

INTERFACE

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Industry Canada — CIO Newsletter

Behind-the-scenes efforts make Strategis possible

Months of behind-the-scenes work went into creating the technical environment that supports Strategis.

This was a tremendous undertaking, says Grant Westcott, Corporate Information Officer. "I know of no other Web site that combines text, fielded data and conferencing as Strategis does. I am particularly impressed with the way the system dynamically creates reports from relational database files."

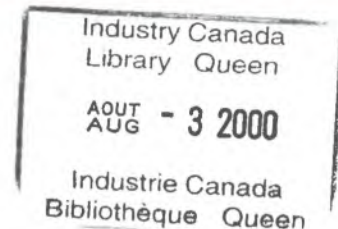


CIO staff played a key role in the development of Strategis. They worked as part of a department-wide team of more than 300 people, including librarians, information technology experts, industry analysts, economists, graphic artists, project managers and lawyers.

The CIO staff were responsible for two interrelated elements that make up the Strategis technical environment, says Jack Drawbridge of the CIO team. One part is the software and hardware that allow information to be put on the World Wide Web or published on CD-ROM or diskette. The other is the publishing and distribution process.



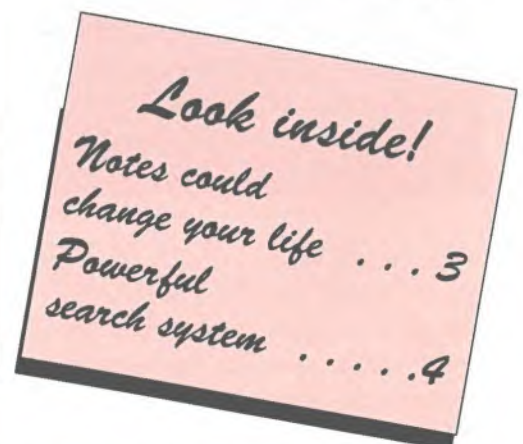
Jack Drawbridge and Bruce Daly are members of the CIO team that worked with staff from across the department to develop Strategis.



The task of assembling the required software and hardware to create Strategis was complicated by a rapidly changing technological environment, says Jack. "We had to set up the infrastructure during a period in which the technology was evolving rapidly. With new products arriving on the market every day, we had to choose a reliable system of servers and software to run a Web site."

The publishing process was based on a rudimentary system using Notes groupware that had been worked out for the INSIGHT information product, says team member Bruce Daly. "Over the past year we had to develop this into a system that the product teams could use to assemble all the information for a product and transfer that information into a form they could see on a Web browser."

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MERA — PROMOTING INDUSTRY CANADA RESEARCH

The MERA (Micro-Economic Research and Analysis) information product gives Industry Canada a chance to expose its research to a wider audience, both in Canada and abroad.

Micro-economic research focuses on how companies behave. "We, ourselves, do and commission a lot of work in this field as part of the department's mandate," explains David Swimmer of the Micro-Economic Policy Analysis Branch. Some examples of recent studies done by the branch include analyses of the knowledge-based economy, Asia-Pacific economic integration and implications, world product mandates, strategic alliances, multinational firms with operations in Canada and corporate decision-making in Canada.

The launch of Strategis is an ideal opportunity to make this research available to a much wider audience than can be reached with traditional publishing. "On line, we estimate that there is a potential audience

of 3.5 million people for this material," he explains. "We could never publish and distribute paper volumes to that many people."

The electronic format also speeds up the publishing process and makes it easier for readers to give feedback. "The instant feedback that will be possible through E-mail is especially exciting to us," says David. "Clients will be able to just click a button and write us a note."

Five different types of information are being put on line through MERA:

MICRO — this newsletter provides information about recent micro-economic research being done at Industry Canada. It provides summaries of recent publications including information on how to obtain them, notices of research projects and upcoming events and short expositions on issues related to Canada's economic performance from a micro-economic perspective.

Research publications — these include synopses of papers in research volumes as well as complete working and discussion papers either commissioned by Industry Canada or done by its staff.

Reports on the business environment — these are comprehensive reports on changing business conditions, primers on institutional frameworks affecting business performance and surveys of business attitudes and perceptions.

Statistical information and strategic analyses — two sets are included, *Monthly Economic Indicators* and the quarterly *Economic Situation*.

Provincial Industry Overviews — these include information on changing patterns and developing trends in each province, and are prepared by Industry Canada's regional offices.

The Micro-Economic Policy Analysis Branch is also considering adding new products. ■

ECONOMIC INFORMATION THAT IS EASY TO ACCESS AND USE

Trade Data On-line is Industry Canada's new easy-to-use trade statistics database. It contains information on every commodity traded between more than 190 countries and Canada and the United States.

The trade data are one of the few economic indicators that are of immediate use to business and government alike.

This new information product puts more than 3.5 million data series not available from any other single source at the fingertips of Strategis users. The import/ export information is drawn from Statistics Canada, Revenue Canada, Industry



Canada and U.S. Department of Commerce sources to produce a comprehensive database.

The facts on what Canada and the United States purchase and sell abroad is

essential to decision-making in both the private and the public sector, says Peter Bruce, Director of Product Operations, Strategic Information Branch. "The timeliness and relevance of trade data make them one of the few economic indicators

Notes could change your life

Notes, formerly known as Lotus Notes, has the potential to completely transform the way departmental employees work, says David Haggerty, who was part of a team that used the software to produce INSIGHT as a pilot project.

This software makes it possible to share information easily without the major drawback of the method most people use now, says David. "With E-mail, it is possible to distribute information widely, but you have to know who wants the information," he explains. "You either run the risk of having people who could benefit from information not knowing about it, or, as everyone in this department is aware, the risk of sending E-mail to people who don't want it."

Notes turns this situation around and puts the onus on the person who wants the information to find it. "You accomplish this by posting the information in a forum or other Notes application that everyone

has access to," says David. "Besides the usual menu structure, Notes contains a search engine to help find information, something Internet users are accustomed to."

Many people will wonder if this will cause information overload, and how they can protect information they don't want to share with everyone. Notes' success is built on solving these problems.

Some of our regional offices have been using Notes to conduct meetings, preparing minutes on line during telephone conferences.

It tackles the overload problem by allowing users to program "views" so they can organize information around their own interests. This is the real promise of Notes, says David. "The next release of Notes (Version 4.0) will make programming

easier than using macros or spreadsheet formulas."

Security is also a strong point of Notes, which provides several access levels to preserve information integrity.

Notes facilitates teamwork by allowing groups to author documents: the software keeps track of revisions and who has seen them. A team spread across the country can work together through Notes, adds David. "Some of our regional offices have been using Notes to conduct meetings, preparing minutes on line during telephone conferences."

The department has purchased the right to use Notes for all employees. A rollout plan has been prepared to distribute it to all desktops, and training programs have been set up, including computer-based training. Interested staff should ask their LAN administrator for more information on how Notes can transform their workplace. ■

that are of immediate use to business and government alike," he explains.

Typically, trade statistics have been difficult to access and even more difficult to understand, says Peter. "But not any more — with Trade Data On-line, we are putting a whole lot of useful information in one easily accessible place and giving our clients powerful and user-friendly search tools to get the facts they want."

The new interface allows users to query the database using familiar terms instead of having to input the code names that are typical of other trade information sources. "For example, people interested in livestock trading can look for information under any number of familiar headings, such as "beef" or "cattle," instead of having to use the standard code name 'bovine.'"

Another exciting aspect of Trade Data On-line is its dynamic graphics system. When a client asks to see information as a graphic, the system creates one using the specific information from their request. Most other Internet sources offer a very limited number of graphs because they have to create and store them ahead of time.

We realize that departmental staff who currently use MIDAS/Tiers will be interested in using this product.

Case studies are being created to demonstrate to clients how they can take advantage of the information in Trade

Data On-line to improve their economic performance and compete for new markets. For example, one case study might show how a broker exporting Canadian goods to a South American country could use Trade Data On-line to determine what other Canadian products are sold in that country. The broker could then consider expanding its product line.

Systems enhancements are on the way, says Peter. "We realize that departmental staff who currently use MIDAS/Tiers will be interested in using this product. Our first goal was to prove the concept. That accomplished, we will be increasing the range of information available." ■

A system that catches all the subtle NUANSes

Interface runs an occasional series on interesting electronic systems used at Industry Canada. One of these is the NUANS (Newly Upgraded Automated Name Search) system, which compares proposed corporate names or trademarks with those that are already registered with the federal or provincial governments. The system is managed by the CIO.

Many computer systems can do searches, but it takes a very special system to make the connection between "Quality Sausages Ltd." and "Kwality Kielbasas Inc."

Industry Canada's NUANS system does 1 000 searches every day to find subtle similarities in spelling, meaning and sound in proposed commercial names. Those clients whose names have been checked by NUANS may file a printed report with their application to register a corporate name knowing that their claim to use a

name is backed up by a thorough search of more than five million names and 46 000 trademarks.

When NUANS receives a query, it asks a series of 180 questions about the proposed name, each permitting a "yes" or "no" answer. The system uses 30 custom dictionaries to answer the questions. The answers are converted into a digital sequence that is the "nameprint" for that query. The nameprint is used to determine how many times the "yes" answers match the patterns in the existing database.

The system gives a report that shows all the closest matches between the proposed name and those stored in the database. The matches are listed in descending order starting with the names that share the most "yes" answers. An ideal result would have no matches at all.

All queries are answered the same day they are made or by 7:30 the following morning at the very latest. All communications between requesting offices in the private sector and the system are electronic.

Since 1980, the government has licensed out the operation of the system to the private sector. Members of the public deal with any one of the more than 180 search houses that have sprung up to provide the service. The licensee deposits approximately \$350 000 into the Consolidated Revenue Fund on behalf of the department each year. In addition, 1 200 paralegal jobs have been created at the search houses.

Currently, work is being done to migrate NUANS from the mainframe to a UNIX environment, which involves rewriting the computer code from Fortran into C. ■

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One of the ongoing challenges facing the CIO team is to make Strategis a seamless environment for users. Strategis involves two different kinds of information sources: Trade Data On-line and Canadian Company Capabilities are databases, while the other products are text-based, explains Jack. "The HTML environment of the Web is also a text-based environment, so we had to create a process whereby the system would dynamically create display pages in response to each client information request."

The team will be doing further development work as needs evolve, says Jack.

"One of the things we learned is that the new media make it much more important that information be kept current. We have to put infrastructure and processes in place to guarantee that it is."

Similarly, the interface will have to be developed further, adds Bruce. "Right now, you can't search the database products and the text-based products at the same time. We have to figure out how to make that distinction disappear." ■

Contest Winner!



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