



Ministry of
Labour, Citizens' Services
and Open Government

Ministry of Labour, Citizens' Services and Open Government

Line of Business Review

Opportunity Profiles and Additional Analyses

November 8, 2011



Table of Contents

1.	Opportunity Profile Summary	p2
2.	Opportunity Profiles	
	a) Technology Services Division (TSD)	
	i. Network Services (NWS)	p6
	ii. Workstations	p13
	iii. Corporate Software Asset Management (CSAM)	p20
	iv. Hosting	p25
	v. Corporate Application Services (CApS)	p32
	b) Logistics and Business Services (LBS)	
	i. Asset Investment Recovery (AIR)	p38
	ii. Distribution Centre Victoria (DCV)	p42
	iii. Storefront Services (SFS)	p46
	iv. Product Distribution Centre (PDC)	p50
	v. Records Management	p54
	vi. BC Mail Plus	p61
	vii. Fleet Management	p66
	viii. Queen's Printer	p72
	c) Integrated Workplace Solutions (IWS)	p76
	d) Business and Workforce Transformation (BWT)	
	i. CDAWS	p79
3.	ITO Agreement High-Level Market Comparison	p82
4.	Cross-Jurisdiction Comparison	p106
5.	Bring Your Own Device (BYOD)	p118
6.	Online Desktop Applications	p123

Opportunity Profile Summary

Opportunity Profile Summary - TSD

Service Line	'10/'11 Spend	Recoveries	Current FTEs	Opportunities	Estimated Impl. Costs	High Level Opportunity Description ¹	Overall Opportunity Assessment	Proceed?	Open Items / Next Steps
Networks	\$66.8M	\$31.4M Total \$27.0M Gov. \$4.4M BPS	98	S. 13, S. 17	S. 13, S. 17	1. VOIP enable phones in Victoria region to reduce operational costs 2. Perform network traffic prioritization by using policy-based routing 3. Reduce WAN bandwidth usage and improve application performance via network data compression.	High	Priority 1	S. 13, S. 17
Workstations / Helpdesk	\$63.7M	\$10.1M Total \$8.7M Gov. \$1.4M BPS	12			1. Slow down desktop refresh to 4 year cycle (25% desktops refreshed /year). Hardware warranties should be re-negotiated with the supplier to cover the 4 years of asset life 2. Printer/MFD utilization should be assessed, number of printers and MFDs should be reduced and redundant devices removed	High ²	Priority 1	
Hosting	\$55.8M	\$22.4M Total \$19.3M Gov. \$3.1M BPS	16			2. More-closely monitor benefits realization from the Transformation Program	High ²	Priority 1	
CSAM	NA	NA	4			S. 13, S. 17	High	Priority 1	
CAPs	\$32.8M	\$6.9M Total \$6.0M Gov. \$0.9M BPS	196	S. 13, S. 17	S. 13, S. 17	1. Manage only core corporate applications and recover costs for ministry-specific application support 2. Explore options to outsource/offshore application support	Low	Priority 2	

Opportunity: OT: One-Time R: Recurring

1) Bold text denotes Priority 1 and Priority 2 opportunities

2) "High" overall opportunity assessment includes opportunities identified in Hosting and Workstation contract review, however the benefit/cost estimates associated with these findings have been excluded from this page pending further validation..

3) The opportunities listed for

Opportunity Profile Summary - LBS

Service Line	'10/'11 Spend	Recoveries	Current FTEs	Opportunities	Estimated Impl. Costs	High Level Opportunity Description ¹	Overall Opportunity Assessment	Proceed?	Open Items / Next Steps
DCV	\$9.5M	\$10.2M Total ² \$7.6M Gov. \$2.6M BPS	27		\$.13, S. 17	1. Maximize CSA discounts and phase out the DCV office supplies	Medium	Priority 1	
Storefront Services	\$1.1M ²	\$1.1M Total ² \$0.7M Gov. \$0.4M BPS	6	S. 13, S. 17		1. Remove need for brick-and-mortar store by moving services online. 2. Move to on-demand model to manage purchasing for Protocol Giftware. Consider online portal for customers to place orders directly with manufacturers / wholesalers.	Low	Priority 1	
AIR	\$14.4M	\$15.6M Total ¹ \$0.6M Gov. \$15.0M BPS	35				Medium	Priority 1	
Queen's Printer	\$20.6M	\$20.3M Total ¹ \$13.6M Gov. \$6.7M BPS	68		S. 13, S. 17		Low	Priority 3	
BCMail Plus	\$28.8M	\$30.9M Total ¹ \$23.0M Gov. \$7.9M BPS	101				Low	Priority 3	
Fleet Mgmt.	\$0.1M	\$0.3M Total ² \$0.1M Gov. \$0.2M BPS	~1	S. 13, S. 17		3. Perform detailed analysis of costs for hybrid versus conventional fuel vehicles as part of overall Fleet Review	TBD	Priority 2	

1) Bold text denotes Priority 1 and Priority 2 opportunities

2) Note: While the recoveries shown indicate breakeven/surplus performance in many cases, the annual spend shown excludes the contribution to overall Ministry/SSBC overhead/operations, which are currently being further analyzed.

Opportunity: OT: One-Time R: Recurring

© Deloitte & Touche LLP and affiliated entities.

Opportunity Profile Summary – LBS (cont'd), CDAWS, IWS

Service Line	'10/'11 Spend	Recoveries	Current FTEs	Opportunities	Estimated Impl. Costs	High Level Opportunity Description ¹	Overall Opportunity Assessment	Proceed?	Open Items / Next Steps
PDC	\$31.2M	\$35.5M Total ² \$32.0M Gov. \$3.5M BPS	74				Low	Priority 2	
Records Mgmt.	\$5.5M	\$6.0M Total ² \$5.7M Gov. \$0.3M BPS	55			4. Develop strategy to support implementation / adoption of enterprise-wide RM system)	Low	Priority 2	
IWS	\$386.6M	\$117.5M Total \$79.9M Gov. \$37.6M BPS	190				High	Priority 1	
CDAWS	\$7.5M	\$2.5M	~85				Low	Priority 2	

Opportunity: OT: One-Time R: Recurring

5

1) Bold text denotes Priority 1 and Priority 2 opportunities

2) Note: While the recoveries shown indicate breakeven/surplus performance in many cases, the annual spend shown excludes the contribution to overall Ministry/SSBC overhead/operations, which are currently being further analyzed

Opportunity Profile: Network Services (NWS)

Opportunity Profile – Network Services

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
TSD	Networks (Data/Voice)	Mixed	\$66.8M	\$27.0M / \$4.4M	98	\$13, \$17	
Service Overview				Current Delivery and Funding Model			
<p>Network Services (NWS) provides both data and voice services to ministries and Broader Public Sector (BPS) clients. NWS manages the data backbone (SPAN/BC) and voice network (VoiceNet). Most of the services are provided by external suppliers with TELUS being the biggest external supplier. Network services are provisioned in about 3,500 sites, including ~60 school districts and ~900 pharmacies. Internal resources are involved in business management, communication services, network operations, service management and technical stewardship.</p>				<p>NWS provides both data and network services through external suppliers including TELUS (primary supplier), NorthwTel, BELL Canada, SHAW etc. Secondary suppliers mostly provide services in remote locations where TELUS does not have a network. Any incidents related to NWS are routed through the Customer Services Centre (CSC). NWS also provides consulting services to enable customers to design and deploy their Local Area Networks (LANs). The current funding model:</p> <ul style="list-style-type: none">Voted Appropriation:<ul style="list-style-type: none">Data : client access services, high availability option, small/medium/large office data services, high availability option and pharmacy network servicesVoice : Base voice, custom voice, directory listing, enhanced services, ISA/ISDN lines, toll-free services, voice mailRecoverable:<ul style="list-style-type: none">Data : consulting, domain name registration, remote access services, wireless servicesVoice : calling cards, conferencing, voice installation, information trees			
Total	SAL.	VOICE	DATA	H/W	AMORT.	OTHERS	
~\$66.8M			\$17				
Current Issues and Challenges				Leading Practices / Benchmarks		Potential Opportunities	
<ul style="list-style-type: none">About a quarter of the currently used voice equipment will not be supported by their vendors in the next five years (based on interviews). Investment is required to upgrade this infrastructureThe Provincial Learning Network (PLNet) uses most of the capacity of the network (usage is estimated to be between 40-70%, depending on the metric used)The majority (about 90%) of incidents reported for the data network are related to the slow network performance because of bandwidth constraints¹Internet utilization is increasing at an average rate of 47% annually over last four years requiring higher data network capacity (based on internet usage data provided by TSD)Costs of network management are deemed to be high (Source: NWS team)				<ul style="list-style-type: none">Managed VoIP for a large business should cost about \$23 per employee per month (or \$276 per employee per year) (Source: Gartner: Market Pricing: Cloud and Managed (On-Site) Delivery of VoIP and UC Services). Voice network costs for SSBC are ~ \$570 per user per year (~\$20M for ~35,000 users - TBC)Policy-based routing can be used to direct traffic onto the appropriate WAN link. By using policy-based routing, customers can implement policies that selectively cause packets to take different paths. The net result of this is a reduction in outages or latency for high priority or data intensive services and a reduction in the amount of bandwidth required in order to manage more routine data transfers (Source: CISCO white paper: Policy-Based Routing)Average-level enterprise bandwidth usage continues to grow at a rate of 30% annually. Enterprises can curb the impact of bandwidth growth by using WAN optimization to compress traffic flowing over the WAN.... most companies should realize compression levels of at least 50% (Source: Gartner report)Organization should invest between 3% and 15% of the deal's contract value in vendor management (Source: Gartner report)		<ul style="list-style-type: none">Enable VoIP, subscribing for full service from vendorEstablish network traffic prioritization capability on data backboneExplore possibility of additional compression of data on the network	
Additional Leading Practices				\$17, \$13, \$17			
<ul style="list-style-type: none">Annual data network cost per employee should be - \$766 (Source: Gartner - IT Key Metrics Data 2011: Key Infrastructure Measures: Data Network Analysis, December 2010), Data network costs for SSBC are roughly \$1,340 per user (~\$46.8M (total costs of \$66.8M minus cost of voice network of ~\$20M) for about 35,000 ministry and BPS users).							
1) Source: SSBC NWS Team 2) Details provided in NWS resources slide				Opportunity: © Deloitte & Touche LLP and affiliated entities.		OT: One-Time R: Recurring	

Opportunity Profile – Network Services (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit		
<ul style="list-style-type: none">• Enable VoIP, subscribing for full service from the vendor – Currently, about 80% of BC Government phones are VoIP capable but only 2% are VoIP enabled. In the Victoria region alone, ~14,000 phones may be VoIP enabled in the short term to reduce operational costs. BC should look at options to procure managed VoIP services (including software & hardware infrastructure, handset and maintenance), thereby removing need for BC to own assets for voice services.					Short / Medium Term		
<ul style="list-style-type: none">• Establish network traffic prioritization capability on data backbone – Perform network traffic prioritization by using policy-based routing (e.g. services to schools may be differentiated from judicial services).		S. 13, S. 17			Medium / Long Term		
<ul style="list-style-type: none">• Explore the possibility of additional compression of data on the network – Use software and/or hardware data compression solutions to reduce WAN bandwidth requirements and Improve application performance.					Immediate / Short Term		
	S. 13, S. 17				Immediate / Short Term		
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time	R: Recurring

1) See subsequent pages for supporting details/calculations

Opportunity Profile – Network Services (cont'd)

Voice over Internet Protocol (VoIP) Enablement

- The OCIO is working on a unified communication strategy which outlines a plan to converge data and voice networks. VoIP is a step towards Unified Communication.
- Managed VoIP for a large business should cost ~\$23 per employee per month (*Source: Gartner: Market Pricing: Cloud and Managed (On-Site) Delivery of VoIP and UC Services*), equating to operating cost of \$276 per year per employee. This cost includes software and hardware infrastructure, handset and maintenance costs (includes Move, Add, Change (MAC) costs and 24x7 customer support).

Potential Benefits

Scenario	Assumption on # of users moving to VoIP	Current proportionate expense	Operating expense if users move to VoIP	Potential Savings ¹
1				
2				
3				

Costs

- 1) Potential savings are may not be linear as shown in these scenarios
- 2) Costs for other locations will require a more detailed analysis of the network topology

Opportunity Profile – Network Services (cont'd)

Network Traffic Prioritization

- Policy-based routing can be used to direct traffic onto the appropriate WAN link, and to reprioritize traffic in the event of disruption to one of the links. By using policy-based routing, customers can implement policies that selectively cause packets to take different paths. The net result of this is a reduction in outages or latency for high priority or data intensive services and a reduction in the amount of bandwidth required in order to manage more routine data transfers (*Source: CISCO white paper: Policy-Based Routing*)
- Prioritized bandwidth for mission-critical applications can reduce or eliminate downtime. An organization can direct the business critical data associated with a specific activity to use a higher bandwidth, high-cost link for a short time, and continue basic connectivity over a lower bandwidth, low-cost link for interactive traffic, thus maximizing existing bandwidth levels and avoiding unnecessary circuit upgrades (*Source: Deloitte expertise*)
- PLNet usage is estimated to be between 40-70% of overall network usage (depending on the metric used to measure usage network utilization, speed, available capacity etc., source: NWS team)

Potential Benefits

•

Scenario	Assumption	Calculations Based on Current Spend on Data Network	Potential Savings
1		S. 13, S. 17	
2			
3			

•

Costs

S. 17

S. 13, S. 17

S. 13, S. 17

Opportunity Profile – Network Services (cont'd)

Data Compression

- Average-level enterprise bandwidth usage continues to grow at a rate of 30% annually. Enterprises can curb the impact of bandwidth growth by using WAN optimization to compress traffic flowing over the WAN. While outcomes will vary according to the application mix on the enterprise's WAN, most companies should realize compression levels of at least 50%. (*Source: Gartner: Ten Ways to Cost Optimize Your WAN*)
- TSD currently pays for circuits of a particular speed for SPAN/BC services, regardless of usage
- Currently there is limited capability to perform data compression on the network, but information on percentage of compression levels on SPAN/BC does not exist

Potential Benefits

- Initial analysis shows that current costs related to these data circuits are about \$18M. This information has been derived from detailed budget line items provided by SSBC.

Scenario	Assumption	Calculations Based on Current Spend on Data Circuits	Potential Savings
1		\$ 13. S. 17	
2		\$ 13. S. 17	
3		\$ 13. S. 17	
		\$ 13. S. 17	
		\$ 13. S. 17	

Costs

-

Opportunity Profile – Network Services (cont'd)

NWS resources

•

•

S. 13, S. 17

- The following table outlines current SSBC NWS resources and their responsibilities:

Service Line	Number of Resources ¹
Network Operations – Enhancements, Provisioning, Internet Management (monitoring, configuration etc)	26
Business Management – Project Management and support, Client management	30
Technology Shared Services – Data, Voice, PLNet, Business Consulting	28
Service Management –Vendor relationship management, SLA management	11
Management and Executive Asst.	3
TOTAL	98

•

•

S. 13, S. 17

1) Source: Information from NWS Team

Opportunity Profile: Workstations

Opportunity Profile – Workstations

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.											
TSD	Workstations & Helpdesk	Mixed	\$63.7M	\$8.7M / \$1.4M	12	\$13.5.17												
Service Overview				Current Delivery and Funding Model														
<p>Workstation and Helpdesk services are part of the Information Technology Alliance Management Office (ITAMO) and provide service desk, security, desk side, order IMAC, asset management , technology engineering and project services. All these services are sourced through IBM. Currently a technology refresh program (U3) is in the planning stage, however implementation is delayed by about eight months. IBM supports about 23.8K desktops, 9.2K laptops, 195 thin clients, and 6.800 MFDs/printers. A 24x7 helpdesk service called "7.7000" is managed by IBM for providing helpdesk support for workstations and peripherals.</p> <table><tr><th>Total</th><th>IBM</th><th>AMORT.</th><th>H/W</th><th>SALS.</th><th>OTHERS</th></tr><tr><td>~\$63.7M</td><td></td><td></td><td>\$17</td><td></td><td></td></tr></table>				Total	IBM	AMORT.	H/W	SALS.	OTHERS	~\$63.7M			\$17			<p>BC owns all assets related to workstations and printers/MFDs. End users order laptops / workstations through iStore, ministries approve the orders, and IBM provisions the workstations. Laptops and workstations are on a 3 year refresh cycle and printers and MFDs are on a 5 year cycle.</p> <p>The current funding model for Workstation and Helpdesk Services is:</p> <ul style="list-style-type: none">• Voted: basic and advanced desktop/laptop/rugged laptop, operating systems, MFDs, security services• Recovery: additional hardware/software/services, project services		
Total	IBM	AMORT.	H/W	SALS.	OTHERS													
~\$63.7M			\$17															
Current Issues and Challenges				Leading Practices / Benchmarks		Potential Opportunities												
<ul style="list-style-type: none">• BC desktops and workstations are currently refreshed on a three year cycle, and it takes eighteen months to complete the refresh. Implementation of U3 is planned for April 2012. This has delayed the current refresh cycle by eight months• SSBC has no control over utilization of ministry devices especially printers and MFDs. Currently there is no provision for returning of printers or MFDs. There maybe a number of unused or scarcely used peripherals. BC currently has a ratio of ~1:5 printers to end users				<ul style="list-style-type: none">• The typical technology refresh cycle for laptops is 3 years, desktops 4 years and servers 5 years. Device provisioning should be spread across that span of refresh period (e.g. 33% of laptops should be refreshed every year)• Provincial governments are implementing plans to reduce number of printers. The City of Madison, Wisconsin is moving towards a goal of having more than 7 employees per printer (Source: City of Madison website). The Ohio State University is attempting to implement a more cost-effective user-to-device ratio (10:1 or better) (Source: Ohio State University website)		<ul style="list-style-type: none">• Slow down desktop refresh cycles• Reduce number of printers/MFDs												
Additional Leading Practices																		
<ul style="list-style-type: none">• The 2010 average Client & Peripheral Support Cost per Desktop/Laptop Client is \$1,143¹ (Source: Gartner: IT Key Metrics Data 2011: Key Infrastructure Measures: Client and Peripheral Support Analysis: Multiyear , December 2010). BC is spending ~ \$1,340 per user per year (BC's current expense for laptop/desktop support is \$592.80 per user per year and proportionate depreciation is ~\$750 per user per year)• Cost of workstation services and IT helpdesk should be about 22% of total IT costs (Source: Gartner: IT Key Metrics Data 2011: Key Industry Measures: Cross Industry Analysis: Current Year) SSBC's cost of workstation services and IT helpdesk constitutes ~27% of IT spend. (Source: TSD Actual spent for FY10/11)• The hardware warranty for workstation devices should be negotiated to be equal to the refresh cycle for the device (e.g. desktops should have a four year warranty). The industry is moving towards thin clients where most of data resides on server-based storage and applications reside on servers. This reduces needs for high end workstations. (Source: Deloitte expertise)• The 2010 average IT Help Desk First Call Resolution Rate is 64.2% (Source: Gartner: IT Key Metrics Data 2011: Key Infrastructure Measures: IT Help Desk Analysis: Current Year). BC is achieving first call resolution rates of greater than 85% (Source: Workstation Support - BC Government Monthly Operations Report, July 2011).																		
				Opportunity:		OT: One-Time	R: Recurring											

1)

This includes costs for hardware, software, personnel (including contractors, travel, benefits and training),outsourcing (external IT services like consulting, system integration, data and voice transmission), disaster recovery and occupancy costs associated with supporting Information Technology within the enterprise

© Deloitte & Touche LLP and affiliated entities.

1) This includes costs for hardware, software, personnel (including contractors, travel, benefits and training),outsourcing (external IT services like consulting, system integration, data and voice transmission), disaster recovery and occupancy costs associated with supporting Information Technology within the enterprise

Opportunity Profile – Workstations (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit		
<ul style="list-style-type: none">Slow down desktop refresh cycles – Desktop refresh should be performed on a four year cycle (25% desktops refreshed every year). Hardware warranties should be re-negotiated with the hardware supplier to cover the four years of asset life		S. 13, S. 17					
<ul style="list-style-type: none">Reduce number of printers/MFDs – Currently there are ~6,800 network printers and MFDs within core Government. Printer/MFD utilization should be assessed and redundant devices removed. Note: A pilot program is currently underway in this area.							
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time	R: Recurring

1) See subsequent pages for supporting details/calculations

Opportunity Profile – Workstations (cont'd)

Spend Analysis

Overall Spend¹

DESCRIPTION	10/11 ACTUALS	%
SALARIES	\$.17	
IT CONSULTING - EXISTING SYS - FEES		
MINOR PURCHASES - INFORMATION SYS		
INFO. SYSTEMS - H/W LEASE/MTCE. COSTS		
ASSET AMORTIZATON EXPENSE		
OTHER		
Total	\$63,730,154	100%

Staff Breakdown

DESCRIPTION	STAFF
OVERSIGHT AND MANAGEMENT OF WORKSTATION SRVCS.	7
OVERSIGHT AND MANAGEMENT OF HELPDESK SERVICES	5

Vendor Breakdown

IBM CANADA LIMITED	\$30,666,718
RICOH CANADA INC.	\$38,284
Other	\$905,886

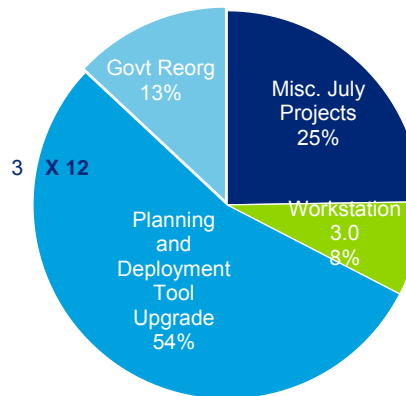
- IT Consulting was the largest component (50%) of WSAMO spend, with 97% of charges coming from IBM (see below for further breakdown)

Major Sub-Categories of spending with IBM (before recoveries and adjustments)²

Estimated Projects versus Support Service Costs (IT Consulting)

\$.17

Project Costs for July 2011



Sub-Category	July Costs
Misc. July Projects	~\$0.2 M
Workstation 3.0	~\$0.1 M
Planning and Deployment Tool Upgrade	~\$0.5 M
Government Reorganization	~\$0.1 M
Total	~\$ 0.9 M

1) Overall breakdown of expenses is for FY10-11 and is sourced from the accounting system

2) Estimated spend in major sub-categories of workstations is calculated from July invoice, by extrapolating July data for the whole year

Opportunity Profile – Workstations (cont'd)

Desktop refresh cycle

- A typical technology refresh cycle includes laptop refresh every 3 years, desktop refresh every 4 years, and server refresh every 5 years. Device provisioning should be spread across the span of refresh period (e.g. 33% of laptops should be refreshed every year)(*Source: Deloitte expertise*)
- Companies that move to a longer refresh cycle and do not adapt their desktop management policies accordingly will see overall PC support and management costs increase by 20 percent to 30 percent in years four and five (*Source: Giga Information Group Inc., now part of Forrester research- Longer Desktop Refresh Cycles Require Review of Desktop Management Processes, November 2002*)
- Cost of hardware procurement for U2 (2008 technology refresh) was ~\$42M. 72% (23.8K desktops of total 33.2K workstations) of workstations are desktops. Therefore, cost of desktop procurement was ~ \$30 M¹ (72% of \$42M)
- As assets are currently completely depreciated over the refresh cycle, depreciation per year for desktops (with a life of 3 years) is 10M (\$30M over 3 years)
- Current desktop/laptop maintenance cost is \$49.40 per user per month or \$592.80 per user per year. For ~30K users, this cost is \$17.8M

Costs

s.13, s.17

1) This assumes that cost of laptops and desktops are about same, which may not be the case. More data is required to fine tune this cost

Opportunity Profile – Workstations (cont'd)

Desktop Refresh Cycle (cont'd)

Potential Benefits

- The following table is an illustrative example of benefit calculations for a 4 year desktop refresh cycle compared to the current 3 year cycle¹

S. 13, S. 17

Opportunity Profile – Workstations (cont'd)

Reduce number of Printers/MFDs

- SSBC currently has approximately 4,000 printers and 2,800 MFDs. For approximately 35,000 end users this results in a ratio of ~1:5 printers to end users
- The current SSBC cost of MFD support services is about \$4M per year (per July 2011 IBM invoice, MFD support is ~\$340K per month)
- The City of Madison, Wisconsin is moving towards a goal of having more than 7 employees per printer (Source: City of Madison website)
- The Ohio State University is attempting to implement a more cost-effective user-to-device ratio (10:1 or better) (Source: Ohio State University website)

Potential Benefits

- The following table illustrates potential benefits from three scenarios

Scenario	Assumption	Number of printers	Reduction on current #'s	Approximate Savings
1	1 printer for 7 end users	$35,000 / 7 = 5,000$	$(6,800 - 5,000) / 6,800 = 27\%$	$27\% \times \$4M = \1.1 M
2	1 printer for 10 end users	$35,000 / 10 = 3,500$	$(6,800 - 3,500) / 6,800 = 49\%$	$49\% \times \$4M = \2 M
3	1 printer for 12 end users	$35,000 / 12 = 2,917$	$(6,800 - 2,917) / 6,800 = 57\%$	$57\% \times \$4M = \2.3 M

- Considering the conservative scenario of reducing printers/MFDs to a 1:7 device to end-user ratio, potential cost savings of \$1.1M may be achieved

Costs

- Costs involved with identifying and retiring printers

Opportunity Profile: Corporate Software Asset Management (CSAM)

Opportunity Profile – Corporate Software Asset Management (CSAM)

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
TSD	CSAM	Mixed	Not Available ¹	Not Available ¹	4	S. 13, S. 17	
Service Overview				Current Delivery and Funding Model			
The Corporate Software Asset Management (CSAM) group is part of Divisional Support Services within TSD. CSAM procures and manages both workstation and server software licenses for all core ministries.				<ul style="list-style-type: none">Both workstation and server software is ordered through iStore. Licenses are procured using enterprise agreements with more than 20 software vendors. Licenses are procured through CSAM and supplied mostly by IBM for workstations and HPAS for server deployment. IBM maintains inventory of workstation software but HPAS does not have an inventory for server software. CSAM is in the process of collecting information on server software (with help from HPAS) licensed to all core ministries and BPS.Current funding model:<ul style="list-style-type: none">Voted – Server software, workstation softwareRecovery – Special workstation software			
Current Issues and Challenges			Leading Practices / Benchmarks			Potential Opportunities	
<ul style="list-style-type: none"> S. 13, S. 17			<ul style="list-style-type: none">Leading practices for software asset management :<ul style="list-style-type: none">Inventory Management / Reporting - It is important to manage the software assets and the usage rights that you have paid for.<ul style="list-style-type: none">Entitlement Management - usage rights of software licensesConsumption ManagementReconciliation - Reconciliation of entitlements and consumption is essential to identify over- and under-licensingInvestigation - Identifying the root cause of any mismatch between entitlement and consumption is necessary to resolve problems effectively and permanentlyRemediation - Financial provision should be made where the value of license shortfalls is a material amount (Source: Gartner: Best Practice for Software Asset Management: Core Process Tutorial, July 2011)Potential long term cost reduction by enhancing IT Asset Management (ITAM) is approximately 3% (Source: Gartner: Ten Key Actions to Reduce IT Infrastructure and Operations Costs , July 2011)			<ul style="list-style-type: none"> S. 13, S. 17	
Additional Leading Practices							
<ul style="list-style-type: none">Software licenses and ongoing maintenance represent a significant investment, typically ~20% of the enterprise IT budget (Source: Gartner: Optimize Software Licensing Costs With Software Asset Management, Feb 2009). indicated that some software may be procured by ministries directly from software vendors. S. 13, S. 17							
				Opportunity: OT: One-Time R: Recurring			

1) Annual spend and recoveries are tracked at division level within TSD .As CSAM is part of Divisional Support Services (division), "'10/'11 Actual Spend" and "Recoveries- (Core / BPS)" is not available for CSAM

Opportunity Profile – CSAM (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<div>S. 13, S. 17</div>					
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:
					OT: one-time
					R: Recurring
1) Estimated Benefits reflect "cost avoidance" as against true "cost savings", as	See subsequent pages for supporting details/calculations				
2) Source: information provided by CSAM					

S. 13, S. 17

Opportunity Profile – CSAM (cont'd)

Software Asset Management for server software

-
-
- CSAM is in the process of collecting information on server software licensed to all core ministries and BPS

S. 13, S. 17

Potential Benefits

-

S. 13, S. 17

Scenario ¹	Assumption	Calculations based on current assets	Value of re-useable software
1			
2			
3			
4			

S. 13, S. 17

-
-

S. 13, S. 17

Costs

-

S. 13, S. 17

Opportunity Profile – CSAM (cont'd)

Software Asset Management for workstation software

Benefits

- Asset base for desktop productivity tools (MS Office/E-Mail) = \$26.5M
- FY 2010/11 spend on workstation software and maintenance was ~\$6.8M

Scenario ¹	Assumption	Calculations based on current assets	Value of re-useable software
1			
2		\$, 13, \$, 17	
3			
4			

-
-

\$, 13, \$, 17

Costs

-

\$, 13, \$, 17

1) Scenarios identified in this table are hypothetical

Opportunity Profile: Hosting

Opportunity Profile – Hosting

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
TSD	Hosting	Mixed	\$55.8M	19.3M / \$3.1M	16	\$13, S. 17	
Service Overview				Current Delivery and Funding Model			
<p>Hosting Services are part of the Information Technology Alliance Management Office (ITAMO). They provide shared hosting, application hosting, mainframe, consulting, shared file and print and open VMS services. All these services are sourced through Hewlett Packard Advanced Solutions (HPAS). Mainframe hosting and maintenance was transferred from IBM to HPAS at the start of 2011. A large Transformation Program is underway to consolidate ten data centres into two. All assets are owned by BC. For assets greater than \$10K in value, BC provides capital to buy the asset and HPAS procures the assets. For assets less than \$10K in value, HPAS buys the assets and bills BC based on actual spend.</p>				<p>Ministries access hosting services through iStore. All requests for hosting services (except those for a shared environment) are reviewed by ministry staff. The helpdesk is routed through the Customer Service Centre (CSC), and bug fixes are performed by HPAS.</p> <p>The current funding model for Hosting Services is:</p> <ul style="list-style-type: none"> Voted: application hosting, backup, mainframe services, database services, shared web hosting services Recovery: application storage – tier 1 to 4, data backup services, hosting consulting services, incremental storage 			
Total	HPAS	IBM	AMMORT.	SALS.	OTHERS		
~\$55.8M			\$17				
Current Issues and Challenges			Leading Practices / Benchmarks			Potential Opportunities	
<ul style="list-style-type: none"> SSBC is currently in year 3 of the data centre Transformation Program. As more servers are being virtualized and moved to HPAS' data centres, HPAS' operating costs are going up. It needs to be determined 			<ul style="list-style-type: none"> The 2010 average mainframe cost per installed "Millions of Instructions per Second" (MIPS) is \$5,048 (Source: Gartner - IT Key Metrics Data 2011: Key Infrastructure Measures: Mainframe Analysis: Multiyear). This includes costs of hardware, software, connectivity, disaster recovery, facilities and personnel. For BC Gov, the average per unit cost per installed MIPS is ~ \$670 per month or \$8,036 per year. This does not include software costs. Selective infrastructure sourcing — for example, hosting or network outsourcing — and data centre consolidation realized 10% to 20% savings in network and data centre costs (Source: Forrester - Savings From Cost-Reduction Activities, January 2011) Infrastructure and Operations (I&O) is typically the largest part of enterprise IT, and the data centre typically comprises the largest percentage of I&O costs (Source: Gartner - Ten Key Actions to Reduce IT Infrastructure and Operations Costs , July 2011) Virtualization should free up capacity in data centres. By reducing the capacity utilized, customers can bring down cost of data centres and therefore cost of IT operations (Source: Deloitte expertise) 			<ul style="list-style-type: none"> More-closely monitor benefits realization from the Transformation Program 	
Additional Leading Practices							

Opportunity: OT: One-Time R: Recurring

© Deloitte & Touche LLP and affiliated entities.

Opportunity Profile – Hosting (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit		
	S. 13, S. 17						
<ul style="list-style-type: none">• More-closely monitor benefits realization from the Transformation Program – BC is in Yr. 3 of 5 of a Data Centre Transformation Program. BC should realize cost savings from data centre consolidation and virtualization of servers. TCO for data centres after the transformation program should be lower than TCO before the contract.		S. 13, S. 17					
	S. 13, S. 17						
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time	R: Recurring

1) See subsequent pages for supporting details/calculations

Opportunity Profile – Hosting (cont'd)

Hosting Spend Analysis

Overall¹

DESCRIPTION	10/11 ACTUALS	%
SALARIES		
DATA OPERATIONS (IBM CANADA)		
IT CONSULTING - EXISTING SYS – FEES		
SOFTWARE LEASE/MAINTENANCE COSTS		
INFO. SYSTEMS - H/W LEASE/MTCE. COSTS		
ASSET AMORTIZATON EXPENSE		
OTHERS		
Total	\$55,840,000	

- Data Operations (mainframe support) and IT Consulting contributed the majority (74%) of EHS (Enterprise Hosting Services) spend

Staff Breakdown

DESCRIPTION	STAFF
① Service Management - Servers	7
① Service Management – Storage	3
② Technical Architecture	3
③ Deal management and financials	3

Vendor Breakdown

- ② IBM CANADA LIMITED²
ACCESS RECORDS AND MEDIA MANAGEMENT LTD.
OTHER
- ③ HP ADVANCED SOLUTIONS INC.³
IBM CANADA LIMITED
OTHER

S. 17

Major sub-categories (extrapolated from invoices)⁴

S. 17

1) Overall breakdown of expenses is for FY10-11 and is sourced from the accounting system
 2) Vendor changed to HP Advanced Solutions Inc. as of January, 2011.
 3)
 4) Estimated spend in major sub-categories of hosting is calculated from July invoice, by extrapolating July data for the whole year

Opportunity Profile – Hosting (cont'd)

Mainframe maintenance

- The 2010 average Mainframe Cost per Installed “Millions of Instructions per Second” (MIPS) is \$5,048 (*Source: Gartner - IT Key Metrics Data 2011: Key Infrastructure Measures: Mainframe Analysis: Multiyear*). This includes costs of hardware, software, connectivity, disaster recovery, facilities and personnel.
- Monthly costs for mainframe maintenance are in the range of \$111 - \$213 or \$1,332 - \$2,556 annually. This includes management fees, hosting, support, maintenance, monitoring, facilities and software updates (*Source: Market comparison data, Deloitte*). For calculation of savings for this opportunity, Gartner benchmark data is used to arrive at a more conservative benefit estimation.

Potential Benefits

- Additional savings are possible by moving applications from mainframe to open systems. Indicative savings on mainframe maintenance based on reduction in MIPS every year are shown in last three rows of the table below. Note, that additional costs will be incurred to setup, migrate mainframe applications and to maintain open systems environment. Further analysis will be required to determine these costs

Scenario	Assumed Maintenance Cost	Calculations Based on Current Costs	Approximate Savings
1			
2			
3			

Costs

-

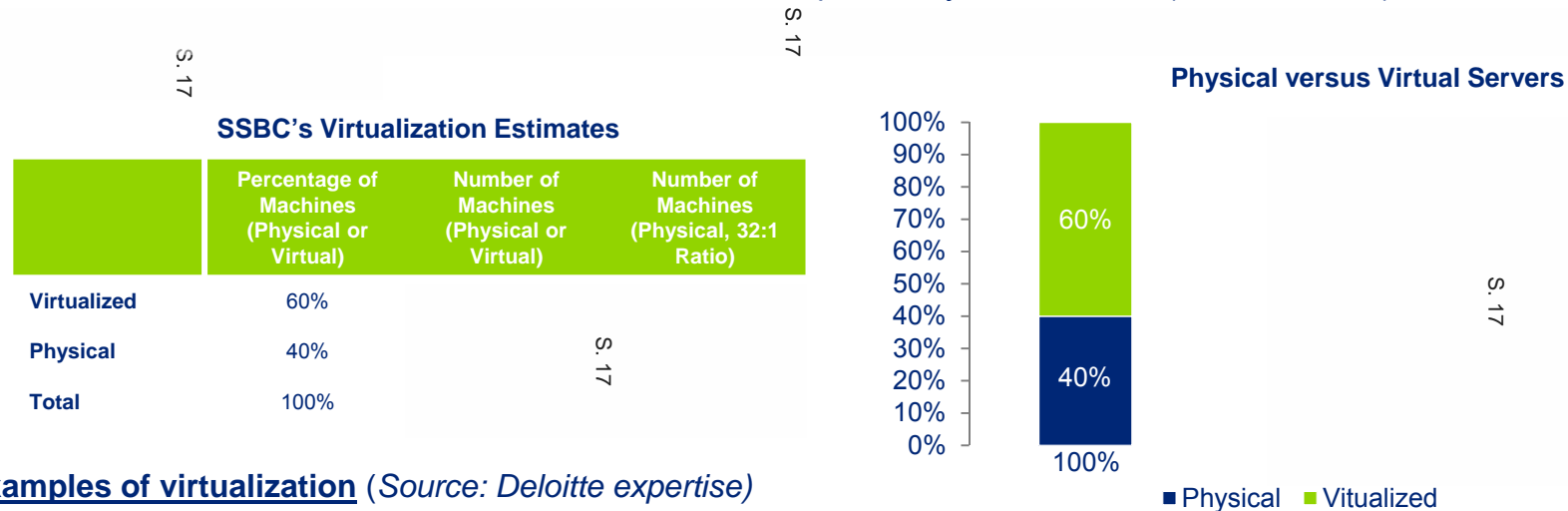
Opportunity Profile – Hosting (cont'd)

Benefits Realization from Transformation Program

- Server utilization at most organizations can be increased to higher levels and there is often an opportunity to reduce the number of physical servers by virtualization. In most cases, costs savings are attained on virtualization of up to 50% of servers. Beyond 50% virtualization, the ROI would need to be assessed on an organization by organization basis
(Source: Gartner: Ten Key Actions to Reduce IT Infrastructure and Operations Costs)

Current State

- BC is in the middle of a data centre transformation program which has two objectives:
 - Consolidate the 10 province-managed data centres to 2 HPAS-managed data centres
 - Perform server virtualization as part of the transformation program. This should reduce ~1,800 servers at the start of virtualization process to ~754 servers by the end of year 5 of the transformation program (calculations shown below)
- SSBC owns a total of ~1,800 servers, of which 60% can potentially be virtualized (Source: SSBC)



Examples of virtualization (Source: Deloitte expertise)

- TD bank is in the process of virtualization of servers with a target of moving 30 physical servers to one physical server
- The Government of Alberta is targeting a move of 10 physical server to 1 physical server
- The State of Michigan, U.S.A. has created a self-service deployment and provisioning cloud service called “MI Cloud” for proving, piloting and sourcing the state’s government cloud offerings

Opportunity Profile – Hosting (cont'd)

Benefits Realization from Transformation Program

- SSBC has committed to buy a total of 2400 KVAs in HPAS' Kamloops data centre. This capacity is split evenly between Heath Shared Services and SSBC, each having 1200 KVAs. Allocation of SSBC's capacity of 1,200 KVA is shown in the graphic →
- Schedule for capacity purchase for Kamloops DC (Source: HPAS contract)

Year	Total Capacity Purchased	Capacity Used by ICBC & BCLC	Capacity for SSBC	Excess Capacity
2011/12				
2012/13				
2013/14			S. 17	
2014/15				
2015/16				

SSBC

S. 13, S. 17

Kamloops Data Centre
1,200 KVA

Potential Benefits

- For FY 2011/12, the cost of the excess 206 KVA is ~ \$1.4M (206/590 x \$4M)

S. 13, S. 17

Costs

S. 13, S. 17

1)

Opportunity Profile: Corporate Application Services (CApS)

Opportunity Profile – Corporate Application Services (CApS)

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
TSD	Corporate Application Services	Mixed	\$32.8M	\$6 M/ \$0.9M	196	\$ 13, S. 17	
Service Overview				Current Delivery and Funding Model			
Corporate Application Services (CApS) provides helpdesk, bug fixes and enhancement support to applications hosted and managed centrally by Shared Services BC (SSBC). These applications can be divided into four categories – Corporate Accounting System (CAS), messaging/authentication & collaboration, enterprise wide application services, and carbon measurement and reporting. Consulting expenses include outsourcing costs for support of CAS which are not recoverable costs.				Corporate Applications Services are delivered by the ministry staff. CAS support is provided through an alternate sourcing arrangement with Fujitsu. Incidents for CApS are routed through the Customer Service Centre (CSC)			
The current funding model for Corporate Application Services is:				The current funding model for Corporate Application Services is:			
				<ul style="list-style-type: none">Voted Appropriation: Corporate applications projects, Corporate application servicesRecoverable: IT Solutions – Consulting (not all IT consulting costs are recoverable. e.g. expenses related to support of CAS applications which are categorized under "Consulting" costs are not recoverable)			
Total	SALARIES	CONSULT.	AMORT.	SOFTWARE	OTHERS		
~\$32.8M			\$ 17				
Current Issues and Challenges				Leading Practices / Benchmarks		Potential Opportunities	
<ul style="list-style-type: none">There are a number of corporate applications coming up for technology refresh (e.g. TRIM, ITEMS, Remedy). Some of these applications have low adoption / usage (e.g. Common Branch Reporting environment has less than 10 users, ARIS and Netflow applications less than 20, SSL VPN for Attorney General less than 25, etc.)The current Oracle version (11.5.10) of the CAS solution will be going out of support in November 2013. The CAS application is highly customized and has ~55 feeder systems				<ul style="list-style-type: none">Conduct rotating monthly reviews on portions of the corporate application portfolio to assess the value provided by each application (determine core applications) (Source: How the CIO Can Increase the Value of the Application Portfolio, Gartner, July 2010). If supported applications are not core, consider alternate sourcing for support of these applications.Low utilization does not necessarily mean low value. In order to properly assess the value of an application, develop a list of "utilization metrics". (Source: How the CIO Can Increase the Value of the Application Portfolio, Gartner, July 2010).		<ul style="list-style-type: none">Improve application support capability by focusing on core corporate applications.	
<ul style="list-style-type: none">The cost of application support is deemed high and most of the ministry's application support resources are involved in day-to-day operations for providing application support services. The CApS team is unable to participate in strategic technology decisions. (source: CApS team)				<ul style="list-style-type: none">Outsourcing of application support services by allowing vendors to provide services from offshore can result in ~25% to 30% cost savings (Source: Deloitte supplier pricing reference, assuming 75% resources are offshore)Off-shoring offers value beyond simple labour arbitrage, application life-cycle process improvement and consolidation & standardization can reduce costs by additional 29% (Source: Forrester: Assessing Which Applications To Offshore, Feb 2008)		<ul style="list-style-type: none">Explore options to outsource/offshore application support	
Additional Leading Practices							
<ul style="list-style-type: none">The typical cost structure for a support organization is 74% Personnel, 20% Software and remaining 6% are hardware and occupancy costs (Source: Gartner - IT Key Metrics Data 2011: Key Applications Measures: Application Support: Multiyear) For SSBC, the cost of personnel is ~69% and cost of software is ~10% of the overall costs. Cost distribution for CApS seems to be roughly aligned to the benchmarks.							

Opportunity: OT: One-Time R: Recurring

Opportunity Profile – CApS (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<ul style="list-style-type: none">Improve application support capability - by focusing on core corporate applications. Though this will not provide direct cost savings at this time, it is an important step to be able to effectively outsource services and for future cost savings because of efficiency and effectiveness of application support servicesExplore the option to outsource/offshore application support		S. 13, S. 17			
Timing: Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time
					R: Recurring

1) See subsequent pages for supporting details/calculations

Opportunity Profile – CApS (cont'd)

CApS Capability Assessment

- The Capabilities of the current CApS organization need to be improved to provide efficient application support to ministry and BPS customers. These gaps need to be reduced/closed before benefits from initiatives like outsourcing of services may be realized
- Deloitte's Application Management Maturity Model provides a structured framework for identifying and evaluating opportunities for improvements in application management organizations. Benefits of using the framework include increased value to business; improved flexibility to respond to business needs/changes; improved customer satisfaction; optimization of costs, and better talent management
- The following observations on maturity in capabilities are based on various discussions and meeting with CApS :

No.	Capability Areas	Inputs from CApS	Capability Level ¹
1	Strategy - looks at the AM organization's approach and helps to align it with the company's overall business strategy	<ul style="list-style-type: none"> Application support strategy is currently in the process of being aligned with the ministries' technology strategy Service catalog is ready for part of services, but not formally published 	Developing
2	Organization - looks at the operating model and organization structure that fits the need of the business to maximize efficiency and performance	<ul style="list-style-type: none"> There is no formal capacity management process in place Currently, there is limited visibility into applications supported by various ministries. An "application health check" project that is currently in progress will help CApS develop a better view of application support across ministries. 	Immature – Developing
3	Financials - looks at the quantifying value application management is creating for the business	<ul style="list-style-type: none"> A benchmarking exercise was performed 3-4 years back to determine financial performance of CApS. No action has been taken based on the results of the study. 	Immature - Developing
4	Processes - looks at operational and management processes and procedures for application management	<ul style="list-style-type: none"> The CAS group partly uses processes described in the ITIL framework for application support. The application support processes are not standardized across CApS 	Immature - Developing
5	Technology - looks at the hardware and software tools required to improve service delivery and reporting	<ul style="list-style-type: none"> CApS currently uses tools like "Remedy" for ticket management "Lean" processes are being defined with Fujitsu for application support of CAS 	Developing - Mature
6	Service Delivery - looks at defining the success of application management and aligning performance measures accordingly	<ul style="list-style-type: none"> Key Performance Indicators (KPIs) and Service Level Agreement (SLA) measures are defined for application support of CAS 	Developing

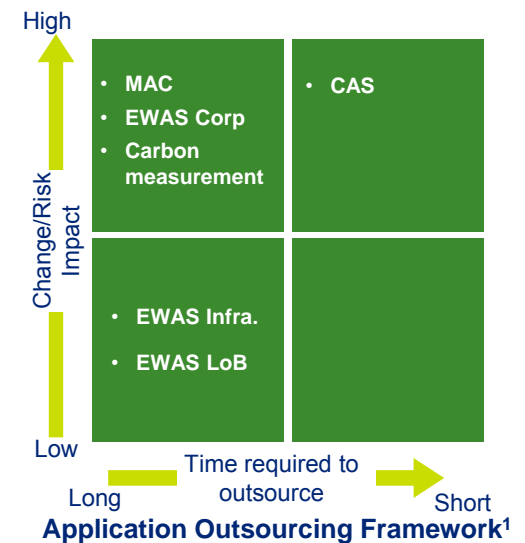
- In the short to medium term, CApS needs to build up capabilities in the areas identified above to be in a position to effectively outsource/offshore application support services

1) Levels of capability are defined as – immature, developing, mature and leading edge. "Immature" is the lowest level on the scale and "leading edge" is the highest.

Opportunity Profile – CApS (cont'd)

Outsourcing application support

- The Deloitte Outsourcing Framework is a tool that helps in identifying applications that are candidates for outsourcing, based on change /risk impact of outsourcing , measured against the time required to be ready to outsource the application. Three criteria are used to determine if an application should be a candidate for outsourcing - organizational, service and market readiness.
- Applications are placed into four quadrants based on their scope. Applications which have a low change/risk impact and short time required to be ready to outsource, should be part of first set of applications to be outsourced. None of the applications supported by CApS fall in this category.
- Inputs from interviews and data provided by CApS was used to place application groups into relevant quadrants. Because of lack of data and time, no formal scoring of these applications was done for CApS as part of this project. It is recommended that detailed outsourcing analysis be done before starting the application support outsourcing initiative.
- Applications in the top two quadrants have high change/risk impact if they are outsourced. Therefore these applications are termed “core” in this framework. Enterprise Wide Application Solutions (EWAS) - Infrastructure and Line of Business applications are non-core but not ready to be outsourced. CApS needs to build capabilities (identified on previous slide) to be in a position to effectively outsource EWAS applications.
- CAS seems to be the only application that is ready to be outsourced (ITIL like processes defined for support, KPIs and SLAs are defined and part of application support is currently outsourced to Fujitsu) but change and risk impact of outsourcing CAS are high



No.	Application Area	Number of Positions	Representative Applications Supported	Core/Non-core ²	Mission Critical ²	Outsourcing Phase
1	Corporate Accounting System (CAS)	87	Core E-Business, iStore, Bank Reconciliation, Budget & charts of accounts, DWH, CGI etc.	Core	Mission critical	Phase 1
2	Messaging, Authentication and Collaboration (MAC)	54	Exchange 2007, Active Directory, Sharepoint 2010, Blackberry, Collaboration services, BCEID, Siteminder etc.	Core	Mission critical	Phase 2
3	Enterprise Wide Application Solutions (EWAS)	45	Infrastructure Apps – Network Ops, EHS, Security	Non-core	Mission Critical	Phase 2
			LoB – Information Access, Secure Remote Access (AG)	Non-core	Mission Critical	Phase 2
			Corporate – Integration Broker, Web Caching, Document and Record Management	Core	Mission Critical	Phase 2
4	Carbon Measurement and Reporting	8	SMARTTEC, SMARTool	Core	Non-Mission Critical	Don't outsource

1) Source: Deloitte's Outsourcing Framework
 2) Source: CApS Team

Opportunity Profile – CApS (cont'd)

Outsourcing application support (cont'd)

- Outsourcing of application support services by allowing vendors to provide services from offshore can result in ~25% to 30% cost savings (Source: Deloitte supplier pricing reference, assuming 75% resources are offshore)
- Current annual salary cost is \$14.9M
- Assume cost of resources is equal for all service lines. Percentage of costs for CAS is 44.4% (= 87/196)
- Therefore annual cost of resources for CAS is ~ \$6.6M (44.4% of \$14.9M)

Benefits

S. 13, S. 17

Costs

S. 13, S. 17

Recommendations:

- Improve maturity/capabilities of application support delivery organization
- Outsource in two phases: Phase 1 – CAS, Phase 2 –other applications
- Examples from other jurisdictions:
 - **Alberta** : Application maintenance and support is not a shared service (Source: Deloitte expertise)
 - **Manitoba**: “SAP first” – attempting to consolidating all applications to SAP platform which will be centrally managed by a staff of about 30. Applications that don’t move to the SAP platform will not managed centrally (Source: Deloitte expertise)
 - **Utah**: Supports only core applications related to e-mail, collaboration etc. but charges back for any other application support (Source: Utah state website)

Opportunity Profile: Asset Investment Recovery (AIR)

Opportunity Profile – Asset Investment Recovery

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
LBS	Asset Investment Recovery (AIR)	Cost recovery (Surplus \$1.2M) ¹	\$14.4M ³	\$0.6M / \$15M ¹	35	\$13, \$17	
Service Overview				Current Delivery and Funding Model			
<ul style="list-style-type: none">Redistributes and disposes of surplus tangible government assets (e.g. buildings, vehicles, boats, equipment) for Ministries and the broader public sector (e.g. municipalities, health authorities, crown corps, police depts).Sells to general public through cash and carry sales, offers to purchase (sealed bids), public auctions and BC Auction. Ministries are mandated to use AIR for asset disposal.Provides ongoing consolidated warehousing and storage services for government assets (e.g. field equipment for Ministry of Environment, Ministry of Energy and Mines, SSBC Workplace IT Solutions).Recoveries for FY2011 were \$15.6 M, split between BC Auction (\$6.6M), public sales (\$2.6M), consolidated warehousing and storage (\$0.2M), and VANOC disposals (\$6.2M). AIR does not currently track recoveries by type of asset.²The recoveries and COGS for VANOC assets disposal were one-time items for FY2011.				<ul style="list-style-type: none">Ministries complete asset disposal report (online or hardcopy) and send to AIR, who organizes pick-up and transportation to warehouse (if needed). AIR checks for requisitions from other ministries / BPS clients and redistributes the asset(s) as needed.If no requisitions, assets are sold to general public through cash and carry sales, offers to purchase (sealed bids), public auctions and BC Auction. Method of sale chosen is based on AIR experience and considers the ease of transport and the opportunity to earn the highest price.AIR recently implemented carbon neutral disposal, where items are sold online from their current location (rather than shipped to AIR warehouse).Assets sold online through BC Auction are shipped anywhere in the world via BC Mail Plus (Purolator). Buyers are charged shipping costs along with purchase.AIR also provides IT asset and secure medial disposal. Offered to general public at charge.AIR operates 3 leased warehouses: Victoria (18,000 sq. ft., 40% asset disposal, 60% storage), Surrey (~26,000 sq. ft., 100% asset disposal less 10,000 leased to Federal Government), and Prince George (~10,000 sq. ft., 100% asset disposal). AIR earns recoveries of \$28.79 / pallet / month for consolidated warehousing and storage.AIR charges commission rates plus cost to dispose of assets for BPS: 32% for general surplus, and 10-15% for higher-end items (e.g. heavy machinery, vehicles). There is no charge to Ministries to dispose of assets through AIR (mandated), and sales revenues are retained by AIR.			
Total		Salary & Ben.	Op. Exp.	Other (incl. COGS) ³			
\$14.4M			\$17				
Current Issues and Challenges				Trends / Leading Practices / Benchmarks		Potential Opportunities	
<ul style="list-style-type: none">				<ul style="list-style-type: none">Some jurisdictions are operating online asset sales, while others are still disposing of assets through on-site lot sales.<ul style="list-style-type: none">Online sales, when appropriate, generally reach a wider audience and earn higher re-sale value.State of Pennsylvania, Washington State Surplus, New York State Surplus, and Oregon Surplus Property sell their IT assets.		\$13, \$17	
<ul style="list-style-type: none">AIR is currently providing asset disposition in-house for a wide variety of asset types through many different sales methods.				<ul style="list-style-type: none">Many private sector organizations outsource asset disposal to private auction houses for specific types of assets to gain the existing efficiency, experience and wide audience of these companies.⁴<ul style="list-style-type: none">Private auction houses typically charge commission ranging from 5%-20% of the asset value, the higher end (e.g. 20%) for more specialized assets.			
Additional Leading Practices							
<ul style="list-style-type: none">Centralized asset collection, re-deployment and/or disposal services are seen as good practices that some Canadian provinces do not currently follow. AIR does utilize this model.AIR is currently piloting selling some assets online through BC Auction for Alberta and							
1) While the recoveries shown indicate breakeven / surplus performance, the annual spend shown excludes the contribution to overall Ministry/SSBC overhead/operations.						Opportunity:	OT: One-Time
2) Reporting by asset type is a requirement of a new system being reviewed for implementation							R: Recurring
3) COGS for FY2011 include purchases of VANOC assets.							
4) Based on Deloitte experience, organizations commonly outsource their asset disposal for specific types of assets like heavy equipment and machinery, IT assets and other items to private auction houses such as Ritchie Bros. and Maynards.							
© Deloitte & Touche LLP and affiliated entities.							

Opportunity Profile – Asset Investment Recovery (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<div> <div>S. 13, S. 17</div> </div>					
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:
					OT: One-Time
					R: Recurring

•

- In FY2011, recoveries for BC Auction were ~\$6.6M. The following table shows the potential increase in asset disposal recoveries if BC Auction items

Opportunity Profile: Distribution Centre Victoria (DCV)

Opportunity Profile – Distribution Centre Victoria (DCV)

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.								
LBS	Distribution Centre Victoria (DCV)	Cost recovery (Surplus \$0.7M)	\$9.5M	\$7.6M / \$2.6M	27	\$13.5M									
Service Overview				Current Delivery and Funding Model											
<ul style="list-style-type: none">Stocks and distributes approx. 2,500 different stationary / office products.Manages and distributes approx. 1,000 different items for Store Front Services, including protocol giftware and BC Magazine items.¹Provides full inventory management and distribution services for Ministry clients, which currently includes approx. 5,600 forms, pamphlets and publications, and Open School textbooks and teaching materials.				<ul style="list-style-type: none">DCV operates a 26,400 sq. ft. leased warehouse in Victoria, currently at 95% capacity with approx. 9,000 items in stock. Average inventory turnover is 8.2 (i.e. 44.5 days): 8.5 for office supplies, 1.3 for forms, 2.9 for pre-printed stock, 4.1 for Ministry publications, and 2.4 for giftware.Sources office supplies & stationary from more than 100 vendors to stock and distribute to government clients. Ministries are mandated to use DCV for those items.Manages two CSAs (Grand & Toy, Monk Office Supply) for office products not carried by DCV. Generally contracts are for a 1-2 year period with extensions. Both CSAs expire April 30, 2012.Distributes items to clients using BC Mail Plus. Shipping costs are included as a percentage mark-up in all DCV prices (i.e. no additional fee to clients), but can cost DCV up to \$100 for remote areas. In FY2011, DCV's total shipping expense was ~\$600,000.²											
<table><tr><th>Total</th><th>Salary & Ben.</th><th>Op. Exp.</th><th>COGS</th></tr><tr><td>\$9.5M</td><td></td><td>\$1.7M</td><td></td></tr></table>				Total	Salary & Ben.	Op. Exp.	COGS	\$9.5M		\$1.7M					
Total	Salary & Ben.	Op. Exp.	COGS												
\$9.5M		\$1.7M													
Current Issues and Challenges			Trends / Leading Practices / Benchmarks			Potential Opportunities									
<ul style="list-style-type: none">DCV's prices for 40 of the top selling office supplies and stationary products are comparable to the prices offered through the existing CSAs.<ul style="list-style-type: none">DCV's prices include shipping, irrespective of order value/quantity or delivery location.DCV procures office supplies and stationary products from more than 100 independent vendors.DCV is keeping a high number of products in stock in the warehouse (e.g. 2,500 types of office supplies, 1,000 types of protocol giftware).Inventory turnover rate may be low, resulting in higher inventory carrying costs (e.g. warehouse space, insurance, security, opportunity costs).			<ul style="list-style-type: none">Public sector organizations are increasingly moving to strategic sourcing with a 3rd party vendor to provide office supplies. These strategic vendors are often able to leverage their high-volume purchasing and distribution network to provide comparable or better prices while also managing the overhead of warehouse storage and distribution.<ul style="list-style-type: none">Discounts through CSAs often start at 60% off list price and increase with higher volumes. Additional discounts may be available for "Top 150" items.³Many organizations create a catalogue of pre-approved items for purchase directly through the CSA to implement stricter controls over spending.Contracts generally include negotiated shipping costs structure (often free shipping).Organizations are using on-demand models for forms, pamphlets, publications, and protocol giftware, reducing/eliminating inventory carrying costs.<ul style="list-style-type: none">Forms, pamphlets, and publications generally change frequently and become outdated. Inventory is reduced to minimum required levels.Protocol giftware may be sourced directly from the manufacturer(s) on-demand and shipped directly to customers,Inventory turnover for Consumer Products industries can range from 3.8 (10th percentile) to 32.6 (90th percentile) with 12 turns being the median.³			<ul style="list-style-type: none">Maximize CSA discounts and phase out the DCV office supplies									
Additional Leading Practices															
<ul style="list-style-type: none">Current leading practice is to outsource any required warehouse facilities and operations to a strategic 3rd party vendor, with industry research indicating that 74% of organizations outsource some part of their warehousing, allowing organizations to focus on their core competency.⁴<ul style="list-style-type: none">Gartner research found that organizations can realize up to 12% cost savings by outsourcing to a 3rd party logistics provider (3PL).⁵3rd party vendors are also able to scale the warehouse space to meet fluctuating demands, making it a variable cost rather than fixed cost.															

1) The data provided by DCV for giftware varied between 389 and 1009 different items. DCV believes that 300+ stocked items are in giftware, and then including BC Magazine stock brings the total up to 1000+.

2) DCV does not have data readily available on the specific mark-up on items to cover shipping costs. Total freight costs in were ~\$600,000 in FY2011 (STOB 6935).

3) Source: Deloitte expertise

4) Source: Gartner, *Research Top View: Global Logistics Strategies and Leading Logistics Practices*, July 13, 2011

5) Source: AMR Research/Gartner, *Three Different Approaches to Outsourced Logistics*, November 13, 2009

Opportunity Profile – Distribution Centre Victoria (DCV)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<ul style="list-style-type: none"> • Maximize CSA discounts and phase out the DCV office supplies <ul style="list-style-type: none"> – Fully analyze the current CSAs, and potentially renegotiate/re-procure the category to maximize discounts, in particular on core items – Consider reducing the # of SKUs and directing purchases toward core items – “Down-spec” core and non-core items, looking for cheaper alternatives that meet basic requirements. – Direct customers to the online vendor portal to place orders; vendor ships directly to customers. – Ensure that the CSA is enforced and appropriately managed/monitored. – As purchases are directed to the vendor portal, phase out dependence on DCV office supplies. 	<ul style="list-style-type: none"> • Lower costs to core government for office supplies. <ul style="list-style-type: none"> – High-level analysis comparing current DCV prices on high-volume items to G&T CSA prices revealed that pricing between the CSA and DCV was similar (including full rebates). On some items, the G&T CSA was cheaper, and vice versa. When volume weighted, overall cost was also similar. – Under the assumption that renegotiating/re-procuring the office supplies CSA could result in savings of approximately 0-10% off current DCV spend, this could lead to annual savings to government of up to \$0.7M. – Potential renegotiations should include considerations for discounts, rebates, and potential signing bonuses. – Additional savings to core government would also result from purchases that are currently being made through the existing CSA (as opposed to through the DCV), as these would also recognize the savings of a renegotiated/new contract. • Risk of fluctuating demand transferred to external party. 				s.13, s.17
	S.13, S.17				

Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time	R: Recurring
1)	DCV operating costs are not broken out across the various services (i.e. office supplies distribution, inventory management and distribution services. Therefore each service's contribution to the FY2011 surplus cannot be determined.						
2)	Limited disposal costs should be incurred if DCV stops purchasing new inventory but continues to fulfill orders until inventory is nearly eliminated, then closes operations and sells remaining items at reduced price. If some stock runs out before DCV closes, DCV staff will order through CSA on behalf of customer. Alternatively, the Ministry may choose to expedite the process by disposing of remaining inventory through online auction.						
3)							
4)							
5)							
6)	DCV is currently unable to provide data on the warehouse space allocations across different products and services.						

Opportunity Profile – Distribution Centre Victoria (DCV)

Reduced Inventory Levels and Estimated Savings

- DCV is currently carrying a wide variety of products in their warehouse, totalling over 9,000 items.
- Based on the FY2011 beginning and ending inventory levels, inventory carrying costs were calculated to be ~33,000/year.

S. 17, S. 13

- 1) Protocol Giftware and BC Magazine were part of DCV in FY2011; these service areas are part of Store Front Services as of April 1, 2011.
- 2) Managed Inventory includes forms, ministry publications, preprinted stock, Wams, Open School, misc/other DCV.
- 3) Inventory turns are based on costs, not volume.
- 4) Approximate FY2011 DCV revenue by service area, beginning and ending inventory data were provided by DCV.
- 5) Inventory Carrying Cost = Average Inventory x Cost of Capital. Cost of financing capital assumed to be 2% (Deloitte Expertise).

6)
7)
8)

S. 17

Opportunity Profile: Storefront Services (SFS)

Opportunity Profile – Store Front Services

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity – Gov.
LBS	Store Front Services (SFS)	Cost recovery (Deficit - \$0.04M)	\$1.15M ¹	\$0.74M / \$0.37M	6	\$13,517	

Service Overview	Current Delivery and Funding Model
<ul style="list-style-type: none"> Store Front Services (SFS) is comprised of three service areas: Crown Book Store (CBS), Protocol Giftware (PG) and BC Magazine Giftware (MG). <ul style="list-style-type: none"> CBS is a specialty store located in a heritage building near Parliament, which sells Crown Publications and BC-themed memorabilia. PG manages the sale of a variety of items, including BC pins and milestone trophies, to government organizations, as well as the general public for some items. PG sells stock merchandise online and in the CBS, and also offers custom orders to government clients, which are generally completed in person. MG sells giftware inventory for BC Magazine online, over the phone and within the CBS. SSBC purchased the inventory from BC Magazine in September 2010. 	<ul style="list-style-type: none"> The new organization of SFS began operations on April 1, 2011 following an activity-based costing (ABC) review which resulted in six recommendations / strategies for reducing costs and improving operational performance across the three service areas. There has been a ~40% reduction in SFS FTEs from 2010 (10.28, ~\$0.4M) to 2011 (6, ~\$0.3M).² Since April 2011, expenditures of \$0.28M and recoveries of \$0.23M have led to a ~\$53,000 loss. Historically, however, annual revenue is driven by strong performances in the winter and spring. Crown Book Store: Sells merchandise sourced from local artisans and books/maps from "sister branch" <i>E-Publications</i>, as well as Protocol Giftware and BC Magazine Giftware. Heritage home hosts store space, as well as offices for SFS staff. Protocol Giftware: 40% of total sales are custom orders. PG recently consolidated custom wholesalers into three prequalified "wholesalers of record" (3 year contracts). Stock merchandise is currently supplied by over 50 different vendors. PG inventory has been reduced by 28% (\$0.1M) since April 2011 and SFS has targeted an inventory turn of three by end of FY2012 (previously <1). Current inventory at 389 SKUs.³ BC Magazine Giftware: As part of the "partnership" with BC Magazine, SFS is provided with free advertising space to market BC Magazine giftware in exchange for 15% of gross sales. The SFS ABC analysis found that showcasing merchandise valued at ~\$30 resulted in greatest total sales. Current inventory at 620 SKUs.³ SFS entered into a 3-year contract with BC Magazine in September 2010.

Total	Salary/ Benefits	COGS	Office Expense
\$1.2M	\$17	\$17	

Note: The Royal BC Museum Shop, which is located within walking distance of the Crown Book Store, offers similar BC-themed merchandise.

Current Issues and Challenges	Trends / Leading Practices / Benchmarks	Potential Opportunities
<ul style="list-style-type: none"> The majority of sales for Protocol Giftware and BC Magazine merchandise are completed online (60-80%). Limited in-store sales and poor financial performance (~\$0.4M in losses on ~\$0.8M sales).⁴ Protocol Giftware is faced with managing a large inventory, which is the result of over-orders and frequently dated merchandise (ministries/ departments often change names, making labeled items obsolete) . 	<ul style="list-style-type: none"> Organizations are generally moving away from traditional brick-and-mortar stores and instead towards online retail sales as online sales continue to grow globally. Source merchandise directly from manufacturers/wholesalers on an on-demand basis through an online portal. Items are manufactured/printed following an online order and are shipped directly to the client. 	<ul style="list-style-type: none"> Remove brick-and-mortar store and concentrate services online Move to on-demand model to manage Protocol Giftware

Additional Jurisdictional Information
<ul style="list-style-type: none"> Alberta has a brick-and-mortar book store (Alberta Queen's Printer Bookstore), which sells government publications, including maps and legislation documents. Items are also available online. This store is part of Alberta Queen's Printer, a division within Service Alberta, which delivers standardized shared services to partner ministries within the Alberta Provincial Government. Ontario has an online book store, which sells books, maps and other government publications. This online store is part of Ontario's Queen's Printer, a division of Service Ontario. Many Provincial governments have Legislative Assembly Gift Shops, which sell a wide selection of local arts and crafts and other themed merchandise.

1) Building Occupancy Costs not included.

2) Information provided by Store Front Services indicate a ~40% reduction in FTEs but only a ~25% reduction in salary and benefits costs.

3) The data provided by DCV for giftware varied between 389 and 1009 different items. DCV believes that 300+ stocked items are in giftware, and then including BC Magazine stock brings the total up to 1000+.

4) According to SFS, the ABC review found that CBS incurred losses of ~\$0.4M on ~\$0.8M of sales in FY2011. The financials, however, only report a \$40,000 deficit in FY2011.

Opportunity Profile – Store Front Services (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<ul style="list-style-type: none"> • Online Retail – Remove need for brick-and-mortar store front by concentrating services online. <ul style="list-style-type: none"> – Reduce inventory of BC Magazine giftware by directing customers to the BC Magazine Online Gift Shop. – Publications which government is mandated to sell can continue to be sold via Crown Publication's online store. • Use Crown Book Store operation to continue to reduce inventory for remainder of FY2012. SFS may also consider a partnership with other government stores (Royal BC Museum Shop) to dispose of remaining inventory. 					
<ul style="list-style-type: none"> • On-Demand Purchasing & Online Portal – Move to on-demand model to manage purchasing of both custom and stock merchandise for Protocol Giftware. <ul style="list-style-type: none"> • Customers would place orders directly with the manufacturer/wholesaler. • SFS operations may shift to managing vendor contracts and the catalogue of approved items. 					

S. 13, S. 17

S. 13, S. 17

Timing:

1)
2)
3)

4)

Immediate: before FY end

Short Term: 6 - 12mths

Medium Term: 12 - 24mths

Long Term: 24 mths+

Opportunity:

OT: One-Time

R: Recurring

S. 13, S. 17

Opportunity Profile – Store Front Services (cont'd)

Activity-Based Costing Review Recommendations

- SFS began operations on April 1, 2011 following an activity-based costing (ABC) review which resulted in six recommendations / strategies for reducing costs and improving operational performance across the three service areas.
- The following table lists the six recommendations / strategies from the ABC review and their current status, as provided by SFS:

Recommendation	Description	Status
Centralize Operations	Previously, the Crown Book Store, Protocol Giftware and BC Magazine Giftware were separately responsible for their own purchasing, marketing and customer service. These activities have been concentrated for all three service areas with a broader focus on SFS as a whole. In addition, the organization's previously siloed operations have been centralized in the Crown Book Store, which includes office space for the organization's six FTEs.	Complete
Review Major Consumption Activities	As a result of the activity-based costing review, major activities were consolidated and streamlined. The purchasing of custom orders for Protocol Giftware, for instance, which represents ~40% of total sales, was consolidated into three prequalified "wholesalers of record" who signed three year contracts in August 2011. This consolidation eliminated the need to collect/review three quotes as part of the procurement process. Similar plans are being considered to consolidate wholesalers for Protocol Giftware stock items as well.	Complete
Reduce Total Staff Complement	SFS staff complement has been reduced from 10.28 FTEs to 6 FTEs. Reduced salary/benefits from ~\$0.4M in FY2011 to ~\$0.3M in FY2012. ¹	Complete
Review Product Pricing	There were a number of issues in the pricing of merchandise across SFS, with some items priced far too high and some items priced far too low. In addition, the pricing mechanism used to calculate shipping costs for BC Magazine giftware (16% of gross order) was resulting in considerable losses on a per order basis, especially for large/heavy orders shipped internationally. This pricing model was replaced following the activity-based costing review and customers are now provided with an accurate quote (pass through only) from a third party courier prior to finalizing an order.	Complete
Reduce Protocol Giftware Inventory	Emphasis to reduce Protocol Giftware inventory to \$0.22M or ~46% by end of current FY. Since April 2011, inventory has been reduced from ~\$0.4M to ~\$0.29M (~28%), and the organization believes that with a successful Christmas season, this goal is attainable.	In Progress
Renegotiate Financial Arrangement with BC Tourism	SFS follows a keystone pricing model in the sale of BC Magazine Giftware – SFS sells BC Magazine giftware to customers for twice the wholesale price SFS paid to BC Tourism. In addition, SFS pays BC Tourism 15% in exchange for advertising space in BC Magazine. SFS therefore, captures 35% of the sale price, in exchange for managing purchasing, inventory, marketing and customer service. SFS is considering the renegotiation of these terms.	In Complete

1) Information provided by Store Front Services indicate a ~40% reduction in FTEs but only a ~25% reduction in salary and benefits costs.

Opportunity Profile: Product Distribution Centre (PDC)

Opportunity Profile – Product Distribution Centre (PDC)

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
LBS	PDC	Cost recovery (Surplus \$4.3M)	\$31.2 M	\$32.0M / \$3.5M	74	\$13, \$17	
Service Overview				Current Delivery and Funding Model			
<ul style="list-style-type: none"> Procure, receive, store and ship orders to customers: <ul style="list-style-type: none"> More than 4,000 different medical, personal care products and pharmaceuticals (e.g. urologicals, entera nutrition, incontinence care, and wound care, as well as gloves, trays, needles, and commodities for institutional or home care). More than 3,300 different uniforms and career apparel products. 445 different maintenance, janitorial and cleaning products. Offer other “Plus+” services: customized supply strategies, career apparel design, drug dispensing services, inventory management, and health benefits supply services. “Plus+” services are provided at no charge to clients as value-add services; costs are recovered through product mark-up. Accepts orders directly from citizens/customers by email, fax, phone. Ministries/customers are not mandated to use the PDC. 				<ul style="list-style-type: none"> PDC operates 50,000 sq. ft. warehouse in Coquitlam, currently at 100% capacity with approx. 550,000 units in stock, including 2,000 sq. ft. licensed & regulated pharmacy. Operates 3 pick-to-light carousels, flow-racking to the conveyor, and implementing radio-frequency to improve inventory mgmt accuracy. Average inventory turnover varies between 2.31 (158 days) and 9.65 (38 days). PDC sources from many vendors due to unique customer medical requirements and client ministries wanting to provide alternatives for customers. PDC supplies to customers directly and bills back to the ministry/BPS client at 16-37% mark-up over cost to cover overhead. PDC provides secure customized shopping carts for each program. Customers can only view and purchase authorized items in their program's cart. Inventory levels are set based on program demand and ministry/BPS client commitment to purchase stock (generally MOU is written)¹. 27-30% of sales to MSD programs, 21-25% to MCFD programs, followed by BC Ambulance (uniforms and supplies), BC Corrections (daily prescription requirements), other ministries / BPS. Ministries are not mandated to use PDC. Distributes items using BC Mail Plus/Purolator, including citizen residences. Deliver within 24 hrs for At Home Care program, 3-5 days for all other programs. FY2011 shipping costs were \$1.2M. 			
		Total	Salary & Ben.	Op. Exp.	Other (incl. COGS)		
		\$31.2M		\$17			
Current Issues and Challenges				Trends / Leading Practices / Benchmarks		Potential Opportunities	
<ul style="list-style-type: none"> PDC provides a wide variety of products, including different <ul style="list-style-type: none"> Provides medical supplies & pharmaceuticals (68%), as well as non-medical items like career apparel (13%) and maintenance products (19%), each with different storage & distribution requirements.² Provides multiple varieties and/or brands of an item to support Ministry requirements (e.g. Huggies & Pampers). PDC delivers to customers within 24 hrs for At Home Care program. <ul style="list-style-type: none"> Includes receiving order, picking items, packaging and delivery to customer residence. May also include procurement. Some orders are medically urgent (e.g. medical reaction). 				<ul style="list-style-type: none"> Lean warehouse operations are standardizing products and reducing inventory levels as much as possible. Storing medical supplies and pharmaceuticals with non-medical products may risk compromising the medical supplies and pharmaceuticals (e.g. sterility) and/or result in non-medical products being stored at a higher cost. Provide shipments at the lowest cost while meeting service levels. 		<ul style="list-style-type: none"> Automated equipment and warehouse operations help improve productivity, improve order accuracies, and lower operating costs. PDC is currently improving automation and would like to automate further if provided the capital budget to do so. 	

1) PDC agrees to stocking levels with ministry/BPS clients, passing risk of overstocking onto client, usually in written Memorandum of Understanding or other written form.
 2) Product split percentages based on current inventory levels as of August 2011.

Opportunity Profile – Product Distribution Centre (PDC)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
-------------------------	--------------------	---------------------	--------------	-----------------	------------------------

S. 13, S. 17

Timing:

1)
2)

Immediate: before FY end

Short Term: 6 - 12mths

Medium Term: 12 - 24mths

Long Term: 24 mths+

Opportunity:

OT: One-Time

R: Recurring

S. 17

S. 17

© Deloitte & Touche LLP and affiliated entities.

Opportunity Profile – Product Distribution Centre (PDC)

Reduced Inventory Levels and Estimated Savings

- PDC is currently carrying a wide variety of products in their warehouse, offering more than 7,700 items and carrying almost 550,000 units of inventory.
- Based on the FY2011 beginning and ending inventory levels, inventory carrying costs were calculated to be ~\$95,000/year.

S. 13; S. 17

- 1) Medical Products and Pharmaceuticals includes medical products, feeding supplies / equipment, personal care products, and pharmaceuticals.
- 2) Current inventory reflective of August 2011.
- 3) Average inventory Turns based on August 2011 report.
- 4) Approximate FY2011 PDC Revenue by service area, beginning and ending inventory data were provided by PDC. Revenues do not include credits for items returned, so net sales values may be overstated.
- 5) Inventory Carrying Cost estimated to be 25% of average inventory value (industry standard and Deloitte Expertise).
- 6)
- 7)
- 8)
- 9)

S. 17

S. 17

Opportunity Profile: Records Management

Opportunity Profile – Records Management

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.								
LBS	Records Management (RM)	Mixed (Surplus \$0.5M)	\$5.5M	\$5.7M / \$0.3M	55	\$ 17									
Service Overview				Current Delivery and Funding Model											
<ul style="list-style-type: none">Provides central records management (RM) support services to ministries & BPS including: physical records storage, advisory services, training, classification development, archival appraisal, Enterprise Document and Records Management System (EDRMS) implementation, and systems administration. Also supports government-wide framework for the management of recorded information.Part of the Ministry's Information Access Operations (IAO) service line.				<ul style="list-style-type: none">Currently ~939,000 boxes in storage (78% government, 22% BPS) and growing by 2.5% / yr.Four private records storage vendors (Iron Mountain ~35%, Access ~29%, CUBE ~26%, and Securiti ~10%) manage transfer, storage, and retrieval of off-site records. Disposition (destruction or transfer to government archives) managed by two separate companies (Recall and Shred-It) through CSAs. Contracts signed in 2007, up for renegotiation in 2012, option to extend to 2017.The current funding model for RM is mixed. Recovery includes records storage & related services (retrieval, disposal, etc.). Voted includes records management services (training, advisory, etc.).Clients are charged a fixed fee of \$0.54/box/month for Records Storage & Related Services. Ministry costs average \$0.33/box/month for storage and \$0.08/box/month for additional services.Disposal costs vary across regions, from \$0.52 - \$1.90/box. ~30,000 boxes are destroyed/yr.¹											
<table><tr><th>Total</th><th>Salary & Ben.</th><th>Prof. Services</th><th>Other Op. Exp.</th></tr><tr><td>\$5.5M</td><td></td><td>\$ 17</td><td></td></tr></table>				Total	Salary & Ben.	Prof. Services	Other Op. Exp.	\$5.5M		\$ 17					
Total	Salary & Ben.	Prof. Services	Other Op. Exp.												
\$5.5M		\$ 17													
Current Issues and Challenges				Trends / Leading Practices / Benchmarks		Potential Opportunities									
<ul style="list-style-type: none">Inexpensive service with limited controls on demand may lead to unnecessary records storage and potential overuse of service offering.<ul style="list-style-type: none">Rush retrievals (2 hr) are offered to clients at no additional charge, but cost Ministry \$4.50/rush retrieval. ~7,500 rush retrievals/year (~\$34,000/yr).Indefinite storage expense of lost/misfiled boxes (2-7% or ~\$0.1 - \$0.4/yr).59% of boxes are stored off-site without schedules (~37% boxes unclassified, ~22% boxes with schedule not yet applied). 5-7 year backlog for service.Multiple vendors for storage due to geographic requirements/service offerings.<ul style="list-style-type: none">Different systems/processes across vendors and need to reconcile reports make data analysis challenging. Currently no regular tracking / analysis and had difficulty retrieving information as part of this review.Different vendors to manage storage and disposition creates additional costs associated with the retrieval, packaging and transfer of records at disposition.Heavy reliance on physical records and associated storage costs.<ul style="list-style-type: none">RM is not integrated with broader government's content management strategy.There is a lack of commitment from individual business units to use existing RM system and implement new electronic record system, TRIM.Multiple copies are stored from the frequent creation of convenience copies and limited adoption of proper RM practices across government.				<ul style="list-style-type: none">A major challenge for centralized RM is ensuring compliance.Organizations may inadvertently pay for the storage of 2-7% of their records indefinitely as a result of misfile or poor record classification.²\$ 13 allows organizations to leverage economies of scale and potential pricing discounts, and support the standardization of processes and reporting, allowing for greater data collection and analysis.Organizations are re-examining the value of physical records and implementing enterprise-wide processes to regulate use of physical documents and limit printing of electronic files.Gartner reports that ~20-50% of organizations have begun implementing electronic records systems, but most of public sector has not yet begun or still in preliminary stages.⁴		<ul style="list-style-type: none">Enterprise-wide RM System (Physical & Electronic)									
Additional Leading Practices															
<ul style="list-style-type: none">Implementation of processes to remove approval at disposal and automate/streamline disposition. Current practice at SSBC.Retention schedules aligned using a "functional" scheme where record series are defined by business activity rather than by subject or media. Current practice at SSBC.Ministries/departments design business record solutions with guidance or governance provided by a centre of excellence or similar source of expertise. Current practice at SSBC.Provincial archives are considering whether to offer electronic business records services to assist in the creation/storage of digital records of enduring value."Big Bucket Approach", using fewer record series and refining the number of retention periods to group records in larger folders (private sector).															
¹⁾ Disposal costs vary across regions. \$0.52/box in Vancouver for orders over10,000lbs, \$1.05/box on Vancouver Island for orders over10,000lbs, and all other disposals are \$1.90/box throughout the Province. ~99% of disposal orders are over10,000lbs.				²⁾ Source: New York City chapter, ARMA International ³⁾ Source: Gartner, <i>Best Practices: Records Retention Policies and Schedules</i> , June 2010 ⁴⁾ Source: Gartner, <i>Hype Cycle for Content Management</i> , July 2011											
© Deloitte & Touche LLP and affiliated entities															

1) Disposal costs vary across regions. \$0.52/box in Vancouver for orders over 10,000lbs, \$1.05/box on Vancouver Island for orders over 10,000lbs, and all other disposals are \$1.90/box throughout the Province. ~99% of disposal orders are over 10,000lbs.

2) Source: New York City chapter, ARMA International

3) Source: Gartner, *Best Practices: Records Retention Policies and Schedules*, June 2010

4) Source: Gartner, *Hype Cycle for Content Management*, July 2011

© Deloitte & Touche LLP and affiliated entities.

Opportunity Profile – Records Management (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<p>• Enterprise-wide RM System (Physical & Electronic) – Develop enterprise-wide strategy for managing both physical and electronic records.</p> <ul style="list-style-type: none"> Support implementation with online training/orientation to increase awareness and improve adoption across government. Assess longer-term opportunity to integrate enterprise RM strategy with full ECM system (email, web, etc.). 	S. 13, S. 17	S. 13, S. 17			
<p>Timing: Immediate: before FY end Short Term: 6 - 12mths Medium Term: 12 - 24mths Long Term: 24 mths+</p> <p>Opportunity: OT: One-Time R: Recurring</p>	S. 13, S. 17	S. 13, S. 17			

Opportunity Profile – Records Management (cont'd)

Additional trends and leading practices

Description of Trend / Leading Practice / Jurisdiction	BC RM Aligned?
Functional Approach – Retention schedules are aligned using a business classification or “functional” scheme where record series are defined by business activity rather than by subject or media. Both Alberta and BC schedule records by function, rather than by media or format.	✓
Streamline/Automate Disposal – Implement processes to streamline disposition approval and automate the disposal of eligible documents. Some organizations operate on a by-exception model in which all eligible documentation is destroyed on schedule unless an exception is identified by the individual or department in need of retaining the document beyond the defined retention period. Using automated processes for disposal can lead to significant time and resource savings.	✓
Not One Size Fits All – Ministries / departments increasingly design business record solutions with guidance or governance provided by a centre of excellence or similar source of expertise. Governments attempting to implement enterprise-wide RM solutions without considering the specific needs of individual units continue to face a number of significant challenges and generally the success rate of this type of initiative is very low. Ontario for instance, attempted to drive out operations and development of a RM system for all government from a central department and experienced a number of challenges primarily related to funding and resource constraints. Both Alberta and BC have found success implementing systems on a ministry-by-ministry basis with guidance provided by a central advisory body.	✓
Going Green – While it is difficult to limit the number of convenience copies created to avoid duplicate storage from a paper perspective, some organizations have looked to implement cultural change to support environmental sustainability and reduce printing. This is only effective when there is some level of monitoring or recognition for adoption.	N/A ¹
Archiving – Some Provincial archives are considering whether to offer electronic business records services to assist in the creation/storage of digital records of enduring value. Archive departments were not originally intended to be in the business of preserving day-to-day business records, as their mandate is primarily to capture the documentary history of the province. While Alberta is considering expanding their intake criteria, BC has become more restrictive, raising the price of service (~\$450/box) to ensure only items of value go into long-term preservation.	N/A ¹
Electronic RM – As of 2017, Library and Archives Canada , responsible for preserving the documentary heritage of Canada, including the storage of Provincial Government documents, will only receive electronic files from clients. On a provincial level, Alberta , Ontario and Newfoundland appear to be leading the way in physical RM and have begun, or are well-positioned to begin, the transition to an electronic RM system across government. BC is in the preliminary stage of its transition to electronic RM – currently implementing TRIM, the new government standard electronic record keeping system. Any ministry, division or branch can contact the IAO EDRMS Implementation Team to initiate a TRIM implementation which can take between 2 months (single unit <10 FTEs) and 2 years (ministry >500 FTEs) to complete.	In Progress

1) These trends are not within the scope of the Ministry's Records Management (RM) service line.

Opportunity Profile – Records Management (cont'd)

Annual storage volumes

- The following table illustrates the increasing trend in storage volumes, as more boxes are being added to storage annually than are being destroyed.

	2007/2008 Actuals	2008/2009 Actuals	2009/2010 Actuals	2010/2011 Actuals	2011/2012 Forecast ¹
Beginning # of Boxes in Storage	845,007 ²	871,944	892,308		
New Boxes Stored	51,721	55,322	52,475		
Boxes Destroyed	(24,734)	(35,008)	(26,255)		
Total Boxes in Storage	871,994	892,308	918,528		
Net Change in Total Boxes	+26,987 / +3.2%	+20,314 / +2.3%	+26,220 / +2.9%		

S. 17

¹ "New Boxes Stored" and "Boxes Destroyed" for 2011-12 were calculated using a 5-year average, rather than a prorated estimate based on YTD figures, to account for an anticipated end-of-year spike in storage demand across government.

² Beginning # of Boxes in Storage for 2007/2008 calculated based on 2008/2009 beginning # less Net Change in Total Boxes for 2007/2008.

Opportunity Profile – Records Management (cont'd)

Overview of HP TRIM

- System capabilities:
 - Provides a range of records management capabilities, including document management and workflow.
 - Integrates with and support of records management for Microsoft SharePoint 2007 and SharePoint 2010.
 - Web client provides the functionality and "look and feel" of HP TRIM rich client with a zero footprint on the desktop.
 - Enables physical records management capabilities with a space management module that will handle multiple warehouses and shelf capacity planning.
- HP TRIM has a strong market presence and installed base in federal, state and local governments in Australia, the U.K. and the U.S.
- Based on the August 2010 Gartner MarketScope for Records Management, HP TRIM received a "Positive" rating¹. The following strengths and cautions were identified.

Strengths	Cautions
Fully certified on all aspects of DoD 5015.2 version 3, including classified records management and FOIA and PA records management.	Federated records management may be implemented through a third-party partner but the typical approach is to move all records into HP TRIM.
Good records management support for Microsoft SharePoint 2010 and SAP through connector integration.	Limited integration with other content repositories and archives.
Strong physical records management capabilities.	

¹ Positive rating was described as:

- Strong product, however execution in one or more area may still be developing.
- Customers should continue with planned investments.
- Potential customers should consider this vendor a viable choice or strategic or tactical investments, while planning for known limitations.

Opportunity Profile – Records Management (cont'd)

Electronic Records Management & Paper Reduction

- Organizations in both the public and private sector are realizing a wide range of benefits as they transition from physical to electronic records management programs to reduce paper volume and achieve operational efficiencies.

Expected Outcome

- Reduce volume of printed paper
- Decrease warehouse storage costs

S. 13, S. 17

Opportunity Profile: BC Mail Plus

Opportunity Profile – BC Mail Plus

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
LBS	BC Mail Plus	Cost recovery (Surplus \$2.0M)	\$28.8 M	\$23.0M / \$7.9M	101	13,517	

Service Overview				Current Delivery and Funding Model			
<ul style="list-style-type: none"> Consolidated mail preparation, processing and distribution services to ministries and the broader public sector throughout British Columbia, as well as onwards to Canada Post and other couriers. Other "Plus+" services, including document development and variable data printing (e.g. BC Student Loan statements), scanning and data capture, ID card production, employee household relocation services, and education logistics services. 				<ul style="list-style-type: none"> Mail preparation and distribution account for 84% of BC Mail Plus expenses and recoveries and 70% of employees. BC Mail operates a fleet and drivers for internal mail deliveries to gov. offices and outsources external mail deliveries to citizens to Canada Post, as well as parcels to Purolator. BC Mail Plus does not track data on proportion of internal versus external mail. Sales are distributed 45% in Victoria and 20% in Vancouver. Each service area earned a surplus in FY2011, with BC Mail Plus earning a \$2M surplus overall. Customers are charged a flat blended rate of \$0.59 cents per letter. BC Mail Plus does not track the cost per item to deliver mail. Customers are charged variable rates based on cost plus mark-up for parcel shipping (50% of Purolator rate + small markup) and employee relocation services (8-9% margin on COGS). ID Card Production is done in partnership with IBM, who provides the machines and BC Mail Plus provides the secure building and labour. Currently they print BC Drivers Licenses and Alberta WIN cards, but are looking to expand to other ID cards (e.g. new BC Health Card). Looking to grow document scanning (growing demand with TRIM implementation) and mail distribution to other broader public sector agencies (e.g. health authorities). 			
Total	Mail Dist.	Mail Prep.	Var. Data Print	Doc. Dev.	Scan. & Data	ID Card	Empl. Reloc.
\$28.8M							

Current Issues and Challenges	Trends / Leading Practices / Benchmarks	Potential Opportunities
<ul style="list-style-type: none"> BC Mail Plus volumes have been decreasing over the last 3 years. <ul style="list-style-type: none"> Mail preparation and distribution volumes have decreased by 7% and 12% respectively since FY2009. Variable data printing volumes have decreased by 18% since FY 2009.³ Scanning and data capture volumes decreased 34% in FY2010 but increased 7% last year. ID card production volumes have decreased by 32% since FY2009¹. BC Mail Plus contracts with over 65 moving firms in BC. 	<ul style="list-style-type: none"> Canada Post reported a 10.2% decline in mail volumes between 2008 and 2010, as did other global postal services organizations (USPS, United Kingdom's Royal Mail and Australia Post). <ul style="list-style-type: none"> Electronic substitution have helped drive declines in the postal industry. Canada Post's 2010 Annual Report states: "The consensus is that physical-mail markets are now fully mature and letter mail volumes will continue to erode."¹ With the increase in electronic communications (e.g. email, voice and video conference) B2C mail is declining at a higher rate than B2C mail. Some jurisdictions are outsourcing internal mail to contracted courier companies. Many jurisdictions negotiate contracts with private vendors to provide corporate moving services. 	13,517

Additional Leading Practices
<ul style="list-style-type: none"> There does not appear to be a clear leading practice in public sector mail services. Some jurisdictions are outsourcing their services, while others are retaining it in-house. Some jurisdictions are implementing new technology like "hybrid mail" where customers write a message in an application which automatically formats its, sends it to print and mail. Decentralized printing may be used when local distribution is more cost effective than distribution throughout the entire geographic territory.

1) Source: Canada Post, 2010 Annual Report, 2010

2) As provided by SSBC. Independent analysis not performed to validate this information.

3) The variable printing function claims to have a distinct advantage over 3rd party vendors by keeping the "print-prep-ship" value chain in one place, leading to scale economies. BC Mail Plus is looking to onboard other entities onto this service as it generates a surplus (based on anecdotal information from LBS)

Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:	OT: One-Time	R: Recurring
1)	Estimates based on FY2011 expenses for Scanning and Data Capture and ID Card Production.						
2)	Based on Deloitte experience,						
3)	BC Mail Plus does not have data on the book value of their assets readily available.						
4)	© Deloitte & Touche LLP and affiliated entities.						

Opportunity Profile – BC Mail Plus (cont'd)

FY2011 Financial Summary

- In FY2011, each service area of BC Mail Plus reported a surplus.

	Mail Distribution	Mail Preparation	Variable Data Printing	Document Development	Scanning & Data Capture	ID Card Production	Employee Household Relocation	Education Logistic Services	BC Mail Plus TOTAL
Expenses									
Salaries & Benefits									\$.17
Operating Costs									
Total Expenses									(\$28.8M)
Recoveries									
Internal				\$.17					\$.17
External									
Total Recoveries									\$30.9M
Surplus / (Deficit)¹									\$2.0M
FTEs	53.5 ²	16.75	3.6	2.7	1.68	4.68	1.09	5.56	100.75 ³

1) Excludes building occupancy and other SSBC overhead charges

2) Mail Distribution FTEs outside of Victoria perform both processing and delivery activities; however, estimated split is 31.38 FTEs for processing and 22.12 FTEs for delivery.

3) BC Mail Plus Total FTEs also includes Director's Office (4.37 FTEs) and Program Support (6.82 FTEs)

Opportunity Profile – BC Mail Plus (cont'd)

FY2007 - FY2011 Annual Sales Volumes

- BC Mail Plus has reported declining recoveries over the past few years, particularly in mail distribution and variable data printing.
 - This is consistent with the overall market trend, with Canada Post losing over 8% in volume in the past 5 years.¹

S. 17

1) Source: 2010 Annual Report, Canada Post.
2) In August 2008 Maximus stopped using BC Mail Plus to produce Care Cards, resulting in drop in FY2009 recoveries.
3) Increase in mail preparation due to an election of May 2009.

Opportunity Profile: Fleet Management

Opportunity Profile – Fleet Management

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
LBS	Fleet Management	Cost Recovery	\$0.1M ¹	\$0.1M/\$0.2M	1.15	\$13,517	
Service Overview				Current Delivery and Funding Model			
<p>Vehicle fleet management involves the administration of motor vehicles and includes a broad range of services such as vehicle acquisition, maintenance and disposal. The current fleet is comprised of ~4,515 vehicles, the majority of which are “light” vehicles (~3,174), meaning less than one ton (pickups, cars and SUVs). In addition, the fleet includes ~1,128 pieces of equipment, ~120 medium/heavy vehicles, and ~93 snowmobiles/boats/ATVs/motorcycles. SSBC outsources the management and maintenance of the entire fleet to PHH. All ministries are required to participate in the contract, and a number of broader public sector entities (e.g. BC Ferry Services) also participate to varying degrees. The existing contract with PHH expires January 31, 2013 and SSBC must decide whether to extend this contract for two years by September 30, 2011.</p>				<ul style="list-style-type: none">• The Province purchases vehicles directly from manufacturers and PHH handles the management and maintenance. Vehicles are procured using a bidding process for each vehicle category, with selection driven primarily by modified price, which includes projected fuel usage, but not maintenance costs. There is no volume guarantee provided to vendors.• Ministries and the BPS are mandated to purchase hybrid vehicles when available in a given vehicle category (~760 active hybrid vehicles).• Prior to 2008, light vehicles were leased from PHH. PHH continues to finance leases entered into before 2008 at the contracted rate. For FY2011, SSBC leased ~2,500 vehicles from PHH.• ~1+ FTEs manage the use of vehicles for each ministry and liaise directly with Fleet Management. FTEs vary depending on the ministry's fleet size (e.g. Ministry of Forests has 10+ FTEs). Vehicles are primarily pooled for each ministry, with some assigned directly to individuals.• At the end of the useful life, vehicles are disposed of through one of two channels. If a vehicle is leased, PHH disposes of the vehicle and the net proceeds are returned to the respective Ministries (less a PHH admin. fee). If a vehicle is owned by the Province, it is auctioned off through AIR, and the proceeds from the sale are largely directed to the CRF.			
		Total	FTEs	Operating Equip Vehicles			
		\$88,938		\$13,517			
Current Issues and Challenges				Leading Practices / Benchmarks		Potential Opportunities	
<ul style="list-style-type: none">• In 2008, PHH advised that it would not be able to provide lease financing for new vehicles at the contracted rate. The Province subsequently exercised the contract option to purchase light vehicles and to internally finance the purchases.•••				<ul style="list-style-type: none">• Leading practice in the acquisition of vehicles (i.e. lease versus buy) is indistinct and depends greatly on the funding options available to an organization. Detailed analysis is required to determine the most appropriate approach.• Utilize a standard replacement cycle to ensure vehicles are acquired/ disposed of at an optimal point in time while facilitating the ability to leverage opportunities in the vehicle market when they arise.• Many Canadian public-sector jurisdictions are implementing various forms of green vehicle policies• On a cost basis alone, the investment in hybrid vehicles may not generate the desired ROL. Nonetheless, environmental impacts and political considerations also need to be factored into decision making		\$13,517	
Additional Leading Practices							
<ul style="list-style-type: none">• Use of vehicle telematics to maximize vehicle life cycle value, monitor and manage fuel consumption, support route productivity, and ensure driver safety.• Drive maintenance to preferred suppliers and limit non-compliance to personnel operating in remote areas not serviced by contracted supplier.• Utilize specialized auctioneer services to manage the disposal of vehicles to reach the largest pool of buyers possible.• Multi-year contracts for preferred supplier selected for each vehicle category to reduce administrative costs associated with annual procurement process.• Assess bids based on total cost of ownership (TCO), which includes projected maintenance costs.							

Opportunity Profile – Fleet Management (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
	S. 13, S. 17				
<ul style="list-style-type: none"> • Perform Hybrid Vehicle Assessment – As of 2007, all new cars purchased or leased by the BC government are to be hybrid, when available in a given vehicle category. 					
S. 13, S. 17					
		S. 13, S. 17			

Timing: Immediate: before FY end Short Term: 6 - 12mths Medium Term: 12 - 24mths Long Term: 24 mths+ Opportunity: OT: One-Time R: Recurring

1) US Department of Energy calculates that CNG vehicles produce 60 to 90 percent less smog-producing pollutants and 30 to 40 percent fewer greenhouse gas emissions than gasoline-powered vehicles (Source: US Department of Energy).

Opportunity Profile – Fleet Management (cont'd)

Hybrid Vehicle Strategies Across Jurisdictions

Jurisdiction	Fleet Size	Hybrid Vehicles	Pct. Of Fleet	Description
Federal Government ¹	32,632	1,327	~4%	<i>Alternative Fuels Act (AFA)</i> to accelerate the use in Canada of alternative transportation fuels (ATF) in motor vehicles to reduce the emission of carbon dioxide and other greenhouse gases, thereby lessening dependence on petroleum-based fuels for transportation.
BC ²	~4,515	603	~13.3%	The BC Government developed the Air Action Plan in 2008, which sets out 28 actions to reduce pollutions from all sources, with all initiatives underway by 2009. Significant investments in clean transportation have been made including Greening BC's vehicle fleet in support of Green Fleets BC.
Ontario ³	10,000	~640	6.4%	Since 2001, the Ministry of Transportation has made considerable investments in "greening" its fleet of vehicles to reduce its GHG footprint. The ministry services their own vehicles as well as provides fleet management services for Ontario Public Service fleet of over 10,000 vehicles.
City of Toronto ⁴	~4,000	67	~1.7%	The City of Toronto is concluding Phase II of its green fleet planning process, called the Green Fleet Plan 2008-2011. As of 2007, Green vehicles, including 141 natural gas vehicles, accounted for approximately 7% of Toronto's entire fleet.
City of Vancouver	TBD	TBD	TBD	Where appropriate, the City purchases alternative fuel, electric and hybrid vehicles to minimize their carbon foot print. The City also uses the maximum engine-manufacturer allowed blends of bio-diesel whenever possible.

1) Source: Report on the Alternative Fuels Act – Fiscal Year 2009-10.

2) Source: BC Purchasing Services Branch.

3) Source: Ontario's Transportation Technology Transfer Digest – Winter 2010 (<http://www.mto.gov.on.ca/english/transtek/roadtalk/rt16-1/>).

4) Source: Green Fleet Plan 2008-2011. Number of hybrid vehicles as of 2007 (<http://www.toronto.ca/fleet/pdf/gfp.pdf>).

Opportunity Profile – Fleet Management (cont'd)

Hybrid Vehicle Benefit Analysis

- B.C. Core Government operates a fleet of 603 hybrid vehicles, with the majority being Ford Escape-Hybrid (304), Ford Fusion-Hybrid (140) and Toyota Prius (136).
- Analysis was undertaken to estimate the costs/savings potential of using hybrid versus conventional fuel vehicles over the vehicle's useful life, as defined by SSBC.

Compact 4-Door Utility Vehicle			Mid-Sized Sedan			Compact Sedan		
SUV	Ford Escape-Hybrid ¹	Ford Escape	Mid-Sized Sedan	Ford Fusion-Hybrid	Dodge Avenger SXT	Compact Sedan	Toyota Prius	Ford Focus
# in Fleet	304	N/A ²	# in Fleet	140	N/A ²	# in Fleet	136	N/A ²
Purchase Price ³	\$34,309	\$22,076	Purchase Price ³	\$27,940	\$18,713	Purchase Price ³	\$26,527	\$16,425
L/100km ⁴	8.39	11.11	L/100km ⁴	6.78	10.5	L/100km ⁴	5.71	8.85
Useful Life	8	8	Useful Life	10	10	Useful Life	10	10
Total Fleet Cost over Useful Life @ 10,000 km/year ⁵	\$13.3M	\$10.5M	Total Fleet Cost over Useful Life @ 10,000 km/year ⁵	\$5.2M	\$4.7M	Total Fleet Cost over Useful Life @ 10,000 km/year ⁵	\$4.7M	\$3.9M
Total Fleet Cost over Useful Life @ 15,000 km/year ⁵	\$14.7M	\$12.4M	*Total Fleet Cost over Useful Life @ 15,000 km/year ⁵	\$5.9M	\$5.7M	*Total Fleet Cost over Useful Life @ 15,000 km/year ⁵	\$5.2M	\$4.8M
*Total Fleet Cost over Useful Life @ 17,500 km/year ⁵	\$15.4M	\$13.3M	Total Fleet Cost over Useful Life @ 17,500 km/year ⁵	\$6.3M	\$6.2M	Total Fleet Cost over Useful Life @ 17,500 km/year ⁵	\$5.5M	\$5.2M
Total Fleet Cost over Useful Life @ 25,000 km/year ⁵	\$17.6M	\$16.2M	Total Fleet Cost over Useful Life @ 25,000 km/year ⁵	\$7.2M	\$7.8M	Total Fleet Cost over Useful Life @ 25,000 km/year ⁵	\$6.3M	\$6.5M
Total Fleet Cost over Useful Life @ 35,000 km/year ⁵	\$20M	\$20M	Total Fleet Cost over Useful Life @ 35,000 km/year ⁵	\$8.6M	\$9.8M	Total Fleet Cost over Useful Life @ 35,000 km/year ⁵	\$7.4M	\$8.1M

- The hybrid vehicle options have higher overall lifetime costs, including higher initial capital costs, based on the pricing and usage estimates provided by SSBC.
 - Fleet purchase discounts for hybrid vehicles are significantly lower than for conventional fuel vehicles due to high market demand.
- For hybrid fuel savings to offset higher capital costs, average km/year would need to increase significantly

Note: Circled values indicate the more cost effective option.

* Denotes the scenario which relates to B.C. Core Government historical km/year.

1) Ford will no longer offer an Escape-Hybrid after 2011. Information used is for 2011 model.

2) While the Ministry does have non-hybrid equivalents in their fleet, these unit numbers were excluded as analysis pertains to cost/benefit of current and proposed Hybrid options.

3) Purchase price of vehicles provided by SSBC.

4) Average fuel consumption data was provided by SSBC based on field results.

5) Total cost of vehicle stated = purchase price + cost of fuel. It is assumed from SSBC experience that all other associated operating costs (e.g. maintenance) are equivalent between hybrids and non-hybrids. A price of \$0.40/litre was used for fuel.

Opportunity Profile – Fleet Management (cont'd)

Hybrid Vehicle Benefit Analysis

S. 13, S. 17

Compact 4-Door Utility Vehicle

Vehicle	Purchase Price	Annual Ammort.	Annual Fuel Cost	Total Annual Costs
Ford Escape	\$22,076		\$ 13, S. 17	
Ford Escape - Hybrid	\$34,309			
Annual Savings per Vehicle				S. 13, S. 17
# of Vehicles Purchased				
Total Annual Savings				

Mid-Sized Sedan

Vehicle	Purchase Price	Annual Ammort.	Annual Fuel Cost	Total Annual Costs
Dodge Avenger SXT	\$18,713		\$ 13, S. 17	
Ford Fusion - Hybrid	\$27,940			
Annual Savings per Vehicle				S. 13, S. 17
# of Vehicles Purchased				
Total Annual Savings				

Compact Sedan

Vehicle	Purchase Price	Annual Ammort.	Annual Fuel Cost	Total Annual Costs
Ford Focus	\$16,425		\$ 13, S. 17	
Toyota Prius - Hybrid	\$26,527			
Annual Savings per Vehicle				S. 13, S. 17
# of Vehicles Purchased				
Total Annual Savings				

- While these benefits can become material over time, the potential policy change should be evaluated against political / public opinion.

S. 13, S. 17

Opportunity Profile: Queen's Printer (QP)

Opportunity Profile – Queen's Printer

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.
LBS	Queen's Printer	Mixed (Deficit ~\$0.3M) ¹	\$20.6M	\$13.6M / \$6.7M	68	\$13.5M	\$17

Service Overview	Current Delivery and Funding Model
<ul style="list-style-type: none"> High-volume custom printing (e.g. books, trade materials, etc.), collating and binding, large format and specialty custom printing (e.g. banners). Desktop creative and total concept solutions advisory, specialized scanning and multimedia duplication. Publishing services, including Crown Publications and electronic publishing, BC Codes, Legislation, BC Gazette and QP LegalEze. Growing services areas: implementing and operating intelligent forms initiative, and maintaining and licensing the Civic Suite (XML) product. 	<ul style="list-style-type: none"> Provides services to Ministries (66%), BPS (33%), and some regional federal (1%) Prints "niche" jobs in-house and remainder is outsourced. <ul style="list-style-type: none"> QP "niche" (based on existing equipment) includes: 1-2 colour press work (e.g. educational, books) and short-run (<500) high-speed digital printing, primarily B&W (e.g. trade material), as well as confidential and/or urgent requests. Generally 40-50% (based on budget) retained in-house, but in FY2012 80-90% outsourced due to special requests (e.g. HST referendum material). Current equipment includes: 5 perfecting presses, 5 digital presses (4 B&W, 1 colour), 2 computerized cutters, 2 large folders, 1 large collator/stitcher, plus other miscellaneous equipment. Digital print equipment between 1-8 years old with an average 6 years remaining useful life. Analog equipment between 3-25 years old with an average 3-10 years remaining useful life. The current funding model for Queen's Printer is mixed. Queen's Printer receives voted funding of \$703,000/yr to publish online legislation. All other services are cost recovery. Currently implementing a self-serve online ordering portal to reduce human touch points and improve delivery time. May be required by BC Statute to print the Acts, journals, sessional papers and other printed documents placed before the Legislature (Queen's Printer Act, RSBC 1996, c 394).³

Total	Salary & Ben.	Op. Exp.	Other ²
\$20.6M		\$17	
Total	Printing	Publishing	
\$20.6M	\$17		

Current Issues and Challenges	Trends / Leading Practices / Benchmarks	Potential Opportunities
<ul style="list-style-type: none"> Overall demand for printing services has decreased in the last 3 years due to the economy and increased online publishing. <ul style="list-style-type: none"> Recoveries for printing services has dropped from \$17M in FY2009 to \$12.5M in FY2011. FTEs reduced by 9-12 people last year due to attrition and have not been backfilled. Queen's Printer has provided estimated/adjusted utilization for digital machines; however, utilization for analog machines is not available. 	<ul style="list-style-type: none"> Corporate printing centres are losing volume to higher-capability office printers, outsource providers, and the overall decline of paper volume. Print centres may try to compete with better equipment, job submission portals, color, and improved service quality and turnaround time, but some believe it's "a losing battle" and these corporate printing centres should consider consolidation or closure.⁴ Gartner estimates that the growth of electronic communications will also affect the print market, reducing its revenue by 10% by end of 2014.⁵ Increasingly public and private sector organizations are outsourcing their printing operations, particularly for commodity items (e.g. standard forms); however, some may retain some in-house printing capability for highly confidential documents and backup operations. 	\$13.5M

Additional Leading Practices
<ul style="list-style-type: none"> There does not appear to be a clear leading practice in public sector print and publishing services. Some jurisdictions are outsourcing their print services, while others are retaining them in house.

1) ~\$260,000 deficit was reported in FY2011; however, this included a one-time \$2M inventory adjustment.

2) Other costs include COGS for paper, ink, etc. (\$10.6M) and one-time inventory adjustments (\$2M).

3) Source: http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96394_01, should be confirmed by legal counsel

4) Source: Forrester, *The State of the Document Processing Services Industry 2011*, March 22, 2011

5) Source: Gartner, *Predicts 2011: Increasing Value of Imaging and Print Services Complements Multimedia Communications*, November 17, 2010

Opportunity: OT: One-Time R: Recurring

Opportunity Profile – Queen’s Printer (cont’d)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<p>Timing: Immediate: before FY end</p> <p>Short Term: 6 - 12mths</p> <p>Medium Term: 12 - 24mths</p> <p>Long Term: 24 mths+</p> <p>Opportunity: OT: One-Time R: Recurring</p>	<p>S. 13, S. 17</p>	<p>S. 13, S. 17</p>			

1) Based on Deloitte experience
2)

Opportunity Profile – Queen’s Printer (cont’d)

Current Assets and Staffing Levels

- Queen’s Printer currently has over 15 machines in its printing facilities. The following table lists the age, remaining useful life, book value and utilization of the different types of machines:¹

S. 13, S. 17

1) Information on Queen’s Printer’s machines, their age, remaining useful life, book value and utilization was provided by Queen’s Printer. Some variables were estimated due to fluctuations of staffing and equipment changes.
2) Utilization was calculated by Queen’s Printer as actual volume / capacity.
3) Average remaining useful life is provided.
4) Queen’s Printer provided the average book value per machine, which was then multiplied by the quantity of machines to get total book value.
5) Analog and other machines includes 5 analog perfecting presses, 2 computerized cutters, 2 large folders, 1 large collator/stitcher, plus other miscellaneous equipment.
6) Book value has been used to estimate potential asset recoveries, but does not reflect current asset fair market value.

S. 13, S. 17

Opportunity Profile: Integrated Workplace Services (IWS)

Opportunity Profile – Integrated Workplace Solutions (IWS)

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.									
IWS	N/A	Mixed (Voted \$269.1M)	~\$386.6M	~\$79.9M / ~\$37.6M	~190	S. 13, S. 17										
Service Overview				Current Delivery and Funding Model												
<ul style="list-style-type: none">Integrated Workplace Solutions (IWS), formerly Accommodation and Real Estate Services (ARES), is a division of Shared Services BC within the Ministry of Labour, Citizens' Services and Open Government. The IWS group provides accommodation and real estate services to ministries and the broader public sector, as well as manages, on behalf of the Government of BC, a diverse real estate portfolio of leased and government owned properties that extend throughout the province. <table><tr><th>Total</th><th>TBD</th><th>TBD</th><th>TBD</th><th>TBD</th></tr><tr><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td><td>TBD</td></tr></table>				Total	TBD		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	<p>The Facilities Contract Management Branch is accountable, through its managing and monitoring of BLJC-WSI, for the effective provision of building operations, maintenance and repair services, asset management and planning, lease/landlord management and tenant improvement services. The current funding model for IWS is mixed:</p> <ul style="list-style-type: none">- Recovery: Minor Client Requests, Projects, Move costs, Labour recovery, Amortization of capital projects, Parking.- Voted: Building Occupancy Costs, Operations and Maintenance, Taxes/Grants-in-Lieu, Parking, MOE, MAM, CSPP approved project work and move costs, AIP project amortization.	
Total	TBD	TBD	TBD	TBD												
TBD	TBD	TBD	TBD	TBD												
Current Issues and Challenges				Leading Practices / Benchmarks			Potential Opportunities									
<ul style="list-style-type: none">The current contract between the IWS and BLJC-WSI will be eligible for renewal in 2014, additional work is required to determine the cost impact of renewing, renegotiating and/or procuring the contract.The maintenance funding for portfolio is less than 1% of replacement value of the current portfolio.IWS continues to manage assets owned by the Government and is looking to assess the option of a sale/leaseback of existing assets.				<ul style="list-style-type: none">Over the past decade a number of governments and some major organization have moved towards outsourced asset management, however, it has been noted that many have found that this movement has not necessarily fully delivered the desired level of innovation either as a result of lack of factors such as misaligned interests, altered communication and a focus on cost cutting versus cost efficiencies.In an effort to correct the challenges created by outsourced management, organizations are working to create additional transparency within the management contracts. Depending on the maturity of the organization, this is often being pursued through the focus on fixed price contracts which create incentive for the provider to maintain efficiency and innovation.Most organizations have demonstrated a preference to improve the current model of outsourced management through the negotiation of existing contracts or procurement process rather than retrenching back to internal management. In our experience we have seen organization use the 5-gap model (originating from the Sigma Six theories) premising that contracts fail based on different expectations.Organizations are focused on ensuring that intellectual capital is maintained and that they are capable of oversight and the development of good working relationships with external management.			S. 13, S. 17									
Additional Leading Practices																
<ul style="list-style-type: none">TBD																
				Opportunity:			OT: One-Time	R: Recurring								

1) Requires further analysis and the execution of the opportunities (in particular, the detailed contract review) to estimate the potential benefit

Opportunity Profile – Integrated Workplace Solutions (IWS) (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<div>S. 13, S. 17</div>					
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:
					OT: One-Time
					R: Recurring

Opportunity Profile: CDAWS

Opportunity Profile – CDAWS

Division	Service Line	Funding Model	'10/'11 Actual Spend	Recoveries- (Gov. / BPS)	Current FTEs	Opportunity – LCTZ	Opportunity - Gov.								
BWT	CDAWS	Mixed	\$7.5M	\$2.5M	~85	\$13.5.17									
Service Overview				Current Delivery and Funding Model											
<ul style="list-style-type: none">The CDAWS group is within the Business and Workforce Transformation division of LCTZ, and provide enterprise web and data services as well as policy/strategy around web and data to the Ministries.The group is comprised of ~85 FTEs. Approximately 70 of these FTEs have operational roles, and are split roughly evenly across web and data services. The remaining ~15 FTEs are focused on setting policy/strategy, and also include a number of administrative staff.The web services side of the group focuses on setting web policies and standards for government (including architecture, look and feel, etc.), as well developing and managing a number of government websites, including gov.bc.ca and WelcomeBC.The data services portion of the group was largely brought to LCTZ from GEO BC, and focuses on the Open Government / DataBC initiative as well as continuing to support the Natural Resources sector.				<ul style="list-style-type: none">CDAWS is a provider of web and data services for the rest of governmentThe group utilizes a combination of a voted appropriation and cost recovery model. Most of the recoveries come from hosting and some development services.Historically, each ministry defined/delivered their own web services, which was becoming costly and inefficient, so government decided to take a more corporate approach to web services.CDAWS used to have a contract with IBM for various web services, but that relationship and contract proved to be unsuccessful and costly so the contract was terminated.CDAWS now maintains relationships with a number of private web services contractors which enables them to scale their capacity.CDAWS still does development / management of a number of large web sites/projects, although many ministry-specific projects are now being sourced separately under the guidance of CDAWSGovernment is still in the initial stages of standardizing websites across ministries. CDAWS is currently in a transition mode, developing/building infrastructure to support ongoing programsThe data side of the CDAWS group manages much of the open data catalogue for the Province, and also continues to serve BC natural resources sector. This group has significant data warehouse expertise.The value proposition behind this amalgamation was to house the data that is shared with the public close to the tools / resources that are used to share it, however the value is still being developed as the merger of the groups is still in its early stages.											
<table><tr><th>Total</th><th>Salary & Ben.</th><th>Op. Exp.</th><th>Other</th></tr><tr><td>\$7.5M</td><td>\$17</td><td></td><td>-</td></tr></table>				Total	Salary & Ben.	Op. Exp.	Other	\$7.5M	\$17		-				
Total	Salary & Ben.	Op. Exp.	Other												
\$7.5M	\$17		-												
Current Issues and Challenges				Trends / Leading Practices / Benchmarks		Potential Opportunities									
<ul style="list-style-type: none">Ministries have the flexibility to source their own web development work.CDAWS has little/no role in enforcing compliance with policies and standards they set forth.Limited alignment with TSD for technical capabilities and the OCIO from a policy standpoint.				<ul style="list-style-type: none">Both public and private sector organizations are focusing their internal resources on setting website policies and standards, and outsourcing site development and management. These are largely commoditized services that can often be provided more cost-effectively by 3rd parties. This often also allows for staff reductions within the organization.Ministries/business units focus on the content of their websites as opposed to the style, standards, development, and site management.		\$13.5.17									
Additional Leading Practices															
<ul style="list-style-type: none">N/A															
				Opportunity:		OT: One-Time									
						R: Recurring									

Opportunity: OT: One-Time R: Recurring

Opportunity Profile – CDAWS (cont'd)

Potential Opportunities	Potential Benefits	Risks / Constraints	Est. Benefit	Est. Impl. Cost	Est. Timing of Benefit
<div>S. 13, S. 17</div>					
Timing:	Immediate: before FY end	Short Term: 6 - 12mths	Medium Term: 12 - 24mths	Long Term: 24 mths+	Opportunity:
					OT: One-Time
					R: Recurring

ITO Agreement High-Level Market Comparison

Table of Contents

Introduction
Executive Summary
HPAS Agreement Review
IBM Agreement Review

Introduction

Background	<ul style="list-style-type: none"> • The Province engaged Deloitte to perform a review of services, assessing the efficiency, effectiveness and net value to Government of its diverse lines of shared service against best practices • A key component of the project involved a high level review of two existing IT Outsourcing Agreements: HPAS – Hosting Services and IBM – Workstation Support Services • Both Provider Agreements were assessed against market practices (Market Comparable Analysis) as outlined below: <ul style="list-style-type: none"> – The analysis covered Agreement terms and monthly service invoice rates comparison – The analysis leveraged Deloitte’s repository for comparable Agreements and associated pricing per Resource Unit (RU) – The analysis was restricted by limited data and differences in RU’s between current invoices and market data
Market Comparable Variables	<ul style="list-style-type: none"> • Market comparable data selected reflects recent Agreements of similar size and scope. However, it is important to keep the following considerations in mind: <ul style="list-style-type: none"> – Locations: Difference in delivery locations affect rates – Off shoring: Market rates at the lower end may reflect a higher degree of offshore components in the delivery model – Scope and environment: Variations in scope and differences in the application footprint, server and storage environments affect rates – Economies of scale: Outsourcers generate economies of scale by leveraging infrastructure / service assets across clients, which is reflected in the market rates – Effect of blend: Transition, transformation, definition of operations versus project etc. can significantly impact rates – Presence of other deal specific characteristics may make comparisons difficult across different deals
Definition and Limitations	<ul style="list-style-type: none"> • The cost baseline was based on invoices from each Provider for July 2011 • Not all Agreement Schedules were available for review. Additionally, given the time constraints surrounding this review, focus was on key gaps only. The review focused on business term gaps and did not constitute a legal review • Comparable market rates assume asset ownership is with the Provider • Agreement terms and conditions were assessed based on Deloitte experience with IT outsourcing Agreements • Current Provider spend was compared to market comparable data defined as follows: <ul style="list-style-type: none"> – A price point for a resource unit taken from another IT deal – Not normalized for deal specific factors such as service levels – Not a benchmark – Not a specific target price to be attained during negotiations

Table of Contents

Introduction
Executive Summary
HPAS Agreement Review
IBM Agreement Review

ITO Agreement High-Level Market Comparison

Executive Summary

The Agreement terms are in general alignment with market practices. However, the review did reveal gaps. Such gaps have the potential to dilute the “value” that the Province could otherwise obtain.

Area	Current State	Leading Practice
Length of Agreement	<ul style="list-style-type: none"> • HP 15 year term and IBM 10 year term • HP’s renewal term - 5 years • IBM’s renewal term - 2 years 	<ul style="list-style-type: none"> • Length of Agreement well beyond industry average of 3-7 years • HP renewal term is outside reasonable “renewal” periods of 1-2 years • Noting, however, that it is not unusual for Public Sector and some Private Sector organizations to implement long term deals for reasons related to capital investment
Termination for Convenience		
Termination Services		

S. 13, S. 17

ITO Agreement High-Level Market Comparison (cont'd)

Executive Summary

The Agreement terms are in general alignment with market practices. However, the review did reveal gaps. Such gaps have the potential to dilute the “value” that the Province could otherwise obtain.

Area	Current State	Leading Practice
Innovation, Benefits, and Gains Sharing	<ul style="list-style-type: none"> Agreement provisions are limited to Resource Unit rate reductions by achieving economies of scale No obligation on either Provider to introduce new technologies, innovate and share benefits (other than annual technology review and benchmarking findings which are by mutual Agreement) 	<ul style="list-style-type: none"> Comparable market deals usually include terms around realizing savings over the course of the agreement term through process and/or technology innovation Gain Sharing provisions are included to ensure that savings are shared by Client and Provider
Benchmarking	<ul style="list-style-type: none"> Benchmarking provisions rely on mutual agreement to effect price changes No recourse available if agreement is not reached 	<ul style="list-style-type: none"> Best practice provisions typically support the ability to terminate for Provider's failure to reasonably bridge pricing gaps The Province does not have this option in either agreement
SLA Penalty Framework	S. 13, S. 17	

ITO Agreement High-Level Market Comparison (cont'd)

Executive Summary

The Agreement terms are in general alignment with market practices. However, the review did reveal gaps. Such gaps have the potential to dilute the “value” that the Province could otherwise obtain.

Area	Current State	Leading Practice
<div>HP</div> <hr/> <div>Pricing</div> <div>IBM</div>	S. 13, S. 17	

Recommendations

- Gather additional data to identify possible cost/scope elements missing from Baseline in order to more accurately conclude this analysis
- Work to achieve further normalization, validate analysis and underlying assumptions to determine any validity in price variances (note: this will require a collaborative effort between the Province and Providers)
- Work with incumbent Provider(s) to implement validated savings opportunities
- Province to consider and prioritize opportunities to amend existing Agreements and implement improvements
- Work with Providers to negotiate improvements to Agreements

ITO Agreement High-Level Market Comparison (cont'd)

Executive Summary

HP Pricing

S. 13, S. 17

IBM Pricing

S. 13, S. 17

- We believe that further work is necessary to fully understand the Province's desktop environment




Recommendations

- Gather additional data to identify possible cost/scope elements missing from Baseline in order to more accurately conclude this analysis
- Work to achieve further normalization, validate analysis and underlying assumptions to determine any validity in price variances (note: this will require a collaborative effort between the Province and Providers)
- Work with incumbent Provider(s) to implement validated savings opportunities
- Province to consider and prioritize opportunities to amend existing Agreements and implement improvements
- Work with Providers to negotiate improvements to Agreement


Table of Contents

Introduction
Executive Summary
HPAS Agreement Review
IBM Agreement Review


HPAS Agreement Review Key Gaps

Term/ Condition	Rating	Findings
Term		
Renewal Options		S. 13, S. 17
Benefits /Gain Sharing / Innovation		


HPAS Agreement Review Key Gaps (cont'd)

Term/ Condition	Rating	Findings
Termination		S. 13, S. 17


HPAS Agreement Review Key Gaps (cont'd)

Term/ Condition	Rating	Findings
Termination Services		S. 13, S. 17
Benchmarking		

HPAS Agreement Review Key Gaps (cont'd)

Term/ Condition	Rating	Findings
Pricing		S. 13, S. 17

HPAS Agreement Review Key Gaps (cont'd)

Term/ Condition	Rating	Findings
Service Levels		<ul style="list-style-type: none"> • Service Level targets generally in line with market with some exceptions (e.g. Storage Back-up Province – 95%, Market – 99-100%, Speed to Answer Province 25% within 60 seconds vs 80% in 30 seconds). • Service Levels do not include 1st Call Resolution or other Resolution Time targets and are limited to Response Time. • Incident SLAs should include timeframes for response by tier (e.g. 7.1 Response to Priority 3 Incident within target (1 business day) – 90%) • At Risk Amount limited to 12.5% of monthly charge. While this is inline with the traditional market offering, ie 10-25%, market now offers escalating penalty structures beyond an At Risk Amount. • Further, 12.5% at risk amount is diluted over the portfolio of Service Levels, likelihood of reaching the 12.5% is unlikely and is not punitive •

S. 13, S. 17

HPAS Hosting Services Market Comparison

All figures \$CDN/month		Baseline			Comparison to Market	
Service	Unit of Measure	Volume	Cost/Unit	Total Costs	Cost/Unit	Notes
Server Management						
Unix/Other Server						
Large	Unit					
Medium	Unit					
Small	Unit					
Wintel/Linux Server						
Large	Unit				S. 13, S. 17	
Medium	Unit					
Small	Unit					
Virtual	Instance					
Ext Server Support (24x7)	Unit					
Cluster Mgmt Services	Unit					S. 17, S. 13
Sub Total				\$797,039		
Mainframe Services						
Processing	Per MIP/Month				S. 13, S. 17	
Non-standard SW	Monthly fee					
DASD	Per GB/Month					
Tape Storage	Per GB/Month					
Sub-Total				\$834,838		S. 17, S. 13

Note: Figures on this slide have been rounded to two decimal points; however, actual calculations are based on unrounded numbers. Therefore, reproduction of these calculations may result in a mismatch.

HPAS Hosting Services Market Comparison (cont'd)

Province Owned		Baseline		Province Owned	
Service	Unit of Measure	Volume	Cost/Unit	Total Costs	Cost/Unit

Province Owned

NAS	Per GB/Month
Tier 1	Per GB/Month
Tier 2	Per GB/Month
Tier 3	Per GB/Month
Backup	Per GB/Month
External Retention	Per GB/Month

S. 13, S. 17

Service Provider Owner

NAS	Per GB/Month
Tier 1	Per GB/Month
Tier 2	Per GB/Month
Tier 3	Per GB/Month
Backup	Per GB/Month
External Retention	Per GB/Month

Sub-Total**\$213,936**

S. 13, S. 17

Calgary

S. 13, S. 17

Kamloops

Sub-Total**\$466,014**

S. 13, S. 17

GRAND TOTAL*	Monthly	\$2,311,827			
	Annual	\$27,741,924			

S. 13, S. 17

*Does not include \$412k in other costs (e.g. Swivel chair management)

97 Note: Figures on this slide have been rounded to two decimal points; however, actual calculations are based on unrounded numbers. Therefore, reproduction of these calculations may result in a mismatch.

© Deloitte & Touche LLP and affiliated entities.

HP versus Market Pricing Observations

S. 13, S. 17

Table of Contents





Introduction

Executive Summary


HPAS Agreement Review

IBM Agreement Review




IBM Workstation Support Agreement Key Gaps

Term / Condition	Rating	Findings
Term		
Renewal Options		
Termination		S. 13, S. 17
Termination Services		

IBM Workstation Support Agreement Key Gaps (cont'd)

Term / Condition	Rating	Findings
Pricing	Undetermined/ More information needed	S. 13, S. 17
Benchmarking		<ul style="list-style-type: none"> Benchmarking provision does not obligate the parties to implement adjustments, ie “Parties shall discuss and agree” Leading Benchmarking provisions include an obligation for an adjustment if aggregate fees are , for example 115% above peer group average. Failure of Provider to provide adjustments can lead to termination with Province’s obligations limited to actual out-of-pocket expenses for wind down (excluding any unearned discount)

IBM Workstation Support Agreement Key Gaps (cont'd)

Term / Condition	Rating	Findings
Service Levels		<ul style="list-style-type: none"> No obligation (other than Joint Review to be mutually agreed) to reset minimum and expected service levels as a result of sustained higher performance. These are treated as Banked Credits and can offset any penalty. Province should allow IBM to bank credits for service level over achievement that (a) should occur naturally as a result of productivity or technology improvements or (b) does not have any direct relation to improved performance (eg improved customer satisfaction) Several service levels are not offered at commercially best targets (e.g. Time to Remedy – Urban – 4 hrs, 85%) Service level credits can only be applied to up to 5% of monthly fees versus the market standard of 10-25% or escalating penalty model beyond the At Risk Amount Further, 5% At Risk Amount is diluted over the portfolio of Service Levels, likelihood of reaching the 5% is unlikely and is not punitive Service Level penalties aligned to categories A,B and C. A being most critical, however Schedule D does not include any Category A Service Levels 24 month interim period did not allow for service level credit accumulation. Would typically expect a 3-6 month characterization period followed by enforceable Service Level credits
Benefits /Gain Sharing / Innovation		S. 13; S. 17
Limitation of Liability		

IBM Workstation Support Market Comparison

All figures \$000/month		Baselines			Comparison to Market	
Service	Unit of Measure	Volume	Cost/Unit	Total Costs	Cost/Unit	Notes

Aggregate IMAC
Cost (Includes
IMAC shipping,
delivery, installation
etc.)

Per IMAC

S. 13, S. 17

Sub Total

\$1,652,143

S. 13, S. 17

MFD (Network
Printers)

Per Printer

Desktop support
cost (Aggregate
including ID
management and
image support

Per Desktop

S. 13, S. 17

Sub Total

\$1,042,431

GRAND TOTAL	Monthly		\$ 2,694,574*	
	Annual		\$32,334,888*	

S. 13, S. 17

*Current IBM costs do not include unallocated monthly spend (Projects) and Blackberry Support Costs of ~\$644K and ~\$5K per month

Note: Figures on this slide have been rounded to two decimal points; however, actual calculations are based on unrounded numbers. Therefore, reproduction of these calculations may result in a mismatch.

© Deloitte & Touche LLP and affiliated entities.

IBM FTE Rate Card Comparison

- IBM hourly resource rates are in line with onshore market rates
- In July 2011, the Ministry spent \$644k on IBM hourly resources for project related work
- Savings can be driven by leveraging IBM's global resources further to reduce average rate per hour for hourly resources

	IBM	Comparison to Market
Project Manager		
Senior architect		
Intermediate architect		\$ 13, \$ 17
Junior architect*		
Senior technician		
Intermediate technician		
Junior technician*		

Notes:

All figures in \$CDN/month

*Deloitte's repository did not contain recent, comparable rates for junior resources

IBM versus Market Pricing Observations

IMAC Services

S. 13, S. 17

Deskside Support Services

- Based on estimates, the current Deskside support average price of \$35.95/workstation is in line with market comparables, assuming a volume of ~33,000 workstations

MFD/Order Management Services

- Multi-Functional Devices (MFD) were assumed to be network printers and the cost of managing network printers has been included in the market comps

Resource Rate Cards

- Hourly resource rates fall well within range of market costs for onshore resources
- Savings opportunities do exist across many roles particularly where offshore resources can be leveraged

Cross-Jurisdiction Comparison

Introduction

- The following analysis compares the scope of services provided by SSBC to a number of shared services organizations globally. The results are based on Deloitte's Global Shared Services Survey as well as information collected on specific public sector jurisdictions.
- Deloitte's biennial Global Shared Services Survey collects data on common practices from private and public sector shared services organizations globally.
 - Data from the 2011 survey has been included here.
 - In addition to the overall survey results representing 270 respondents, a subset of the data representing public sector organizations only have also been included.
 - The percentages shown for each business process represent the portion of the respondents providing each service,
- In addition, research and interviews have provided information on the scope of shared service offerings provided by various specific public sector SSOs in:
 - **Canada:** British Columbia (Shared Services BC, Public Service Agency, Ministry of Finance), Alberta (ServiceAlberta, Alberta Infrastructure Policy and Corporate Service Division), Ontario (Ontario Shared Services, HROntario, Ontario Realty Company)
 - **United States:** New York (Office for Technology, Office of General Services, Statewide Financial System), Massachusetts (Executive Office of Administration and Finance – Information Technology Division)
 - **United Kingdom:** Local Government Shared Services (Cambridgeshire/Northamptonshire), Department of Transportation
 - **Australia:** New South Wales Government (NSW BusinessLink), South Australia Government (Shared Services South Australia)

Jurisdictional Scope of Analysis

The following organizations were included in the jurisdictional scan:

Jurisdiction	Shared Service Organization	Description
Alberta	Service Alberta	<ul style="list-style-type: none"> Administers shared services to government in accounts payable and receivable, revenue and capital asset management, collections, payroll, employee benefits and reporting, electronic payment systems and business re-engineering and innovation. Delivers shared services to ministries in areas such as business and technology support.
	Alberta Infrastructure Policy and Corporate Service Division	<ul style="list-style-type: none"> Provides shared services for the ministries of Infrastructure and Transportation. The division leads major program and policy reviews of government owned and supported facilities; develops and plans the ministry budgets; oversees all financial policies, processes, and control; and provides information management support as well as automated records services for all ministries of Infrastructure and Transportation locations within the province.
Ontario	Ontario Shared Services	<ul style="list-style-type: none"> Provides enterprise-wide employee and business support services to the Ontario Public Service. Core. Services include financial transactional processing and collections, supply chain management (including procurement policy and advisory services), payroll management and processing, and benefits administration.
	HROntario	<ul style="list-style-type: none"> Responsible for human resources management and corporate policy, human resource service delivery, employee relations, the Centre for Leadership and Learning and modernization services to be provided to ministries within the government of Ontario.
	Ontario Realty Corporation ¹	<ul style="list-style-type: none"> A centrally managed property services company that serves the government of Ontario.

1) Now called Infrastructure Ontario

Jurisdictional Scope of Analysis (Cont'd)

The following organizations were included in the jurisdictional scan:

Jurisdiction	Shared Service Organization	Description
New York	Office for Technology	<ul style="list-style-type: none"> Offers a wide array of enterprise information technology shared services to the New York State government including data storage, network services, print services, customer care centre, and email.
	Office of General Services	<ul style="list-style-type: none"> Facilitates 2,400 centralized procurement contracts for goods, services, and technology needed by state agencies, municipal governments, and educational institutions. Provides shared administrative services (e.g., human resources and financial management) for 14 state agencies. Provides architectural, and construction management for buildings statewide. Performs building management, energy saving operations, and maintenance services to 49 major office complexes and buildings statewide. Administers a variety of support and distribution services including interagency mail and freight services, and printing services.
	Statewide Financial System	<ul style="list-style-type: none"> The Statewide Financial System (SFS) Program is a New York State government initiative to replace its over 25-year-old Central Accounting System and several agency financial management systems with one integrated, statewide system.
Massachusetts	Information Technology Division	<ul style="list-style-type: none"> Enables agencies to deliver high quality, efficient and effective services to their customers by providing a range of centralized IT services; overseeing IT policies, standards and architecture; and promoting cross-agency collaboration and adoption of shared services to numerous agencies across the Commonwealth. ITD does not serve the public directly. Provisions the HRCMS (Human Resources Compensation Management System) application that is a reliable and secure system used by 149 departments, 2000+ end users to process personnel and payroll transactions based on the policies governing 85,000+ public employees of the Commonwealth.

Jurisdictional Scope of Analysis (Cont'd)

The following organizations were included in the jurisdictional scan:

Jurisdiction	Shared Service Organization	Description
United Kingdom	Local Government Shared Services – Cambridgeshire / Northamptonshire (LGSS)	<ul style="list-style-type: none"> Public Sector controlled vehicle that provides the full suite of back office services to specific county councils in the UK. The full suite of services includes information technology, finance, human resources, policy, and planning and analysis.
	Department of Transportation (DoT)	<ul style="list-style-type: none"> Provides numerous shared services such as finance, payroll, and HR transactional support functions to executive agencies such as the Driving Standards Agency, as well as to non-departmental public bodies such as the British Transport Police Authority.
New South Wales, Australia	NSW Businesslink Pty Ltd.	<ul style="list-style-type: none"> Provides business, finance, human resources, and information technology services to agencies within the NSW government as well as non-government agencies and the community. Clients within the government include the Department of Family and Community Services and Juvenile Justice .
South Australia, Australia	Shared Services South Australia	<ul style="list-style-type: none"> Shared Services SA provides corporate and business services to be shared by all departments of the South Australian Public Sector. These services are in the areas of Finance, Human Resources, Information and Communication Technology and Procurement.

Functional Scope of Analysis

The analysis focuses on the following shared service functional areas:

Finance	<ul style="list-style-type: none">• Sample business processes include: Accounts Payable, Fixed Assets, General Accounting
Technology	<ul style="list-style-type: none">• Sample business processes include: Application Hosting and Support, Network Operations and Management, Data Centre, Infrastructure Management
Supply Chain / Procurement	<ul style="list-style-type: none">• Sample business processes include: Create and Issue POs, Payment, Supplier Relationship Management
Real Estate	<ul style="list-style-type: none">• Sample business processes include: Facilities Management, Asset and Lease Management, Real Estate Portfolio Management, etc.

Key Survey Takeaways

General	<ul style="list-style-type: none"> Public sector shared services organizations provide similar functional scope as private sector organizations, however, their level of service delivery maturity lags in some areas (e.g. adoption of technology enablers) Provision of shared services are often spread across a number of entities within the Public Sector (e.g. SSBC, Min of Finance, PSA) as opposed to consolidating all functions under one umbrella organization SSBC provides a number of unique offerings within the technology, Logistics and Business Services and Integrated Workspace Solutions areas and is mostly absent from the Finance function compared to other jurisdictions SSBC provides select services that were not common offerings and not part of the global shared services survey. These processes were also not found in the jurisdiction research (e.g., FOI request, GHG Reduction, Online Access to Statutes, ASD Consulting, Asset Investment Recovery and Crown Publications)
Finance	<ul style="list-style-type: none"> Finance is the most common functional offering of shared service organizations given the transactional nature of the work performed and the scalability of supporting technologies (e.g. ERPs) Transaction-based processes such as accounts payable, general accounting, and travel and expenses are prevalent in private and public sector jurisdictions Shared Services organizations have evolved to include more value-add functional services (e.g. financial planning, reporting and analysis) although this trend is less common in the Public Sector
Technology	<ul style="list-style-type: none"> The survey results showed a range of 20% to 40% of respondents providing various IT services but the research into specific jurisdictions showed that most jurisdictions are providing the majority of IT services Utilization of off-shore IT services continues, however, there is the need to have robust service level agreements and performance management regimes in place to track service standards against contractual obligations
Supply Chain	<ul style="list-style-type: none"> Provision of supply chain based services is mixed both in terms of the Survey results and the jurisdictional comparison, with SSBC providing an expanded set of services versus what is typically included under this area Procurement services are a growth area for Public Sector shared service organizations, particularly for cost effective procurement mechanisms (e.g. MSA and revolving vendor of records), spend analysis and relationship management
Real Estate	<ul style="list-style-type: none"> Real estate services are provided by just over ¼ of respondents with an increasing trend in this area

Comparison – High-Level Functions

Shared Services Survey Process Areas and Results			Jurisdictional Scan								
High Level Functions / Processes	2011 Global SS Survey	2011 Global SS Survey – Public Sector	BC ¹	Ontario	Alberta	New York	Mass.	South Australia	New South Wales	UK (LGSS)	UK (DoT)
Finance	93%	93%	MFIN	✓	✓	✓		✓	✓	✓	✓
Technology	48%	40%	SSBC	✓	✓	✓	✓	✓	✓	✓	✓
Supply Chain / Procurement	47%	53%	SSBC	✓	✓	✓	✓	✓	✓	✓	✓
Real Estate	23%	27%	SSBC	✓	✓	✓			✓	✓	

Legend	
Symbol	Description
-	Process Area not in Survey
✓	Process Area is performed within jurisdiction
SSBC	Process Area is performed by SSBC
MFIN	Process Area is performed in BC by The Ministry of Finance
PSA	Process Area is performed in BC by the Public Service Agency

1) To be validated by SSBC

Comparison – Finance

Shared Services Survey Process Areas and Results			Jurisdictional Scan								
High Level Functions / Processes	2011 Global SS Survey	2011 Global SS Survey – Public Sector	BC ¹	Ontario	Alberta	New York	Mass.	South Australia	New South Wales	UK (LGSS)	UK (DoT)
Accounts Payable	84%	87%		✓	✓	✓		✓	✓	✓	✓
Accounts Receivables			MFIN								
Fixed Assets	72%	80%	MFIN	✓		✓		✓	✓	✓	✓
General Accounting	72%	87%		✓	✓	✓		✓	✓	✓	✓
Travel & Expense	70%	87%		✓	✓	✓				✓	✓
Cash Application	65%	73%		✓	✓					✓	✓
Collections	60%	60%	MFIN	✓	✓			✓	✓	✓	✓
Payroll	58%	73%	n/a	✓	✓			✓	✓	✓	✓
Credit Management	53%	47%	?	✓	✓				✓	✓	✓
Billing	52%	80%		✓		✓		✓		✓	✓
Internal Financial Reporting	51%	67%		✓				✓	✓	✓	✓
Cash Management	51%	47%	?	✓		✓			✓	✓	✓
Cost Accounting	45%	60%				✓			✓	✓	
Tax Reporting & Analysis	41%	53%	n/a					✓	✓	✓	
Tax Filing	40%	47%	n/a						✓	✓	
Value Added Tax	39%	53%	n/a							✓	✓
Treasury	37%	20%	MFIN			✓			✓	✓	
External Financial Reporting	37%	53%						✓	✓	✓	
Legal/Compliance Reporting	34%	40%	?	✓	✓			✓		✓	
Internal Audit/Compliance	30%	47%	MFIN	✓	✓	✓		✓		✓	
Financial Planning & Analysis	24%	33%							✓	✓	
Forecasting	23%	33%			✓					✓	
Budgeting	23%	53%			✓	✓		✓	✓	✓	
Reporting & Analysis	57%*	64%*						✓	✓	✓	
Electronic Payment Systems	-	-	?		✓					✓	

1) To be validated by SSBC

Comparison – Technology

Shared Services Survey Process Areas and Results			Jurisdictional Scan								
High Level Functions / Processes	2011 Global SS Survey	2011 Global SS Survey – Public Sector	BC ¹	Ontario	Alberta	New York	Mass.	South Australia	New South Wales	UK (LGSS)	UK (DoT)
Application Enhancement & Deployment	31%	27%	SSBC	✓			✓	✓	✓	✓	✓
Security & Controls	31%	40%	SSBC	✓	✓		✓		✓	✓	✓
Enterprise Systems Management	30%	13%	SSBC	✓	✓	✓	✓		✓	✓	✓
Application Hosting & Support	30%	27%	SSBC	✓	✓	✓	✓	✓		✓	✓
Network Operations & Management	29%	20%	SSBC	✓	✓	✓	✓	✓	✓	✓	✓
Infrastructure Management	29%	33%	SSBC	✓	✓	✓	✓		✓	✓	✓
Server Management	28%	20%	SSBC	✓		✓	✓			✓	✓
Consolidated Service Desk	28%	20%	SSBC	✓	✓		✓	✓	✓	✓	✓
Service Performance Measurement	28%	33%	?	✓	✓		✓	✓	✓	✓	✓
Data Center	27%	20%	SSBC	✓		✓	✓	✓	✓	✓	✓
Vendor Management	27%	40%	SSBC	✓			✓	?	✓	✓	✓
Enterprise Application Management	27%	27%	SSBC	✓	✓			?	✓	✓	✓
IT Customer Management	27%	20%	SSBC	✓	✓	✓	✓	✓		✓	✓
End User Device Provisioning & Support	26%	20%	SSBC	✓	✓	✓			✓	✓	✓
Business Continuity Management	26%	33%	?	✓			✓			✓	✓
Internet & Web Delivery	26%	33%	SSBC	✓	✓	✓	✓			✓	✓
Data Governance	24%	27%	?				✓	✓		✓	✓
Integration & Message Services	24%	27%	SSBC	✓			✓	✓		✓	✓
Collaboration & Documents Management Services	19%	33%	SSBC	✓	✓					✓	✓
Storage Management	40%*	43%*	SSBC	✓	✓	✓	✓	✓		✓	✓
IT Solutions Consulting	-	-	SSBC	✓		✓			✓	✓	✓
Voice Network Services	-	-	SSBC	✓	✓	✓	✓	✓		✓	✓
Email	-	-	SSBC	✓	✓	✓	✓	✓		✓	✓
Technology Training	-	-		✓	✓	✓	✓	✓		✓	✓
Workstation Services	-	-	SSBC	✓	✓	✓				✓	✓

1) To be validated by SSBC

Comparison – Supply Chain / Procurement

Shared Services Survey Process Areas and Results			Jurisdictional Scan								
High Level Functions / Processes	2011 Global SS Survey	2011 Global SS Survey – Public Sector	BC ¹	Ontario	Alberta	New York	Mass.	South Australia	New South Wales	UK (LGSS)	UK (DoT)
Payment	31%	53%		✓				✓	✓	✓	✓
Create & issue / Process PO Change Orders	26%	47%		✓		✓		✓	✓		
Procurement of Materials & Services	26%	33%	SSBC	✓		✓				✓	✓
Process Approvals	24%	40%		✓		✓		✓			
Create Requisitions	23%	40%		✓		✓					
Conduct Spend Analysis	22%	33%		✓						✓	
Manage & Assess Supplier Performance	22%	33%		✓						✓	
Supplier Relationship Management	21%	20%		✓				✓		✓	
Price Management	18%	27%		✓						✓	
Distribution Planning & Management	14%	20%	SSBC	✓		✓					
Sustainability Management	9%	13%	?	✓		✓				✓	
Negotiations & Contracts	33%*	36%*		✓	✓	✓		✓		✓	
Manage RFIs & RFPs	33%*	29%*	SSBC	✓		✓	✓			✓	
Risk Management	32%*	21%*		✓			✓			✓	
Process Areas Specific to SSBC and not included in survey:											
Mail	-	-	SSBC	✓	✓	✓	✓		✓		
Records Management	-	-	SSBC	✓					✓		✓
Shared File & Print Services	-	-	SSBC	✓	✓				✓		
Vehicle Fleet Management	-	-	SSBC		✓				✓		
FOI Request Administration			SSBC								
GHG Reduction Measurement			SSBC								
On-line Access to Statutes			SSBC								
ASD Consulting Services			SSBC								
Asset investment Recovery			SSBC								
Crown Publications			SSBC								

1) To be validated by SSBC

Comparison – Real Estate

Shared Services Survey Process Areas and Results			Jurisdictional Scan								
High Level Functions / Processes	2011 Global SS Survey	2011 Global SS Survey – Public Sector	BC ¹	Ontario	Alberta	New York	Mass.	South Australia	New South Wales	UK (LGSS)	UK (D0T)
Manage Assets/Leases	15%	20%	SSBC	✓	✓	✓			✓	✓	
Manage Transaction Processing for Real Estate	14%	13%	?	✓	✓	✓				✓	
Manage & Report Financial Performance	14%	20%	SSBC	✓					✓	✓	
Manage Facilities	13%	27%	SSBC	✓	✓	✓			✓	✓	
Develop & Manage Real Estate Portfolio	11%	13%	SSBC	✓	✓				✓	✓	
Define & Develop Real Estate Financials	9%	13%	SSBC	✓						✓	
Manage Design & Construction Services	7%	13%		✓	✓	✓			✓	✓	
Move Coordination	-	-	SSBC								
Parking	-	-	SSBC								

1) To be validated by SSBC

Bring Your Own Device (BYOD)

What is BYOD?

Companies implementing “Bring Your Own Device” policies give employees the option of supplying their own IT components such as mobile phones, tablets, or even laptops. In some companies, this has been shown to increase employee satisfaction and productivity¹. However, BYOD programs are still in their infancy and the long-term ROI is unknown².

There are various types of BYOD models, ranging from mobile phones, tablets, to personal computers³.

Potential Benefits¹

- Improved employee satisfaction – *employees get to use the tools they prefer*
- Increased worker productivity – *preferential tools that better meet the employees' needs*
- Greater mobility – *devices such as mobile phones and laptops increase employees' mobility*
- Reduction of IT costs – *fewer IT staff required as company owned hardware decreases*
- Ability to attract and retain quality talent – *seen as a perk by employees*

Leading practices for providing support in BYOD environments²

- **Technically-bounded support** - support organizations only provide support on problems involving servers and the network but not the BYO device which would ultimately be the `users' responsibility.
- **Pool of loan devices** - maintains pools of spare devices to preserve productivity if user-provided device is under repairs or needs replacing.
- **Defining and communicating support arrangements** - more and more common to have formal written contracts to ensure users are fully aware of the scope that the support organizations provide.

1) IT Organizations Embrace Bring-Your-Own Devices, Citrix, July 2011

2) Best Practices for Supporting 'Bring Your Own' Mobile Devices, Gartner, July 2011

3) Economic Factors Accelerate Employees' Use of Personally Owned Equipment, Gartner, January 2009

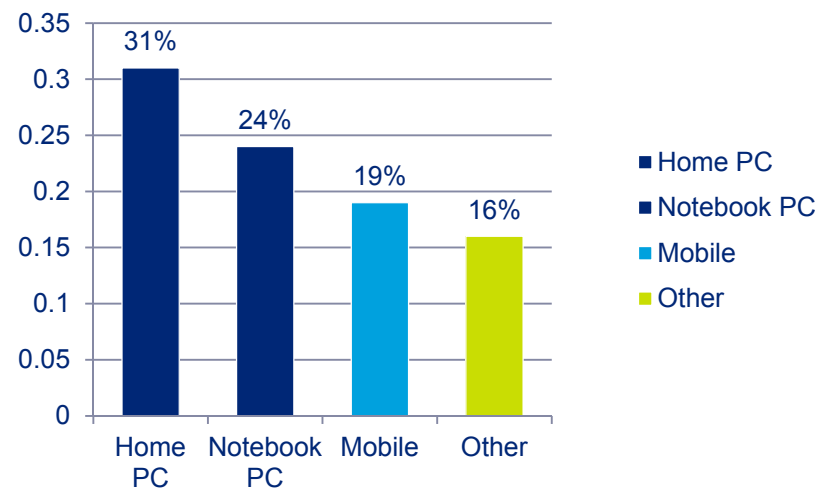
Adoption of BYOD Policies

The rate and effectiveness of BYOD adoption is unclear. Some adopters of BYOD have seen measurable benefits such as reduced costs¹, however, others have reported increased costs as well². There are a number of key factors that may increase the odds of success, however, a proven approach to achieving the potential benefits is not yet apparent.

Types of BYOD and reported usage²

- Home PC – 31% usage
- Notebook PC – 24% usage
- Mobile – 19% usage
- Other – 16% usage

BYOD Device Usage



Key success factors³

- Users are technically knowledgeable
- Strong peer and community support
- The devices and applications being used are relatively easy to support
- Some of the previous support costs are eliminated
- A legal, cultural and administrative environment that supports BYO programs

1) IT Organizations Embrace Bring-Your-Own Devices, Citrix, July 2011.

2) Economic Factors Accelerate Employees' Use of Personally Owned Equipment, Gartner, January 2009

3) Best Practices for Supporting 'Bring Your Own' Mobile Devices, Gartner, July 2011

BYOD Usage, Risks and Challenges

Usage Data¹

Survey Data: Percentage of Knowledge-Worker Respondents Reporting Use of Non-Company-Owned Devices on Company Systems and Networks

There appears to be a negative correlation between company size and the number of employees using their own gear. Possible interpretations of this negative correlation are that larger enterprises:

- *Provide better tools to their knowledge workers, thus relieving some of the pressure on employees to partially provide their own gear*
- *Are more likely to be populated by people who are more mindful of and governed by rules and policy*

Company Size (Employees)	Home PC	Notebook PC	Mobile	Other	Number of Respondents
500 to 999	28%	21%	18%	15%	109
1,000 to 4,999	33%	28%	17%	17%	112
5,000 to 9,999	39%	33%	30%	31%	106
10,000 or More	24%	15%	11%	4%	115
Grand Total	31%	24%	19%	16%	442
Number of Respondents in Grand Total	136	106	84	36	

Risks and Challenges^{2,3,4}

Having employees bring their own devices poses associated risks and challenges

- **Security:**
 - Only 27% to 28% of CIOs believe their mobile security would satisfy an auditor.
 - Potential attacks by viruses / trojans
 - Threat of botnets
 - Lost devices
- **Penalties:**
 - Hardware contracts usually give step-level discounts based on volume. Even a 10% drop in purchases could give a less attractive discount level

1) Economic Factors Accelerate Employees' Use of Personally Owned Equipment, Gartner, January 2009
 2) CIO Attitudes Toward Consumerization of Mobile Devices and Applications, Gartner, May 2011
 3) Bring Your Own PC to Work Programs Increase the Threat of Botnets, Gartner, September 2010
 4) Best Practices for Supporting 'Bring Your Own' Mobile Devices, Gartner, July 2011

Sample BYOD Case Studies

California-based Pharma. Company¹

- **Objective:** To give employees greater mobile capabilities
- **Types of devices included:** Mobile Phone
- **Key Benefits:** In addition to improved usability of the iPhone (attachments, Web, corporate applications), the company is saving \$360 per device per year on voice and data plan versus previous BlackBerry spend
- **Implications:**
 - Battery life is a problem because people are using their phones for much more than email
 - Phones are being used like laptops or netbooks

Oracle¹

- **Objective:** To cater to employees' request for email and calendar support for iPhones they acquired at the Apple Store
- **Types of devices included:** Mobile Phone
- **Key Benefits:** The development platform and intuitive user interface means that Oracle IT can build collaboration and business applications that employees can take with them anywhere
- **Implications:**
 - Oracle responded by using open standards using its own Beehive collaboration software
 - Management tools "aren't there yet, though they will come."

Kraft Foods¹

- **Objective:** To empower the workforce by introducing new tools and technology such as the iPhone
- **Types of devices included:** Mobile Phone
- **Key Benefits:** Kraft's support of iPhone use is driving culture change by "telling" the organization to take advantage of new technology
- **Implications:**
 - Apple saw value and made Kraft Foods part of its iPhone enterprise beta program in April 2009
 - Moving employees to corporate AT&T accounts from personal accounts – "high touch transition"
 - Problem with calendar synchronization and iPhone-initiated calendar changes and additions

Citrix^{2,3}

- **Objective:** To enable workers to participate in BYOD program by providing \$2,100 stipend to purchase personal computer every three years.
- **Types of devices included:** Laptop
- **Key Benefits:** Worker job satisfaction, productivity, greater mobility, a more flexible working environment and IT cost reduction
- **Implications:**
 - Potential security issues
 - Potential device/support issues
 - Implementation/management costs
 - Use of non-sanctioned applications

1) Making iPhone Work In The Enterprise: Early Lessons Learned, Forrester, April 2009

2) Bring Your Own PC Reinvents The Corporate PC: A Citrix System Case Study, Forrester, July 2009

3) IT Organizations Embrace Bring-Your-Own Devices, Citrix, July 2011.

Online Desktop Applications

Online Desktop Applications - Description / Leading Practices

Online desktop applications are web-hosted applications such as Google Apps or Microsoft Office 365 that can be accessed anywhere with an internet connection. These applications seek to streamline technology management and engage organizations looking for cost savings by providing desktop applications on the Web.

Potential Benefits¹

- Easy/fast to deploy – *application is hosted online, no need to deploy on individual machines*
- Pay only for what you use – *cost incurred only application used*
- Less in-house IT staff, costs – *machines require lower maintenance, hence lower staff and costs*
- Offers the latest functionality – *any updates means everybody gets the update*
- Sharing systems – *seen as a perk by employees*

Current State: Road map planning and early stages of implementation have been completed by various Canadian jurisdictions. However, full scale implementation across the different jurisdiction has not been completed¹.

Leading practices for migrating to online applications²

- **Involve the legal department early** to ensure terms and conditions are agreed upon early. Understand regulatory compliance requirements.
- **Build up the network prior to deployment.**
- Start with **small, focused projects** targeting clear needs.
- Only move sensitive data (e.g., personally identifiable information) when the provider offers the appropriate level of **technical security, SLAs, and contractual assurances.**

1) Government of Canada (GC): Seeing the Future – in the Clouds, September 2010

2) Case Study: City of Los Angeles Migrates to Google Gmail

Adoption of Online Desktop Applications

Adoption of Online Desktop Applications have been a success in some companies^{1,2,3}. However, not every Online Desktop Application will be beneficial to all organizations. Careful research, experimentation, and planning is key to understanding the different possible scenarios and the possible risks that the company may face when making the switch⁴.

Key success factors for implementation¹

- Communication on why change of system is needed and impact of migration
- Unanimous approval from upper management so that there is buy-in from everyone
- Multifaceted training and assistance program
- Assistance of a seasoned enterprise system integrator
- Formal user acceptance testing program

Use of online desktop applications are best fit for small to mid-size organizations, including government agencies⁶

- Government of Canada has short term plans to implement internal collaboration (GEDS 2.0, GCPedia, GConnex, GCForum, VPCS)⁵.
- U.S. General Services Administration offers online desktop applications at a central hub (apps.gov) for Business Apps, Productive Apps, and Social Media Apps.
- Obama's "Cloud-First" policy has provided support for state and local governments to migrate to Online Desktop Applications. Through utilization of cloud technology, a signification reduction of government IT operation costs is expected⁷.

1) Case Study: City of Los Angeles Migrates to Google Gmail, Gartner, Gartner, July 2011

2) Case Study: Sanimax Leverages Cloud Computing and Hosting to Drive Agility and Efficiency, Gartner, August 2011

3) Case Study: D-Link Makes Aggressive Move to the Cloud, Gartner, August 2011

4) Case Study: EasyJet Exploits the Cloud for Rapid Innovation, Gartner, August 2011

5) Government of Canada (GC) Cloud Computing: Information Technology Shared Services (ITSS) Roadmap, Public Works and Government Services Canada, April 2010

6) Top IT Trends in U.S. Local Governments, Gartner, December 2010

7) Overview: Implementation of Cloud Computing Solutions in Federal Agencies, NJVC, September 2011

Sample Online Desktop Applications Case Studies

City of Los Angeles¹

- **Objective:** To relieve the unhappiness with mailbox size, mobility options, and system cost of the previous email provider, Novell GroupWise
- **Online Application:** Google Apps - Gmail
- **Number of Users:** 17,000
- **Key Benefits:** \$5M over five years
- **Implications:**
 - Migration of distribution lists, which in some cases had to be manually recreated in Gmail
 - Mail interoperability between GroupWise and Gmail was prone to failure and was eventually turned off.

Sanimax²

- **Objective:** Changes required to start a major ERP project
- **Online Application:** Windows 365
- **Number of Users:** 900
- **Key Benefits:** Improved agility to meet new users needs and easy access from any device and/or location.
- **Implications:**
 - IT culture had to change
 - Shift staff skills away from technology management to focus on business process and consultation

D-Link³

- **Objective:** Modernize their system to support growth
- **Online Applications:** All applications except ERP to the salesforce.com platform, and to adopt Google Apps for email and collaboration
- **Number of Users:** 2,500
- **Key Benefits:** To lower costs and to have greater business agility
- **Implications:**
 - IT team had to learn new skills and get up to speed quickly
 - Changing computing environment meant changing the organization

EasyJet⁴

- **Objective:** To lower costs and to innovate more rapidly
- **Online Applications:** Windows Azure
- **Number of Users:** 70 (just IT department)
- **Key Benefits:** Able to connect to the myriad of endpoints devices in a manner that was less expensive and less complex than if WestJet created it in its existing internal systems
- **Implications:**
 - A multiyear incremental process
 - The business and IT have to build trust with Microsoft for consistent delivery to predefined service levels

1) Case Study: City of Los Angeles Migrates to Google Gmail, Gartner, July 2011

2) Case Study: Sanimax Leverages Cloud Computing and Hosting to Drive Agility and Efficiency, Gartner, August 2011

3) Case Study: D-Link Makes Aggressive Move to the Cloud, Gartner, August 2011

4) Case Study: EasyJet Exploits the Cloud for Rapid Innovation, Gartner, August 2011

Deloitte.



Ministry of
Labour, Citizens' Services
and Open Government

Ministry of Labour, Citizens' Services, and Open Government

Line of Business Review

Executive Summary

November 8, 2011



High-Level Opportunity Summary

Overview of Scope and Approach

- Over the course of nine weeks, the Deloitte team conducted a high-level review of 15 service lines within the Ministry of Labour, Citizens' Services, and Open Government (LCTZ).
 - Technology Services Division (SSBC) – 5 service lines
 - Logistics and Business Services (SSBC) – 8 service lines
 - Integrated Workplace Solutions (SSBC)
 - Business and Workforce Transformation - CDAWS
- The focus of the review was on identifying opportunities to increase efficiency, effectiveness, and overall net value to government of the services provided by LCTZ.
- The review incorporated discussions with 60+ LCTZ personnel to gain an understanding of the way that services are currently delivered.
- The Deloitte team then leveraged its global network of subject matter experts to identify leading practices which might be applicable to LCTZ
- Following information gathering from LCTZ staff and Deloitte personnel globally, an initial set of leading practices and potential opportunities was compiled. That list was then refined to include only opportunities that were appropriate for LCTZ, and was then further prioritized to develop the list of recommended opportunities outlined in this document.
- The analysis on the following pages makes recommendations based on leading practices that LCTZ should consider. However, these recommendations are based on high level information and analysis and further information gathering and detailed analysis may be required prior to moving forward with implementation.



Summary of Opportunities

- The largest and most viable improvement opportunities are in the Technology Services Division (TSD) given the scale of the service lines (e.g. Network, Workstations, Hosting, Corporate Software Asset Management).
 - Examples include implementing VoIP technology and lengthening the desktop refresh cycle
 -
- While the services lines within the Logistics and Business Services (LBS) division are generally smaller in scale, there are opportunities to focus on core businesses and alter delivery models to improve efficiency and effectiveness to LCTZ and overall government.
 -
- Given the scale of the Integrated Workplace Solutions (IWS) division and the upcoming expiration of the facilities management contract,
 -
- In a number of services lines, in particular within LBS, the more-moderate benefit potential coupled with the greater complexity of implementation and other stakeholder factors lower the priority of opportunity implementation.
 - Examples include BCMailPlus, Queen's Printer, PDC, and Corporate Application Services
- While a number of significant opportunities were identified, it does not appear that there are many “low-hanging fruit”. The large opportunities / benefits identified will require time, effort, and investment from LCTZ to implement and realize.

S. 13, S. 17

S. 13, S. 17

S. 13, S. 17

S. 13, S. 17

Opportunity Summary Matrix

The graphic below helps to prioritize opportunities by illustrating the tradeoff between potential benefit and complexity of implementation. The size of the circles on the graph represents the aggregate spend for each service line, while the placement of the circles is based on the consolidation of all the distinct opportunities for each area.

5
13

- A number of service lines present opportunities that should be pursued in the short term due to the significant benefit potential with relatively low implementation complexity.
- A second group of opportunities require deeper analysis before proceeding as the implementation complexity may outweigh the potential benefit.
- The remaining opportunities have a high complexity to implement and relatively low benefit opportunity, making them lower priority for implementation.
- The benefits associated with a number of the technology-related opportunities will be dependent on the vendors' willingness to open and potentially renegotiate existing outsourcing agreements (e.g., hosting, workstations, networks).

Legend

- Unable to quantify potential \$ at this time – further analysis is needed. Horizontal placement on the graph would shift as a result.

Opportunity Summary Table

The following table outlines the recommended opportunities by service line, as well as those requiring further analysis before proceeding.

#	Div.	Line of Bus.	Opportunity	Spend	Surplus ¹	FTE	Savings (\$M)		Impl. Cost ¹ (\$M)		Timing	Complexity	Proceed?
							Lo	Hi	Lo	Hi			
1	TSD	Networks	Utilize VoIP	\$66.8M	Mixed n/a	98			\$.13, S. 17		Short	Low	Priority 1
2	TSD	Networks	Enable data prioritization										
3	TSD	Networks	Enable compression										
4	TSD	Networks		\$63.7M	Mixed n/a	12			\$.17, S. 13		Short	Low / Medium	Priority 1
5	TSD	Wstations	Lengthen refresh cycle										
6	TSD	Wstations	Reduce # of printers										
7	TSD	CSAM									Short	Low	Priority 1
8	TSD	CSAM											
9	LBS	AIR											
10	LBS	AIR									Immed.	Low	Priority 1
11	TSD	Hosting											
12	TSD	Hosting	Monitor transformation benefit										
13	TSD	Hosting									Short	Medium	Priority 1
14	LBS	DCV	Utilize CSAs for office Supplies									Low	
15	LBS	DCV										Low	
16	LBS	DCV											

Continued on next page...

Legend: Timing → Immediate: Before FY11/2 end

Short Term: 6-12 months

Medium Term: 12-24 months

Long Term: 24+ months

1. Mixed – n/a, represents a mixed funding model

2. Opportunities in AIR are both revenue enhancement and cost reduction

3. TBD – will require further analysis following this Line of Business Review to determine.

4. Data not available as not captured this way by LCTZ

5. DCV – Assumes 0-10% savings from current DCV office supplies spend

6. Opportunity for FY11/12. Opportunity may increase in subsequent years as committed capacity increases per contract as transformation progresses.

7. Note: While the recoveries shown indicate breakeven/surplus performance in many cases, the annual spend shown excludes the contribution to overall Ministry/SSBC overhead/operations provided by these lines of business.

8. © Deloitte & Touche LLP and affiliated entities.

Opportunity Summary Table (cont'd)

The following table outlines the recommended opportunities by service line, as well as those requiring further analysis before proceeding.

#	Div.	Line of Bus.	Opportunity	Spend	Surplus ¹	FTE	Savings (\$M)		Impl. Cost ¹ (\$M)		Timing	Complexity	Proceed?
							Lo	Hi	Lo	Hi			
17	LBS	SFS	Move protocol giftware online	\$1.1M	\$0.0M ²	6			\$.17		Immed.	Low	Priority 1
18	LBS	SFS	Eliminate store; reduce offerings			S. 17							
19	IWS	IWS				S. 13, S. 17					Immed.	Low	Priority 1
20	IWS	IWS											
Subtotal – Priority 1													
21	TSD	CApS	Refine support processes	\$32.8M	Mixed n/a	180					Medium	High	Priority 2
22	TSD	CApS	Explore outsourcing										
23	LBS	PDC									Med.	High	Priority 2
24	LBS	PDC											
25	LBS	PDC											
26	LBS	PDC											
27	LBS	Records				S. 13, S. 17					Short	Med	Priority 2
28	LBS	BCMail+											
29	LBS	Fleet									Immed.	Low	Priority 2
30	LBS	Fleet											
31	BWT	CDAWS									Short	Med	Priority 2
Subtotal – Priority 2													
TOTAL – Priority 1 and 2													
Legend: Timing → Immediate: Before FY11/2 end				Short Term: 6-12 months		Medium Term: 12-24 months				Long Term: 24+ months			

1. Mixed – n/a, represents a mixed funding model

2. Note: While the recoveries shown indicate breakeven/surplus performance in many cases, the annual spend shown excludes the contribution to overall Ministry/SSBC overhead/operations provided by these lines of business.

3. TBD – will require further analysis following this Line of Business Review to determine.

4. Excludes potential reduction in building lease costs

5. © Deloitte & Touche LLP and affiliated entities.

Opportunity Summary Table

The following table outlines the opportunities identified by service line and whether the opportunity was recommended for implementation (Priority 1 = move forward, Priority 2 = conduct further analysis, Priority 3 = lower priority for further analysis / action at this time).

#	LoB	Opportunity	Proceed?	#	LoB	Opportunity	Proceed?
1	Networks	Utilize VoIP	Priority 1	22	Q's Printer		Priority 3
2	Networks	Enable data prioritization	Priority 1	23	BCMailPlus		Priority 3
3	Networks	Enable compression	Priority 1	24	BCMailPlus		Priority 3
4	Networks		Priority 1	25	BCMailPlus		Priority 2
5	Hosting		Priority 2	26	PDC		Priority 2
6	Hosting	Monitor transformation benefit	Priority 1	27	PDC		Priority 2
7	Hosting		Priority 2	28	PDC		Priority 2
8	Wstations	Lengthen desktop refresh cycle	Priority 1	29	PDC		Priority 2
9	Wstations	Reduce # of printers / MFDs	Priority 1	30	Records		Priority 2
10	CSAM		Priority 1	31	Records		Priority 3
11	CSAM		Priority 1	32	Records		Priority 3
12	CAPs	Refine app. support processes	Priority 2	33	Records		Priority 3
13	CAPs	Outsource application support	Priority 2	34	Fleet		Priority 2
14	DCV	Maximize office supply CSA discounts	Priority 1	35	Fleet		Priority 2
15	DCV		Priority 1	36	Fleet		Priority 3
16	DCV		Priority 2	37	IWS		Priority 1
17	SFS	Move protocol giftware online	Priority 1	38	IWS		Priority 2
18	SFS	Eliminate store, reduce offerings	Priority 1	39	IWS		Priority 3
19	AIR		Priority 1	40	CDAWS		Priority 2
20	AIR		Priority 2	41	CDAWS		Priority 3
21	Q's Printer		Priority 3				

© Deloitte & Touche LLP and affiliated entities.

Additional Observations

1. The access to and quality of data across LCTZ creates a barrier to effective management.
2. Given that internal LCTZ/SSBC overhead is not allocated within the Ministry/Divisions, many of the service lines have an incomplete picture of their financial performance.
3. The scope of services provided in a shared services environment within BC does not always align well with those typically seen in other Canadian and global jurisdictions.
 - For example, the provision of a number of transactional finance processes (e.g. accounts payable) is common within a shared services environment and typically leads to greater efficiencies and cost savings.

Deloitte.