Cool Fusion: Data & Digital Power for the 21st Century?

Large aggregations of similar sorts of digital objects have existed for decades. The Thomson subsidiary Dialog quickly learned that a large aggregation of vended databases was good business, and OCLC and RLG created massive aggregations of cataloging records. Electronic journal aggregators, such as EBSCO and ProQuest, know the value of large aggregations, and Google wants to build an aggregation of approximately ten million scanned books from several research libraries.

Fusing two or more different types of data to create a "cool fusion" of greater value and usefulness than each part used separately also has been practiced for decades. The number of recently announced initiatives, however, makes me wonder if the first decade of this century will be remembered more for its cool fusion projects than for its massive aggregations.

Three examples of cool fusion projects may shed some light on this:

1. Tumble Readable Read-Alongs fuse e-books (with variable font size controlled by each individual user) with digital audio books. The user can read, listen, or both. Another way to think about what Tumblebooks has done: They have combined the regular print edition, the large print edition, and the audio book version of a book into one multimedia offering, customizable at the point of each use. This is truly cool fusion.

2. Placeopedia adds tags about pertinent Wikipedia articles to a Google map. Mouse over the little tag icon and a box pops up containing the title of the Wikipedia article and a link to it. The Google map displayed in the Placeopedia interface is active, so you can zoom in and out or drag the map in any direction.

3. The hybrid feature in Google Maps has been around for a while but it still qualifies as cool fusion. First, Google had maps, then it added aerial images, then it fused the two into one display that gives both the image and the map details.

Perhaps we will see lots of very cool fusion projects sprout up in the coming years. Inventive people and organizations are thinking about how they can combine valuable digital resources and data sets in ways that benefit everyone. —*Tom Peters*

Contact: www.tumblereadables.com
www.placeopedia.com
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www.oclc.org
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www.il.proquest.com/division/ct-libraries.shtml

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THE ILS SCOOP BY MARSHALL BREEDING

Ex Libris Withdraws from IPO

In a move to gain additional funding for its business strategies, Ex Libris recently embarked on an initial public offering (IPO) of stock to raise capital. But late in the process, the company's board of directors withdrew from the IPO; the aborted effort follows another significant company event—the retirement of Azriel Morag, company founder and longtime chairman of the board.

Following its September 11, 2005, IPO announcement, Ex Libris president/CEO Matti Shem Tov issued this message on October 9:

> As a result of a concentrated effort by Ex Libris management and advisers during the last three months, the [company] received an official offer to go public on the AIM stock exchange in the U.K. Both the shareholders and Ex Libris's management reviewed this offer and felt that the value offered for the [company] to go public was not indicative of Ex Libris's position as a global leader in library automation and e-resource management. Thus, [Ex Libris] and its shareholders have decided not to accept this proposal from the underwriters for floating Ex Libris on [AIM, the Alternate Investment Market].
>
> Ex Libris will continue as a private company [that] will be fully committed to implementing the vision and plans presented in our recent user group meetings (ICAU, SMUG, NAAUG).

Why the Attempt to Go Public?

Ex Libris embarked on the road toward a public offering so it could move forward on a number of key issues. Even though the IPO wasn't completed, the reasons given for pursuing it shed light on the company's business environment.

Primarily, the IPO was a way for Ex Libris to gain funds so it could carry out its aggressive agenda to develop technologies and produce library products. This would include an expansion of its own development efforts as well as strategic acquisitions—buying other companies that offer technologies/products to complement its efforts or that expand its reach into other markets. The IPO would have supplied the company with $US 15 million to support these activities.

In addition, the IPO was planned as an opportunity for owners to recoup at least part of their investments and likely would have gone toward internal realignments. The ownership of the company is divided among multiple investors, including Hebrew University of Jerusalem (HUJ), two venture capital (VC) firms (Walden Israel and Tamar Ventures), and its founders and executives. The owners individually planned to retain a portion of their individual equities in the company through stock ownership, but as a group, they intended to sell $15 million of their interests.

The cancellation of the IPO does not necessarily represent a huge change in the company's larger strategy, however. Its strong financial position gives it other options for raising capital, such as additional investments from private VC firms or even from borrowing as needed from banks.

Why AIM?

The shares were to be offered beginning in October 2005 through AIM, an affiliate of the London Stock Exchange that specializes in small to medium-sized companies. In recent years, there has been a trend for Israeli companies to go public via AIM. Given the relatively small size of the IPO, Ex Libris selected AIM rather than one of the larger stock exchanges. A typical IPO on NASDAQ, for example, would be at least $250 million.

According to figures quoted in the *Jerusalem Post*, Ex Libris posted revenues of $US 29.7 million in 2004 with profits of $2.5 million. The overall valuation of the company was optimistically projected to be in the $US 90 to 110 million range. The IPO's termination was largely due to a lower valuation of the company offered by institutions offered stock.

Morag Exits Ex Libris

Azriel Morag's exit from the company this August represents an even more significant event and also forms a part of the financial picture. As its founder and chairman of the board, Morag's vision was a major force in the company. His retirement included divestment of his equity and his stepping down from Ex Libris's board of directors.

With Morag's departure, the VC firms hold the controlling interest in the company. Walden Israel and Tamar Ventures

provided the funds to acquire Morag's equity; the VC firms now own more than fifty percent of Ex Libris. Ownership and control of companies in the library automation industry by VC firms is not unprecedented. Seaport Capital, for example, owns controlling interest in SirsiDynix.

Corporate Background

Ex Libris began in 1980 as an effort to create software to automate the libraries of HUJ. Its software, Automated Library Expandable Program or ALEPH-100, was the genesis of several generations of software to follow, culminating in the current ALEPH 500. The initial version ran on a mainframe system from Control Data Corp., one of the popular computing platforms of the day. The software quickly proved itself and was adopted by other Israeli universities.

In 1983, the success of the effort caught the attention of Yissum, the University's unit empowered to transfer technologies

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The cancellation of the IPO does not necessarily represent a huge change in the company's larger strategy, however. Its strong financial position gives it other options for raising capital . . .

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to commercial enterprises. Yissum hired Morag, a veteran of the software industry in Israel, to lead the company established to commercialize ALEPH; the company was called "Aleph Yissum."

Another company, Ex Libris, Ltd., was formed in 1986 to market and support the software outside of Israel, allowing Aleph Yissum to focus on the software development and to support its use by Israel-based libraries.

In 1995, Yissum Aleph (owned by HUJ) and Ex Libris, Ltd. (owned by Morag) merged, taking the Ex Libris identity. A year later, the company was reorganized as Ex Libris Group, which stood as the parent company for a growing number of subsidiaries and distributors around the globe. In July 1997, Ex Libris acquired the German company Dabis, which had a three hundred-library customer base using its BIS system.

In 1999, two Israel-based VC firms, Walden Israel and Tamar Ventures, invested a total of $4 million in the company. This investment provided the two firms seats on the Ex Libris board of directors.

Ex Libris entered the U.S./Canadian market in full force in 1999, finding an eager slate of large academic libraries ready to cast off outdated legacy systems. Sales through about 2004 were strong for its ALEPH 500 library automation system; Ex Libris captured 21 of the prestigious group of 123 member libraries of the Association of Research Libraries. About 40 percent of its revenues currently come from U.S.-client libraries.

Current Product Picture

In the last two years, ALEPH 500's North American sales have slowed somewhat, reflecting the fact that most of the largest libraries (that require such sophisticated systems) are now running modern systems. Ex Libris, however, continues to report major international contracts.

Ex Libris's non-ILS products continue to garner impressive sales too. SFX is the dominant link server for academic libraries, and MetaLib is gaining ground in the metasearch arena. Verde (in general release as of September 2005), the company's electronic resource management (ERM) system, has a large-market potential, especially among libraries running the SFX link server or ALEPH 500. DigiTool, its offering for creating digital library collections, plays within a smaller market niche.

Almost all academic libraries require link-resolver and metasearch products—in order to provide users with better means to access their ever-growing collections of licensed electronic content—and ERM products to manage electronic content more efficiently. In addition, an increasing number of libraries are involved in creating their own digital content.

Ex Libris has enjoyed great success selling add-on products to libraries that run competing ILS products. Ex Libris designed SFX, MetaLib, Verde, and DigiTool to operate with any ILS, giving no special favor to its own ALEPH system. This strategy gives Ex Libris broad exposure as a technology provider for academic and research libraries.

Contact: www.exlibris-usa.com
www.jpost.com/servlet/Satellite?pagename=JPost/
    JPArticle/ShowFull&cid=1127096410266&p
    =1077768895034

THE ILS SCOOP

Settling into SirsiDynix

Following the announcement in June 2005 that Sirsi Corp. would acquire Dynix, the formerly separate companies have been hard at work blending into a single organization. By the end of September 2005, the company publicized who will fill the top- and mid-level management positions. Overall, the executive management structure of the former Sirsi Corporation remains in tact, and most Dynix execs remain onboard as well.
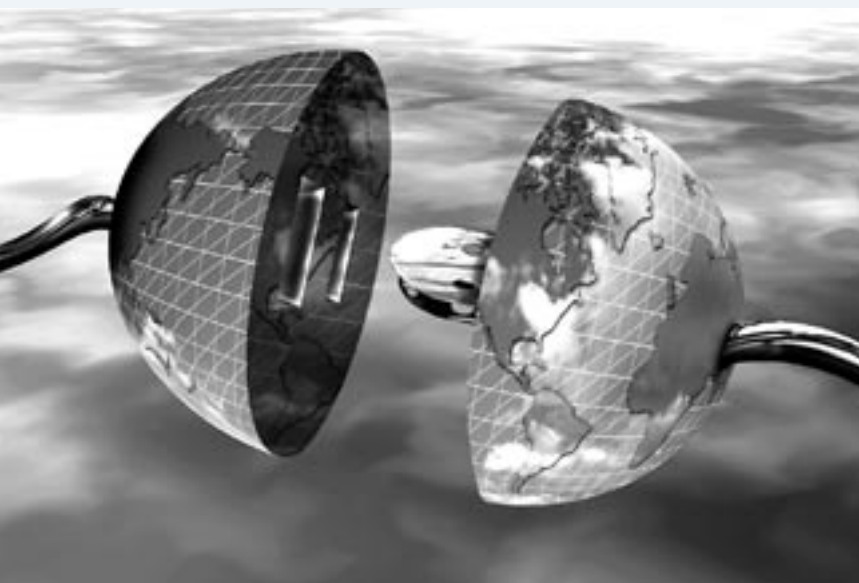
The headquarters of SirsiDynix will be located in Huntsville, Alabama. The Dynix office in Provo, Utah, will remain in operation as will the Sirsi office in St. Louis, Missouri. Business, personnel, and administrative functions have been consolidated and will be run out of Huntsville.

Pat Sommers leads the company as president/CEO; Sirsi execs Don McCall and Larry Smith take the chief operating officer and chief financial officer positions, respectively. Angus Carroll continues his Sirsi role as chief marketing officer.

Former Dynix COO Bill Davidson will lead the SirsiDynix sales force and is one of the few that will relocate from Provo to Huntsville. Middle-management positions in sales divide more or less equally between former Sirsi and Dynix managers.

On the international front, SirsiDynix favors former Sirsi execs. Mark Carden (who ran Dynix sales for Europe, the Middle East, and Africa) and Petros Demetriou (who served as Dynix VP for Asia Pacific) both exit, and Peter Gethin and Lamar Jackson will head up international sales. Gethin, who held the managing director position in Sirsi Ltd. (which sold and distributed Sirsi products in the United Kingdom and Europe), now serves as managing director for the U.K., Europe, Middle East, and Africa. Jackson, former Sirsi director of global alliances, takes a new post as VP for Asia Pacific.

Jack Blount, former Dynix CEO, continues as senior technical consultant and acting chief technology officer. Jeff Hagins, the former CTO at Dynix, left the company shortly following the merger. John Dickson, Sirsi VP of software development, continues in that role. Byers Parsons, chief architect for Dynix, takes a similar role in the new company. Lynn Thackery, also from the Dynix side, has been appointed as director of software development.

Slimmed Down Staff, but Not Support

Not surprisingly, the size of the new combined company stands somewhat smaller than the combined totals of Sirsi and Dynix prior to the acquisition. At year-end 2004, the combined workforce of the two companies totaled 789 full-time equivalent personnel. Some slimming down occurred by the time of the merger, with 725 FTE employed. At this stage of integration, SirsiDynix now employs 698 FTE. Most of this contraction was realized through the consolidation of administrative functions, such as human resources and accounting. The company reports all departments related to product development and support remain in tact.

SirsiDynix also says it will remain committed to supporting and developing both the Unicorn and Horizon family of integrated library systems. Given the large installed base for both Unicorn and Horizon, the company is highly motivated to continue development and support to foster continued loyalty of all the libraries that use either of these major products.

Other aspects of integration continue. A new Web site for the integrated company should be unveiled by the time of the ALA Midwinter Meeting. A single exhibition booth will also be unveiled at that conference.

All in all, the shape of the new SirsiDynix has been set, though it will take months or years for the integration process to complete. As the most powerful company in the industry in terms of the number of libraries affected by its business decisions, it's important to monitor the direction and execution of its strategies.

Contact: www.sirsidynix.com

They Dream of GENI

The National Science Foundation (NSF) has begun a process that may, eventually, lead to the development of a next-generation Internet that provides greater security and more functionality. The project, called GENI (Global Environment for Networking Investigations), has been proposed by CISE, the Directorate for Computer & Information Science and Engineering. The modest goals, according to the Web site for the initiative, are to advance science, to stimulate innovation and economic growth, and to be a group effort with governmental and nongovernmental agencies and companies from around the world.

The proposed outcomes of this initiative include:

- those involved will completely rethink networking and systems architecture, which will eventually achieve increases in the security and robustness of the entire system;

- to "enable the vision of pervasive computing and bridge the gap between the physical and virtual worlds by including mobile, wireless, and sensor networks";

- to increase the ease of network operation and usability for everyone;

- to establish a research program that explores and tests the various aspects of this far-reaching vision; and

- to institute a worldwide experimental facility designed to test new networking architectures on a large scale.

The more things change, the more they stay the same. As I recall, one primary motivation for the conceptualization and construction of the distributed architecture computing systems that eventually evolved into the Internet was to protect national data and communications security during an emergency or attack. The desire for security never goes out of style.

Some of the longstanding tensions and unresolved conflicts about the Internet are evident in the GENI announcement— e.g., the tug of war between U.S. national interests and the global nature of the existing and proposed systems.

Secondly, the initial announcements talk about a global infrastructure that would, nevertheless, respect "regional differences and local values." This may have been a bone thrown to the global pornography industry and the old idea of community standards of taste.

A third enduring tension involves "balancing privacy and accountability." In addition, the tension between a social structure based on the free sharing of expertise and experiences and one where monetary transactions are involved is evident.

Speaking of money, evidently at this point in time, this GENI cannot afford even a pair of those diaphanous pantaloons worn by Barbara Eden.

Perhaps the bottom-line truth here (which no genie or radical rethinking of the basic architecture of our information and communication systems can change) is: Living and thriving in any human society, especially in the more open societies, is based on an incredibly complex web of trust that may be beyond the pale of any deliberate, overt, all-too-human architectural effort. —*Tom Peters*

Contact: www.nsf.gov/cise/geni

READIVS **ALL ABOUT IT**

The basic design of the PDA owes as much to the stylus and wax tablet used by the ancients as it does to the address book of the late 20th century. The idea of adapting another ancient document type—the scroll—for a portable digital information appliance has been around for decades, but it has yet to make an impact in the modern marketplace.

Polymer Vision recently unfurled a new scrollable prototype device called the "Readius." In its most compact state, the Readius is approximately 4 in. x 2.5 in.

and very thin. When its scrolled screen is wide open, the screen is 5 in. big, 320 pixels x 240 pixels. Because the prototype incorporates e-paper technology from e-Ink, Inc., it provides a high contrast bitonal display, readable even in sunlight, with none of the flicker that contributes to eyestrain. It also consumes little power.

Karl McGoldrick, the CEO of Polymer Vision, succinctly states why he thinks the scrollable display has a bright future. "Making displays thinner and flexible will have advantages in power and weight. But

the only way to add the key advantage of size—allowing larger displays in smaller, pocket-size mobile devices—is by actually making the displays rollable."

Libraries and library users cannot purchase the Readius yet. Polymer Vision does not plan to commercialize this prototype. It just wants to fuel the idea of a paper-thin scrollable digital display in our collective imagination.—*Tom Peters*

Contact: www.polymervision.nl

Lockheed Leading the ERA

The Lockheed Martin Corp. was awarded a $308 million federal contract to build (over the next six years) an Electronic Records Archive (ERA) for the National Archives and Records Administration (NARA).

According to a September 11, 2005, article in the *Washington Post* and a press release from the Bethesda, Maryland-based technology-systems' integrator, Lockheed is the prime contractor and it will lead a team of companies "with archiving and data-management experience." (For a list of the subcontracting firms, see www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=17111&rsbci=0&fti=111&ti=0&sc=400.)

This is a huge and important challenge because many federal agencies have gone to electronic-only documentation and also because Kenneth Thibodeau, director of the ERA Project at NARA, predicts that *nearly five thousand* file formats and document types are involved.

Better Get a Bigger In-Box

The volume of documents is daunting. For example, at the conclusion of the Clinton Administration the Executive Office of the President forwarded to NARA 30 million e-mail messages. NARA predicts the Bush Administration will forward twice as many messages.

The challenge for Lockheed's assembled team is to make this mass of data viewable and usable long after the original software and hardware used to create all this electronic stuff has been superseded and forgotten.

The runner-up in the competition for this large federal contract was the Melbourne, Florida-based Harris Corp. Over the past year, the two finalists built prototype systems for review and testing.

Although plans call for a six-year project, access to selected records in the new system may be available to libraries and the general public as early as 2007.—*Tom Peters*

Contact: www.archives.gov/era/index.html
www.washingtonpost.com/wp-dyn/content/
    article/2005/09/11/AR2005091101019.html
www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci
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Yahoo! Enters the Book Digitizing Fray

Google's plan to digitize millions of books has been one of the major topics of the year in library circles. It stirred controversy regarding copyright issues and presents major opportunities and challenges for libraries.

Early last month, another major project to potentially digitize millions of books was announced. On October 3, 2005, a group called the Open Content Alliance (OCA) announced it will work toward digitizing and making available a large body of books. Yahoo! and the Internet Archive conceived the OCA early in 2005 and have been working since that time to build the partnerships necessary to provide the initial content and infrastructure for the project.

The digitized books will be hosted on the OCA Web site with support by the Internet Archive and indexed by Yahoo!. Although Yahoo! is one of the primary participants in the project, other search engines will be able to index the content as well.

One of the first facets of the project will involve a large collection of early American fiction drawn from the collections of the University of California. Other content contributors involved early on include the University of Toronto, O'Reilly Press, The National Archives of the U.K., the Prelinger Archives of moving images, and other content from the Internet Archive.

The project will avoid the copyright problems that have plagued the Google Print Library Project by focusing on books in the public domain and include in-print books only with the publisher's permission (in Google's effort, publishers need to inform Google they want their copyrighted works excluded). Given this approach, books digitized within the OCA will be available in their entirety, unlike Google's plan to make only brief passages available for items within copyright.

While this project may not be of the massive scale of Google's, it underscores the need for many different options for digitizing the world's books.—*Marshall Breeding*

Contact: www.opencontentalliance.org
www.techsource.ala.org/blog/blog_detail.php
    ?blog_id=66

Google Corner(ed)

BY TOM PETERS

Google Launches Blog Search

Google has launched a separate search engine for the blogosphere. Like most things at Google, it officially is a beta version and probably will remain that way indefinitely. Mary Ellen Bates of Bates Information Services wrote a long review of this new search tool from a good, reliable, librarian perspective.

Google defines a blog as anything that offers an RSS feed and is updated frequently. Bates cautions that Google indexes only the blog content submitted to feeds such as RSS and Atom. In many instances, this is much less information than is actually contained in the blog itself. Also when launched, the Google Blog Search indexed feeds only back to March 2005.

One little sociological glimpse into the struggle for the legitimacy of sources of news and commentary: Google is trying to distinguish between the news it indexes in its separate news search engine from blog entries indexed here.

Contact: http://blogsearch.google.com
www.batesinfo.com/tip.html

According to an article in *Wired* about the Greasemonkey movement, a script named Butler ". . . undoes the clever copy protection on Google Print . . . so you can copy and paste copyrighted book pages to your desktop."

I Greasemonkeyed It

Greasemonkey seems to do for Web browsing what TiVo does for television. It gives the individual user control over when, how, and what content is delivered.

According to the Wikipedia article, Greasemonkey is a piece of software, usually Javascript, allowing users of the Firefox browser to modify specific Web pages to better meet their needs and tastes.

Greasemonkeying is part of a larger movement called "active browsing," a practice by which the human browser is not a passive wanderer in cyberspace, but rather exercises some control (part of the burgeoning remix culture). In other words, some users of the Web are wresting some control from the authors of the Web, even though those authors are legion and diverse.

The Wikipedia article also states, "Greasemonkey can be used for adding new functionality to Web pages (like embedding price comparison in amazon.com pages), fixing rendering bugs, [and] combining data from multiple Web pages. . . . Well-written Greasemonkey scripts can integrate changes so well that their additions appear to be natural parts of the Web page."

Greasemonkey stains already have appeared on content from Google Print. According to an article in *Wired* about the Greasemonkey movement, a script named Butler ". . . undoes the clever copy protection on Google Print . . . so you can copy and paste copyrighted book pages to your desktop."

Is this cool fusion, censorship, an accessory to a crime, sacrilege, power to the people, or something completely different?

Contact: www.wired.com/wired/archive/13.09/start .html?pg=7
http://en.wikipedia.org/wiki/Greasemonkey

November 2005
Cool Fusion: Energizing Digital and Data in the New Millennium

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