CloudBC Contractors

	Contractor	Current Contract Term	Hourly Rate
1	Pierre Vorster	Jul. 31, 2016 – Feb. 28, 2017	$150
2	Scott Wilkinson	Apr. 1, 2016 – Mar. 31, 2017	$175
3	Julian Whike	Apr. 1, 2016 – Mar. 31, 2017	$130
4	Morgan Shields	Jan. 1, 2016 - Dec. 31, 2017	$155
5	Tracey Gabert	Feb. 1, 2016 – Jan. 31, 2017	$45
6	Anthony Roy	Apr. 1, 2016 – Mar. 31, 2017	$160

Resource / Cost	Approved Budget	YTD Actual	Remaining Forecast	Actual + Remaining Forecast	Forecasted Annual Variance	APRIL AprilActual	MAY MayActual	JUNE JuneActual	JULY JulyActual	AUGUST AugActual	SEPTEMBER SeptActual	OCTOBER OctActual	NOVEMBER NovForecast	DECEMBER DecForecast	JANUARY JanForecast	FEBRUARY FebForecast	MARCH MarForecast
	$1,800,000.00	$1,198,718.53	$693,307.00	$1,892,025.53	($92,025.53)	$172,187.52	$245,386.06	$186,071.73	$145,046.38	$158,291.39	$158,481.45	$133,254.00	$138,892.00	$126,433.00	$137,942.00	$123,885.00	$166,155.00
Duncan McLellland	$93,937.50	$4,827.70	$0.00	$4,827.70	$89,109.80	$0.00	$4,827.70	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Sophia Tham	$140,940.00	$76,328.00	$0.00	$76,328.00	$64,612.00	$11,020.00	$17,168.00	$16,588.00	$13,688.00	$9,048.00	$8,816.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Stephen Gordon	$54,000.00	$29,780.20	$0.00	$29,780.20	$24,219.80	$5,956.04	$5,956.04	$5,956.04	$5,956.04	$5,956.04	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Hema Paupiah	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Julian Whike	$230,100.00	$128,700.00	$95,713.00	$224,413.00	$5,687.00	$18,980.00	$19,500.00	$17,810.00	$20,280.00	$12,610.00	$19,110.00	$20,410.00	$20,150.00	$15,113.00	$20,150.00	$20,150.00	$20,150.00
Legal Services Branch (LSB)	$133,875.00	$167,817.40	$112,105.00	$279,922.40	($146,047.40)	$20,469.00	$30,542.40	$31,034.00	$14,855.00	$26,669.00	$25,628.00	$18,620.00	$25,900.00	$18,725.00	$29,680.00	$22,680.00	$15,120.00
External Legal Council	$0.00	$39,487.42	$0.00	$39,487.42	($39,487.42)	$0.00	$21,977.95	$17,509.47	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Procurement Services Branch (PSB)	$53,437.50	$28,734.00	$29,810.00	$58,544.00	($5,106.50)	$2,420.00	$6,050.00	$1,210.00	$3,575.00	$3,165.00	$3,905.00	$8,409.00	$8,800.00	$8,800.00	$4,070.00	$4,070.00	$4,070.00
Mike Larson	$270,000.00	$86,904.00	$0.00	$86,904.00	$183,096.00	$25,704.00	$25,704.00	$26,928.00	$8,568.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Pierre Vorster/COO	$0.00	$91,800.00	$116,250.00	$208,050.00	($208,050.00)	$0.00	$0.00	$4,800.00	$21,000.00	$22,050.00	$24,900.00	$19,050.00	$23,250.00	$23,250.00	$23,250.00	$23,250.00	$23,250.00
Tracey Gabert	$81,000.00	$46,688.50	$34,178.00	$80,866.50	$133.50	$6,412.50	$7,087.50	$7,245.00	$5,377.50	$7,245.00	$6,818.00	$6,503.00	$6,975.00	$6,278.00	$6,975.00	$6,975.00	$6,975.00
Scott Wilkinson	$196,875.00	$135,231.50	$40,689.00	$175,920.50	$20,954.50	$26,775.00	$24,937.50	$22,531.25	$18,156.75	$13,212.50	$17,062.50	$12,556.00	$13,563.00	$13,563.00	$13,563.00	$0.00	$0.00
Bob Dugan	$27,000.00	$21,029.18	$0.00	$21,029.18	$5,970.82	$12,840.00	$5,693.18	$756.00	$960.00	$780.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Morgan Shields	$237,150.00	$183,599.00	$102,107.00	$285,706.00	($48,556.00)	$29,760.00	$32,860.00	$23,947.50	$20,072.50	$25,110.00	$27,591.00	$24,258.00	$18,019.00	$18,019.00	$18,019.00	$24,025.00	$24,025.00
TBD Senior Analyst	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Tony Roy	$0.00	$32,880.00	$62,000.00	$94,880.00	($94,880.00)	$0.00	$0.00	$0.00	$0.00	$7,760.00	$14,320.00	$10,800.00	$12,400.00	$12,400.00	$12,400.00	$12,400.00	$12,400.00
Web design & development	$100,000.00	$8,500.00	$50,000.00	$58,500.00	$41,500.00	$0.00	$0.00	$0.00	$0.00	$8,500.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$50,000.00
Travel Expenses	$49,000.00	$16,634.26	$5,000.00	$21,634.26	$27,365.74	$3,084.94	$1,061.02	$999.22	$3,922.19	$2,087.89	$1,581.00	$3,898.00	$1,000.00	$1,000.00	$1,000.00	$1,000.00	$1,000.00
Rent	$66,000.00	$37,625.00	$26,875.00	$64,500.00	$1,500.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00	$5,375.00
Property Taxes (one time)	$0.00	$5,452.25	$0.00	$5,452.25	($5,452.25)	$0.00	$0.00	$0.00	$0.00	$5,452.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Supplies	$1,185.00	$100.00	$425.00	$525.00	$660.00	$100.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$85.00	$85.00	$85.00	$85.00	$85.00
Hosting	$5,500.00	$0.00	$0.00	$0.00	$5,500.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Membership fees	$6,000.00	$0.00	$0.00	$0.00	$6,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Training	$6,000.00	$0.00	$1,330.00	$1,330.00	$4,670.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$500.00	$0.00	$500.00	$330.00
SSBC Overhead	$48,000.00	$21,874.70	$15,625.00	$37,499.70	$10,500.30	$3,124.95	$3,124.95	$3,124.95	$3,124.95	$3,124.95	$3,124.95	$3,125.00	$3,125.00	$3,125.00	$3,125.00	$3,125.00	$3,125.00
Telecommunications	$0.00	$1,385.02	$1,200.00	$2,585.02	($2,585.02)	$166.09	$180.42	$257.30	$135.45	$145.76	$250.00	$250.00	$250.00	$200.00	$250.00	$250.00	$250.00
WSBC 2015-2016 Backcharges	$0.00	$33,340.40	$0.00	$33,340.40	($33,340.40)	$0.00	$33,340.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

CCIO Hosted Services

Business Plan 2015-2017

Submitted to the BC Council of Chief Information Officers (CCIO)

Version date: May 1, 2015

Contents

Introduction

The BC Council of CIOs (CCIO) is committed to developing a hosted services strategy on behalf of the BC broader public sector. A business case was prepared and tabled at CCIO in September 2014 which outlined the value proposition of leveraging hosted services. Over the following months the project team worked collaboratively with the project steering committee and the Council to outline the core components of a go-forward strategy, as well as the governance and organizational models to deliver the strategy.

This business plan sets forth a 3-year strategic plan and supporting Year 1 operating plan and budget for Hosted Services, a CCIO-led initiative to help drive successful adoption of cloud and other hosted services across the BC broader public sector. Pending approval of the plan, the program will enter a transition phase to stand up the business model which should be fully operational by August.

> *Under a hosted services model, the customer purchases T services run on infrastructure owned and managed by 3rd parties. Hosted services are generally synonymous with cloud services insofar as they are rapidly scalable and pay-per-use, and may be delivered through multi-tenanted architectures. They include Infrastructure, Platform, and Software as-a-Service (IaaS, PaaS, SaaS) variations.*

The planning cycle for the organization will correspond to the BC government fiscal cycle, and therefore the strategic plan covers the period through fiscal year 2017-18 and the operating plan and budget covers the balance of the current fiscal year.

The strategy and program design emphasize nimbleness and flexibility in recognition that the marketplace for hosted and cloud services is evolving very quickly and Council organizations are at various stages of adoption readiness. Through the governance model, the business plan, including the annual operating plan and budget, will be updated as required to ensure activities drive the greatest value to member organizations and the necessary resourcing is in place to execute on those priorities.

Business Case

Hosted services have matured and are viewed as viable solutions to help address many key challenges faced by CIOs. A business case was prepared in fall 2014 to articulate and quantify the value proposition of hosted and cloud services to the BC public sector. Key observations from the business case are summarized below.

Containing IT Costs – Potential financial benefits are estimated at 20% of the IT budget (capital and operating) which can be captured as savings or reinvested in higher value activities. There are four primary sources of economic value to CCIO entities:

1. Scale – Leading hosted services providers have economies of scale, allowing them to offer and finance services at a significant cost advantage over organizations that lack scale.

2. Pooled Demand – Some hosted services pool demand from many customers, increasing capital utilization and reducing demand volatility.

3. Specialization – Leveraging the unique characteristics of cloud computing (broad network access, resourcing pooling, rapid elasticity, etc.), some hosted service providers have built highly specialized services that are uneconomic for consumers to replicate.

4. Network Effects – Some cloud service providers have capabilities that become more valuable to each user as more users join the network.

Adapting to workforce pressures – Adopting hosted services can help address workforce pressures, especially high rates of retirements. For example, 32% of IT staff in the BC government are forecast to retire within 5 years , while 40% of IT staff at one CCIO entity will be 60 years or older within 5 years. Not only does turnover from retirement create workforce pressures, it also puts pressure on the IT organization to modernize its platforms, as many of these retiring individuals have highly specialized skills tied to aging technologies. These skills are in short supply in the market. Leveraging hosted services built on modern technology platforms presents an opportunity to both help address workforce pressures and modernize IT services.

Delivering solutions quickly that are easily scalable – SaaS and PaaS solutions can typically be deployed much faster than on-premise alternatives. For example, one CCIO entity implemented a HR SaaS system for 500 users in 6 months with 3.5 project FTEs involved; a comparable in-house solution would have required 10 FTEs and 18 months to implement. SaaS and PaaS platforms are pre-built and tested, simplifying deployment and upgrades. PaaS and SaaS vendors can deploy additional seats and enable additional features or modules almost instantaneously. An example of the value of scalability is a BC-based multinational company with annual revenues of over $1B that is re-platforming their core custom legacy applications on Force.com platform so that IT can affordably (and with manageable complexity) support 10-15% annual revenue growth. From an IaaS perspective, vendors can provision and deploy IT infrastructure (servers, storage, firewalls, etc.) almost instantly, and can easily scale up or down to adjust to demand. Lastly, the underlying hosted services incorporate improvements in functionality and applying updates as part of the normal mode of business. This substantially reduces ongoing maintenance costs compared to traditional environments where internal IT continually applies patches and improves functionality within the internal IT budget. These activities are "bundled" into the unit usage costs, thereby limiting risks associated with major patches, while realizing the benefits as functionality is expanded and improved by the provider at essentially no additional cost.

Adapting to new technology and service models – CCIO organizations need to ensure alignment of their architectures and technologies to what is available in the market. Increasingly those market offerings will be cloud-oriented. Leading vendors are pivoting their corporate strategies to focus on cloud services, for example: "Our strategic imperative is absolutely that we will remake enterprise IT for the era of cloud" (IBM CEO, 2014), and "Microsoft will go boldly into mobile-first, cloud-first world" (Microsoft CEO, 2014). Cloud technologies unlock new sources of value not possible on traditional platforms. An example is AppExchange, Salesforce's marketplace for click-to-purchase reusable software

services built on the Salesforce development platform, tested against its security model, and deployed on a multi-tenanted, highly scalable infrastructure platform.

Demonstrating value of IT to the business – Under traditional IT, the cost of service delivery is difficult to value due to high fixed costs across functional domains (e.g., infrastructure, database & middleware, security). With hosted services there is a clear line of sight between consumption and cost, enabling the organization to understand and optimize its IT expenditures. The value to the business is not limited to cost, but also includes innovation and time-to-value, where hosted services provide opportunities that are unavailable under traditional IT environments.

Adoption Factors

Three factors are outlined below that will impact the pace and scale of adoption. They also help frame how coordination and consistency across the CCIO can help drive adoption.

Figure 1: Adoption factors
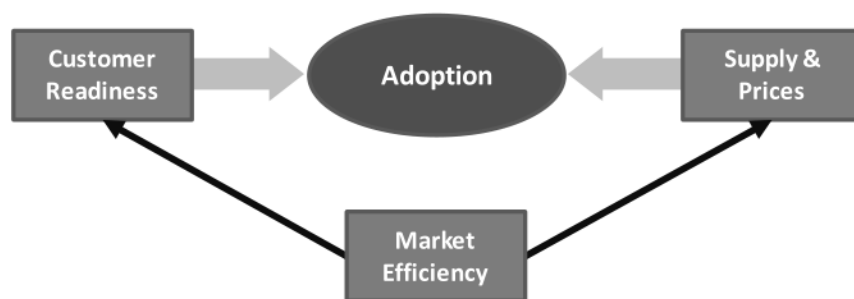
Customer Readiness – Demand for services is fundamentally about the state of internal readiness among the CCIO community to consume hosted services at substantial scale. The readiness "agenda" for an organization comprises sets of inter-related activities to: 1) evaluate workloads to develop the migration strategy and drive the business case, and 2) adapt IT capabilities to successfully consume hosted services at significant scale. Because the scope of change affects multiple areas within IT, and engagement and buy-in from senior executive are critical to success, the change program should be managed centrally, for example through a project management office, with strong senior executive support.

Observation: In general, CCIO entities are in the early adoption phase of hosted services. They are focusing on implementing point solutions rather than executing against an enterprise-wide IT strategy with hosted services adoption being a clearly articulated and well-planned component of the strategy. Hosted services and cloud computing overall is a cultural change activity, where building and establishing trust boundaries are mandatory considerations to clarify opportunities, risks, activities, governance and responsibilities.

Market Efficiency – The robustness of any market is partially a function of the quality and breadth of information about that market. Markets are efficient to the extent there is perfect information, i.e.

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where the customers know all things, about all products, at all times, and therefore always make the best decisions regarding purchase. Hosted services can create information asymmetries between customer and supplier as a result of transferring delivery and control of a greater scope of technology components to the supplier. Information asymmetries may also arise as a result of inconsistent understandings of key terms including service definitions, terms and conditions, and pricing.

Observation: The level of understanding of cloud computing concepts, risks, benefits, compliance requirements is mixed across the CCIO. There is inconsistency with respect to what customers should require in cloud contracts and the appropriate division of responsibilities between vendor and customer in delivering quality cloud-based service to end users. On the supply side, the lack of consistent or coordinated procurement & contracting activities results in duplicative effort and upward pressure on prices.

Supply & Prices – Supply and prices vary at the regional level. Large technology vendors tend to focus their investments where demand is greatest, for instance, the US, Asian and European markets. Market maturity of services hosted Canada is behind that of the US in part because US providers can meet the needs of many Canadian organizations, for many workloads. Public bodies subject to data sovereignty and residency legislation do face constraints on their ability to tap foreign markets for best-of-breed and lowest-cost hosted services.

Observation: The Canadian marketplace with respect to data-resident cloud offerings is maturing, with market leaders Salesforce, IBM, SAP, HP, and Oracle having recently entered or announced their plans to enter the Canadian marketplace. However, there is mixed understanding of BC's data residency & sovereignty requirements to which all BC public bodies are subject under BC's Freedom of Information and Protection of Privacy Act (FOIPPA). There are many innovative BC companies that offer services on-top of the major cloud offerings, whether hosted in Canada or elsewhere, that contribute meaningfully to the local economy.

Feedback from CIOs, vendors, interviews with other jurisdictions, and research by Gartner and similar organizations, indicate that leadership at the CCIO level is essential for entities to help drive the development of the marketplace in BC and the pace of adoption among BC public sector entities. The following statements capture the desired transformation to support the consumption of hosted services at substantial scale among CCIO organizations:

From…	*To…*
Limited coordination on procurements and contracts to support on-ramping of multiple entities	CCIO-certified services from multiple providers are available through an online marketplace to streamline on-boarding
Inconsistent understanding of compliance requirements (especially FOIPPA) among CCIO entities and vendors	Clear compliance requirements, supporting contract language and recommended controls are developed

Limited consistency on minimum terms & conditions for cloud contracts	A standard set of minimum recommended terms & conditions is developed based on type of service
Uncertainty of service providers' ability to meet requirements (security, privacy, performance, interoperability, etc.)	Guidelines, best practices and risk frameworks are defined with respect to defining requirements and evaluating cloud offerings
Inconsistent understanding of terms, services and concepts as they relate to hosted & cloud services	A common language is in place based on existing standards and frameworks, illustrated by examples and use cases
No common framework and approach to developing a hosted services strategy, roadmap and change plan	A readiness framework is documented, and specialist vendors are pre-qualified to assist in readiness activities

Business Model

A series of workshops and meetings were held with CCIO to establish strategic direction on the role for CCIO. The discussions were informed by vendor input collected during the business case phase as well as lessons learned from cloud strategies implemented in other jurisdictions and their applicability to the BC context given unique circumstances such as compliance requirements and the size of the market opportunity for vendors.

A cornerstone objective of the strategy is to develop an open and competitive market for cloud and supporting services that meet minimum requirements, with executable contracts in place to streamline on-boarding. Procurement remains a responsibility that resides with the CCIO entities. Minimum requirements should reflect that cloud services are commercial services built for wide appeal. At the same time, terms & conditions should be in line with the most rigorous of industry standards to which market leaders have built their solutions. The approach should draw on industry-leading standards developed by other bodies (e.g., ISO, OMG, NIST/FedRamp, etc.), while addressing gaps where standards are immature or insufficient for CCIO's needs. Where appropriate, the approach should be in line with similar efforts being undertaken in other jurisdictions in Canada.

A services model has been developed that sets out the capabilities that need to be in place to achieve this objective and are in line with the strategic direction laid out by CCIO. Through this services model, Hosted Services will deliver on a value proposition to achieve gains from scale by developing common solutions to common challenges and opportunities.

Figure 2: Services model

Work with stakeholders to identify and prioritize opportunities to drive the highest value

Drive market efficiency through common language, standards, guidelines

Develop procurement & contract vehicles with efficient on- and off-boarding

Share knowledge, lessons learned, best practices

The service areas that comprise the model are mutually reinforcing. At the heart of the model is **Strategy & Opportunity Capture**: through the governance model and stakeholder engagement strategy (both outlined below), Hosted Services will take primary responsibility on behalf of CCIO to frame, prioritize, and lead response efforts to those marketplace opportunities that drive maximum benefit to the group. Common **Guidelines & Best Practices** drive market efficiency through common definitions, templates and strategic frameworks. Procurement and contract vehicles for common use are stood up within a **Marketplace** of CCIO-certified services. Information and knowledge exchange between Hosted Services and customers is provided through a **Community of Practice**.

Responsibilities by service area are further defined below.

Figure 3: Responsibilities by Service Area

Service Area	Responsibilities
Strategy & Opportunity Capture	• Lead strategic planning for marketplace expansion & evolution • Facilitate strategic engagement with vendors and knowledge exchange with CCIO • Lead / support negotiation on collaborative contracts • Track & report on benefits
Marketplace	• Develop procurement vehicles for common use across CCIO • Facilitate customer and supplier on- & off-boarding • Track vendor and contract performance, perform contract audit and compliance duties • Operate an online marketplace of "CCIO-certified" services

Guidelines & Best Practices	• Develop and maintain recommended minimum terms and conditions to include in cloud contracts • Advise on terms & conditions and requirements to include in CCIO procurement vehicles • Develop and maintain guidelines and best practices to support decision-making and change management (procurement, contracting, evaluation, security, privacy, business case development, risk management, service lifecycle management)
Community of Practice	• Educate entities about the marketplace, guidelines & best practices • Facilitate knowledge sharing between CCIO entities • Help run pilots and document use cases • Identify opportunities for developing CCIO guidelines & best practices

A supporting Program Administration function will provide supporting capabilities around reporting, communications, and administration and logistics.

Governance, Organization and Metrics

In spring 2015, a workshop was held with the CCIO to validate the services model and make decisions on the governance model and organizational structure to operationalize the services model. Supporting guiding principles were also re-affirmed. These are:

I.   **Focus on Benefits** – Focus on activities with the highest return on investment to stakeholders

II. **Measurable** – Be accountable for results as measured against quantifiable metrics

III. **Lean** – Minimize fixed costs, easily scale (up or down) to match needs

IV. **Proactive** – Leverage experience and expertise from both within and outside CCIO community

V.   **Responsive** – Support and do not hinder individual CCIO organizations efforts to innovate

VI. **Extensible** – Design for CCIO's needs but make the strategy available to other customers with similar requirements (e.g. other BC public sector, other provinces, etc.)

Governance going forward will continue to rest with the CCIO, with Hosted Services providing communications support such that CCIO members have consistent messaging about the program as they engage with their stakeholders. The Government CIO (GCIO) will provide quality of service oversight of operations and ensure the necessary provision of back office functions to support service delivery. Hosted Services will report directly to GCIO.

A Content Review Board chaired by a CCIO representative will provide quality assurance of best practices and guidelines documentation and overall leadership for the Community of Practice. Working

groups will be struck as-needed to, for example, evaluate RFx responses and develop new guidelines & best practices, and may include representation from CCIO organizations as well as from external stakeholders such as vendors, other public sector organizations, industry associations, standards bodies, etc.

Figure 4: Governance & Organizational Model
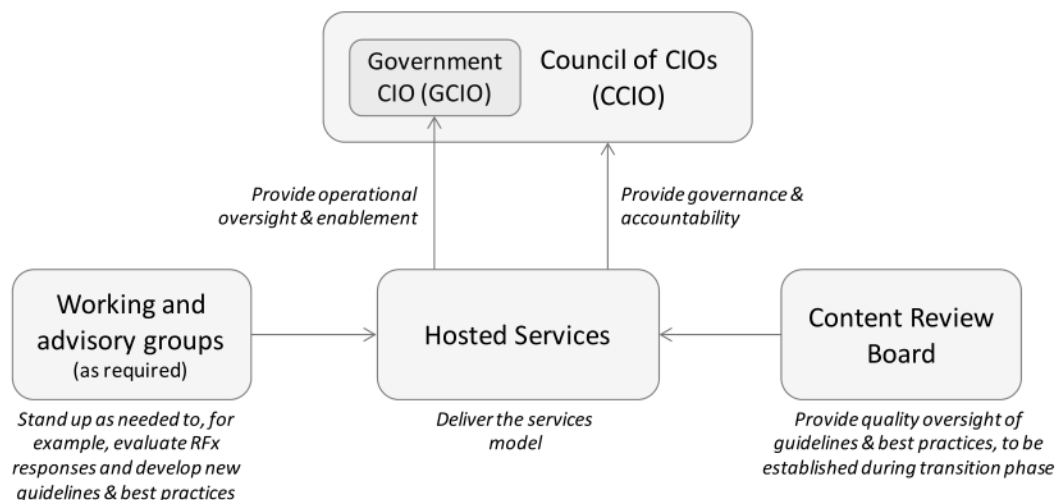
Hosted Services will measure its impact using the following metrics. Predicting performance for all these metrics for the initial 3 year timeframe is difficult especially for Output type metrics. Hosted Services will have greater leverage over the Leading Indicator type metrics than over Output metrics. In particular, Hosted Services will take responsibility for standing up services within the marketplace and marketing the services so that both customers and vendors are aware of the market and how it works. However, uptake of services, which drives the Output metrics, is within the purview of the entities. Therefore, in Year 1, while the marketplace is being established, performance assessment will focus primarily on the Leading Indicator type metrics. 3-year targets for all metrics will be established at the near the conclusion of most of the start-up activities (Sept/Oct).

Figure 3: Performance Measurement Framework

Metrics	Rationale	Formula Description	Type
Benefits			
Collaboration Benefits	Demonstrates the economic value-add of Hosted Services	Dollars and time saved compared independent procurement	Output
Savings			
Marketplace Sales	Demonstrates scale and growth of the marketplace	Total value of sales of services available in the marketplace	Output
Performance			
Payback Period	Demonstrates the period before which the organization is self-funded	Years until zero-base budget is achieved	Output

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CCIO Satisfaction	Demonstrates member entities' satisfaction with the operating model	Results of a satisfaction survey	Leading Indicator
Market Impact			
Marketplace Sales in BC	Demonstrates the impact on the provincial economy	Revenue growth of BC-based companies as a result of the Strategy	Output
Number of Customers	Illustrates the size of the customer base and demand power	Total number of customers making purchases through the marketplace	Leading Indicator
Number of Qualifying Vendors	Illustrates the breadth and choice available in the marketplace	Total number of vendors qualified for the marketplace	Leading Indicator
Number of Qualifying Services		Total number of services that have qualified for the marketplace	Leading Indicator

Strategic Plan

Analysis compiled over the past 18 months points to a number of potential large scale opportunities for cloud services adoption in BC. Hosted Services will work through the governance model to continually reassess the key opportunities for capture and refine the strategic and operating plans accordingly. The following are the major priorities for Year 1 with respect to building out the marketplace, as directed by CCIO.

Figure 5: Year 1 strategic priorities
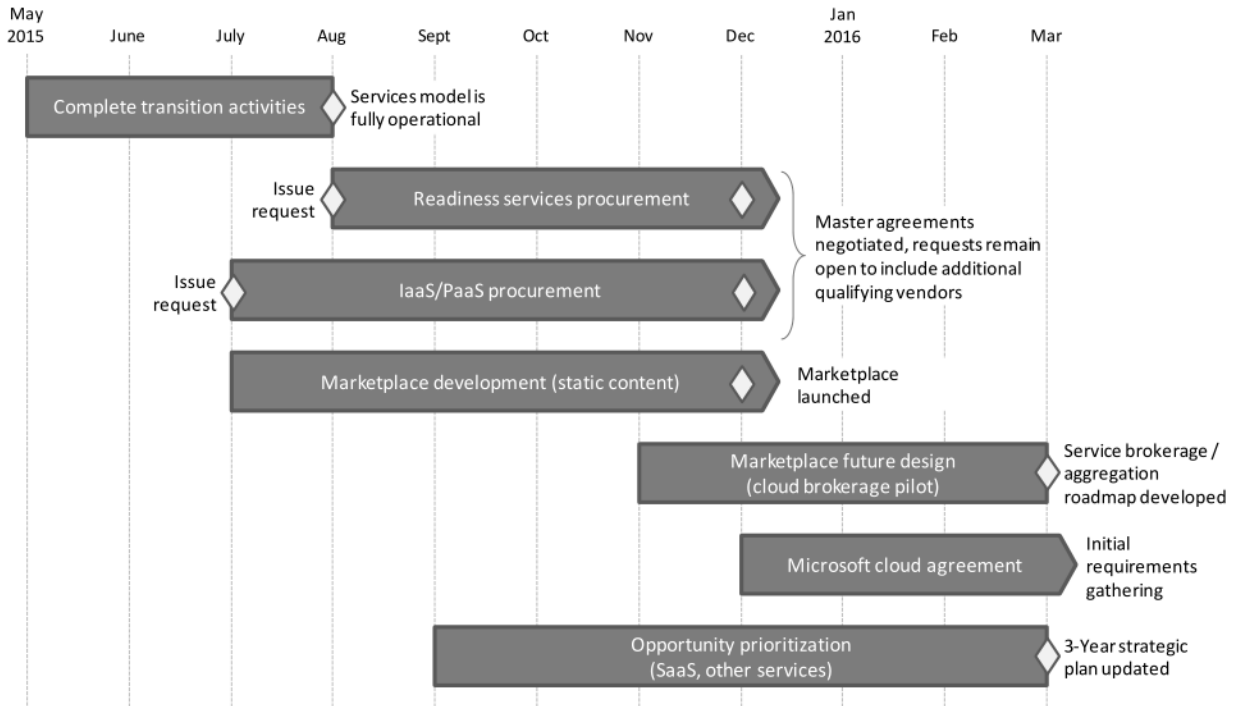
Readiness services procurement

The business case indicated that CCIO organizations are early in their journey to the cloud and would benefit from developing cloud strategies to help frame decision-making and align to their specific requirements and objectives. Hosted Services will pre-qualify readiness vendors that have demonstrated experience helping clients get ready to adopt cloud and provide services such as cloud strategy and roadmap development, procurement & negotiations support, risk assessments, and change management support.

IaaS/PaaS procurement

CCIO gave direction to build out the marketplace incrementally starting with IaaS and PaaS services. Pre-qualified vendors could be cloud service providers, resellers or brokers, and may offer value-added services such as design and migration services. Common-use contracting vehicles would be negotiated where possible with pre-qualified vendors to streamline onboarding.

Service offerings typically extend upwards from the core data centre infrastructure to include middleware, databases, programming languages, libraries, services and tools. Building solutions on cloud infrastructure may include value-added services such as analysis, design and migration services, and ongoing support. Example use cases include application hosting, application development & test, cloud bursting, archival, disaster recovery, environment provisioning, high performance computing.

Work is underway to develop the procurement framework to support the initiative. Draft terms & conditions and related requirements have been developed, informed by terms and conditions work by the OCIO, external documents[1], and work to date on IaaS/PaaS pilots with WorkSafeBC, Ferries and BC Hydro. The goal is to conclude contract negotiations with multiple vendors as early as December.

Marketplace development (static content)

Information about CCIO-certified services including service descriptions, pricing, and terms and conditions negotiated under master standing agreements will be available via a public-facing website, i.e. marketplace. The marketplace will be launched to coincide with the conclusion of contract negotiations with vendors that meet minimum terms and conditions for readiness services and IaaS/PaaS.

Marketplace future design

CCIO provided direction to investigate brokerage platforms as a longer-term strategy for streamlined onboarding. As cloud services continue to evolve and market offerings proliferate, many leading commentators including Gartner[2] expect IT organizations, including shared services organizations within

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[1] Example is the "Best Practice Guide for Cloud and as-a-Service Procurements" published by Center for Digital Government published in 2014.
[2] Gartner, "How Cloud Is Affecting Government Agency CIOs and Shared Services" (Dec 6, 2012).

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the public sector, to become cloud service brokers, facilitating secure, cost-effective and efficient access to multiple cloud offerings.

Figure 6: Service Aggregation
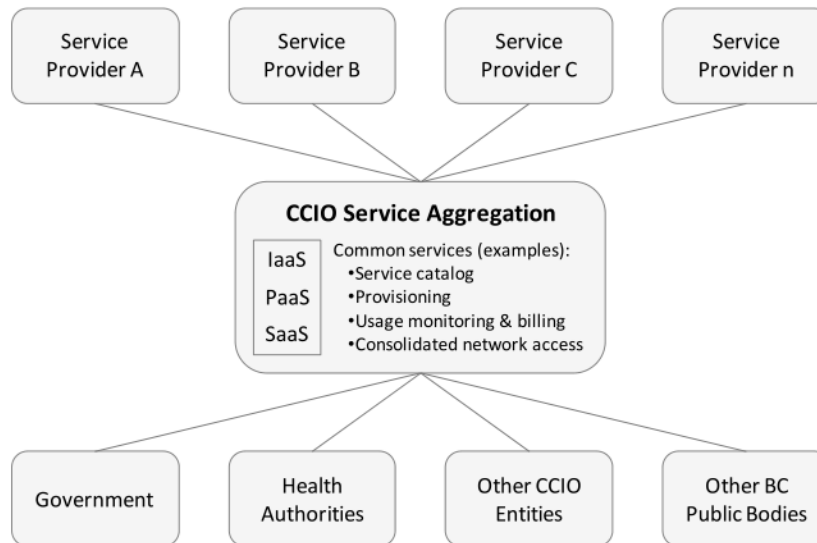
A priority for year one will be to complete an evaluation of such models (e.g. deploy ready-made commercial solutions, customize an existing platform, or build from scratch) along with a business case, risk assessment and implementation roadmap. A specialist advisor with cloud technical experience working with public sector organizations will be recruited lead this work and possibly run pilot in Year 1.

Microsoft cloud agreement requirements gathering

Work will begin to gather requirements to inform negotiations with Microsoft on a renewal agreement for 2017. Scope will be limited to cloud offerings unless otherwise directed by CCIO

Opportunity prioritization

A final priority for Year 1 is to develop a prioritization framework and high level action plans for all cloud opportunities. The viability of the opportunities is a function of two factors: 1) the maturity of the market in terms of the quality of the service offerings available and choice in the market, and 2) the state of customer readiness to consume and extract value from the service. Prioritization will be further informed by the estimated economic value-add of collaboration via CCIO and the Hosted Services program, as illustrated below. Ongoing support from CCIO for the Hosted Services program will depend fundamentally on demonstrating that the cost of collaboration yields a positive return on investment from factors such as deeper price discounts than would otherwise be available, reduced procurement and on-boarding effort, and faster access to services (i.e. faster adoption) than would otherwise have been possible.

Figure 7: Opportunity prioritization
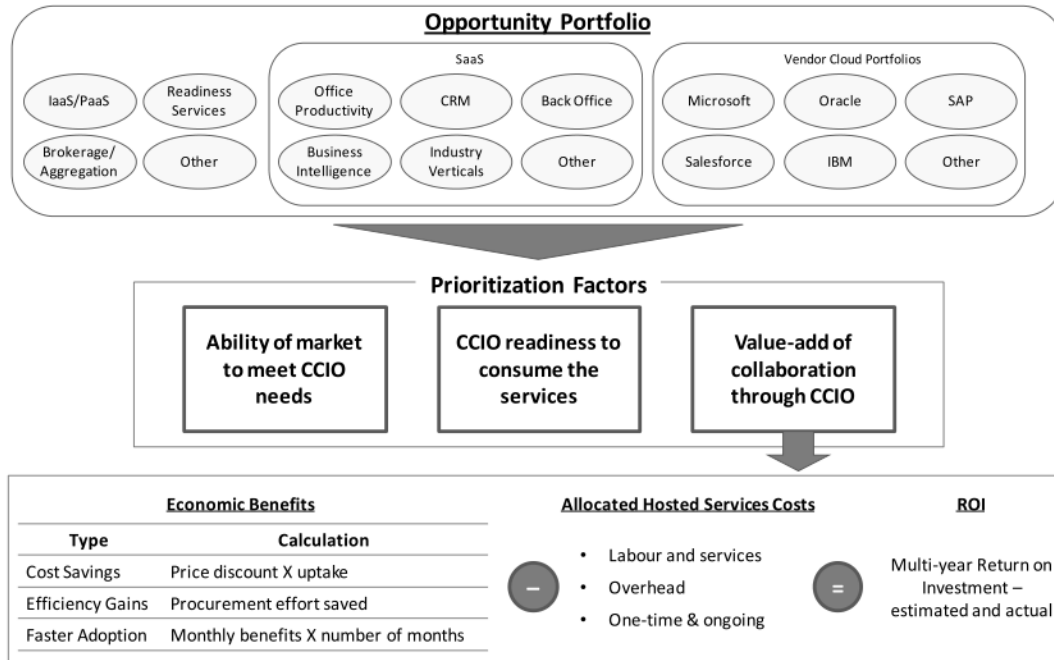
A three-year strategic plan is presented below and will evolve, especially for years 2 & 3, through ongoing engagement with stakeholders and vendors.

Figure 8: 3-year strategic plan

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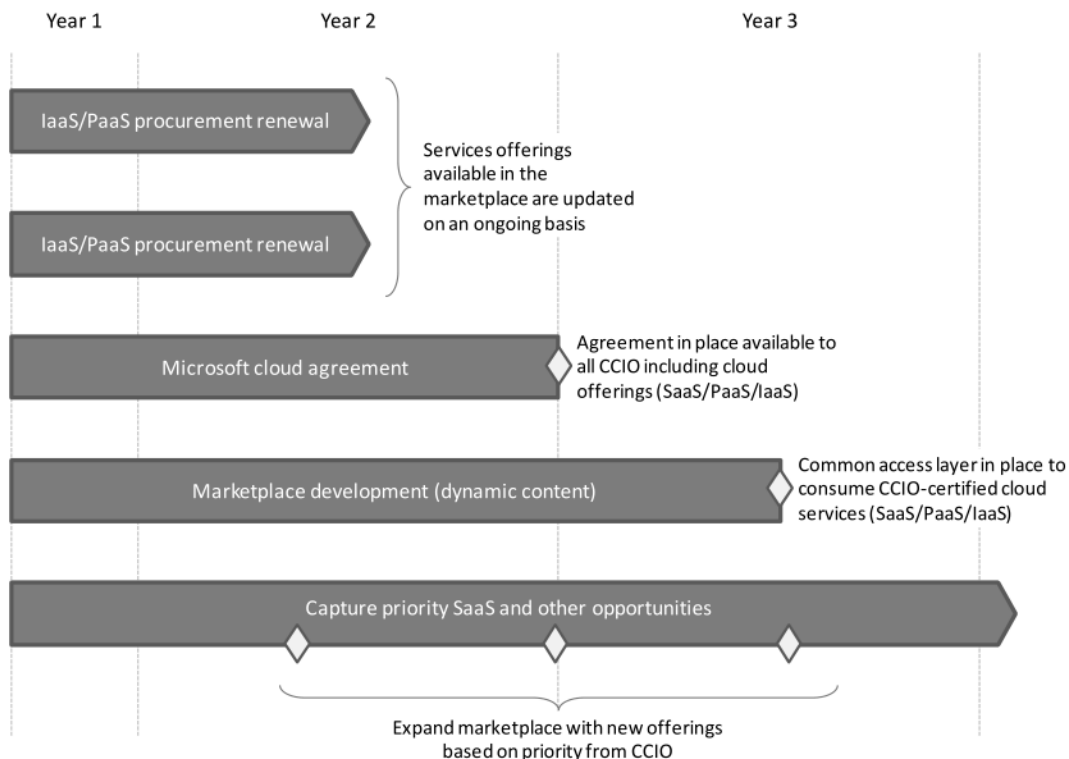
Operating Plan

The operating plan lays out plans and priorities for the current fiscal year of the business plan. A key objective for the current year is to successfully transition from start-up activities to ongoing operations. The timing of the transition from start-up to ongoing phases will vary by service area.

Strategy & Opportunity Capture

<u>Current year objective</u>

Tactical plans will be developed for priority opportunities that will roll up to a 3-year benefits realization forecast. To that end, start-up activities will focus on consolidating senior executive engagement between vendors and customers through the CCIO governance structure and managed by Hosted Services, and establishing the necessary portfolio planning structure, templates and processes to establish tactical plans for capturing the opportunities.

<u>Operational Plan</u>

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Start-Up Phase											
Develop governance policies and procedures vis-a-vis CCIO, GCIO, Hosted Services	■	■									
Develop portfolio planning and analysis templates and requirements	■	■									
Transition ongoing discussions / negotiations with BPS-wide scope to Hosted Services	■	■									
Develop calendar of external events (conferences, advisory councils, seminars, etc.) to support knowledge sharing and innovation	■	■									
Ongoing Operations											
Develop action plans for each major opportunity		■	■	■	■	■	■	■	■	■	■
Continue to engage vendors						■	■	■	■	■	■
Provide strategic oversight to tactical planning efforts through the Marketplace service area						■	■	■	■	■	■
Provide regular reporting to CCIO						■	■	■	■	■	■
Complete year end benefits report, year 2 operating plan and updated 3-year business plan										■	■

<u>Dependencies & Risks</u>

Progress will depend critically on successful engagement with CCIO. Establishing governance policies and procedures as a way to level set on expectations will be an immediate priority. These will cover decision rights and decision-making processes, frequency of meetings with the CCIO.

Marketplace

Current year objective

Marketplace objectives are described in the Strategic Plan section above. Transition activities will include engaging with vendors to get feedback on the procurement frameworks for IaaS/PaaS and readiness services and designing the online marketplace to be ready to launch when contract negotiations conclude (forecasting as early as December).

Operational Plan

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Start-Up Phase											
Establish procurement, contracting and legal framework to support marketplace strategy	▓	▓									
Complete draft RFx materials for IaaS and PaaS	▓										
Host vendor session to get feedback on marketplace strategy, minimum terms & conditions, requirements for IaaS/PaaS and readiness services		▓									
Design marketplace to support Year 1 objectives			▓								
Ongoing Operations											
Issue pre-qualification process for IaaS and PaaS vendors (BC Bid)			▓								
Vendor preparation of responses for IaaS and PaaS			▓								
Evaluation of responses and set-up of vendor contracts (e.g. Standing Offers or Master Service Agreements)				▓	▓	▓	▓				
Develop and launch Marketplace website with Cloud Infrastructure vendors; education sessions with vendors and BPS entities				▓	▓	▓					
Establish ongoing communication and education processes required to support the Marketplace as it evolves						▓					
Engagement of CCIO entities and requirements gathering for cloud readiness services opportunity		▓									
Complete procurement and contracting for cloud readiness services				▓	▓	▓					
Market research and requirements gathering to define Service Aggregator functionality							▓	▓	▓	▓	▓
Develop Year 2 Operational Plan for Hosted Services Marketplace (including on-boarding and off-boarding vendors for current services)										▓	▓
Requirements gathering for the Microsoft cloud offerings (Office 365, Azure, etc.)									▓	▓	▓

Dependencies & Risks

Progress will depend critically on timely decisions on escalated items (e.g. vendor feedback on data sovereignty requirements), the number of vendors that participate in the pre-qualification processes,

timely hiring of procurement resources (see Resourcing Plan below), and active engagement from the CCIO entities when requested by Hosted Services. Note that all activities with respect to engaging with CCIO entities will be coordinated by the Community of Practice Lead role per the resourcing plan.

Guidelines & Best Practices

<u>Current year objective</u>

Initial guidelines and best practices for Data Categorization, Cloud Controls and SLAs have been completed. Efforts in May and June will focus on incorporating these into a practical guide for evaluating and selecting cloud vendors and/or offerings. The team will also be finalizing recommended terms and conditions and converting them into a standard set of legal clauses to be used in the IaaS/PaaS pre-qualification processes as well as make available for CCIO entities to use in go-it-alone procurements.

Ongoing operations of this service area will leverage input from the Community of Practice, with approval from the Content Review Board, to identify additional guidelines and best practices that require development. As required, consultant expertise will be enlisted to develop content for new guidelines and best practices, augmented with working and advisory groups.   In Year 1, the following guidelines and best practices will be completed: Financial Model for Evaluating Cloud Costs and ROI (including impact of CapEx/OpEx shift), a Cloud Risk Management Framework and a second, expanded version of the practical guide.

Publication and education on Guidelines and Best Practice deliverables falls to the Community of Practice Service Area.

<u>Operational Plan</u>

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Transition											
Finalize minimum recommended terms & conditions for cloud services	▓										
Finalize current draft content for a consolidated Guidelines & Best Practices deliverable and establish sustainment plan	▓										
Develop structure and Terms of Reference for Content Review Board, transition content ownership to it		▓									
Ongoing Operations											
Develop cloud risk management framework		▓	▓	▓							
Develop financial model for evaluating cloud costs and ROI		▓	▓	▓	▓	▓					
Develop second, expanded version of the practical guide									▓	▓	▓

<u>Dependencies & Risks</u>

Working and advisory groups supporting this service area will require active participation across CCIO entities to develop relevant, BC specific content and exceed the value of more generic Cloud guidelines and resources that are widely available. Participants and Board Chair will need to be recruited.

Community of Practice

Current year objective

Start-up of the community of practice will build on engagement from the Strategy phase, expanding participation through a formal Year 1 communications and outreach plan. The service area will establish both formal engagement in the community of practice, through the Content Review Board, and informal engagement, through active networking at the operating level within CCIO entities. IaaS and PaaS pilots currently underway (for WorkSafeBC, BC Ferries and BC Hydro) are expected to complete by July. Lessons learned will be documented and shared through the Community of Practice. Content development and launch of the Hosted Services website will be a primary focus of the service area in May through November.

In ongoing operations, the Community of Practice will interface with the Guidelines and Best Practices service area to identify opportunities for guideline development. The CoP will then facilitate subsequent approval, dissemination and training for content developed to meet those opportunities. Cultivation of the community beyond CCIO entities, to include for example municipalities and education, is expected in Years 2 and 3.

Operational Plan

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Transition Phase											
Complete IaaS/PaaS pilots for WorkSafeBC, BC Ferries, BC Hydro and document lessons learned	█	█	█								
Develop 1st year communications and outreach plan (non-vendor stakeholders)	█	█									
Develop common messaging for Hosted Services to be used by CCIO at Executive Level	█	█									
Develop and launch Hosted Services website and content			█	█							
Run education sessions with entities on the overall strategy, marketplace, practical guide		█	█								
Ongoing Operations											
Continue to develop network of contacts at the operating level, within CCIO entities			█	█	█	█	█	█	█	█	█
Identify common issues and opportunities for Guideline and Best Practice development			█	█	█	█	█	█	█	█	█
Ongoing delivery of training and outreach to promote marketplace, educate on cloud guidelines and best practices usage			█	█	█	█	█	█	█	█	█
Provide strategic support to pilots			█	█	█	█	█	█	█	█	█

Activity		
Ongoing development and publication of use cases and lessons learned		▓▓▓▓▓▓
Continue to update & expand web content (use cases, guidelines & best practices, etc.)		▓▓▓▓▓▓
Continuous development and expansion of CoP network, including municipalities and education		▓▓▓▓▓▓

Dependencies & Risks

Success of the Community of Practice to solicit input and drive education will depend on establishing active participation in the community, through meaningful and valuable engagement with community stakeholders. A full-time Community of Practice Lead role will be crucial to drive engagement at the operating level (see Resourcing Plan below).

Program Administration

Current year objective

Efforts in May through July will focus on setting up the organization and ensuring all the support functions and infrastructure are in place to ensure successful delivery of the services model.

Operational Plan

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Transition Phase											
Establish internal governance and support model with OCIO (finance, accounting, audit, legal, HR, IT)	▓	▓									
Secure space	▓	▓									
Recruit and ramp up project resources	▓	▓	▓								
Provision IT services to support dedicated project resources (security, software, devices, network/voice)	▓	▓	▓								
Implement allocation model		▓									
Design and implement the vendor admin fee model		▓	▓	▓							
Set up team site including contacts database, document management & collaboration		▓	▓								
Ongoing Operations											
Administration, reporting, revenue collection					▓	▓	▓	▓	▓	▓	▓

Dependencies & Risks

Current project resources will need to work closely with OCIO staff to set up core processes and infrastructure to ensure a smooth and quick transition.

Resourcing Plan

A resourcing plan has been developed for Year 1. Recruitment will take place during the transition phase for both *roles* for ongoing operations and *services* to be used on an as and when needed basis. The current core team will be maintained through the transition phase to ensure continuity and rapid stand-up of the services model.

Roles

The following roles will be required to deliver the services model on a daily basis. In general, preference will be to recruit for these roles with contractors during Year 1 while the program stabilizes and long-term job function requirements become clearer.

1. **Executive Lead**

Job Functions:

- Facilitate strategic engagement with vendors and knowledge exchange with CCIO
- Lead strategic planning including setting of objective, metrics and targets
- Lead strategic planning for service catalogue expansion & evolution
- Identify potential opportunities for collaborative contracts and engage internal & external stakeholders
- Facilitate strategic engagement with vendors and knowledge exchange with CCIO

Requirement:

- Start in May using existing team
- Required for an indefinite period
- FTE: 1

2. **Program Manager**

Job Functions:

- Provide quality assurance across service areas and oversee day to day operations
- Prepare executive reports including benefit realization & progress updates
- Facilitate issue resolution and escalation
- Lead program reporting and planning execution
- Serve as primary point of contact to vendors and other external stakeholders on strategy (i.e. outside of procurement activities)
- Coordinate contracting activities for delivery of the services model

Requirement:

- Start in May using existing team
- Required for an indefinite period
- FTE: 1

3. Business Analyst

Job Functions:

- Collect, track and report on all key metrics and benefits
- Lead the development of all reports & documents
- Lead the tracking and reporting of the budget and spend
- Produce the cost allocation reports for member entities
- Prepare market scans and other one-off research requests

Requirement:

- Start in May using existing team
- Budget for an indefinite period
- FTE: 1.0

4. Procurement & Contract Specialist

Job Functions:

- Develop RFx documents
- Manage and run RFx processes
- Coordinate working groups to collect requirements, evaluate offerings
- Serve as primary point of contact for customers and suppliers to facilitate on- & off-boarding
- Track vendor and contract performance
- Manage collection of revenues, e.g. membership fees, rebates (depending on the funding model)
- Perform audit and compliance duties to ensure vendors are meeting performance standards
- Manage on-line catalog of "CCIO-certified" services

Requirement:

- Start in June
- Budget for an indefinite period
- FTE: 1.0

5. Cloud Technical Architect

Job Functions:

- Complete market scan for service aggregation / brokerage services

- Run brokerage / aggregation pilot
- Develop architecture and requirements
- Prepare roadmap, business case, and design requirements for functionality to be in place by end of year 2

Requirement:

- Start in September
- Budget for an indefinite period
- FTE: 1.0

6. Community of Practice Lead

Job Functions:

- Primary point of contact and outreach for BPS entities
- Identification of barriers to adoption and change management issues
- Facilitate knowledge sharing to help address areas in change management
- Oversee special community of practice event including special workshops, seminars, conferences
- Help run pilots and document use cases
- Identify opportunities for developing CCIO guidelines & best practices
- Promote the marketplace

Requirement:

- Start in May using existing team
- Potentially shared between two individuals – one based on the Mainland, the other on the Island
- Required for an indefinite period
- FTE: 1

7. Administration Support

Job Functions:

- Provide administrative support to the project team
- Preparing project financials
- Website configuration
- Organize and run special community of practice events including vendor workshops and conferences

Requirement:

- Start in May using existing team
- Budget for an indefinite period
- FTE: 1.0

Services

A number of services will be required on an as and when needed basis. It is anticipated that these will be provided as a combination of independent consultants and firms, with contributions provided from individuals within CCIO where possible, e.g. privacy.

1. **Procurement Strategy**

- Develop procurement frameworks, strategies and vehicles for common use across CCIO
- Lead risk assessment to determine major risks and mitigation strategies for procurement strategies
- Year 1 estimate: $30-50k

2. **Legal Advisory**

- Provide legal opinion on standard offers and collaborative agreement contract language
- Advise on contract negotiation
- Assist with dispute resolution and vendor compliance
- Year 1 estimate: $80-100k

3. **Web Development**

- Design web tools to meet Year 1 objectives including stand-up of internal web tools to support project delivery as well as external tools including a marketplace with static content
- Wire-framing for demos
- Ongoing maintenance and support
- Year 1 estimate: $140-180k

4. **Procurement**

- Augmentation of Procurement & Contract Specialist role to support short-term needs
- Lead requirements gathering, evaluation support, financial analysis, deal structuring
- Expect to be required for Microsoft cloud agreement and Other Priorities objectives above
- Year 1 estimate: $80-120k

5. **Communications**

- Develop communications, stakeholder engagement and marketing plans
- Advise on web design requirements
- Organize special events
- Year 1 estimate: $30-50k

6. **Guidelines & Best Practices – Subject Matter Experts**

- Update or develop new guidelines based upon need

- Develop change management strategies for commonly identified issues
- Execute on the strategy through facilitating knowledge sharing/transfer through working groups, workshops, and/or seminars
- Oversee and manage working groups to resolve special issues
- Year 1 estimate: $60-80k

Cost Structure & Budget

In keeping with the guiding principles, the cost structure will be lean and support rapid scalability based on demand. Activities will be deliverable-based and where possible not burden future years. Labour will be sourced through contracts or other short-term arrangements (e.g. secondments) where appropriate. Expenditures in Year 1 will cover the necessary start-up and transition activities as well ongoing operations which will initiate as early as July depending on the service area. Expertise within CCIO and existing supporting infrastructure (e.g. space) and processes (e.g. procurement vehicles) will be leveraged to minimize costs, but are included in the budget.
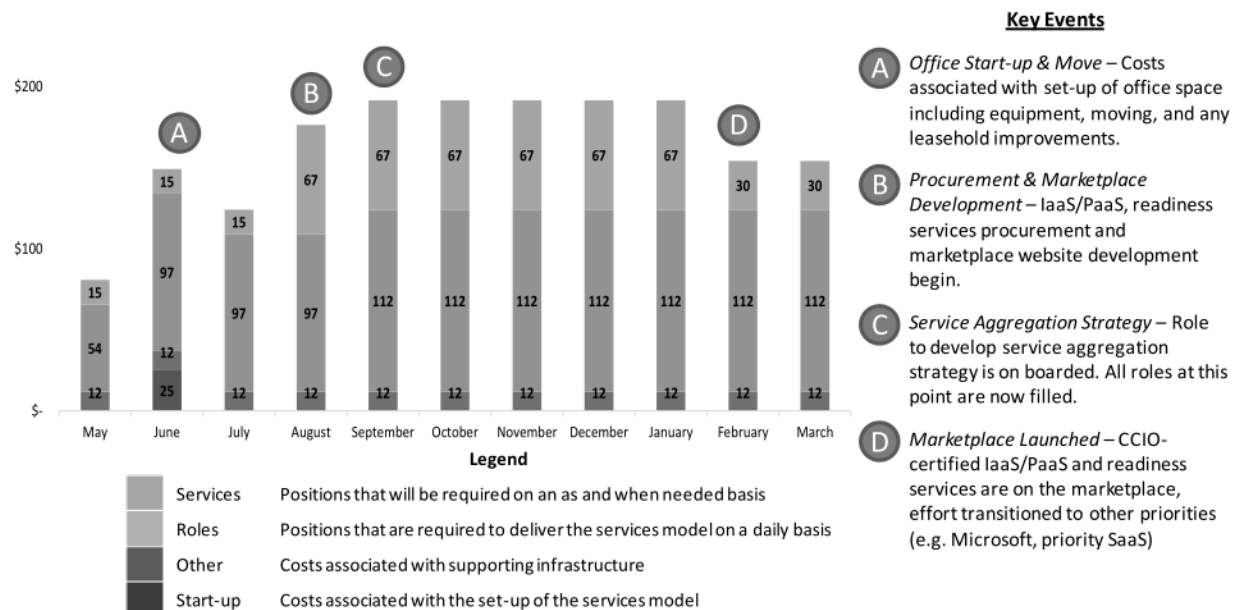
A three year budget view is presented below. The business plan seeks approval for a $1.8 million budget for Year 1 which will include coverage for $0.6 million in transition activities. The budget requirements for subsequent years will be prepared for approval on an annual basis, but at this point would appear to be comparable to Year 1, with Transition costs in Year 1 effectively being replaced with additional costs related to evolving the marketplace site from delivering static content to delivering dynamic functionality, and expanding service delivery to the full 12 month period.

Figure 9: Three-year budget estimates
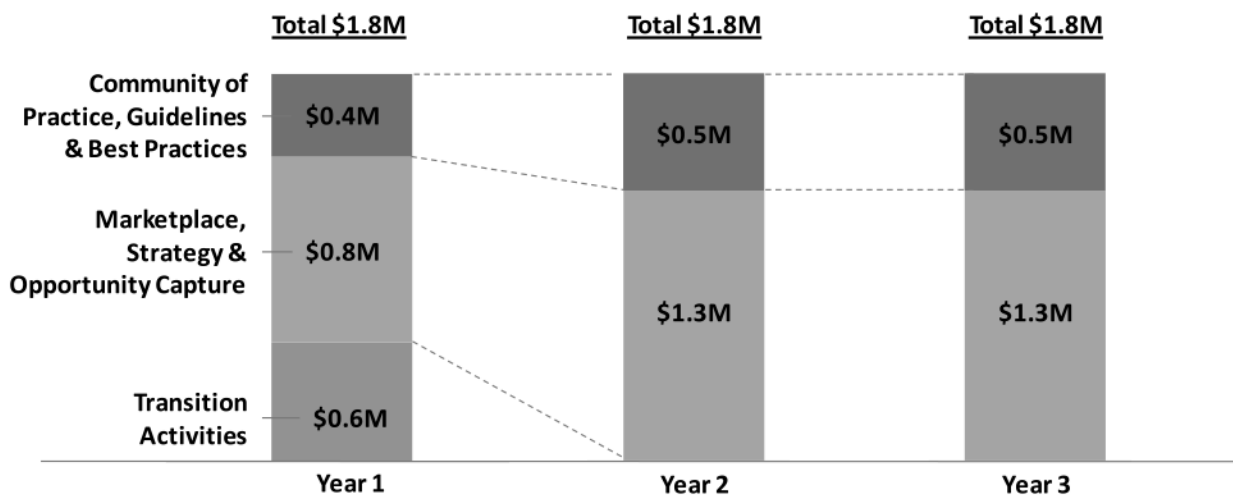
Year 1 costs are further broken down in the figure below to demonstrate estimated outlays by month.

Figure 10: Year 1 budget by month - estimate ($1000s)

Key Events

A — *Office Start-up & Move* – Costs associated with set-up of office space including equipment, moving, and any leasehold improvements.

B — *Procurement & Marketplace Development* – IaaS/PaaS, readiness services procurement and marketplace website development begin.

C — *Service Aggregation Strategy* – Role to develop service aggregation strategy is on boarded. All roles at this point are now filled.

D — *Marketplace Launched* – CCIO-certified IaaS/PaaS and readiness services are on the marketplace, effort transitioned to other priorities (e.g. Microsoft, priority SaaS)

Legend

Services	Positions that will be required on an as and when needed basis
Roles	Positions that are required to deliver the services model on a daily basis
Other	Costs associated with supporting infrastructure
Start-up	Costs associated with the set-up of the services model

Monthly Budget management policies will be established as part of the governance model, for example:

- Change requests should additional funds be required within the budget year

- Administration of unspent funds at year end

Hosted Services will be subject to financial administration, oversight and audit requirements per OCIO's direction.

Funding Framework

CCIO approved in principle to fund the program as a necessary and valuable investment to support adoption and as a sign of commitment to influence vendor behaviour. Alternative revenue sources to fund the program are built into the funding framework. Options are under consideration, and vendor feedback will be solicited during the transition period.

One option is a rebate model whereby vendors remit a rebate based on revenues received through marketplace sales. The rebate model is common among collaborative procurement programs & cloud marketplaces in particular. Corporate Supply Agreements implemented by BC Shared Services' Procurement Services Branch include such rebates. In the cloud marketplace context, rebate rates are typically between 0.5% and 2% of the transaction value. Rebate collection is typically incorporated into regular vendor and contract performance reviews, e.g. quarterly or annually. The model is relatively

straightforward to implement. A potential risk is that prices to end customers are higher than would otherwise be available, leading to customers and vendors circumventing the market.

A less common alternative is a registration fee model where vendors "pay to play" in the marketplace. Under this model, the intention is two-fold: first, ensure vendors have "skin in the game" to create the incentive to drive sales through the marketplace so that they generate a return on their investment, and second, to reflect the reduced level of effort that vendors need to invest in procurement activities to serve CCIO customers. On the other hand, the model is not observed in cloud marketplace frameworks in other jurisdictions. Implementation challenges include ensuring fairness (payment size and frequency may need to vary by vendor and type of contract) and attracting vendors to participate in the marketplace in the absence of spend commitments from customers. A third potential funding source is sponsorship and attendance fees for special events such as vendor demo days.

Financial forecasts prepared assume for now that the rebate model is the single alternative revenue source. The scenario illustrated below assumes a 2% rebate model, i.e. vendors remit payment to Hosted Services of 2% of revenues collected through CCIO marketplace sales. The offsets are based on the strategic objectives outlined above and preliminary estimates of uptake and prices, to be refined once analysis begins in earnest on the procurement initiatives.

Figure 11: Three-year funding scenario – illustrative
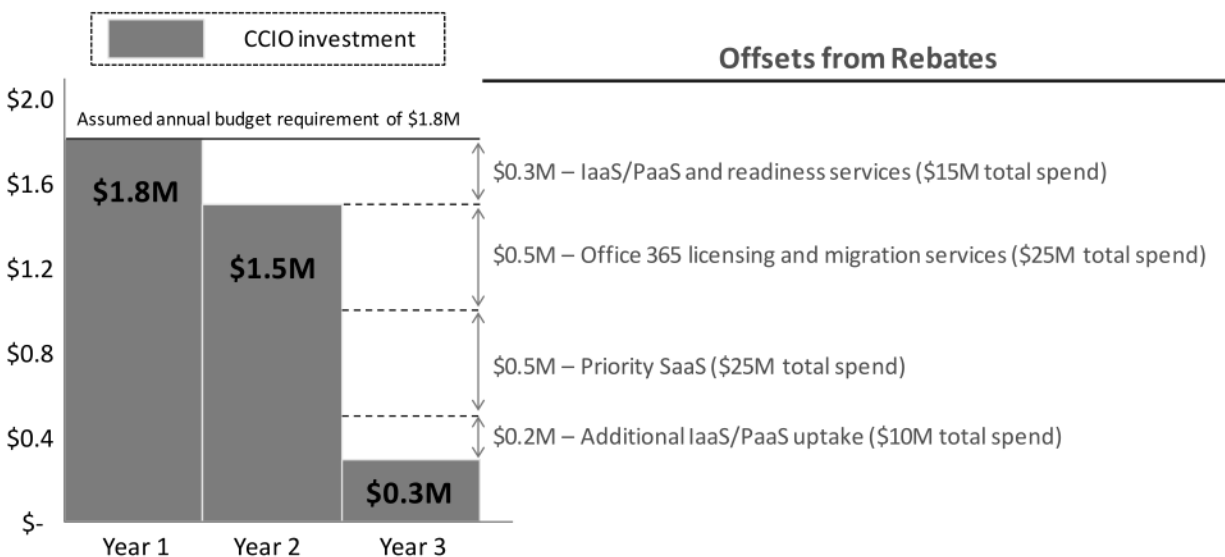
In this scenario, breakeven occurs when an equivalent of 3% of current IT spend is transacted through the marketplace (assumes current IT budget across CCIO is $3 billion), this in light of analysis from the business case phase which estimated the potential cloud spend to be up to 25% of the current IT budget.

A critical risk factor is that the velocity of offsets, and therefore the length of time before the program is financially self-sufficient, depends on CCIO's uptake of services. Hosted Services will take responsibility

to work with CCIO to prioritize marketplace initiatives and work with personnel at the operating level to help address adoption challenges.

Risk Assessment

A risks assessment has been completed across five categories of risk. The Assessment & Mitigation sections in the tables below focus on short-term risks (i.e. in Year 1). Longer term considerations are summarized in the Outlook sections.

Risk: Compliance	
Description	Perceived or real risk of violation with legal obligations. Legal frameworks that come into play are trade agreements as they relate to procurement, and data residency & sovereignty requirements under the Freedom of Information and Protection of Privacy Act.
Assessment & Mitigation	Hosted Services will help mitigate risk by working with privacy, procurement and legal subject matter experts to establish the appropriate procurement & contracting framework. This includes establishing recommended contractual terms & conditions as well as corresponding requirements (e.g. required security controls) for vendors to demonstrate in practical terms that they meet the terms & conditions. The budget includes funds for legal advisory and procurement strategy services are budgeted.
Outlook	FOIPPA-related risks are well-managed through the terms & conditions. Trade law-related risk will vary depending on the opportunity and supporting procurement model. Legal advisory and procurement strategy services will be retained as needed going forward.

Risk: Strategic	
Description	Risk that activities undertaken establish a suboptimal course that is not easily corrected, for example, focusing efforts on one opportunity at the expense of another opportunity that would yield higher value for the collective.
Assessment & Mitigation	Initial roll-out is small scale, open, and based on existing demand. Hosted Services will engage regularly with CCIO through a rigorous portfolio planning approach, and will facilitate engagement with vendors, to ensure activities are focused on the highest value opportunities, and that all vendors have a meaningful and fair opportunity to participate in the process.
Outlook	Risk could increase with the use of common platforms (e.g. SaaS eco-system such as Salesforce). A risk management framework, to be developed under the Guidelines & Best Practices service area, will inform risk assessments, including assessment of vendor lock-in and data ownership risk.

Risk: Financial	
Description	Risk of financial loss or underperforming investments.
Assessment & Mitigation	The cost structure is lean with low fixed costs. The program can easily (scale up or down).

Outlook	There are several longer-term risks to highlight. First, the period of time before which the program is fully self-sufficient from alternative funding sources depends on CCIO uptake of services. Hosted Services will mitigate this risk by work closely with the CCIO to prioritize marketplace initiatives and also with personnel at the operating level to help address adoption challenges. Second, staffing with contractors will be expensive over the longer term. Where job functions can be defined for the longer term, permanent hires will be recommended. Third, investment in a common aggregation and brokerage service could increase risk. Options will be developed in Year 1 including a business case and risk assessment.

Risk: Reputational	
Description	Real or perceived risk that the strategy causes social or economic harm.
Assessment & Mitigation	A formal communications and outreach plan will be put into action in Year 1 that considers the interests of all stakeholders. Communications will draw on use cases that demonstrate the cost savings potential and business value benefits that are uniquely available from solutions that leverage cloud-based services. Vendors will be encouraged to participate in marketplace activities. This activity will be measured per the Marketplace Sales in BC metric above as an explicit acknowledgement that the strategy can help drive BC economic activity including and especially with respect to the provision of professional services such as strategy, design, migration and development. Benefits will be measured to demonstrate value realization.
Outlook	Communications and benefits tracking will be key ongoing activities to mitigate reputational risks.

Risk: Delivery	
Description	Risk that the operating plan is not successfully completed.
Assessment & Mitigation	The key risks in this respect are around resourcing and clarity on governance. It will be a priority in the short term to maintain continuity by retaining key project resources during the transition. Governance policies and procedures will be established to ensure decisions occur at the appropriate level to maintain momentum. The operating plan is conservative in scope to help ensure the program can demonstrate success within Year 1.
Outlook	Delivery risks not likely to increase in future years.

Risk: Benefits	
Description	Risk that benefit realization is lower or slower than expected.
Assessment & Mitigation	Start-up activities need to wrap up as quickly as possible so that the organization can start developing the marketplace. Securing resources in a timely fashion is therefore top priority. Additionally, the project will need to work actively through the governance model to prioritize opportunities, encourage development of shared goals, and commit to ongoing reporting to demonstrate benefits. An example of a shared goal is committing to having in place a cloud

	strategy and roadmap within a given timeframe.
Outlook	Benefits risk not likely to increase in future years.