

Update on Information Technology ZBR

PFC2018-0017

Attachment 5

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Following a review of IT's key services, benchmarking surveys, processes, initial performance metrics as well as a series of workshops with staff and clients, the IT ZBR project team identified 44 opportunities for improvement related to IT's services. Eight of these were selected by the Steering Committee for further development. These improvement opportunities fall within three topic areas which are provided through IT's operations:

1

Workforce Productivity

2

Managing Software
Assets

3

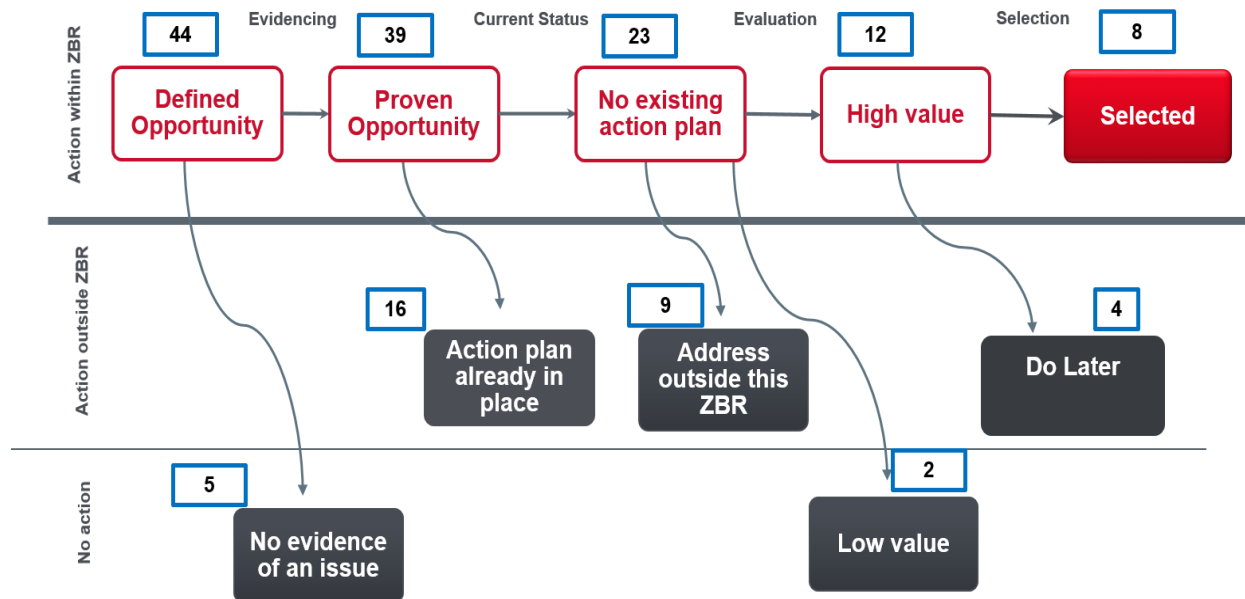
Managing Lines of Business
System Operations

The opportunities were scrutinized and filtered using criteria that included:

- Strategic alignment with:
 - Enhancing and creating a collaborative and service-based organization
 - Ensuring financial sustainability
- Sequencing opportunities so that opportunities that are dependent on the completion of other projects are pursued at a later date
- Potential for greater benefits to the corporation related to savings, service quality, increasing organizational capacity etc.



Selection Process of Opportunities to pursue for IT ZBR



NOTE: Included among the nine opportunities to be ‘Addressed outside this ZBR’ is a corporate opportunity to review The City’s approach to internal cost recovery.

Two of the eight selected opportunities have already been completed by Administration and are delivering benefits. These are:

Customer Journey Mapping

Understand the journey an internal customer follows when they have identified that a significant technology investment (and therefore service from IT) is needed for their business. The key benefit of this work is that it enables other improvement opportunities within the topic areas of Managing Software Assets and Managing Lines of Business System.

Right Devices

This opportunity relates to rationalization of personal productivity devices (desktops/laptops and desk phones/smart phones) throughout the Corporation, ensuring that each user has the right device(s) – no more and no less – to do their job. The Business Case for the Right Devices opportunity has been completed by Administration and falls within the Workforce Productivity Service provided by IT. The key benefits of this work are in annual financial gains: \$786k in direct cost savings with an additional productivity gain worth an estimated \$3.8 million. There are also some important non-financial benefits. A summary may be found below.



Right Devices - Summary of Opportunity

Since 2012 the number of workforce productivity devices (desktops, laptops (including Windows-based tablets), Virtual Desktop Infrastructure (VDI) devices, and smart phones) has grown by 34 per cent (not including desk and cell phones). As City staff become more mobile, and with the implementation of initiatives under Tomorrow's Workplace, The City is seeing a shift away from the use of desktops towards more mobile devices such as laptops (including Windows-based tablets) and smart phones. Since 2012, laptops and Windows-based tablets, have increased from 1,806 to 4,725 (262 per cent). With such a large increase in laptops/tablets, The City is also seeing an increase in the number of staff with multiple workforce productivity devices. Based on analysis, approximately 1,200 City staff have multiple devices (desktop computer and laptop and/or Windows-based tablet).

With advances in virtual desktop technology, IT is moving those staff who work primarily at their desks from traditional desktops to virtual desktops (Virtual Desktop Infrastructure (VDI)). In 2016, IT deployed 110 VDI devices but it is estimated that a further 4,400 users could be transferred from a traditional PC to a VDI device.

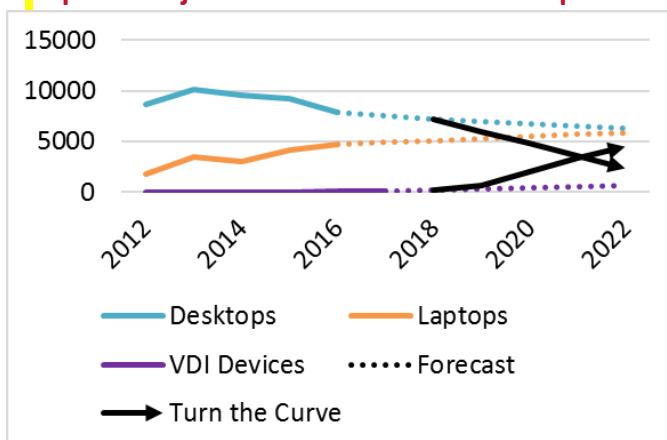
Case for Change

IT will enhance its device advisory service (including staff, processes, procedures, communications, training and other support materials). This service would include assessing both workforce productivity and telephony devices needed for staff to do their job, drawing on Tomorrow's Workplace work styles while considering business operational needs. The enhanced services will guide and direct each business area toward the technology that best suits their needs, so that the most cost-effective solution is deployed and duplicate devices are eliminated unless they are absolutely necessary.

Three segments of City users would be affected:

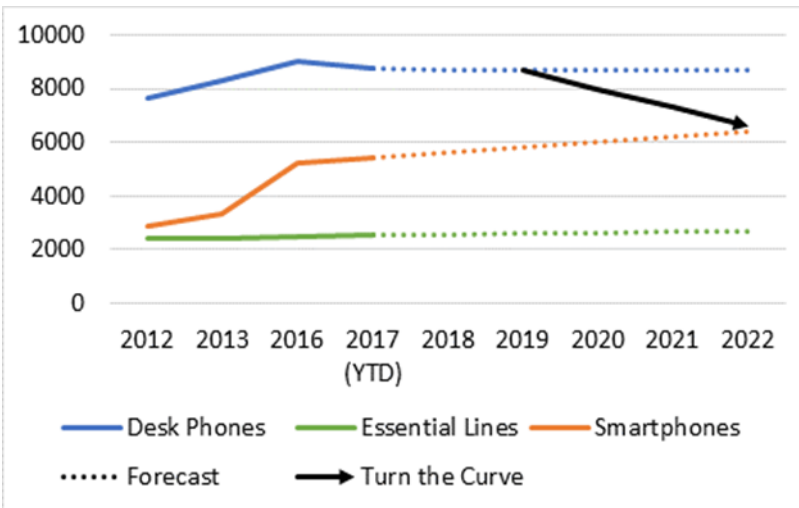
1. Users with more than one workforce productivity device, e.g. desktop and laptop and/or Windows-based tablet.
2. Users on traditional desktops that are candidates to use Virtual Desktop Infrastructure (VDI) devices.
3. Staff that have both a smart phone and desk phone.

Graph 1: Projected number of workforce productivity devices



Since 2012, the total number of workforce productivity devices (desktops, laptops including, Windows-based tablets, VDI devices) has grown from 10,469 to 12,657 (21 per cent). Approximately 4,400 traditional desktops users are projected to move to Virtual Desktop technology. In addition, converting users with multiple devices to one device can be started immediately in 2018. There will be cases where multiple devices are justified, however, 1,140 (90 per cent) redundant windows-based devices can be removed by 2019.



Graph 2: Projected Number of Smart Phones and City managed landlines

Since 2012 City managed smart phones have increased from 2,881 in 2012 to 5,200 in 2016 (80 per cent).

Approximately 2,100 users with a smart phone and desk phone could have their desk phone removed.

In addition to these direct cost savings for IT, there would be additional savings that could be achieved throughout The City's operations through the implementation of this opportunity. Specifically, corporate cost savings of \$177,000 could be realized through the reduction of energy consumption with fewer devices and desktops being used.

Summary of Expected financial gains (in \$000's) of implementing the 'Right Device' business case:

Phase	2018	2019	2020	2021	Exp. Annual Savings 2022 on	5 Year Total 2018-22
Phase 1- One Device	\$134	\$268	\$402	\$402	\$402	\$1,608
Phase 2 - Desktop to VDI	\$0	\$16	\$56	\$96	\$127	\$295
Telephony	\$0	\$20	\$40	\$60	\$80	\$200
Total Project Savings in IT	\$134	\$304	\$498	\$558	\$609	\$2,103
Operating Savings (IT)					\$378	
Capital Savings					\$231	
Savings outside of IT						
Corporate Energy Savings	\$0	\$22	\$78	\$133	\$177	\$410
Total Project Savings	\$134	\$326	\$576	\$691	\$786	\$2,513

NOTE: There are \$486,000 in implementation costs (from 2018-2022) for this business case that will be absorbed through in current IT operation costs. For full details of cost and benefit calculations please see the business case which is available upon request.



It is also estimated that The City will achieve a further \$3.8 million in productivity gains as users experience a reduction in the time lost related to IT issues for each of their devices. This estimate is based on data about the end user costs of desktop ownership compiled by Gartner Research.

- Gartner's work quantifies a reduction in end user time for a VDI device compared to a traditional PC at around \$266¹. Multiplied by the anticipated 4,400 devices The City expects to convert, a total productivity gain of around \$1.17 million is expected.
- Gartner further estimate that around \$2,346 in total end user time¹ is used per desktop. Multiplied by the anticipated reduction of 1,140 desktop computers, a further productivity gain of around \$2.67 million is expected.

Note that these productivity gains will not result in any budget reduction, since they represent a few hours of time per person across over 5,500 staff: approximately one third of The City's workforce. It nevertheless represents a significant release of staff capacity for higher value work.

The annual productivity gains as well as the energy cost savings would be realized once the opportunity has been fully implemented in year five (2022).

Expected non-recoverable productivity gains (in \$000's):

Benefit	2018	2019	2020	2021	Exp. Annual Savings 2022 on	5 Year Total 2018-22
User Productivity Gains	\$0	\$1,038	\$2,295	\$3,552	\$3,845	\$10,730

Non-Financial Benefits

Along with the cost savings and productivity gains noted above, this opportunity also has non-financial benefits. These include:

- Helps support cultural change throughout the organization to intentionally manage assets more efficiently.
- Improves IT lifecycle process; optimizes use of devices; potential for asset recovery.
- Supports flexible working and business continuity.
- Continues with Tomorrow's Workplace initiatives; avoids future real estate costs.
- Improved IT security with VDI.

¹After adjustment for salary inflation and conversion from US to Canadian dollars.



Next Steps for IT ZBR in 2018

In 2018 Q1/Q2, Corporate Initiatives will engage external consultants to pursue four of the remaining opportunities for the IT ZBR:

- Enabling and Implementing Application Portfolio Management Processes
- Rationalizing Existing Applications
- Diagnosis, Resolution and Prevention of System Outages
- Total Cost of Ownership of Business Systems

In addition, Administration will pursue another opportunity related to optimizing the levels of service IT offers its clients.

Other Opportunities to be pursued in 2018

There are also two opportunities, which came out of the IT ZBR but apply across the corporation. The first relating to clarifying and agreeing to the mandate and authority of each internal service over decisions and strategic corporate direction within their own service areas. Secondly, a corporate opportunity to review The City's approach to internal cost recovery.

Administration will provide an update on these opportunities later in 2018.

