ebXML Case Study: XML in Ontario (XiO)

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Abstract:

During 2001, Corporate Architecture Branch (CAB) initiated a project known as XML in Ontario (XiO) to research and investigate into the XML technology.

Phase I of the project (completed in May 2002) mainly focused on understanding how the technology can be positioned in the G2G context within the Ontario Public Service (OPS). It developed a vision and architecture framework for the future applications of XML within OPS. Phase I also recommended ebXML as the e_government framework for OPS.

XiO completed Phase 2 at the end of February 2003. The project was responsible for development of the following deliverables. Currently, the team is securing support for Phase 3.

- Define requirements and technology architectures based on the ebXML framework from the business owner's view, XML designer's view and runtime view. The architectures also included OPS specified requirements.

    Define ebXML Registry/Repository requirements.

- Evaluate and select ebXML compliant repository product based on defined requirements.

    Design and implement a prototype ebXML registry/repository.

- Extend OSDML specifications based on the latest release of ebXML specifications. OSDML (Ontario Services Description Markup Language) is a common vocabulary to describe government services and transactions, which was developed in XiO Phase I.

    Conduct roadshows to various ministries and clusters for a widely adoption in OPS.

32 # **Table of Contents**

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1   Executive Overview

The goal of the second phase of XML in Ontario (XiO) was to build on the successes of the Phase 1 and to further evolve the architecture design and prototype of the key technologies of ebXML, at the same time continue to monitor the changes in this dynamic industry including standards, tools and user trends. XiO Phase 2 completed in late February 2003.

The specific objectives of the second phase of the project are to:

- Review of toolsets for defining and management of government program and services including ebXML registry/repository.

- Continue to collaborate with ESDi (a ministry project) for next phase development and usage of Common Data Element (CDE) schemas and toolsets as well as change management framework for the management of schemas.

- Participate in industry standards and forums to represent e-government program and services requirements and make appropriate recommendations

- Collaborate with governments in evolving G2G standards.

1.1   Business Need

e_government requires a framework which provides:

- Standards based interoperability

- Secure and reliable messaging

- Business process support

- Accessible, distributed information stores

- Loosely coupled collaboration between parties

- Non-proprietary technology

1.2   Project Description

The project will be responsible for development of the following deliverables.

- Define requirements and technology architectures based on the ebXML framework from the business owner's view, XML designer's view and runtime view. The architectures also included OPS specified requirements. (Second draft completed)

    Define ebXML Registry/Repository requirements. (Second draft completed)

- Evaluate and select ebXML compliant repository product based on defined requirements. (Second draft completed)

    Design and implement a prototype ebXML registry/repository. (Ongoing, Global XML registry 3.0 is used right now.)

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83   • Define Change Management framework and processes for management of XML schemas.
84   (First draft completed)

85   • Extend OSDML specifications based on the latest release of ebXML specifications. OSDML
86   (Ontario Services Description Markup Language) is a common vocabulary to describe
87   government services and transactions, which was developed in XiO Phase I. (Ongoing)

88   Conduct roadshows to various ministries and clusters for a widely adoption in OPS.
89   (Ongoing)

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2   Participants

92   Corporate Architecture Branch, Management Board Secretariat

93   e_Business Service Delivery Individual (ESDi)

94   Economics and Business Cluster (EBC)

2.1   Industry

2.2   Users

97   Economics and Business Cluster (EBC)

98   Ministry Transportation of Ontario (MTO)

99   Training, College and University (TCU)

100 Ministry of Health (MOH)

2.3   Other

3   ebXML Specifications Used

103 ebXML RSS2.0

104 ebXML MS 2.0

105 ebXML RIM2.0

106 ebXML BPSS1.01

3.1   Other Standards Used (where applicable)

108 CDEM (v.17d) – Common Data Element Model

109 CDES (v.1.7d) – Common Data Element Schema

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4 Technical Description

Prototype of ebXML registry/repository

5 Benefits and Challenges

5.1 Business

- Increased efficiency
- Increased interoperability
- Reduced costs
- Increased accountability
- Increased availability
- Increased citizen satisfaction

5.2 Technical

- Currently, ebXML is the best framework for e-government.

5.3 Lessons Learned

- Not many knowledgeable and experienced consulting firms in the ebXML area.
- Vendor products are immature and expensive.

6 Future Plans

Phase 3 is under consideration and funding decisions are being made. For Phase 3, Reg/Rep V3.0 will be considered.

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129   Appendix A. *Acknowledgments*

130   The following individuals were instrumental in the success or progress of this effort:

131   •   None at this time.

132 # Appendix B. *Revision History*

Rev	Date	By Whom	What
XIO-01	04-03-2003	Zheng Liang zheng.liang@mbs.gov.on.ca	Initial version

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134 Appendix C. *Notices*

135   None provided.

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