

# IT Application Portfolio Sustainability Program

Audit & Risk Committee Report
January 2021

**Sean Baird**, Commissioner Digital & Information Services **Peter Parsan**, Director IT Solutions **David Freudenstein**, Manager IT Solutions Delivery & Support

### **Outline**

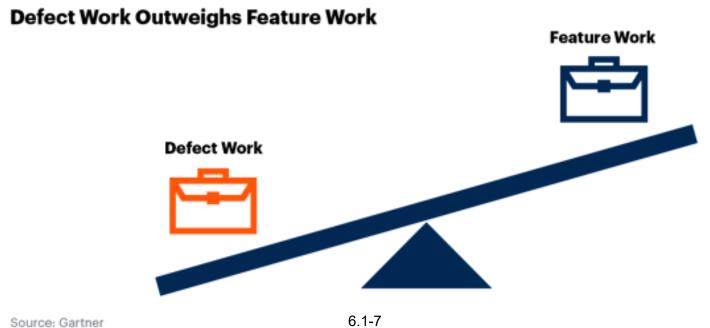
- > Technical Debt Industry Context
- > Program Framework
- **➤** Update on work completed 2018-20
- **▶** Planned Approach 2021-23
- > Q&A



# Technical Debt: Broader Industry Context

Maintaining systems health and reducing technical debt can be compared to servicing a car. Without regular maintenance, the engine will gradually slow down, and eventually the vehicle may stall completely.

For many organizations, the teams are spending all their time fixing issues, as opposed to delivering items of business value.



Source: Gartne 719923\_C

# **Technical Debt: Broader Industry Context**

Based on findings from several industry-leading experts (Gartner, Info-Tech, Claranet, McKinsey), we have learned that many businesses are severely constrained by technical debt. Common scenarios include:

- Outdated technologies are not replaced and become unsupported.
- Reduced ability to improve inefficient processes.
- Integrations are more complex or may not be feasible.
- Increased reliance on expensive outside contractors.

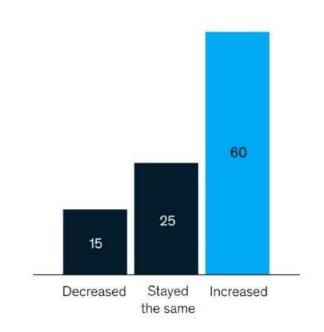
A survey of 100 IT decision-makers from UK-based businesses with over 1,000 employees indicated that over 8 in 10 respondents (84%) do not have an active reduction program in place, and close to a fifth (19%) want to reduce their legacy technology but do not have a clear plan of action on how to do this.

# Technical Debt: Broader Industry Context, cont'd

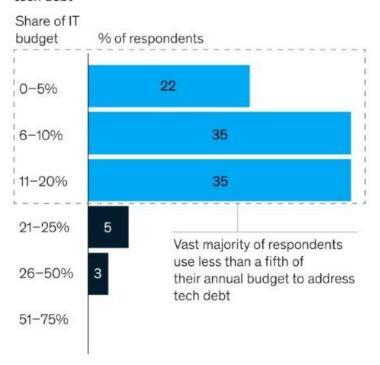
CIOs believe tech debt is increasing—but generally allocate less than 20 percent of their tech budget to paying it down.

#### CIO estimates of spend on tech debt

Perceived change in tech debt over past 3 years % of respondents (n = 45)

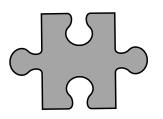


### Share of tech budget allocated to paying down tech debt



Source: McKinsey survey of tech debt among 50 ClOs, July 2020

# Technical Debt Management Framework and Approach

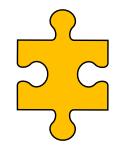


#### **Establish Platform Strategy**

4 Enterprise Platforms implemented

2 Enterprise Platforms in progress

Technology Standards policy as a requirement for all new implementations



#### **Identify and assess Application Portfolio**

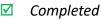
Identify and prioritize technical debt items



#### Reduce/Pay debt

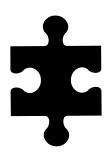
- End Of Life roadmaps
- Consolidation and architecture alignment
- Legacy apps modernization





In-progress

Future



#### **Prevent**

- Governance of architecture and technologies
- Tech debt management integrated into operating model

# **Current Application Portfolio**

A Business Application Repository is maintained by D&IS to document approx. 1,700 supported applications in use across the Region. These applications can be grouped under the following categories:

- ☐ Applications that rely on on-premises infrastructure (application or database servers): *est. 350*
- ☐ Cloud-based applications: *est. 150*
- ☐ Smaller stand-alone Windows applications *est.* 1,200

# **Application Sustainability Dispositions**

Further to engaging an external third-party consultant in 2018, we prioritized the review of 44 of a total 250 applications that rely on our on-premises technology infrastructure. Based on technical and functional health, each assessed application was placed into one of the following groups:

Maintain: Basic maintenance and support acceptable through at least December 2021

**Upgrade**: Deploy a newer, fully supported release of the application

**Retire**: Fully decommission the application

**Repurpose**: Identify capabilities within the application that can be used to support other business needs

# Progress 2018-2020: On-premises applications

- Retirements included the **Human Services Outreach database**; and **eAgenda**.
- Upgrades included Trapeze v. 16; PeopleSoft Financials v9.2;
   Oracle CC&B Water Billing cumulative patches update; and FileMaker v17.
- Evolved alignment with D&IS Intake and Governance Boards.
- Proceeded with portions of security risk mitigations to address technology security risks identified in a 2019 third-party vulnerability assessment.
- Initiated discussions with Corporate Asset Management team to plan alignment of D&IS hardware and software assets.

# **Progress: Cloud applications**

- 2015 ongoing: Ongoing maintenance of application technical health for Salesforce has included multiple Salesforce "seasonal" releases three times annually. This includes the recently deployed 10/2020 "Winter '21" Salesforce release.
- 2020 YTD: Several related 3<sup>rd</sup> party Salesforce solutions deployed onto our Salesforce platform have also been upgraded (3 YTD, as of 10/2020).
- 2020: In collaboration with the Salesforce vendor, we've updated configurations to raise the platform health score from prior value of 50% up to 88% ("Very Good").

# **Current Status Reporting**

Updated 2020-05-21										
Application Dispositions  Application	Function al Heall	al	Under PMO Report	SOGR Lead	High-Level Perceived Urgency	No. Versions Behind	Scheouled  Deployment of New or Upgraded	Scheduled Full Decommission of the old system	Output Disposition for Consideration	
CBS (Centralized Booking System)	25%	20%	Yes	Karen + Pranav	н	Extremely Old - In- house FOXPRO	2019-09-30	Enabling Tachnology RFP	Retire or Outsource	
Outreach [PMOD]	35%	25%		Raminder	Completed				Retire or Outsource	
HTML Forms/Bid Documents	30%	25%		Rajani	L	Extremely Old - On Obsolete Platform	TBC	TBC	Retire or Outsource	
Office Form & Templates	45%	20%			Completed		2018-12-31		Retire or Outsource	
AutoCAD	60%	75%			L				Maintain	
FileMaker	53%	60%		Raminder	Completed	5.00	2019-12-31	Tan <u>q</u> et 3/2020	Maintain	
Vsys One Volunteer Management System Web Portal	75%	70%		Ray	L				Maintain	
InMagic	55%	55%		Ray	L				Maintain	
Bentley	30%	60%	Yes	Kashef Haseeb	Н		2020-06-30		Upgrade	
IBM Sterling	65%	55%		Karen	L				Maintain	
PowerPlan LTFP (f.k.a. RIVA / Hemson)	60%	55%		Rajani	Completed		2018-12-31		Maintain	
FIA Web	65%	65%		Raminder	L				Maintain	
FIA Legacy VB6/MS-Access	30%	20%		Raminder	L	Extremely Old - On Obsolete Platform	2016-01-02	TBC Raminder	Retire or Outsource	
Kaba Clocks	80%	60%		David / Kristy	L				Maintain	

6.1-15 Slide 11

# Progress to date since 2018

Application Sustainment Disposition Metrics - Updated as of October 2020

Application	Total #			
Disposition	Assessments	Completed	In Progress	<b>Not Started</b>
Maintain	28	3	0	25
Repurpose	0	0	0	0
Upgrade	12	4	5	3
Retire	27	5	8	14
Total	67	12	13	42

## **Application Sustainment Program Intended Phases**

2021

Ongoing remediations of smaller scale applications

2021-2023

\$10 M Capital Work to Address Current Needs

**Proposed Funding Allocation** 

Establish the Program - \$0.5M On-premises applications - \$6M Cloud-based applications - \$3M Stand-alone applications - \$0.5M 2023 (Steady State)

Annual renewal aligned with existing Corporate Asset Management program



# Thank You.

