

FOSDEM 2016

The State of XMPP
and Instant Messaging

The awakening





Bonjour !

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Idea of this Talk

XMPP is coming back!

...and it's **here to stay**



A Little Audience Survey?



Basic plan

A 15 minutes talk is **short!**

- ▶ The 3 generations of Instant Messaging
- ▶ Trough of disillusionment
- ▶ A bit of cleanup

The 3 generations of IM

- ▶ 1st generation: **ICQ** et al
- ▶ 2nd generation: **WhatsApp** et al
- ▶ 3rd generation: **Slack** et al

First Generation

- ▶ ICQ et al
- ▶ ICQ, Yahoo!Messenger, AIM, MSN, Gadu-Gadu, QQ, NateOn
- ▶ 1998-2008

Second Generation

- ▶ WhatsApp et al
- ▶ WhatsApp, WeChat, LINE, Google Hangouts, Viber, KakaoTalk, BBM, Telegram
- ▶ 2008-now



Third Generation

- ▶ Slack et al
- ▶ Slack, HipChat, Otalk/Kaiwa, Zulip, Mattermost, Let's Chat, Rocket.Chat
- ▶ Now-?



First Generation

- ▶ Landline modem, connect a few minutes
- ▶ Presence-based
- ▶ Desktop-only
- ▶ Dual-window
- ▶ Group chat secondary feature
- ▶ Offline messages (store-and-forward)

First Generation

- ▶ Media file transfers, limited bandwidth, invitation/acceptance process
- ▶ Sometimes voice
- ▶ IM was synchronous

Second Generation

- ▶ Mobile-only
- ▶ Fullscreen
- ▶ No presence, or secondary feature
- ▶ Group chat as secondary feature
- ▶ Stickers craze!

Second Generation

- ▶ Inline media
- ▶ History sync
- ▶ Push notifications
- ▶ IM became asynchronous

Third Generation

- ▶ Mobile AND desktop: multi-device
- ▶ One window
- ▶ Group chat as key feature
- ▶ Archive/history
- ▶ Text search in history
- ▶ Message correction

Third Generation

- ▶ All “integrations”/bots
- ▶ Dominant:
 - ▷ Masssive, fast adoption
 - ▷ Monetisation
- ▶ Web technologies

2.5 Generation?

- ▶ Secure messaging
- ▶ Ephemeral messaging
- ▶ Mesh networks



First Generation

Old cat is old...
and tired!



https://commons.wikimedia.org/wiki/File:Feral_cat_Virginia_crop.jpg
Stampo, GFDL

Second Generation

Adult cat
feels the **threat**



Third Generation

Kitten is
soooo cute!



Trough of **disillusionment**

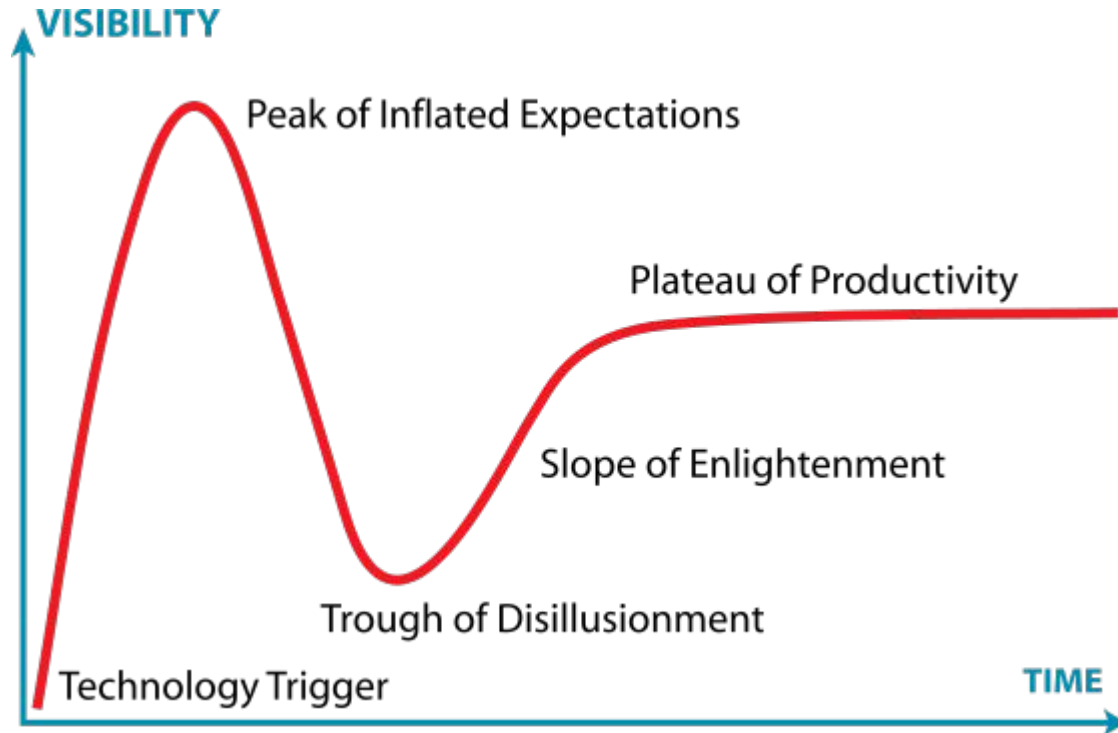
- ▶ Peak of inflated expectations
- ▶ Trough of disillusionment
- ▶ Plateau of productivity

GARTNER'S HYPE CYCLE

The Hype Cycle is a **branded graphical presentation** developed and used by US Information Technology (IT) research and advisory firm Gartner for representing the **maturity, adoption** and **social application** of specific technologies.

Thank you Wikipedia!

GARTNER'S HYPE CYCLE



Peak of **inflated expectations**

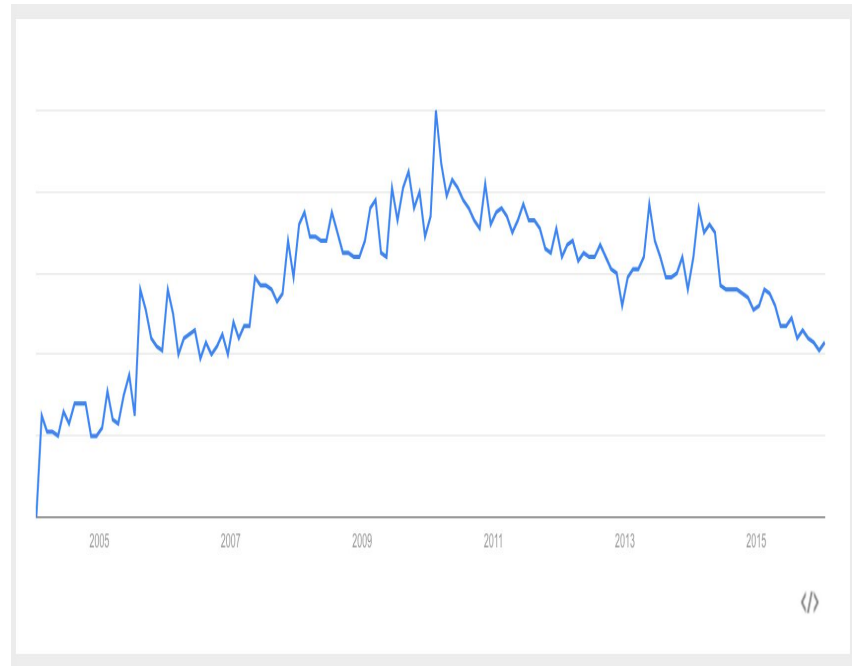
We over-promised:

- ▶ Jingle: voice & video
- ▶ PubSub
- ▶ Generic bus

Trough of **disillusionment**

- ▶ XML vs JSON
- ▶ Still not mobile
- ▶ Inline media

Same **feeling everywhere**:
stackoverflow, hacker news, reddit, quora, slashdot, etc.



Plateau of productivity

- ▶ Community revival
- ▶ Emergence
- ▶ Clean up



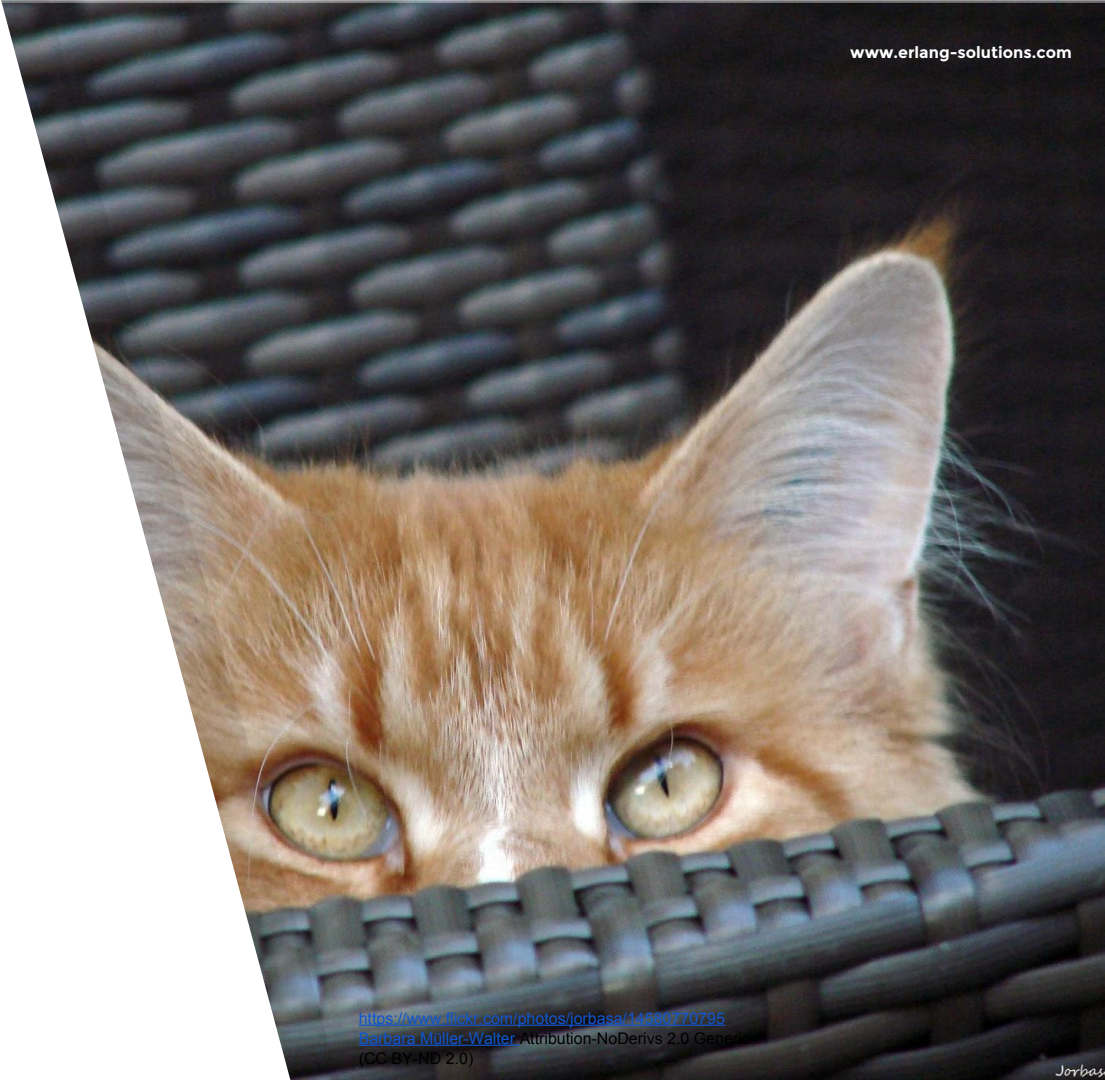
Peak of **inflated expectations**

Community “mea culpa”



Trough of disillusionment

Is it **over** yet?



Plateau of productivity

Wake up call



A bit of **cleanup**

- ▶ Obsolescence
- ▶ Optimisations, simplifications
- ▶ Implementors



Obsolescence

- ▶ Lots of implementations are:
 - ▷ Obsolete
 - ▷ Unmaintained
 - ▷ Uneven
- ▶ The overall feeling is not right

Optimisations, simplifications

Great progress has been made, just not enough:

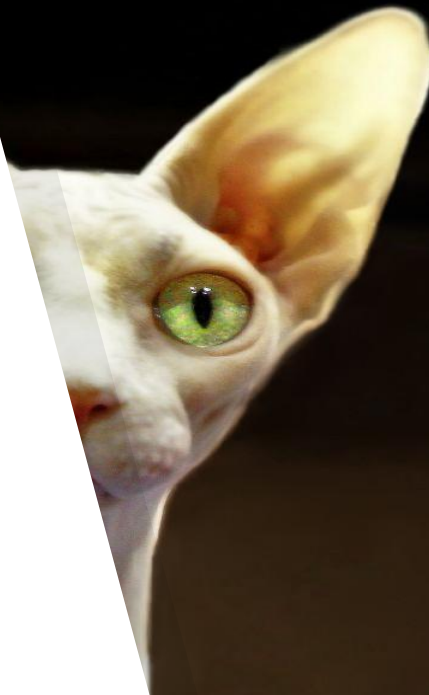
- ▶ Simple Reconnection
- ▶ 3rd generation features
 - ▷ Ubiquitous MAM & Carbons
 - ▷ Inline media
 - ▷ Archive search
 - ▷ Correction with archiving
 - ▷ Presenceless group chat

Implementors

- ▶ XSF and standards are not enough
- ▶ Network of implementors

Obsolescence

Another dimension



Simplifications

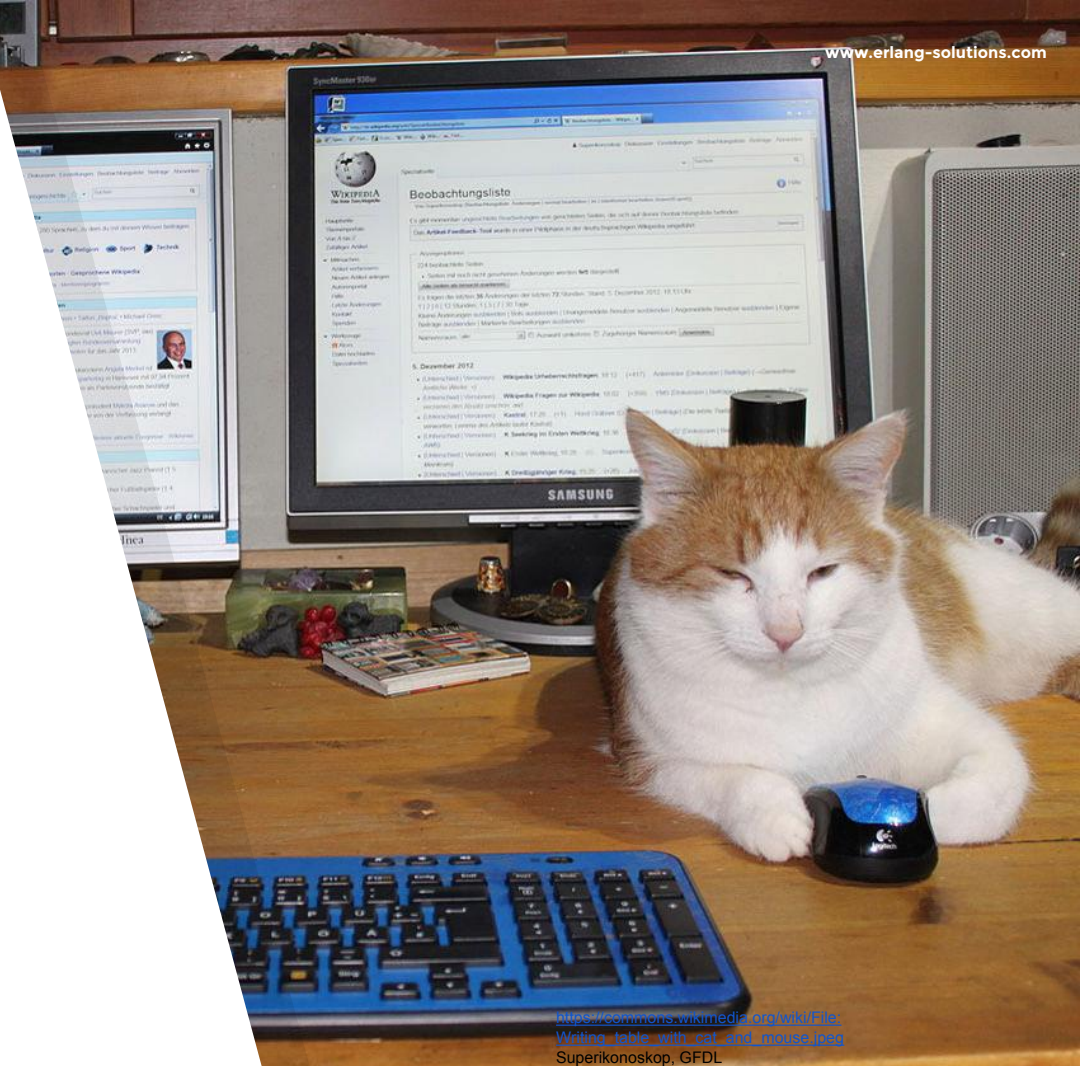
Even cats love mobile!



<https://www.flickr.com/photos/cipherswarm/2369136756>
Christopher Bowns

Implementors

Even cats code!



SUMMARY

- ▶ **The 3 generations of Instant Messaging**

- ▷ 1st generation: **ICQ** et al
- ▷ 2nd generation: **WhatsApp** et al
- ▷ 3rd generation: **Slack** et al

- ▶ **Trough of disillusionment**

- ▷ Peak of inflated expectations
- ▷ Trough of disillusionment
- ▷ Plateau of productivity

- ▶ **A bit of cleanup**

- ▷ Obsolescence
- ▷ Simplifications
- ▷ Implementors

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Q&A

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