

# Viral Triggers

## Instant Messaging

Ilia Mirkin

[imirkin@mit.edu](mailto:imirkin@mit.edu)

January 26, 2005

---

# Instant Messaging

- Talk: Communications between terminals
- Zephyr: Developed at MIT; little use outside
- ICQ: First popular IM service
- AIM: At first for AOL members only, later free service to all, but with ads for non-AOL members
- Jabber: Open IM architecture, though similar to AIM in most respects
- MSN/Yahoo/etc: Proprietary but free services similar to AIM
- Rendezvous: Can be used for messaging in LANs
- Skype: Peer-to-peer application for both voice and text

# Talk

- Originally developed for Multics, in 1973
- Became a standard UNIX command with 4.2BSD
- Further enhancements to connect terminals over a network, and later, to be able to connect more than 2 parties (Ytalk - 1990)
- Was popular amongst UNIX users since its existence, though no concrete usage statistics are available
- Has become marginalized by other IM systems that do not require people to be logged in on terminals

# Zephyr

Developed at MIT under Project Athena

Designed to run under Unix, there are few clients available, as well as few users outside universities

Started in the 1980's, has not gained widespread acceptance. However it does provide various security enhancements, such as interoperability with Kerberos

Protocol specifications available freely, open source clients

# ICQ (“I Seek You”)

Created by Mirabilis, Inc., in 1996

First IM service to gain wide acceptance, mostly via member-driven advertising

Used numbers to identify members (much like Comuserve)

Allowed messages to be stored on server and delivered them when the target user would log on

Overtaken in popularity by AIM, which allowed people to pick any username

Currently accepts new users, but the service has become very similar to AIM, and uses the same servers

# AOL IM

AOL bought up Mirabilis, and recreated ICQ as AIM

Two protocols: OSCAR and TOC

OSCAR included all the features of AIM, but was closed.

TOC provided the bare minimum but was documented.

OSCAR was reverse-engineered and now there are non-AOL clients available

Success mostly due to ability to pick usernames and set away messages

Usage went from 42 million in 9/2000 to 53.8 million in 9/2001

Currently send over a billion messages per day

# Jabber

Very similar to other IM offerings

Open architecture, people are encouraged to run their own servers (though this is still a centralized architecture)

Implements IETF's XMPP (and in fact inspired the spec in the first place)

# iChat with Rendezvous

Rendezvous is Apple's protocol for peer detection in a LAN, though it is an open standard

iChat uses it to detect who is currently on the LAN and allows them to send messages

Rendezvous only works in a LAN, but there are some efforts to pass it around in higher-layer protocols

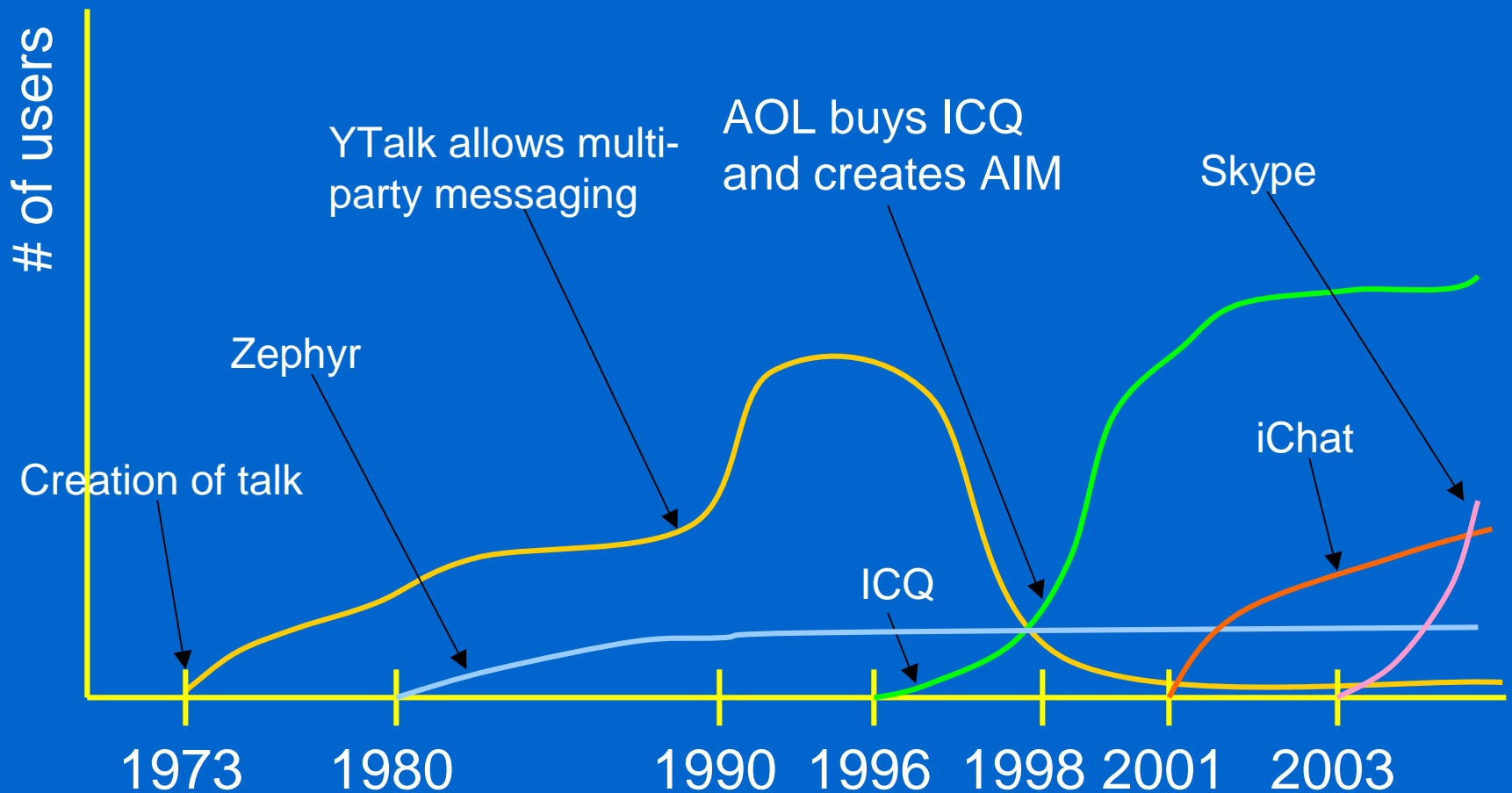
Only program that allows this directly is iChat, though the rendezvous protocol is an open one



# Skype

- Peer-to-peer VoIP application
- First released in 2003
- 7 million users after one year
- Allows instant messaging as well as voice calls
- Rather closed architecture, but understood to be mostly viral

# Usage of IM applications



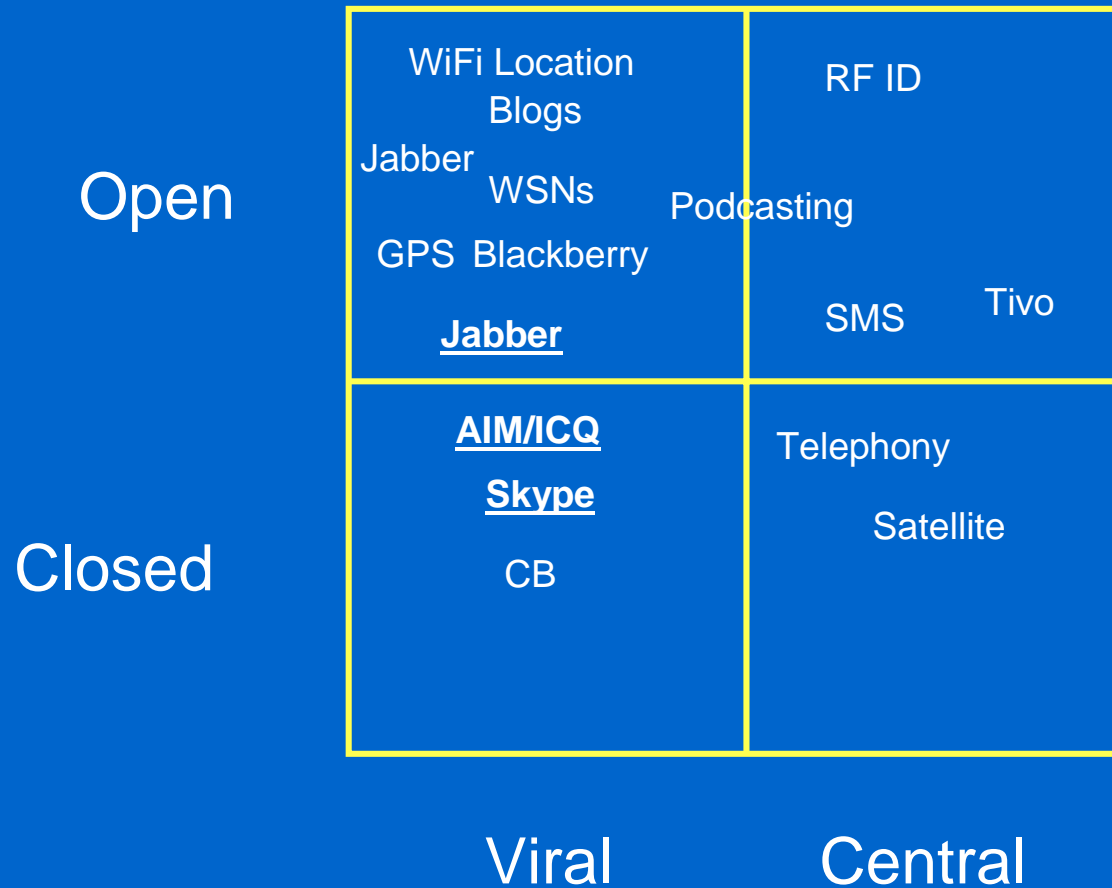
# Frameworks

## Architecture

Open	Blogs WiFi-Location <u>Jabber</u>	Podcasting Tivo Blackberry Jabber
Closed	CB <u>Skype</u> WSNs	RF ID Satellite GPS <u>AIM/ICQ</u> Telephony SMS
	Viral	Central

# Frameworks

## Interfaces



# Frameworks

## Marketing

