Towards the Global Village
The Strategic Alliance between the Canadian Museum of Civilization and Digital Equipment of Canada

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"The heritage of Canada and all its peoples is an important part of the world heritage and must be preserved for present and future generations"[1]

Introduction

When I started my museum career some 20 years ago, I never imagined that technology would change the very fabric of our museums. I was for the longest time a traditionalist believing that people should go to museums to see real artifacts, not reproductions, in static but attractive displays. In 1989, Dr. George MacDonald & Stephen Alsford published a book entitled "A museum for the global village" I read it with interest but didn't realize that those ideas would could become reality so quickly. The visions portrayed in this publication are realities today. In order for museums to survive in this very competitive world they must analyze their environment and quickly adapt to the societal needs which is often brought upon by rapid technological changes. Canada is becoming a major producer of information-based services and the Canadian Museum of Civilization is involved in providing these services.

"Instant communication and the ability to transmit, with high efficiency, huge quantities of information - in a diversity of forms - over great distances is linking communities within a framework of shared knowledge. The large community thus created, the Global Village, will be defined by the knowledge base (and the values inherent in it) which is made common to all members by the communication process"[2].

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1   Museums Act, 1990.

2   Dr George F. MacDonald and Stephen Alsford, "A museum for the global village, 1989, p.215.

The purpose of the Canadian Museum of Civilization Corporation is:

"to increase, throughout Canada and internationally, interest in, knowledge and critical understanding of and appreciation and respect for human cultural achievements and human behaviour by establishing, maintaining and developing for research and posterity a collection of objects of historical or cultural interest, with special but not exclusive reference to Canada, and by demonstrating those achievements and behaviour, the knowledge derived from them and the understanding they represent"[3].

It became apparent to the Corporation when analyzing its purpose that strategic partnerships in the areas of Informatics and Digitization were required for the accomplishment of its vision a "Museum for the Global Village" and in 1991, the Museum started the search for strategic alliance partners. The process was a arduous one since several private sector organizations needed to understand and align their corporate visions and fiscal responsibilities with those of the Museum.

In March of 1992, Digital Equipment of Canada Ltd (DEC) and the Canadian Museum of Civilization Corporation (CMCC), began the process of defining what a mutually beneficial alliance could mean and, in May of 1992, a document which outlined both organization's understanding of such an alliance partnership was signed by Dr George MacDonald, Executive Director of the Canadian Museum of Civilization, and Ken Copeland, President of Digital Equipment of Canada Ltd.

Strategic visions

In order to fully appreciate how the strategic alliance between Digital and the Canadian Museum of Civilization Corporation will be a synergistic and mutually beneficial relationship, it is important to understand the strategic visions of both organizations. Outlined below are excerpts from the "Enabling Technology proposal" produced by Digital which was submitted to the CMCC in March 1992 which clearly defines the synergy of visions, objectives and the solution approach of this partnership.

CMCC's vision

The main focus of the CMCC's vision is what it refers to as its Outreach Program. This Program will be the means by which the Museum will make its knowledge products available to all Canadian "students", not just those who come to Parc Laurier. Through the Outreach Program, the Museum will

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3   Museum Act, 1990.

begin its transformation from "traditional" museum; collector, documentor, conservator, exhibitor and interpreter, to a more accessible, participative museum that "contributes to the mutual understanding between the various cultures that make up the Canadian mosaic and ultimately the cultures that make up the Global Village." The CMCC will use the Outreach Program as the springboard to executing new exhibit technologies, increased information accessibility and enhanced communications capabilities. Ultimately, the Outreach program will allow the CMCC to attain its vision of being recognized as a global, world-class information resource.

Other key principals that are an integral part of the Museum's vision are as follows:

Knowledge Products: effective communication is key, therefore, the goal will be the creation of a meaningful information services which can be distributed. Inherent in this process is the development of a product creation methodology which can be replicated.

World Class: to be recognized globally as a valuable source of information.

Exhibit Technology: to pioneer the application of various media types in a presentation of collection and exhibit materials.

Multi-media: to explore the application of different multi-media technology: voice, data, image, and full-motion video and, to facilitate and enhance the acquisition, maintenance, interpretation, management of collections and advertising the development of new knowledge products.

Integrated: to take advantage of technology in the integration of all museum functions, both museological and business, towards a more streamlined, effective and responsive organization. The goal of this integration will be to collect and store information once, while using it many times to support all functions.

Accessible: to provide all users of information with a common user interface to create, store and access what they need. Accessability is key to both the business operations and museum resources.

Standard Based: industry standards which govern the deployment of technology are the equalizing force in an industry that thrives on innovation and proprietary inventions. In order to allow the museum to take advantage of the best of what technology has to offer, without consigning the organization to any one vendor, standards-based systems will be considered over vendor-proprietary technology.

Digital's vision

Digital has recognized that the way business is done today will not be the way it is done tomorrow. There is a fundamental shift in the Information Technology industry away from product sales to service solutions. Customers are increasingly looking to deal with one vendor to provide comprehensive solutions that address all of their Information Technology (IT) requirements.

It is with this understanding of market changes in mind, that Digital is actively pursuing its vision of providing IT services to the marketplace via what Digital refers to as its Information Technology Utility (ITU). This ITU vision will allow Digital to provide customers with a host of IT related services from a remote location (s) and charge for these services on a utility basis.

The central features of the Information Technology Utility (ITU) vision are as follows:

Global: it is Digital's intention to offer ITU services remotely to customers, whether the customer is local or international in scope. Digital will establish an international network of ITU centres that will provide consistent, best-in class service to customers, no matter how many facilities they have or where these facilities are located.

Easy Access: Digital will provide all customers with easy access to the ITU through the use of a common user interface. No complex or proprietary technology will be required for customers to "plug into" the ITU.

Information: in addition to providing "normal" IT services to customers, the ITU will provide information services as well. Digital realizes that customers want and need regular access to databases, news services, etc ..., and will provide this access as an ITU service offering.

Applications: corporate applications such as financial, material management, retail, etc. will reside on systems in the ITU, and will be provided to customers on an as required basis. This will preclude customers from having to make large up-front investments to purchase and support these applications, and will allow them immediate access to applications they may not have been otherwise able to afford.

Networks: Digital's ability to achieve its ITU vision is based upon its worldwide network (Digital's network is the largest private network in the world), and its expertise in the areas of networking and information transfer. The ITU vision is built upon Digital's core competencies; areas where Digital is recognized as an industry leader.

Open: the technology that Digital will use to deliver ITU services will be open in nature, not proprietary. This will allow Digital to offer its ITU services to the marketplace as a whole, not to just a limited number of customers.

Standards Based: Digital complies will all the current major de facto and industry standards and is an active player in the development of new standards. This compliance with standards is an integral part of the ITU strategy.

Utility Pricing: services provided via the ITU will be charged on a utility, pay for use basis. Monthly invoices will be dependant upon the amount and type of service provided, with charges increasing or decreasing as more or less service is required by the customer.

Synergy of Visions

When ones studies the CMCC and Digital visions discussed above, it becomes apparent that there are several similarities between the two visions.

Both organisations are striving to achieve world-class recognition in their areas of expertise, and both expect to meet their goals by offering information services to a global market. Inherent to the success of these endeavours will be the ability to cultivate and work with best-in class partners.

The Museum is a vast and invaluable repository of information, a witness to our cultural heritage. As a resource, however, they are virtually untapped due to barriers in the collection, access, manipulation, and dissemination of that information. In their current facility at Parc Laurier, the CMCC has at its disposal many of the underpininnings of a world-class computing infrastructure upon which to create and market its knowledge. What is missing, however, is the glue that ties it all together; the systems which will facilitate both the business and the museological mandates of the CMCC.

Digital's strengths lie, on the other hand, in the design, implementation, and management of large world-wide networks, as well as the ability to offer freedom of choice in the selection of computer platforms and desktop systems. We understand that the application of technology toward meeting information requirements, regardless of the form that information takes, is the ultimate critical success factor of any computing environment.

Digital proposes to provide the physical infrastructure upon which the CMCC can create, store, manage, and most importantly USE their information resources. In turn, the CMC will provide testimonial to the technology, processes and services which facilitate those tasks.

Phases

In order to create a enabling infrastructure a three phase approach was undertaken.

Foundation phase

This phase began in June of 1992 and included the planning, design, implementation and management of the enabling infrastructure and entity. During this phase, the CMCC computer LAN environment was established using Pathworks (Digital product), and basic computer services such as Electronic Mail (Teamlinks), Word processing (Wordperfect 5.1), Spreadsheets (Excel), Graphics (CorelDraw), Project Management (MS Project), Communication (Reflection) and other entreprise-wide PC applications were provided. The foundation phase was completed in Nov 1993.

A total of 440 computers are presently connected to the Pathworks network with a network user community of 570.

Second phase

This phase began in January 1993 and involved the deployment of applications which support the Museum's business environment (i.e. Finance and Adminstration, Human Resources, Materials Management, etc).

This phase is ongoing since studies are undertaken as needed to replace or deploy new Corporate applications.

So far, the following systems have been deployed:

1. A new Financial system entitled "Prophecy" was tested and deployed in March 1994.

2. Fax Sr software providing desktop faxing from the Network was testing and deployed in February 1995.

3. A new Point of Sales system was tested and deployed in March 1995 using the Raymark system.

Initiatives have begun for a Library system and a Corporate Mail list services.

Third phase

This phase began in September 1994 and involved the Museum's readiness to deploy the global village, or "outreach" program. This includes the development and deployment of museum specific applications (i.e. collection management), exhibit technologies, knowledge products, and information applications.

The CMCC showed its presence on the Internet in December 1994 with bilingual content outlining the Museum activities. (WWW.CMCC.MUSE.DIGITAL.CA)

A pilot project to use the CMCC telecommunication infrastructure to disseminate information to its visitors using cellular telephones was undertaken in Feb 1995.

A National Multimedia Institute (NMI) will be created and located at CMC (announcement made June 14th 1995). The NMI's mission is as follows:

"From a single location, NMI will provide the infrastructures, tools, services and expertise to create and distribute multimedia on the information highway. Whether it is design and analysis, research and development, product creation, archival or distribution on the information highway NMI will be the end solution provider for content suppliers large and small."

This phase will be ongoing using new technology as they become available to deploy the global village.

Benefits of the alliance

The CMCC association with Digital is achieving the following benefits:

- The establishment of the enabling technology for Global outreach, the vehicle by which the CMCC's knowledge products are created and distributed.

- The CMCC is able to focus its energies and resources on its core competencies and capabilities.

- The CMCC is able to stay ahead of the technological "arms race", benefiting from the state-of-the art technologies.

- The CMCC is able to reduce the time to acquire and implement new technology.

- The CMCC creative process is being enhanced through the thoughtful application of technology. State-of-the-Art technologies are available for review and will be implemented when the CMCC determines that it will enhance its business.

- The CMCC has enhanced controls over the implementation and management of technology in support of both business and museological functions through the use of contracts and management mechanisms.

- The CMCC is able to implement its technology infrastructure based on industry's standards allowing innovations from other vendors. Thus providing an "open" computing environment.,and,

- The CMCC is able to contact other best-in-class partners which have already partnered with Digital such as Stentor, Kodak and Microsoft.

Taking all the above considerations and benefits, one realizes that a strategic alliance between the CMCC and Digital will allow both organization to achieve their visions more quickly than would have otherwise been possible.

It has yet to be proven if the CMCC will gain real revenue opportunities from the distribution of its knowledge products across the Information Technology Utility. It is the CMCC goal to provide electronic membership access to its vast amount of information using the Internet.

A vision for the 21st Century

In June 1993, the Canadian Museum of Civilization Corporation published:

"A vision for the 21st Century, Strategic plan 1993-1998" in which its stated that:

"The Canadian Museum of Civilization Corporation (CMCC) is like the Roman god Janus: it has two faces, one traditional, one innovative. While our collections and our curatorial experts remain the two fundamental strengths of the Corporation, the new facilities of the Canadian Museum of Civilization in Parc Laurier led us to question everything we did, and to rethink how well we were serving the Canadian public. We realized that we were rich in knowledge but should strengthen and diversify our methods of getting that knowledge to people. As a result, our new face is turned outwards, towards our audiences and towards the future.

The CMCC is committed to:

Being a centre of museological excellence by generating and disseminating knowledge about history, the achievements and the cultures of all peoples; and in particular the people of Canada;

Fostering in all Canadians a sense of our common Canadian identity and history;

Promoting intercultural understanding and dialogue;

Sharing and communicating its knowledge to a degree unprecedented in museums;

and

Providing a learning experience that is both educational ad enjoyable. "

Conclusion

The CMCC has undergone tremendous changes during the last three years and as technology continues to evolve so is the Corporation. The foundation upon which the Museum can reach out, absorb, and disseminate its knowledge base has been established. The development of a robust technology platform which will allow application and new technologies to be deployed as they are required is in place. The user community within the Museum has been provided with more computing services and preparation are taking place for more multi-media projects both within and outside the Museum.

In closing keep in mind the following:

"To adapt and survive is not a matter of choice. It requires an ability to analyze the environment of museums, to distinguish significant trends, to assess their likely effect on the future, and to decide how museums can best respond to changing societal needs. Whether they like it or not, museums are products of their environment and their time. They cannot stand outside the inexorable process of change if they wish to remain a meaningful part of the social fabric"[4].

The Canadian Museum of Civilization has changed and will continue to change since the future of technology is boundless.

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4   Dr George F. MacDonald and Stephen Alsford, "A museum for the global village, 1989, p.38.

References

1. MacDonald, George F. & Stephen Alsford, "A museum for the global village", Canada, Canadian Museum of Civilization, 1989.

2. Digital, "The Museum for the Global Village, Enabling Technology Proposal", Ottawa, 1992, p.1-8.

3. Canadian Museum of Civilization, "A vision for the 21st century", Strategic Plan 1993-1998, Hull, 1993.