



Developed in the mid-1990s, to date IM has been accepted more readily by home broadband users than by business users. Indeed, many employees frequently use consumer versions of IM (such as AOL Instant Messenger, MSN Messenger, and Yahoo! Messenger) in the workplace, with or without their IT department's consent. As IM technology matures enough to become a serious business tool, a number of IT market analysts estimate the level of legitimate adoption of IM in business could reach as high as 84% and penetrate 99% of enterprises by 2007.¹⁻³

Instant messaging (IM) is becoming

more common in business as it fills the gap between e-mail and phone conversations. IM is faster and less formal than e-mail and allows real-time "chats" between remote users; as long as User A is connected to the Internet, messages from User B (or C or D...) pop up instantly on screen, no matter what programs or applications User A is running. Users can make use of IM to see if someone is available to chat (and avoid a flood of e-mails and phone messages), or initiate ad hoc group chats, share applications, and deliver messages at once to multiple users. As with any new technology, IM has its issues. This column examines the key issues and offers safeguards to minimize the risks in using IM.

IM TECHNOLOGY

IM is groupware, a type of program that helps people connect from remote locations. It works over the Internet, employing "presence technology" that allows users to see who on their contact (or "buddy") list is online. Users send electronic messages to one another, with a minimal delay between the sending and receipt of a message. Even during peak Internet usage periods, messages require only a second or two to travel from User A to User B.

IM, like a face-to-face or telephone conversation, promotes rapid-fire conversation, though in written form. Unlike e-mail messages, which remain unread in the recipient's in-box until opened, IM notifies users when others are online and available to accept messages. Opting to send a message via IM opens a small "pop-up" window on screen, where users type in messages that both the sender and recipient(s) can view.

Most IM systems permit both one-on-one and group chats. The technology allows for text or voice messages and the sharing of Web links, images, audio, streaming video, and other files. Some IM systems include a "whiteboard," a space on the display where one or more participants can write or draw, using a mouse, keyboard, or other input device.

IM provides the missing link between people and information.

BENEFITS

Perhaps the primary business benefit of IM is that it promotes collaboration. IM offers today's "24/7, on-demand" businesses collaboration, both internally among teams and departments and externally with customers and suppliers. Central, consolidated databases alone do not promote collaboration—many people can access shared data, but do so independently. IM provides the missing link between people and information. It works well for multifunctional teams; tech-savvy, fast-paced groups, departments, or organizations; or geographically dispersed employees.

Another benefit is the quick, casual nature of IM, which promotes creativity through impromptu chats and brainstorming sessions, and links parties required in the project decision-making process. Some enterprises have seen measurable productivity gains and cost savings with IM implementation. For example, individuals can avoid rounds of unanswered e-mails or voice mail messages, potentially saving up to 40 minutes per day on such tasks.³ In addition, enterprises can save labor, travel, and telephone costs. One mid-size environmental consulting firm reportedly saved \$50,000 in long-distance phone charges alone during the first year after implementing IM.

ISSUES AND SAFEGUARDS

If you are thinking about applying IM to your business, keep in mind that, as with any new technology, IM has inherent issues.

Security

Can organizations safely send information back and forth across networks? Generally, IM is less secure than corporate e-mail, especially when using IM through a commercial

Tips for IM Business Users⁴

- ✓ Know your company's policies for IM use.
- ✓ Keep instant messages simple, to the point, and know when to sign off.
- ✓ Don't use IM to communicate confidential or sensitive information.
- ✓ Don't compromise your company's liability, or your own reputation.
- ✓ Keep personal use of IM to a minimum.
- ✓ Don't use IM to share personal data or information.
- ✓ Be aware of virus infections and related security risks.
- ✓ Keep business contact lists separate from personal contact lists.
- ✓ Use your company user ID rather than a clever user name.

Internet provider (e.g., AOL, MSN, or Yahoo!). The risk of computer viruses and hacker intrusion into the IM system is higher for servers outside the control of the organization using the system. Also, IM accessed through a commercial provider requires the business to open a hole (or "port") in the firewall equipment that protects its computer systems from the outside world. To help safeguard against these security risks, enterprises should consider

- adopting an acceptable usage policy for user access to the corporate network, the Internet, and IM system;
- installing hardware and software firewalls;
- placing the IM server inside the company firewall;
- installing anti-virus and spam-blocking software on servers and desktop computers;
- monitoring IM transactions and network usage to detect potential security breaches;
- mapping "buddy names" (i.e., on-screen user names) back to the corporate directory to identify users;
- prohibiting the sending and receiving of attachments via IM;
- if using a commercial provider, understanding the security measures offered by the vendor and insisting on contract language to address potential security lapses; and
- regularly backing up company data.

Confidentiality

Organizations need confidential information to remain confidential. IM systems could be an open door to snooping if an outside IM service provider has access to company information. Enterprises can safeguard against this risk by placing the IM server inside the company firewall. However, this can be more costly than outsourcing the

service, and requires IT support. The bottom line is that IM is not appropriate for conveying sensitive data, since most IM services do not use encryption technology to protect against outsiders reading messages. Businesses should provide users with IM usage guidelines, including cautioning against sending or receiving confidential data (with or without attachments) via IM.

Records Retention

IM's lack of formality is at once a benefit and a challenge for users. Indeed, many users do not realize that their instant messages can be saved by design or intentionally, creating electronic records of an informal chat. As with e-mail, messages sent via IM can be retained long after they were created. Users are able to cut and paste message text into separate documents for later retrieval, print hard copies of messages, and create electronic communications logs. Like e-mail, IM can open the door for data discovery in legal matters. Businesses should evaluate their records-retention policies with respect to electronic data, and should remind users that some information is best conveyed through other media.

Bandwidth

The availability of high-bandwidth Internet access is essential. Small or mid-size organizations that lack continuous

high-speed Internet connections will not find IM a good option. IM, particularly when it involves audio, whiteboard, or application sharing, can take up significant communications bandwidth. Businesses should evaluate the need for additional bandwidth before deploying a corporate-wide IM system.

Human Factors

Human factors influence the value of any technology. One factor is that employers are keen to ensure that IM is not a time-waster. Enterprises might advise employees to use the company IM system at work for both personal and work-related communications. This can help with work-life balance, eliminating the use of nonapproved IM systems, while allowing employees to respond quickly to messages from family or friends, all without having to leave meetings or take time out from work to make personal phone calls. Another factor is user acceptance. Older or less tech-savvy employees may be slow to adopt IM, while recent college graduates and 30-somethings will typically find it easy to use in the workplace. A final factor is training and education. Organizations should not only train employees on how to use IM, but also educate employees on the inherent risks, policies, and guidelines.

IM has been around for a while, but remains an emerging technology for business. Businesses should make informed decisions before adopting an IM system. IM is easy to use, quick, and informal. Its benefits include better collaboration among groups and departments, reduced time to make decisions, increased productivity, and cost savings. It can also complement existing communications technologies, although, in some cases, there is still no substitute for a phone call or a face-to-face meeting. As with any new technology, the success of IM in business will depend on how it's deployed, an organization's unique workplace culture, and the people who use it. **em**

REFERENCES

1. James, G. Auditing the Chat Line; *CIO Magazine*, September 15, 2003; available online at www.cio.com/archive/091503/tl_audit.html (accessed February 2005).
2. Jahnke, A. How Does Your Company Use Instant Messaging?; *CIO Magazine*, March 13, 2003; available online at www.cio.com/soundoff/031303.html (accessed February 2005).
3. Kerner, S.M. *Study: Enterprise IM Could Reap ROI in Days*; Instant Messaging Planet.com, December 15, 2004; available online at www.instantmessagingplanet.com/enterprise/article.php/3448631 (accessed February 2005).
4. Adapted from Enbysk, M. *10 Tips for Using Instant Messaging in Business*; Microsoft.com Small Business Center; available online at www.microsoft.com/smallbusiness/issues/technology/communications/10_tips_for_using_instant_messaging_for_business.mspx (accessed February 2005).

Jill Barson Gilbert, QEP, is president of Lexicon Systems, LLC. She helps organizations increase business value by designing and implementing EH&S management solutions that leverage technology. E-mail: JBGilbert@Lexicon-Systems.com.

