

AMERICA ONLINE AND INSTANT MESSAGING:



by

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Instant Messaging (“IM”) as an Internet communications technology holds great promise for Internet business applications. IM is a software application that tracks the online presence of users who have established each other as online “buddies.” When IM buddies are online simultaneously, messages can be sent between them. These messages are different than e-mail. They appear like a pop-up note on the user’s screen, enabling a much more instantaneous and efficient means of communication than that afforded by ordinary e-mail messages. Instant messaging is ideal for time-sensitive communication, for highly dispersed groups, and with virtual teams. Online presence detection is considered a key factor in developing the next step in business and personal communications and is an essential part of new commercial applications such as on-line meetings, enhanced wireless services, and new forms of collaboration. By mid-2000, there were over 1 billion instant messages sent every day, more than 100 million IM users worldwide and more than 3 million users signing up for IM every month. Its growth rate was faster than the growth rate of e-mail or the browser. The adoption rate of IM among teenagers has been phenomenal and the plans business has made for this technology promise to be revolutionary.¹ [America OnLine \(AOL\)](#) has tens of millions of registered IM users on its [AOL Instant Messaging](#) and [I Seek You \(“ICQ”\)](#) systems. By January 2001, AOL boasted a combined 140 million registered users worldwide, or 90% of the instant messaging market. [Microsoft Network \(MSN\)](#), [AT&T/Excite@Home](#), [Yahoo!](#), [Tribal Voice](#), [Odigo](#), [Prodigy](#), and other companies established instant messaging services for their users to compete with AOL. But none come close to having the size of the user base that AOL was able to amass. According to a research report by Jupiter Media Metrix, at the end of 2000 Yahoo! Messenger



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¹ Forrester Research reports that 35% of all employees in U.S. companies are already using it. For example, at IBM, 235,000 employees regularly use instant messaging which ties with other office productivity tools. Instant messaging is being incorporated into next generation videoconferencing and mobile computing applications.

had approximately 10.6 million users, while Microsoft Messenger's subscriber base stood at 10.3 million users.²

Microsoft, AT&T, and the other companies desired a unified system where their users could interact with those of AOL. Competitors in the IM market claimed that innovations alone in IM technology were not enough to lure new subscribers, that AOL's first-mover advantage was too great, and that tremendous lock-in existed within the AOL community. Without access to that community of users, competitors were having trouble maintaining robust and growing communities of users. System compatibility with AOL would have (1) made the other systems valuable for their users as a communication device to the broader IM community (AOL users), and (2) created more business opportunities for the clients of these other systems as they could now interact with a much larger consumer market.

Allowing open access to these rivals, however, would weaken AOL's dominance and hurt its efforts to cross-promote other services it planned to sell to those users, not to mention the ads it currently sold on its IM service. It was reported that for 2001, AOL had accumulated a \$100 million advertising backlog for its IM service.³ AOL did, however, license out its IM technology to a number of ISP's.⁴ These arrangements allowed AOL to keep control of the basic technology, terms of usage, and indirectly the user base, as well as ensure that appropriate compensation would eventually accrue to AOL.

Competitors Attempt to Open Up IM

Microsoft attempted to connect its IM users to the AOL user base by changing protocols to match those of AOL. AOL responded by changing its IM protocols, bumping off Microsoft messaging users who were accessing the AOL system. Microsoft responded by again changing its protocols to match those of AOL. In lockstep, AOL again changed its protocols. A public

Mobile Applications

AOL also launched a version of its IM that runs on web-enabled Sprint PCS phones, providing much of the functionality of PC-based AOL IM system, in the hope of attracting a larger segment of the business user market. Users could see which of their colleagues were logged on – be it phone or PC -- and type a message using the phone's keypad. The program uses T9 text input, which makes educated guesses about the words the user would like to type, facilitating typing on a numeric keypad. Canned phrases such as "Where are you?" also would help to speed communication. The application was expected to be particularly useful when making a traditional phone call was inappropriate or not possible, such as when the user is in a meeting and would like to discretely contact an associate or when the associate's line is busy. Another useful feature was real time file sharing between IM users.

AOL inked a deal with Nokia, pledging to use Nokia's micro-browser technology in conjunction with its "AOL Anywhere" wireless web initiative. AOL would integrate some of its web service features into Nokia's technology for wireless application protocol-based micro-browsers and would provide the browsers to mobile telecom device manufacturers and service providers. AOL planned to use its Netscape browser brand on the micro-browsers. Senior VP of AOL Wireless, Alex Felker said AOL will integrate text-input and instant messaging features into Nokia's WAP browser. "Obviously, the context here is that certainly worldwide, but particularly domestically, increasingly people are going to be using non-traditional means to access the Internet generally."

Keeping in lockstep with AOL, Microsoft also focused on mobile users, allowing its users to set up shared folders as well as file sharing capabilities. The service also permits users to establish contact lists which allow messages to be transmitted to pagers, cell phones or other mobile devices.

² Wireless Review, "Messages Promote Convergence," Deborah Young, Dec. 31, 2000.

³ Chicago Tribune, Jan. 16, 2001, "Conditions on Merger may not loosen AOL's grip on Instant Message Market," Mark Harrington.

⁴ These included CMGI's Lycos, FaceTime Communications, Lotus, Apple Computer, Novell and Sun-Netscape.

battle ensued where Microsoft claimed that AOL was engaged in anti-competitive behavior, and AOL responded that its users' privacy was at stake. AOL claimed it favored interoperability, but not at the risk of exposing their users to privacy and security issues. These tit-for-tat policy statements were arguably made for the attention of the Federal Trade Commission and the Federal Communications Commission, both of which had approval powers over AOL's merger with Time-Warner.⁵

AOL has used a variety of other tactics, some have argued, to limit access by other IM providers to the IM customer base. These include: (1) a complaint by Disney to the FCC that AOL actively tried to keep customers from leaving AOL's "walled garden" through restrictive covenants with Disney and other content providers; (2) complaints by AOL users that the newest version of AOL's software makes it difficult to change the "home page" to a site other than AOL's site; and (3) an earlier version of the software sparked complaints that, when installed, it changed the computer's default Internet service provider to AOL.⁶ AOL also sued AT&T for use of the terms "IM" and "Buddy List" on its IM Here instant messaging service.

The fate of many IM start-ups was closely tied to an open-access marketplace. Two victims were iCast and Tribal Voice.⁷ iCast, which integrated entertainment into its messenger, ceased operations after CMGI decided to stop funding the venture in November 2000. CMGI blamed AOL in part for the demise of its IM technology. "Given the barriers associated with AOL's market dominance, the company cannot continue to support [IM] from a business perspective," read a note on one CMGI Web site.⁸ Purchased by dot-com operating company CMGI, Inc. in late 1999, Tribal Voice was one of the first "community" sites on the Internet. It developed its Pow-Wow IM software for companies like telecom giant AT&T, CMGI's AltaVista operating company, and UK Internet service provider Freeserve with the hope of tapping into AOL's established network of users. Some of AOL's tactics were believed to have contributed to bringing down that company as well, including technical blocking of user access to the AOL network and lawsuits filed against the company for use of the service mark "buddy list" in connection with its IM software.⁹ Before folding, iCast and Tribal Voice formed an advocacy organization, FreeIM.org, to promote the idea of an open IM system and to pressure AOL to open up its IM system. On that Web site was posted information about instant messaging, press releases from members of FreeIM.org, and a petition to be sent to federal regulators.



AOL Merger With Time-Warner:

⁵ In fact, the IM issue became a critical factor in the FCC's consideration of the AOL-Time Warner merger. J. Angwin, "AOL Rivals Lobby FCC Over Instant Messaging," Wall Street Journal, Friday, Dec. 29, 2000, sec. A, p. 14.

⁶ USA Today, "Marriage Fuels Fears Consumers Were Jilted," Jan. 15, 2001.

⁷ Chicago Tribune, Jan. 16, 2001, "Conditions on Merger may not loosen AOL's grip on Instant Message Market," Mark Harrington.

⁸ Mindy Charsky, "Silenced," Interactive Week from ZD Wire, December 12, 2000.

⁹ Newsbytes, Jan. 19, 2001, "Tribal Voice's Pow-Wow is Finally Silenced," Steve Bonisteel.

IM Debate Plays Out at the FTC and FCC

In 2000, AOL and Time Warner announced their plans to merge which would make the newly formed company the largest Internet and entertainment company in the world. AOL had the Internet experience and customer base, Time Warner had broadband cable and entertainment content. Antitrust regulators in the U.S. and Europe were sure to closely inspect the arrangement for risks of monopoly. This provided an opportunity for AOL's IM foes to link IM to an antitrust investigation.

Among others, Bill Gates lobbied on behalf on IMUnified, contacting FCC Chairman William Kennard asking that the government force AOL to share its protocols for instant messaging. Some called the action ironic given Microsoft's antitrust troubles and its refusal to reveal the source code for its Windows OS.

"TEAR DOWN THIS WALL"

Written Testimony of Tribal Voice CEO Ross Bagully, FCC Hearings, July 27, 2000.

Chairman Kennard and Commissioners Ness, Powell, Furthcott-Roth and Tristani. I want to thank you for the opportunity to speak to you today about how this merger could reinforce the walls already being maintained around the Instant Messaging market.

Today, I come to you with a simple message: Mr. Case, on behalf of the IM industry and users everywhere, tear down this wall. Users of IM, like users of email and the telephone, deserve the right of free and open communication. AOL has repeatedly denied consumers this right by building a wall around its members. In order for consumers to enjoy all of IM's benefits and for the technology to realize its full potential, your wall must come down.

In offering this testimony, I recognize that I have an obligation to speak not just on behalf of myself, but on behalf of many others who are similarly concerned. Such parties include:

1. The 28 million members of the hearing impaired community who recognize the great potential that instant messaging has to improve communications in their lives and who have asked this Commission to ensure that that potential is not emasculated by a closed, monopolistic market;
2. Applications companies such as Net Nanny who want to provide filtering software for families whose children use instant messaging but whose products don't have a chance to reach consumers because one company has the power to block its introduction.
3. Content companies like iCast whose efforts at enabling its users to be able to freely send content to their friends through instant messaging have been blocked by one company that controls 90% of the market.

If the courts had allowed AT&T to require that everyone who wanted to communicate with an AT&T customer also be an AT&T customer, would we see the kind of innovations and price cuts we've seen in the long distance market over the last two decades?

If e-mail required that in order to send an e-mail to another person, you had to subscribe to the same e-mail service, even if such a service were free, would e-mail have become the incredibly powerful and important tool that it has for businesses and individuals?

So the bedrock principle of interoperability and open standards for our communications systems ought not to be violated. Yet today in the Instant Messaging market we don't have open standards and interoperability. And the merger you are reviewing is certain to make the problem worse, not better

AOL/TW understands this. At a recent investor conference Time Warner Chairman Gerry Levin was asked what would be the most valuable asset of a merged AOL/TW. He answered Instant Messaging.

In making its argument, AOL/TW relies on two fundamental defenses.

The first is that interoperability would threaten the privacy and security of its members. This is an important argument and not one to be taken lightly. But AOL/TW's defense does not hold. As detailed in a white paper made public last week written by 17 companies with an interest in Instant Messaging, there is not and need not be any trade-off between interoperability on one hand and privacy and security on the other.

The white paper provides an analysis of AOL/TW's filings to the FCC as well as an AOL submission to the IETF. Among the key points made by the paper are: While AOL continually invokes privacy and security concerns, nowhere in its submissions does it demonstrate how interoperability contributes to the problem; As the competitors who AOL has blocked used AOL's own protocols, the competitors' systems were at least as private and secure as AOL's service;

The second defense is that AOL now, and presumably AOL/TW in the future, will work in good faith to achieve interoperability as soon as possible. Should you trust them to give up their monopoly, which will only be strengthened by the addition of Time Warner, voluntarily?

The FCC approved the merger, with some restrictions on AOL's IM



business. FCC Chairman William Kennard said letting the AOL-TW merger go forward without specific IM constraints is tantamount to allowing a single entity to control the nation's phone system. "Imagine a world in which one company controlled all of the telephone numbers that people need to communicate with one another. That is the danger if we don't allow a competitive marketplace for instant messaging. There's a danger if one company would be allowed to dominate that essential database, called the names and presence database, that people need to communicate with one another over instant messaging."¹⁰ "We focused on harms that would be presented by these two companies coming together. And so that's why we focused on what we call "advanced" instant messaging, instant messaging products that are offered only because AOL and Time Warner have been allowed to merge. And we think that that's the appropriate way to look at the harms presented in this specific transaction."¹¹

The FCC gave AOL-TW the choice of three options for complying with its requirement that an "advanced" version of IM be open to competitors. Specifically, the Commission said AOL-TW: (1) may show it has implemented an industry-wide standard for server-to-server interoperability; (2) may show it has signed a contract for server-to-server interoperability with "at least one significant, unaffiliated provider" immediately and two additional rivals within 180 days of first contract; or (3) may seek relief "by showing by clear and convincing evidence this condition no longer serves the public interest, convenience or necessity because there has been a material change in circumstances." With respect to the third option, FCC Chairman Kennard gave as an example that AOL-TW could cite market share statistics showing that its IM services no longer dominate the market.¹² The FCC required that AOL-TW also file progress reports with the FCC every 180 days on steps it had taken toward IM interoperability. Neither the FTC, nor the European Union, chose to impose any IM conditions on merger approval.¹³

Republican FCC Commissioner Michael Powell was highly critical of the agency's move to "condition a hypothesized product and a hypothesized market...Whenever a regulatory agency has to make up a its own acronym to describe a product or service it intends to regulate, one

¹⁰ CNN Special, "FCC Approves AOL-Time Warner Merger," Jan. 12, 2001, Darren Kagan.

¹¹ FDCH Political Transcripts, "William Kennard Holds New Conference on AOL-Time Warner Merger," Jan. 12, 2001.

¹² Communications Daily, Jan. 16, 2001, "FCC Instant Messaging Compromise Criticized On All Sides."

¹³ Communications Daily, Jan. 16, 2001, "FCC Instant Messaging Compromise Criticized On All Sides."

should be concerned. I concede there are serious problems presented by AOL's dominance of current IM products, [but] no competent anti-trust authority...would conclude intervention was necessary." He called the assertion that IM would be an essential facility "a breathtaking prediction and conclusion by a regulatory agency. This order makes clear that the FCC has jurisdiction to regulate virtually every Internet product. The implications of that step are not fully considered here and that is why I am most hesitant to make such a substantial leap...without greater notice and a fuller and broader opportunity to comment."¹⁴

Rick Warren-Boulton, an economist with Microeconomic Consulting Research & Associates, submitted a report to the FCC detailing the dangers of allowing AOL not to interconnect to IM competitors. Mr. Warren-Boulton indicated there are two possible outcomes given the FCC's order to delay interoperability until the release of an "advanced" IM service: (1) AOL-Time Warner will release an advanced service quickly, in which case the FCC "would have been better off saying just do it," or (2) AOL-Time Warner delays any new releases to avoid opening its protocols, creating "a problem for technical change in general."¹⁵ Wayne Crews of the Cato Institute suggested that the FCC order gave AOL perverse incentives not to roll out new IM services. Moreover, the "advanced IM-based, high-speed services (AIHS)," a phrase coined by the FCC in their order, was left undefined.¹⁶

The FCC ruling fell short of the IMUnified's hopes, calling for open access to future "advanced" versions of AIM, an undefined term which could include streaming audio and video in addition to the tradition text messaging service. But AOL-Time Warner was under no obligation or timetable to upgrade the current software to an advanced" version.¹⁷

Responses To Regulatory Restrictions on IM



AOL competitors formed a coalition called [IMUnified](#) which advocated interoperability among IM applications and lobbied regulators to make approval of the AOL-Time Warner merger contingent on the opening of the AOL's IM protocols.¹⁸ IMUnified issued a statement shortly after the FCC's order was announced:

"Our goal has been to give consumers the full benefit of interoperable instant messaging now and to spur the development of next-generation services that utilize instant messaging technology. This interoperability will give consumers the freedom to choose among competing IM services and to easily and seamlessly communicate with one another.

One key industry player does not seem to share our goal. That's why we had hoped the FCC would take steps immediately to advance this cause for all IM users. Today's order is a step. It still will not provide any near-term benefits for today's IM users. Indeed, given the limited contract requirements that are part of the order, it is possible that consumers will not see material benefits from the Commission's order even over the long-term. We appreciate the Commission and its staff for addressing this issue. It is significant that the FCC recognizes that AOL's aversion to interoperability is a problem. But the problem is bigger than the FCC's limited action. As a result, AOL's stranglehold on IM will remain intact for now, and consumers and competition will continue to suffer as a result.

¹⁴ Communications Daily, "FCC Instant Messaging Compromise Criticized on All Sides," Jan. 16, 2001.

¹⁵ Communications Daily, Jan. 17, 2001, Mass Media section.

¹⁶ Communications Daily, Jan. 16, 2001, "FCC Instant Messaging Compromise Criticized On All Sides."

¹⁷ Newsbytes, Jan. 19, 2001, "Tribal Voice's Pow-Wow is Finally Silenced," Steve Bonisteel.

¹⁸ Tribal Voice and iCast had also formed an organization called Freeim.org.

We remain committed to the development of open, industry-led standards for interoperability. Almost eighteen months ago, AOL said it was equally committed. To date, AOL has not followed through. Federal officials, the industry, standards-setting bodies and consumers will be watching AOL's actions in the coming months to see if it lives up to the promises it has made."¹⁹

Other members of IMUnified were particularly dismayed by the FCC's decision to stall IM interoperability. "The FCC has done little to advance the course of progress and innovation," said Eli Efrat, CEO of instant messaging company MessageVine. "The Internet's main achievement is its ability to create communication across borders yet the FCC is allowing AOL to maintain technological barriers to the free flow of information. At a time when IM has the potential to challenge email as the dominant communications tool, AOL should join the other players of the IM industry in working together rather than being anti-competitive."²⁰

A Microsoft spokesperson called AOL's refusal to open its system a disservice to all IM users. "Consumers have been demanding it for a while. They want free-flowing communication over instant messaging. If you look at any of these other communication tools like e-mail and phones, interoperability has been an important principle and standard for consumers, and that's been the thrust."²¹

Avner Ronen, co-founder of Odigo, Inc., a New York-based instant messaging rival with more than 3 million subscribers, said the FCC's conditions were meaningless because they are based on a market that does not yet exist. "Video conferencing [is] not something that's relevant to the core instant messaging technology. Instant messaging is about text messaging and having the knowledge of who's online at any given time. Anything else you might add on to it is just a tool to make the application more sexy to the end user."²²

Some believed the market and not regulators would ultimately dictate the fate of IM. Once IMUnified's uniform data protocol was fully tested and operational, they suggested, it would rival AOL's service in popularity, forcing AOL to open its network or become obsolete.²³

AOL CEO Stephen Case stated: "More and more people are using [IM] to communicate, and there are some interesting new possibilities in the future. What the FCC was saying is the instant messaging people are using today is fine. They just want to make sure in the future, if through cable broadband systems, maybe there's some kind of video instant messaging, that these systems are interoperable, and that's something we've certainly looked at. And we've been working over the past year to make sure we can assure all the people in the government and nonprofit groups that AOL-Time Warner is going to try to do the right thing in the right way, not just run our business in the shareholder interest but also in the public interest."²⁴

¹⁹ PR Newswire, "Leading Instant Messaging Companies React to FCC Action on IM," Jan. 12, 2001.

²⁰ M2 Presswire, Jan. 17, 2001, "AOL-Time Warner merger decision disappointing says MessageVine."

²¹ Chicago Tribune, Jan. 16, 2001, "Conditions on Merger may not loosen AOL's grip on Instant Message Market," Mark Harrington.

²² Newsbytes, "AOL-Time Warner Approval Provokes Strong Responses," Jan. 12, 2001.

²³ The Boston Globe, Jan. 18, 2001, "Technology and Innovation Upgrade - Problem takes care of itself," Hiawatha Bray.

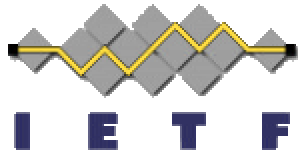
²⁴ Good Morning America Show, "Gerald Levin and Steve Case Talk About the Merger of Their Companies, Time Warner and AOL," Jan. 12, 2001.

AOL COO Pittman stated: “Instant messaging is a very important component and feature [of our business], certainly for AOL members. I mean AOL really invented it. And, in fact, what the government has simply tried to do is to talk about what happens when you have advanced instant messaging. And AOL itself and now AOL-TW is obviously committed to making this an open environment but there is an important principle here and you don’t want the invasion or encouragement of viruses and spam and unwanted material which we have seen happen with regular e-mail.”²⁵

TW CEO Levin stated: “And AOL probably in the last three or four years has been giving away AOL Instant Messenger to people who aren’t AOL members for free. And we’ve been giving it to competitors to use on their service. So we found a way to do it even before we could really work out all the technical aspects of making an open architecture out of it.”²⁶

Internet Engineering Task Force (IETF)

An Internet standards-setting organization known as the Internet Engineering Task Force separately worked on a long-term solution for instant messaging that would work across all devices. Founded in 1986, the Internet Engineering Task Force (IETF) is a large open international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet. It is open to any interested individual. The actual technical work of the IETF is done in its working



groups, which are organized by topic into several areas (e.g., routing, transport, security, etc.). Much of the work is handled via mailing lists. The IETF holds meetings three times per year. Open standards first adopted by IETF include HTTP, the Hypertext Transfer Protocol used for downloading Web pages and SMTP, the protocol that governs the sending of email. The IETF has a working group on

Instant Messaging and Presence Protocol (IMPP). Their plan was to allow a user to maintain a single instant messaging account but communicate with users across all services. AOL said it favored resolution of the issue through the IETF process. But the company failed to provide the organization with a “detailed blueprint for interconnecting as other organizations have done.” “I’d be happier if AOL had submitted input to the documents or had commented on any of the documents, but that didn’t happen,” said Leslie Daigle, co-chair of the IETF instant messaging working group.²⁷ “Most of our (IETF) stuff happens online, and hitherto, I have not seen very strong participation from the people at AOL.” Vijay Saraswat, Co-chairman of Internet Engineering Task Force and Corporate Researcher AT&T.²⁸

²⁵ CNBC/Dow Jones Business Video, “AOL-Time Warner CEO-COO Interview,” Jan. 12, 2001.

²⁶ CNBC/Dow Jones Business Video, “AOL-Time Warner CEO-COO Interview,” Jan. 12, 2001.

²⁷ Carolyn Duffy Marsan, IETF split on Instant Messaging Standard, December 18, 2000.

²⁸ Washington Post, November 11, 1999.

Questions

1. What techniques has AOL used to protect its IM customer base, and against what is AOL protecting?
2. What role can/should AOL's technologists play in AOL's strategy?
3. What role does policy play in the strategy of AOL and its competitors?
4. Who is in the best position to decide AOL's strategy (or AOL's competitors' strategy) towards IM?
5. How important is it to have a strategy towards IETF ? What should it be?
6. Will the FCC's restrictions on AOL affect what AOL will do with IM? How?
7. What should be AOL's competitors' next action with respect to IM?
8. What role did/do organizations such as FreeIM.org or IMUnified.org have on IM?
9. How does rhetoric matter in the struggle over IM?
10. Is Microsoft a convincing player on the policy front? Technology front?
11. Does the application of IM to mobile technologies create any new issues? strategies?
12. How should an executive of an IM-based start up strategize in this environment? What do you think about Ross Bagully's comments to the FCC?