GeoIT.org Members:

Overview and Outlook of GeoIT Platforms and Components for developers

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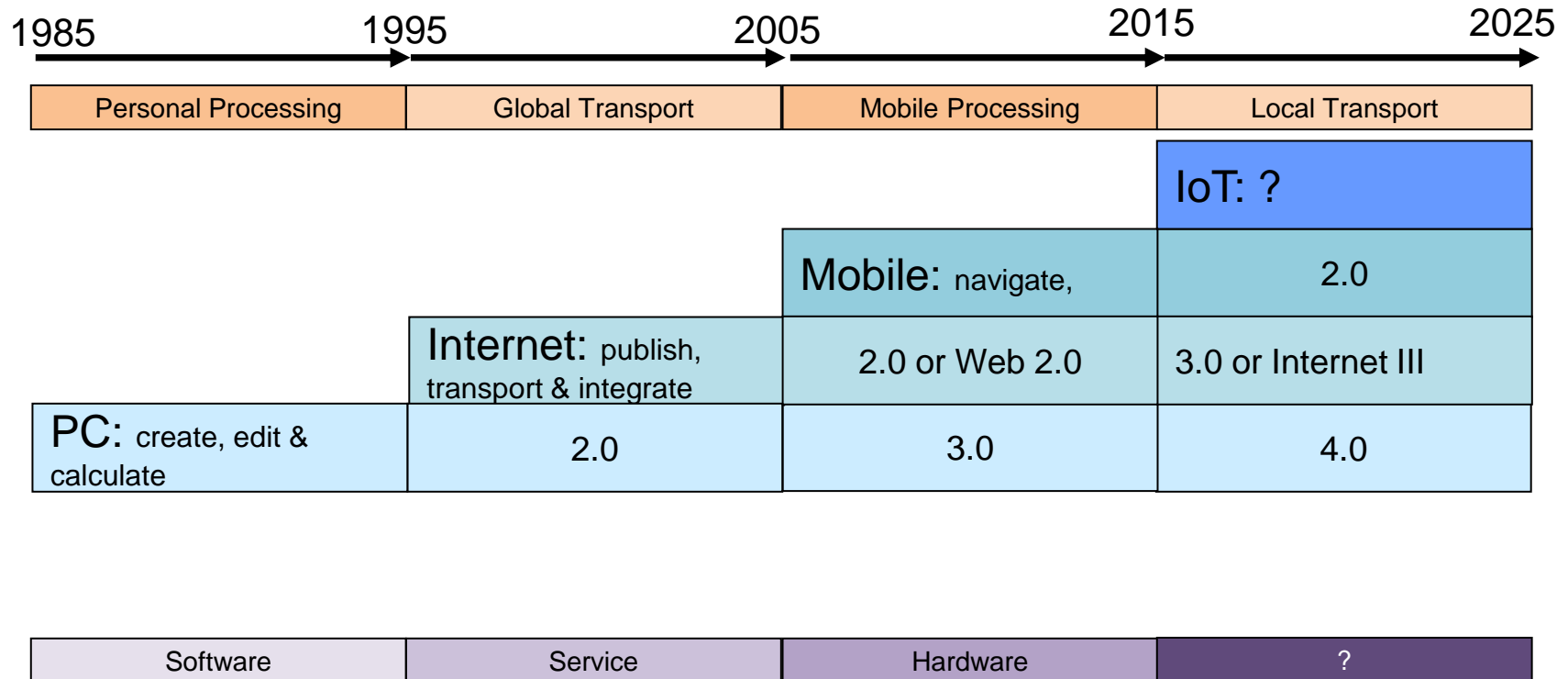president@geoit.org

Approach and overview

1. IT development cycles and main methods

2. Abstract and Technology Media Formats

3. IT and GeoIT Platforms and disruption of separated classic geoinformatics (governmental driven) by mainstream IT

4. GeoIT.org Community

1. IT Platforms, ages and methods

1985	1995	2005	2015	2025
Personal Processing	Global Transport	Mobile Processing	Local Transport	

			IoT: ?
		Mobile: navigate,	2.0
	Internet: publish, transport & integrate	2.0 or Web 2.0	3.0 or Internet III
PC: create, edit & calculate	2.0	3.0	4.0

Software	Service	Hardware	?

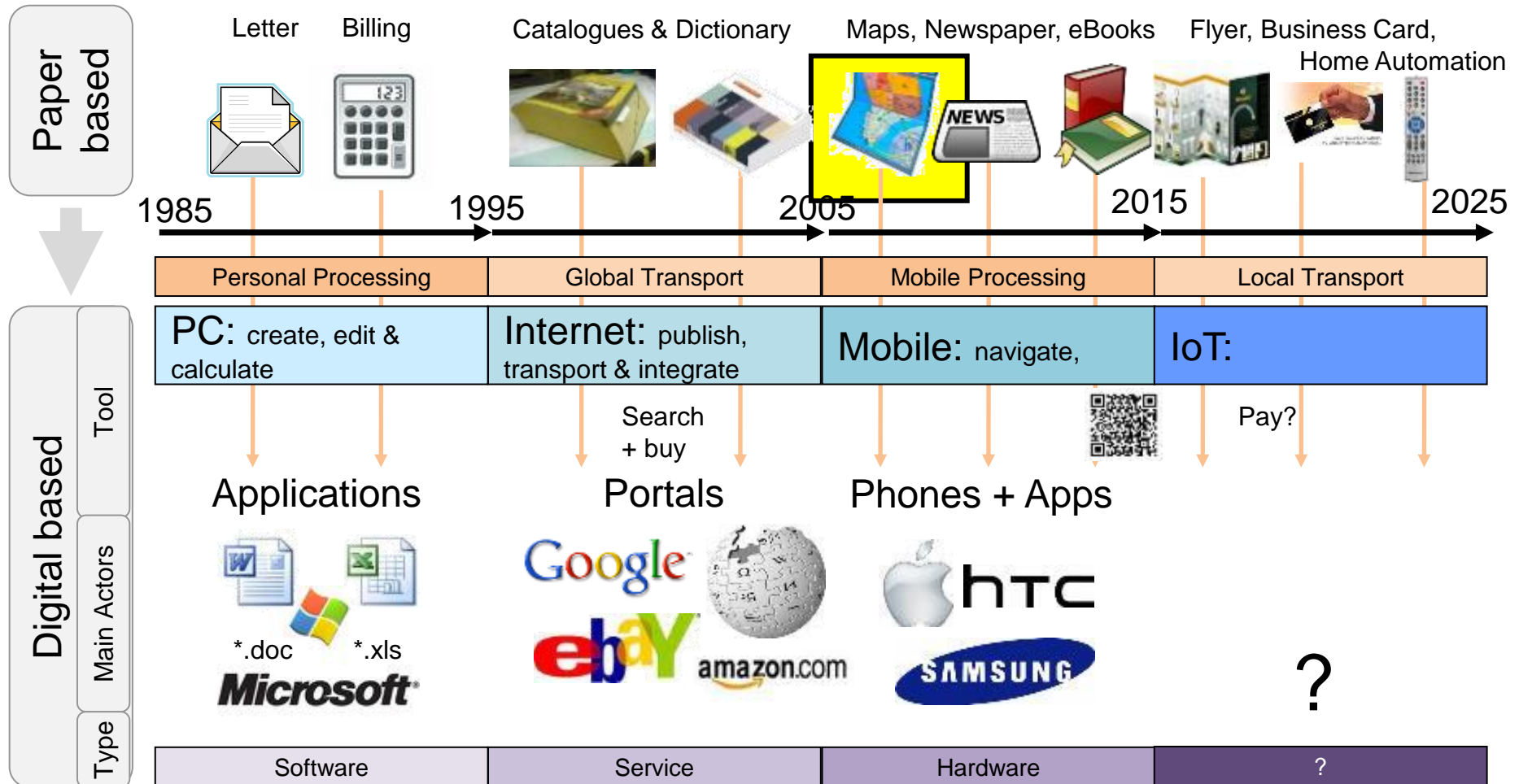# 2. Conversation of Media Formats

- Human basic needs do not change or expand very much
  - More change in tools
  - New technologies replace older technologies, e.g.
    - Paper technologies
    - Digital technologies
- Example:
  - Paper Maps
  - Digital Maps

2.1 Abstract Media Formats: e.g. Map

Paper based

Letter   Billing   Catalogues & Dictionary   Maps, Newspaper, eBooks   Flyer, Business Card, Home Automation

1985   1995   2005   2015   2025

Personal Processing	Global Transport	Mobile Processing	Local Transport

Digital based

Tool

PC: create, edit & calculate	Internet: publish, transport & integrate	Mobile: navigate,	IoT:

Search + buy   Pay?

Main Actors

Applications   Portals   Phones + Apps

*.doc   *.xls   Microsoft   Google   ebay amazon.com   Apple hTC SAMSUNG   ?

Type

Software	Service	Hardware	?

3. Umbrella Terms and "Where"

- Computer science (informatics) vs. Information technology (IT)

- Geoinformatics vs. GeoIT

- Geo-"": "Where" question as the main focus with positions and functions

  - GIS is not an umbrella term for multiple ages, but a sub umbrella term for the PC Age with commercial main instance ArcGIS by ESRI and open source main instance QGIS

3.1 IT vs. GeoIT

- The spatial functions require some (later) main stream age features and therefore a time shift of about 5 years can be detected, e.g.

- PC / GIS: Graphical Display

- Internet / GeoWeb: More bandwidth for maps (images)

- …until ca. 2005

Mobile: GeoAPI already in Android API level 1

3.2 IT/GeoIT – GeoWeb Infrastructure
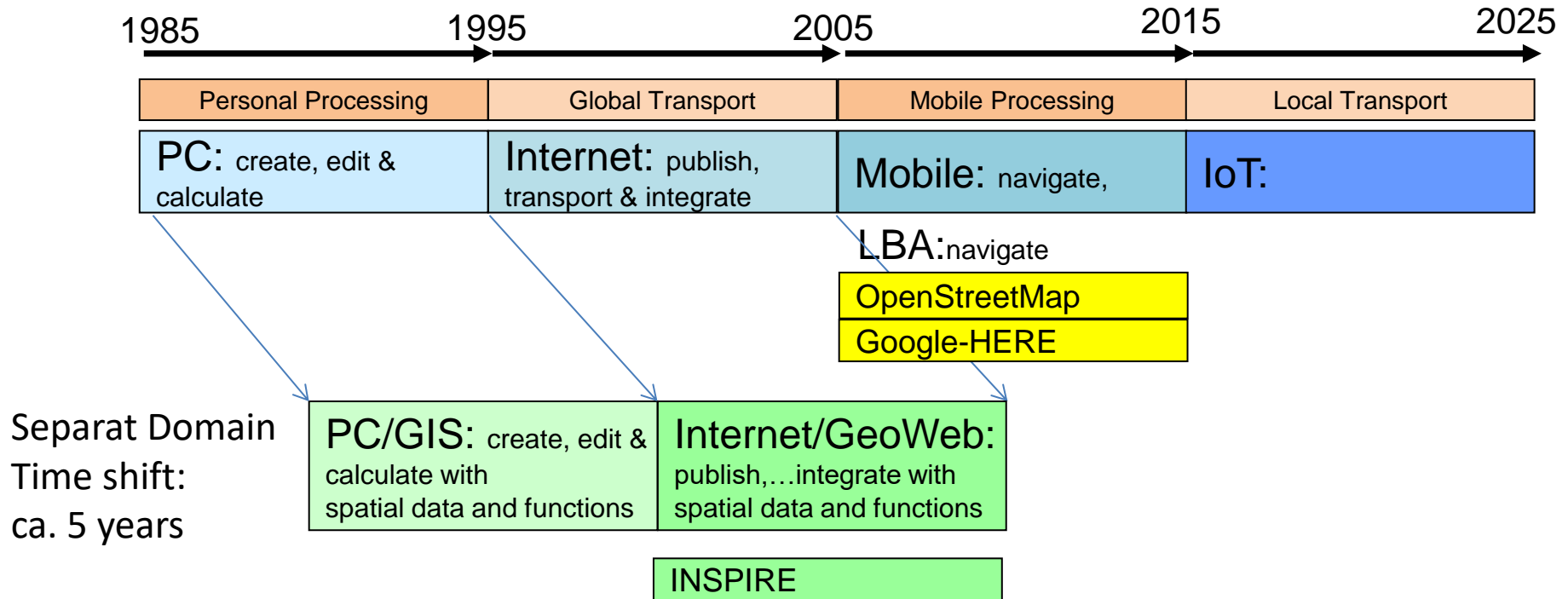
- Traditional community view and expectation

1985	1995	2005	2015	2025

Personal Processing	Global Transport	Mobile Processing	Local Transport
PC: create, edit & calculate	Internet: publish, transport & integrate	Mobile: navigate,	IoT:

Separat Domain
Time shift:
ca. 5 years

PC/GIS: create, edit & calculate with spatial data and functions	Internet/GeoWeb: publish,…integrate with spatial data and functions
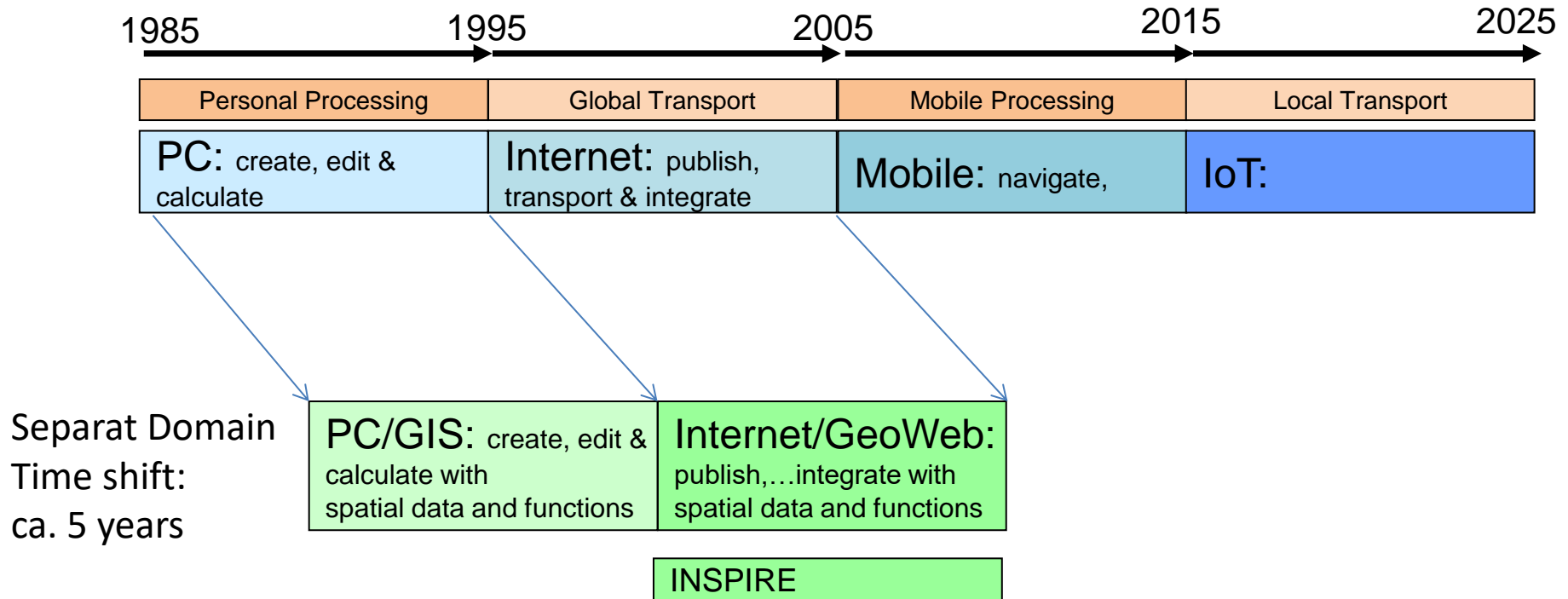
INSPIRE

Geoweb Infrastructure: term to include all sector infractures, e.g. google maps, INSPIRE,.

3.3 Disruption in 2005/2008

- New GeoIT Infrastructures in Mainstream

1985 1995 2005 2015 2025

| Personal Processing | Global Transport | Mobile Processing | Local Transport |

PC: create, edit & calculate

Internet: publish, transport & integrate

Mobile: navigate,

IoT:

LBA:navigate

OpenStreetMap

Google-HERE

Separat Domain
Time shift:
ca. 5 years

PC/GIS: create, edit & calculate with spatial data and functions

Internet/GeoWeb: publish,…integrate with spatial data and functions

INSPIRE

Geoweb Infrastructure: term to include all sector solutions,
e.g. google maps, here maps, OpenStreetMap and EU INSPIRE

3.4 Industrialization of "Where"

- Serve large number of customers/users, e.g. 500 Million

| 1985 | 1995 | 2005 | 2015 | 2025 |

Personal Processing	Global Transport	Mobile Processing	Local Transport
PC: create, edit & calculate	Internet: publish, transport & integrate	Mobile: navigate,	?:

LBA: navigate

GeoWeb Infrastructures
- OSM
- Google
- HERE

Separat Domain
Time shift:
ca. 5 years

| PC/GIS: create, edit & calculate with spatial data and functions | Internet/... publish,…inte... spatial data a... | ...BA: navigate ...nd functions | ?: |
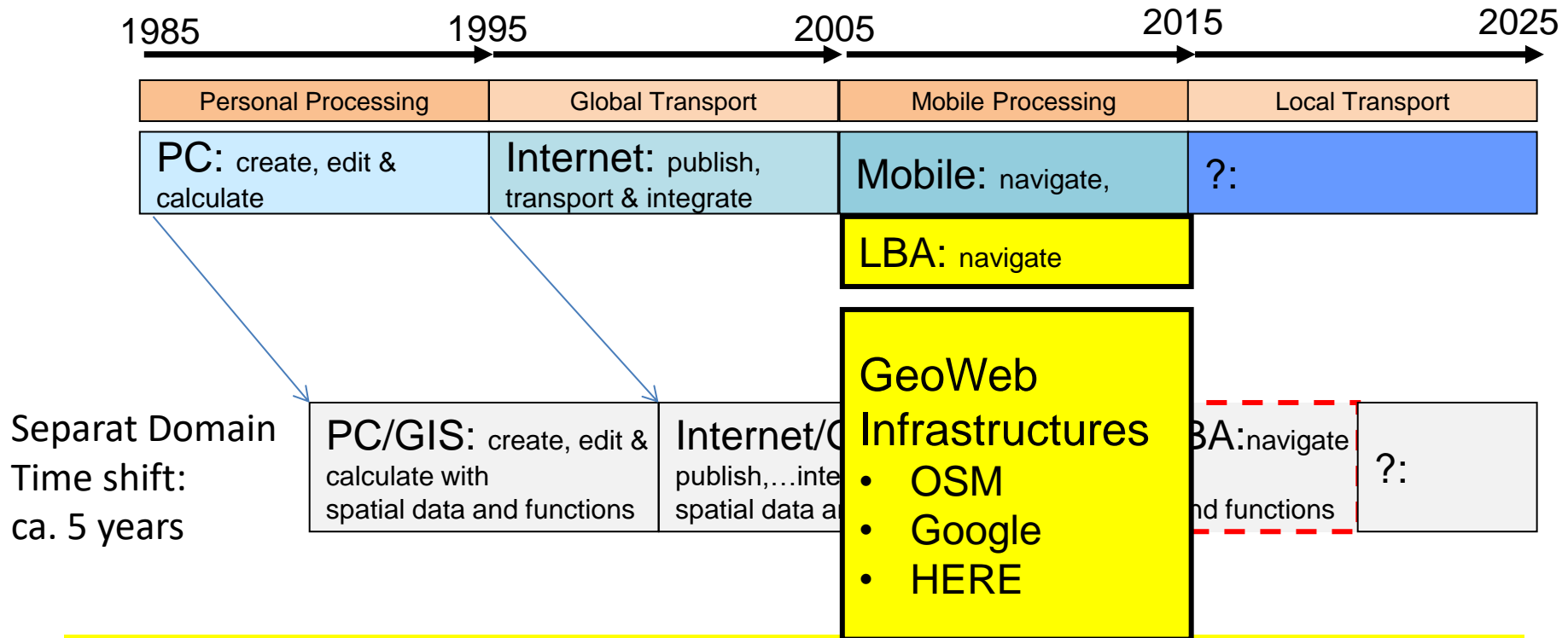
Full integration and industrialization to IT/GeoIT

3.5 Mobile Navigation

- Android API 1 with android.location API and com.google.{maps}
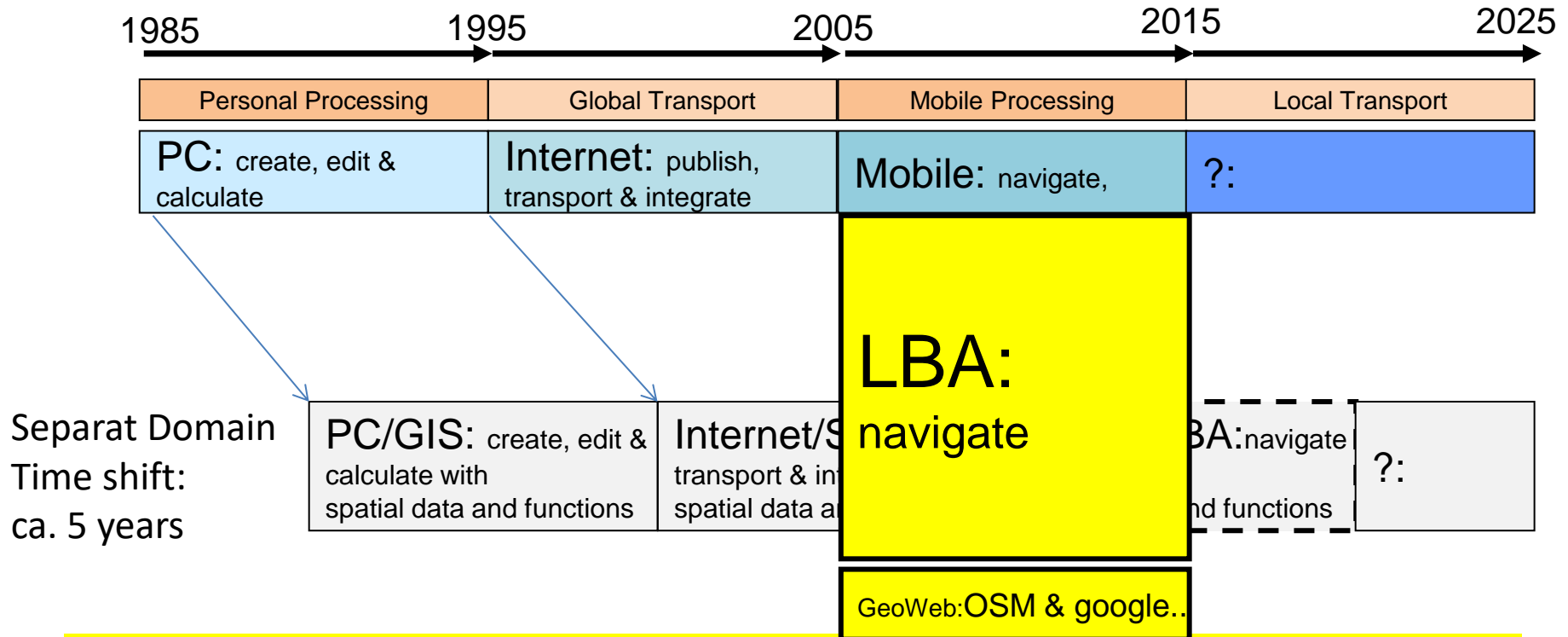
| 1985 | 1995 | 2005 | 2015 | 2025 |

| Personal Processing | Global Transport | Mobile Processing | Local Transport |

PC: create, edit & calculate

Internet: publish, transport & integrate

Mobile: navigate,

?:

Separat Domain
Time shift:
ca. 5 years

PC/GIS: create, edit & calculate with spatial data and functions

Internet/S transport & in spatial data a

LBA: navigate

BA: navigate nd functions

?:

GeoWeb: OSM & google..

Full integration and industrialization to IT/GeoIT

3.6 IoT Age: Outlook

- New trends are difficult to detect beforehand

1985	1995	2005	2015	2025

Personal Processing	Global Transport	Mobile Processing	Local Transport
PC: create, edit & calculate	Internet: publish, transport & integrate	Mobile: navigate,	IoT:
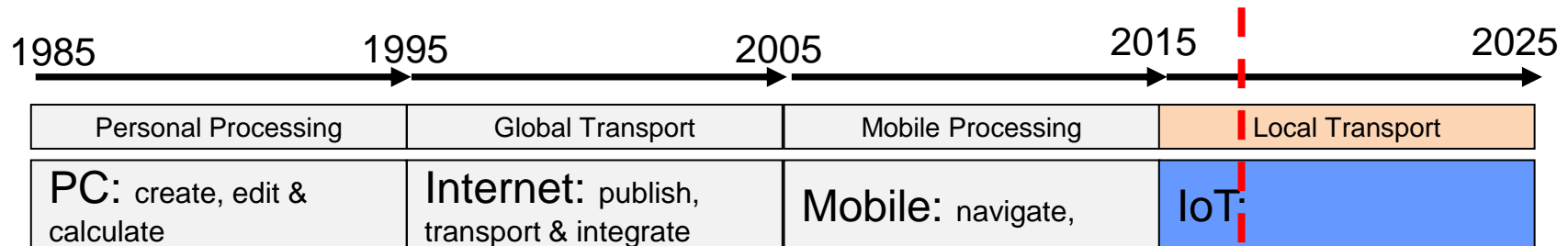
2017

- IoT with Smarthome applications
  – Amazon Alexa / others (based on NLP)
  – Philips Hue / others (based on zigbee)
- GeoIoT might add the "where"
  – E.g. (Hue) lamps/printer/beamer/TV selection by "physical pointing to" with indoor position and indoor data model

4. GeoIT Community

GeoIT.org Members:

- Knowledge Exchange and Community
- Events
  - GeoIT Wherecamp Conference, next Nov. 30th
  - GeoMonday, evening events, 4 times a year
  - GISCO workshop, next Dec. 1st
  - support of new ideas, e.g. Tango
- Legal association (e.V.) with 50 personal and 13 corporate members

- O'Reilly Where 2.0 Conferences 2011 and 2012

- Multiple Wherecamps worldwide, e.g. San Francisco

1985	1995	2005	2015	2025

Personal Processing	Global Transport	Mobile Processing	Local Transport
PC: create, edit & calculate	Internet: publish, transport & integrate	Mobile: navigate,	?:

Internet/GeoWeb: publish,…integrate with spatial data and functions	Mobile/LBA: navigate with spatial data and functions	?:
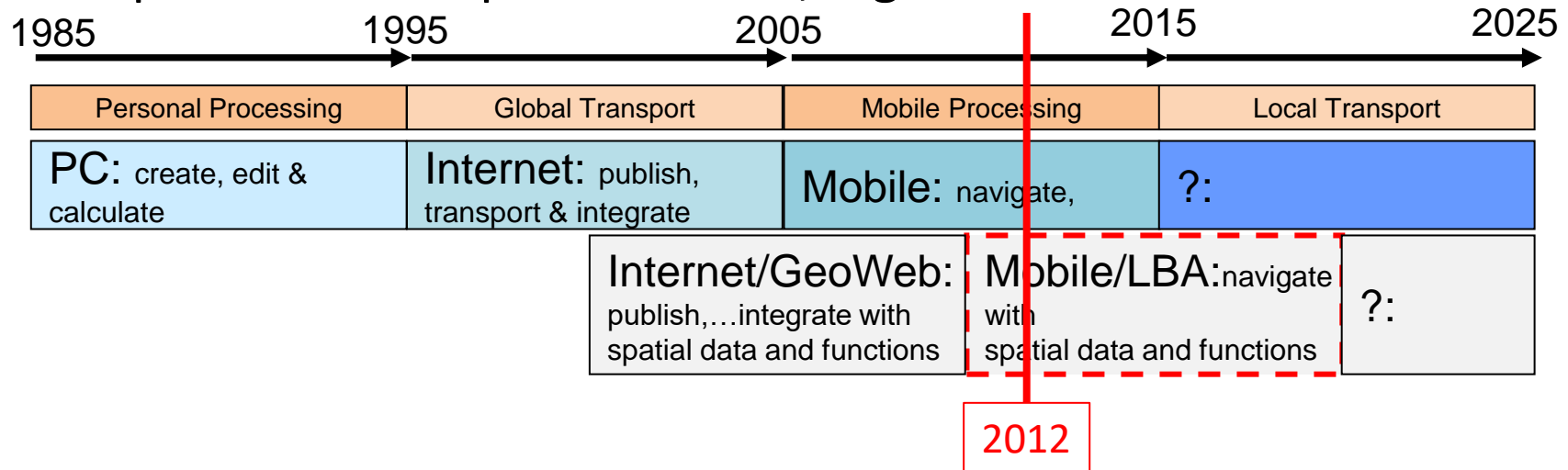
2012

Import of this motion into Europe and also into Berlin

- WherecampEU in 2011 in Berlin

- Wherecamp Berlin in 2012, 2013…2017, Philipp Kandal, Jan Nowak and Roland Wagner

4.2 GeoMonday & Wherecamp Impressions

Soon 16th GeoIT GeoMonday Edition
Soon 7th GeoIT Wherecamp Edition

4.3 EU Galileo Hackathon

4.4 Wherecamp with Prof. Thomas Blaschke

4.5 Wearable Hackathon

4.6 Philipp Kandal (skobber) and Steve Coast (OSM)
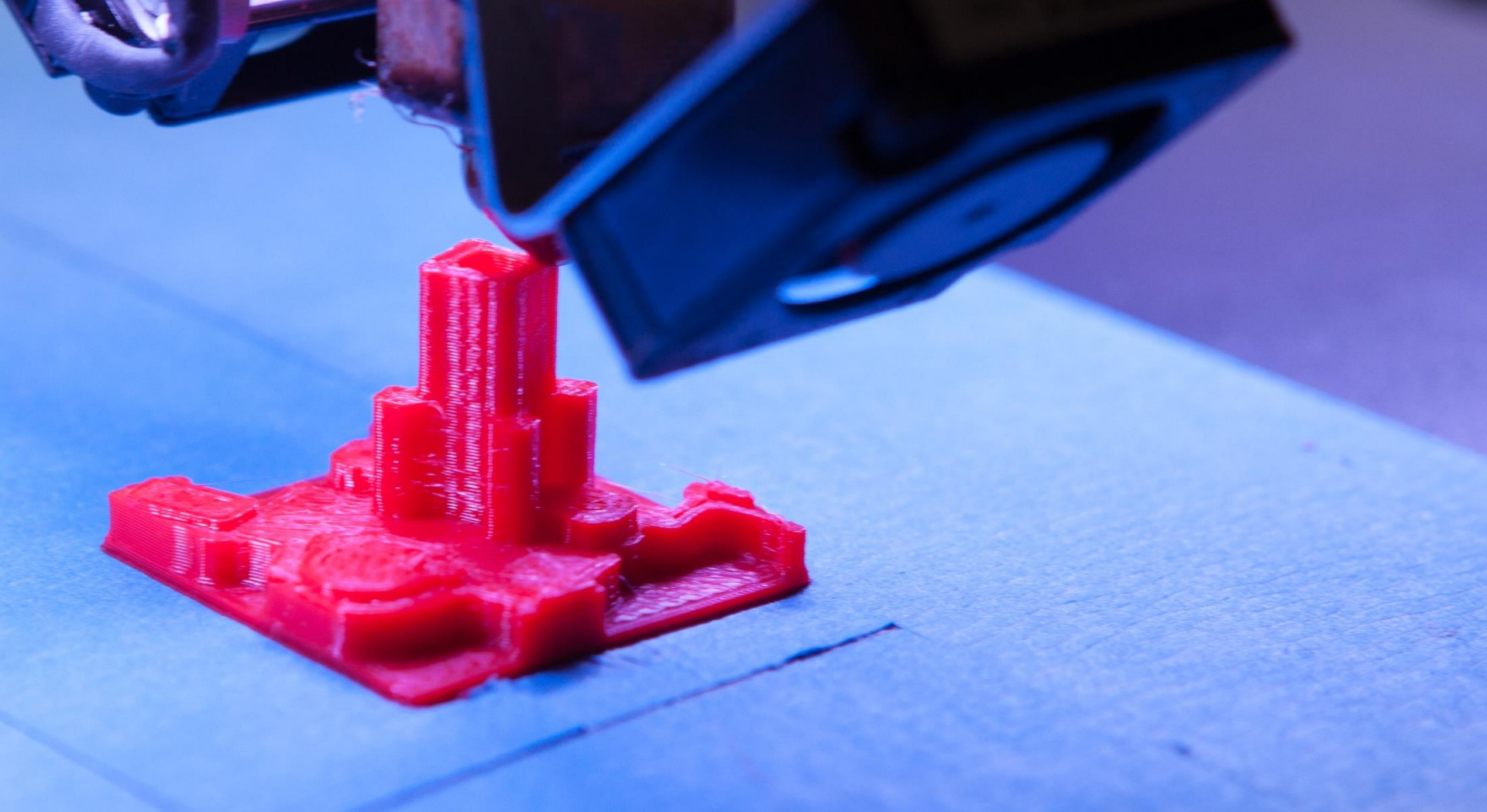
4.8 Droidcon 2017 booth and Navigation Talks
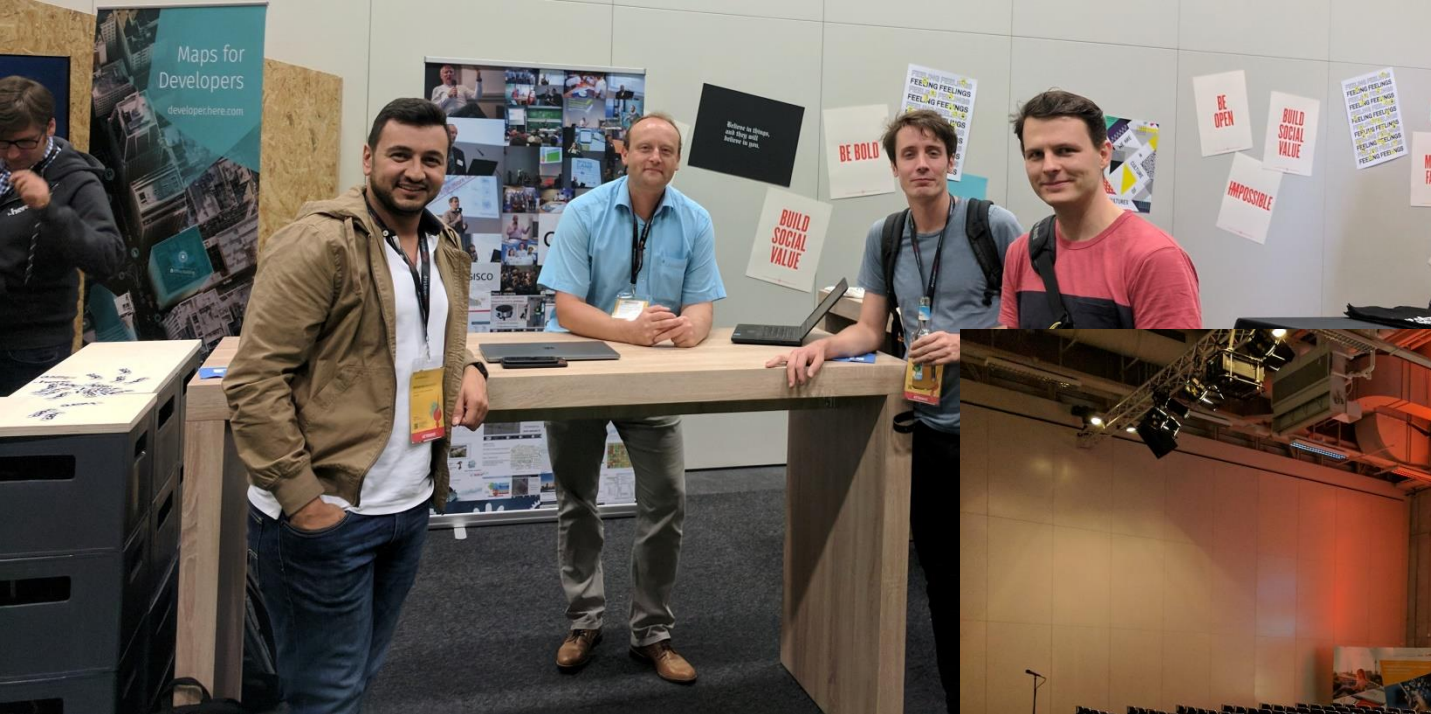
4.9 Videos of talks online

4.10 Attend, Join us and Contact

- Attend the next events

- Join us as the association for 35 EUR / year as a personal member

- Association for Geoinformatics, GeoIT and Navigation e.V. (GeoIT.org)
  - Web: www.geoit.org
  - Twitter: @GeoItOrg
  - Personal….