



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-3010

January 22, 2009

Stuart S. Moskowitz  
Senior Counsel  
International Business Machines Corporation  
Corporate Law Department  
One New Orchard Road  
Armonk, NY 10504

Re: International Business Machines Corporation  
Incoming letter dated December 18, 2008

Dear Mr. Moskowitz:

This is in response to your letter dated December 18, 2008 concerning the shareholder proposal submitted to IBM by Chuck Pettus. Our response is attached to the enclosed photocopy of your correspondence. By doing this, we avoid having to recite or summarize the facts set forth in the correspondence. Copies of all of the correspondence also will be provided to the proponent.

In connection with this matter, your attention is directed to the enclosure, which sets forth a brief discussion of the Division's informal procedures regarding shareholder proposals.

Sincerely,

Heather L. Maples  
Senior Special Counsel

Enclosures

cc: Chuck Pettus

\*\*\*FISMA & OMB Memorandum M-07-16\*\*\*

January 22, 2009

**Response of the Office of Chief Counsel**  
**Division of Corporation Finance**

Re: International Business Machines Corporation  
Incoming letter dated December 18, 2008

The proposal relates to open source standards.

There appears to be some basis for your view that IBM may exclude the proposal under rule 14a-8(i)(7), as relating to IBM's ordinary business operations (i.e., the design, development and licensing of IBM's software products). Accordingly, we will not recommend enforcement action to the Commission if IBM omits the proposal from its proxy materials in reliance on rule 14a-8(i)(7). In reaching this position, we have not found it necessary to address the alternative bases for omission upon which IBM relies.

Sincerely,

Philip Rothenberg  
Attorney-Adviser

**DIVISION OF CORPORATION FINANCE  
INFORMAL PROCEDURES REGARDING SHAREHOLDER PROPOSALS**

The Division of Corporation Finance believes that its responsibility with respect to matters arising under Rule 14a-8 [17 CFR 240.14a-8], as with other matters under the proxy rules, is to aid those who must comply with the rule by offering informal advice and suggestions and to determine, initially, whether or not it may be appropriate in a particular matter to recommend enforcement action to the Commission. In connection with a shareholder proposal under Rule 14a-8, the Division's staff considers the information furnished to it by the Company in support of its intention to exclude the proposals from the Company's proxy materials, as well as any information furnished by the proponent or the proponent's representative.

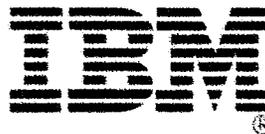
Although Rule 14a-8(k) does not require any communications from shareholders to the Commission's staff, the staff will always consider information concerning alleged violations of the statutes administered by the Commission, including argument as to whether or not activities proposed to be taken would be violative of the statute or rule involved. The receipt by the staff of such information, however, should not be construed as changing the staff's informal procedures and proxy review into a formal or adversary procedure.

It is important to note that the staff's and Commission's no-action responses to Rule 14a-8(j) submissions reflect only informal views. The determinations reached in these no-action letters do not and cannot adjudicate the merits of a company's position with respect to the proposal. Only a court such as a U.S. District Court can decide whether a company is obligated to include shareholder proposals in its proxy materials. Accordingly a discretionary determination not to recommend or take Commission enforcement action, does not preclude a proponent, or any shareholder of a company, from pursuing any rights he or she may have against the company in court, should the management omit the proposal from the company's proxy material.

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DIVISION OF CHIEF COUNSEL  
CORPORATION FINANCE



International Business Machines Corporation  
Corporate Law Department  
One New Orchard Road  
Armonk, New York 10504

December 18, 2008

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
Office of Chief Counsel  
100 F. Street, N.E.  
Washington, DC 20549

Subject: Stockholder Proposal of Mr. Charles Pettus  
IBM Open Source Software Offerings

Pursuant to Rule 14a-8(j) under the Securities Exchange Act of 1934, I am enclosing six copies of a proposal (the "Proposal"), dated November 8, 2008 submitted to International Business Machines Corporation (the "Company" or "IBM") by Mr. Charles Pettus, a former IBM employee (See **Exhibit A**). Mr. Pettus will be sometimes hereinafter be referred to for convenience as the "Proponent". This letter is being filed with the Securities and Exchange Commission (the "SEC" or the "Commission") by the Company not later than eighty (80) calendar days before the Company files its definitive 2009 Proxy Materials with the Commission.

### THE PROPOSAL

The Proposal states:

Resolved: The shareholders request the Company adopt a policy or take appropriate steps to increase the IBM role to fill the following stockholders' perception. Stockholders perceive the NEW WORLD ORDER yearns for the very high professional "OPEN SOURCE" standards the IBM resources and experience can provide if mandated by an IBM management directive.

The shareholders feel this IBM action would be a win-win experience for IBM, the shareholder's financial investment in IBM, the IBM Image, the shareholder's Image and the IBM Brand Name.

IBM believes the Proposal may properly be omitted from the proxy materials for IBM's annual meeting of stockholders scheduled to be held on April 28, 2009 (the "2009 Annual Meeting") for the reasons discussed below. To the extent that the reasons for omission stated in this letter are based on matters of law, these reasons are the opinion of the undersigned as an attorney licensed and admitted to practice in the State of New York.

### GROUNDS FOR EXCLUSION

The Proposal may properly be excluded pursuant to:

- Rule 14a-8(i)(7) because the Proposal relates to the ordinary business operations of the Company,
- Rule 14a-8(i)(10) because the Proposal has already been substantially implemented; and
- Rules 14a-8(i)(3) and 14a-9 because the Proposal is vague and indefinite.

### ANALYSIS

#### **I. THE PROPOSAL MAY BE OMITTED UNDER RULE 14a-8(i)(7) AS RELATING TO THE CONDUCT OF THE ORDINARY BUSINESS OPERATIONS OF IBM.**

The Company believes that the Proposal may properly be omitted from the Company's proxy materials for the 2009 Annual Meeting pursuant to the provisions of Rule 14a-8(i)(7) because it deals with matters relating to the conduct of the ordinary business operations of the Company. The Commission has expressed two central considerations underlying the ordinary business exclusion. The first underlying consideration expressed by the Commission is that "[c]ertain tasks are so fundamental to management's ability to run a company on a day-to-day basis that they could not, as a practical matter, be subject to shareholder oversight." See Amendments to Rules on Shareholder Proposals, Release 34-40018 (63 Federal Register No 102, May 28, 1998 at pp. 29,106 and 29,108). In this connection, examples include "the management of the workforce, such as the hiring, promotion and termination of employees, decisions on production quality and quantity and the retention of suppliers." (*id.* at 29,108) (emphasis added) "The second consideration involves the degree to

which the proposal seeks to micro-manage the company by probing too deeply into matters of a complex nature upon which shareholders, as a group, would not be in a position to make an informed judgment." *id.* The Commission had earlier explained in 1976 that shareholders, as a group, are not qualified to make an informed judgment on ordinary business matters due to their lack of business expertise and their lack of intimate knowledge of the issuer's business. See Adoption of Amendments Relating to Proposals by Security Holders, Exchange Act Release No. 12999 (November 22, 1976).

The Commission has also reiterated "[t]he general underlying policy of this exclusion is consistent with the policy of most state corporate laws: to confine the resolution of ordinary business problems to management and the board of directors, since it is impracticable for shareholders to decide how to solve such problems at an annual shareholders meeting." See Amendments to Rules on Shareholder Proposals, Release 34-40018 (63 Federal Register No 102, May 28, 1998 at p. 29,108). See also Proposed Amendments to Rule 14a-8 under the Securities Exchange Act of 1934 relating to Proposals by Security Holders, Exchange Act Release No. 19135 (October 14, 1982), at note 47. Under this standard, the instant Proposal is clearly subject to omission under Rule 14a-8(i)(7). The instant Proposal, seeking to direct how the Company ought to manage its Open Source Software ("OSS") activities, also fails to focus on any sufficiently significant social policy issues which might otherwise cause the Proposal to transcend the ordinary business exclusion.<sup>1</sup>

**THE MARKETING, DELIVERY AND SUPPORT OF IBM'S SOFTWARE --  
WHETHER THROUGH IBM'S CONVENTIONAL PRODUCT  
OFFERINGS OR THROUGH IBM'S OPEN SOURCE INITIATIVES -- ARE  
MATTERS FALLING DIRECTLY WITHIN THE COMPANY'S  
ORDINARY BUSINESS OPERATIONS.**

IBM makes its software and other technology available in the ordinary course of our business through a variety of methods. One of the ways in which we offer certain software to our customers and business partners is through our Open Source initiatives. IBM has been an active participant in the Open Source arena for many years, and our efforts in this area has resulted in our becoming a leader in the industry. The concept of "Open Source," as described below, is closely interrelated to the concepts of Open Computing,<sup>2</sup> Open Standards<sup>3</sup> and Open Architecture.<sup>4</sup>

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<sup>1</sup> Although not evident from the face of the Proposal, after multiple conversations with the Proponent, we understand the Proponent was interested in having IBM management release certain additional IBM software through our Open Source initiatives. Irrespective of this fact, the Proposal, however interpreted, relates to the mainline business of the Company, and the way in which we determine to make our products available. As such, the instant Proposal is subject to omission under Rule 14a-8(i)(7).

<sup>2</sup> "Open computing" is the philosophical principle that describes architecture and technology procurement

## WHAT IS OPEN SOURCE?

Open source in Information Technology ("IT") is software whose source code is published and made available to the public, enabling anyone to copy, modify and redistribute the source code without paying royalties or fees. Open source software ("OSS") usually evolves through community developers composed of individual programmers, as well as very large companies. Some examples of open source initiatives are Linux, Eclipse, Apache, Mozilla, Globus Alliance and various projects hosted on SourceForge.net, a developer portal for the hosting of open source projects.

Open source software is offered under a license agreement which allows recipients to freely copy, modify and distribute the program source code without paying a royalty or fee. The Open Source Initiative ("OSI") is a non-profit corporation dedicated to managing and promoting the Open Source Definition for the good of the community, specifically through the OSI Certified Open Source Software certification mark and program. There are a variety of different open source licenses approved by the OSI.

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(Footnote Continued)

policies and practices that align Information Technology with the principles of "openness" by ensuring interoperability with open standards. The principles and benefits of "openness" include choice, flexibility, speed to market, agility, and the availability of skilled resources. Open computing is built on a foundation of community innovation, and uses open standards and open architecture. Open source can be a good way of implementing open computing, along with private source and mixed open/private source solutions. IBM believes that open computing is the simplest and most cost effective approach to building flexible business infrastructures.

See <http://www-03.ibm.com/linux/opensource/faqs.shtml#faq1>

<sup>3</sup> "Open standards" in Information Technology typically define interfaces or formats that software or hardware components must adhere to in order to ensure interoperability with other components or systems. Open standards are openly documented and published without restrictions that limit implementations. They include specifications for programming interfaces, protocols, data and file formats. Open standards, like HTTP, HTML, TCP/IP, XML and SQL, are evolved collaboratively by software engineers typically from various IT or software companies who collaborate under the auspices of standards organizations such as W3C, OASIS, OMA, ISO and IETF. Open standards are implemented by offerings available in the market, including software and hardware.

See <http://www-03.ibm.com/linux/opensource/faqs.shtml#faq2>

<sup>4</sup> "Open architecture" in Information Technology is a flexible architectural approach that allows for the loose binding of application functionality through the use of standards. Open architectures provide independence to isolate and distribute work to the most effective teams within and outside the organization. A good example is the Services Oriented Architecture (SOA) which views every application or resource as a reconfigurable service implementing a specific, identifiable set of (business) functions.

See <http://www-03.ibm.com/linux/opensource/faqs.shtml#faq3>

Open source software often promotes standards and leverages community development and collaborative innovation. It also typically is produced through a development methodology which uses a community approach and peer review to develop software.

### **IBM's OPEN SOURCE PHILOSOPHY**

IBM has long been a leader in the Open Source arena, and our ongoing involvement and leadership in various Open Source projects is an integral part of IBM's ordinary business operations. IBM offers a variety of software technology utilizing the Open Source licensing format in cases where the Company determines both that it is legally feasible and that it makes good business sense for us to do so.

*IBM's strategic goals for open source have remained consistent. They are:*

*To support rapid adoption of open standards by facilitating easy access to high quality open-source implementations of open standards in order to speed industry adoption. A primary goal is to encourage open-source implementation of open standards and thus use open source as a way to support our business and strategic goals.*

*To use open source as a business tool by keeping the platform open and taking advantage of new business opportunities. By creating more open opportunities, we encourage choice and flexibility in responding to customers' needs in typically heterogeneous environments.*

*To enhance IBM mind share, creating a preference for IBM brands by associating them with successful Open Source Software ("OSS") projects and building relationships with a broad spectrum of developers. We contribute to key OSS projects that are functionally connected with some of our key products. The joint participation of commercial developers and independent OSS developers creates a synergy that enhances the open-computing "ecosystem."*

*To summarize these goals, IBM views open source as a tool or technique to be used, where it makes sense to do so, to enhance our business and that of our customers. We strive to do this in a way that makes significant contributions to open-source communities and projects and are often able to do that. We acknowledge that we benefit from the open-source efforts of others, but are, on balance, a net contributor.*

See Capek, Frank, Gerdt and Shields, [A history of IBM's open-source involvement and strategy](#), IBM SYSTEMS JOURNAL VOL 44, NO 2, 2005, pp. 249-257, posted on IBM's website at [www.research.ibm.com/journals/sj/442/capek.pdf](http://www.research.ibm.com/journals/sj/442/capek.pdf)

As part of IBM's leadership efforts to advance the Open Source and Open Standards arenas, IBM has engaged in a number of important activities, a few of which we outline for illustration below.

In January 2005, IBM pledged 500 patents in support of open source. At that time, we named 500 specific patents that would be made available without royalty to any open source project that wanted to use them. The pledge included a defensive termination clause that would suspend the right to freely use the patents from anyone who sued an open source project for patent infringement. In this way we created a *patent commons*, a set of patents pledged by IBM to make it easier for others to use and improve upon the original ideas.

By making this pledge, IBM anticipated several results:

- To draw attention to IBM's new approach to intellectual property and the notion of a patent commons.
- To show that open innovation could be built on previously private Research & Development (R&D) activities.
- To speak to the importance of collaboration beyond Company boundaries as a source of future innovation.
- To give a clear statement about IBM's commitment to open source.

This intellectual property pledge helped the open source community, which we expect, in turn, will develop further innovations that will help IBM and the rest of the industry.

[See http://www-03.ibm.com/press/us/en/pressrelease/7473.wss](http://www-03.ibm.com/press/us/en/pressrelease/7473.wss)

IBM received widespread recognition for our innovation in this area, leading others in the industry to follow. See, e.g., [CA, IBM Join in Open Patent Pledge The competitors forget their differences as CA joins IBM in its quest to fuel open source software development](#), Internetnews.com (September 7, 2005) at:

<http://www.internetnews.com/dev-news/article.php/3546891>

In October 2005, IBM made our second patent pledge. There, we focused on the Healthcare and Education industries. IBM's healthcare and education practices announced a major initiative to improve interoperability and information-access through the development of open software standards.

Under this initiative, IBM pledged royalty-free access to its patent portfolio for the development and implementation of selected open healthcare and education software standards built around web services, electronic forms and open document formats.

As we stated in our press release: "Healthcare remains one of the greatest challenges for our society and our economy worldwide. Many industries are transforming, using open software standards to create a powerful platform for innovation and industry growth," said Neil de Crescenzo, vice president, Global Healthcare, IBM Business Consulting Services. "Our initiative can help do the same for the worldwide healthcare industry."

"Fueling innovation and creating a highly skilled workforce requires greater collaboration between students, administrators, industry, school systems and institutions of higher education," said Sean Rush, general manager, IBM Global Education Industry. "IBM is eager to contribute to this collaboration through open standards and industry best practices that drive down costs and provide an environment of learning and advancement. We're calling on others to join us in promoting the development and adoption of truly open software standards."

Innovation based on open software standards can help transform both healthcare and education.

In the healthcare industry, access to IBM's patents has the potential to spur worldwide development of standardized electronic health-record networks, fostering the widespread adoption of health information technology. Such technology will support the protection, privacy and security of health information through open, interoperable technologies.

See <http://www-03.ibm.com/press/us/en/pressrelease/7938.wss>

In July 2007, IBM announced that we were granting universal and perpetual access to certain intellectual property that might be necessary to implement more than 150 standards designed to make software interoperable. One likely result of the pledge to commercial and open source communities is that it will be easier for more computing devices and software to be compatible with one another. The move, which we believe to be the largest of its kind at the time, was also designed to spur industry innovation, while discouraging litigation. See [IBM Pledges Free Access to Patents Involved in Implementing 150+ Software Standards -- Promise to Not Assert Patent Rights Is Single Largest Commitment of Its Kind; Latest in a Series of Patent Pledges and Support for Open Standards](#) located at:

<http://www-03.ibm.com/press/us/en/pressrelease/21846.wss>

Moreover, IBM has published on our website our “Interoperability Specifications Pledge” extending our leadership role to further the adoption of open specifications for software interoperability and to simplify implementation of those specifications by open source software (and private source) developers.

See <http://www-03.ibm.com/linux/opensource/ispinfo.shtml>

As recently as December 4, 2008, IBM and our Business Partners introduced a Linux-Based, Virtual Desktop; specifically we announced general availability of a Linux-desktop solution designed to drive significant savings compared with Microsoft-desktop software. As we noted in our press release:

This solution runs open standards-based email, word processing, spreadsheets, unified communication, social networking and other software to any laptop, browser, or mobile device from a virtual desktop login on a Linux-based server configuration.

A virtual desktop looks like a traditional desktop but is not limited to a single physical computer. Instead, many virtual Linux desktops are hosted on a server. The combined solution includes:

- Virtual desktop provided by Virtual Bridges called Virtual Enterprise Remote Desktop Environment (VERDE);
- Ubuntu, the worldwide leading Linux desktop operating system, from Canonical; and
- IBM Open Collaboration Client Solution software (OCCS) based on IBM Lotus Symphony, IBM Lotus Notes and Lotus applications. IBM Lotus Symphony is built on the Open Document Format (ODF).

IBM’s news built on announcements throughout 2008 around delivering Microsoft-alternative desktops in conjunction with IBM’s business partners. This solution is now a key component of IBM’s financial services front office transformation offering as well as part of the IBM public sector industry solution framework.

See <http://www-03.ibm.com/press/us/en/pressrelease/26230.wss>

There are many other examples of IBM’s leadership in the Open Source area. In short, IBM has been a significant leader in the Open Source / Open Standards arena, and IBM has effected such leadership as an integral part of our Company’s ordinary business operations.

## IBM's OPEN SOURCE PORTAL ON THE INTERNET

IBM's Open Source Portal on our Internet website ([www.ibm.com](http://www.ibm.com)) contains a wealth of additional information on our Open Source initiatives and offerings, which we believe responds to the needs and desires of our customers and business partners, *again all in the ordinary course of our business.*

See <http://www-03.ibm.com/linux/opensource/index.shtml>

Our Open Source Portal highlights some of the numerous productivity offerings we make available to our customers and business partners as part of our normal business operations. In advancing these offerings, we expressly state to our customers and business partners:

**"Let us help you innovate with open source and private source software leveraging best of breed for total solutions. IBM's extensive software, hardware, and services portfolio, as well over 600 developers working with the community on over 100 open source projects are here to serve you."**

Some of IBM's business initiatives in the Open Source arena are highlighted on the portal. These include, without limitation:

### Web Application Servers ("WAS"):

- As part of the community, IBM contributes to Apache projects such as Apache Geronimo and offers WAS Community Edition as IBM's supported distribution of Geronimo. WAS Community Edition pre-integrates Apache Tomcat with other open source components such as web services, security, authentication, messaging and web tier clustering. It is free to download and use in production with support options available on a yearly subscription.

### Linux, Integrated Stack:

- Contributing to Linux and providing the Integrated Stack for SUSE Linux Enterprise, a pre-integrated database and application server stack on Linux.

### Software Development:

- IBM contributes to the Eclipse community and then uses Eclipse as the basis on which the Rational Software Delivery Platform is built. IBM is also building its Jazz project for collaborative development on Eclipse, and has opened up access to the Jazz development website to Rational customers, business partners and selected individuals.

#### Client Collaboration:

- IBM contributes to Eclipse and OpenOffice.org as part of the community and then uses open source components in the Lotus Expeditor platform and cross-client GUI applications such as Lotus Notes 8, Lotus Sametime 7.5 and Lotus Symphony.

#### Information Management:

- Offering free DB2 Express-C--production ready and with native XML. IBM contributes to the Apache Derby and Lucene projects and uses these open source components in a number of IBM products including OmniFind Yahoo! Edition.

#### Systems Management:

- IBM contributes to Eclipse and COSMOS as part of the community to provide common open source components which can be used in future generations of products.

#### IBM Grid and Cloud Offerings:

- Working as part of the Globus, Xen and Apache Hadoop communities to develop open source components which are then used in IBM Grid and Blue Cloud offerings.

#### Emerging Technologies:

- IBM contributes to many open source emerging technology projects through communities including Apache and Eclipse. This includes Apache Tuscany, OpenAjax, Dojo, and Apache UIMA.

All of these and other product-related efforts are undertaken by IBM in the ordinary course of our business operations. Moreover, IBM's Open Source portal provides additional detailed information relevant to our customers, including valuable **White Papers**, describing specifically to our customers how we can add value, and assist our customers in integrating Open Source into their own Information Technology Strategy and their business operations. See Exhibit B. Indeed, a simple review of the IBM website reveals a multitude of activity, undertaken as an integral part of IBM's leadership in this area. Since information technology is our business, and since we assist other businesses in their own information technology efforts as part of our business, this is precisely why the Proposal itself implicates IBM's ordinary business operations, and should be excluded under Rule 14a-8(i)(7).

## APPLICATION TO THE PROPOSAL

The Proponent is a former IBM employee and a self-described computer programming hobbyist. As such, we believe him to be more knowledgeable than the layman on technological matters and related software programming concepts. However, the Proponent asks us to do what we are already doing as part of our day-to-day business operations. In addition to the fact that we already are a leader in this area, the Proponent's ideas, while thoughtful, are not properly the subject of a stockholder proposal, as they fall directly within the Company's ordinary business operations under Rule 14a-8(i)(7). Company decision making related to our software offerings and the methods by which we determine to make such offerings available to our customers, business partners and the public all are clearly matters for IBM business management, not for stockholder evaluation, and are therefore all part of the ordinary business operations of the Company.

In this connection, the Commission has long recognized that a variety of proposals regarding the selection of products, services or offerings to be developed by a registrant, as well as proposals regarding the manner in which those products, services or offerings should be designed, promoted, distributed, delivered and/or supported by a registrant, all relate to a company's ordinary business operations and are thereby excludable from proxy consideration under Rule 14a-8(i)(7). See International Business Machines Corporation (January 6, 2005)(**proposal that the board take steps to offer IBM customers software technology that has greater simplicity**); Pfizer Inc. (January 25, 2004)(product research, development and testing are ordinary business matters); H.J. Heinz Company (June 2, 1999)(submissions relating to various aspects of Heinz's operations, including pickle processing methods and the distribution and sale of pickles, were properly excluded as ordinary business matters under Rule 14a-8(i)(7)); General Electric Company (February 4, 1999)(proposal to offer long term care insurance was properly excluded as relating to company's ordinary business operations (i.e., offering of a particular product)); International Business Machines Corporation (December 22, 1997)(**proposal to have IBM implement a policy to increase market share in the home and small office software market excluded by staff as ordinary business (i.e., product marketing)**); Mattel, Inc. (January 4, 1996)(determining the manufacturing specifications of a registrant's products, as well as deciding that such specifications would be attractive to and appropriate for a broad consumer segment was properly determined by the staff to fall within the issuer's ordinary business operations, as relating to the nature, content or presentation of a product); Philip Morris Companies, Inc. (February 3, 1993)(proposal to establish a National Cheese Exchange Review Committee to research and recommend to management ways to stabilize the cost of raw milk used in the Company's cheese

products and to streamline the company's cheese procurement practices properly excluded as ordinary business); The Kroger Company (March 23, 1992)(use of food irradiation processes and the use and sales of irradiated foodstuffs properly excluded as ordinary business (i.e., products and product lines retailed by the company including the choice of processes and supplies used in the preparation of its products); **IBM** (January 14, 1991)(**proposal relating to the development of a particular product by IBM excluded as ordinary business**); American Telephone and Telegraph Company (December 19, 1986)(proposal to have management produce and offer telephone sets standardized for persons having diminished hearing properly excluded as ordinary business); Prime Computer Inc. (February 10, 1986) (proposal to alter the company's policies with respect to software license fees excluded as ordinary business (i.e., the determination of appropriate fees for company products or services)); Potlatch Corp. (January 23, 1986)(proposal relating to restarting certain operations in the registrant's "Western Wood Products" division excluded as ordinary business (i.e. determining when to reduce or increase operations at the registrant's facilities)); International Business Machines Corporation (January 14, 1986)(**proposal to have IBM provide customers with certain programming materials, including "computer readable source code" excluded as ordinary business (i.e., determining the form in which Company computer programs will be delivered)**). The very same result should apply to the Proposal in the instant case, and the Proposal excluded as part of this Company's ordinary business operations.

The instant Proposal is also very similar to the letter from the same Proponent in International Business Machines Corporation (December 22, 1997), as well as the other IBM letters highlighted above, which were all submitted by Company employees or retirees relating to actual or potential IBM product or service offerings, and what those stockholders thought we should be doing with them. In the 1997 letter, the instant Proponent did not agree with the direction IBM was taking with respect to the software products IBM then delivered to the home and small office business marketplace. The Proponent thought IBM ought to be doing more than we were in the small business marketplace, either by delivering another version of OS/2, another operating system for the small business marketplace, or other software products that he, as a former IBMer would find to be suitable. The staff permitted IBM to omit that proposal under the ordinary business exclusion. The same result should now apply here with respect to the Proponent's hopes and desires for the Company in the Open Source / Open Standards arenas.

In substance, the instant situation is no different. As in International Business Machines Corporation, supra, the instant Proponent again has his own views on how we ought to be delivering certain software offerings. The Proponent thinks

we ought to be doing more in the Open Source arena. Through conversations with the Proponent, we learned that he was interested in having IBM deliver some of the OS/2 source code through an Open Source license. Because of intellectual property restrictions, we informed the Proponent and others over the years that we are not in a position to provide OS/2 in Open Source format. As related to the Proposal at hand, while the Proponent may have his own opinions on the development, marketing and delivery of IBM's software products, just as in International Business Machines Corporation, *supra*, and each of the other IBM letters highlighted above, it is clear that these views cannot properly form the basis of his stockholder proposal under Rule 14a-8(i)(7).

The instant Proposal, while fixed in terms of this Company's Open Source activities and offerings, can also be analyzed in the same manner set forth in Mattel, Inc. (January 4, 1996). In Mattel, a stockholder, dissatisfied with the way the toy manufacturer designed, portrayed and marketed one of its flagship products, the Barbie Doll, lodged a proposal seeking to direct Mattel to redesign the doll in a way that stockholder thought would be more suitable. The stockholder did not like the image Mattel's Barbie Doll portrayed in the marketplace, and believed that if Mattel were to redesign the Barbie with more realistic body proportions, the new Barbie would be a more positive role model. The registrant maintained that the ordinary business exclusion should be applied. In describing the application of the ordinary business exclusion to that proposal, the registrant wrote that:

[the Company's] management, under supervision of the Board of Directors, is best positioned to determine how to design and manufacture its products and best serve its customers. Over the years, the development, design and marketing of Mattel's product by management have created enduring and popular products like the BARBIE doll, and Mattel's stockholders have enjoyed the consequent rewards. *Were stockholder proposals to become an approved mechanism for addressing product issues, special interest groups, or for that matter stockholders with differing visions as to how to run a company, could veto a particular product or delay or block its successful introduction into the marketplace. Mattel could not effectively conduct its operations or compete under such circumstances. Persons or interest groups dissatisfied with product decisions by a company's management have numerous means of communicating their views, including refusing to purchase such products, selling their shares, seeking a change in management or undertaking public relations campaigns. However, the shareholder resolution mechanism is an inappropriate forum to debate matters involving, like the Proposal, a company's ordinary business. (emphasis added)*

The Staff concurred. The same analysis advanced so cogently in Mattel can also be applied with equal force to the instant Proposal.

In a variety of other analogous cases, the staff has consistently ruled that proposals may be excluded under Rule 14a-8(i)(7) where they would seek to regulate, eliminate or otherwise modify the way the registrant delivers its product or service offerings. See Marriott International, Inc. (February 13, 2004)(proposal to issue and enforce a corporate policy against any of its hotels or resorts which it owns or manages from selling or offering to sell any sexually explicit materials through pay-per-view or in its gift shop excluded under rule 14a-8(i)(7) (i.e. the sale and display of a particular product and the nature, content and presentation of programming)); Wal-Mart Stores, Inc. (February 13, 2004)(proposal for Wal-Mart to purchase and utilize a particular product relating to on-line credit card purchases properly excluded as relating to Wal-Mart's ordinary business operations (i.e., the purchase of a particular product relating to online security)); The Kroger Co. (March 20, 2003)(proposal that registrant "discontinue use of the Kroger Plus Shopper's Cards" properly excluded as ordinary business (i.e., the manner in which a company sells and markets its products)); Time Warner Inc. (February 24, 1997)(proposal to research the effect that certain cartoon characters, especially Porky Pig, have on encouraging the teasing and bullying of children, with a view to retiring some of the characters, properly excluded as ordinary business (i.e., the nature, content or presentation of products and programming)); American Express Company (January 25, 1990) (proposal seeking for the Company to terminate all fur promotions was properly excluded under the ordinary business exception because the staff found the proposal to relate to the promotion and sale of a particular product); USX Corporation (January 26, 1990) (proposal seeking to have the registrant stop the sale of adult soft core pornography at its retail outlets was properly excluded by the staff as relating to the sale by the registrant of a particular product); Kimberly-Clark Corporation (February 26, 1987)(proposal to cease making certain paper and products for use by tobacco industry excluded by staff as relating to the company's ordinary business operations (i.e., decisions about maintaining or changing product lines)); Philip Morris Companies, Inc. (February 6, 1989)(the decision to cease advertising and abandon a particular line of business properly determined to be within the registrant's ordinary business operations). See also The Walt Disney Company (November 4, 1997)(proposal seeking to preclude the registrant from affiliating with movies rated other than G or PG-13, television shows rated other than TVG or TV-14 or recordings bearing a parental advisory label properly determined to fall within the ordinary business operations of the registrant inasmuch as the proposal purported to regulate the nature, content and presentation of the registrant's programming); General Motors Corporation (March 4, 1996) (proposal seeking the appointment of a vice president level position to monitor the Company's advertising

determined to relate to the conduct of the ordinary business of the registrant (i.e. presentation of advertising)); Gannett Co. Inc. (March 18, 1993)(proposal to have the registrant, a newspaper and billboard company, prepare a report on its practices with respect to cigarette advertisements properly omitted as falling within the registrant's ordinary business operations, since proposal related to the nature, presentation and content of the registrant's news and advertising).

The Staff has also recognized that proposals concerning quality, service, and support matters, including the handling of customer issues with respect to a Company's products and services, also relate to the ordinary business operations of a corporation, and has consistently concurred in the omission of proposals suggesting various procedures to rectify issues associated with quality concerns. See, e.g. Deere & Company (November 30, 2000)(proposal relating to the creation of a "Customer Satisfaction Review Committee" comprised of shareholders was properly excluded as relating to the registrant's ordinary business operations (i.e., customer relations)); American Telephone and Telegraph Company (January 25, 1993)(proposal to initiate audit procedures to track customer correspondence to rectify the lack of response by registrant properly excluded as ordinary business); The Goodyear Tire and Rubber Company (January 28, 1991)(proposal to establish committee to study the handling of consumer and shareholder complaints excluded); General Motors Corporation (February 13, 1979)(proposal to have the Company establish a consumer relations department in order to rectify dealer disputes determined to be a matter relating to the conduct of General Motors' ordinary business operations).

As in the Proponent's earlier letter in International Business Machines Corporation, supra, as well as each of the other IBM letters which related to our own product and service offerings, this Company's internal management is in the best position to determine how to best design, develop, market and deliver our products, including the format for the delivery of such products. Indeed, IBM's continued success in the marketplace is dependent upon our delivery of quality product and service offerings, whether through conventional means, through Open Source licensing, or otherwise. IBM has long been known for our high quality software and product offerings as well as our excellent customer service. The products, software and services we decide to offer and the manner in which we determine to deliver such products, software and services are all subjects which are entirely within existing management's own expertise. Just as the development, marketing, and distribution and support of our products, software and services has, over the years, been instrumental to our success, so too is the Company's commitment to address issues our customers have with our offerings. To the extent our customers have questions about our offerings, IBM maintains multiple channels for our customers to contact us, including telephone hotlines, help desks, and other channels.

Although the stockholder proposal process is not the proper way for the Proponent to raise the issue in the Proposal, we wish to highlight that IBM maintains a special vehicle to handle ideas and suggestions with respect to our product and service offerings. For many years, IBM has maintained an External Submissions Program, where ideas and suggestions relevant to our business have been reviewed and addressed in an organized manner. IBM's External Submissions program can be found on our Internet web site at:

<https://www-01.ibm.com/contact/submissions/extsub.nsf/BusinessProposal?OpenForm>

Our External Submissions website enables all interested parties to make an electronic submission to IBM on an idea, suggestion, software proposal or business proposal. Thereafter, IBM's team of experts determine if IBM has an interest in pursuing the submission. There, it is specifically noted:

**This Web page will enable you to make an electronic submission to IBM on an idea, suggestion, software proposal or business proposal.**

**Our team of experts can act as your single point of contact within IBM to determine if IBM has an interest in your submission. Submissions can be business propositions including marketing and development relationships, software proposals, equity, acquisition, and joint venture proposals, patents including those issued and pending, and ideas relating to IBM products and services.**

The public is encouraged to use this web site to share their ideas on our products and services. The Proponent has used this website in the past and may of course continue to do so in the future. Given all of these facts, it is the Company's position that the instant Proposal may be omitted from our 2009 proxy materials under Rule 14a-8(i)(7). Therefore, upon the basis of the policy of the staff of the SEC with regard to the subject matter of the Proposal, the Company requests that no enforcement action be recommended if it excludes the Proposal on the basis of Rule 14a-8(i)(7).

## **II. THE PROPOSAL CAN BE OMITTED FROM THE COMPANY'S 2009 PROXY MATERIALS UNDER RULE 14a-8(i)(10) AS SUBSTANTIALLY IMPLEMENTED.**

Rule 14a-8(i)(10) permits the exclusion of a shareholder proposal from a company's proxy materials "if the company has already substantially implemented the proposal." In applying this standard, the Commission has indicated the proposal need not be "fully effected" by the registrant, as long as it has been "substantially implemented." Release No. 34-20091 (August 16, 1983). Accordingly, Rule 14a-8(i)(10) permits the exclusion of a shareholder proposal

when a registrant has implemented the essential objective of the proposal, even where there is not exact correspondence between the actions sought by the shareholder proponent and the registrant's actions. See AMR Corporation (April 17, 2000)(proposal recommending that members of identified board committees meet specified criteria could properly be excluded based on issuer's representation that the members of the board committees identified in the proposal met the criteria specified).

The rationale for exclusion of a stockholder proposal like the instant one under Rule 14a-8(i)(10) has been described as follows:

"A company may exclude a proposal if the company is already doing -- or substantially doing -- what the proposal seeks to achieve. In that case, there is no reason to confuse shareholders or waste corporate resources in having shareholders vote on a matter that is moot. In the SEC's words, the exclusion is designed to avoid the possibility of shareholders having to consider matters which have already been favorably acted upon by the management...."

William Morley, Editor, Shareholder Proposal Handbook, by Broc Romanek and Beth Young (Aspen Law & Business 2003 ed.), Sec. 23.01[B] at p. 23-4. (emphasis added).

In this connection, in Staff letters utilizing the substantial implementation exclusion, a company need only have appropriately addressed the concerns underlying such a proposal to warrant exclusion. See 3M Co. (February 27, 2008) Johnson & Johnson (February 19, 2008). Although the text of the Proposal is far from clear, for the same reasons that have already been articulated in Argument I, supra, and by reason of the actions we have taken and continue to take in the OSS arena, we also believe we are addressing the issues raised by the Proposal, and have substantially implemented it under Rule 14a-8(i)(10). In short, we believe we are already doing what the Proposal seeks to achieve. We are a leader in the Open Source arena and we believe this fact is well established.

As described in Argument I, supra, IBM's active, long-standing and high-profile participation in the open source and open standards communities are cornerstones of the Company's balanced approach to the marketplace. On the one hand, we encourage the development of a common blueprint to make products from different vendors compatible with one another. We also contribute code to the open source community, which often adheres to those common, open standards when writing software code. Yet, we also compete fiercely when it comes to providing the best commercial product and services built on top of those underlying standards and open source applications.

For instance, IBM has invested billions of dollars over the last ten years in developing software products and services designed to complement the open

source community. Today, the Company invests about \$100 million in open source development annually. IBM participates in and contributes to more than 150 open source projects -- more than any other Company. In fact, IBM has more than 900 people dedicated to specific open source projects, and about 10,000 employees contributing in some way to open source software, such as Linux. IBM ships more than 350 software products that run on Linux.

At the same time, IBM has cultivated a highly respected reputation within the open standards community as well. The company participates in literally hundreds of standards activities. But it's not just the number of groups -- it's the depth of our commitment. We made our global portfolio of 42,000 patents freely available to adopters of hundreds of software standards. And in the fall of 2008, we became the first Company to adopt a well publicized, formal policy governing our behavior within the world of open standards.

As part of our groundbreaking standards policy, we advocate for the creation of high-quality open standards predicated on transparent processes and fair intellectual property policies. Not surprisingly, it specifically urges standards bodies to give priority both to the open standards community, as well as growth markets. To make it truly successful, it urges other members of the open standards community to likewise institute reforms and policies that will preserve the integrity, relevance and impartiality of the standards process.

To the extent the Proposal can be read to recommend increasing IBM's role in developing open source and open standards, we have already taken up this challenge and have implemented it on a global scale. Given all of the foregoing, we believe there is no reason to confuse shareholders or waste corporate resources in having shareholders consider and vote upon this matter. IBM's existing activities respond directly to the concerns of the Proponent, and the Company has already implemented the essential objective of the Proposal. See E.I. DuPont de Nemours and Company (February 12, 1990)(proposal to establish a standing committee to establish corporate environmental and occupational safety and health policy was excluded when the registrant already had a committee to address safety, health and environmental issues). For all of these reasons, the Company maintains it has substantially implemented the Proposal under Rule 14a-8(i)(10). The Company therefore respectfully requests that no enforcement action be recommended to the Commission if the Company also excludes the Proposal under Rule 14a-8(i)(10).

**III. THE PROPOSAL MAY BE OMITTED UNDER RULE 14a-8(i)(3) AS VAGUE AND INDEFINITE AND AS SUCH, CONTRARY TO THE PROXY RULES, IN PARTICULAR RULE 14a-9, WHICH AMONG OTHER THINGS PROHIBITS FALSE AND MISLEADING STATEMENTS IN PROXY SOLICITING MATERIALS.**

The Company firmly believes the Proposal is excludable under Rules 14a-8(i)(7) and 14a-8(i)(10). In addition, however, the Proposal and supporting statement are also excludable as vague and indefinite under Rules 14a-8(i)(3) and 14a-9. Rule 14a-8(i)(3) permits a company to exclude a proposal if the proposal or the supporting statement violates the proxy rules, including Rule 14a-9 which prohibits materially false or misleading statements in proxy soliciting materials. The staff has permitted registrants to use Rule 14a-8(i)(3) to exclude proposals from proxy statements if the proposal is determined to be either vague and indefinite or false and misleading. See, e.g., International Business Machines Corporation (January 10, 2003); Joseph Schlitz Brewing Company (March 21, 1977).

Based upon conversations with the Proponent, we now have a better idea of his issues. However, a reading of the two sentence Proposal, together with the one sentence section following it provides no guidance *whatsoever* to IBM's stockholders at large as to what the Proponent would have the Company do regarding our Open Source and Open Standards activities. As we explained earlier, there is a difference between Open Source and Open Standards, and IBM is already heavily involved in both the Open Source and Open Standards arenas. The fact that the Proposal is devoid of any guidance to stockholders on what more IBM should be doing in these arenas makes it fatally defective under Rule 14a-8(i)(3), particularly since we are already a major industry participant. IBM stockholders at large reading a proxy statement -- having in front of them only the stark text of the Proponent's submission to ponder, trying to figure out what more the Proponent would have the Company do -- would be at an utter loss to determine what actions the Company would actually take in the Proponent's "NEW WORLD ORDER" if we were to implement the Proposal. The second sentence states only that "The very high professional "OPEN SOURCE" standards the IBM resources and experience can provide if mandated by an IBM management directive" implies that IBM should issue some directive, but provides no specificity. Aside from the fact that IBM has already assumed a leadership role in the Open Source and Open Standards arenas and, among other things, has already publicly posted our "Interoperability Specifications Pledge," as described earlier<sup>5</sup>, we believe that in light of all of our existing actions, IBM stockholders would be confused by this Proposal. The Proponent has his own

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<sup>5</sup> See <http://www-03.ibm.com/linux/opensource/ispinfo.shtml>

opinions on this subject matter, but has provided no guidance to us or to IBM stockholders at large on what more is needed. Given IBM's already extensive track record in this arena, stockholders could only speculate as to the actions the Company should take to implement activities we are already addressing each and every day as part of our ordinary business operations. As such, the Proposal should also be excluded under Rule 14a-8(i)(3). See Woodward Governor Company (November 26, 2003)(proposal linking compensation for executives in upper management to stock growth excluded under Rule 14a-8(i)(3)); Capital One Financial Corporation (February 7, 2003)(excluding proposal which considered board members as employees if they received specified remuneration).

Over the years, there have been many situations in which the staff has granted no-action relief to registrants with proposals which were similarly infirm. See International Business Machines Corporation (February 2, 2005)(proposal to reduce the pay of those responsible for the reduction of the dividend excluded as vague and indefinite); General Electric Company (January 23, 2003)(proposal seeking cap on salaries and benefits of one million dollars for GE officers and directors excluded in its entirety under rule 14a-8(i)(3) as vague and indefinite); International Business Machines Corporation (January 10, 2003)(proposal requiring two nominees for each new member of the board excluded under rule 14a-8(i)(3) as vague and indefinite); The Proctor & Gamble Company (October 25, 2002)(permitting omission of a proposal requesting that the board of directors create a specific type of fund as vague and indefinite where the company argued that neither the stockholders nor the company would know how to implement the proposal); NYNEX Corporation (January 12, 1990)(permitting omission of a proposal relating to noninterference with the government policies of certain foreign nations because it is "so inherently vague and indefinite" that any company action "could be significantly different from the action envisioned by the shareholders voting on the proposal"); Joseph Schlitz Brewing Company (March 21, 1977).

The SEC has found that proposals may be excluded where they are:

so inherently vague and indefinite that neither the shareholders voting on the proposal, nor the Company in implementing the proposal (if adopted), would be able to determine with any reasonable certainty exactly what actions or measures the proposal requires. See Philadelphia Electric Company (July 30, 1992).

The Staff's response above applies with full force to the instant Proposal. The courts have also supported such a view, quoting the Commission's rationale:

it appears to us that the proposal, as drafted and submitted to the company, is so vague and indefinite as to make it impossible for either the board of directors or the stockholders at large to

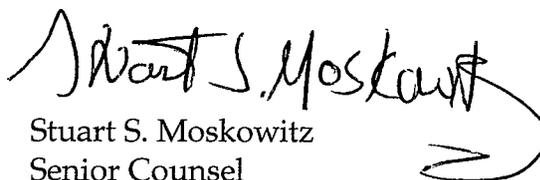
comprehend precisely what the proposal would entail. Dyer v. Securities and Exchange Commission, 287 F.2d 773, 781 (8th Cir. 1961).

As with each of the letters cited above, the Company also submits that the instant Proposal, in addition to being subject to exclusion as a matter of ordinary business under Rule 14a-8(i)(7), and as substantially implemented under Rule 14a-8(i)(10), is also woefully vague and indefinite, and should also be excluded from our 2009 proxy statement under Rules 14a-8(i)(3) and 14a-9. We therefore request that no enforcement action be recommended to the Commission if the Company excludes the Proposal under Rules 14a-8(i)(3) and 14a-9.

### CONCLUSION

In summary, for the reasons and on the basis of the authorities cited above, IBM respectfully requests your advice that the Division will not recommend any enforcement action to the Commission if the Proposal is omitted from IBM's proxy materials for the 2009 Annual Meeting. We are sending the Proponent a copy of this letter, thus advising him of our intent to exclude the Proposal from the proxy materials for the 2009 Annual Meeting. If you require any further information, please call me at 914-499-6148. Because of time considerations, I would appreciate it if the Staff could also provide your response to both IBM and Mr. Pettus via e-mail. My e-mail address is [smoskowi@us.ibm.com](mailto:smoskowi@us.ibm.com), and Mr. Pettus' e-mail address is [charles.pettus@us.ibm.com](mailto:charles.pettus@us.ibm.com). The Proponent is hereby requested to copy IBM on any response he may choose to make to the Commission in connection with the Proposal. Thank you for your attention and interest in this matter.

Very truly yours,

  
Stuart S. Moskowitz  
Senior Counsel

cc: Mr. Charles Pettus

\*\*\* FISMA & OMB Memorandum M-07-16 \*\*\*

Exhibit A

International Business Machines Corporation (“IBM”)

IBM’s request to exclude stockholder proposal from  
2009 Proxy Statement pursuant to Rule 14a-8

Office of the Secretary  
International Business Corporation  
New Orchard Road, Mail Drop 301,  
Armonk, N.Y. 10504

November 8, 2008

## Stockholder 2009 Proposal

This letter is to notify IBM Management that Chuck  
Pettus, \*\*\* FISMA & OMB Memorandum M-07-16 \*\*\* holder  
of 1860 shares, intends to submit the following  
proposal at the meeting.

Resolved: The shareholders request the Company adopt  
a policy or take appropriate steps to increase the  
IBM role to fill the following stockholders' perception.  
Stockholders perceive the NEW WORLD ORDER yearns for  
the very high professional "OPEN SOURCE" standards  
the IBM resources and experience can provide if mandated  
by an IBM management directive.

The shareholders feel this IBM action would be a win-win  
experience for IBM, the shareholder's financial  
investment in IBM, the IBM Image, the shareholder's  
Image, and the IBM Brand Name.

Chuck Pettus;

\*\*\* FISMA & OMB Memorandum M-07-16 \*\*\*



11-10-08 A11:21 IN

Exhibit **B**  
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International Business Machines Corporation (“IBM”)

IBM’s request to exclude stockholder proposal from  
2009 Proxy Statement pursuant to Rule 14a-8

## Integrating Open Source into your business **IBM**

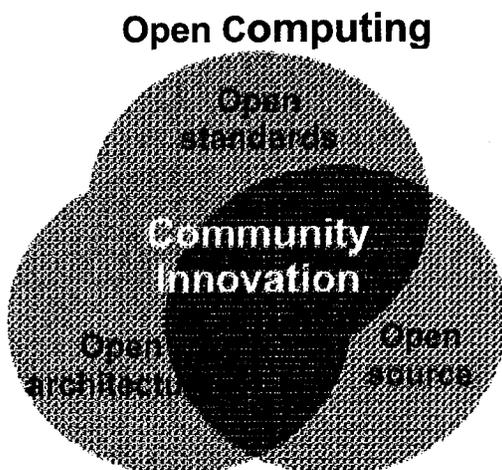
To help businesses deal with the complexity of globalization, unanticipated opportunities, unexpected threats, competitive demands and fiscal constraints, a business' information technology and administrative systems must be highly flexible and resilient so that they can seamlessly communicate with other disparate technologies and systems. It is the enablement of this flexibility and resilience that defines "Openness."

"Open" is simply a better means to an end. It may not be the only means, but it is the simplest and most cost effective approach to building flexible business infrastructures. Closed, or proprietary, systems alone will not spell failure, but will make success more difficult to achieve due to increased integration requirements. These first principles of "open computing" act as filter when determining how to pragmatically implement open technologies in support of business strategy.

- **Choice:** choices made today should not limit choices that can be made in the future, thus ensuring future access to innovation.
- **Flexibility:** internal departments and external partners that make different technology choices can be connected.
- **Speed to market:** new solutions that involve multiple hardware and software platforms can be quickly built and deployed, without vendor lock-in.
- **Agility:** changing business parameters can be accommodated and incorporated into existing systems very rapidly.
- **Skilled resources:** a work force is available that is trained and understands open computing standards and platforms.

### What is Open Computing?

Many software companies brand their offerings and architectures as open. We shouldn't be surprised. "Open" is very often an important requirement in most IT acquisitions, so small wonder companies posture their offerings as such. There are as a result, many points of views and many definitions on what is open and what is not.



**Open computing** is the philosophical principle that describes architecture and technology procurement policies and practices that align IT with the first principles of "openness" by ensuring interoperability with open standards.

**Open standards** are specifications for API's, protocols, data and file formats that are openly documented and published without restrictions that limit

implementations. Open standards, like HTTP, HTML, TCP/IP, XML and SQL, are evolved collaboratively by software engineers typically from various IT or software companies who collaborate under the auspices of standards organizations such as W3C, OASIS, OMA, ISO and IETF. Open standards are implemented by offerings available in the market.

**Open architecture** is a flexible architectural approach that allows for the loose binding of application functionality through standardized interfaces. Open architectures provide independence to isolate and distribute work to the most effective teams within and outside the organization. A good example is the Services Oriented Architecture (SOA) which views every application or resource as a reconfigurable service implementing a specific, identifiable set of (business) functions.

**Open source** is software whose source code is published and made available to the public, enabling anyone to copy, modify and redistribute the source code without paying royalties or fees. Open source software (OSS) usually evolves through community developers composed of individual programmers, as well as very large companies. Some examples of open source initiatives are Linux, Eclipse, Apache, Mozilla, Globus Alliance and various projects hosted on SourceForge.net, a developer portal for the hosting of open source projects.

**Community innovation** is the common thread that runs across all three of the open computing components. All three require active support and collaboration among individual developers, IT vendors, standards organizations, governments, and universities to accelerate innovation and promote the advancement of critical standards.

Open computing accelerates the process from idea generation to market distribution through a standardized information technology platform. Due to the alignment of technology and business strategies made possible through open computing, businesses have more technology choices and greater flexibility to solve business problems more efficiently.

## What is Open Source?

Open source is defined by three key components:

- A **development methodology** which uses a community approach and peer review to develop software. Since the code is openly published, everyone can see whether it is good or bad – and offer feedback on how to improve it. This promotes a meritocracy amongst developers – you basically get to be a key player by writing good code.
- A **licensing approach** that provides free access to source code and conforms to one of about 60 licenses authorised by OSI - the Open Source Initiative. All of these licenses allow users to view and modify the source code but vary greatly in specifying the conditions under which code modifications and extensions must be returned to the community as open source. Visit the OSI web site <http://www.opensource.org/> for details on open source licenses.

- **Community** of developers, users, and IT vendors that contribute code, test, and provide support for an open source project. A key distinction exists between open communities that encourage broad participation and vendor controlled communities in which a single vendor controls the direction of an open source project. Vendor controlled communities can lead to vendor lock-in and are higher risk given total dependence on a single company.

OSS can be an important source of innovation because it brings together people from different backgrounds and perspectives to work on and solve common business and IT problems. OSS is also an excellent approach for driving emerging standards and, in many cases; an OSS project can become the common implementation of a standard that is used by a large number of IT vendors and customers. The Apache Web Server is a good example of this.

### **Open Source Benefits and Challenges**

The IT industry is seeking a new equilibrium between open source and commercial private source software. In terms of innovation, both private source and open source will continue to be critical in the future. Open source and its collaborative communities will help drive the evolution of emerging standards. And, private source will continue to play a vital role in driving innovation on top of the commoditized layers of open source providing unique value to customers. In the future, we'll increasingly see a combination of open source and private source used to create best of breed solutions. Open source offers a number of potential benefits to customers:

- **Low initial costs:** the cost of acquiring OSS may be low or even zero with optional support offerings priced separately. Free, informal web support is also typically provided for most open source projects.
- **Easy to acquire:** OSS is easy to download from the web or often it's available as part of a Linux distribution. This frictionless access makes it easy for developers to try out the software without needing to go through a formal purchasing process. OSS encourages the rapid prototyping and "do-it-yourself" computing popularized by scripting languages and the LAMP stack.
- **Increased choice and flexibility:** OSS can often be obtained from multiple suppliers and often runs on multiple hardware architectures. Combined with the option of buying support – again often from multiple vendors – this leads to choice and flexibility for customers.
- **High code quality:** the peer review process of open source development has tended to produce high quality code and robust community support helps turn around bug fixes very quickly.
- **Community innovation:** the community approach frees developers to focus on value add components.

However, there are a number of potential challenges that also need to be considered by customers looking at open source software:

- **Support:** Is support available from a trusted vendor at the quality and service levels demanded by mission-critical use?
- **Integration:** Who's responsible for integrating the various OSS components with existing IT infrastructure software? Open source is a collection of communities – some of whom talk with each other and ensure integration, and some of whom don't.
- **Application availability:** Are ISV applications available which build on the open source platform – and are they tested and supported to work on it?
- **Maturity:** How mature is the open source offering? Does it have the functionality and scalability of competitive commercial offerings? Is there broad community and industry support for this offering? And how are the developers of the open source offering going to make money – is there a sustainable business model behind it – and if not, how long is the offering going to last?
- **Complexity:** Rapid prototyping and “do-it-yourself” computing promoted by OSS can be very effective at developing applications fast, but how maintainable are those applications, and how do they relate to the standards and applications mandated by Corporate IT? Uncontrolled open source usage could lead to more complex IT infrastructure environments.

### **Integrating Open Source into your IT Strategy**

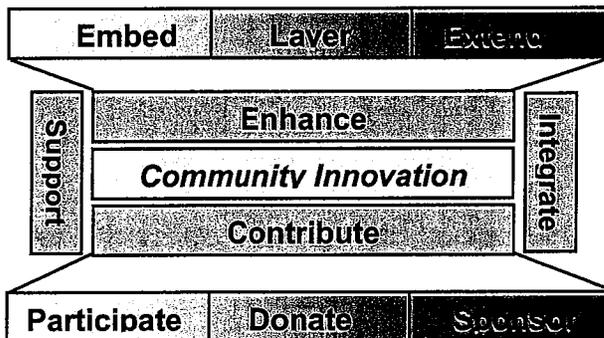
There are lots of open source alternatives available in the market. How do you determine which open source projects to consider? How will you integrate these open source products into your existing IT environment? IBM has helped many customers develop pragmatic open source strategies. Here are some guidelines to determine if a particular open source project meets your business and IT infrastructure needs:

- First and foremost, **insist on open standards**. This applies equally to open source and private source commercial software. Open standards increases choice and flexibility and is absolutely critical to responding quickly to business opportunities and threats, and reducing vendor lock-in.
- **Consider both open source and commercial (private source) software**. Don't build a separate strategy, but integrate open source into your existing strategy. When evaluating open source alternatives consider how these products will integrate with existing technology in your IT environment and determine how you could migrate to more enterprise-strength offerings if/when your performance and scalability needs increase. In addition, take a broad view of total cost of ownership (TCO) when evaluating open source and commercial offerings. In addition to up-front cost, consider support costs, admin and developer costs (including training), migration costs, etc. In general, software acquisition costs account for a small percentage of the overall TCO.

- **Evaluate the maturity of open source projects** before committing to them – especially in the areas of community, sustainable business models, and ecosystems. Open source projects that are backed by a strong “open” community present greater value and lower risk than vendor controlled communities. Open communities protect against vendor lock-in and shield customers from the risk that a company goes out of business or gets acquired. Make sure the community is vibrant and active and that the supporting ecosystem of ISVs and corporate backers is strong. Also ensure that the company from which you’re acquiring the open source product/support is financially viable in the future. You want to make sure your open source vendor is around to service your needs for many years in the future.
- **Establish company-wide policies** for working with open source software right from the start. Implement a management system to review and track all use of OSS, and use due diligence to review the licensing for every OSS package used. Open source has a way of finding its way into an enterprise coming in under the radar of the corporate IT organization. For example, many departmental developers use open source to rapidly prototype without going through procurement. It’s important for enterprises to understand where and how open source is being used and to understand how it relates to and impacts the corporate software standards that have been mandated. This knowledge will help your enterprise better leverage open source and prevent the potential disruption undetected usage might cause.
- And lastly – **be pragmatic**. Run a pilot or proof of concept at an early stage and make decisions based on business factors and technical considerations – just as you would for commercial software. Start small by picking one area where you think open source might be beneficial. Consider the costs aspects along with integration, interoperability and migration scenarios up front and then run a pilot to establish benchmarks for cost savings and other business related benefits. Once satisfied with the results of the pilot, plan on a staged implementation to reduce disruption to operations.

## IBM and Open Source

IBM’s approach to open source helps enhance the benefits and mitigate the challenges of open source for our customers and business partners. Open source is nothing new to IBM. We’ve been involved in open source for over 7 years and we’re currently engaged in over 150 open source projects. IBM has been a leading contributor to Apache, Mozilla, Eclipse, and Linux for many years starting back in 1999. So we have a lot of experience.



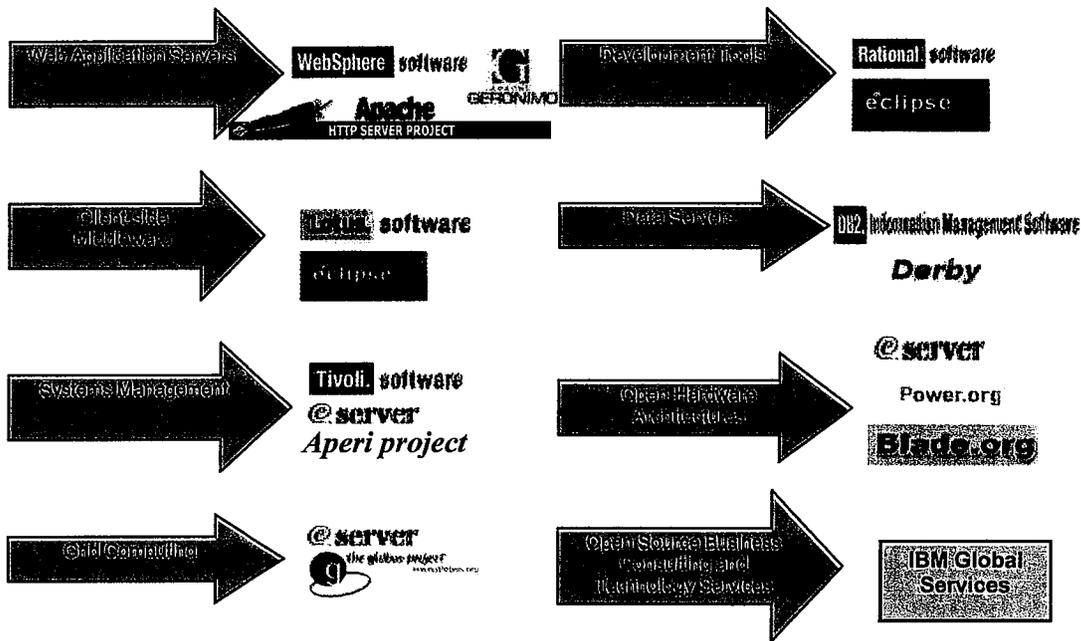
As depicted in the figure, promoting and harnessing community innovation is at the core of IBM’s open source approach both in terms of accelerating the evolution of emerging standards and freeing up resources to focus on higher value services.

IBM actively **contributes** to a

number of open source communities in various ways. We *participate* in work groups to help develop new technology – for example, our involvement in Linux. We *donate* code, patents and other resources to the open source community, both as part of existing communities and to start new projects – for example, our donation of accessibility code to the Firefox web browser. We *sponsor* foundations and cross-vendor organizations to accelerate open source adoption and usage – for example, our formation of the Eclipse foundation.

We then **enhance** open source with our own skills, technologies and people to benefit our customers and partners. IBM provides *support* for both open source offerings and for associated IBM commercial software offerings. We *integrate* open source components with commercial software to provide customers with integrated software stacks. We *embed* open source components in our commercial software offerings. We *layer* our commercial software on top of an open source platforms – for example, IBM middleware on Linux. We *extend* open source products by ensuring affinity and easy migration to our commercial software which offers greater scalability and higher functionality.

The figure below illustrates IBM’s broad support for open source across software, hardware and services. This is in addition to the comprehensive support for Linux that IBM provides across its entire portfolio.



- *Web Application Servers* – IBM contributes to the Apache Geronimo project and then uses Geronimo as the base for WebSphere Application Server Community Edition (WAS CE).
- *Client-side Middleware* – IBM contributes to the Eclipse Rich Client Platform (RCP) project and then uses Eclipse RCP as the platform for building IBM Workplace Client

Technology and delivering cross-client GUI applications such as Lotus Notes. IBM also contributes to Mozilla and to OpenAjax.

- *Systems Management* – IBM is working with other IT vendors on a range of open source systems management projects. These include the Aperi project to provide a common open source storage management platform on which future generations of products, such as Tivoli Storage Manager, can be built, and “Project Higgins” which is developing software for "user-centric" identity management, an emerging trend in security software.
- *Grid Computing* – IBM is working with the Globus Alliance to develop the Globus Grid toolkit.
- *Development Tools* – IBM contributes to the Eclipse Integrated Development Environment (IDE) project and then uses Eclipse as the foundation for the Rational Software Development Platform.
- *Data Servers* – IBM donated the Cloudscape database to open source as the Apache Derby project. Derby is used as the basis for future generations of the IBM Cloudscape embedded relational database which is included in a number of IBM products.
- *Open Hardware Architectures* – IBM established the Power.org and Blade.org organizations to accelerate the ecosystem around POWER processors and Blade systems through an open hardware approach.
- *Open Source Business Consulting and Technology Services* – IBM is actively identifying and leveraging new services opportunities around open source software.

## **Conclusion**

Businesses and governments alike recognize value in “openness” and are striving to attain the flexibility and agility required of the on demand world. Open computing platforms -- both hardware and software -- are essential underpinnings for the journey towards on demand computing. The role that open computing and open standards have played in the evolution of e-business and the Internet have been well established. The role that open computing and open standards *will* play, together with the open commercial and open source projects that embrace those specifications and standards, is central to the further evolution towards more responsive, focused and resilient on demand capabilities.

Businesses and governments are embracing open computing, open standards, and some open source projects because they provide higher value than the alternatives. Procurement policies should reflect this pragmatism, choosing openness wherever possible, but never losing focus on business need or government objectives.

IBM has made a strategic commitment to these concepts and has aligned its hardware, software, services and consulting businesses to support the building of open infrastructures enabling our customers to make the journey toward “on demand.”

## **Resources**

- Linux and Open Source zones on the IBM developerWorks website
  - [ibm.com/developerworks/opensource](http://ibm.com/developerworks/opensource)
- IBM's Open Computing Development Environment
  - Includes WAS CE, DB2 Express-C, and Eclipse
  - [ibm.com/developerworks/kickstart](http://ibm.com/developerworks/kickstart)
- IBM Systems Journal
  - "Open Source" edition - Vol 44, No 2, 2005
  - [www.research.ibm.com/journal/sj44-2.html](http://www.research.ibm.com/journal/sj44-2.html)
- IBM Press Books
  - eg. Apache Derby – Off to the Races
  - [ibm.com/ibmpress](http://ibm.com/ibmpress)