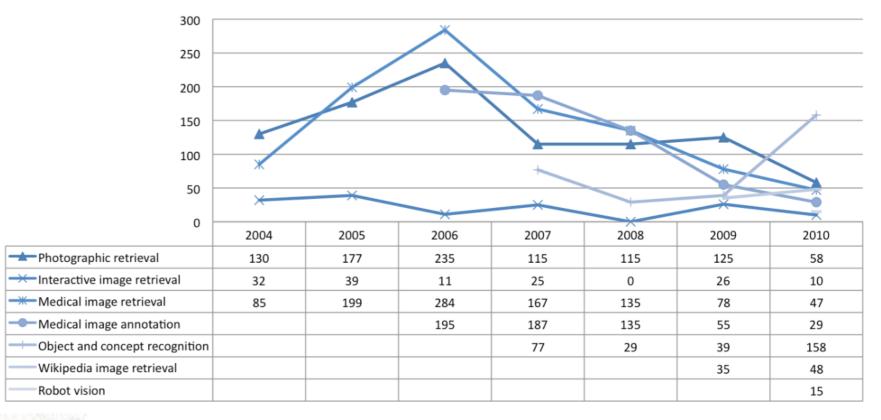# Evaluating the impact
# of projects and benchmarks

Henning Müller
for Chorus+ WP2/3

Motivation

- All (EU) projects need to create a plan to assess project success or failure
  - Same for persons when applying or being promoted
  - Most start almost from zero as few recommendations
    - Besides some clear indicators such as web page access, number of publications, number of presentations, …
  - Goal is to find criteria that are possible to fulfill
    - Measurable criteria but is quality=quantity?
- Criteria can vary strongly
- Are all projects evaluated in an equal way?

Link with Chorus+ and retrieval

- In Chorus+ a **resource wiki** was build for MIR

  - A few projects make **data** sets available
    - Sustainable, long term, help other projects

  - Many **tools** are created in EU projects and some are equally available
    - Sometimes as open source, sometimes informally, sometimes only to project members (sustainability/support?)

  - Use of tools, **components**, data sets is difficult to quantify, not always cited, not always mentioned in the right way

- Tracking **reuse** and **citations** can be seen as a retrieval problem (far from trivial even with scholar)

An optimization problem

- ## We adapt to what we are evaluated upon

  - Humans are strong to adapt to different environments

- ## The more we know what is expected the better we can adapt

  - Not knowing means that optimization can fail

- ## EU has all interest in clearly communicating internal goals specific for projects

  - Foresee analysis after the projects finish (long term)

  - What could incentives be to work long term?

Short term vs. long term

- Too much stress on short term!!

- For each annual review the criteria and evaluation need to be presented

  - Publications expected in year 1?

  - How many citations or project h-factor after three years?

  - Reuse of components or data really realistic?

- Maybe long term analysis would be better

  - Following projects after they have finished

  - Making sure that tools and data remain accessible

  - Making sure that projects optimize long term

Axes for long term impact analysis

- ## Scientific impact

  - Number of papers (journals, conferences, …)

  - Number of citations, h-factor, impact factor, …

  - Performance increase on benchmark data

- ## Economic impact

  - Patents, startups, money saved (for whom)

  - Jobs created, …

- ## Societal impact

  - Impact on quality of life, particularly in health, AAL

  - Visibility, such as web page visits, …

Examples for impact analysis

- ## TREC (NIST)
  - Economic impact analysis, much outcome for $ spent

- ## TRECvid
  - Scholarly impact analysis, over 15'000 citations

- ## ImageCLEF
  - Scholarly impact analysis, also many citations

- ## Baselines are not clear
  - What exactly would have happened had these events/projects not existed?
  - What are the elements for success

Recommendations

- **Favor long term** over short term success
  - A few automated ways to measure project success after 2-4-... years, then reflect on this
  - Check whether start ups still exist years later
- **Automate** some of the process (on an EU level?)
  - Register project publications/patents/data sources and analyze their impact
- Create **guidelines** for projects to avoid time being lost (standardized way to get some data)
  - Leave flexibility for specific projects
- Favor **sharing** of data and tools across projects

Conclusions

- EU and funded projects would profit from standard criteria and transparence on impact
  - Automated way to get some of the data on citations and use of tools/data; same evaluation for all projects
- Long term analysis should be more important than short term
  - Automation is necessary, give credit to projects with good long term impact
  - How can incentives be created for projects
- Goal needs to be to help projects and avoid administrative overhead

Questions?

- More information can be found at
  - http://www.avmediasearch.eu/
  - http://www.promise-noe.eu/
  - http://www.khresmoi.eu/
  - http://medgift.hevs.ch/
  - http://www.imageclef.org/
  - http://publications.hevs.ch/
- Contact:
  - Henning.mueller@hevs.ch