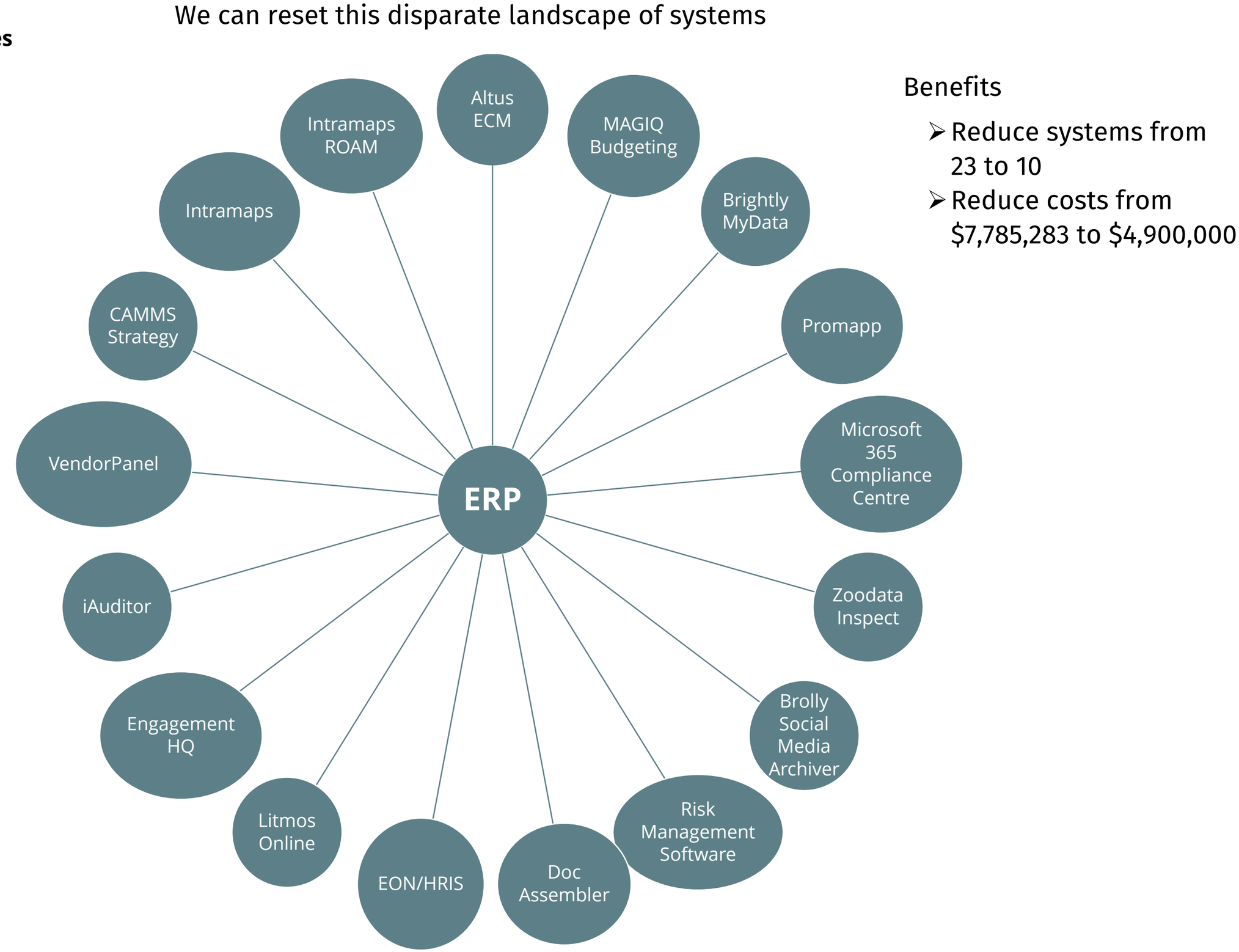


Figure 1 – Disparate Systems currently used to work around SynergySoft

Current State

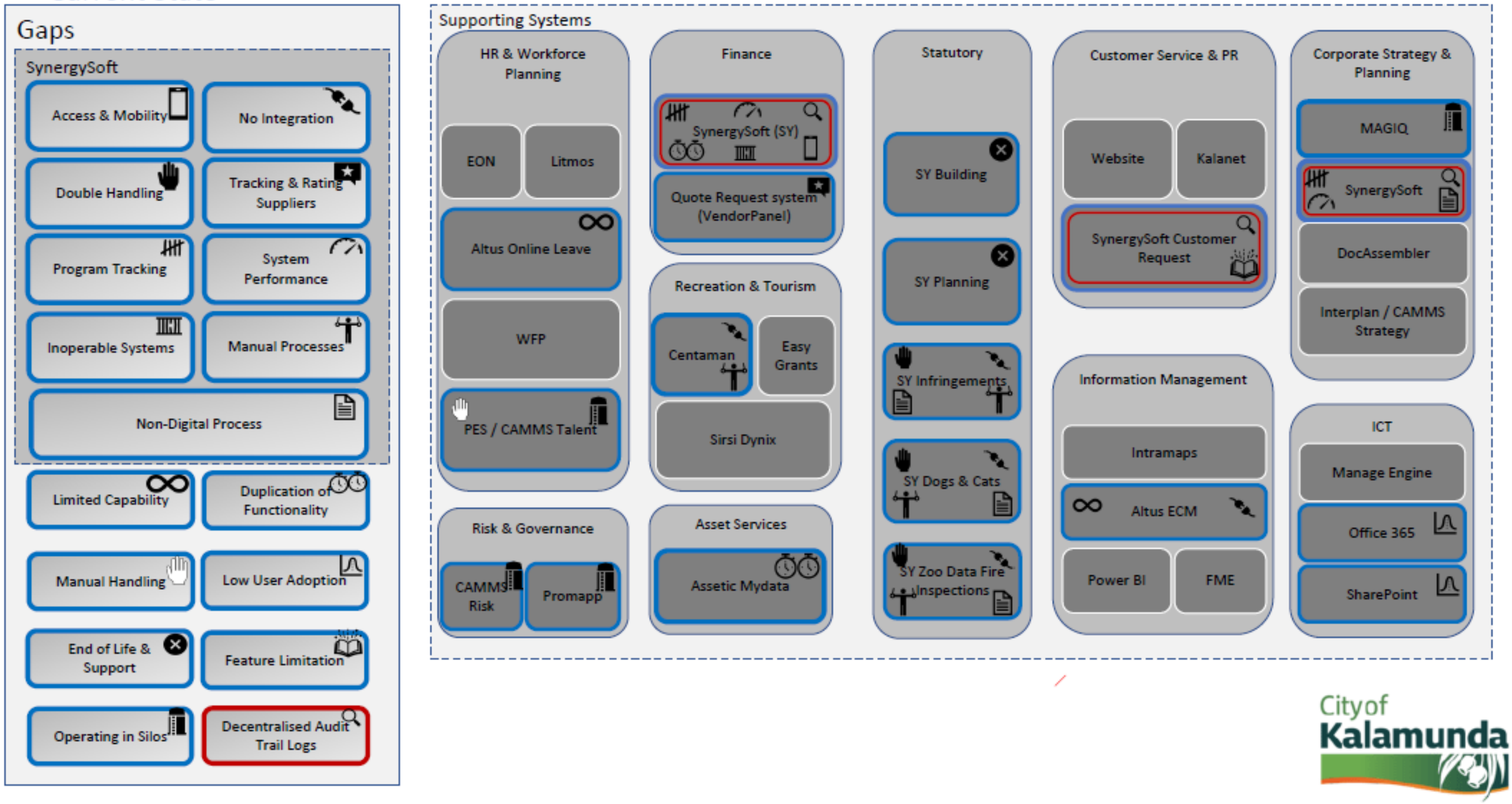


Figure 2 – A view of the Gaps and current supporting systems

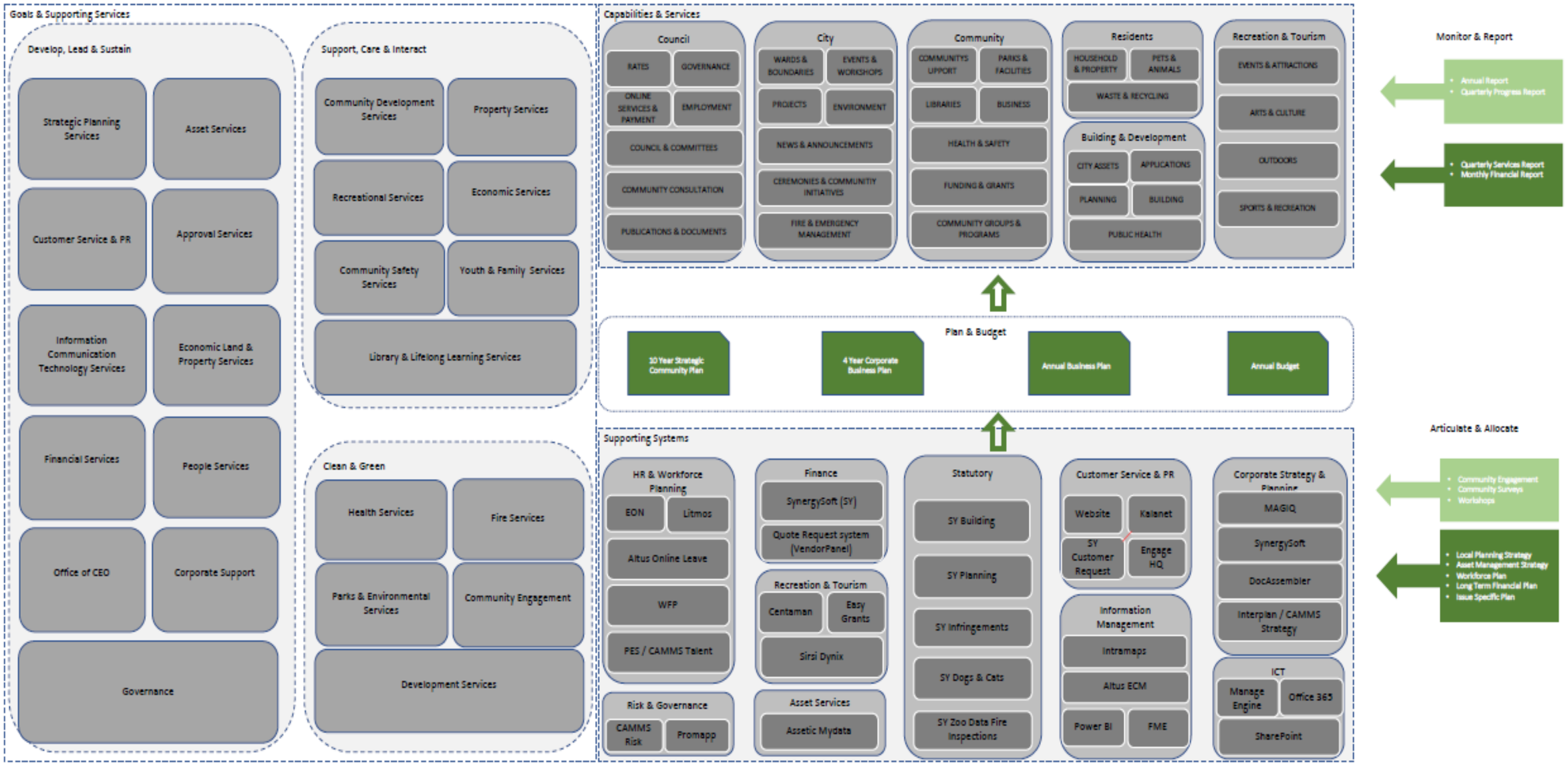

Goals & Supporting Services
Develop, Lead & Sustain
Strategic Planning Services
Asset Services
Customer Service & PR
Approval Services
Information Communication Technology Services
Economic Land & Property Services
Financial Services
People Services
Office of CEO
Corporate Support
Governance
Support, Care & Interact
Community Development Services
Property Services
Recreational Services
Economic Services
Community Safety Services
Youth & Family Services
Library & Lifelong Learning Services
Clean & Green
Health Services
Fire Services
Parks & Environmental Services
Community Engagement
Development Services
Capabilities & Services
Council
RATES
GOVERNANCE
ONLINE SERVICES & PAYMENT
EMPLOYMENT
COUNCIL & COMMITTEES
COMMUNITY CONSULTATION
PUBLICATIONS & DOCUMENTS
City
WARDS & BOUNDARIES
EVENTS & WORKSHOPS
PROJECTS
ENVIRONMENT
NEWS & ANNOUNCEMENTS
CEREMONIES & COMMUNITY INITIATIVES
FIRE & EMERGENCY MANAGEMENT
Community
COMMUNITYS UPPORT
PARKS & FACILITIES
LIBRARIES
BUSINESS
HEALTH & SAFETY
FUNDING & GRANTS
COMMUNITY GROUPS & PROGRAMS
Residents
HOUSEHOLD & PROPERTY
PETS & ANIMALS
WASTE & RECYCLING
Building & Development
CITY ASSETS
APPLICATIONS
PLANNING
BUILDING
PUBLIC HEALTH
Recreation & Tourism
EVENTS & ATTRACTIONS
ARTS & CULTURE
OUTDOORS
SPORTS & RECREATION
Plan & Budget
10 Year Strategic Community Plan
4 Year Corporate Business Plan
Annual Business Plan
Annual Budget
Supporting Systems
HR & Workforce Planning
EON
Litmos
Altus Online Leave
WFP
PES / CAMMS Talent
Risk & Governance
CAMMS Risk
Promapp
Finance
SynergySoft (SY)
Quote Request system (VendorPanel)
Recreation & Tourism
Centaman
Easy Grants
Sirzi Dynix
Asset Services
Assetic Mydata
Statutory
SY Building
SY Planning
SY Infringements
SY Dogs & Cats
SY Zoo Data Fire Inspections
Customer Service & PR
Website
Kalanet
SY Customer Request
Engage HQ
Information Management
Intramaps
Altus ECM
Power BI
FME
Corporate Strategy & Planning
MAGIQ
SynergySoft
DocAssembler
Interplan / CAMMS Strategy
ICT
Manage Engine
Office 365
SharePoint
Monitor & Report
Annual Report
Quarterly Progress Report
Quarterly Services Report
Monthly Financial Report
Articulate & Allocate
Community Engagement
Community Surveys
Workshops
Local Planning Strategy
Asset Management Strategy
Workforce Plan
Long Term Financial Plan
Issue Specific Plan

Figure 3 – Goals and Supporting Services, with Supporting Systems

Interim Priority Actions

(Red denotes priority actions from IT Survey)

A snapshot of what we want to achieve:

- ICT Strategy endorsement
- Continued strong focus on disaster recovery fundamentals and testing
- Continue to mature the City's cybersecurity posture
- Datacentre migration, network upgrade
- Review of City wide applications
- Continue to be responsive to COVID-19 requirements (Council meetings, working from home)

Figure 4 – Priority actions prior to endorsement of Digital Strategy

Figure 5 – Goals

Appendix 3- Consultation

The City of Kalamunda has aligned its Digital Strategy with the Digital Strategy for the Western Australian Government 2021-2025 and consulted internally in the development of this strategy. Internal consultation was in the form of:

- Employee engagement staff survey, the five highest priorities identified from the survey were:
    1. Effective IT Systems and technologies
    2. Access to equipment & resources
    3. Communication across the organisation
    4. Team spirit
    5. Policies and procedures

- The IT Survey (Dec 2021), to all staff on current systems and capabilities, with the major concerns identified being:
    1. SynergySoft (ERP)
    2. Altus ECM (Enterprise Content Management System)
- As a result of the IT Survey (Dec 2021), the top three needs of staff were identified as:
    1. IT staff have skills to effectively perform their roles
    2. IT staff are responsive to issues
    3. IT Staff provide reliable solutions to issues

- Further consultation included:
    1. Power User feedback survey on specific software, to understand the failings of the current systems
    2. Business Analyst discussions with key staff in each Business Unit
    3. Coordinator and Executive Meeting discussion

The consultation company JourneyOne were contracted to provide a review of current and future system landscapes. The results of that review were played back at an Executive and Council level, with the most significant finding being the need to replace the ERP as a priority item. Appendix 2 provides a diagrammatic view of the work undertaken by JourneyOne.

2022 Employee Engagement Results (Lower Scorce = Bigger Issue)

Key Focus areas to make the City a great workplace

Item	Count	Ranking	IT Related
Access to Equipment and Resources	26	1	Partially
Effective IT systems and technologies	24	2	Yes
Communication across the organisation	24	2	Partially
Team Spirit	20	4	All
Effective policies and processes	15	5	Partially
Professionally managed organisation	12	6	All
Access to training opportunities	12	6	All
Safe and healthy work environment	10	8	All
Good employee benefits	6	9	All
Flexible work	6	10	Partially
Fair pay	6	10	All
Top down communication	5	12	All
Manager encourages ideas	5	12	All

IT Survey Results 2021

Question	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Grand Total
Critical business information is adequately protected	2	3	27	23	6	61
I know how to spot a phishing email and what to do	0	3	7	36	17	63
IT systems are easy to use	6	22	10	20	2	60
IT systems provide excellent support for business processes	11	14	14	14	5	58
Overall, I am satisfied with IT's performance	3	15	18	20	7	63
The IT staff are professional	1	3	19	25	14	62
The IT staff are responsive to issues	3	14	17	21	9	64
The IT staff have the skills to effectively perform their jobs	1	6	18	27	8	60
The IT staff provide reliable solutions to issues	2	9	21	22	6	60

Question	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Grand Total
The right information is provided to me in the right format for me to operate efficiently	5	10	17	25	6	63
We are provided with effective IT Tools to do our jobs	8	20	19	13	2	62
Grand Total	42	119	187	246	82	676

Appendix 4 - Legal and Legislative Requirements

Australian/International Standards Applied

ISO – 35.020 for Information Technology

ISO IEC 20000-1 Information Technology Service Management

ISO 27017 Security Controls for Cloud Services

AS ISO 15489 for Records Management

Legal Obligations

Information Communication Technology at the City of Kalamunda is affected by the following Acts and Regulations:

- Local Government Act 1995
- Public Interest Disclosure Act 2003
- Building Services (Registration) Act 2011
- Criminal Code 1913
- Electronic Transactions Act 2011
- Interpretation Act 1984
- Workers Compensation and Injury Management Act 1981
- Equal Opportunity Act 1984
- State Records Act 2000
- Evidence Act 1906
- Freedom of Information Act 1992 and Regulations 1992