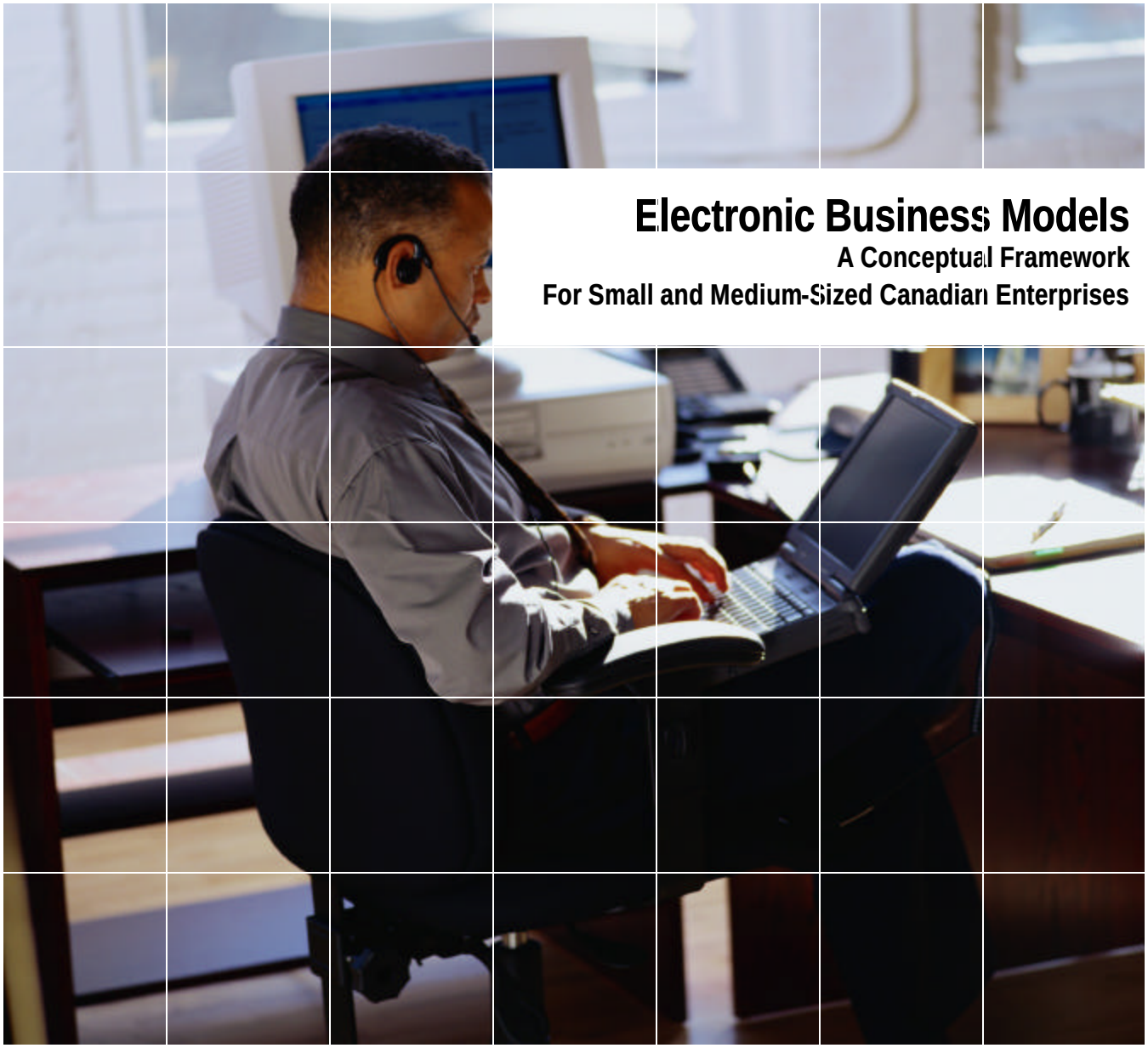

Electronic Business Models

A Conceptual Framework
For Small and Medium-Sized Canadian Enterprises

Intitiated by:

cefrio
Your Link to the Future

In collaboration with:

NATIONAL BANK

TELUS

CANARIE

Industry Canada / Industrie Canada

Canadian Heritage / Patrimoine canadien

CEFRIO

is a networking centre with over 140 university, industry and government members whose mission it is to help improve organizational performance through the application of information and communications technology(ICT). With offices in Quebec City and Montreal, CEFRIO works with partners conducting research and strategic monitoring activities that affect Quebec's economic sectors as a whole.

This document is part of the project entitled "New Electronic Business (E-business) Models and Small and Medium-Sized Enterprise (SME) Development", a CEFRIO initiative conducted in partnership with the National Bank of Canada, CANARIE, Industry Canada, Canadian Heritage and TELUS Québec. CEFRIO wishes to underscore the assistance provided by these organizations throughout the execution of this project.

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CEFRIO

CEFRIO was founded in 1987 as a networking centre. Its mission is to help improve organizational performance through the application of ICT.

Its main function, "action research", is based on three key approaches:
1) promote the application of relevant research results at the organizational level;
2) transfer the most useful strategic knowledge and know-how; and
3) share information tied to its field of expertise.

CEFRIO focusses on three areas of expertise:
1) corporate competitiveness through information technology;
2) transformation of public services through information technology; and
3) knowledge management.

This document is the result of a research project entitled **"*New E-business Models and SME Development*"** .

E-business is a source of new business opportunities for SMEs in Quebec and Canada. In order to speed up conversion to e-business, CEFRIO and its partners are carrying out a project designed to facilitate decision-making for corporate leaders. The various business models are laid out, taking into account business processes, sectoral characteristics, technological solutions, etc.

This ***Conceptual Framework Designed for Canadian SMEs*** is intended to shed some light on the various e-business models, and is the result of work performed by the project's research team.

Moreover, CEFRIO wishes to express special thanks to the authors of this document.

CEFRIO would also like to thank the National Bank of Canada, CANARIE, Industry Canada, Canadian Heritage and TELUS Québec for their support and involvement in the execution of this project.

This document is the result of a partnership between several collaborators. However, the opinions expressed herein reflect the position of the authors.

Pleasant reading!

Josée Beaudoin
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Preface

Following the spectacular drop in the Nasdaq Index in February 2000, the term e-business model (EBM) became increasingly popular and somewhat banalized the concept to the point where it is becoming difficult to build consensus around a common definition.

Nonetheless, developing an original and balanced EBM that meets the needs of the company and its business partners is an essential step in the development of e-business among Canadian SMEs. Going into e-business without an EBM is like going into business without an e-business plan. But what is an EBM ?

For information technology specialists, an EBM often boils down to technological solutions like a Web site, a portal or an e-business place. For visionaries and other strategy experts, the EBM becomes a reflection of the strategy to be implemented as a means of conducting e-business. For managers with financially-oriented training, it generally turns out to be the business plan for an e-commerce project. An EBM is actually much more complex since it combines and integrates all of these dimensions. In fact, *an EBM matches the Web or EDI-based technological solutions implemented as a means of supporting the company's e-business strategy and value chain activities, including its business partner relations, with a view to creating value for the company and its clients.*

Not only does a company have to select the products and services sold on the Web, the markets to be courted, it also has to determine the nature of the Internet-based relations it has with its business partners, choose a level of e-business integration for its operations, identify technological solutions and select the deployment strategy that is best suited, while at the same time hooking up with the right business partners and ensuring the viability of its e-business project.

This task is a complex and sometimes perilous one. However, the prize is worth the risk and Canadian SMEs must pursue this process to integrate their e-business operations. The **objective** of this document is to demonstrate how companies, using EBMs that are often very different, can successfully position themselves in the e-business field. Consequently, *it is intended for all Canadian SMEs seeking to ensure their growth and competitiveness through e-business*.

Executive summary

Based on the concepts of innovation and strategic scope, this document identifies four categories of firms that set themselves apart through their e-business model, namely, balanced, diversified, bold and ambitious businesses. Balanced businesses essentially use e-business to consolidate their core competencies. Diversified businesses seek to use e-business as a means of increasing their strategic scope in terms of product line, territory and client base. Bold businesses rely on innovation and their technical expertise to develop new ways of doing business on the Internet. Finally, ambitious businesses seek to dominate their market by imposing an incontrovertible technological standard.

Despite the differences that may exist between these four categories of businesses, it is possible, for each category, to identify the companies that have achieved outstanding success. This document highlights six examples of businesses spread among the different categories and operating in various industry sectors, in order to demonstrate that there is no better or worse category, and that there simply are different ways, all equally valid, of going into e-business.

No matter what category fits your business, a well designed and adequately deployed e-business model can offer potential that is extremely interesting in terms of creating value for both your company and its business partners.

Introduction

Since the mid 1990s, industrialized countries have been scrambling like never before in an effort to convert to e-business. The havoc wreaked on high tech market shares over the course of 2000-2001, and the dismal failure of numerous *dot-com* companies reported by the economic media underscored the financial and strategic hazards associated with technological conversion.

Although many companies failed in their e-business ventures, several were successful and deserve recognition. Furthermore, in today's "New Economy", it is increasingly important to identify successful business models that can be a source of inspiration, especially in industrial sectors that are sensitive to the effects of new information and communications technologies on business practices.

Against such a background, CEFRIO has undertaken a major research project focusing on successful e-business models.

At this stage in our research, we deem it useful to present a conceptual framework making it possible to identify the various types of e-business models. This framework establishes a link between the company's strategic e-business orientations, and the selected technological solutions. To demonstrate how the businesses are positioned within each of the four categories, we describe six cases of companies that have distinguished themselves through their e-business models. These cases are drawn from the plastics processing, printing, publishing and tourism industries.

What is an e-business model ?

An e-business model (EBM) is designed to make the company's e-business strategy operational by deploying technological solutions[1] through which value is created for a company and its business partners. An EBM differs from the e-business strategy just like a traditional business model differs from the conventional business strategy. For Simon (2000), *the business strategy focuses on how to compete in product (or service) markets.* The business strategy determines the means that allow the firm to create value for its clients and set itself apart from its competitors. Based on this logic, we can state that an ***e-business strategy*** determines the means by which an organization can create value for its clients and distinguish itself from its competitors thanks to the deployment of technological solutions. An **e-business model (EBM)** is the cornerstone of an e-business strategy. More specifically, an EBM fits in with Web or EDI-based technological solutions implemented as a means of supporting the e-business strategy and the company's value chain operations, including its relations with its business partners, in an effort to create value for the company and its clients.

As a result, an EBM involves making choices regarding the type and level of integration activities within the firm, the quality and format of the client interface, as well as, the compagny's position in its business network (suppliers, partners, sectoral associations, etc.) and its positioning within the industry value chain.

Strategic dimensions and classification of e-business models

Over the past few years, the Internet revolution has led to the development of EBMs that have been perceived either as drastic alternatives, or solutions for adjusting to as business models.

Companies with a revolutionary EBM were created either totally from scratch, or they had to "reinvent" themselves by adopting a new entrepreneurial identity and abolishing its former one. Without a doubt, these companies develop technological solutions that are innovative and create value. Their strategic intentions are to either market new technological solutions and engage in aggressive growth at a higher-than-average pace for their industry sector, and/or to dominate the market or one of its segments by imposing a technological or commercial standard.

On the other hand, "traditional" ("bricks and mortar") companies that convert to e-business have a business model that might be described as "mixed" or "adapted" ("click and mortar"). In other words, these companies have either adapted their traditional business model by integrating e-business applications, or they have created an independent e-business unit that still fulfills the same functions in the same

[1] For a description of the main technological solutions, refer to Appendix 1.

market segment occupied by their traditional business unit.

The development of an EBM and its "implementation" through a technological solution are also determined by the company's ***strategic scope***. This strategic scope refers to the company's potential (occupation, know-how, available resources, leadership, product strength, etc.) and growth prospects in a given market. In fact, this scope will ***narrow*** if the company decides to limit its activities to a single product or market segment. It will ***expand*** if the company, relying on e-business, pursues a strategy focusing on market diversification and distribution and/or procurement control, or if the company imposes a technological standard. Strategic scope is therefore largely determined by the prospects for growth and the company's capacity to commit to a market control and diversification strategy.

Thus, in order to characterize an EBM, it is essential to consider the company's strategic scope and the innovative or non-innovative nature of its business practices. Considering these two aspects then allows you to identify four groups of businesses with which basic skills, strategic aims and special technological solutions (Diagram 1) may be associated.

In this case, we are using metaphors we believe are appropriate for illustrating the nature of the companies' strategic "behaviours" or *idiosyncrasies*. Each quadrant has a corresponding perspective for which certain hypotheses or premises are offered. Diagram 2 features technological solutions generally associated with each perspective.

Balanced businesses

This first quadrant is made up of so-called balanced businesses. These are traditional firms whose conversion to e-business is carried out cautiously. The businesses in this group feature business models that rely on a specialization or a limited diversification by capitalizing on the company's skills and core business (entrepreneurial niche or productive function in its sector) to deal with e-business competition. Such is the case, for example, for discounters like Dell or Schwab whose e-business practices do not conflict with the traditional business model as long as the company's core business remains the same.

Furthermore, balanced businesses view e-business as an economic lever enabling them to strengthen their strategic position. These businesses focus on control, integration and visibility. In terms of performance, they seek to maintain or increase comfortable gross profit margins as well as maintain or increase the perceived value of products and services while improving efficiency and effectiveness of the business processes. In this type of context, they have a tendency to favour the following technological solutions: management information systems, promotional or transactional Web sites and navigation tools for product and service searching.

DIAGRAM 1 – Classification of e-business models

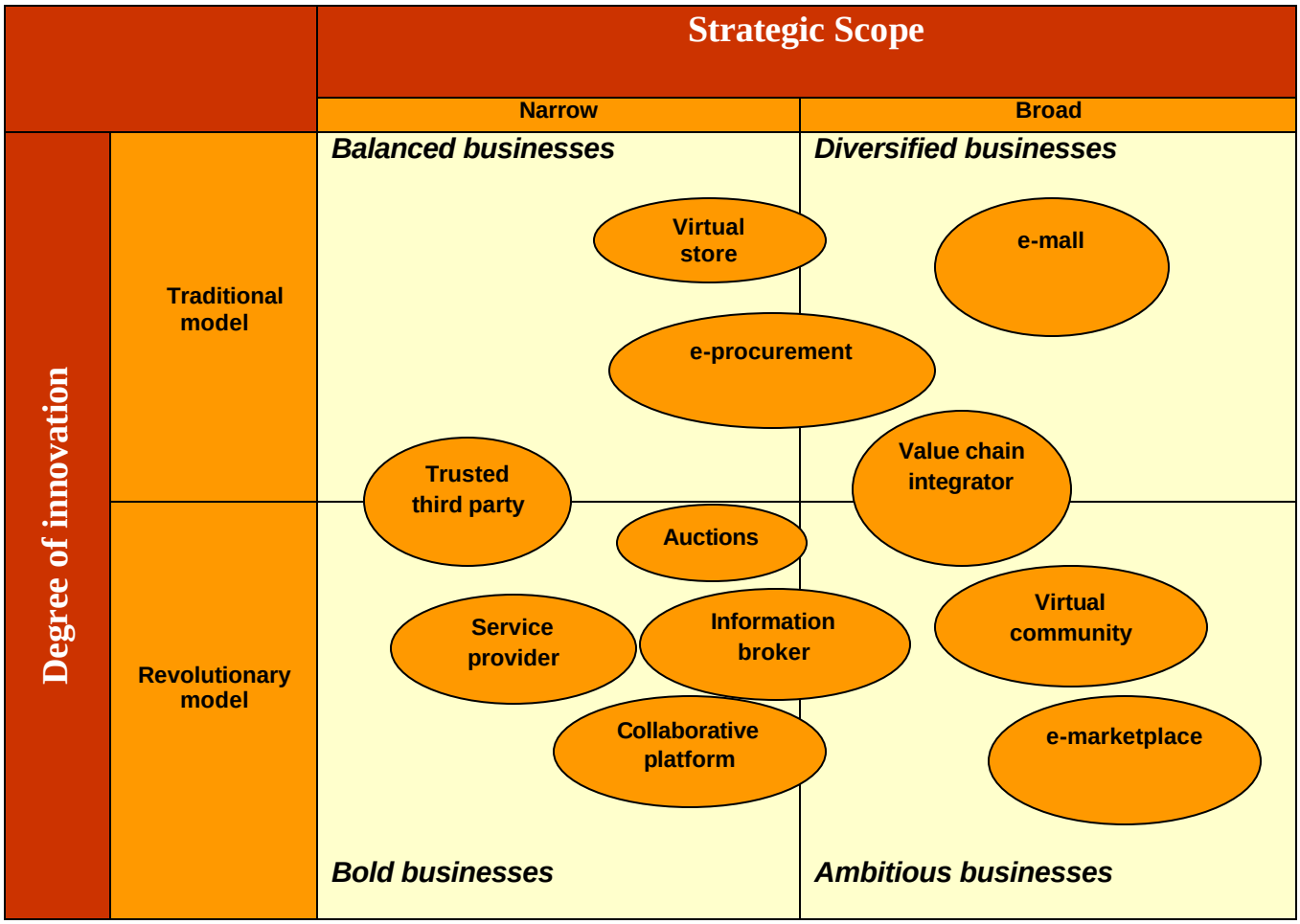
		Strategic Scope	
		Narrow	**Broad**
Degree of innovation	**Traditional model**	***Balanced businesses*** **Basic skills:** Control, integration and visibility **Strategic aim:** Strengthen the firm's basic skills by focusing its operations on a single market product **Technological solutions:** Management information systems, promotional or transactional *Web* site, navigation tools for product and service research, cyberstore	***Diversified businesses*** **Basic skills:** Control of distribution and procurement **Strategic aim:** Take advantage of market growth opportunities through diversification and control of distribution and procurement **Technological solutions:** Development of virtual shopping centres, integration of the value chain through privileged partnerships
	Revolutionary model	***Bold businesses*** **Basic skills:** Technological expertise and specialization **Strategic aim:** Develop new and innovative algorithms and maintain a rate of growth greater than the market's **Technological solutions:** Collaborative portals, auctions, sophisticated search engines	***Ambitious businesses*** **Basic skills:** Partnership and market share management **Strategic aim:** Dominate the market or a segment by imposing a technological and commercial standard **Technological solutions:** Horizontal and vertical e-marketplaces, and virtual communities

It should be pointed out however that balanced businesses have trouble shielding themselves against the hazards associated with radical technological changes that are likely to challenge their strategic skills. Technological investments not directly linked to their core business are accompanied by high risks, especially when these businesses have not mastered the technical aspects of the technology. The returns generated by these investments then prove to be insufficient, or even negative. Decisions regarding the e-business technologies may even become suicidal for this type of company.

Diversified businesses

This group features companies for which e-business conversion focuses on external positioning as measured by operational diversification and growth. We view the EBMs of such companies as being especially useful in sectors where markets are already structured. Indeed, the developed models take into account existing rules of competition and growth potential, thus promoting diversification of the companies' operations. Moreover, similar rules of competition, applying to both e-business and traditional markets, facilitate the management of diversified businesses.

DIAGRAM 2 – Technological solutions and classification of e-business models



Note: Appendix 1 presents definitions associated with each type of technological solution.

Companies in this group are not as well prepared to function in emerging markets where the playing rules are just taking shape. Such is the case for numerous emerging e-business industry sectors whose business models are still in the experimental stage. Furthermore, e-business diversification can cause these companies to suffer significant conflicts in terms of trade, distribution and procurement which are requiring management skills. Successful diversified businesses however are able to seize opportunities for growth and diversification. They tend to focus on distribution and procurement control. More specifically, they strive to diversify by penetrating promising e-markets, by pursuing vertical integration (suppliers and distributors) electronically, by developing horizontal diversification through increased company profitability and average rate of return, based on sales growth and economies of scale. These businesses choose technological solutions that rely on cyberstores or e-malls, or promote integration of the value chain through privileged partnerships.

Bold businesses

Businesses deemed bold adopt an EBM that is innovative but always focused on their basic strategic skills. Although they tend to pursue aggressive growth that is greater than the market's, their strategic scope is reduced.

Bold businesses opt for experimental and innovative EBMs whose sustainability has not yet been proven. The 'mortality' rate of *dot-com* companies is proof of this. Such emerging *bold businesses* are often "start-ups" that have come to symbolize the

"New Economy". By their very nature, the EBMs of these companies are innovative. They do not depend on widespread business practices, as would traditional companies operating in a stable market environment. The technological solutions of such companies count heavily on the Web and rely relatively little on the company's traditional activities (if any).

These companies generally deploy complex technological solutions like collaborative portals, cyber auctions and sophisticated search engines.

Ambitious businesses

The fourth group is made up of businesses whose EBM, in addition to being innovative, also focuses on the diversification and growth of company activities.

The strategic aim lying behind the operationalization of the EBMs for this group of companies is to dominate the market or a segment thereof by imposing a technological standard or by systematically controlling an electronic channel. For companies whose strategy is based on these business models, cornering the market with high switching costs, e.g. the setting up of technological standards, is a fundamental manœuvre. To achieve this, ambitious businesses attempt to structure the market using portals (e-marketplaces). Newcomers to an activity sector create independent, neutral portals while the already well-established players share marketplaces, often by teaming up with their competitors. At any rate, ambitious businesses generally invest heavily in their technological infrastructures.

In fact, the implementation of such business models calls for the establishment of technological standards that require major investments whose payback periods are often longer than expected and whose upfront costs are substantial. For example, AOL's disappointing results show that the implementation of such a business model demands significant investments and also causes market penetration to be slower than the speed at which businesses relying on their strategic skills can achieve.

Because ambitious companies seek above all to structure and control a network of external cyberalliances, business volume becomes an especially important measurement for them. They are often willing to tolerate a weak profit margin to achieve a large business volume and to implement a price discrimination policy. And so, ambitious businesses must closely monitor the evolution of their market share while maximizing their sunk costs in the short term. In order to do so, they have to maximize use of the technological and commercial standard they are offering.

In this type of context, ambitious businesses prefer technological solutions like horizontal and vertical e-marketplaces, as well as virtual communities.

Six examples of successful business practices

More and more companies with configurations as varied as they are complex offer their clients, suppliers and partners technological solutions that never cease to be original and user-friendly. To illustrate this fact, six examples of businesses that have shown leadership and know-how are outlined below. Diagram 3 positions the six companies according to the analysis framework proposed in this document.

PRINT APPROACH: integration of the value chain

Print Approach is an Australian family business that specializes in commercial printing. In 2001, thirty years after being founded, the company decided to convert to e-business by focusing on the market potential within its commercial niche and banking on its skills.

Aimed at developing its core competencies, its e-business strategy revolves around its partnership with Business Print Australia, a broker specializing in the outsourcing and management of printing jobs, thus providing them with greater strategic scope. This is a **balanced business** seeking to provide online access to a range of services like graphic design, preprinting, printing, finishing, storage and delivery. The two companies are linked together by a *virtual private network*, which enables them to share information in real-time. In fact, customers dealing with Business Print Australia have access to the viewing and editing options for the work requested. All modifications are thus automatically sent to Print Approach prior to final production.

For the company's suppliers and clients, implementation of the EBM has the distinctive advantage of facilitating functional integration at the supply chain level in addition to providing greater visibility of the order filling process. This integration calls for strategic sharing of information in order to promote synchronized planning and improved task

coordination between the business partners.
Furthermore, use of the portal makes it possible to speed up the processing of work estimate requests (quotations) and orders online, as well as the routing of information within the network.
Financially speaking, in 2001, the implementation of technological solutions required investments bordering on 135,000 dollars (Australian) and generated close to 500,000 dollars in net revenues while the operating revenue exceeded 183,000 dollars.

According to the company, aside from the 35,000 dollars worth of assistance received from the Australian government, a significant portion of its earnings is due to the improved performance of its employees in terms of time saved and administrative errors avoided. By reorganizing work, the company has been able to reassign staff members to more profitable operations. Thus, duties that had traditionally been programmed in response to customer demands were converted into revenue-generating activities such as after-sales service and new client prospecting.

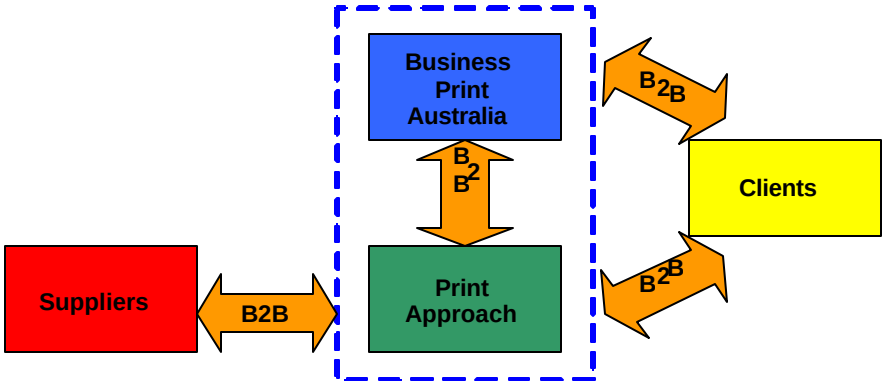
Down the line, the company plans to expand its strategic position by occupying the internal market of the Australian government's various departments and ministries. In order to do so, it plans to offer technological solutions that would expand its response capability by means of a Web connection giving public service employees access to Print Approach's service interface via their work station.

DIAGRAM 3 – Examples of e-business models

		Strategic Scope	
		Narrow	**Broad**
Degree of innovation	**Traditional model**	***Balanced businesses*** **PRINT APPROACH** www.printapproach.com.au Promotional and transactional Web site for the printing sector **COOPSCO** www.coopsco.com Web site / Promotional and transactional portal for the publishing sector	***Diversified businesses*** **CONCIERGE.COM** (Condé Nast) www.concierge.com Virtual shopping centre for the tourism sector
	Revolutionary model	***Bold businesses*** **WEBCOLLAGE** www.webcollage.com Content syndication and Web services application technology for the publishing sector	***Ambitious businesses*** **POLYSORT** www.polysort.com Market intermediary/portal for the plastics processing industry **OMNEXUS** www.omnexus.com Value chain integrator for the plastics processing industry

In short, Print Approach is a company that managed to set up an e-business model that is profitable not only in terms of consolidating its position among its clients and business partners, but also from a financial standpoint. Finally, based on the descriptive framework presented above, Print Approach's EBM resembles that of balanced businesses that have successfully handled their "e-conversion" and whose technological expertise is growing. In fact, the strategic value of this expertise will be pivotal for future strategic directions and decisions regarding the deployment of technological solutions. Diagram 4 highlights the special business links that exist between Print Approach and its partners.

DIAGRAM 4 – Business links between Print Approach and its partners



COOPSCO: network consolidation

Founded in 1944, Coopsco is the commercial banner for the *Fédération des coopératives québécoises en milieu scolaire* (FCQMS) made up of about sixty cooperatives in 78 high-school, college and university educational institutions; it reaches a potential customer base composed of nearly 300,000 students. In accordance with its mission stemming from the governance principles of cooperative groups, Coopsco offers a range of services including management support, cooperative education, information, insurance, group purchasing and trade agreements. Furthermore, as a strategic element in the cooperative structure, Coopsco has negotiated trade agreements with suppliers that entitle member cooperatives to attractive discounts and commercial terms.

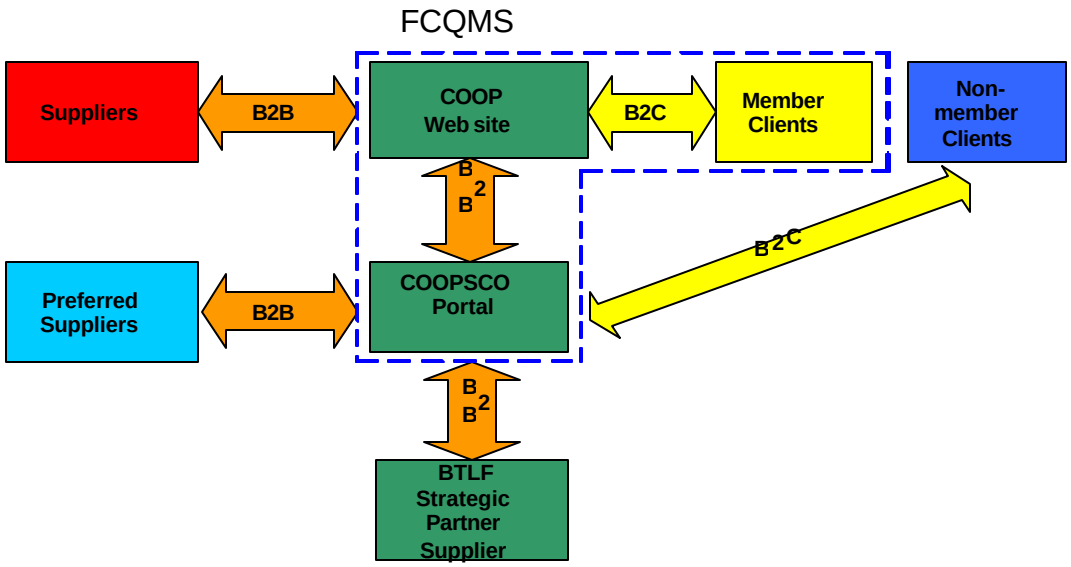
On an e-business level, students, teachers and the general public may use the Coopsco portal and purchase from the Web sites of the cooperatives listed as members. Member cooperatives for their part can use their intranet access privileges and submit various information requests to firms like *Banque de titres de langue française* (BTLF). BTLF is a management company that provides members and Internet subscribers with access to more than 85% of the French-language books distributed in Canada, as well as over 600 referenced additions every week. BTLF enables bookstores (and libraries) to inquire about and download bibliographical and commercial information, in addition to providing access to useful directories within the database and hyperlinks to other Web sites. This service constitutes a highly practical tool for a bookstore or a library that, up until now, had to check "manually" with each of its suppliers in order to identify the titles and order them, which consumed a great deal of time and resources. The savings in terms of time and resources can be measured in thousands of dollars a year for a single school-environment cooperative whose main function, needless

to say, is selling books. With the help of the link granting access to the BTLF's data bank, Coopsco greatly simplifies the management process of its title database and its cooperative members can then focus on their core competencies. This **balanced business** model is a practical example of the operational edge that a technological solution offers.

Depending on the proposed analysis framework, Coopsco has limited strategic scope in a traditional cooperative structure where each member cooperative enjoys its own autonomy. In this context, Coopsco remains an essential and strategic entity for its members and, thanks to the deployment of technological networking solutions, this entity acts as a lever enabling the cooperatives to build up their skills in their main business niches.

On a competitive level, Coopsco operates in a market that is already structured, but thanks to e-business, it can more fully penetrate its market by controlling distribution and procurement. Its e-business projects will probably pave the way for fuller integration of the network's value chain while broadening the e-business chain thanks to strategic partnerships like the one with BTLF. Diagram 5 illustrates the Coopsco e-business network.

Diagram 5 – Business links between Coopsco and its partners



FCQMS: *Fédération des coopératives en milieu scolaire*

CONCIERGE.COM: the value of complementarity

Concierge.com is a prime example of an e-business concept founded directly on the niche of a classic "bricks and mortar" company whose core competencies are recognized. Launched in August 1999, Concierge.com opted to migrate towards a **diversified business** model by developing a formula along the lines of a "virtual travel mall" focusing on information about travel/tourism products and services, and doing so by teaming up with Condé Nast Traveler, a division of Condé Nast. The latter is a publishing pioneer in the United States and is now owned by Advance Publications Inc., the second largest publishing group in the U.S. after AOL -Time Warner.

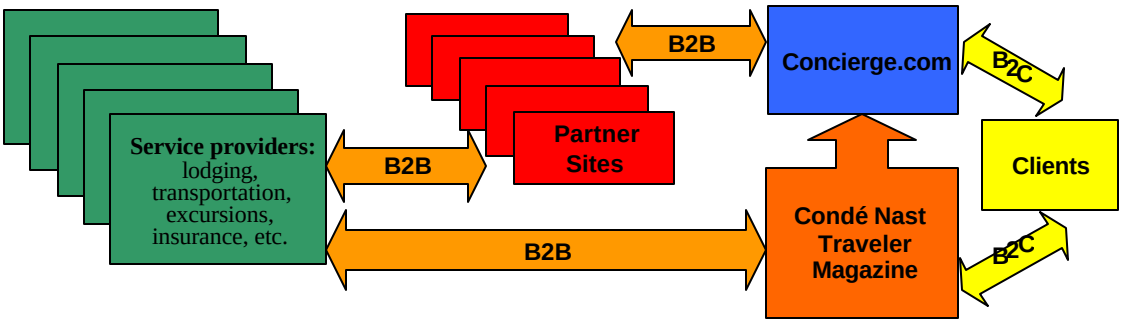
Concierge.com is the online resource for sophisticated travellers wishing to plan and prepare a trip. Its site features the informational content of certain Condé Nast publications including the Condé Nast Traveler Gold List, Spa Poll, Hot List, Ski Poll, as well as travel guides like its Insider Guides. Also available are references and expert information (text and image documents) offering a look at

more than 15,000 food, lodging and entertainment sites. Internet users can access the site via Travelog, a virtual community where people can share their travel experiences with others, read, publish and circulate their travelogs and personalized photo albums. The site will soon feature online purchasing, with a brand new range of services for business travellers.

Thanks to its partnerships with WCities, Orbitz, ICruise, eBags, AutoEurope etc.,Concierge.com provides online access to all kinds of information that might be useful to travellers and allows them to reserve a variety of services among hundreds of destinations throughout the world. Furthermore, Concierge.com advertises special fares and discounts on certain trips, publishes news and information bulletins, and supplies visitors with currency calculators, weather reports, interactive maps, etc. Finally, Concierge.com conducts surveys among experts who are familiar with the preferences and interests of travellers, which makes this site a user-friendly information tool and marketing instrument.

Customer interest in such a site is due to the fact that it considerably reduces the research time involved in preparing a trip. Furthermore, Concierge.com includes the content of its special-interest publications on the Web, and it does so in a dynamic and transactional framework. From Condé Nast's point of view, Concierge.com is a marketing tool complementing its other traditional products (publications), thus permitting retention of its customers who are already loyal to its publications. It therefore serves as a useful link in the continuity chain between the act of reading the travel magazine (Condé Nast Traveler) and the actual "consumption" of the trip. From the point of view of the tourism sector's partners and players, with the possible exception of travel agencies, it offers a prime marketing showcase given its strategic scope. Thanks to Concierge.com, Condé Nast stands halfway between the **traditional business** and the **diversified business** but the shift toward greater diversification remains conservative, possibly in keeping with its tardy penetration of the Web universe. Diagram 6 illustrates the business links within Concierge.com at the information exchange level.

DIAGRAM 6 – Business links between Concierge.com and its partners



WEBCOLLAGE: boldness and innovation

WebCollage is an innovative U.S. company in the publishing sector. In 2000, with about forty employees, WebCollage began developing a series of products based on interactive Web services technology. This technology allows businesses to mix and match complete interactive business processes by sharing them with partners. Relying on its feature product *Syndicator*, the company targets three customer types: (1) companies that have Web applications and make them available through their business partners, (2) companies that host Web services applications and incorporate them in their Web sites (example: corporate portals) and (3) other corporate or non-corporate clients who interact with Web services providers.

This technological solution is distinctive because it makes it possible to share information

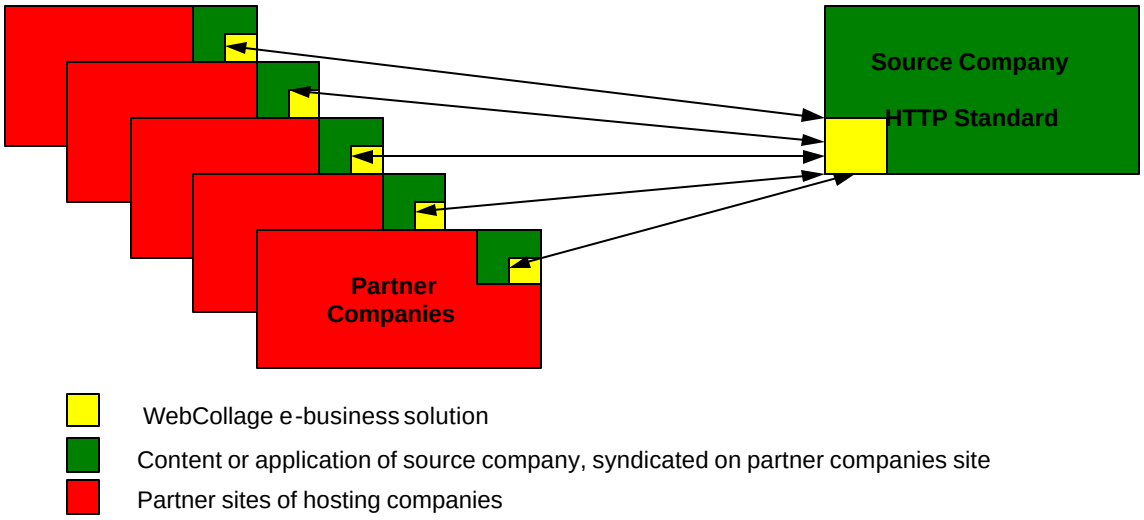
and execute various applications on a business partner's Web site/portal. This Internet-based *content syndication* tool is especially useful for a company seeking to establish contact with a target audience or a group of customers in a context typical of the site where the message or program is displayed. Practically speaking, content syndication means that the digital informational content comes from outside sources, and is ready to be incorporated in a Web site that is common to different sites following distribution through a network of subscribers. With this technology, content and dynamic interactive applications can be integrated wherever they are displayed from a central point, which makes it possible to perform monitoring and updating in real-time, right from the source. The advantage lies in the fact that the company generating the syndicated content thus maintains control over its brand image.

The value of this technology becomes fully evident in a context where electronic exchanges are increasingly interactive and network-based. In fact, WebCollage's technological solutions revolutionize business practices in a great many sectors where dynamic information and interactivity promise comparative advantages, and therefore added values.

Though the concept of content syndication is not revolutionary in itself, technological solutions developed in an Internet environment by this firm constitute significant innovations that are bound to play an increasing e-business role in sectors like publishing.

Although the company has a narrow strategic scope in terms of product, it occupies a leadership position in its market niche by relying on solid strategic and operational competencies, and by maintaining partnerships with the sector's major players. WebCollage is an example of an innovative business offering a collaborative platform concept. It may be classified in the **bold businesses** category**.** Its product is based on new performance algorithms. Diagram 7 illustrates the link that binds publishing companies, including WebCollage, via the content syndication service.

DIAGRAM 7 – Business links between WebCollage and its partners



POLYSORT: the advantage of intermediation

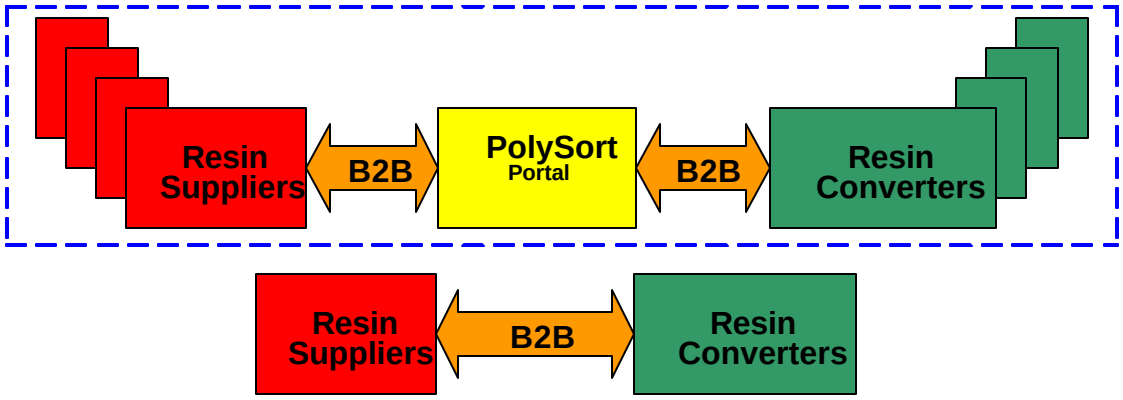
Founded in 1995, Polysort is a private purchasing group for plastic resin converters, with facilities in an area occupying eight States in the Central and Northwestern part of the United States. Run by a group of about ten people, this company is viewed as a benchmark in the United States, given its status as an independent intermediary providing online purchasing solutions for resin converters. This intermediation service is particularly useful, especially for small and medium-sized converters, since their combined demand enables them to negotiate favourable prices with resin suppliers. The

company also provides other services including the opportunity to participate in closed auctions, discussion groups, marketing support programs, in addition to supplying industry-related information, not to mention access to online research tools. More than an information portal with 3,000 registered members and 35,000 “hits” per month, this site serves as a preferred, effective and efficient transaction intermediary.

As an e-marketplace, Polysort draws upon the functionalities of its "horizontal portal" capable of providing innovative, neutral, personalized and secure business solutions with short turnaround times. Polysort’s e-business model is typical of **ambitious businesses** as presented in the descriptive framework of Diagram 1, and for which the issues associated with control of the business network and growth of the business volume are important. In fact, Polysort plans to eventually expand its activities to other U.S. States, and even diversify its product line and related services.
By marking this industrial sector with its success, Polysort will likely be in a position to expand its strategic scope, with an opportunity to broaden its customer base (more suppliers and converters) and service range (more comprehensive and complex technological solutions). Diagram 8 illustrates the special business links that exist between entities.

DIAGRAM 8 – Business links between PolySort and its partners

Technological solution determined from the demand standpoint



Traditional-type of technological solution

OMNEXUS: diversification of business solutions

Omnexus was founded in 2000 by several major players in the plastics processing sector (including Bayer, Dow, BASF and Ticona) in order to facilitate the buying and selling of resins from 20 major suppliers, and act as a prime source of industry information. Omnexus deploys three types of technological solutions. The first involves providing a multifunctional electronic gateway, to facilitate contact between suppliers of resin (and other ancillary products) and buyers. To do so, it operates a

platform ("*Omnexus Global Transaction Platform*") directly linked to the suppliers, thus creating an interface that allows customers to select and place orders for the products they want. Next, it provides its clients with several technological solutions that can connect buyers with suppliers, through a secure Web link, using specialized applications enabling them to process product orders, invoicing, payment and delivery in record time. This B2B approach gives the buyer computer access to its supplier’s management and information system, thus eliminating "manual" intermediation and rendering the procurement process more efficient and effective.

Finally, from its intermediary position, the company also provides e-marketing solutions that facilitate research and information sharing (industry news, online directories, product and corporate information, research utilities,

etc.) in an effort to promote business opportunities. With over 22,000 professional members worldwide, the Omnexus portal is a powerful marketing tool featuring global market breadth, as evidenced by the 250,000 yearly “hits” on the company’s Web site.
This company operates in a sector where the market is stable and characterized by a majority of "traditional" businesses, i.e. focusing on a single product/market. Although it services mainly "balanced" businesses, it is, according to our classification, an **ambitious business**. In fact, because of its EBM, it plays a growing role in the procurement chain by diversifying into the development of technological solutions involving transactional support and e-marketing. Its EBM is developed from a provider’s standpoint rather than a buyer’s standpoint (refer to previously documented Polysort profile). In any event, the Omnexus EBM expands the possibilities of the e-business chain while having an impact on the consolidation of business ties “*lock in*”. Diagram 9 illustrates the special business links that exist between the entities, based on the technological solutions provided by Omnexus.

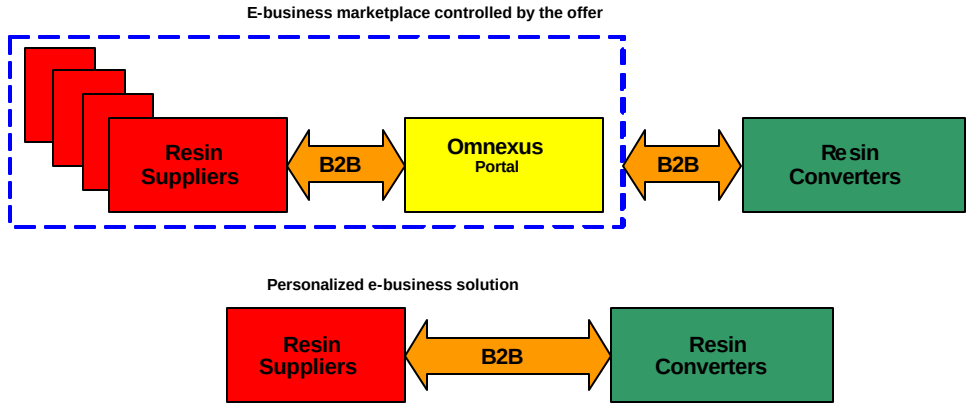
Prospects for the future

The descriptive framework presented in this document makes it possible for users to consider the various e-business opportunities within an industry sector. Therefore, it allows decision-makers to position themselves in relation to various options, thus making it a useful reference for qualifying potential strategic decisions.

Our classification of e-business models remains an illustrative one, and will not cause a company to be stigmatised in a group, since an EBM’s strategic scope may well cover more than one dimension. Moreover, there is always a chance that a company will change its strategic direction or do an about-face, especially if it ventures into "unknown" and uncertain territory. Nonetheless, this framework provides a look at the phenomena specific to the reality of e-business. For example, it is clear that the more companies diversify and deploy advanced technological solutions, the greater the tendency towards vertical or horizontal integration.

The examples given show that each perspective has its share of interesting e-business opportunities. Technological solutions mainly play an informational and promotional role, but the future lies in Web applications that facilitate transactions and business network integration. Regardless of the technology’s perfectible nature, when it comes to e-business, companies who manage to align their e-business models with their e-business strategies using the appropriate technologies will have a better chance of surviving. This alignment is just as important with the business partners who belong to the e-business network (*stakeholders*). Finally, both technology and strategic consistency are key elements in a successful e-business operation. However, it might be useful to bear in mind that companies venturing into e-business will succeed only if they meet their customer’s actual needs instead of merely imposing technological solutions.

DIAGRAM 9 – Business links between Omnexus and its partners



Conclusion

This document focuses on e-business practices and their strategic value. It is designed for all managers of Canadian SMEs who seek to gain a better understanding of e-business model structures and who want to take a glimpse at their potential for value creation.

After introducing the e-business model (EBM) concept, we presented a descriptive framework of the various strategic dimensions, which enabled us to propose a classification for companies that use e-business.

To illustrate the relevance of the proposed conceptual framework, we described six actual cases of companies whose e-business model corresponds to one of the strategic dimensions presented.

Our analysis was also designed to demonstrate that viable e-business models have strategic value, as well as an integrating effect on both the company's value chain and its business partner network.

Although there are other original and interesting e-business initiatives not described in this document, several opportunities remain to be explored. It is therefore important for SME managers to think about ways of using e-business to create value for their company and their business partners.

We believe that the successful companies will be those with an EBM featuring advanced and flexible transactional functionalities, adapted to the needs of users and clients, as well as those of business partners. This projection remains an intuitive one, and we therefore believe that the value of our analysis is having formulated an original framework to define the various e-business models and having expressed a reality that raises as much interest as it does generate gaps in understanding.

Glossary

Business-to-customer e-commerce (B2C): Transactions conducted via Internet between businesses and consumers.

Business-to-business e-commerce (B2B): Inter-company transactions conducted via Internet.

E-business model (EBM): corresponds to the EDI or Web-type technological solutions implemented in support of the company's e-business strategy and value chain activities, including its relations with its business partners in an effort to create value for the company and its clients.

Portal : Site designed to support online exchanges or commercial transactions between manufacturers,

suppliers and customers, to develop intercompany e-commerce and Internet-based procurement, and to promote collaboration between the various business partners.

Virtual private network: Private communication network allowing partners to exchange business documents electronically. EDI (Electronic Data Interchange) is the method frequently used by these value-added networks or VANs.

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Online resources

Centre francophone en informatisation des organisations (CEFRIO)
The standard for information technology appropriation.
http://www.cefrio.qc.ca/english/indexAccueil.cfm
Visit PMEQuébeclic, Quebec's e-business portal.
http://www.pmequebeclic.com

Ebiz.facile : Research and statistics
Canada's e-business portal. This site contains the information you need to support the e-business decision-making process.
http://strategis.qc.ca/ebizenable

SourceCAN
Unique business portal providing companies with the opportunities and tools they need to do business on the WEB.
http://sourcecan.ca

Canadian e-Business Initiative (CeBI)
A voluntary private sector-led partnership that aims to further Canada's e-business success
http://www.cebi.ca/

STRATEGIS : Canada's business and consumer site
STRATEGIS Guides: Using electronic commerce
http://strategis.ic.gc.ca/sc_x/engdoc/using_ecom.html

Partners

Appendix 1: Main technological solutions

Technological solutions	Features	Company examples
E-shop	Information, sale and distribution of the company's products and services (also operates in traditional markets)	Archambault, Renaud Bray
E-procurement	A site through which sellers can sell to major accounts	Jal, Air Canada, Jobboom, Commerce électronique Banque nationale (www.ecombnc.ca)
E-auctions	E-auction site	Fastparts.com, E-Bay
E-mall	Several sellers under a single site	Desjardins (ruedesachats.com)
3rd Party Marketplace	Transactional support for sellers	Fedex E-commerce builder
Virtual communities	Promotes communication between members of a single community	Amazon, Notarius, community.web
Value Chain Service Provider	Support for the value chain (logistics, payments)	Banks, FedEx, Canada Post
Value Chain Integrator	Create value by integrating the elements of the value chain	Marshall.net, Partners.net, Dell Computer
Collaboration platform	Provides the tools and information supporting collaboration between companies (e.g. collaborative design)	portal.etsi.org, www.nuxeo.com, www.webwisdom.com
Information broker	Gathering and analysis of available information (e.g. consulting services)	Toile du Québec, Sympatico, Yahoo finance, McKinsey & Co., AberdeenGroup, cedrom-sni
Trust service provider	Accredited organization certifying the authenticity of Internet transactions	www.belsign.be, Mirapay

Translated and adapted from : Timmers (1998)