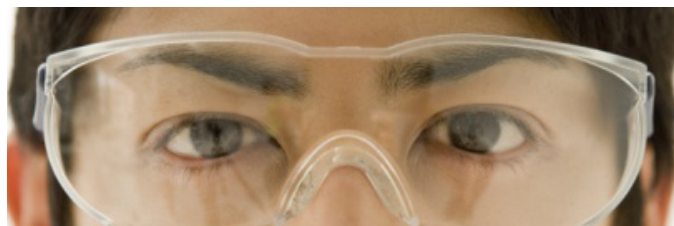
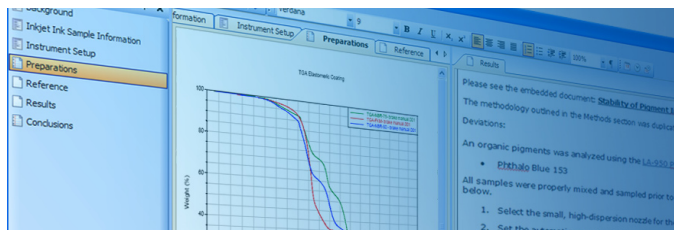




Symyx makes R&D

Smarter, Faster, Better



Shareholder Letter

The global economy posed severe challenges to virtually every company in every industry during 2008, including Symyx and its customers. During the year, we adjusted our business operations in response to the changing economic climate and to position the company for success. We emerged from 2008 a more focused company, determined to continue our mission of transforming R&D for companies in the life sciences, chemicals, energy, and consumer and industrial products industries.

Today's tough economy amplifies R&D challenges and underscores the need for our solutions. Companies around the globe are increasingly frustrated by the high cost and slow pace of discovery and development. R&D installations everywhere are under intense pressure to do more with less. At the same time, the demand to produce game-changing breakthroughs and step-change improvements in return on investment has not let up.

Symyx helps companies meet these challenges. The Symyx Software suite of scientific software, content and decision support technology enables R&D information lifecycle management, providing scientists immediate access to personal, laboratory, enterprise, proprietary and third-party data across different projects, platforms and organizational boundaries. With our industry-leading Symyx ISIS and Isestris platforms, our recently released Symyx Notebook enterprise platform, our lab execution, analysis and operational informatics applications, and our content databases, scientists can design, execute, analyze, and report experimental results faster, easier, and less expensively.

Our newly formed High Productivity Research (HPR) business unit delivers increased R&D productivity, agility and flexibility. Customers can access the benefits and advantages of our microscale, parallel experimentation, lab automation and advanced informatics by purchasing our products or through our contract research services. Either way they can lower their cost per experiment by up to 90%, achieve a 10-25X increase in the number of experiments per year, and acquire experimental results in days, not weeks or months.

During 2008 we adjusted our business operations to enable us to deliver these solutions more efficiently and effectively. In addition to realigning the company into the two divisions I just described, Symyx Software and Symyx HPR, we divided our sales force into two corresponding segments to improve our ability to target solutions to the appropriate channels. As the economy weakened dramatically in the fourth quarter, we took the painful but necessary step of reducing our global headcount by 15% and took other actions we believe should reduce our cost base in 2009 by approximately \$15 million. This reduction was primarily focused on Symyx HPR and our general and administrative functions, and was designed to drive performance, improve operating efficiencies and results, and ensure continued positive cash flow in 2009.

Symyx Software performed well during 2008, meeting our revenue expectations and contributing significant operating margins. On the product front, Symyx Software aggressively drove its product lines forward, in particular releasing Symyx Notebook 6.0 in April, our electronic lab notebook (ELN) platform that enables R&D organizations to replace multiple ELNs with a single enterprise-wide application. More recently, we released Notebook 6.1, which supports analytical chemistry and biology workflows. This release was a key factor in our recent successes with two of the top 15 pharmaceutical companies, Eli Lilly and Schering-Plough.

We also saw increased adoption of our core Isestris platform, the next generation of Symyx ISIS, by leading pharmaceutical companies who adopted our Isestris 3.1 informatics systems to develop and manage searchable databases that provide on-demand data through localized networks or offline resources.

Although Symyx HPR made progress in 2008 with its new chemicals/energy and life sciences services offerings, the worsening economic environment led to second-half pushouts and cancellations by customers of our automation tools. This, in turn, caused Symyx HPR to sustain significant operating losses in 2008. In December, we moved to size Symyx HPR to reflect a lowered business outlook and improve its operating performance for 2009. The business entered 2009 with commitments for more than 70% of its 2009 plan and has opportunities within various market segments to drive long-term growth and success.

Looking ahead, while the economy continues to pose major challenges, Symyx has no debt, is leaner and more focused, and has two business units that offer complementary solutions to a significant challenge that faces many of the largest corporations in the world: how to develop new products faster and less expensively. Our product development efforts are on track against a well-defined roadmap, and our sales team is aggressively developing our pipeline of new opportunities.

Most importantly, Symyx has the team in place to deliver on our potential. We have an unparalleled group of professionals to draw upon, many of them leaders in materials research and chemistry. All of our employees have been asked to shoulder a heavier burden as we move forward with a leaner organization; they have responded with dedication and enthusiasm. I would like to thank each of them for their continued hard work and acknowledge as well our Board of Directors and our shareholders for their ongoing support.



Isy Goldwasser
Chief Executive Officer



Symyx makes R&D **Smarter, Faster, Better**

Smarter

Symyx Notebook delivers unprecedented performance across the enterprise and around the globe.

? The market

Over the last decade, electronic laboratory notebooks (ELNs) have emerged as one of the primary scientific informatics solutions for helping scientists design, execute, analyze and report on experiments. ELNs enable scientists to share experimental results and learn from the knowledge of their colleagues. Domain-specific ELNs, like those used specifically in discovery, process or formulations chemistry, create silos of information that are difficult to manage, access, contrast and compare. More and more, organizations are demanding a single, enterprise lab notebook to combat data silos, multiple user interfaces, bottlenecks in the flow of information, inaccurate data, inconsistent processes and unsustainable costs of ownership.

◎ Our growth strategy

Symyx Notebook, the industry's first enterprise ELN, was launched in April 2008 to enable workflow optimization, process consistency, collaboration and improved productivity by scientists across the enterprise and around the globe. The development roadmap lays out an unprecedented path to address the specific needs of analytical chemists, synthetic and medicinal chemists, biologists, formulation chemists and process chemists in a single notebook. By the end of 2008, major pharmaceutical companies were evaluating and adopting Symyx Notebook for their enterprise applications.

✓ 2008 highlights

Symyx Notebook gives scientists the freedom to experiment. Our new enterprise electronic laboratory notebook (ELN) is configurable to meet the needs of biologists and analytical chemists out-of-the-box. It simplifies laboratory operations and lowers costs by enabling R&D organizations to replace multiple discipline-specific ELNs with a single, multi-discipline application deployable across the enterprise.

Symyx Notebook 6.1 supports workflow productivity for analytical chemists and biologists. This second major release of Symyx Notebook captures, queries and reports on the numerous experimental methods and data across the highly variable spectrum of experimentation encountered by analytical chemists and biologists.

Symyx Notebook 6.2 adds synthetic chemistry to existing analytical chemistry research and biology capabilities. New capabilities support synthetic and medicinal chemistry investigations by adding industry-leading Symyx chemical representation, chemical reaction and compound registration capabilities.

Schering-Plough licenses Symyx Notebook to support an innovative, collaborative R&D environment. A common, shared notebook across the enterprise will help researchers achieve better compliance, improve collaboration and build support for integration and harmonization of procedures across sites.

A new global partnership with Thermo Fisher Scientific, Inc. focused on giving scientists improved workflows. The two companies are working closely to integrate applications, with Thermo Fisher marketing and selling its industry-leading laboratory information management system (LIMS) with Symyx Notebook and Symyx ISENTRIS® decision support software.



Symyx makes R&D **Smarter, Faster, Better**

Faster

Getting to clinical trials faster with Symyx contract development & manufacturing

? The market

Innovative drugs are the lifeblood of biopharmaceutical companies, but the cost of developing them is rising to unsustainable levels. A 2004 FDA paper noted that investment in basic research, and pharmaceutical and biotech investment in applied research, went up 250 percent between 1993 and 2003, but the number of new molecular entities approved declined. A critical milestone in the drug development race is getting to clinical trials quickly with a reliable formulation, and biopharmaceutical companies are increasingly seeking development partners that can help them increase innovation and productivity while simultaneously reducing costs.

◎ Our growth strategy

In July of 2008, Symyx launched Research Services for Life Sciences to enable pharmaceutical clients, such as Bristol-Myers Squibb (BMS), to increase productivity, agility and flexibility. The following month, we entered the fast-growing market for biotechnology drug development by acquiring Integrity Biosolution. Symyx is leveraging expertise in formulation development with leadership in microscale, parallel experimentation and advanced informatics to develop better formulations in less time. We also are combining formulation development and CGMP clinical manufacturing in our contract development and manufacturing facility to help deliver promising biopharmaceutical drug candidates to clinical trials faster.

✓ 2008 highlights

Symyx launches client-directed and collaborative research services for life sciences. These services allow clients to access our installed base of parallel experimentation and testing capabilities through packaged offerings for solubility studies, polymorph screening, salt selection, co-crystallization, API stability in liquid and solid formulations, excipient compatibility, organic synthesis and process optimization.

Bristol-Myers Squibb partners with Symyx Research Services for solubility studies. Under terms of the new agreement, Symyx will perform solubility studies for Bristol-Myers Squibb through May 2009.

Symyx acquires Integrity Biosolution, boosting our research offerings in life sciences. The combination creates a differentiated set of large molecule formulation services to customers in the pharmaceutical and biotechnology industries.

Symyx launches CDMO for biopharmaceuticals. Building on development work conducted in the second half of 2008, we recently announced the launch of our Contract Development and Manufacturing Organization for biopharmaceuticals. By integrating formulation development with preclinical and CGMP fill/finish manufacturing, Symyx helps biopharmaceutical companies move promising drug candidates to clinical trials faster and more reliably.



Symyx makes R&D **Smarter, Faster, Better**

Better

Symyx ISENTRIS surpasses industry-leading ISIS for scientific R&D decision support.

? The market

The ISIS Integrated Scientific Information System, from Symyx, has been the leading cheminformatics software for searching, browsing, updating and reporting on scientific information held in corporate, project and local databases for over 15 years. As companies move from proprietary to open systems, they want a seamless path that allows them to retain the information and knowledge equity in their existing ISIS system while accessing new, productivity-enhancing capabilities to register, retrieve, display and analyze scientific information and without converting existing chemical structure repositories to another format or chemical representation.

◎ Our growth strategy

The introduction of Symyx ISENTRIS 3.1 in September 2008 provides ISIS users a seamless transition and upgrade path that preserves their ISIS investments while enabling access to numerous new decision support capabilities. Symyx ISENTRIS is a complete out-of-the-box solution for searching, browsing, analyzing and reporting on information used in scientific R&D. Symyx ISENTRIS 3.1 also provides a platform to develop and extend applications, integrate specialized tools, and gain access to internal and external data sources. The Symyx ISENTRIS research environment integrates with Symyx Notebook and Databases to support workflow processes and strengthen scientific R&D decision making.

✓ 2008 highlights

Symyx launches ISENTRIS 3.1, a significant new release of the Symyx ISENTRIS® informatics system. The new release, which goes well beyond Symyx's industry-leading ISIS software, gives scientists the freedom to create, manage, and share fully searchable local databases and to work offline.

Software upgrades facilitate ISIS-to-ISENTRIS migration. The joint releases of the Symyx Direct 6.1 chemistry data cartridge and ISIS/Host 5.2 informatics system for registering, retrieving, displaying and analyzing scientific information remove a significant ISIS-to-ISENTRIS transition barrier for R&D organizations working with legacy ISIS molecule databases.

Symyx Draw 3.1 delivers improved functionality for chemists. The release of Symyx Draw 3.1, a software package for drawing chemical structures and querying for searching, registration, and collaboration, offers significant enhancements over ISIS/Draw, including improved functionality for rapidly drawing chemical structures and chemically intelligent queries.

Accessing Symyx Metabolite database with Symyx ISENTRIS enhances decision support in drug metabolism research. The latest release of the Symyx Metabolite database—the largest and most comprehensive collection of drug metabolism data in the world—is now available to pharmaceutical, agrochemical and biotechnology researchers via the Symyx ISENTRIS® data access, analysis and decision support system, as well as the Web-based DiscoveryGate® content platform.

Selected Financial Data

The following selected historical information has been derived from our audited financial statements. Liabilities accrued for uncertain income tax positions have been reclassified as long-term payables; income taxes receivable previously netted against income taxes payable have been reclassified as current assets. Consolidated balance sheet data for prior periods have been reclassified to conform to current presentation.

The financial information as of December 31, 2008 and 2007 and for each of the three years in the period ended December 31, 2008 is derived from audited financial statements included in Symyx's Annual Report on Form 10-K on file with the Securities and Exchange Commission. The table should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operation," and Item 8, "Financial Statements and Supplementary Data," in our 10-K.

(In thousands, except per share data)	For the Years Ended December 31,				
	2008	2007	2006	2005	2004
Consolidated Statements of Operations Data:					
Revenue:					
Service	\$ 74,892	\$ 59,034	\$ 57,933	\$ 56,980	\$ 42,251
Product	25,033	34,898	33,526	26,663	27,060
License fees, content and royalties	59,120	31,140	33,441	24,494	13,874
Total revenue	159,045	125,072	124,900	108,137	83,185
Costs of revenue:					
Cost of service	21,094	8,995	6,519	3,826	—
Cost of products	10,444	14,281	11,811	11,090	7,857
Cost of license fees, content and royalties	5,876	1,773	—	—	—
Amortization of intangible assets	7,355	3,873	2,571	2,252	155
Total costs of revenue	44,769	28,922	20,901	17,168	8,012
Gross profit	114,276	96,150	103,999	90,969	75,173
Operating expenses:					
Research and development	75,365	66,186	59,268	47,151	41,142
Sales, general and administrative	54,589	41,935	34,497	25,249	18,007
Restructuring charges	4,952	—	—	—	—
Impairment to goodwill, intangibles and other long-lived assets	90,330	—	—	—	—
Acquired in-process research and development	—	2,500	1,392	1,590	2,260
Amortization of intangible assets arising from business combinations	5,903	2,253	1,699	1,263	76
Total operating expenses	231,139	112,874	96,856	75,253	61,485
Income (loss) from operations	(116,863)	(16,724)	7,143	15,716	13,688
Gain from sale of equity interest in Ilypsa, Inc.	4,939	40,826	—	—	—
Interest and other income, net	135	5,694	7,709	4,427	2,521
Income (loss) before income tax benefit (expense) and equity loss	(111,789)	29,796	14,852	20,143	16,209
Income tax benefit (expense)	5,173	(10,698)	(6,382)	(8,141)	(3,327)
Equity in loss from investment in Visyx Technologies Inc.	—	(314)	(186)	—	—
Net income (loss)	\$(106,616)	\$ 18,784	\$ 8,284	\$ 12,002	\$ 12,882
Basic net income (loss) per share	\$ (3.16)	\$ 0.57	\$ 0.25	\$ 0.37	\$ 0.40
Diluted net income per share	\$ (3.16)	\$ 0.56	\$ 0.24	\$ 0.35	\$ 0.38
Shares used in computing basic net income (loss) per share	33,747	33,199	33,199	32,819	32,067
Shares used in computing diluted net income (loss) per share	33,747	33,557	34,214	34,564	33,872

(In thousands)	December 31,				
	2008	2007	2006	2005	2004
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	\$ 66,415	\$ 45,472	\$ 149,995	\$ 168,625	\$ 136,541
Working capital	\$ 41,393	\$ 40,750	\$ 146,180	\$ 162,237	\$ 142,361
Long-term investments	\$ 15,147	\$ 13,500	\$ 13,714	\$ —	\$ —
Goodwill and intangible assets	\$ 93,247	\$ 180,515	\$ 31,657	\$ 32,065	\$ 24,397
Total assets	\$ 224,514	\$ 316,898	\$ 260,006	\$ 241,412	\$ 207,002
Total stockholders' equity	\$ 152,083	\$ 252,241	\$ 228,376	\$ 218,529	\$ 191,009

Corporate Information

Board of Directors

Steven D. Goldby
Chairman
Symyx Technologies, Inc.

Isy Goldwasser
Chief Executive Officer
Symyx Technologies, Inc.

G. Stephen DeCherney, MD, MPH
Professor of Medicine (Adjunct)
University of North Carolina

Timothy Harkness
President and CEO
Cell Biosciences, Inc.

David C. Hill
Private Investor

Bruce A. Pasternack
Private Investor

Christopher van Ingen
Private Investor

Corporate Officers

Steven D. Goldby
Chairman

Isy Goldwasser
Chief Executive Officer

Rex S. Jackson
Executive Vice President and
Chief Financial Officer

Richard Boehner
President, Symyx High Productivity Research

Trevor Heritage
President, Symyx Software

Richard Rosenthal
Senior Vice President, Finance
and Principal Accounting Officer

Charles Haley
Senior Vice President and General Counsel

Corporate Headquarters

1263 East Arques Avenue
Sunnyvale, CA 94085

Corporate Mailing Address

415 Oakmead Parkway
Sunnyvale, CA 94085

Internet Address

www.symyx.com

Independent Registered Public Accounting Firm

Ernst & Young LLP
San Jose, California

Legal Counsel

Cooley Godward Kronish LLP
Palo Alto, CA

Common Stock

Listed on Nasdaq Global Select Market:
"SMMX"

Annual Meeting

June 11, 2009
9:00 a.m.
Symyx Technologies, Inc.
1263 East Arques Avenue
Sunnyvale, CA 94085

Transfer Agent & Registrar

Wells Fargo Bank Minnesota, N.A.
Shareowner Services
161 North Concord Exchange Street
South St. Paul, MN 55075-1139
(800) 468-9716

Annual Report on Form 10-K and Proxy Materials

A copy of the Company's annual report on Form 10-K and proxy materials are available without charge upon written request to ir@symyx.com or to Investor Relations, Symyx Technologies, Inc., 415 Oakmead Parkway, Sunnyvale, CA 94085.

Stockholder Inquiries

Inquiries related to stock transfer or lost certificates should be directed to the Transfer Agent by calling (800) 468-9716. General information regarding Symyx and recent news releases can be obtained through our web site, www.symyx.com, or by contacting Investor Relations at ir@symyx.com or (408) 773-4075.

Price Range of Common Stock

Our common stock is traded on the NASDAQ Global Select Market under the symbol "SMMX." The following table sets forth, for the periods indicated, the low and high bid prices per share for our common stock as reported by the NASDAQ Global Select Market.

	High	Low
2007		
First Quarter	\$ 21.87	\$ 16.01
Second Quarter	\$ 18.21	\$ 9.86
Third Quarter	\$ 11.55	\$ 8.09
Fourth Quarter	\$ 10.42	\$ 6.90
2008		
First Quarter	\$ 8.18	\$ 6.19
Second Quarter	\$ 8.40	\$ 6.93
Third Quarter	\$ 12.24	\$ 6.59
Fourth Quarter	\$ 9.51	\$ 3.03

About Symyx

Symyx Technologies, Inc. (NASDAQ: SMMX) enables companies in life sciences, chemicals and energy, and consumer and industrial products industries to transform scientific R&D and achieve extraordinary breakthroughs in productivity and return on investment. Symyx scientific information management enables scientists to design, execute, analyze, and report experimental results faster, easier, and less expensively. Symyx microscale, parallel experimentation enables a single scientist to rapidly explore a broad experimental space and develop comprehensive data sets in days – not weeks or months. Symyx contract research delivers these advantages on a project basis and enables companies to increase R&D productivity, agility, and flexibility. Information about Symyx, including reports and other information filed by Symyx with the Securities and Exchange Commission, is available at www.symyx.com.

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