

# Digital Transformation Strategy

## ‘Tipping the balance’

### Executive Summary

Council strives to provide a broad range of high quality services to the Darebin community. The business capabilities required to deliver these services include staff expertise and a variety of tools from heavy machinery to business processes and systems.

The Digital Strategy will set out a clear approach to strengthening Council’s capabilities from a digital business perspective.

The strategy will pave the way through the challenges described below under the section ‘current business situation’, and will provide a clear approach to overcoming the obstacles blocking Council’s ability to deliver an exceptional service to the community.

The underlying strategic theme of ‘Tipping the balance’ will ultimately improve services to the community; the following outlines the changes required to cause a larger, more transformational change.

| From...  | To...   |
|--|---|
| Accepting the limitations of systems in how digital services are delivered i.e. being ‘vendor led’.                      | Designing services that are customer centric using systems that are adaptable and future focused. |
| Staff being burdened with high administrative overheads caused by systems. Being forced to defending Council’s position. | Staff being freed to serve the community through genuine two-way engagement.                      |
| Hosting and providing services in-house.   | Partnering with external vendors for more efficient service delivery.                             |
| Being locked into conventional ways of working.  | A mobile enabled workforce.   |
| ‘Inside out’ – designing services from the viewpoint of the organisation’s structure and current capabilities.           | ‘Outside in’ – designing services from the viewpoint of the stakeholder <sup>1</sup> .            |

<sup>1</sup> A Stakeholder includes any person or business connected with Council

## The current business situation

A good strategy honestly acknowledges the challenges we face and provides an approach to overcoming them.

This section provides an assessment of the current business situation and the challenges grouped by service type<sup>2</sup>.

Each identified service type was rated against the following stages of maturity referred to as ‘Business Situations’ to indicate the extent of the challenge faced:

- **Start-up:** Capabilities need to be assembled (people, financing, and technology) to get a new service or function off the ground.
- **Turnaround:** Saving a function or service widely acknowledged to be in serious trouble
- **Accelerated growth:** Managing a rapidly expanding area of business.
- **Realignment:** Reorganising a previously successful function that now faces problems.
- **Sustaining success:** The function is performing well and running as ‘business as usual’.

| Service type  | Business Situation | Challenge  |
|---|--------------------|--|
| <b>Customer e-Services</b><br>The online channel through which citizens transact with Council.  | Turnaround         | The online user experience could be vastly improved by a full replacement of the current portal.   |
| <b>Customer request fulfilment</b><br>The delivery of service requests to the community.  | Turnaround         | Council staff use a myriad of disjointed business systems and processes to fulfil service requests and services. An opportunity exists to introduce transformational changes to streamline delivery practices and to realise significant efficiencies. Further Council does not have a single view of the stakeholder <sup>3</sup> . |
| <b>Smart Cities</b><br>This broad area is broken down into two areas:<br>1. Digital access: For example Council’s public WiFi offering for the disadvantaged in particular; OpenData initiatives to facilitate building publicly available Council information into apps. | Accelerated growth | Council is quite advanced in this area and has sensory devices operating in the field. E.g. water delivery, lighting, cameras on garbage trucks.<br><br>An opportunity now presents to formalise and package the many current initiatives into a SmartCity agenda to multiply the effectiveness of effort.                           |

<sup>2</sup> This ongoing work commenced over three months ago and is being led by the Director of Corporate Services and the Manager of Digital and Information Services. The authors acknowledge and thank the Executive Leadership Team and Managers for their contributions.

<sup>3</sup> Stakeholder includes any person or business connected with Council

| Service type  | Business Situation | Challenge   |
|---|--------------------|---|
| <p>2. Internet of Things (IoT): Council's ability to make strategic and operational use of vast streams of information flowing from appliances in the field for a more sustainable environment. E.g. traffic flows; utility optimisation; health management; and machinery.</p> |                    |   |
| <p><b>Connectivity</b><br/>The infrastructure through which computers communicate within Council (LAN); Council's connection to the internet (WAN).</p>   | <p>Realignment</p> | <p>Critical components of the network infrastructure are outdated and its capacity will not meet future demands as Council transitions into a truly digital landscape. The ageing public and private WiFi requires consolidation and renewal.</p> |
| <p><b>Internal systems used to serve the Darebin community</b></p>  | <p>Turnaround</p>  | <p>Council's core systems are up to ten years old, costly to maintain, and result in inefficient work practices. The lack of research and development by many of the vendors compound Council's predicament in this area.</p>                     |
| <p><b>High availability of Council services to the community</b><br/>Council's ability to rehearse, and then execute if required, a formalised plan to reinstate systems following a disaster.</p>  | <p>Realignment</p> | <p>The current IT Infrastructure design is vulnerable with the fail over data centre only a few hundred metres from the primary data centre. An enduring Business Continuity plan requires a full redesign.</p>                                   |

## Strategic Objectives

The current business situation described above includes a diagnosis of the challenge; this section provides an overall approach to cope with obstacles identified in the short term, and to overcome in the longer term.

Each of the strategic objectives below are accompanied by a real case study to demonstrate the importance.

## 1. Empowered and informed Community

Provide the customer with an outstanding experience when transacting with Council.

The community will have the ability to transact with Council through digital channels<sup>4</sup> that are beautifully designed and intuitive; that Darebin can be proud of. The design will be adaptable and sensitive to diverse customer groups.

The community will have easy online access to their touch points with Council such as: services provided; requests made and the status; and payment details.

Timely and relevant information will be pushed out to stakeholders based on their profile and digital footprint. For example alerts on: planned works; payments due; new relevant services; and reminders. New communication channels will facilitate fluid conversations with the community, for example community members actively help Council make decisions.

### CASE STUDY

#### 'vehicle crossover'

Sally set out to make an online request for a vehicle crossover through Darebin's website. Unfortunately Sally could not find the form online and called Customer Service 'CS' who emailed the link to the online application form. Sally could not use the form on her mobile phone because it wasn't mobile responsive, and couldn't use the form on her PC either because it was not intuitive. Sally called CS again who asked her to go into a Customer Service Centre to lodge the application in person along with the \$105 payment.

Sally didn't hear back for some days after the payment was made, and called Customer Service again who provided the phone number of the staff member handling the case. The staff member performed a physical inspection and phoned Sally to request another payment for the permit. The payment required Sally to either submit an application online with payment, or go to the Customer Service Centre again. Sally became exasperated at the thought of having make another payment after the last experience and stated her local Councillor would be contacted.

Sally then communicated directly with the staff member handling the case through to completion.

#### **Vision for the future:**

Sally successfully lodged the request from her mobile within a few minutes, and was messaged with a link to monitor the request in real time and was also provided a time line for completion. Sally was messaged as the request progressed through to completion. Upon completion Sally was invited to provide feedback on her experience.

<sup>4</sup> Channels such as: Council's website; social media; payment processes such as banks; direct debit

## 2. An effective organisation

Empower the organisation to deliver a seamless customer experience.

The business systems used by staff to serve the community will be designed to complete a customer request in the most efficient manner. Or from an internal perspective; empower staff to efficiently complete back-office processes.

Fragmented and disjointed systems will be updated and combined to meet current technology standards. Where feasible systems designed specifically for Local Government<sup>5</sup> will be replaced with powerful systems that can be adapted.

Staff will have access to all the information required to complete the customer request effectively. Smart information management and scheduling of works will bring efficiencies; for example all tree inspection information will be captured directly into systems and resulting maintenance works will be automatically mapped geospatially.

The training needs of staff will be met through a comprehensive and formalised plan.

### CASE STUDY

#### 'closing the loop'

Emilia in her 70s stumbled on cracked footpath outside her home and reported the matter to Council by phone. A Customer Service Request was assigned to Asset Maintenance '**AM**' for action. However AM use another system '**Hanson**' to manage their work and closed the request as 'completed' with the comment 'refer to Hanson'.

A few days later Emilia called Customer Service '**CS**' for an update; unfortunately Emilia had to wait some time for CS to find the request - the CS system is not easily searchable by customer name. The record was finally located by using another system called 'GIS' with the comment 'refer to Hanson'. CS typically use at least 4 disconnected systems. Emilia was kept on hold for another 5 minutes whilst CS called around trying to find the status. CS had to call Emilia back with the estimated repair date, Emilia was never informed the repair was completed but did notice the repair herself.

#### **Vision for the future:**

Emilia reported the matter to Council by phone and was immediately provided with the date by which the repair would be made. Emilia received a phone call reporting the repair had been made before the due date. This outcome was made possible because one Council system was used to track Emilia's request and Council officers had seamless access to all relevant information which came in from other systems.

<sup>5</sup> The Local Government ICT industry is small, current such system functionality evidences little research and development.

**CASE STUDY**

**'family care'**

Sergio was a recipient of Home Delivered Meals for many years, he passed away and his grieving family informed his care givers who put a stop on all future services. A few months later rate notices were issued to Sergio.

**Vision for the future:**

One 'source of truth' was updated by Sergio's care givers which rippled down into all systems such as the Rates system. This scenario did not occur.

### 3. A stable and secure technology environment

Provide a technology environment that is stable, secure and flexible.

Risks historically taken on by Council will be transferred to external partners that can deliver the services at a substantially lower cost due to their economies of scale – without compromising quality or security. For example the outsourcing of costly to maintain data centres will enhance Council’s business continuity capability in the case of a disaster.

Similarly Cloud based systems commonly referred to as ‘Software as a Service’ (**SaaS**) will be utilised where feasible; eliminating the need to procure expensive systems that are costly to implement and maintain on-site.

Up-to-date technology will be available by default, whether it be a network component or system version.

**CASE STUDY**

**‘power pole down’**

Early on Tuesday morning a truck hit a power pole on High St which caused a loss of power to Darebin’s data centre that houses Darebin’s mission critical business systems.

Thirty minutes later Darebin’s website and phone system went down, along with all the systems. Calls to Council were diverted to a third party who logged the call for future action.

The back-up power generator was manually started 45 minutes later and power resumed to the data centre, however not all key system Engineers were available to restart systems. Many office-based Council staff were either sent home or worked on task not requiring systems.

The following morning all systems were available again, however a massive backlog of requests remained for a now frustrated community.

**Vision for the future:**

The truck incident had no impact on Council because the data centre resided at another location in Melbourne, and was managed by a provider whose sole purpose was to run Data Centres. The provider had a number of interconnected data centres around Australia – so downtime could only result if Australia lost power.

#### 4. Mobility and the 'Internet of Things'

Enable the organisation to deliver services to the community anywhere, anytime.

##### **A mobile enabled and collaborative workforce:**

Communication models will dramatically change away from traditional voice and email. A mobile workforce will utilise collaboration and productivity tools; for example an asset inspection officer will stream video back to the depot to demonstrate the issue and arrange for the fast deployment of resources to resolve.

##### **Connectedness:**

Internet access for the public and staff will be expanded to cover the entire municipality.

The Internet of Things (**IoT**) will become mainstream; Council will have the ability to adjust levers to minimise Council's impact the environment. This will be achieved through a new level of sophistication in the management of appliances in the physical environment.

##### **CASE STUDY**

###### **'water and power'**

Late on a hot summer evening Council sprinklers automatically turned on and delivered pre-determined saturation level across the many sporting facilities. Street lighting illuminated the entire city between set hours.

###### **Vision for the future:**

On a hot summer evening heavy rainfall was forecast for the early hours of the morning; there was some rain but not the amount forecasted. Council sprinklers knew about this weather prediction and waited until 4am to make a decision to turn on. Sensory information from the ground reported back that only a top up was required following the rain fall – this smart approach and decision making process based on sensory information saved several hundred thousand litres of water.

The intensity of street lighting adjusted to the volume of vehicle and foot traffic, in some city pockets the street lighting did not turned on at all. This smart design halved Council's power consumption each night.

## 5. Future thinking

### Future proof Darebin's technology blend and related services.

Darebin's technology blend is vast; ranging from mobile devices to infrastructure that transmits and stores vast volumes of data. The technology is glued together by services provisioned in-house or through external partners.

For each component Darebin will not be locked in; but will have the ability to scale up or down, replace or decommission. This will be achieved through careful consideration and foresight at each critical juncture.

Council will favour suppliers: who invest heavily in research and development; who service other industries; whose products are supported by common skill sets on the market; and that have a track record of fairness.

One system to service the community is not an objective; rather a trusted set of partners will be motivated and incentivised to provide continual improvements that drive Darebin forward.

At the core will be enterprise work flow management that mobilises resources to deliver an outstanding customer service. This layer of resilience will hide the inner machinations of Council from stakeholders. For example considerable system changes could be made without interrupting the customer's experience.

Products and services will adapt to future internal and external influences. For example limited office space will be overcome through enabling new ways of working supported by a scalable network.

#### CASE STUDY

##### 'locked in'

Bob returned from a Local Government conference where a popular rostering system 'Shift Track' was demonstrated. An invigorated Bob proceeded to procure 'Shift Track' however staff weren't so sure; they were familiar with the product's limitations and thought an existing system could be utilised.

A \$100,000 five-year contract was signed and the technology installed, however staff continued to use Excel because 'Shift Track' was not flexible enough to meet the inherent requirements. Council complied with its legal obligations and paid out the \$100,000 - the system was never used.

##### **Vision for the future:**

Bob came back and flagged the need for a rostering system. Fortunately one already existed that was used by the Leisure Centres and Libraries. When this system was procured Darebin ensured: the supplier had an innovative track record; the system could be adapted and easily connected with other Council systems.

Bob's department embraced the rostering system which was inexpensively configured to the department's requirements. The Governance controls around the procurement of technology weren't required in this case but would have prevented Bob from commissioning a new system.