

Item No.
Audit & Finance Standing Committee
January 30, 2013

TO: Chair and Members of Audit & Finance Standing Committee

Original Signed

SUBMITTED BY:

Richard Butts, Chief Administrative Officer

Original Signed

Greg Keefe, Director, Finance & ICT/CFO

DATE: January 18, 2013

SUBJECT: Alternative Service Delivery (ASD) Model for SAP Support Services-
Due Diligence Analysis

ORIGIN

On October 17, 2012, the Audit & Finance Standing Committee requested staff to present the findings of the Due Diligence analysis regarding HRM's possible transition of SAP Support Services to the Province of Nova Scotia (PNS) SAP Core Competency Center (CCC), prior to the Committee being asked to make a recommendation to Regional Council.

LEGISLATIVE AUTHORITY

The authority to spend the amount detailed in this report can be found under Section 79 of the Halifax Regional Municipality Charter. The purchase would proceed by way of a sole source under the authority of Section 8 (11) A. (k) of Administrative Order #35, Procurement Policy.

RECOMMENDATION

It is recommended that the Audit and Finance Standing Committee direct staff to proceed with the recommendation to enter into a formal service level agreement with Province of Nova Scotia (PNS), Department of Finance to provide SAP Support Services. The agreement will be submitted to Regional Council for approval.

BACKGROUND

HRM implemented SAP in 1997 and currently uses this software to support financial accounting, human resource management, and other select administrative functions. HRM currently houses and supports the SAP system from its Duke Street facilities under the management of the ICT Division.

At the time of implementation, HRM determined an internal SAP Support Services model would be adequate to meet business needs. Since the time of implementation, SAP Support Services have been provided to HRM business units primarily using internal staff. The SAP support team is comprised of two technical support resources and six functional support resources. Annual SAP support costs are approximately \$1.43M which includes staff costs, infrastructure costs and software license fees.

HRM recognizes that over the last number of years its focus on SAP as a key software solution for the organization has not been sufficient. A transition to a new support model is required to capitalize on the benefits that SAP software can provide to meet the increasing business support needs of HRM business units as well as provide improved services to HRM constituents.

In May 2012, a business case was commissioned to assess the feasibility of an Alternate Service Delivery (ASD) model for SAP Support Services. The business case considered three SAP alternate service delivery options; maintain SAP Support Services at the HRM, out-source SAP Support Services to the PNS SAP Customer Competency Center (CCC), and a hybrid in-source/out-source model between the HRM and the PNS SAP CCC.

The business case concluded an out-source model would provide the HRM with advantages over an in-source model, particularly in the following areas: access to a broader range of SAP knowledge, skill and capability, an opportunity to leverage the Provincial SAP infrastructure, business risk reduction, access to the Municipal SAP template developed by the PNS, and an opportunity to realize operational cost savings while increasing SAP Support Service to HRM business users.

In October 2012, a due diligence analysis was commissioned to validate and confirm business case assumptions, to further understand the implications of the in-source and out-source service delivery options, and to develop a clearer understanding of the opportunities, risks and organizational impacts associated with changing the current SAP Support Services model. As well, the announcement by the Province of Nova Scotia in October 2012 to “out-source” its SAP Support Services to IBM as part of a broader economic development opportunity for Nova Scotia introduced additional considerations for HRM that supported the need to conduct the due diligence effort.

The SAP ASD Due Diligence has recently been completed and has provided HRM management with a more detailed understanding of the implications associated with selecting either an in-source or out-source SAP Support Services model.

DISCUSSION

It is recognized that continued use of the current SAP Support Services model will lead to increased risk to business operations, increased business support costs and lost opportunities to optimize business practices for more cost-effective service delivery. The current SAP support infrastructure and software versions are out of date and the staffing model and skills mix is not adequate to appropriately meet HRM business needs going forward. As well, there is insufficient management oversight to ensure strategic leveraging of SAP to drive business process change and organizational efficiencies to improve service. Consequently, the Due Diligence analysis focused on identifying the requirements for an *improved* or *transformed* in-source model and compared it to the PNS out-source model.

An improved in-source model or out-source support model will better align SAP Support Services with HRM business needs and risk tolerance. Each of the two models requires a tailored one-time transition effort with associated costs and has a specific steady state support cost. Each model also has a unique set of characteristics and therefore aligns differently to HRM's short and long term goals.

In a transformed in-source support model, HRM provides all key areas of SAP support using HRM staff similar to current conditions however it requires significant investment to train and increase the knowledge and capability of internal staff. In an out-sourced model, the HRM provides only strategic and business support functions while Functional Support and Technical Support functions would be provided through the PNS SAP CCC.

A comparison of in-source and out-source models using risk, strategic advantage and costs among other criteria, confirms the out-source model offers a number of advantages to the HRM over the in-source model. A scoring model was used which considered the above noted criteria and resulted in a score of 70% for the in-source model compared to a score of 82% for the out-source model.

An out-sourced model is projected to be more cost effective in the long term costing approximately \$1.35M per annum during steady state service delivery compared to \$1.69M for the transformed in-source model. In the shorter term, service delivery during the transition year which includes one-time costs is comparable for both models with out-sourcing showing a marginal saving. Longer-term costs (over a six year period including transition costs) position the out-source model favorably at \$8.8M compared to \$10.6M for the in-source model.

Advancing with the out-source option proposed for SAP Support Services will require a government to government agreement between the HRM and the Province. Under this agreement, the Province will be responsible and accountable for providing SAP Support Services to the HRM (similar to how it delivers SAP Support Services to other municipalities). Under such an out-source arrangement with the Province, the HRM will not be entering into any contractual agreements for SAP Support Services with IBM as this is a relationship owned and managed by the Province.

It is believed the agreement between the Province and IBM to establish an SAP Global Delivery Centre in Halifax will increase the scope and quality of SAP Support Services available to the HRM from the Province. The risks associated with out-sourcing are viewed as manageable and the SAP CCC has demonstrated it has the facilities and capabilities to support HRM's SAP support needs. In this model, the HRM will need to provide appropriate service management oversight to the SAP CCC to ensure HRM's service needs are met and risks managed.

The HRM has completed a Privacy Needs Assessment to understand the implications and opportunities to secure private data affected by an out-sourcing arrangement for SAP service delivery. This assessment identified a number of prerequisite steps recommended to ensure compliance with privacy obligations and also recommended continued management oversight after an out-source arrangement is in place. Staff has concluded the recommended activities can be achieved and that obligations to protect private data can be met in this arrangement.

The average annual steady state cost comparison highlights a compelling annual cost advantage of 20% (approx. \$342k) in favor of an out-sourced model over an improved in-source model. In addition the costs are on par with current costs and HRM can expect improved service delivery. Risks associated with the development and management of a transformed in-source option are avoided.

Considering these factors, it is recommended HRM transition to an out-source model for SAP Support Services by entering into a formal agreement with the Province of Nova Scotia, Department of Finance. Under such an agreement, the SAP system would be re-located to the Provincial Data Centre under the oversight of the Department of Finance. Technical and Functional SAP support would no longer be provided directly by HRM staff.

By making this transition, HRM will better leverage its investment in SAP and enable focused attention to improving strategic and business support for SAP and avoid significantly increased costs associated with a transition to an improved in-source model and the higher on-going costs associated with supporting this model.

FINANCIAL IMPLICATIONS

Costs to provide SAP Support Services during the first year for the out-source model are estimated at \$2.11M. These costs are \$0.68M higher than current annual costs of \$1.43M and represent the one-time investment needed to transition to the out-source model. In subsequent 'steady state' years, costs are marginally less than current costs at \$1.35M, an annual savings of

approximately \$78,000.

Included in the SAP support costs are fees payable to the SAP CCC which are estimated to be \$775,000 per annum in the steady state model. In addition, HRM would pay \$478,650 in annual SAP licensing fees which are administered by the SAP CCC and currently paid by HRM in the current support model. A service level agreement between the HRM and the Province would be required to manage the fees and services provided. The current fee estimates are based on a ten year agreement for services.

In addition to one time and steady state SAP support fees, the transition to the out-source support model requires adjustments to the current staffing model. A strategy has been developed to mitigate the impacts of out-sourcing on staff.

COMMUNITY ENGAGEMENT

N/A

ENVIRONMENTAL IMPLICATIONS

N/A

ALTERNATIVES

As an alternative to an out-source model, the HRM could transition to an improved in-source service delivery model. The effort to transition to this improved in-source model will require a one-time investment of \$769,000 over current annual support costs of \$1.43M. This investment is primarily needed to replace the aging technical infrastructure and to upgrade the software. Once transitioned, steady state costs are estimated to be \$1.69M or 18% over current annual costs. Total six year costs are projected to be \$10.6M.

In an in-source model, improvements are required to all major SAP support areas of strategic support, business support, technical support and functional support. However, in an out-source model, HRM is able to focus on providing the necessary improvements to strategic and business support functions which will ultimately lead to improved support for business functions.

Staffing changes are required at the technical support and functional support levels to implement the in-source service delivery model. These changes include the addition of a dedicated manager with responsibilities to direct functional work and ensure quality and alignment with business needs.

As a result of the increased costs and risks associated with this alternative, staff does not

recommend consideration of this option.

ATTACHMENTS

Attachment A: SAP ASD Due Diligence Key Findings & Recommendation – January 18, 2013

Attachment B: Audit & Finance Committee Briefing- January 30, 2013

A copy of this report can be obtained online at <http://www.halifax.ca/boardscom/SCfinance/index.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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**SAP ALTERNATE SERVICE
DELIVERY DUE DILIGENCE**

**AUDIT & FINANCE
COMMITTEE BRIEFING**



Donna Davis, Chief Information Officer

January 30, 2013

Background and Context

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- In 2012, a business case was developed to assess the feasibility of adopting an Alternate Service Delivery (ASD) model for HRM's SAP Support Services
- The business case provided insight that out-sourcing SAP Support Services to the Province Nova Scotia's SAP CCC would provide the HRM with a number of key benefits including:
 - An improved SAP service delivery capability and access to a broader group of SAP Support resources
 - A cost effective alternative to delivering SAP Support Services internally
 - An opportunity to further leverage the government to government agreement in terms of SAP licensing
- FICT and HRM executive concluded a SAP Due Diligence effort was required to:
 - validate business case assumptions
 - understand the implications of the Province's announcement regarding outsourcing SAP services to IBM
 - further understand and refine the SAP Service Delivery Framework necessary to enable a more strategic use of SAP
 - Confirm cost projections, investment requirements and potential cost savings

Current State

HRM's SAP Support Services

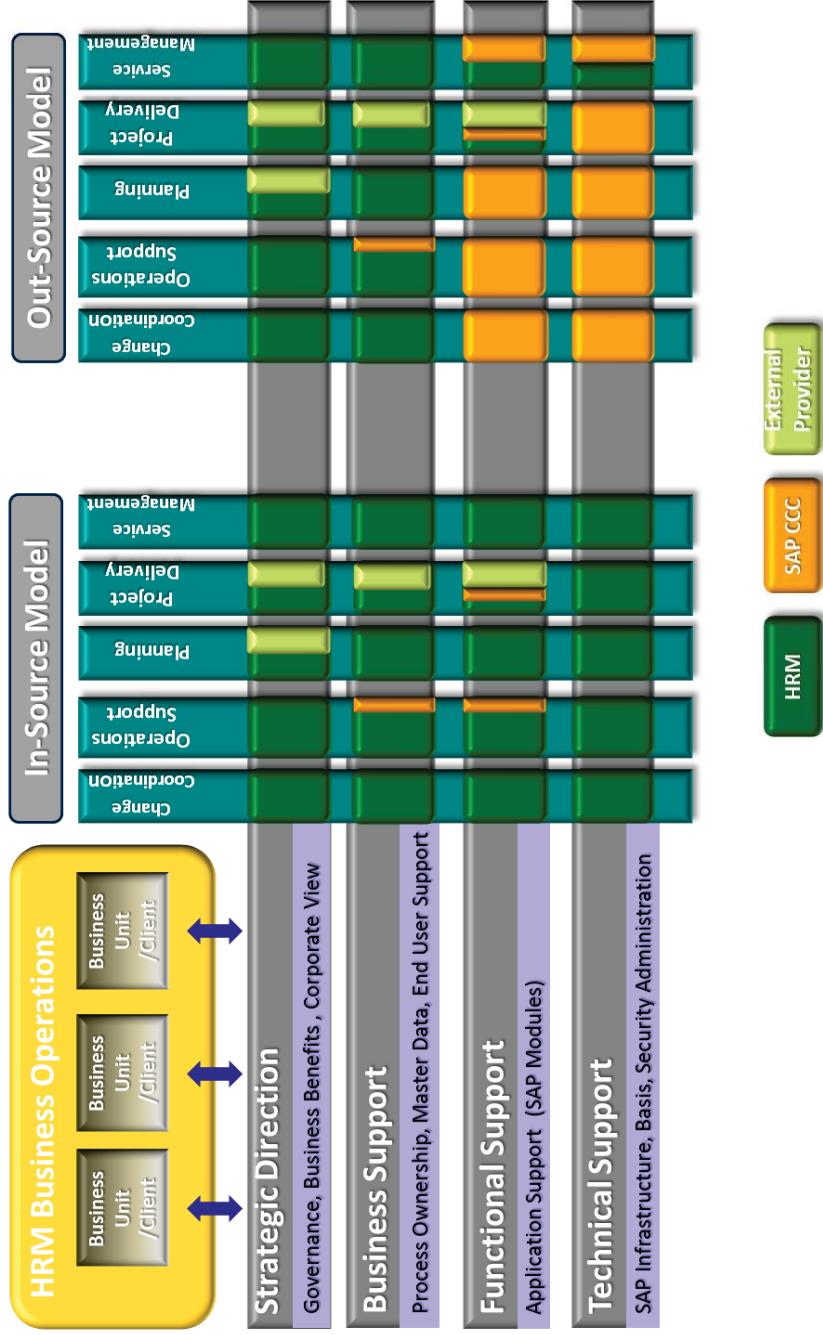
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- Recognized that the desired “target state” SAP Support Services model can not be compared to HRM’s current state.
- The current SAP support model is not optimal and lacks appropriate governance and structure to effectively deliver SAP Support Services.
- The current state support model is not well positioned to advance the SAP agenda at the HRM without significant investment in training and engagement of external service providers.
- SAP is a core business solution critical to the delivery of services by the HRM – a more strategic support model is required.



Focus Areas of Delivery Model Options

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- The In-Source model requires strong SAP support services from HRM at each key delivery area.
- The Out-Source model allows a focus on the strategic and business support delivery areas and delegates functional and technical support to the SAP CCC.
- Improved strategic and business support services are needed to improve the SAP support services at HRM.

Due Diligence Findings

In-Source (HRM) vs. Out-source (SAP CCC)

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- The current SAP support approach is not sustainable and will lead to increased risk and cost.
- Development of a strategic SAP Roadmap and improvements in business support for SAP are necessary regardless of the in-source or out-source approach chosen.
- An improved internal delivery model for SAP (in-source) is possible with a one-time investment of \$769,000 over current costs. Projected annual steady state costs are higher for an in-source option than in an out-source option by approximately \$342,000.
- Improved SAP Support Services can be provided externally by the SAP CCC for a one time investment of approximately \$680,000 over current costs. Projected annual steady state costs are on par with current support costs.
- The SAP CCC has appropriate services and oversight to meet HRM's SAP support needs.
- Privacy needs can be met in an out-source model however a number of preparation steps are required to mitigate risks.
- The Province's decision to engage IBM to provide SAP Support Services offers HRM with increased access to SAP knowledge and capability.
- HRM can leverage the significant investment made by the SAP CCC in delivering services to other municipalities.
- Overall the risk associated with out-sourcing is viewed as manageable.

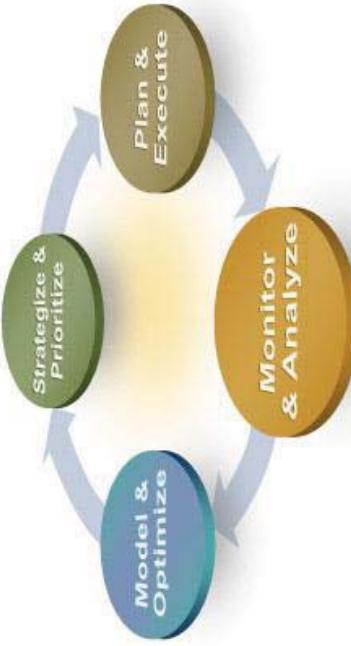
Model Comparison Approach

Transformed In-Source and Outsource

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- The model options were compared across seven characteristics:

- Physical Landscape
- Software Environment
- Control Environment
- Support Model
- Service Levels
- Support Processes
- Project Delivery



- For each characteristic, risk, ability to execute, organizational flexibility and strategic focus were considered.
- Overall cost to operate the model was also compared and scored using established HRM financial scoring techniques.

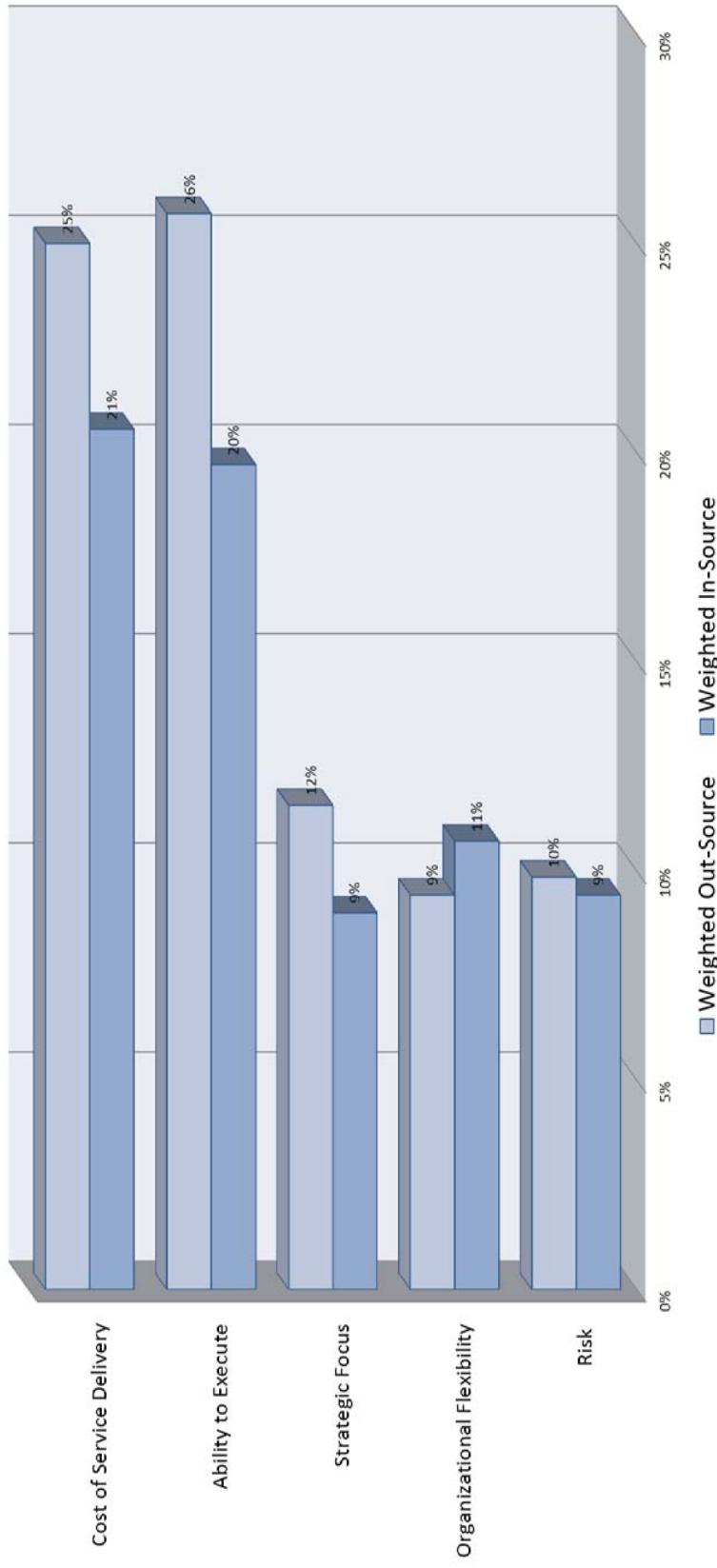
Comparison of Options

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Dimension	Weight	Model Comparison Summary		Weighted Scores	
		In-Source	Out-source	Weighted In-Source	Weighted Out-Source
Risk	15%	22	23	9%	10%
Organizational Flexibility	15%	25	22	11%	9%
Strategic Focus	15%	21	27	9%	12%
Ability to Execute	30%	23	30	20%	26%
Cost of Service Delivery	25%	29	35	21%	25%
Weighted Scores	100%	120	137	70%	82%

- The out-source model received a more favorable overall score of 82 while the transformed in-source model received a score of score of 70.

Comparison Category Differentiators



- Cost, ability to execute and strategic focus categories were differentiators with the out-source model scoring higher in these categories.

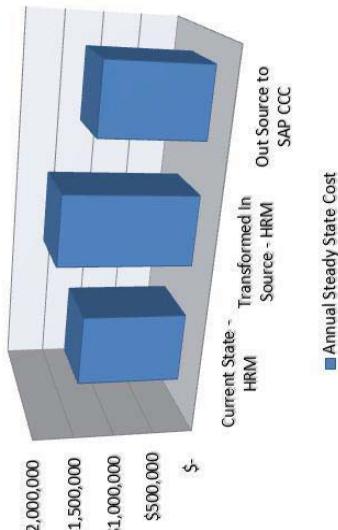
Financial and Qualitative Model Comparison

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Model Type	Cumulative Costs over a 6 Year Period	Transition Year (In-Source and Out-Source Models Only)	Annual Steady State Cost (NPV)	Change from Current HRM Model (Steady State)
Current HRM Support Services			\$ 1,427,744	0%
Transformed In-Source Model	\$ 10,655,946	\$ 2,196,681	\$ 1,691,853	18%
Out-Source Model	\$ 8,857,255	\$ 2,108,078	\$ 1,349,835	-5%

- Overall the out-sourced model for SAP Support Services is more cost effective
- Transition year costs to achieve an improved SAP Support model are on par for both in-source and out-source
- The average annual steady state costs for the out-source model are significantly less than for the in-source model (approx. \$342k)
- The projected steady state cost for the out-source option is within the current operational envelope

Annual Steady State Operational Cost Comparison



Privacy Needs Assessment

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- The HRM is required to meet the privacy obligations outlined in the Municipal Government Act (MGA) and the Personal Information and International Disclosure Protection Act (PIIDPA).
- Compliance with PIIDPA will be met through restrictions the SAP CCC and service provider IBM place on access to data and through procedures to be followed when access from outside Canada for support purposes is necessary.
- Compliance with MGA and HRM Policy to be met by:
 - Reconfirming authorized access to private data and ensuring alignment with data in production SAP environments;
 - Participation in data scrambling procedures to be offered by the SAP CCC to ensure private data is not accessible in test or project environments.
- On an on-going basis management will monitor annual audit reports of the service provider and follow up on any security or privacy related exceptions noted.

Human Resource Considerations



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- HR employee impacts exists with both models
- In-sourced model requires changes to 3 of 8 existing positions. 4 additional new positions are required. New positions have been included in the financial analysis.
- Out-sourced model requires changes to 8 positions. 1 additional new position is required. New position has been included in the financial analysis.
- A strategy has been developed to mitigate the impacts of out-sourcing on affected staff.
- In addition to formal position changes, HR support for changes in business roles are essential to the success of the model.
- A detailed communication plan, union consultation, and notice period is needed.

Risks to Consider



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Risk Area	HRM Recommended Mitigation
Ability to maintain operational stability during transition	<ul style="list-style-type: none">• Develop detailed plans, test and validation scripts to ensure transitioned system is fully operational• Document “current state” functionality prior to a transition
Loss of institutional knowledge	<ul style="list-style-type: none">• Formal knowledge transfer process and measurement.• Documentation of existing SAP configuration and interfaces• Strengthen business support roles
Loss of service	<ul style="list-style-type: none">• Non-commercial contract terms will require production relationships between HRM and Province to be effective.• Monitor concern noted in host facility and follow up.
Disclosure of private information	<ul style="list-style-type: none">• Strengthen security environment and follow recommendations in privacy needs assessment
Lack of strategic value	<ul style="list-style-type: none">• Steady state means increased risk and a loss of value from current investment. A new SAP support model will improve value and reduce risk.

Summary

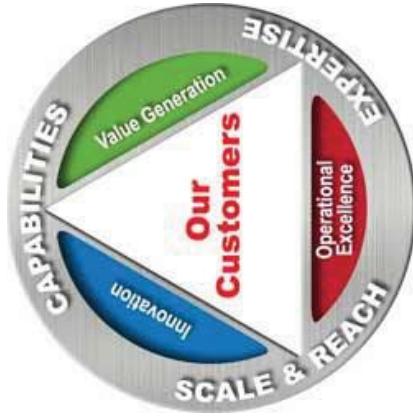
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- The HRM is most interested in leveraging its investment in SAP to drive business process change and organizational efficiencies to improve service.
- In order to capitalize on the capability of SAP, HRM must undertake a transformation to better position the organization for success when leveraging SAP.

- Status quo is not a viable option.
- There are significant costs and risks associated with building and implementing a transformed in-sourced model

- Selecting an SAP ASD option of outsourcing is a rational next step for HRM, supported by a number of key factors:

- Leveraging an Existing Relationship
- HRM Focus and SAP Vision
- Broader Access to SAP Expertise and Capability
- Leveraging the Municipal Template
- Leveraging Existing SAP Licensing



Recommendation

Out-Source SAP Support Services to the SAP CCC

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- Due Diligence results indicate HRM would benefit significantly from advancing with an out-sourced SAP Support Services arrangement with the Province of Nova Scotia's SAP CCC
- It is recommended that the Audit & Finance Standing Committee direct staff to proceed with the recommendation to enter into a formal service level agreement with PNS Department of Finance to provide SAP Support Services. The agreement will be submitted to Regional Council for approval.



Questions and Discussion

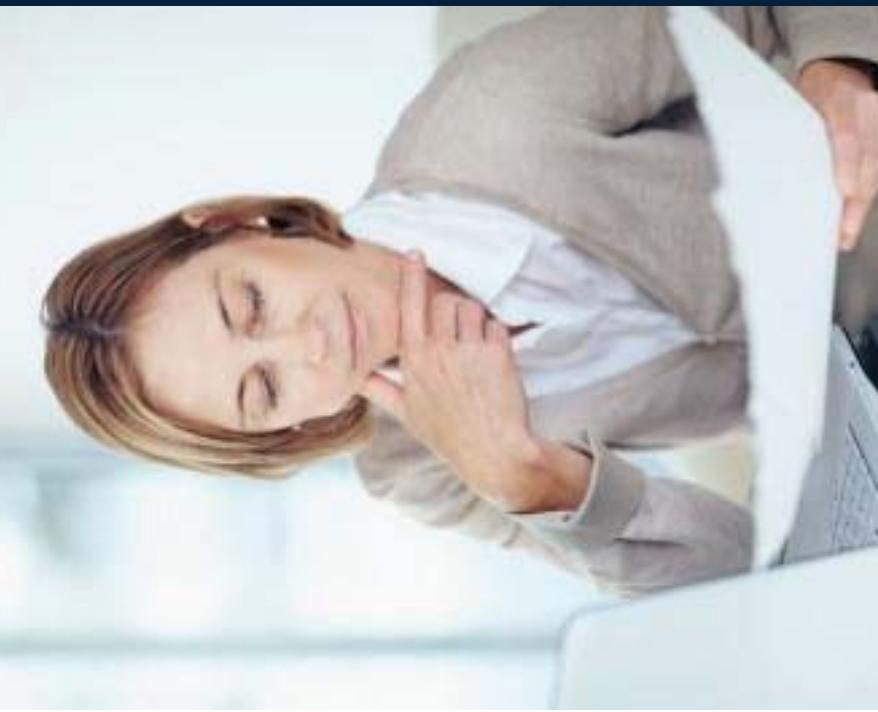
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**KEY FINDINGS AND
RECOMMENDATION**



January 18, 2013

Key Topics Covered

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Learn from
the past

Adjust the present

Introduction

Background and Context

SAP Support Services Due Diligence

Due Diligence Objectives

SAP Support Services Framework

Introduction

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- The ICT Division's mandate is to support business operations through the delivery and support of innovative technology solutions.
- The ICT Division is presently undergoing a transformation to align itself with the standards typical of an enterprise class service provider.
- A component of this transformation involves ensuring that ICT managed systems, such as SAP, are meeting the operational requirements of HRM's business units.
- Over the last year the ICT Division has assessed its capabilities and approach to delivering SAP Support Services.
- It was concluded that the HRM's SAP Support Services capability was not sufficient to support HRM's vision and long-term requirements for SAP.
- In August 2012, a business case assessing SAP Alternate Service Delivery options was completed.
- The business case concluded that outsourcing SAP Support Services to the SAP CCC was a viable option to consider.

Background and Context

Rationale for Considering an Alternate Service Delivery Approach for SAP

5

- SAP was first implemented at the HRM in 1997.
- Over the last number of years HRM's investment in SAP as an enterprise resource planning (ERP) solution has been less than ideal.
- The reduced focus on developing SAP capability in house has resulted in a number of challenges that HRM must now address:
 - ▣ Significant securing and access control risk exposure
 - ▣ Replacement of aging server infrastructure
 - ▣ Expansion of technical and functional competencies
 - ▣ Upgrade of SAP system software
- SAP as an Enterprise Resource Planning solution has evolved significantly in the last five years.
- The HRM has been unable to capitalize on some of these improvements as the organization was not well positioned both strategically and from a knowledge and capability perspective.
- ICT recognizes that to maximize its use of SAP and to leverage additional SAP functionality that it must change its service delivery approach.

SAP Support Services Due Diligence

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- A due diligence exercise was initiated in October 2012 – the primary focus was to perform a detailed review, analysis and comparison of two ASD models:
 - ▣ **In-Source – enhance the HRM's current SAP Support Services capability**
 - ▣ **Out-Source – contract the SAP CCC to provide select SAP Support Services to the HRM**
- A number of key factors were considered during the due diligence effort:
 - ▣ Definition of an SAP Service Delivery framework for the HRM;
 - ▣ Assessment of organizational requirements and implications associated with building the required SAP Support Services capability “in house”;
 - ▣ Assessment of the SAP CCC’s service delivery capability;
 - ▣ Implication of the Province’s recent announcement to partner with IBM for the delivery of SAP Support Services to the Public Sector in Nova Scotia.

Due Diligence Objectives

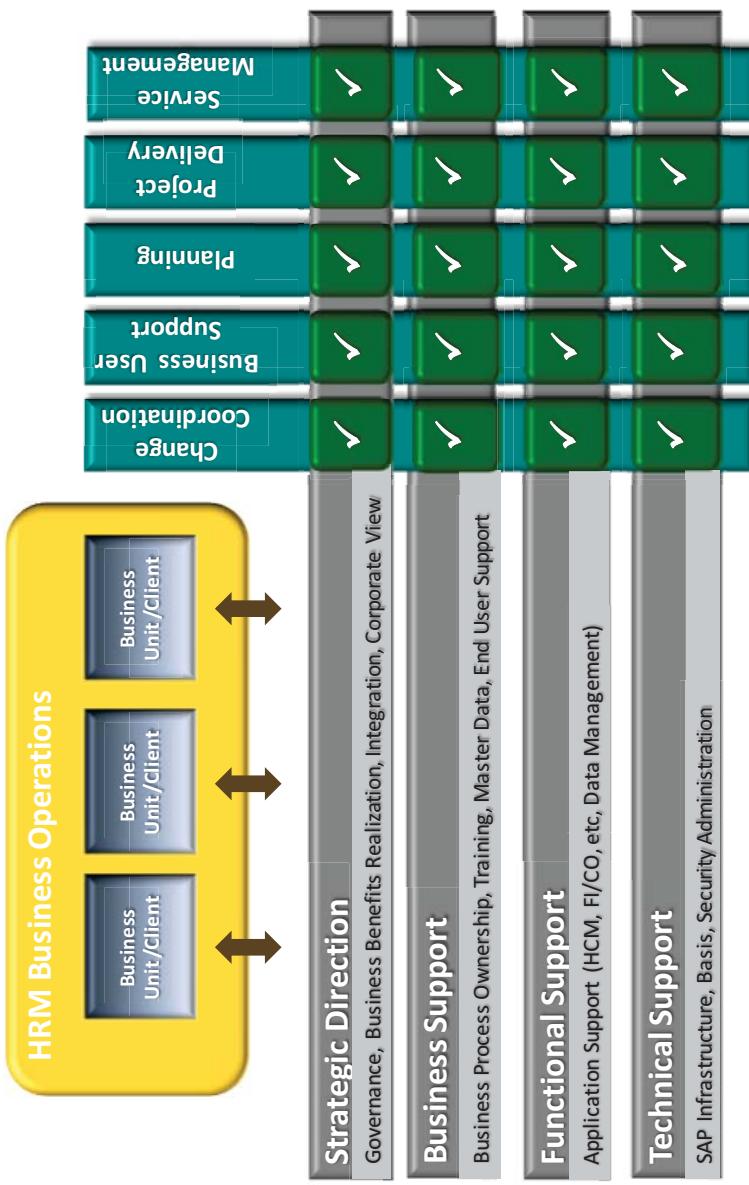
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The following objectives were defined:

- Define and assess an organizational model that supports the strategic use of SAP within the HRM.
- Define and assess two SAP Support Services models: in-source (HRM) and out-source (SAP CCC).
- Validate the capabilities of the SAP CCC to provide SAP Support Services.
- Validate the capabilities of the Provincial Data Centre to host and operate SAP infrastructure.
- Develop a financial model for the delivery of SAP Support Services.
- Determine potential organizational and human resource impacts.
- Develop a communications strategy to support due diligence activities.
- Develop an understanding of information and data privacy needs.
- Define key roles and responsibilities necessary to effectively support SAP within the HRM.
- Conduct a jurisdictional scan of municipalities leveraging SAP and identify best-practices and key learnings.

SAP Support Services Framework

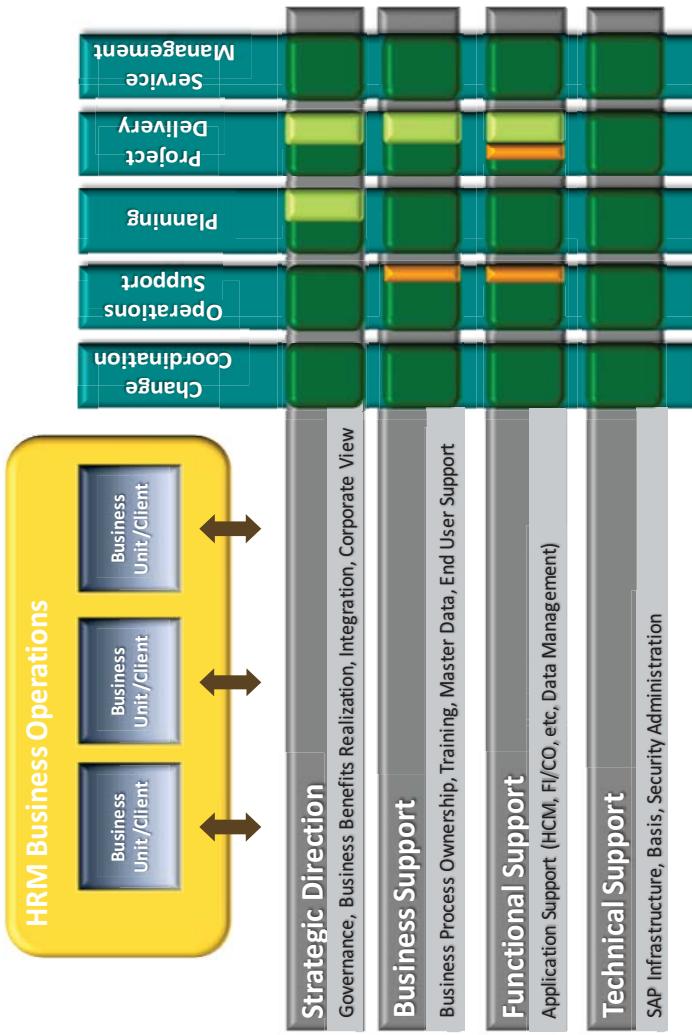
A Baseline Model for HRM



- An SAP Support Services Framework was developed to guide the modeling and analysis work.
- The framework presents three major service delivery areas; Business Support; Technical Support and Functional Support.
- The framework provides for clear delineation of roles, responsibilities and support functions.

SAP Support Services – In Source

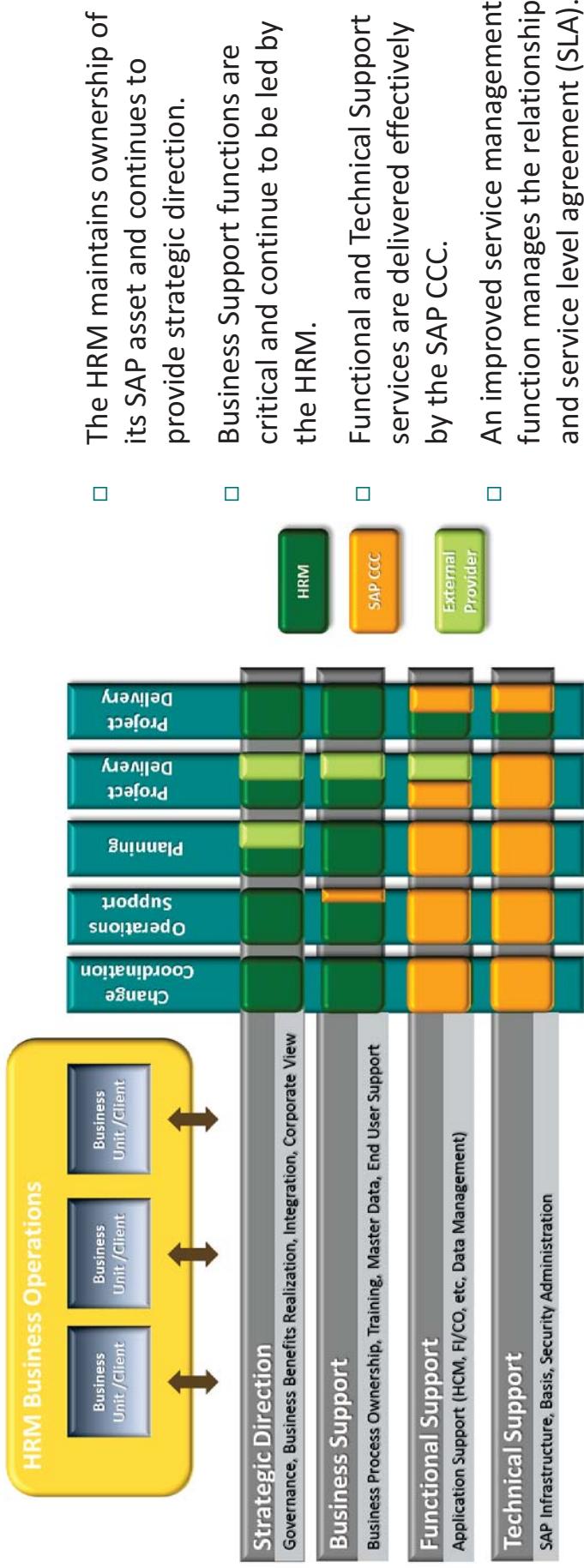
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- This SAP ASD option would be established, delivered, and operated internally within the HRM.
- External partners assist with project planning and delivery.
- The SAP CCC continues to provide training and limited SAP programming as noted in the operational support dimension.

SAP Support Services – Out Source

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SAP Support Services

Overview of Support Needs

Service Ticket Volumes

SAP Support Requirements

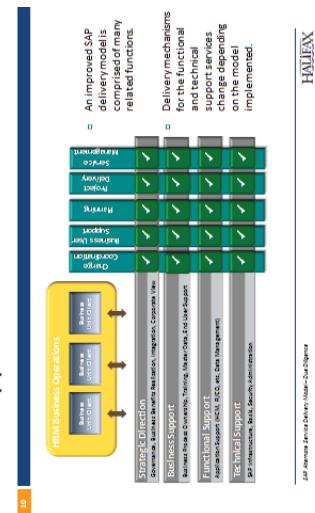
SAP Interfaces

Overview of SAP Support Needs

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- First step of the Due Diligence effort was to understand HRM's SAP support needs.

SAP Support Services Framework



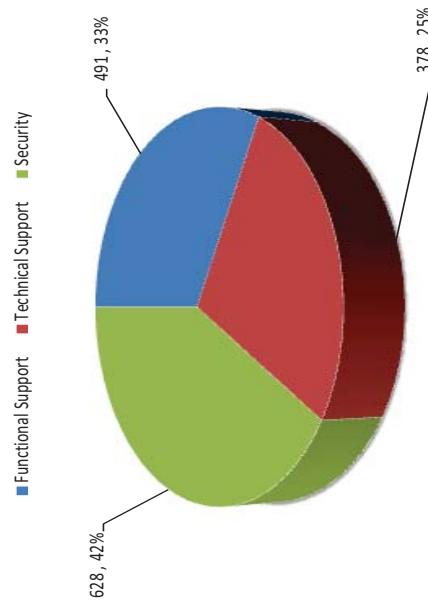
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- The SAP Support Services Framework was used to structure an understanding of needs and eventually to compare models.
- Current SAP support effort was measured using HRM's ticket system and direct input from staff.
- Best practice service information was used to determine specific control needs.

SAP Ticket Volumes and Statistics

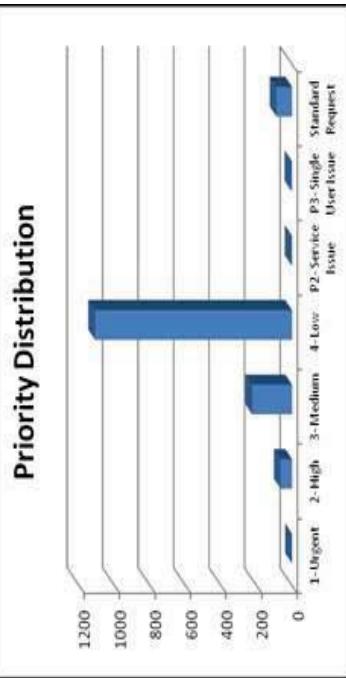
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Total SAP Service Request Volume



- A period of one year was used to measure the current SAP support effort.
- Functional Support, Security Requests and Technical Support issues comprised the ticket volume.

Priority Distribution

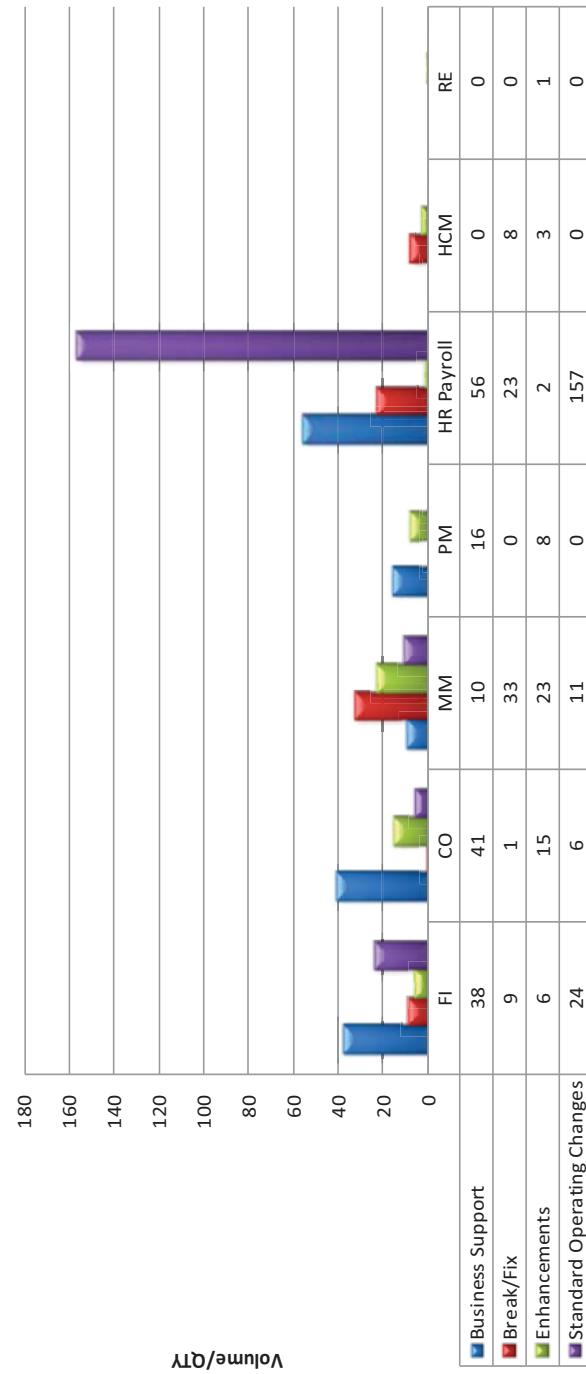


- Most ticket requests were low priority indicating a stable SAP implementation.

Functional Support Statistics

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SAP Functional Support Service Requests



- Business support tickets comprise the majority of ticket volume handled in the current model by functional staff with the exception of HR where expected regular business changes demand minor SAP intervention.
- Redirecting business support tickets represents a significant opportunity to improve efficiency.

SAP Support Requirements

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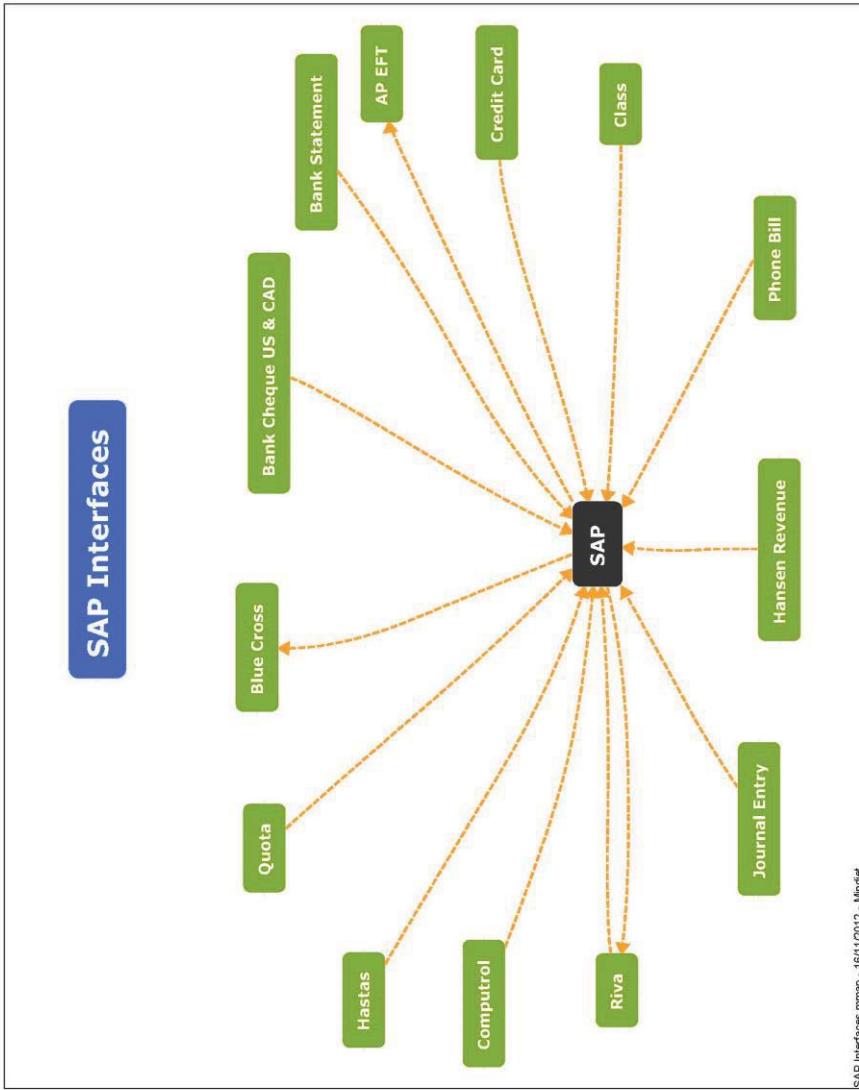
Module
Financial Accounting (FI)
Controlling (CO)
Materials Management (MM)
Investment Management (IM)
Plant Maintenance (PM)
Inventory (IN)
Procurement
Funds Management (FM)
Real Estate Management
Cross-Application Time Sheet (CATS)
Workflow
NetWeaver Business Intelligence (BI)
Printing
SAP Solution Manager
HCM
Business Objects
Security
SAP/OSS Management
EDI

- HRM utilizes a broad range of SAP functions.
- HRM has a significant SAP configuration in the FI and CO and HCM modules.
- Minor configuration or interaction occurs with a number of other SAP modules.
- Security and data privacy is a major concern area for ICT and requires solid experience.

SAP Support Requirements

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- HRM has a significant need for robust and secure interfaces with other systems within and external to the HRM.



Assessment of Options

Current State - HRM

In-Source - delivered internally at HRM

Out-Source - delivered externally by SAP CCC

Current State

HRM's SAP Support Services

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- Recognized that the desired “target state” SAP Support Services model can not be compared to HRM’s current state.
- The current SAP support model is not optimal and lacks appropriate governance and structure to effectively deliver SAP Support Services.
- The current state support model is not well positioned to advance the SAP agenda at the HRM without significant investment in training and engagement of external service providers.
- SAP is a core business solution critical to the delivery of services by the HRM – a more strategic support model is required.

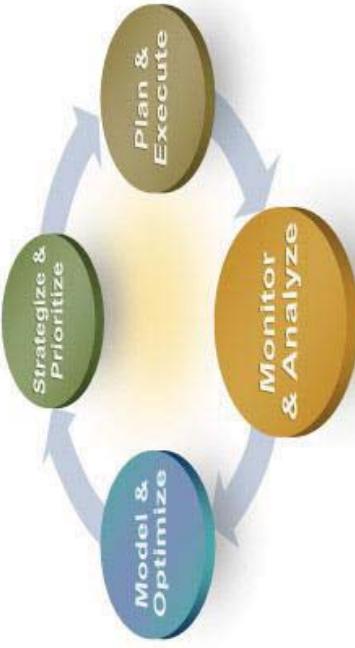


Model Comparison Approach

Transformed In-Source and Out-source

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- The two model options were compared across seven characteristics:
 - ▣ Physical Landscape
 - ▣ Software Environment
 - ▣ Control Environment
 - ▣ Support Model
 - ▣ Service Levels
 - ▣ Support Processes
 - ▣ Project Delivery
- Risk, ability to execute, organizational flexibility and strategic focus were considered for each characteristic.
- The overall cost to operate the model was also compared and scored using established HRM financial scoring techniques.



Comparison of Options

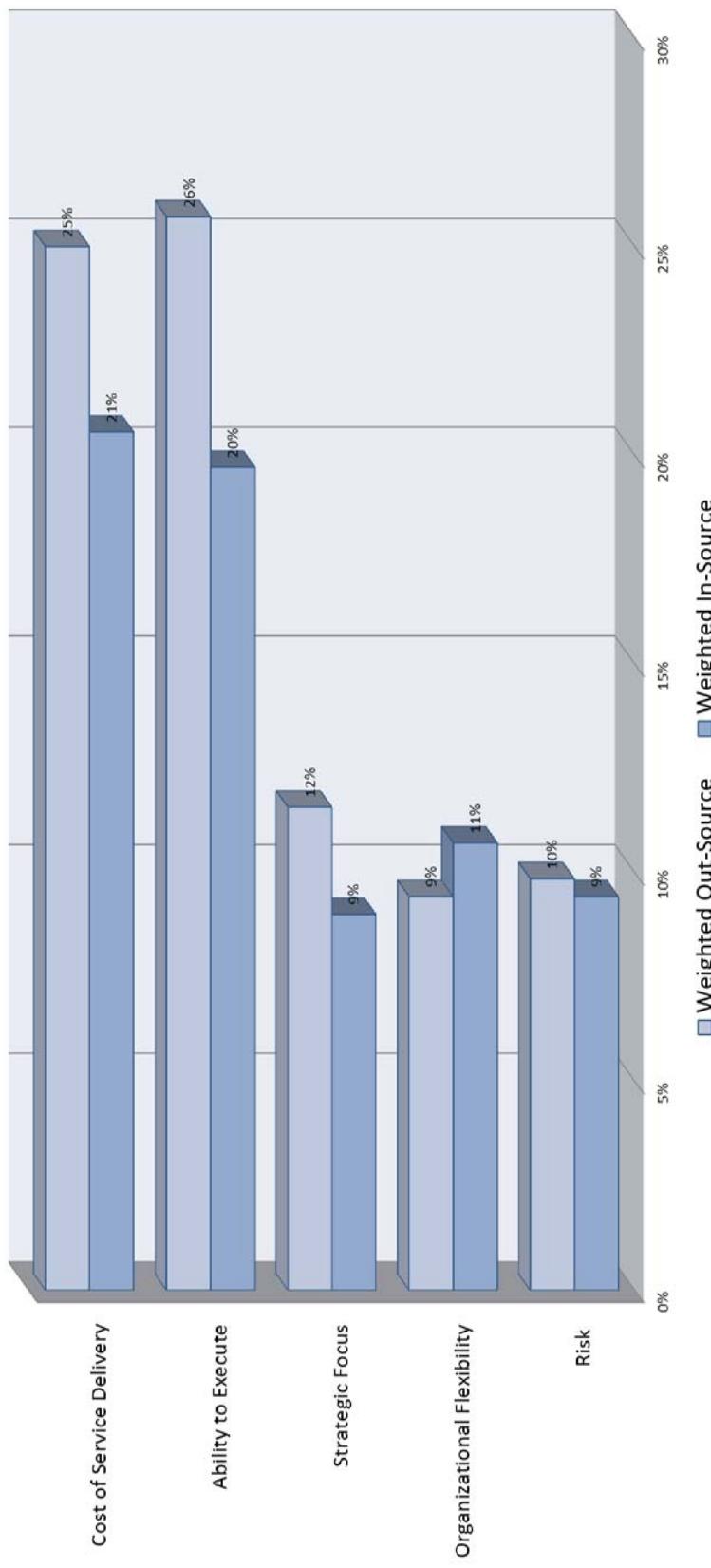
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Dimension	Weight	Model Comparison Summary		Weighted Scores	
		In-Source	Out-source	Weighted In-Source	Weighted Out-Source
Risk	15%	22	23	9%	10%
Organizational Flexibility	15%	25	22	11%	9%
Strategic Focus	15%	21	27	9%	12%
Ability to Execute	30%	23	30	20%	26%
Cost of Service Delivery	25%	29	35	21%	25%
Weighted Scores	100%	120	137	70%	82%

- The out-source model received a more favorable overall score of 82 while the in-source model received a score of 70.

Comparison Category Differentiators

21



- Cost, ability to execute and strategic focus categories were differentiators with the out-source model scoring higher in these categories.

Human Resource Considerations

In-Sourced Model

23

Position	Change
Five analyst level positions in business units	Super Users responsibilities added
Five manager level positions in the business	SAP ownership responsibilities added
One Basis Role	Primary responsibility changed from Basis to Security Administration
Two SAP Specialist roles	Roles are no longer needed
Position	Change
Manager SAP Development /Delivery Manager	New Role/Hire
Two team lead positions	New Roles/Hire
ABAP Programmer	New Role/Hire

- In addition to formal position changes, HR support for changes in business roles are essential to the success of the model.
- A detailed communication plan, union consultation and notice period are needed.

Human Resource Considerations

Out-Sourced Model

24

Position	Change
Five analyst level positions in business units	Super Users responsibilities added
Five manager level positions in the business	SAP ownership responsibilities added
Two Basis Roles	Roles no longer needed
Six SAP Specialist Roles	Roles no longer needed

Position	Change
ITSM Process Coordinator	New Role/Hire

- In addition to formal position changes, HR support for changes in business roles are essential to the success of the model.
- A detailed communication plan, union consultation and notice period are needed.

Financial Summary

Transitional Costs

Steady State Operational Costs

Service Area Analysis and
Comparison

Financial Summary and Comparison

26

Model Type	Cummulative Costs over a 6 Year Period	Transition Year (In-Source and Out-Source Models Only)	Annual Steady-State Cost (NPV)	Change from Current HRM Model (Steady State)
Current HRM Support Services			\$ 1,427,744	0%
Transformed In-Source Model	\$ 10,655,946	\$ 2,196,681	\$ 1,691,853	18%
Out-Source Model	\$ 8,857,255	\$ 2,108,078	\$ 1,349,835	-5%

- Overall the out-sourced model for SAP Support Services is more cost effective
- Transition year costs to achieve an improved SAP Support model are similar for both models
- The annual steady state costs for the out-source model are significantly less than for the in-source model (approximate difference \$342k per year)
- The projected steady state cost for the out-source option is within the current operational envelop
- A comparison of the in-source and out-source models including costs and qualitative factors rated the out-source model higher in most areas. Overall rating is 82% and 70% in favor of the out-source model.

Transition Year Costs

27

First Year Total Costs		
Cost Component	Transformed In-Source Model	Out-Source Model
Business Support	\$ 13,075	\$ 13,075
Service Management	\$ 53,820	\$ 75,348
Functional Support	\$ 762,380	\$ 470,088
Technical Support	\$ 401,756	\$ 239,947
SAP CCC Fees	\$ -	\$ 572,970
External SAP Specialists	\$ 365,000	\$ 258,000
Infrastructure	\$ 122,000	\$ -
Licensing Fees	\$ 478,650	\$ 478,650
		\$ 2,196,681
		\$ 2,108,078

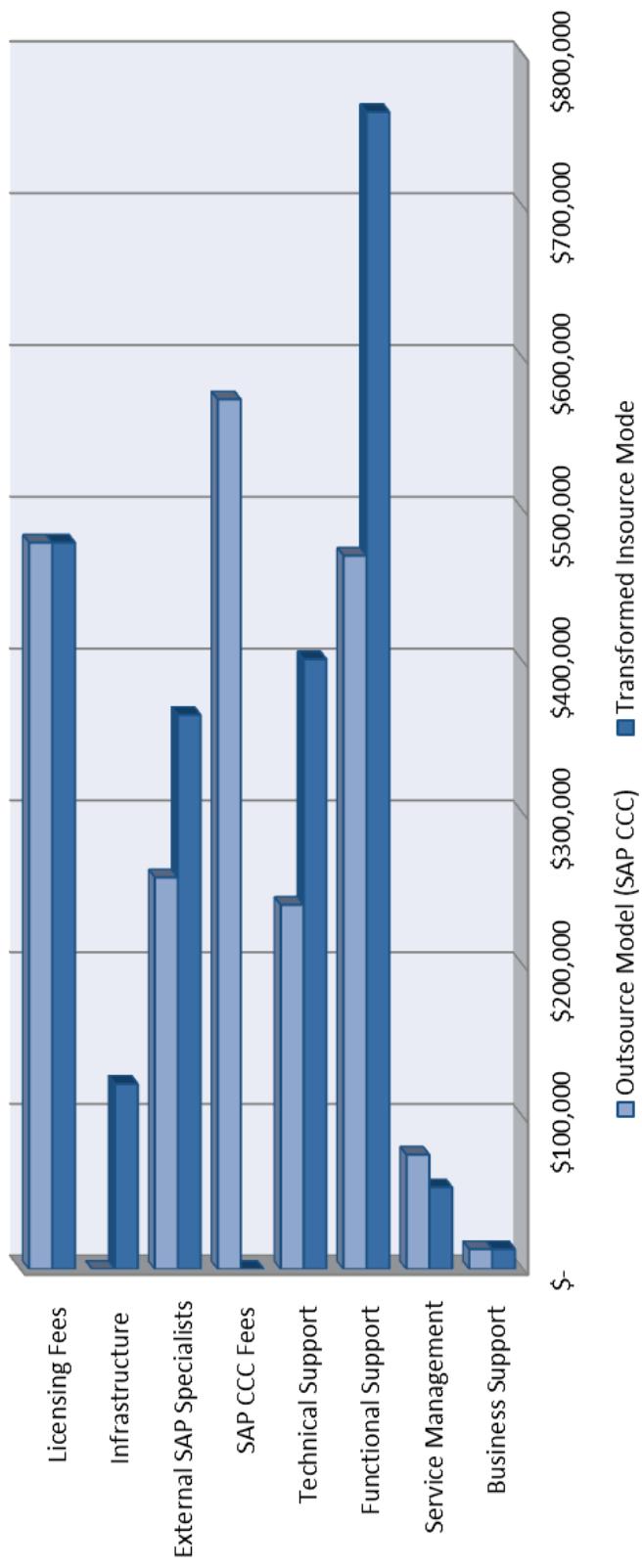
First Year Incremental Costs			
Cost Component	Transformed In-Source Model	Out-Source Model	
Business Support	\$ 13,075	\$ 13,075	\$ 13,075
Service Management	\$ 4,214	\$ 4,214	\$ 25,742
Functional Support	\$ 161,713	\$ 161,713	(130,579)
Technical Support	\$ 122,935	\$ 122,935	(38,874)
SAP CCC Fees	\$ -	\$ -	\$ 572,970
External SAP Specialists	\$ 365,000	\$ 365,000	\$ 258,000
Infrastructure	\$ 102,000	\$ 102,000	\$ (20,000)
Licensing Fees	\$ -	\$ -	\$ -
			\$ 680,334
			\$ 768,937
			\$ 680,334

- Investments for the in-source model are aimed at building up the HRM SAP infrastructure.
 - Investments for the out-source model are focused on transition of the SAP services to the SAP CCC and are off-set by lower operating cost during the first year.
 - Transitional Costs include operational support costs to maintain SAP Support Services during the transition period.
 - Incremental cost for the transition year are “one-time” and reflect the HRM’s investment to extend its SAP capability and position the organization’s ability to realize business benefits.

Transitional Costs

28

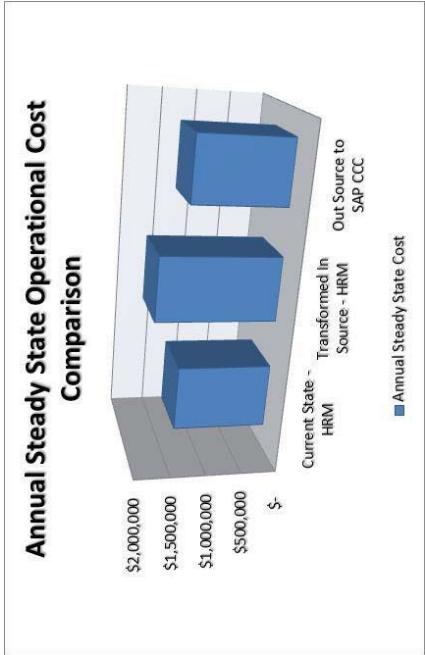
Cost Category Comparison
Transition Period



Steady State Costs

29

Cost Component	Current State (for budget comparison)	Transformed In- Source Model	OutSource Model
Business Support	0 \$	22,539 \$	22,539
Service Management	49606 \$	71,603 \$	73,518
Functional Support	600667 \$	716,740 \$	-
Technical Support	278821 \$	377,502 \$	-
SAP CCC Fees	0 \$	- \$	775,128
External SAP Specialists	0 \$	12,286 \$	-
Infrastructure	20000 \$	12,533 \$	-
Licensing Fees	478650 \$	478,650 \$	478,650
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	\$ 1,422,744 \$	\$ 1,691,853 \$	\$ 1,349,835

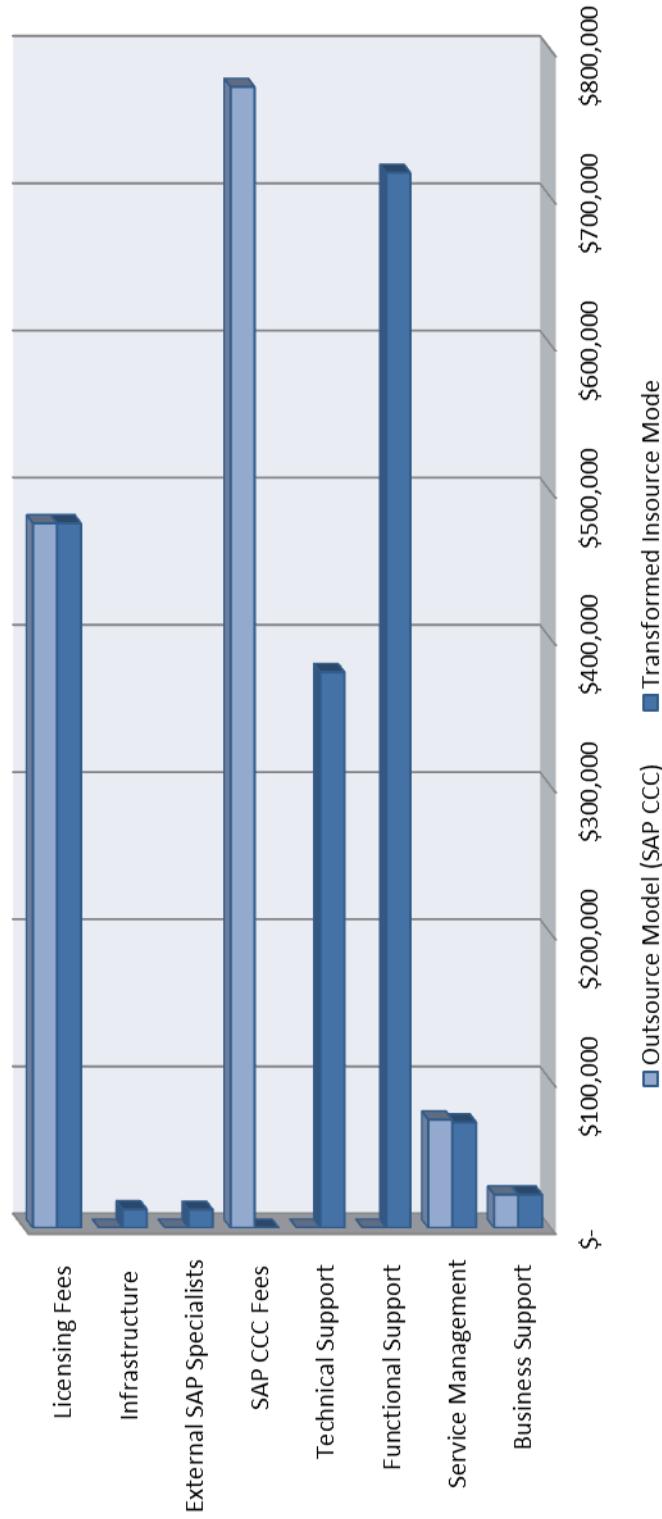


- Differentiators in the steady state costs are Functional Support, Technical Support, SAP CCC fees, external SAP specialists and infrastructure costs.
- Out-source costs are comparable to current state costs but with a significant improvement in capability and service delivery potential.
- Expansion of HRM's SAP capability through an In-source model will require a 18% increase in operational spend to deliver the same service levels as the out-source model.

Steady State Costs

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Cost Category Comparison
Average Annual Steady State



Detailed Cost Comparison

Transformed In-Source (HRM)Compared with
Out-Source to Province of Nova Scotia SAP CCC

Business Support Costs

32

Business Support		Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$	\$ 13,075	\$ 13,075
Steady State Annual Cost	\$	\$ 22,539	\$ 22,539
Six Year Total Cost (NPV)	\$	\$ 125,770	\$ 125,770

- Business support costs are small compared to the total costs but arguably are one of the most important investment areas.
- Costs for business support are aimed at improving SAP awareness, skills and strategic focus.
- An effective business support function is essential for the cost projections for SAP support services in general to be realized.

Functional Support Costs

33

Functional Support		
	Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$ 762,380	\$ 470,088
Steady State Annual Cost	\$ 716,740	\$ -
Six Year Total Cost (NPV)	\$ 4,346,079	\$ 470,088

- In the in-source model, steady state costs are marginally lower than during the transition year.
- During this first year, six SAP specialist positions are transitioned to four positions. Two team lead positions are created.
- One manager position with an allocation of 50% time to the functional support category begins in month five.
- In the out-source model, six SAP specialist roles end.

Technical Support Costs

34

Technical Support		
	Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$ 401,756	\$ 239,947
Steady State Annual Cost	\$ 377,502	\$ -
Six Year Total Cost (NPV)	\$ 2,289,264	\$ 239,947

- For the in-source model first year costs are marginally higher than for steady state:
 - ▣ Basis roles are differentiated to Basis and Security Administration, an ABAP position begins in month 7, OS and DB support increases to 50% allocation during the infrastructure and software upgrades.
- For the out-source model, technical support efforts are wound down beginning with OS and DB support ending at month 7, internal basis support ends, and ABAP support is replaced by the SAP CCC broader agreement.

Service Management

35

Service Management		
	Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$ 53,820	\$ 75,348
Steady State Annual Cost	\$ 71,603	\$ 73,518
Six Year Total Cost (NPV)	\$ 411,837	\$ 442,939

- For the in-source model, these services are provided by the ICT Service Owner and the ICT Service Delivery Manager.
 - Salaries for these two roles allocated as 15% and 50% respectfully.
- For the out-source model, service management is provided by the ICT Service Owner and a role to be called the ITSM Process Coordinator.
 - Salaries for these two roles are allocated at 15% and 50% respectfully with the exception of the ITSM Process Coordinator who is allocated at 80%.
 - The ITSM Process Coordinator will represent a net new staff role for the HRM.

SAP CCC Costs

36

SAP CCC Fees		
	Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$ -	\$ 572,970
Steady State Annual Cost	\$ -	\$ 775,128
Six Year Total Cost (NPV)	\$ -	\$ 4,448,610

- The base annual fee has been estimated by the SAP CCC at \$775,128 or \$64,594 per month.
- Fees are expected to decline year over year based on the assumption of improved efficiencies gained by the service provider. However, flat fees are assumed in the financial model.
- During the first year, it is assumed the CCC fees would begin in month 7 after the end of the HRM infrastructure transition project.
- **Fees for SAP CCC for assistance in this project are estimated at \$250,000.**

Infrastructure Costs

37

Infrastructure		Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$	\$ 122,000	\$ -
Steady State Annual Cost	\$	\$ 12,533	\$ -
Six Year Total Cost (NPV)	\$	\$ 184,664	\$ -

- Costs in this category apply to the in-source model only and are related to the cost of purchasing hardware and software to support SAP (with the exception of the SAP license fees).
- A key assumption for infrastructure is that an initial upgrade would occur during the transition year and would be required again in year five of the steady state period (capital costs are adjusted to align with a 6 year total cost model).

SAP Specialist Fees

38

External SAP Specialists		
	Transformed In-Source Model	Out-Source Model
First Year (Transition)	\$ 365,000	\$ 258,000
Steady State Annual Cost	\$ 12,286	\$ -
Six Year Total Cost (NPV)	\$ 426,432	\$ 258,000

- In the first year of the in-source model, part-time project management costs are assumed to provide leadership to the preparation phase to prepare for and oversee the infrastructure and software upgrades. Additional technical resources are assumed to assist internal resources with the transition.
- For the out-source model, a full time SAP Project Manager is assumed from the preparation to the end of the software upgrade. In addition, sixty days of an external technical resource and HRM staff will provide the additional effort to upgrade the interfaces and assist the SAP CCC with the transition.

SAP Licensing

39

- SAP licensing is typically based on a percentage of the one-time purchase price of SAP.
- HRM currently pays \$478,650 annually which provides use of the SAP modules negotiated under the provincial agreement with SAP Canada.
- These fees continue to be payable under either model scenario and total \$2.871M over the transition year and 5 year steady state period.

Recommended ASD Model

Recommendation

Rationale

Risks to Consider

Data and Information Privacy Considerations

Recommendation

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Out-Source SAP Support Services to the Province of Nova Scotia's SAP CCC

In considering the analysis and validation work completed during the due diligence stage, the results indicate the HRM would benefit from advancing with an out-sourced SAP Support Services arrangement with the Province of Nova Scotia's SAP CCC.



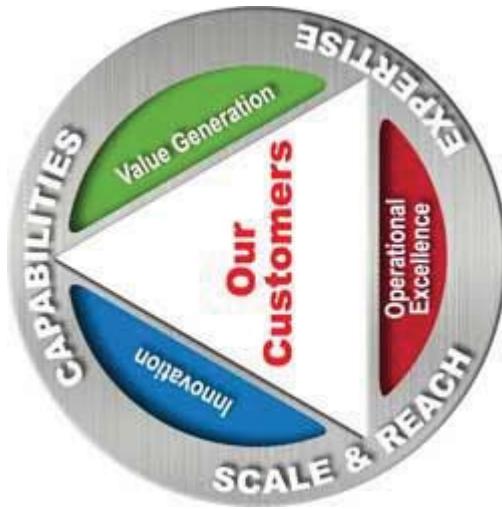
Recommendation Rationale

42

- The HRM is most interested in leveraging its investment in SAP. In order to capitalize on the capability of SAP, the HRM must undertake a transformation to better position the organization for success when considering SAP.

- Selecting an SAP ASD option of outsourcing is a rational next step for the HRM and is supported by a number of key factors:

- Leveraging an Existing Relationship
- Significant Investment Requirement to Build Internal SAP Capability Steady State Operational Cost Benefit
- HRM Focus and SAP Vision
- Broader Access to SAP Expertise and Capability
- Leveraging the Municipal Template
- Leveraging Existing SAP Licensing



Rationale to Out-Source

43

Significant Investment Requirement to Build Internal SAP Capability - The effort and investment required by the HRM to build knowledge and capability “in-house” is viewed as costly and time consuming and in many respects does not come with a guarantee of increased service delivery performance. Outsourcing SAP Support Services to the SAP CCC represents a shift of service delivery to an organization that has been providing like services in the Nova Scotia Public Sector for many years. Acquiring this type of knowledge and expertise would be costly and time consuming for the HRM.

Steady State Operational Cost Benefit – the average steady state cost of out sourcing SAP Support Services to the SAP CCC is on par with the HRM’s current operational SAP Support Costs. Although there is cost neutrality when comparing current state with an out-source scenario, the value that the HRM is receiving in the out-source scenario is greater than the SAP Support Services is currently delivering in-house.

Leveraging an Existing Relationship - The HRM has a longstanding relationship with the Province of Nova Scotia specific to SAP. A transition of SAP Support Services to the SAP CCC represents an expansion of this relationship and will not require the creation and investment in new business relationships. Currently there are other municipalities also leveraging the Province’s SAP support model which makes the out-source option attractive.

Rationale to Out-Source

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HRM Focus and SAP Vision - HRM intends to expand its use of SAP in the coming years to leverage new functionality that will enable HRM to operate more efficiently and provide improved service delivery internally to HRM employees as well as to HRM residents. The HRM is maturing its thinking and strategy specific to SAP. Understanding that SAP has a wealth of functionality and best practice business processes as well rapid deployment methods, the HRM sees great benefit in building its Business Support capability while engaging an experienced and knowledgeable third-party to deliver SAP Support Services.

Broader Access to SAP Expertise and Capability - The future expansion of the HRM SAP solution will require access to a broader range of SAP experts. HRM recognizes that the Province's SAP CCC has extensive experience supporting the municipal sector in Nova Scotia. As well, the SAP CCC also has extensive Public Sector knowledge and expertise; and this knowledge and expertise will provide a benefit to HRM. The Province of Nova Scotia's recent announcement that IBM will become its SAP support provider is of interest to the HRM as well. The establishment of an SAP Global Delivery Centre in Halifax by IBM will provide access to a significant SAP resource pool. This development provides an opportunity for even greater access to SAP expertise and capability.

Rationale to Out-Source

45

Leveraging the Municipal Template – the Province of Nova Scotia has invested significantly (\$2M+) in recent years in developing a “municipal template” for municipalities in Nova Scotia. Presently, the HRM is not leveraging this capability, however in an out-sourced scenario, the HRM will be able to leverage components/functionality associated with the template. The opportunity for the HRM is that it can adopt and integrate this functionality more rapidly than it could if it adopted an in-source model.

Leveraging Existing SAP Licensing - HRM currently licenses SAP through the Province of Nova Scotia’s SAP license agreement with SAP Canada. This will continue, regardless, even in the event the Province opts to engage a third party service provider. The Province of Nova Scotia continues to hold the SAP software licensing agreement with SAP Canada.



Risks to Consider



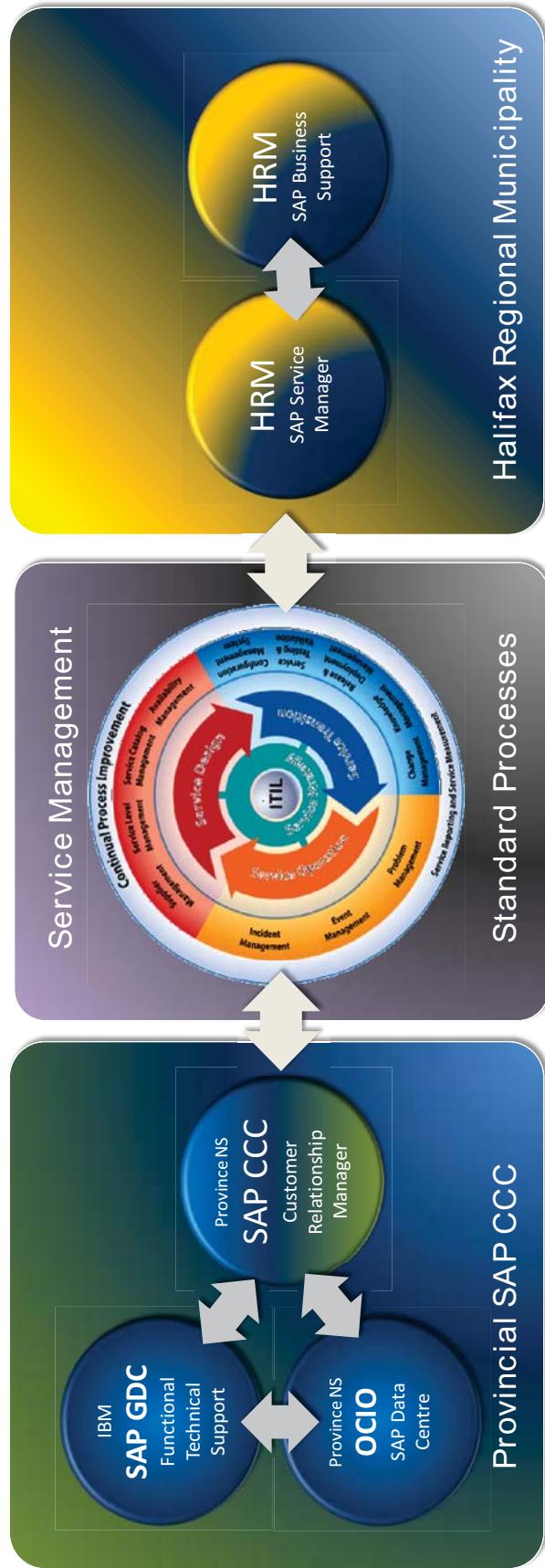
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Risk Area	HRM Recommended Mitigation
Ability to maintain operational stability during transition	<ul style="list-style-type: none">• Develop detailed plans, test and validation scripts to ensure transitioned system is fully operational• Document “current state” functionality prior to a transition
Loss of institutional knowledge	<ul style="list-style-type: none">• Formal knowledge transfer process and measurement.• Documentation of existing SAP configuration and interfaces• Strengthen business support roles
Loss of service	<ul style="list-style-type: none">• Non-commercial contract terms will require production relationships between HRM and Province of Nova Scotia.• Monitor concern noted in host facility and follow up.
Disclosure of private information	<ul style="list-style-type: none">• Strengthen the security environment and follow recommendations in privacy needs assessment
Lack of strategic value	<ul style="list-style-type: none">• Continuing with current state means increased risk and a loss of value from current investment. Implementing a new SAP support model will improve value and reduce risk.

Service Management

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- Service Management processes will be based on standard ITIL processes at both the HRM and the PNS SAP CCC.
- ITIL provides a framework for high quality interaction between related IT service organizations.



Privacy Needs Assessment

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- The HRM is required to meet the privacy obligations outlined in the Municipal Government Act (MGA) and the Personal Information and International Disclosure Protection Act (PIIDPA).
- Compliance with PIIDPA will be met through restrictions the PNS SAP CCC and service provider IBM place on access to data and through procedures to be followed when access from out-side Canada for support purposes is necessary.
- Compliance with MGA and HRM Policy to be met by:
 - Reconfirming authorized access to private data and ensuring alignment with data in production SAP environments;
 - Participation in data scrambling procedures to be offered by the PNS SAP CCC to ensure private data is not accessible in test or project environments.
- On an on-going basis, management will monitor annual audit reports of the service provider and follow up on any security or privacy related exceptions noted.

SAP Transition Roadmap

Key Decision Points

SAP Transition Timeline

Communications Governance

Next steps

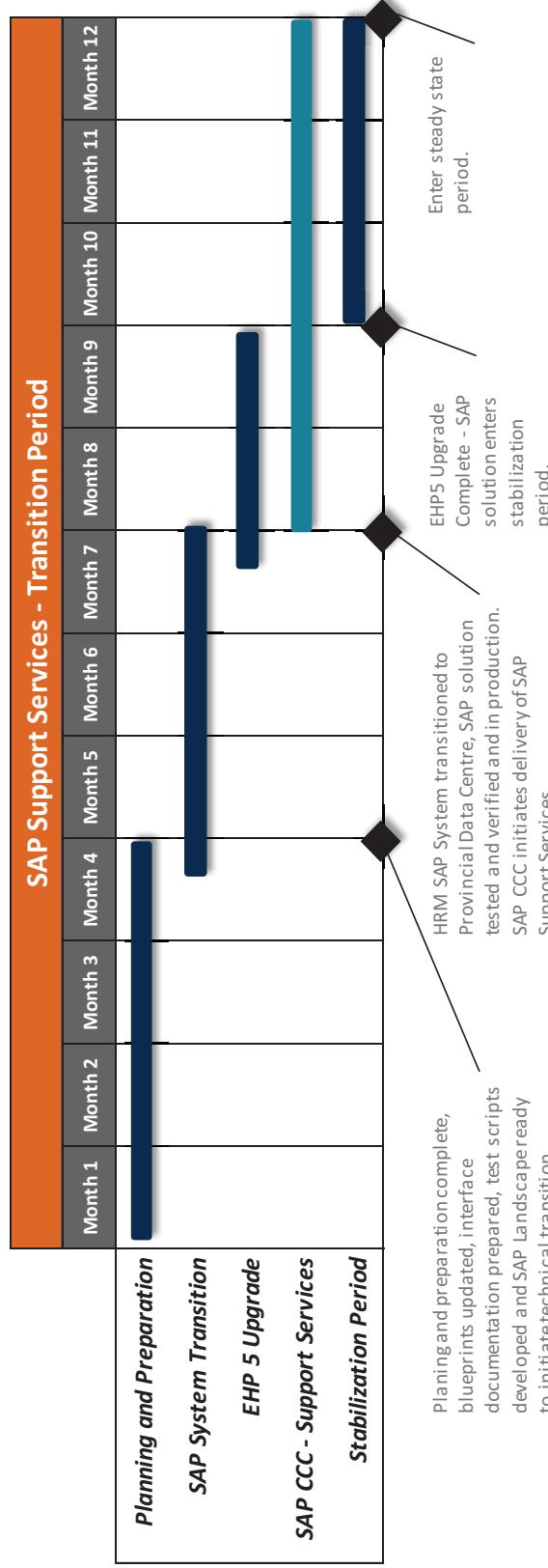
Key Decision Points

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Decision Makers	Key Decision Points
ICT Management Business Management	<input type="checkbox"/> Agreement and acceptance of SAP Service Delivery Framework as a model to implement at the HRM. <input type="checkbox"/> Agreement to establish the Business Support function/organization.
Chief Information Officer	<input type="checkbox"/> Agreement and acceptance of SAP Service Delivery Framework as a model to implement at the HRM. <input type="checkbox"/> Agreement to establish the Business Support function/organization.
Chief Financial Officer and Executive	<input type="checkbox"/> Agreement with the recommendation to advance with outsourcing SAP Support Services to the Provincial SAP CCC.
Audit and Finance Committee/ Regional Council	<input type="checkbox"/> Agreement with the recommendation to advance with outsourcing SAP Support Services to the Provincial SAP CCC.

SAP Transition Timeline

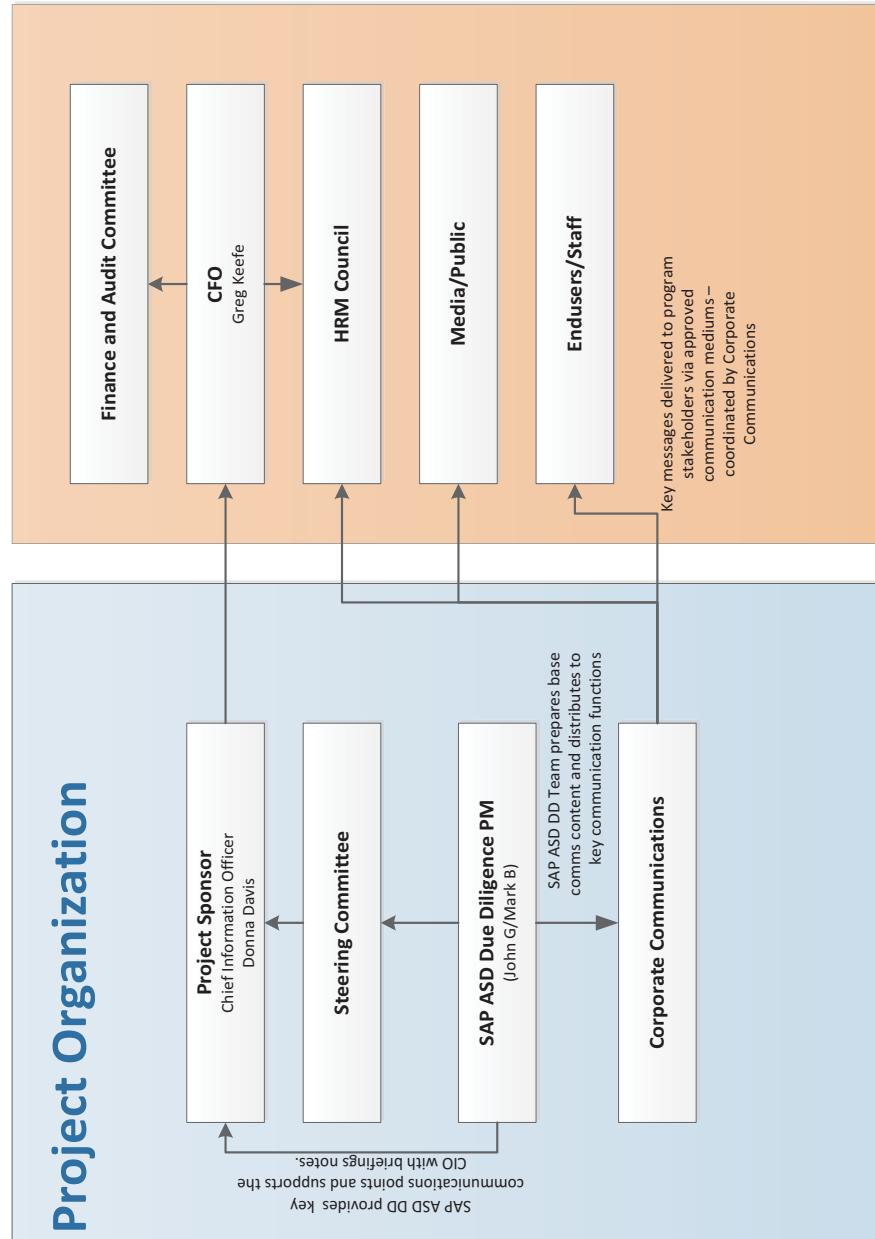
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- Provides a general overview of the sequencing of events for the transition.
- Initiation of the timeline is based on achieving a “go” decision
- A detailed plan will be developed to validate sequencing, activities, contract negotiations and key transition dates.

Communications Governance

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Key Next Steps

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Focus Area	Action Items
Communications	<input type="checkbox"/> Brief HRM SAP Support Resources on outcome and key findings of the Due Diligence effort <input type="checkbox"/> Brief business stakeholders on outcome and key findings of the Due Diligence effort <input type="checkbox"/> Engage Corporate Communications and develop a communication plan specific to the transition process
Transition Planning and Preparations	<input type="checkbox"/> Develop a project charter and project plan to advance with detailed planning and preparations <input type="checkbox"/> Kickoff a planning and preparation project <input type="checkbox"/> Assemble project team (HRM SAP support resources) and assign work packages
Human Resources	<input type="checkbox"/> Engage HR to review and discuss organizational and staffing implications related to the go forward decision.
Provincial SAP CCC	<input type="checkbox"/> Engage the SAP CCC and confirm assignment of a project manager to manage SAP CCC transition related activities <input type="checkbox"/> Review and confirm out-sourcing approach with Department of Finance – establish Memorandum of Understanding <input type="checkbox"/> Review and Confirm planning assumptions related to cost, scope and schedule (timing)
SAP Strategy and Roadmap	<input type="checkbox"/> Engage SAP Canada and advance detail discussions regarding development of a broader SAP roadmap and strategy for the HRM

Closing Remarks

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- The SAP ASD Business Case provided a foundation and direction for the HRM to further explore out-sourcing of SAP Support Services.
- The Due Diligence effort confirmed and validated key assumptions and enabled the HRM to solidify its understanding of SAP support requirements, organizational impacts, human resource implications and cost.
- The results of the due diligence effort indicate that the HRM would benefit from out-sourcing SAP Support Services to the SAP CCC.
- The implications of the Province's announcement to engage IBM to provide SAP Support Services to the Nova Scotia Public Sector is viewed as positive and offers HRM with increased access to local SAP knowledge and capability.
- Overall the risk associated with out-sourcing is viewed as manageable – primarily because the SAP Service Provider will be the Province of Nova Scotia.
- The steady state cost of outsourcing SAP Support Services to the Province is comparable to existing HRM operational support costs.



Questions and Discussion

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