

The future of email and applications is social



Executive summary

Email and related traditional collaboration applications are some of the few truly ubiquitous and mission-critical communication tools for business today. Like the telephone, it is hard to imagine a workplace without them.

Email, designed as a simple one-to-one communication tool, is used today for everything from broadcast communications to project, information and business process management. The resulting information overload, coupled with the availability of newer social collaboration tools, has highlighted major challenges to the current use cases for email in business.

Despite these challenges, email use is expected to continue growing—but at a slower pace than some of the newer capabilities such as blogs, microblogging, wikis, social file sharing, social communications and video collaboration. Email will retain relevance as a key business collaboration tool by evolving toward a more integrated approach with these newer tools. This evolution into a social email experience takes users from a place where email is a “hammer that treats everything like a nail” to an integrated business collaboration environment in which users switch seamlessly between the right tools for the right tasks.

IBM® Notes® and IBM Domino® (“Notes and Domino”) software is a leading force in this evolution. Building upon more than 20 years of collaboration leadership, Notes and Domino software provides a business-ready, open standards-based platform from which to build a social business. A platform that can speed adoption of newer tools by giving users a familiar interface in which to work. And a platform that can ultimately help deliver real business value and a solid return on investment. This white paper examines the state of collaboration in today’s enterprise and provides an IBM point of view on how collaboration will evolve, along with how Notes and Domino software will fit into the new collaboration equation.

The state of messaging and collaboration in today’s enterprise

It would be hard to imagine a workplace today that does not rely on email for critical business communications. From humble beginnings, when the first email message was sent over the ARPANET in 1971, email has grown to be the number one business communication tool. An estimated 116 billion corporate email messages per day were sent in 2012, and usage is expected to grow.¹ The volume of email continues to dwarf newer social tools. With approximately 2.5 billion Facebook posts per day² and 400 million tweets per day,³ business email volume alone is still two orders of magnitude greater than business and personal social media usage combined.

Email has many beneficial aspects that make it ideal for business collaboration:

- Improvements in server technology and network latency that make email near real time, messages being sent in seconds, even between companies on opposite ends of the world
- Widely supported standards that make email universally accessible and that continue to evolve, with updates to standards such as security assertion markup language (SAML) and OAuth, being published and supported regularly by most vendors
- Accessibility from almost any computing device and availability through most enterprise security infrastructures
- Well-defined business security policy and control support, including encryption, spam filtering, antivirus filtering, policy- and user-defined filtering, archiving, and discovery
- Flexibility for addressing one-to-one and one-to-many communication and for forwarding messages, as well as linked, ongoing conversations

But with this success comes many challenges. Users are increasingly frustrated with their collaboration tools in general and email in particular. On average, workers spend at least a quarter of their day managing email.⁴ Dozens of blogs and publications devoted to personal productivity have published hundreds, if not thousands, of articles on tips on how to better manage daily email.

And companies must contend with weakened productivity as well as significant IT management costs. Whether on premises or cloud-based, even the most basic, business-ready email service costs several dollars per user per month. And the costs increase when businesses add in supporting services, including IT support, help desk, training, education, security and more.

Yet despite the costs and frustration, email is still seen as a critical tool for getting business done:

- Eighty-three percent of U.S. knowledge workers felt that email was critical to their success and productivity at work, even more than the telephone (81 percent). Only 33 percent felt that instant messaging was critical, with even fewer preferring Twitter (19 percent).⁵
- Seventy-eight percent of U.S. knowledge workers reported an *increased* use of email, more than audio conferencing (69 percent), web conferencing (67 percent), instant messaging (64 percent) social media sites (61 percent), texting (58 percent) and videoconferencing (54 percent).⁶
- 86 percent of email users surveyed rely on email as a search tool to find documents or information from within their inbox or archive.⁷
- Email is preferred over social media for all forms of workplace collaboration, including exchanging documents (91 percent), arranging a meeting (89 percent), requesting information (88 percent), and sharing views and opinions (72 percent).⁸
- 78 percent of email users say that social media has not reduced their reliance on email for dealing with customers, and 76 percent say that it has not reduced the need for email when communicating with colleagues.⁹
- 74 percent of information workers believe that information shared in an email is taken more seriously than information shared through social media.¹⁰

So if both businesses and users see a continued role for email in business collaboration, how should email evolve in an increasingly complex business collaboration environment?

A shifting collaboration environment

Three fundamental shifts in the macroeconomic landscape fundamentally affect how businesses operate and therefore collaborate:

- *The workforce is becoming more instrumented.* Smartphones shipments now outpace desktop computer shipments worldwide, and by 2013 there will be more mobile subscriptions than people globally.¹¹ At the same time, people expect their employers to support their devices at work—the bring your own device (BYOD) phenomenon.
- *The workforce is becoming more interconnected.* People are using these devices to connect instantly and ubiquitously to social and professional networks. The top six social networks have more than two billion participants. Nielsen estimated that users spend on average 20 percent of their time on desktop computers, and 30 percent of their time on mobile devices, in social networks.¹²
- *The workforce is becoming more intelligent.* People are leveraging the power of mobile devices; the social graph, which is commonly defined as the global mapping of everybody and how they are related; and the enormous amounts of data generated—much of it in the cloud—to make better decisions. It is estimated that almost one zettabyte of data was generated in 2012, much of it from social network activity.¹³

IBM calls the combined results of these three shifts—instrumented, interconnected and intelligent—a smarter planet. On a smarter planet, these changes can be seen as opportunities to create real competitive differentiation and positive business outcomes. A key response to that opportunity is the transformation into a social business.

What is a social business?

A social business is one that leverages social networking technology to connect people with knowledge. It activates networks of people to apply relevant content and expertise to business processes, improving and accelerating how things get done and delivering unprecedented returns for the time invested.

Becoming a social business can improve productivity by addressing key challenges faced by today's workforce.

- Faster and better decision-making is needed from a workforce exhausted by change and no longer responding to existing change management projects.
- A higher capacity for innovation is required from a workforce that is more interconnected than ever. Workers have to interact with a much wider network of coworkers, contractors, temporary or part-time workers, partners, vendors, agencies, and even customers and other stakeholders.
- Organizations continue to reduce education and training expenses, but also still expect improved workforce engagement. Providing a modern, intuitive collaboration toolset that more closely matches what workers use in their personal lives is critical to making ongoing skills enhancement a reality.

These same pressures require more flexibility in infrastructure choice. Businesses want to deploy collaboration tools to their users in a way that leverages their existing infrastructure (to “future proof” their investment) without breaking it. They also have to continue to protect their business assets, user security and intellectual property—despite supporting an ever-increasing array of new tools and devices.

Evolving email for a more social workplace

Given changing workplace dynamics and technology evolution, how then will email and related applications evolve to stay relevant in this more social workplace?

“Very soon, you won’t be able to see email and social networking separate. Email will ... have more flavour and will be more integrated.”

—Neha Gupta, senior research analyst, Gartner¹⁴

As discussed earlier, the three key trends impacting the workplace—social, mobile and the cloud—shine a light on the path forward to keeping email and related applications relevant on a smarter planet.

A social email and application experience takes advantage of the impact of social networking technologies on business processes and worker expectations. This will have a direct impact on how email and business applications should look, feel and behave.

It includes streamlined, cleaner user interfaces, “progressive disclosure” (where menu and other options reveal themselves visually only when appropriate,) and visual integration of other applications directly inside a social environment, such as via OpenSocial gadgets.

A social email experience also embraces mobility. Mobile email and applications respond to the increasing demands of employees to bring their own devices to the workplace to better integrate their work and personal lives. Businesses have already responded: 83 percent of IT departments said that they allowed workers to access corporate email accounts via their own mobile devices.¹⁵ Effective mobile collaboration is much more than simple “push”; it also means customized user interfaces and information access that take the special capabilities of mobile devices into account.

A social email experience must also consider the cloud. Advances in cloud technologies have enabled the possibility of email and application delivery that is flexible, allowing for rapid iteration in capabilities and interfaces. The cloud also has additional benefits for IT, including the possibility of reducing some fixed assets and costs through virtualization. This frees highly skilled IT managers for more strategic activities than providing ad hoc help desk support for users in need.

This integrated, social, mobile and cloud-ready email experience is more easily achieved when email is considered part of a broader social collaboration platform. Rather than looking at email as one of many siloed applications that business users must interact with separately, a social email experience is predicated upon integration—at the user and server levels—with an end-to-end platform for social business. This provides easier

integration of existing tools with newer ones. It also provides a foundation for building new, value-added business applications and services.

A more social email experience, one that is part of a platform for social business, can deliver real benefits. Social technologies, especially those that are integrated with email and other collaboration tools, can lead to productivity improvements of up to 25 percent.¹⁶ Specific sources of productivity and effectiveness enhancements from a social email experience can come from:

- *Improved workforce effectiveness.* Workers can make better decisions faster by having information available at their fingertips rather than having to switch between their email and other applications, reducing “context switching costs” and other breaks in productivity.
- *Increased innovation.* Workers can use ideas from more places, more easily share their expertise and more easily find it in others.
- *Reduced need for formal education and training.* Workers learn more by doing because the tools they use “just work” and work like the tools they use in their everyday personal lives outside of the office.
- *Increased infrastructure flexibility that turns IT from a “help desk” to a “hero.”* IT becomes a strategic partner for building business value, not just wringing costs out of tools people don’t want to use.

But what does a social email experience actually look like? Of course, technology continues to innovate at a rapid clip. And there is no general consensus yet on what exactly is a social email experience. However, experience with hundreds of clients has led IBM to identify a core set of capabilities that are required for a more socially relevant email experience.

Social email capability	Starting point	Improvement	Best practice
Social file sharing	<p>Replace attachments with social file sharing; comment on files and keep the comments associated with the file, rather than the email; and start with links instead of attachments.</p> <p>Example: IBM Notes 8.5.3 sidebar application for IBM Connections files</p>	<p>Preview shared files that are stored in the file-sharing service, directly from within the email.</p> <p>Example: watching a video or previewing a document via an OpenSocial gadget enabled by, IBM Connections files and IBM Notes Social Edition beta software</p>	<p>Edit the document directly and dynamically without ever leaving the email message.</p> <p>Example: OpenSocial gadget in IBM Notes Social Edition beta software, connected to IBM Docs</p>
Rich profiles	<p>Get rich profile information, including dynamically and self-updated profiles, photos, current status and social connections, instead of a static corporate directory.</p> <p>Example: the IBM Connections business card in IBM Notes with IBM Sametime® Entry software</p>	<p>Initiate communications (chat, audio, video and online meetings) directly from the business card.</p> <p>Example: IBM Sametime Advanced software enabled for the IBM Connections business card</p>	<p>Initiate conversations directly in the email without opening another client.</p> <p>Example: an OpenSocial gadget that initiates a video chat inside the email message</p>
Microblogging and activity streams	<p>Read and share status updates to a broader network right from your email environment, rather than burying them in an email.</p> <p>Example: IBM Notes 8.5.3 sidebar application for IBM Connections profiles</p>	<p>Switch from traditional email sorting (for example, first in–first out, sort by date, sort by name, sort by size, sort by title) to activity streams, integrating updates from your network with your email</p> <p>Example: IBM Notes Social Edition beta software activity streams</p>	<p>Apply social analytics to make your inbox smarter, having your inbox decide for you what the most important messages are based on your behavior and rules.</p> <p>Example: social analytics applied to IBM Connections Mail and IBM Notes software</p>
Access messaging from other applications	<p>If you spend more time in your social portal, access core messaging capabilities (for example, read, reply, compose, forward, file and check calendar), without leaving to go to an email client.</p> <p>Example: IBM Connections Mail.</p>	<p>Use surface core messaging as a contextual service inside specific business process applications.</p> <p>Example: contextual email for procurement professionals inside their enterprise resource planning or supply chain management application, such as SAP solutions</p>	<p>Add data analytics to help further contextualize messages into priority based on actual behavior and projects being worked on, rather than pre-set rules based on basic metadata like sender, date/time, or subject line.</p> <p>Example: contextual email for sales professionals accessing their sales force automation application, organized by deal value and sales stage</p>

Social email capability	Starting point	Improvement	Best practice
Online presence and real-time communications	<p>See whether an email recipient is online, away, in a meeting or on do not disturb.</p> <p>Example: IBM Sametime Entry integration within IBM Notes software</p>	<p>Initiate real-time contact with a single click: text chats, audio chats, video chats, voice over Internet protocol (VoIP) calls, online meetings and more.</p> <p>Example: IBM Sametime Advanced software with Polycom videoconferencing embedded in IBM Notes software</p>	
Mobile	<p>Get email, calendar, to-do lists and other messaging applications on the user's device of choice, including iPhone, iPad, Android phone, Android tablet, Windows 8 phone and BlackBerry.</p> <p>Example: IBM Notes Traveler software</p>	<p>Provide <i>all</i> messaging applications to those same mobile devices.</p> <p>Example: IBM Notes browser plug-in in IBM Notes Social Edition beta software</p>	<p>Easily customize business messaging and other applications for specific mobile devices.</p> <p>Examples: IBM XPages technology, IBM Worklight</p>
Integration with public social networks and other socially enabled applications	<p>Check the status updates of your favorite social networks and RSS feeds—and update your own status—from an email sidebar application.</p> <p>Example: Wildfire, Twitter, Facebook, LinkedIn, RSS sidebar apps in IBM Notes software</p>	<p>Import social streams directly into your email—and act upon them—via an activity stream.</p> <p>Example: OpenSocial gadgets for Facebook or LinkedIn or Google Reader inside IBM Notes social edition</p>	<p>Integrate public social networks and <i>any</i> application via OpenSocial gadgets.</p> <p>Example: send expense report approval as an embedded form - approve, deny or send back for alteration without ever leaving your email message</p>
Social calendars	<p>Import calendars from your personal and work lives into a single view.</p> <p>Example: iCalendar feeds imported into your IBM Notes 8.5 calendar, with color coding to differentiate feeds</p>	<p>Integrate a two-way security-rich calendar across firewalls, while adhering to corporate policies.</p> <p>Example: creation and management of dynamic group calendars between marketing and external partners as they prepare for an event</p>	<p>With team analytics, see social details of meeting participants, including time zones, organizational chart relationships, recent posts and news feeds.</p> <p>Example: IBM Social Networks and Discovery technology, team analytics</p>

Examples of social email and social applications in action

What does a more social email approach actually look like today? The good news is that a more social email experience is already a reality today in many organizations. Leading businesses and organizations are already transforming the way they work with a more contextual, integrated and social messaging environment—and reaping significant business results from that transformation.

Nicrometal is one of Poland's largest scrap metal recycling companies. It was able to increase suppliers managed per employee from 30 - 40 to 200, helping grow the company without increasing staff. [Read the full case study.](#)

Practice Plan is a UK provider of custom-branded dental plans, offering a range of industry support services to help dental practices promote their own brands and develop their businesses. It implemented an IBM Notes and Domino software-based solution that can process 600,000 patient collections within 70 minutes and grew to more than one million patients without straining the IT system or business processes. [Read the full case study.](#)

Interhandler is an exclusive authorized distributor of JCB, Rubble Master and SAME vehicles, machinery, equipment and spare parts in Poland. It was able to cut delivery times to customers by an average of 30 percent. [Read the full case study.](#)

The law offices of LaVan & Neidenberg specialize in disability compensation and long-term disability cases. The firm represents disabled veterans and social security disability claimants nationwide. With a more social collaboration environment,

it can analyze and file claims for veterans 66 percent faster, resulting in quicker access to much-needed aid.

[Read the full case study.](#)

Max Sibbern has grown to become one of Denmark's biggest bathroom fittings and plumbing and sanitary installation agencies. It implemented a customer relationship management solution that resulted in improved customer service by focusing attention on customer requests and feedback.

[Read the full case study.](#)

AP7 is a Swedish pensions company, responsible for managing premium pension assets on behalf of Swedish savers. The company was able to increase its straight-through processing rate to 99 percent, while increasing control of its responsibilities to pension holders. [Read the full case study.](#)

Lithuania's tiered public health infrastructure needed faster, more efficient epidemiological reporting to better protect the public against the spread of communicable diseases. The Lithuanian Ministry of Health instituted an electronic reporting system that reduced the time for compiling nationwide data from one week to less than two hours, putting it in a better position to take action against disease outbreaks.

[Read the full case study.](#)

Intelligent Data Services helps its customers enhance sales and marketing efforts by creating customized telesales, teleresearch and web-based information solutions that help optimize sales and revenue potential. It was able to improve the ratio of administrative assistants to outbound callers from 1:3 to 1:20, dramatically cutting costs and increasing the company's competitive advantage. [Read the full case study.](#)

IBM Notes and Domino software: the platform for social email and applications

IBM Notes and Domino software brings together your email, calendar, contacts, to-do lists, team spaces, social networks, business applications and other key capabilities in an intuitive user experience. One that supports your IT policies and risk requirements with proven security-rich features. And IBM Notes and Domino software has always been so much more than messaging: it is a leading rapid application development and deployment platform that brings together all the tools developers need to quickly design, develop, deploy, manage and integrate collaborative, workflow-driven departmental applications.

With all this in a single package, IBM Notes and Domino software forms a core component of the IBM platform for social business. Unlike point solutions from other vendors, IBM Notes and Domino software and the IBM platform for social business integrate information, expertise and insights in a simple and security-rich way to increase peoples' effectiveness and drive improved business results:

- *Save time* through boosted employee efficiency and productivity because of integrated and consolidated information and interactions
- *Improve decision making* in real time as a more social approach makes information and experts more discoverable

- *Create an engaged workforce*, resulting from an easy-to-use collaborative working environment that combines business and social applications and that easily extends to real-time and video collaboration
- *Mitigate enterprise security risks* through standardized access across platforms to open standards-based, business-grade tools and security-rich features

The IBM Notes and Domino family is an integrated portfolio of offerings that includes:

- *Client software*: IBM Notes and IBM SmartCloud Notes software provides a rich client experience, and IBM iNotes® solutions provide a lightweight browser-based client.
- *Server software*: IBM Notes and IBM SmartCloud Notes software provides a rich client experience, and IBM iNotes® solutions provide a lightweight browser-based client.
- *Mobile access*: IBM Notes Traveler and IBM Mobile Connect software enable the creation of a mobile work environment with “push” email and collaboration services.
- *Developer tools*: IBM Domino Designer software, IBM XPages technology and IBM XWork Server can enable the design and development of new applications and integrations with other business and social applications, and they can enable you to modernize existing applications for web browsers and mobile devices.
- *Security software*: IBM Notes Protector software helps secure your messaging environment.

Why IBM?

The introduction of Lotus Notes software more than 20 years ago helped create the business group collaboration software marketplace. Lotus Development Corporation was one of the originators of the NoSQL database technology trend. And IBM continued to lead its development with open source support, such as OpenNTF and XPages technology, as well as its ongoing commitment to open standards, such as SAML, OAuth, OpenSocial and Linux.

From the very beginning, Notes and Domino software has provided an unparalleled level of granular customizability and policy controls to match your specific business requirements. Far from a “one-size-fits-all” solution, standard deployment options can be easily customized for rapid deployment and administration, while allowing for extensive control and custom integration at a user level.

As a leading rapid application development and deployment (RADD) platform optimized for collaborative, workflow-driven departmental applications, IBM Business Partners have provided a rich ecosystem of hundreds of thousands of custom-built, business-critical applications for Notes and Domino software. With easy-to-use visual design tools, application templates and open standards support, in-house developers, independent software vendors and systems integrators can quickly design, develop and deploy new applications, integrate them with existing or future applications, or modernize existing applications for the web and mobile devices—all from a single platform.

IBM also has one of the most comprehensive and intuitive sets of optimized user interfaces, across the broadest array of devices, including desktop computers, as well as the latest smartphones and tablets.

IBM continues to innovate and lead in the collaboration marketplace with the launch of IBM Connections four years ago, which rapidly grew to be a leader in the business social software marketplace. IDC ranked IBM first in worldwide social platform vendor share for the third year in a row¹⁷ and is widely recognized as a leader in mobile collaboration.

IBM also has the ability to derive new insights and recommendations through our world-class IBM Research team, including technologies such as IBM Watson™. IBM continues to be the innovation leader, once again having the highest number of patents awarded to a single company several years in a row.¹⁸

For more information

To learn more about how IBM Notes and Domino software can help you transform into a social business, visit:

ibm.co/NotesDomino

Additionally, IBM Global Financing can help you acquire the software capabilities that your business needs in the most cost-effective and strategic way possible. We'll partner with credit-qualified clients to customize a financing solution to suit your business and development goals, enable effective cash management, and improve your total cost of ownership. Fund your critical IT investment and propel your business forward with IBM Global Financing. For more information, visit:

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Software Group
Route 100
Somers, NY 10589

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