

# innovation scenarios

Daniel Jackson · Autodesk · Woodinville, WA · Dec 3-5, 2024

what does  
success look like?

story #1:  
**TBL's Web**  
(1989)

# what was novel about the web?

## World Wide Web

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### [What's out there?](#)

Pointers to the world's online information, [subjects](#) , [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

A list of W3 project components and their current state. (e.g. [Line Mode](#) ,[X11 Viola](#) ,[NeXTStep](#) ,[Servers](#) ,[Tools](#) ,[Mail robot](#) ,[Library](#) )

### [Technical](#)

Details of protocols, formats, program internals etc

### [Bibliography](#)

Paper documentation on W3 and references.

### [People](#)

A list of some people involved in the project.

### [History](#)

A summary of the history of the project.

### [How can I help ?](#)

If you would like to support the web..

### [Getting code](#)

Getting the code by [anonymous FTP](#) , etc.

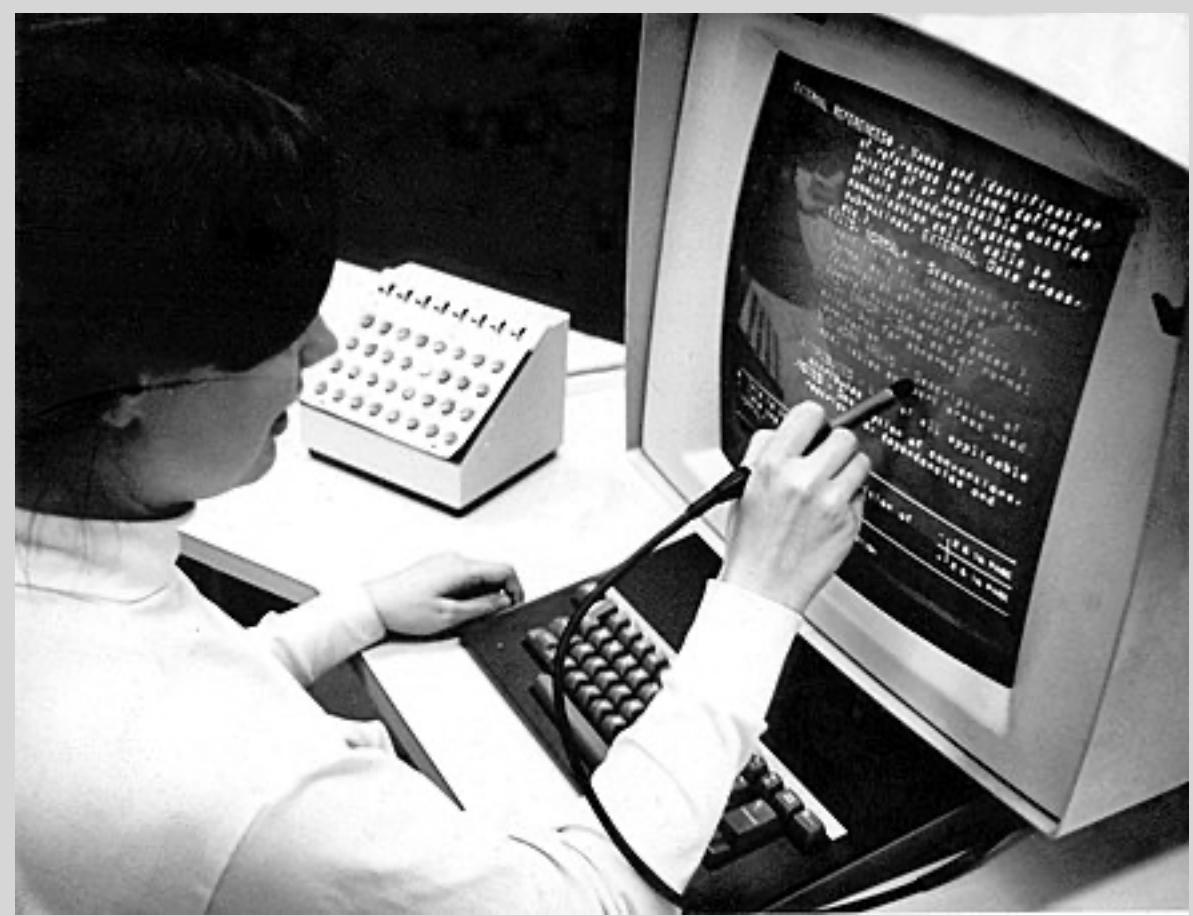
<http://info.cern.ch/hypertext/WWW/TheProject.html>

# the technology?

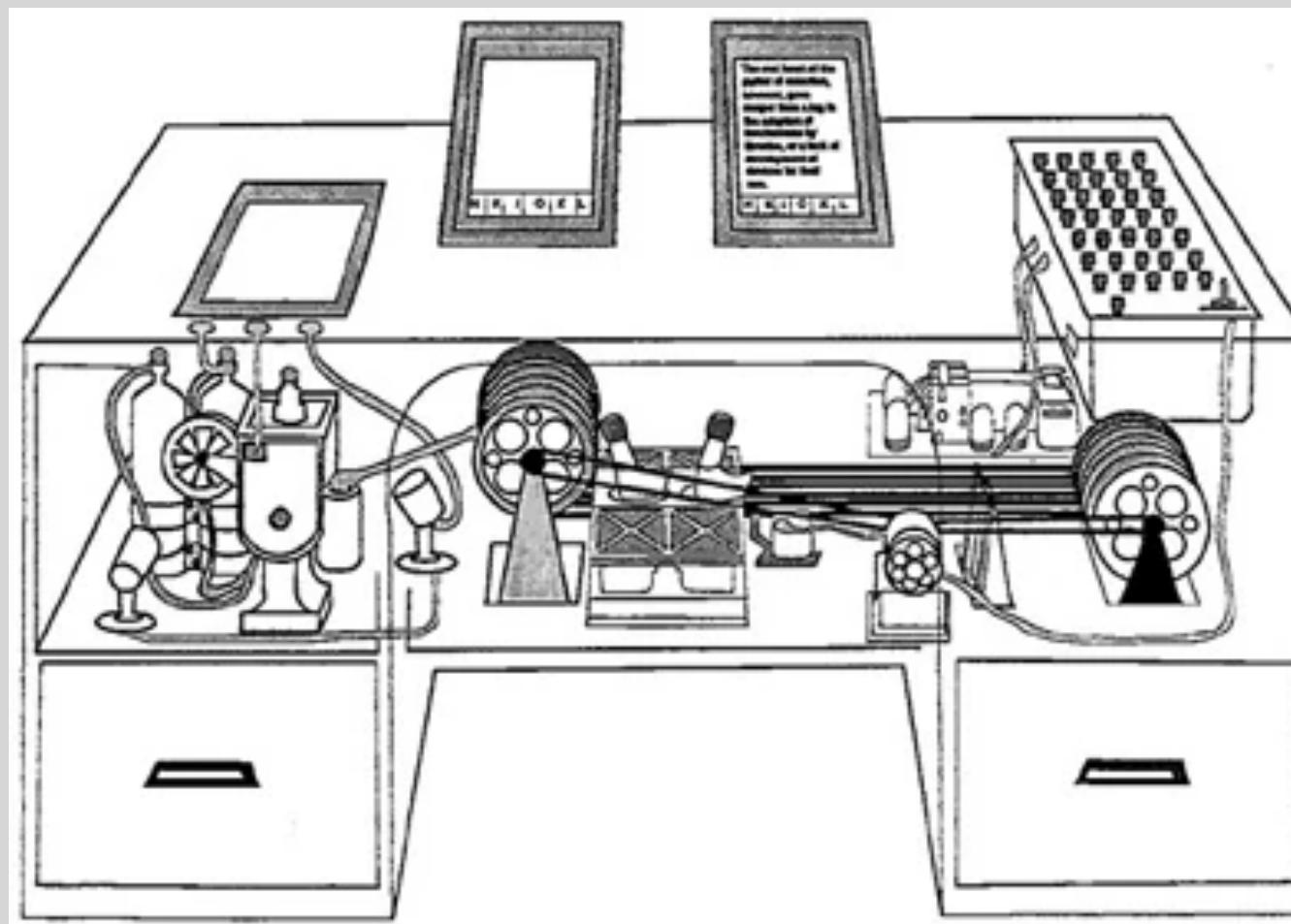


NeXT computer  
660MB hard disk  
Motorola 68030, 25MHz  
17" monitor with Display Postscript  
built in ethernet connectivity

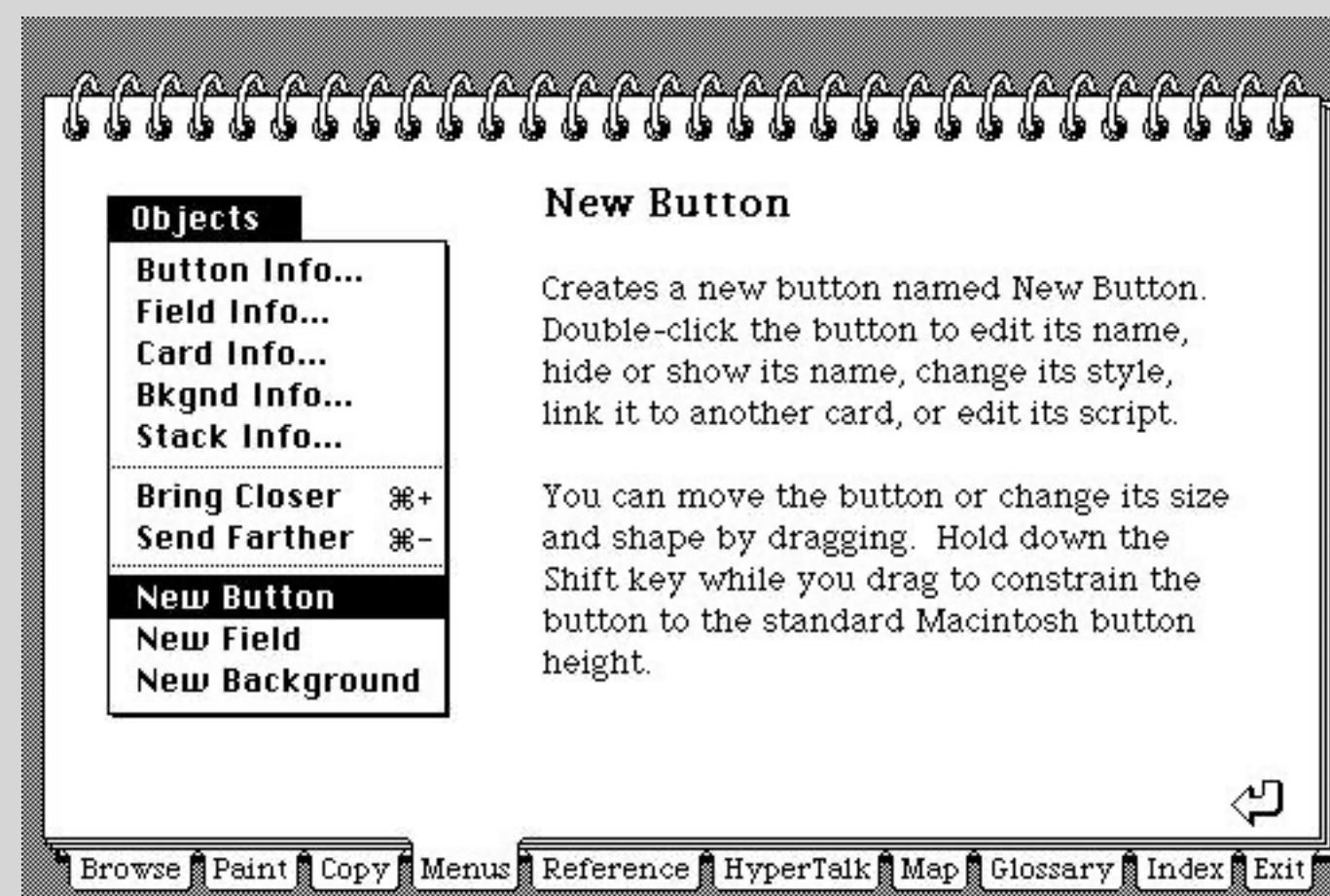
# hypertext?



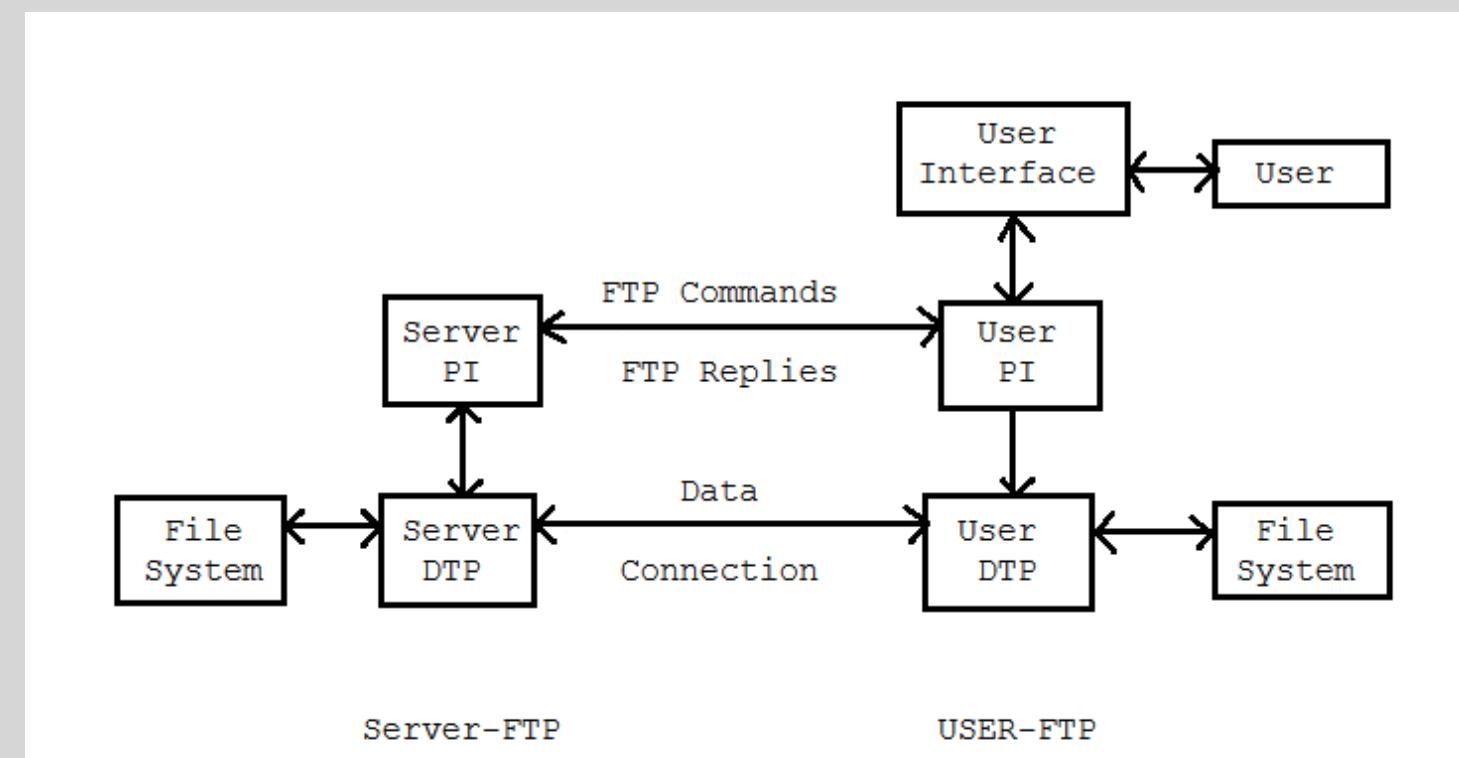
Hypertext Editing System  
(Nelson & van Dam, 1967)



Memex  
(Vannevar Bush, 1945)



Apple HyperCard  
(Bill Atkinson, 1987)



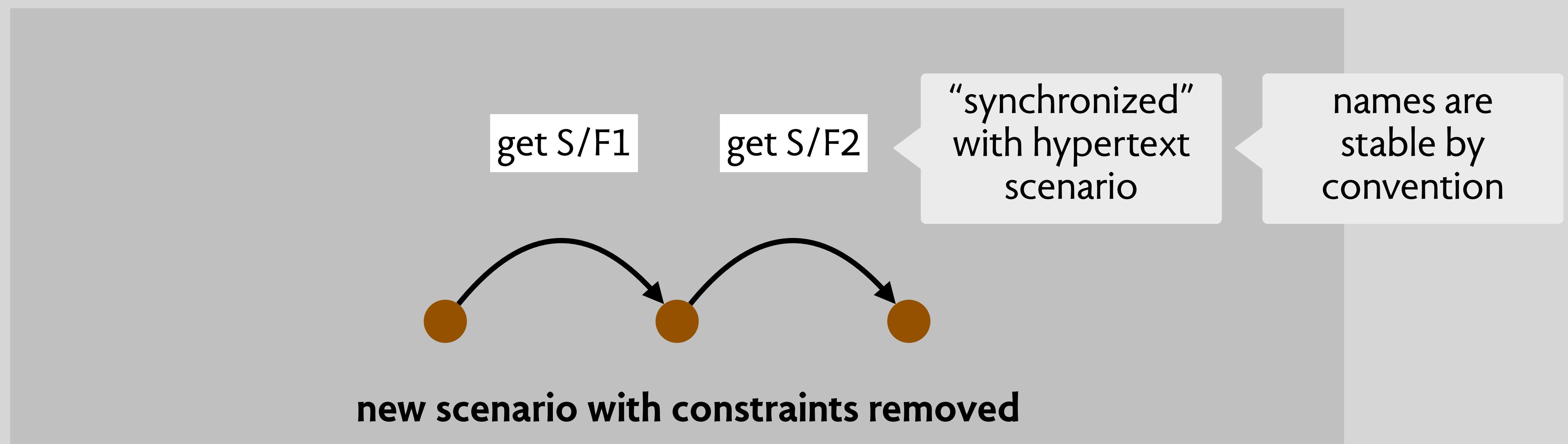
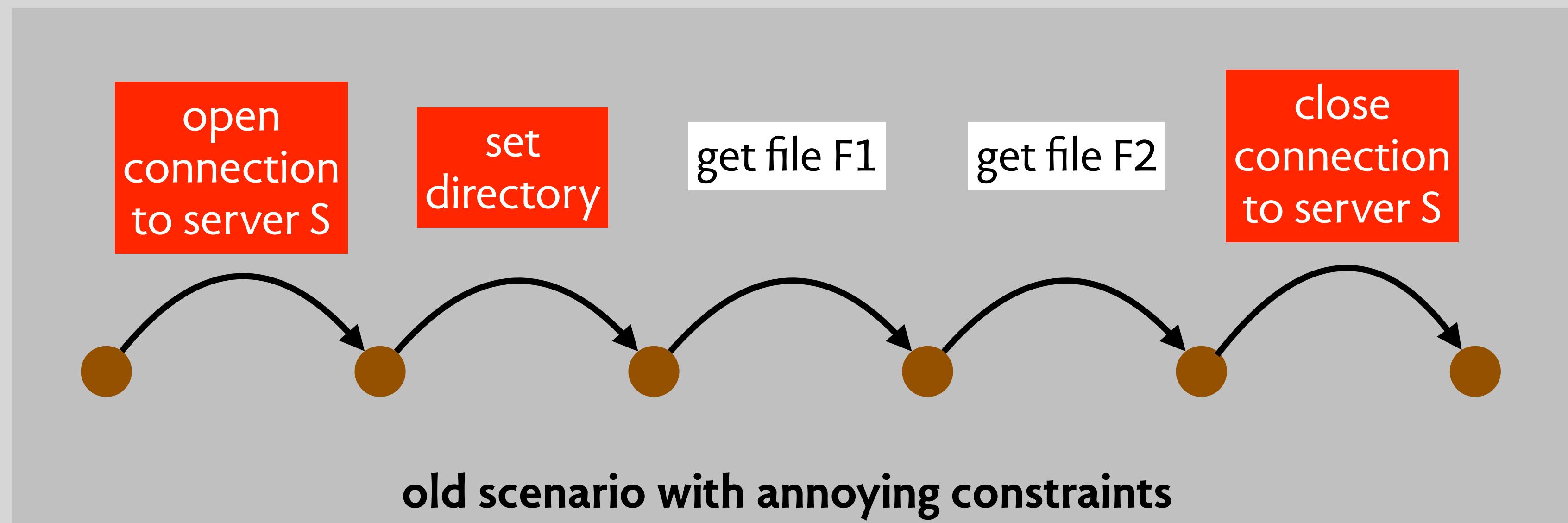
File Transfer Protocol  
(Abhay Bhushan, 1971)

```
<!DOCTYPE motd [ <!E
<motd>
<!-- created: 2003-12-12-->
<sentence>Do not throw
out the <keep>baby</>
with the
<refuse>dirty</>,
<refuse>stinky</>,
<refuse>bathwater</>.
</>
<!-- finish this later-->
</motd>
```

**SGML**

SGML  
(Charles Goldfarb, 1986)

# a new way to get content



this new scenario is embodied in the concept of the URL

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<http://info.cern.ch/hypertext/WWW/TheProject.html>

story #2:  
iPod (2001)

# what was novel about the iPod?

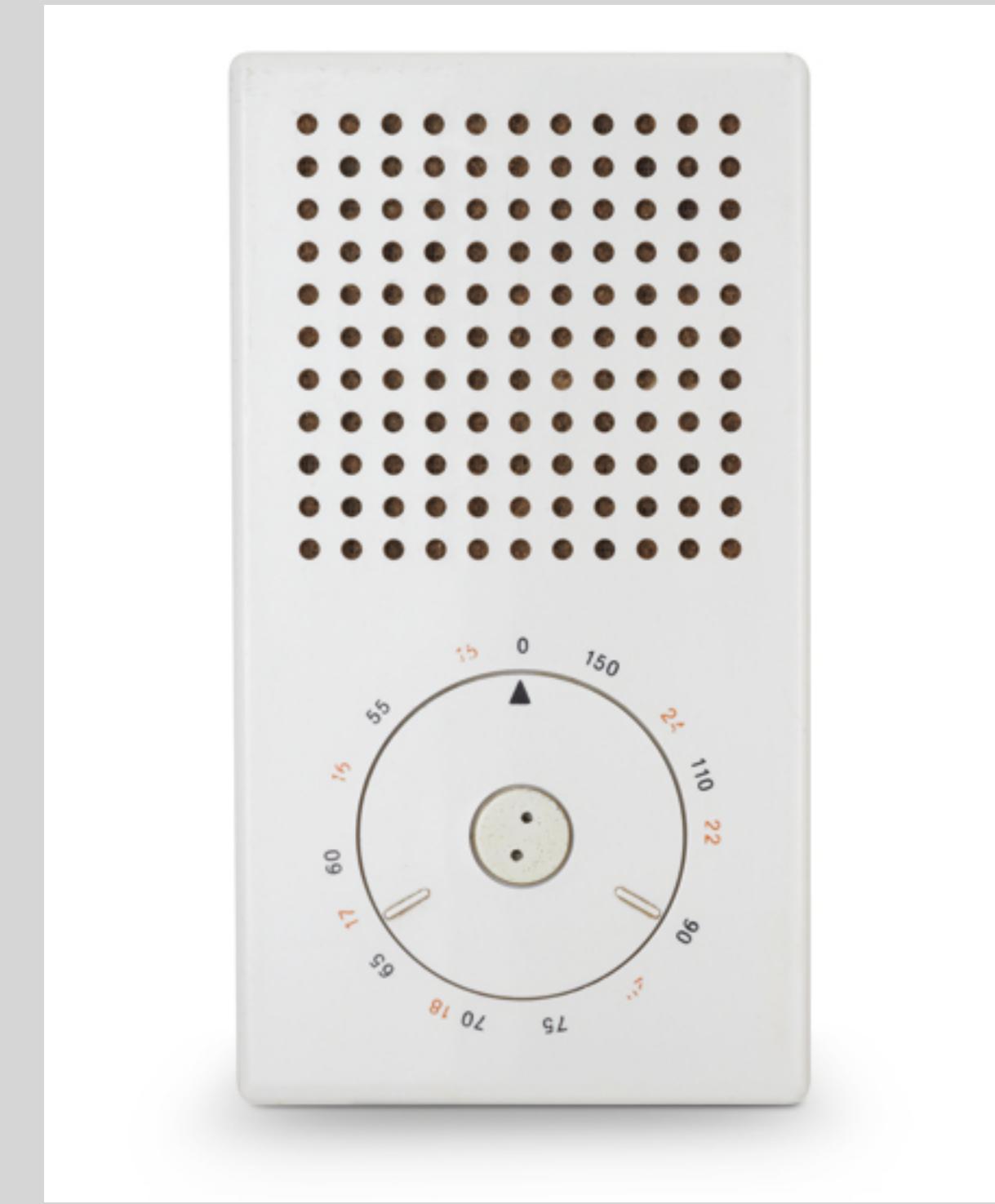


Apple iPod  
(2001)

# a new industrial design?



**Apple iPod**  
(Jony Ive, 2001)



**Braun Pocket Radio T3**  
(Dieter Rams, 1958)

# a technology breakthrough?



iPod 5GB drive  
(Toshiba, 2001)

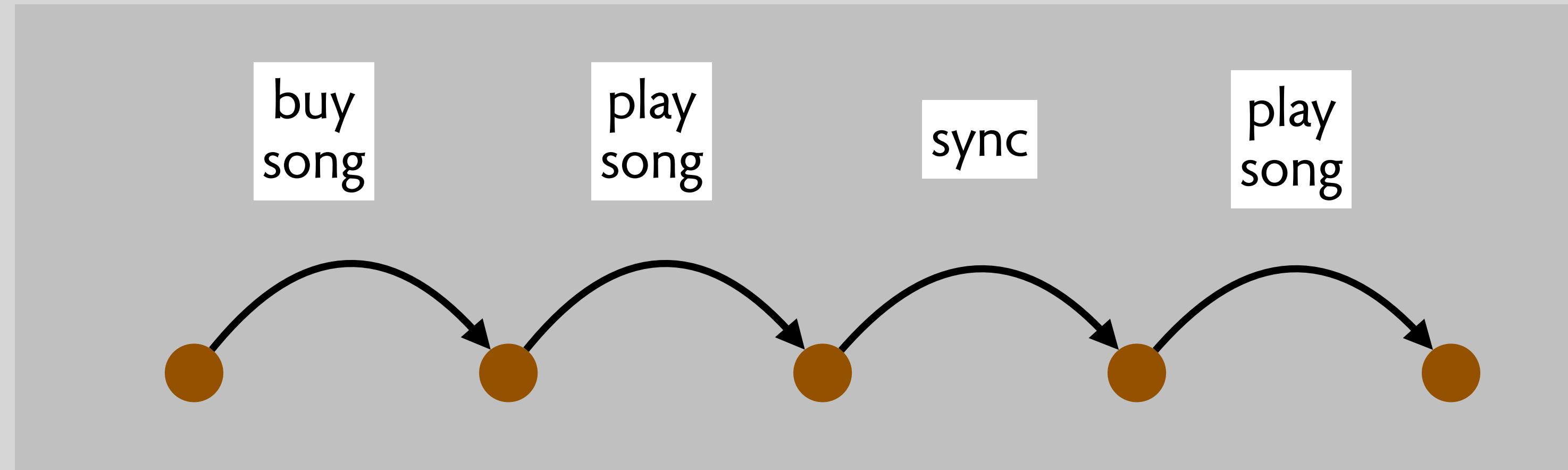
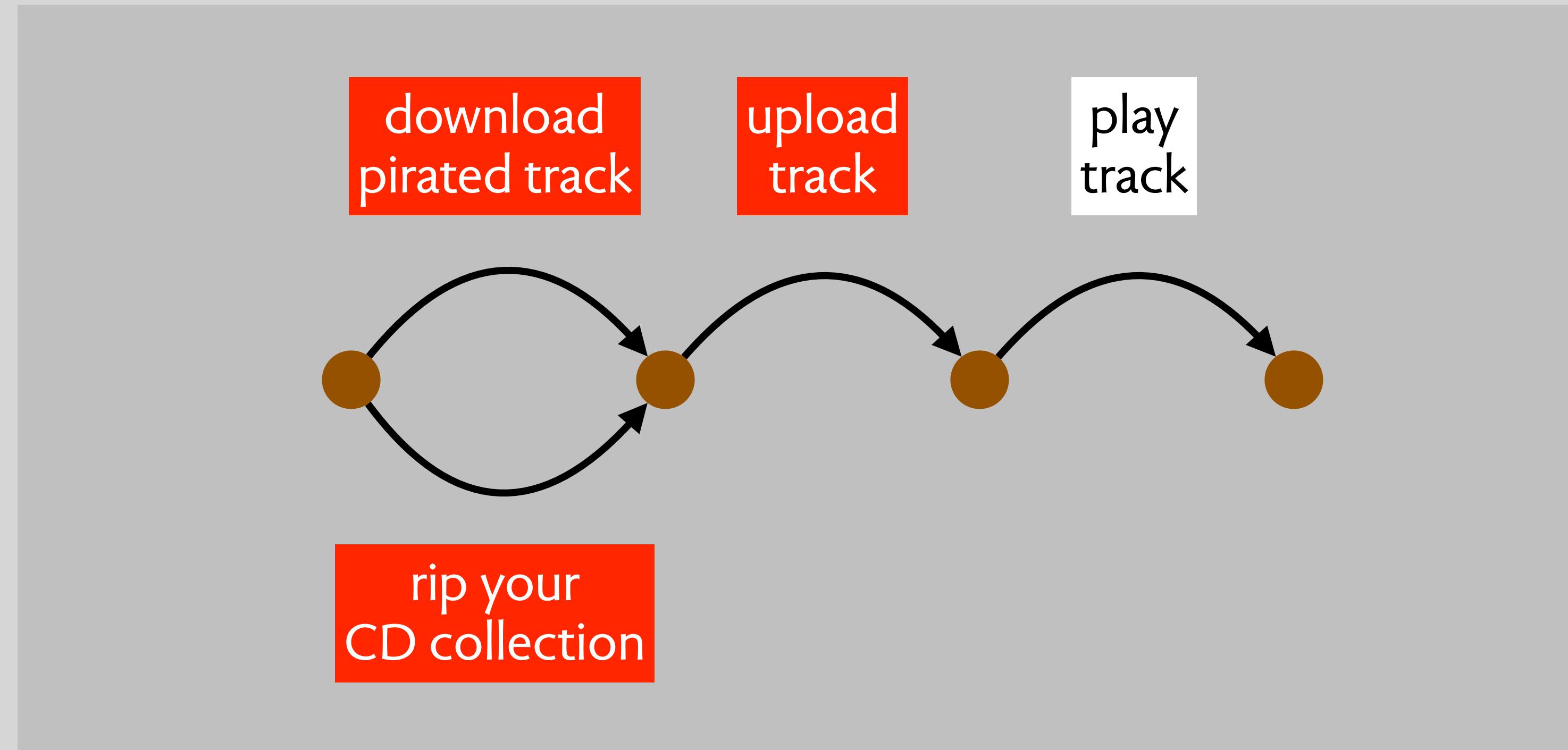


FireWire serial bus  
(Apple, 1995)



Personal Jukebox 5GB drive  
(DEC, 1999)

# the ipod scenario

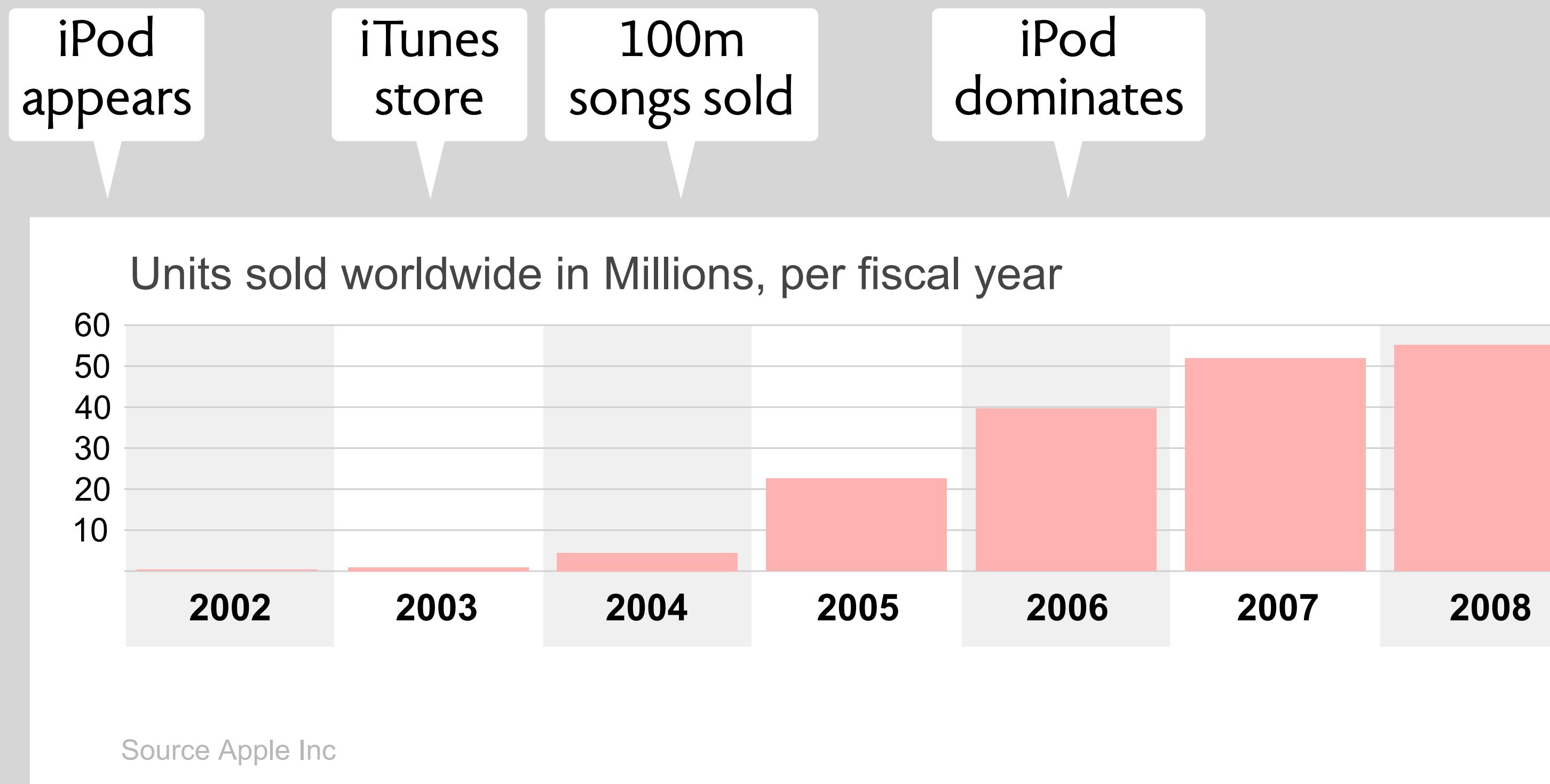


# supporting cast: iTunes



iTunes Media Player (2001); iTunes Music Store (2003)

# explosion in sales came after iTunes took off



# how did Sony fail?

## all ingredients of success (1999)

Network Walkman: a digital audio player  
Bitmusic: a store for downloading songs

## what went wrong?

proprietary compression scheme (ATRAC)?  
store limited to release in Japan?  
DRM controls made trouble for users?  
no simple usage scenario?

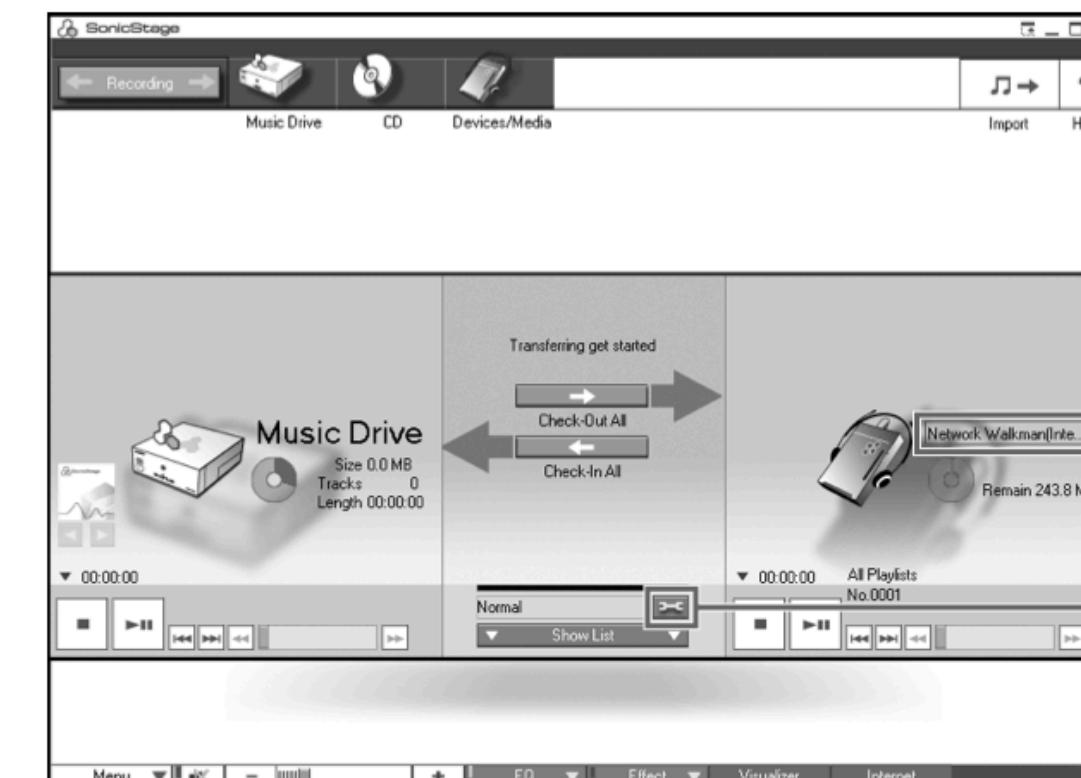
### 1 Connecting your Network Walkman to the computer

For details, refer to the instruction manual of your Network Walkman.  
When using a device supporting “MG Memory Stick”, insert the “MagicGate Memory Stick” media into the device before connecting to the computer.

### 2 Transferring audio files to your Network Walkman – Check-out

1 Click to display the Recording Assistant Window.

2 Click and select (Music Drive) for [1 Sources] and (Device/Media) for [2 Targets], and then click (Jump to Record Window).  
The Record/Transfer window is displayed.

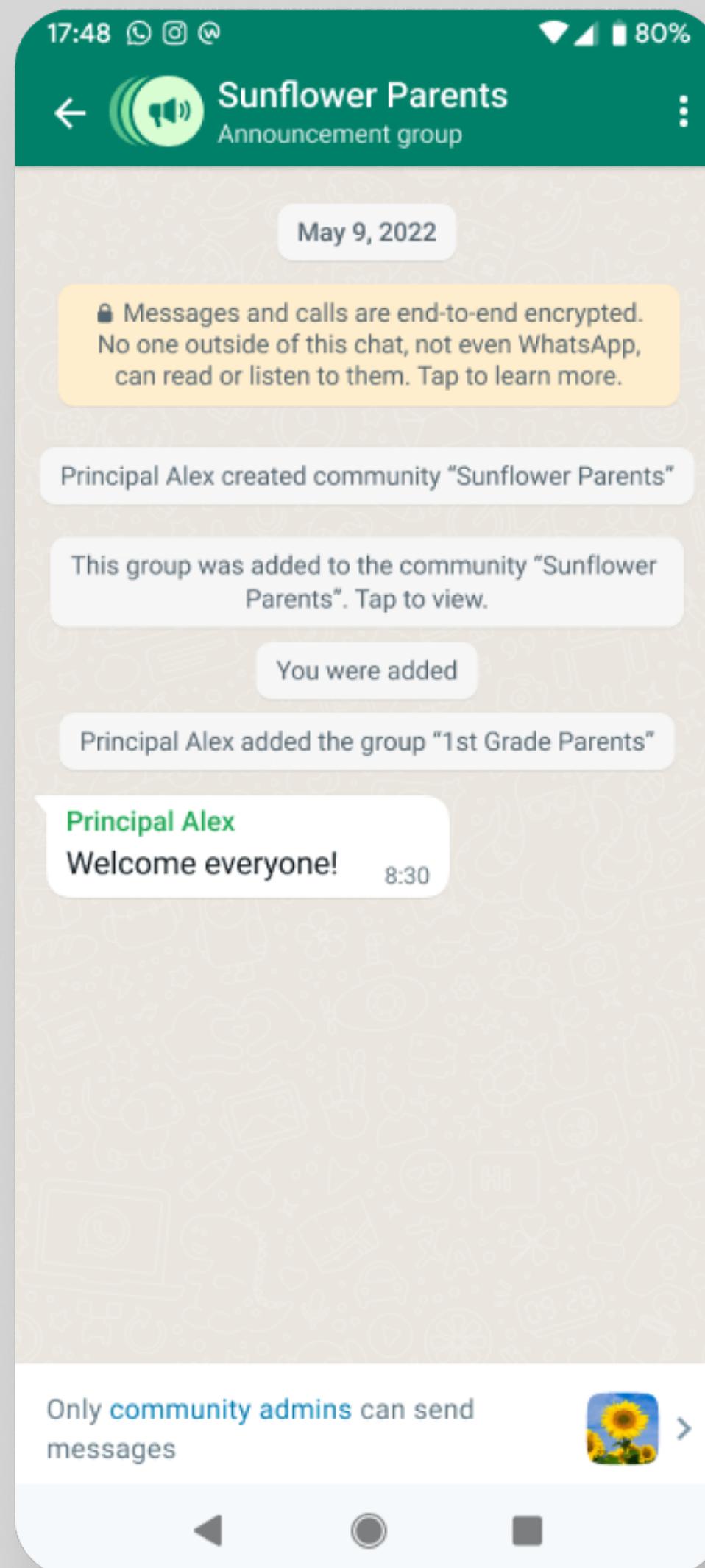


3 Select the device/media from the drop-down list at the right of the window.

When using the Network Walkman supporting two or more medium types, select the target medium.  
When you check out to the built-in flash memory, select “Network Walkman (Internal),” and when you check out to the “Memory Stick”, select “Network Walkman (Memory...).”

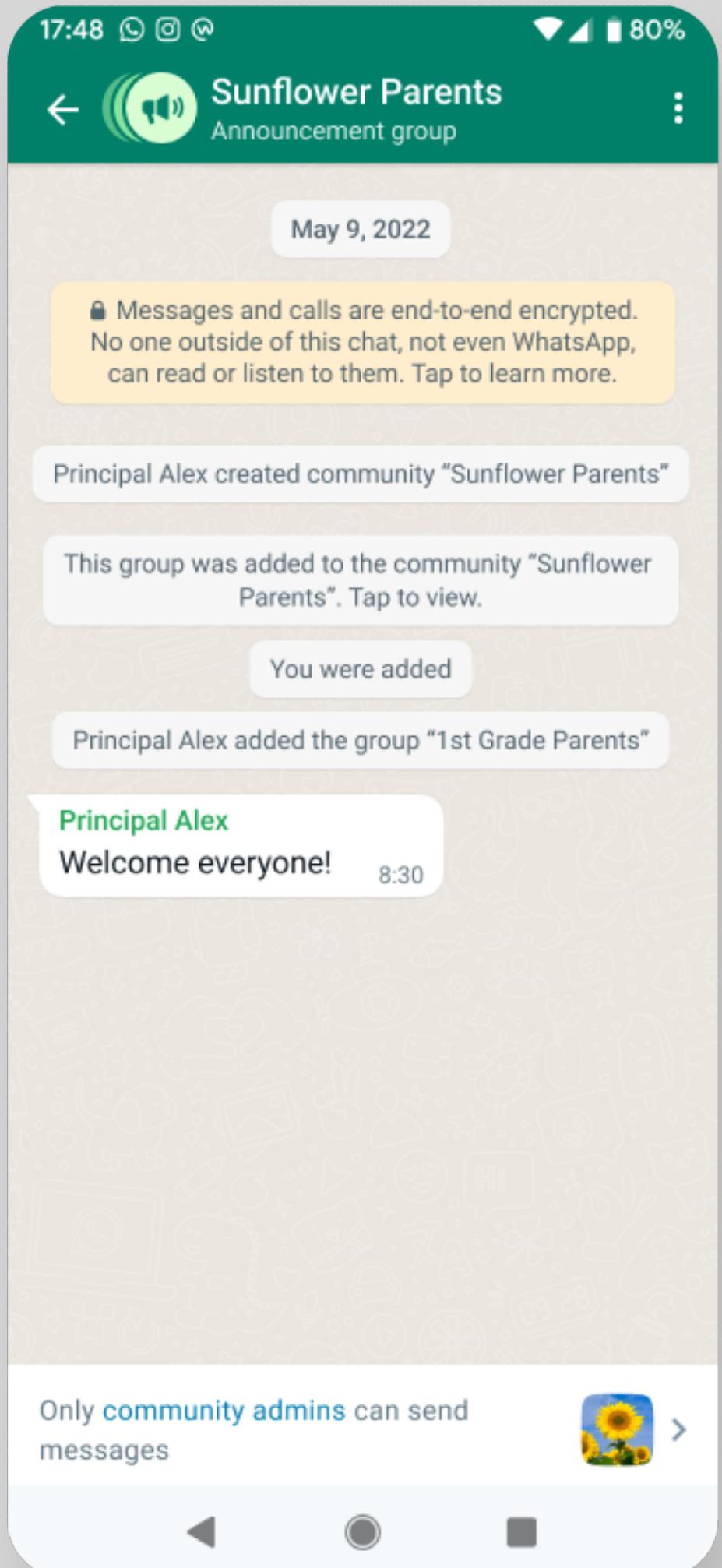
story #3  
WhatsApp  
(2009)

# what was novel about WhatsApp?



WhatsApp (2009)

# was it free texting?



WhatsApp (2009)



**first free-texting app**  
TextFree/Pinger (2006)

# whatsapp's big moment

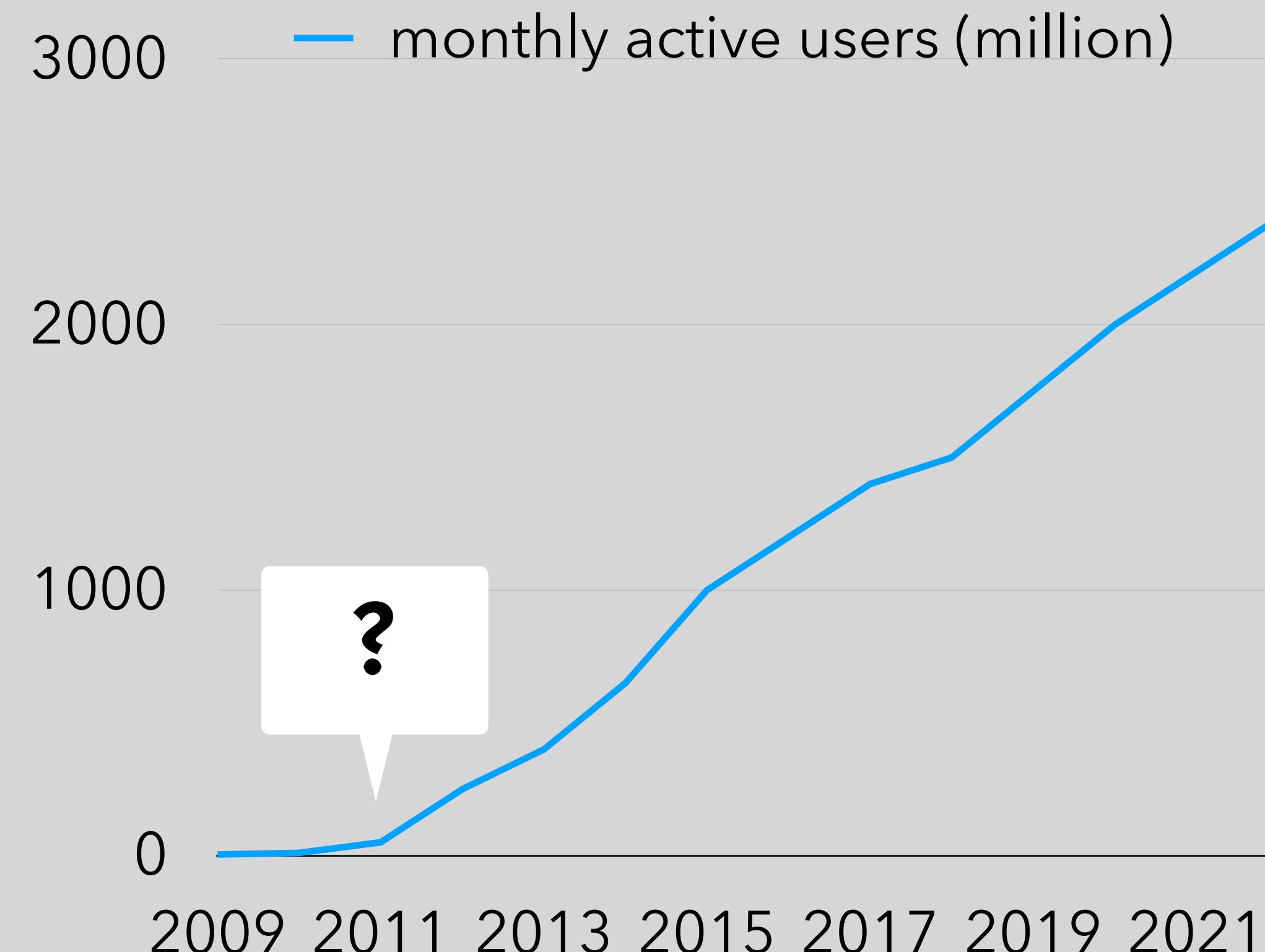
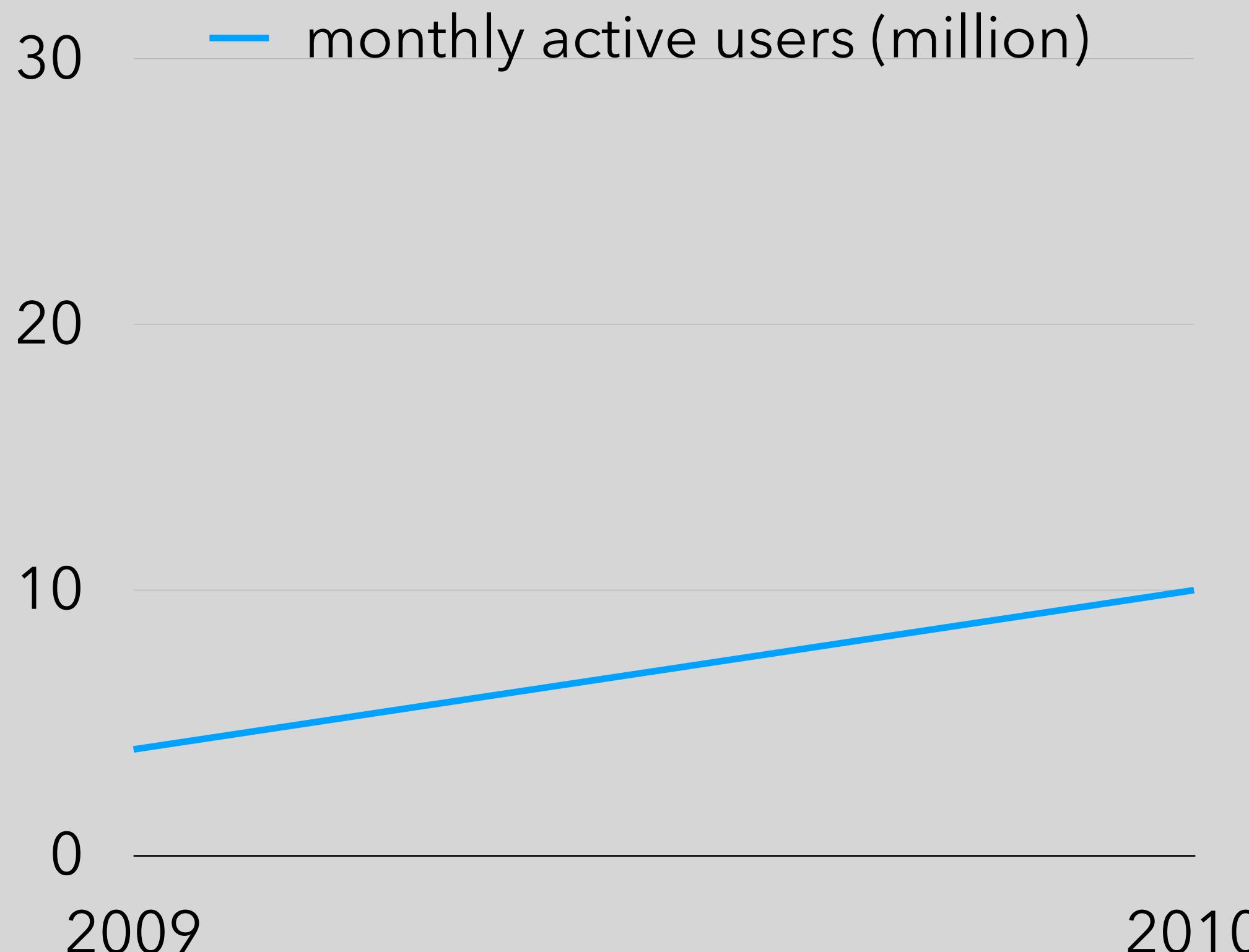


WhatsApp ✅    
@WhatsApp

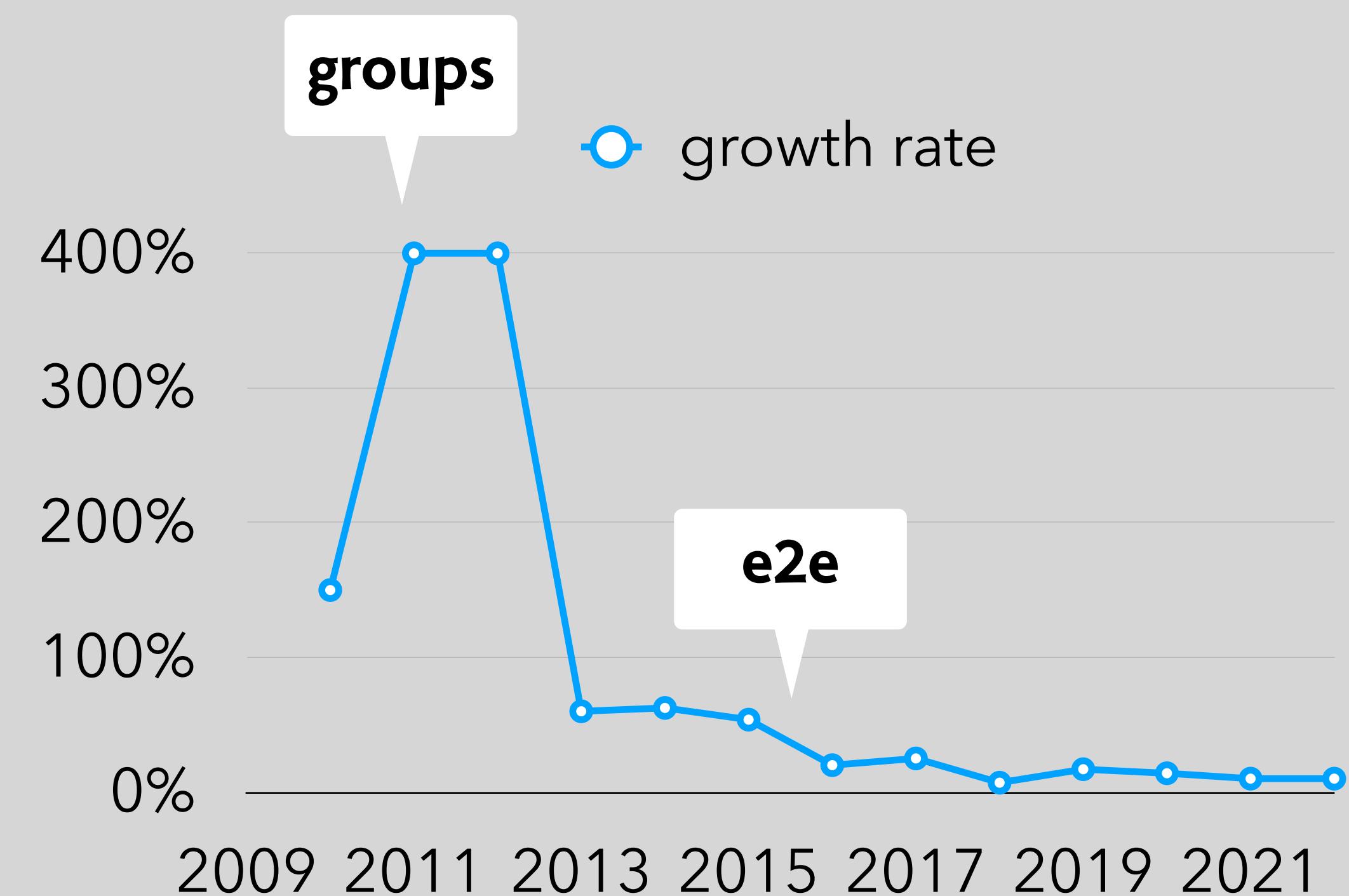
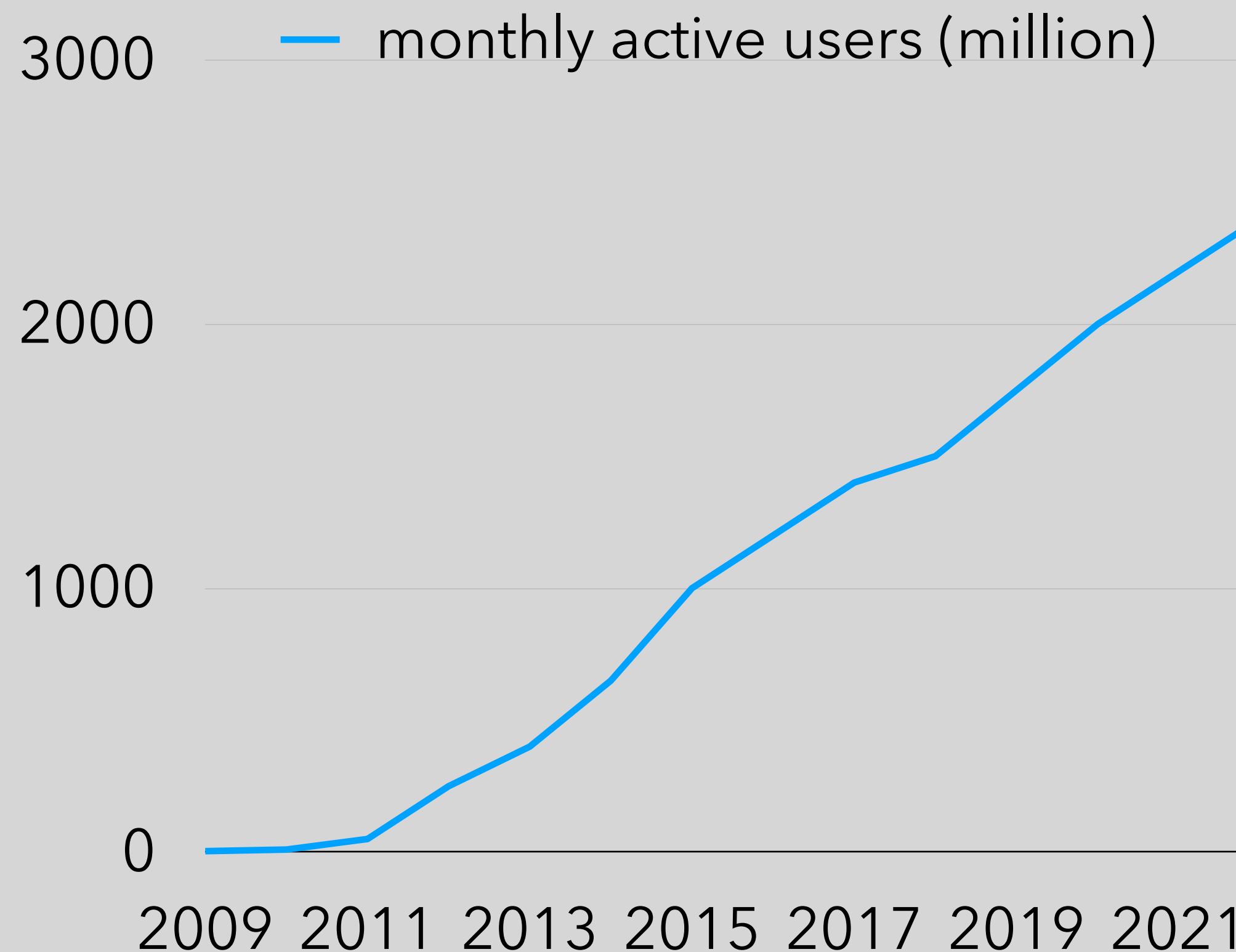
...

Group chat is now live for iPhone and BlackBerry in versions 2.6 (our Android client update with group chat is coming in 12 hours)

1:08 AM · Feb 10, 2011



# growing with groups



# what was happening in 2011

## *Start-Ups Are in a Rush to Bring the Chat Room to the Smartphone*

 Share full article  



Caleb Elston, left, and David Kasper, co-founders of the social messaging site Yobongo, in the company's offices in San Francisco. Jim Wilson/The New York Times

By [Jenna Wortham](#)

March 10, 2011



GroupMe

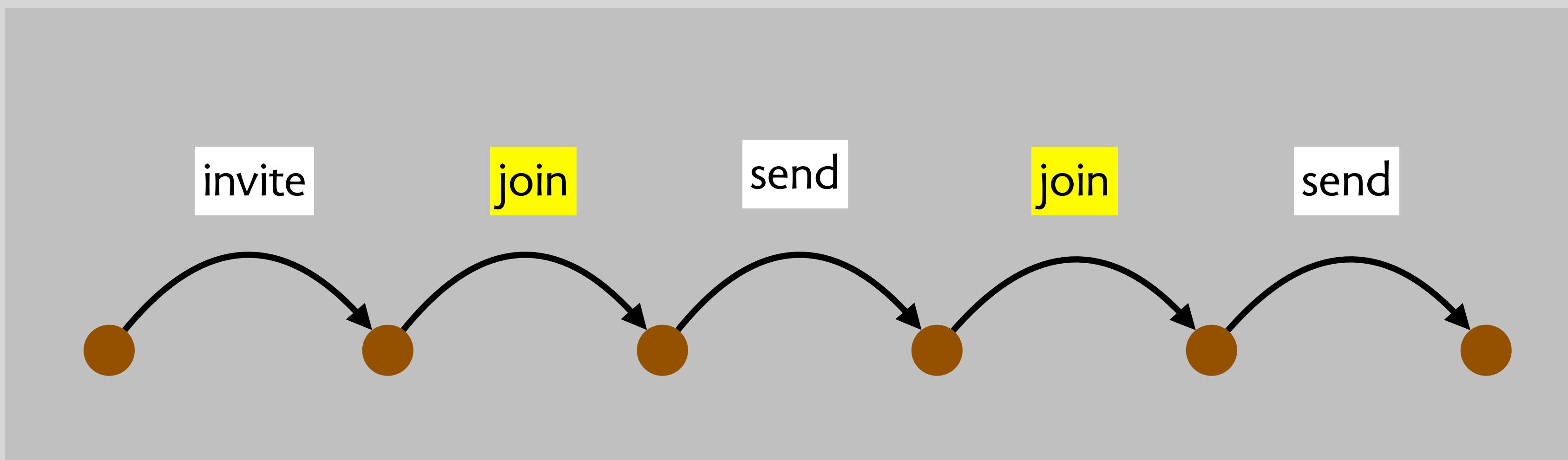
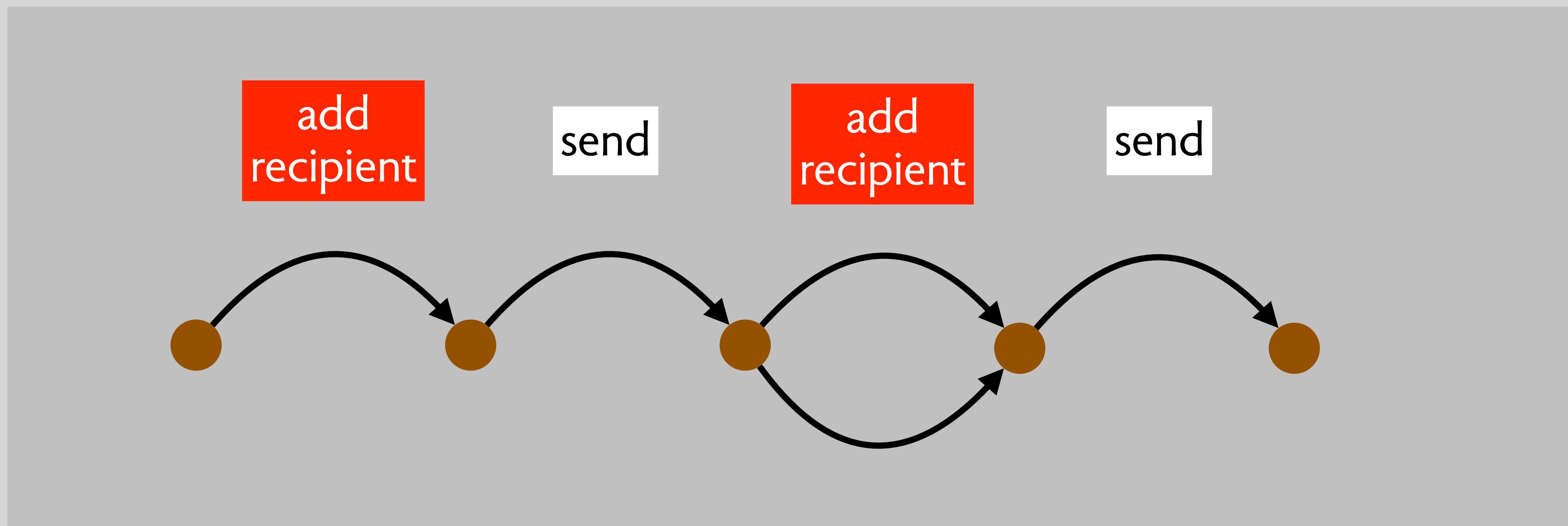


Beluga



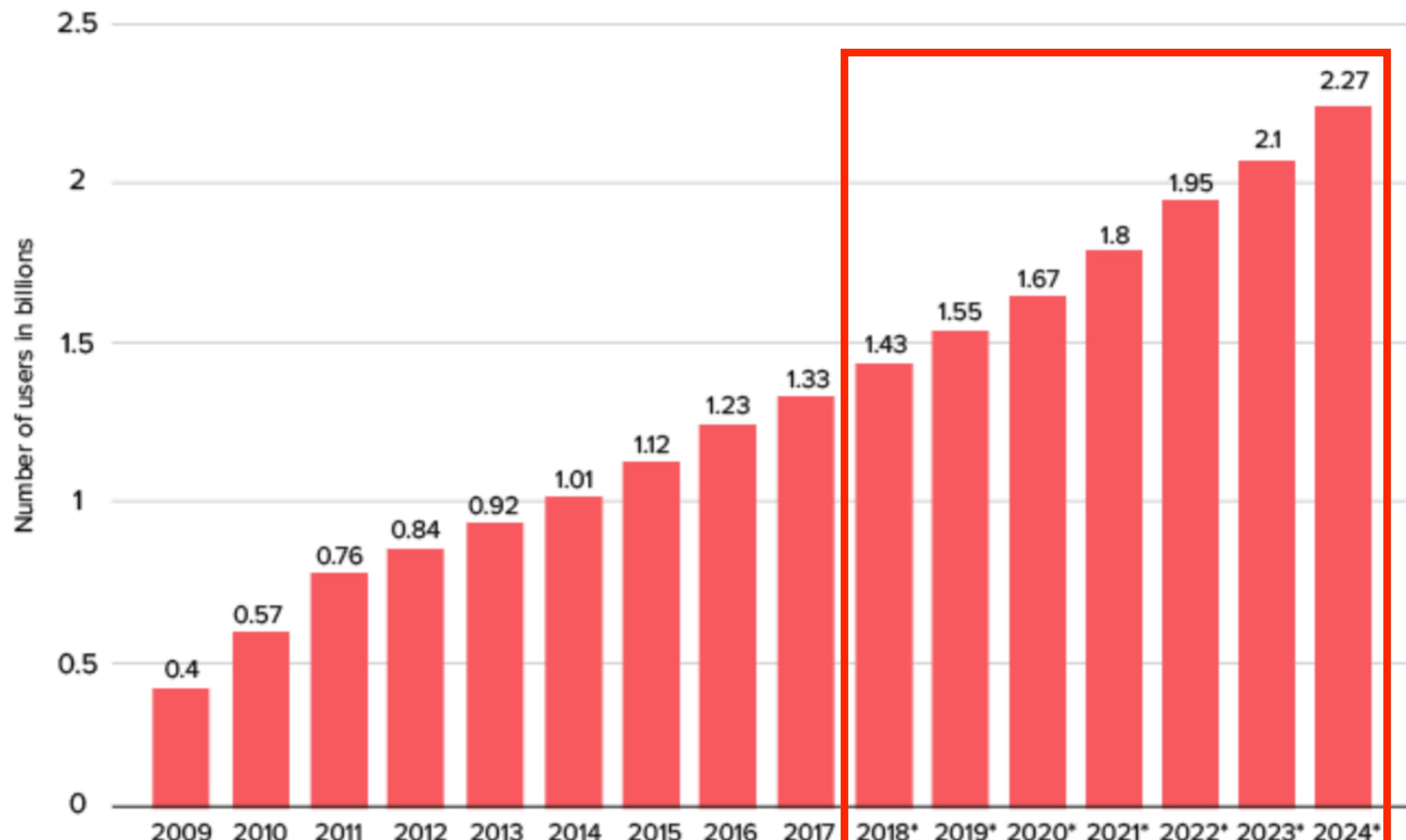
Yobongo

# the group scenario



story #4  
Zoom (2013)

## Number of estimated Skype users registered worldwide from 2009 to 2024 (in billions)



from Statistica: 2018-2024 estimated

# Covid-19 / Zoom-a-Zoom-Zoom

BBOViz  
Covid-19

**There's only one winner in the work-from-home meeting app wars**

- Zoom
- Microsoft Teams
- Google Meet
- Houseparty
- Skype for iPhone
- Discord
- Google Duo
- Google Hangouts
- WeChat Work
- Skype for Business
- Marco Polo - Stay In Touch
- Slack

Daily worldwide app downloads, in millions

Source: Apptopia

BEN SCHOTT

BloombergOpinion

# what was novel about Zoom?



March 31, 2020

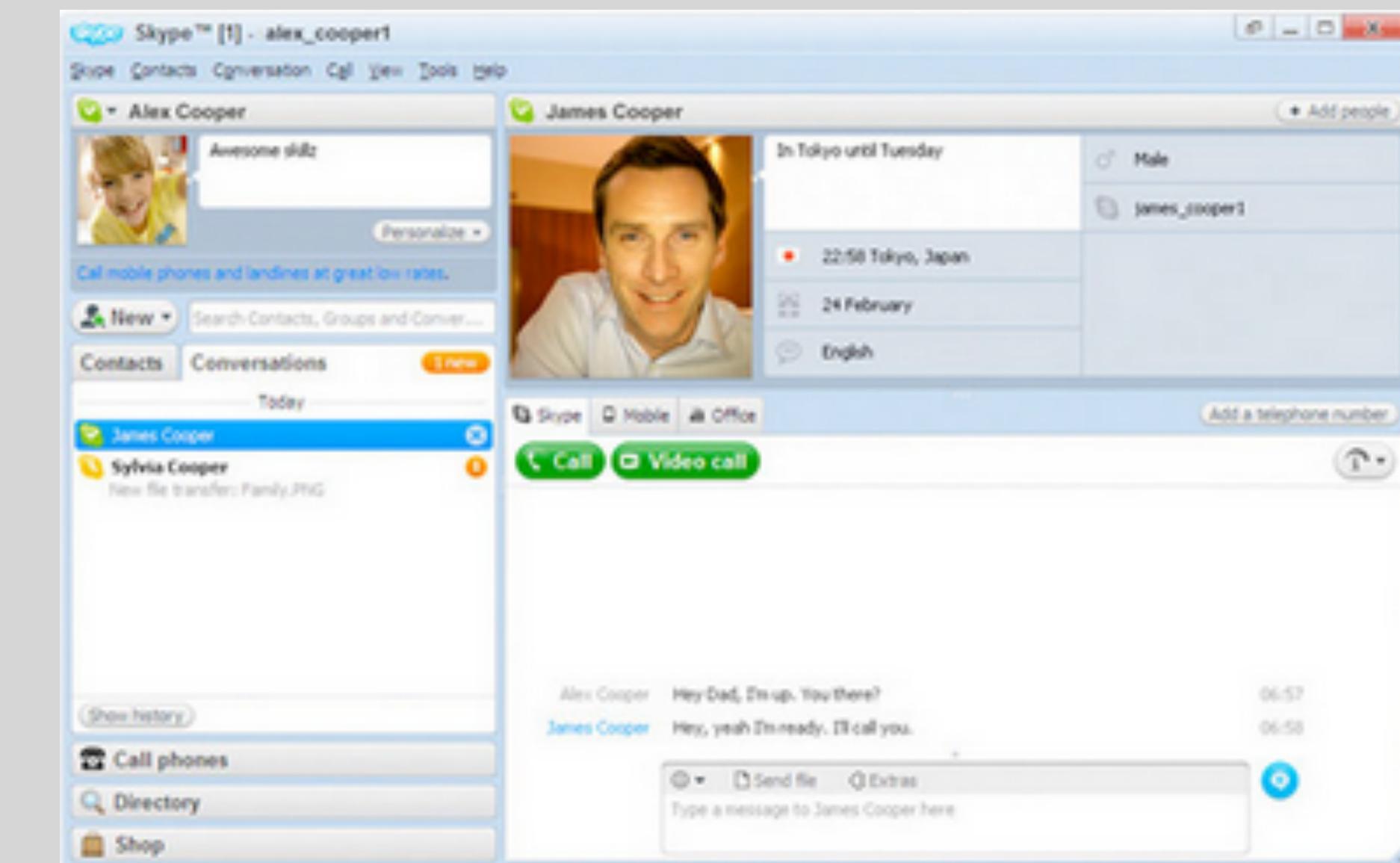
# were video calls new?



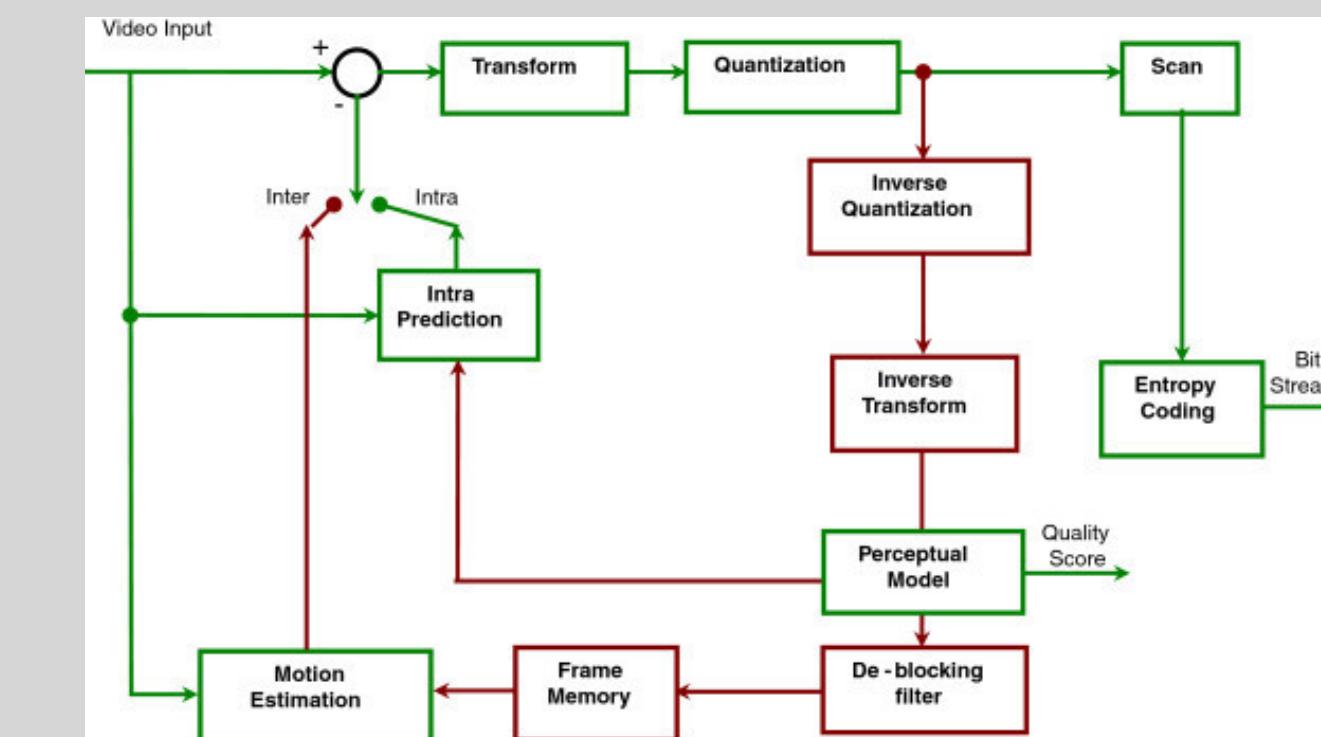
Picturephone (1964)



QuickCam (1994)  
first commercial webcam

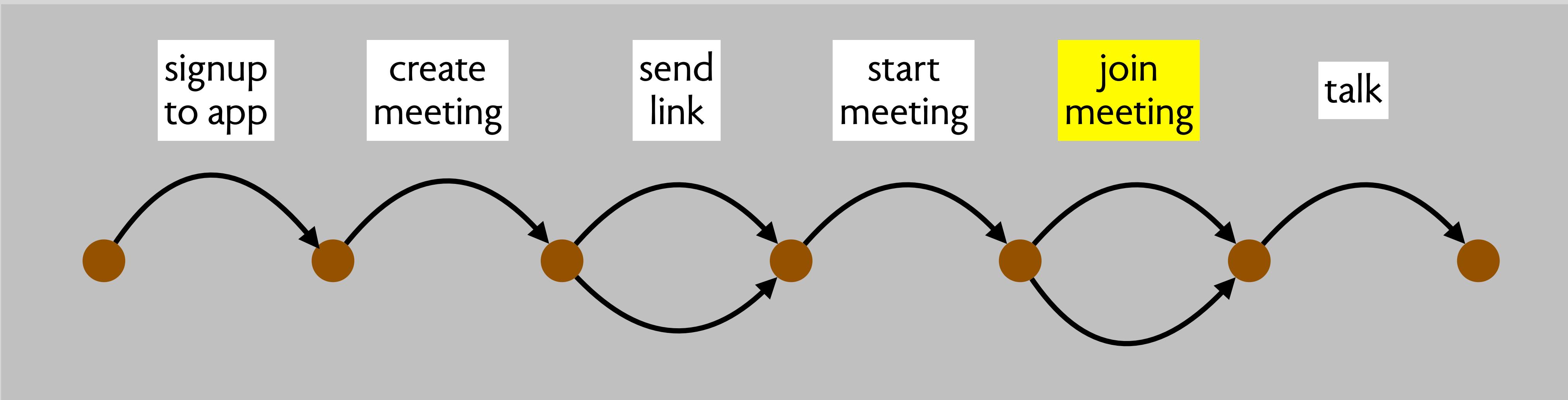
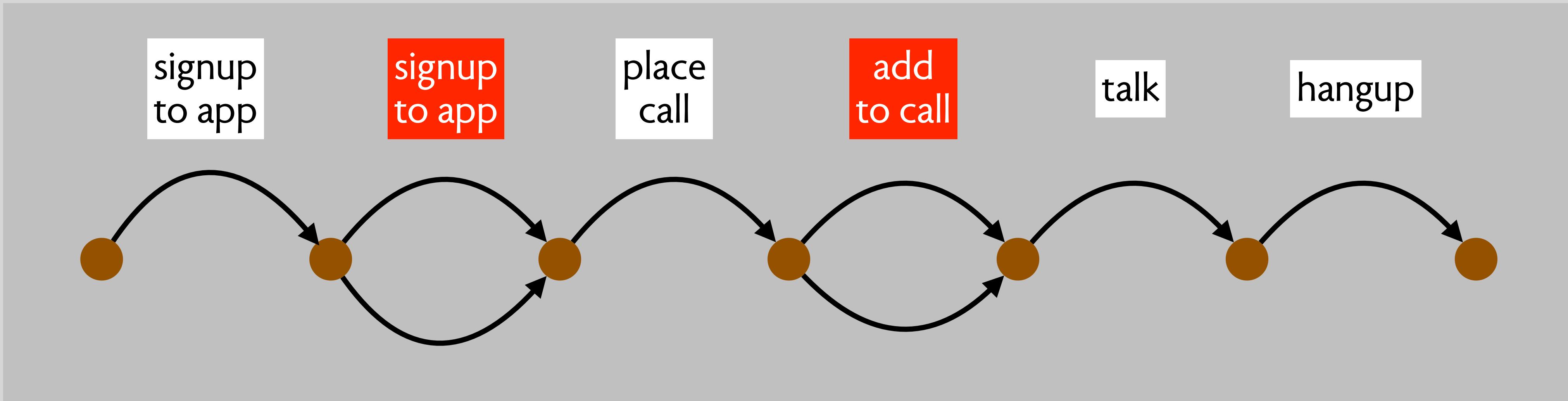


Skype (2009)

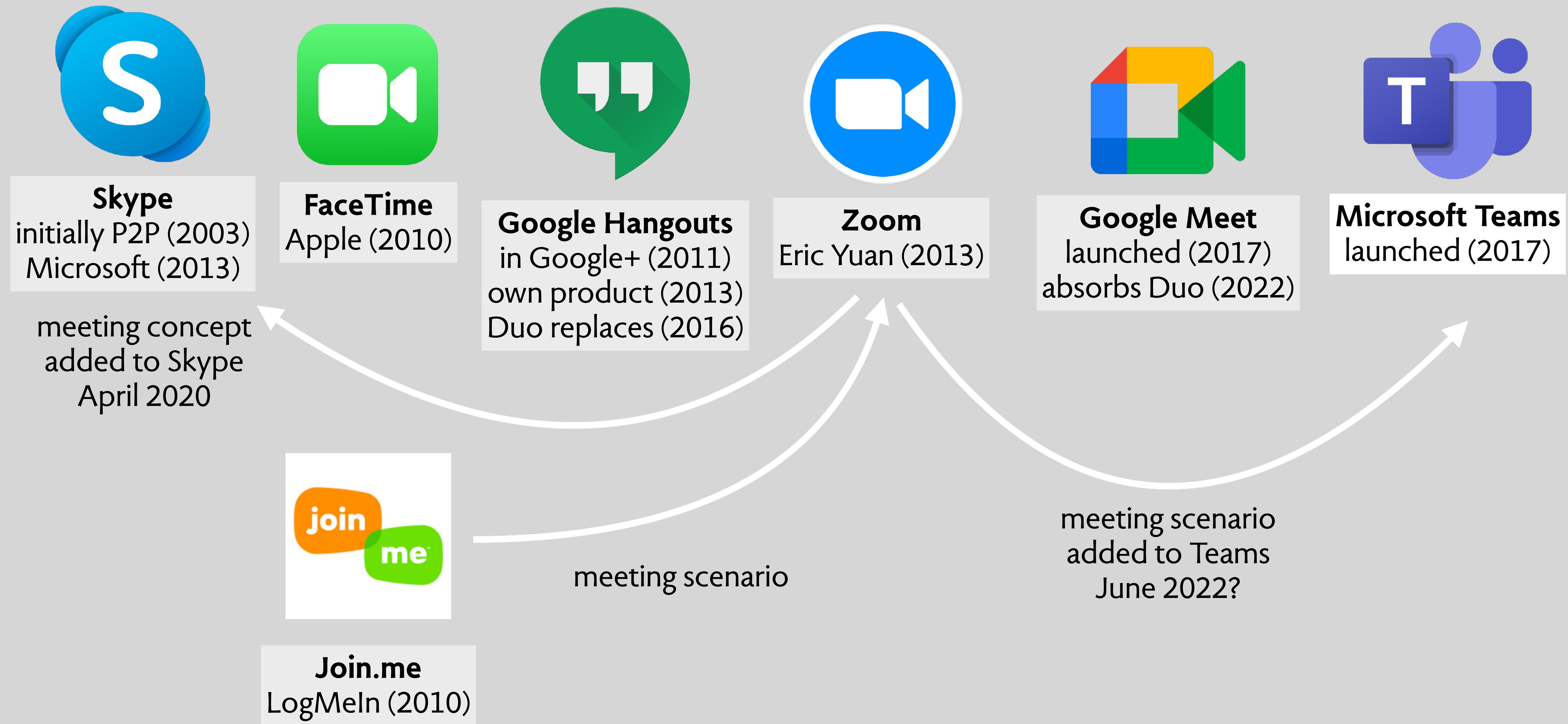


H.264 Video Codec (2003)

# the meeting scenario

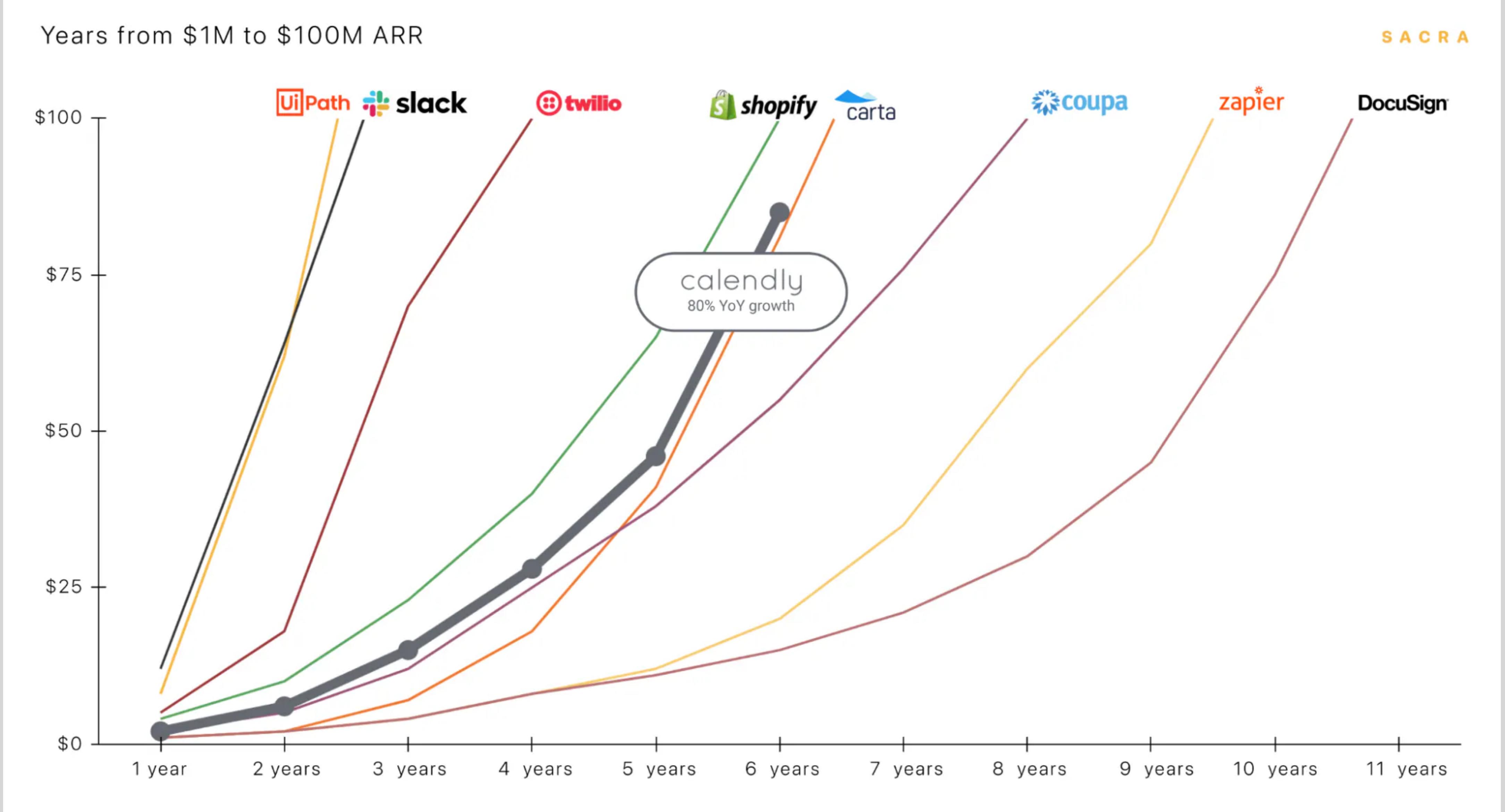


# tracing zoom's meeting concept



story #5  
Calendly (2013)

# “the \$4b DocuSign of scheduling”



# scheduling yourself



## Select a Date & Time

May 2022

< >

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

PACIFIC TIME - US & Canada (4:24pm) ▾

**30 Minute Meeting**

⌚ 30 min

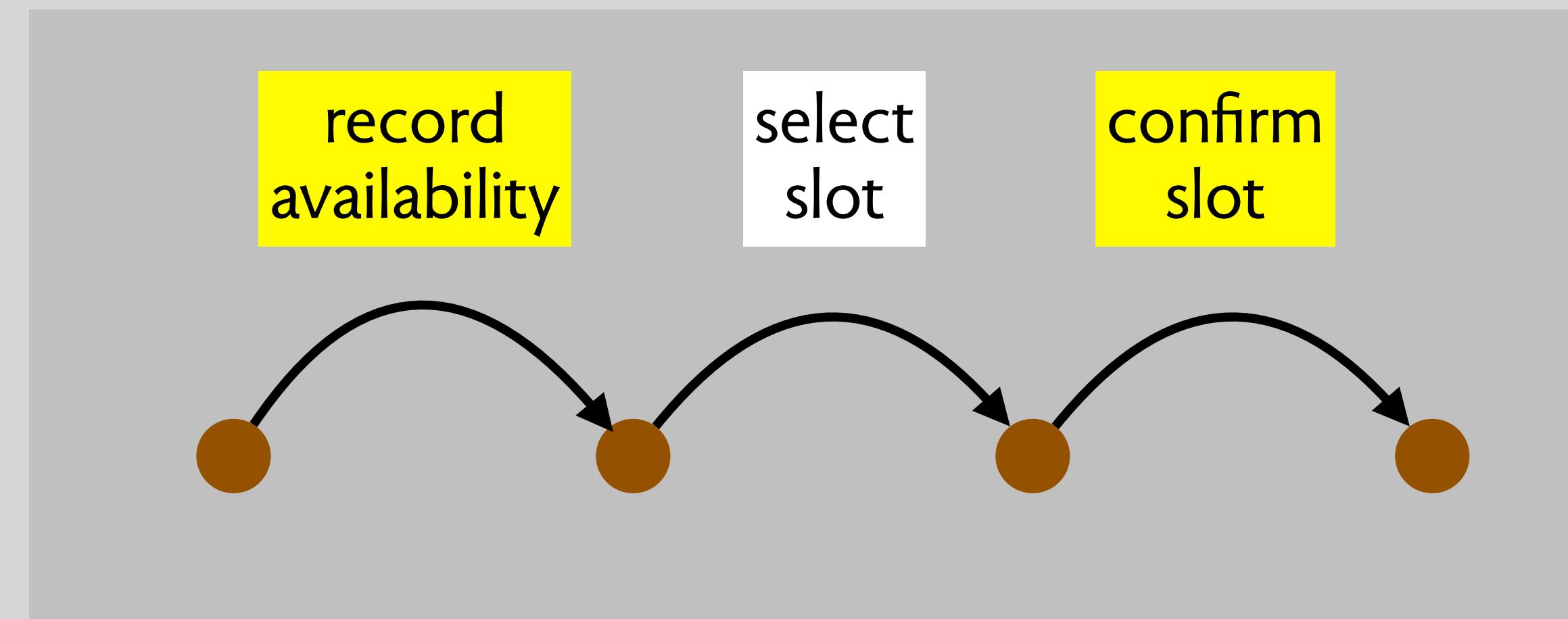
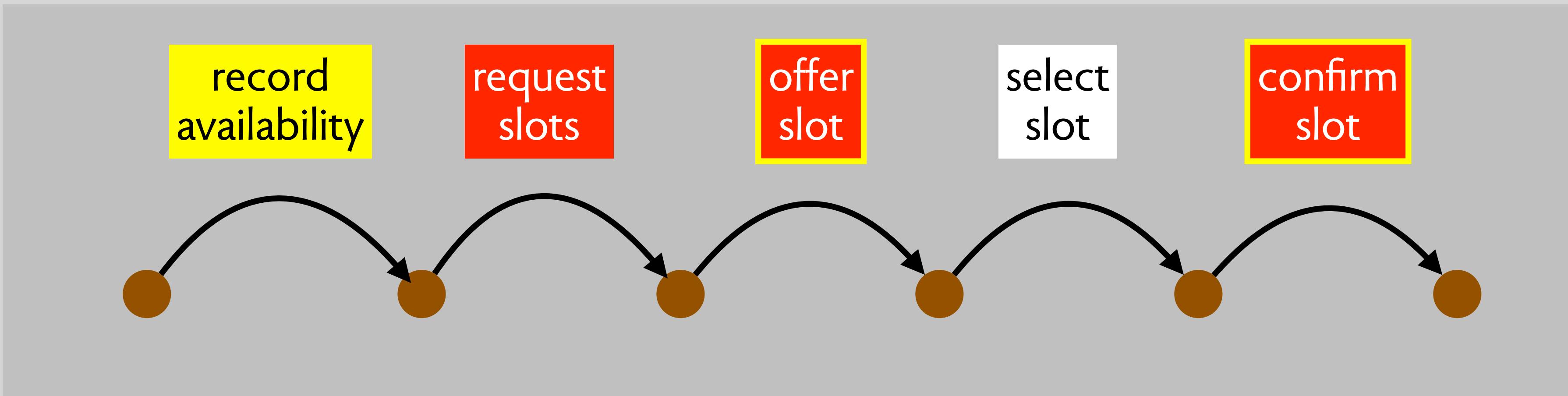
💻 Web conferencing details provided upon confirmation.

[Cookie settings](#)

 [Troubleshoot](#)

POWERED BY  
Calendly

# fixing the scenario: scheduling a slot



# tracing self scheduling



**Acuity (2006)**  
small business focus  
to Squarespace (2018)



**Calendly (2013)**  
sole proprietor focus



**Google Calendar**  
“slots” (2011)  
“schedules” (2022?)

self-scheduling scenario

where we  
are so far

# lessons so far

## a product is defined by a scenario

a compelling story of how to use it  
a social protocol and a service API at once  
hints at why the user's purpose is fulfilled  
an archetypal usage, not the only one

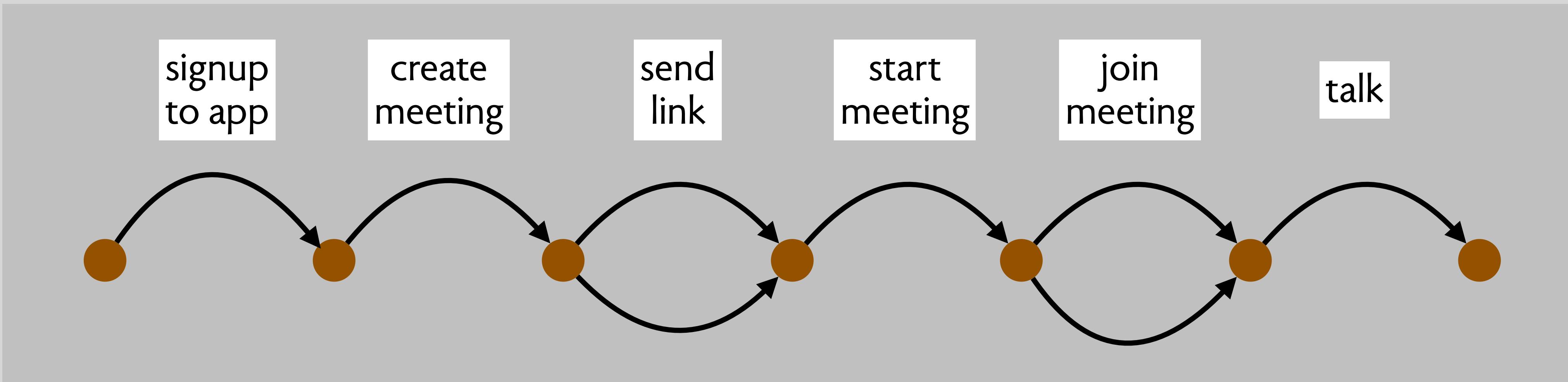
scenarios for  
design, not  
specification!

## innovations (almost) never enable new things

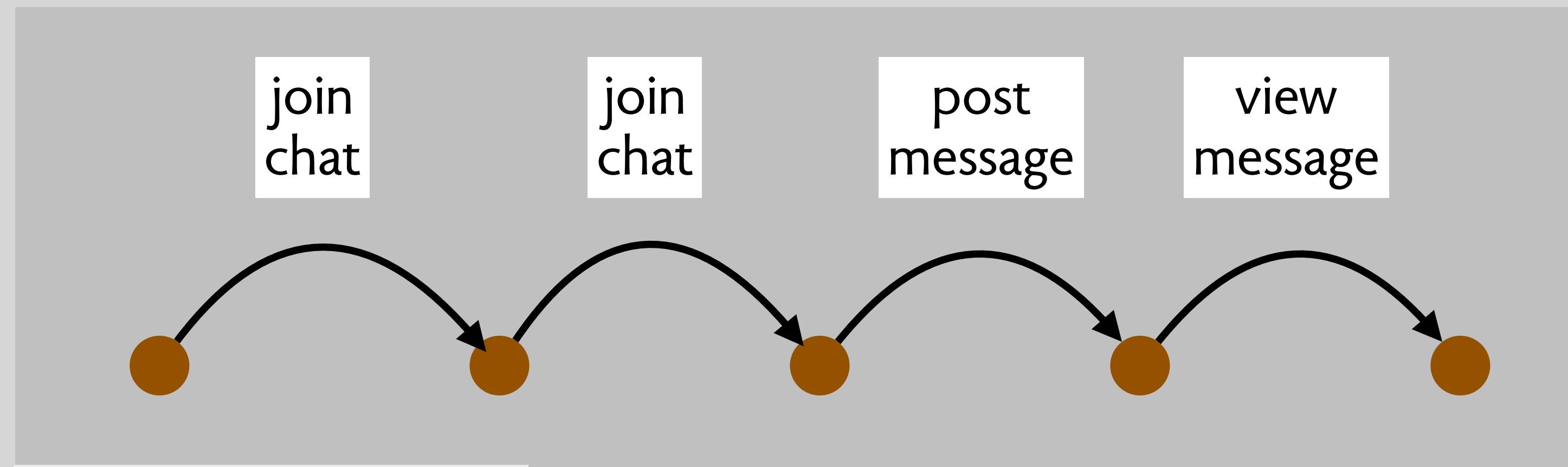
they just make them easier to do  
an old scenario with pain points is replaced by new one

from scenarios  
to concepts

# zoom isn't just the meeting link scenario



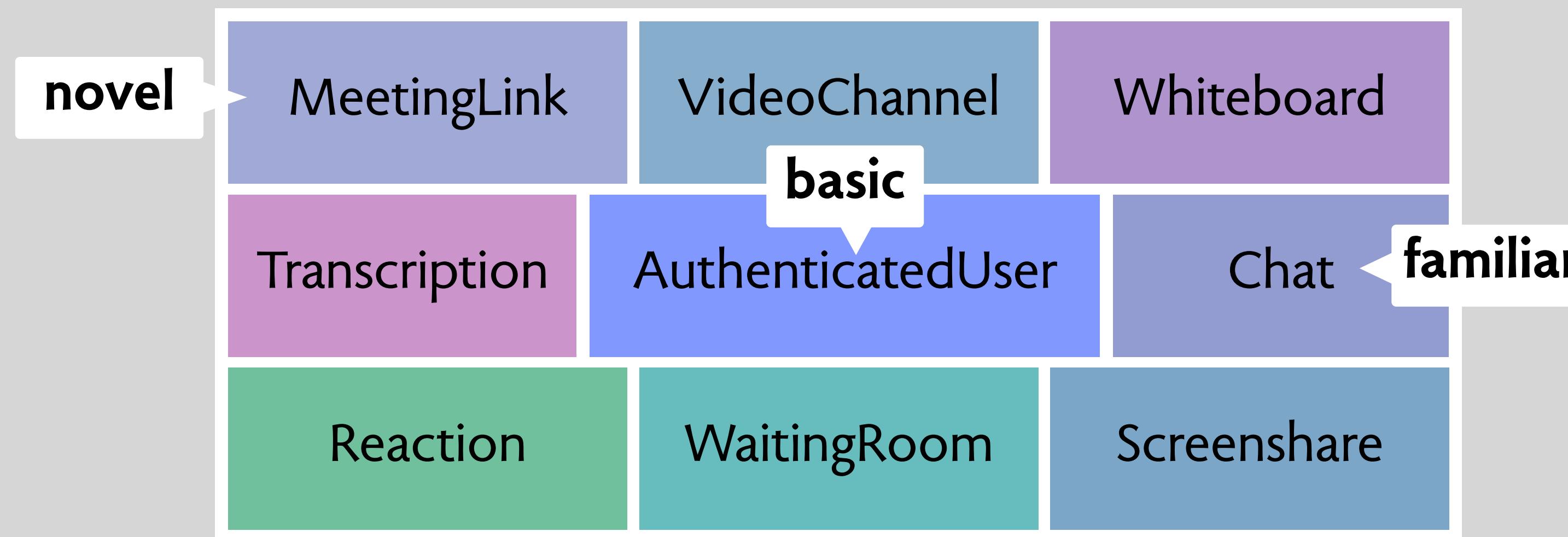
**Zoom's meeting link scenario**



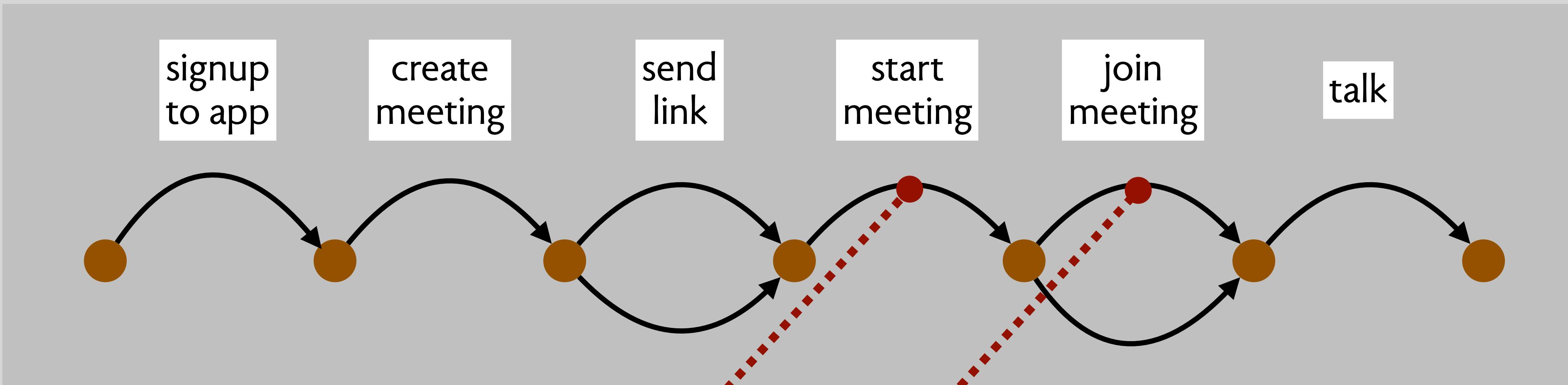
**Zoom's chat scenario**

# software = concepts

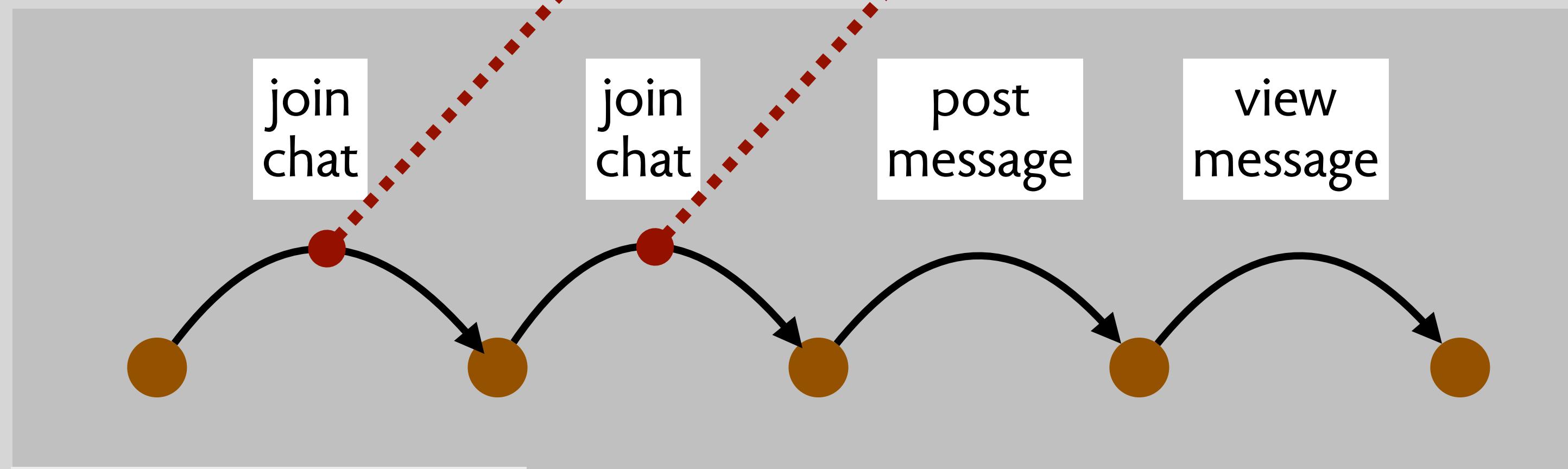
## Zoom



# how are concepts composed? by interleaving & synchronization

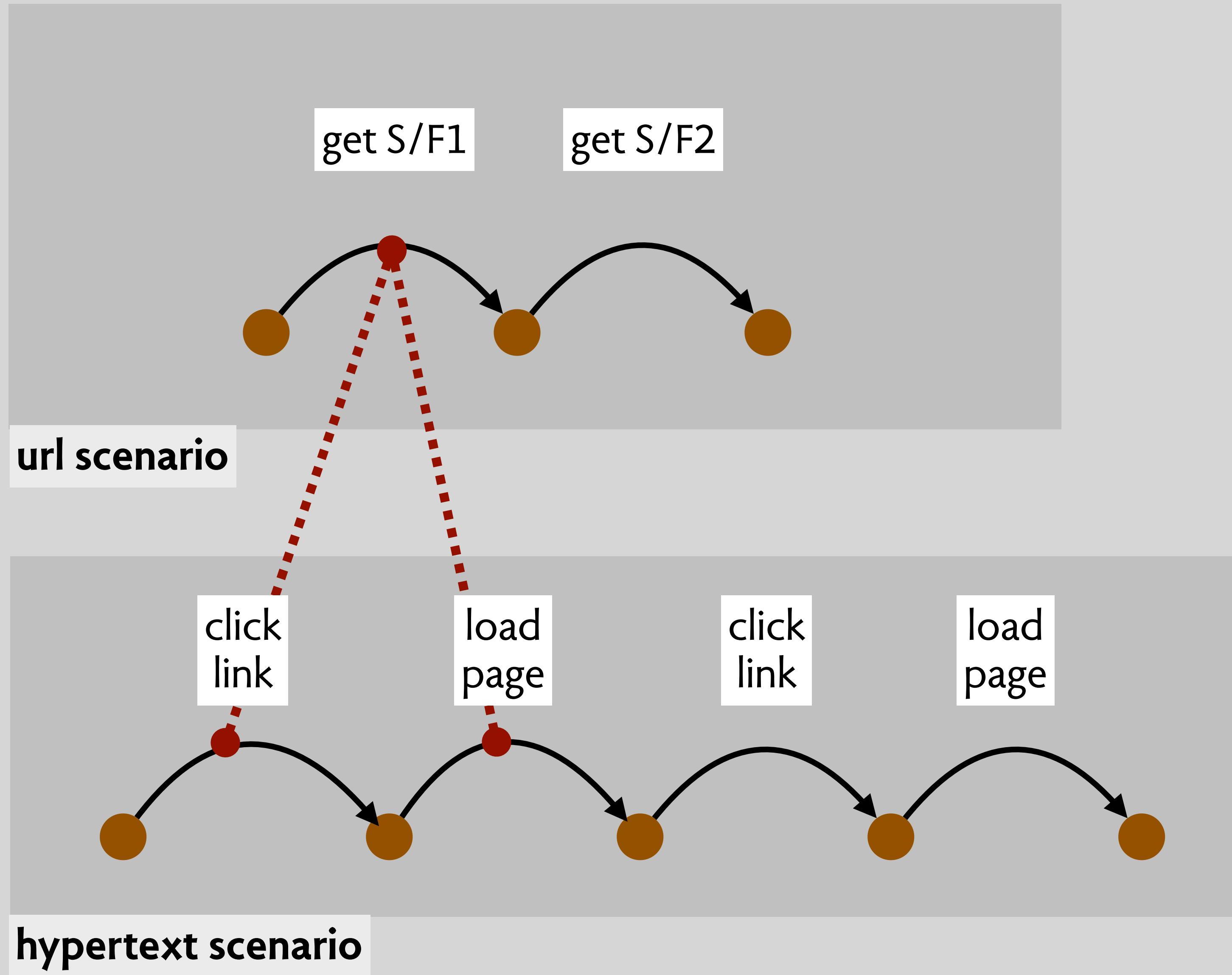


**Zoom's meeting link scenario**



**Zoom's chat scenario**

# the synchronization that makes URLs work



# essential concept compositions

Zoom = MeetingLink + VideoConference

Calendly = SelfSchedule + Notify

iPod = Song + Store + Sync

# how many “differentiator” concepts?



Gmail: email + search



Zoom: meeting link



Photoshop: pixel array,  
layer, mask, channel, ...



Arc: tabs as bookmarks



WhatsApp: group



Quark: flow, kerning,  
bezier curves, ...

**no new concepts**  
combinational creativity

**one new concept**  
a better way to work

**many new concepts**  
a new paradigm

exercise:  
your own scenario

# a scenario from autodesk

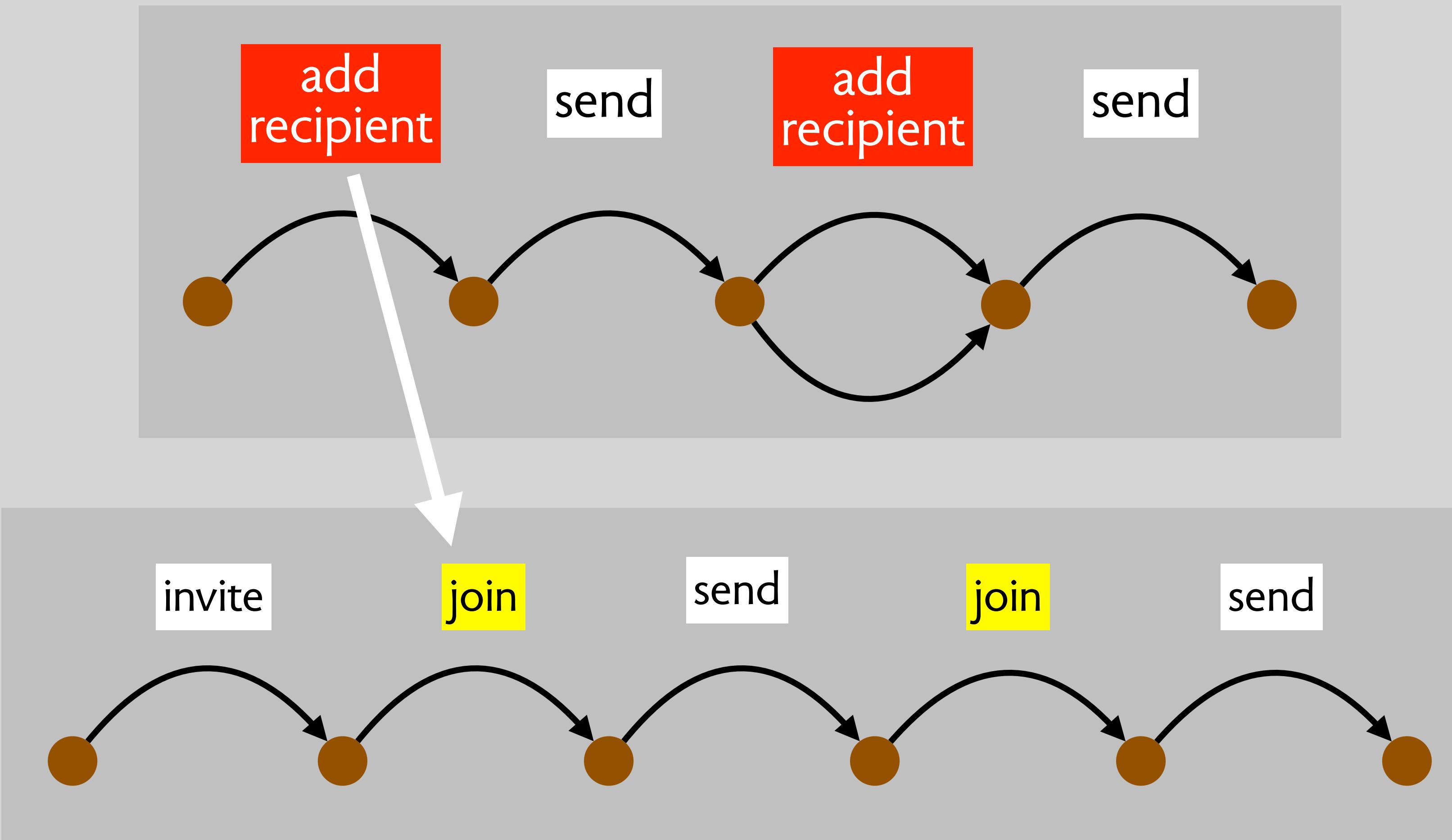
**in pairs, consider a software product you know well**  
preferably Forma or Revit, but could be anything  
may want to consider outcome based BIM

## **discuss**

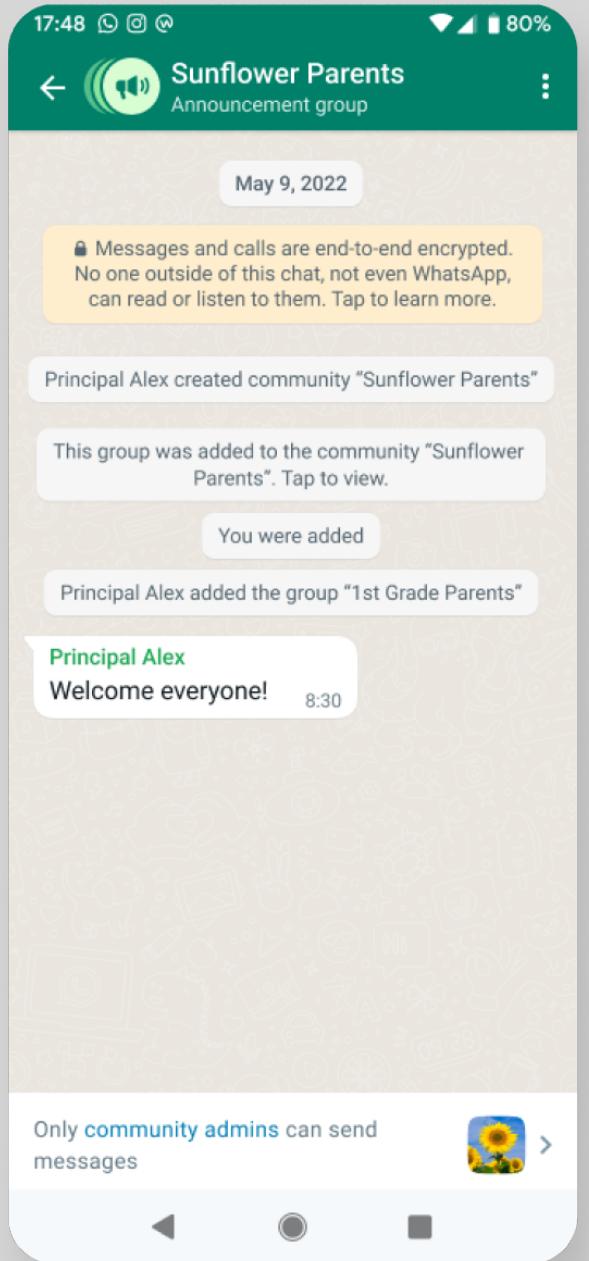
what is the essence of its success/value?  
can you identify a critical scenario?

takeaways

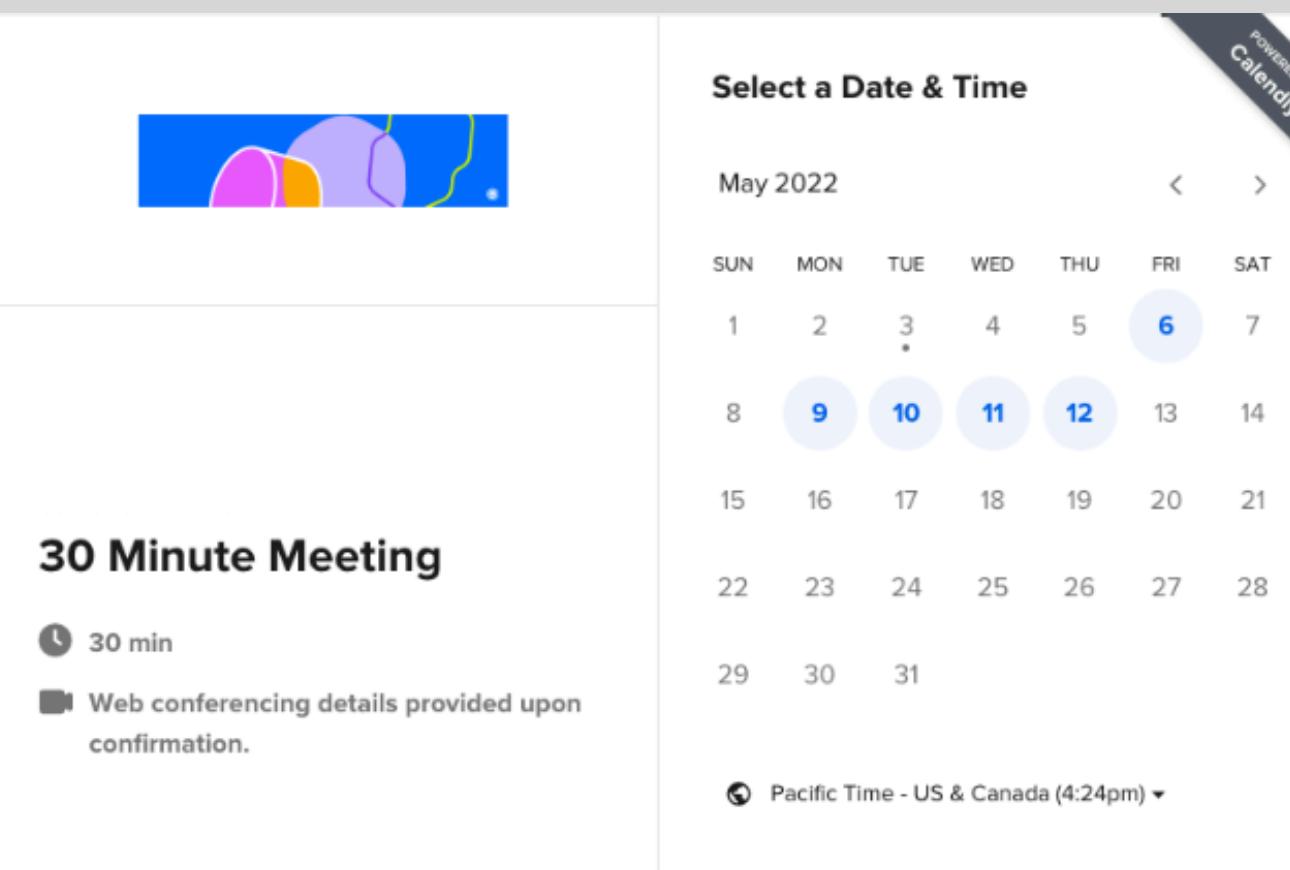
# innovations simplify scenarios



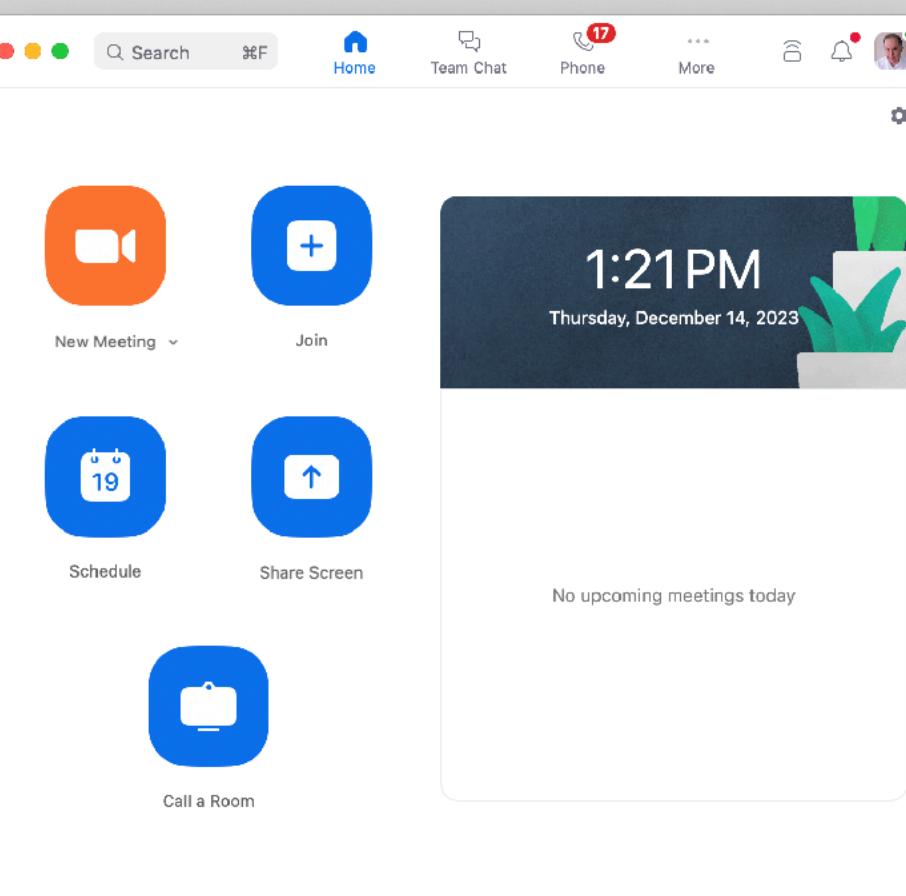
# design starts with function & concepts help structure it



Group



SelfSchedule



MeetingLink

Song

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URL

what's next?

**a scenario is just an archetypal behavior**  
but how do you define all possible behaviors?