Agenda

1 Introduction

2 Research organisms

3 Actors of Research

4 Research processes

5 Research need in the society

An idea for a Project Proposal

- An idea
- Comfirmed by
  - existing publications
  - contacts (research community, industry, end-users)

Formal Project Proposal

Contains:
- Research topic
- Existing similar solutions
- Use cases
- Project members (possibly: consortium definition)
- Research plan, expected results, validation plan
- Planned budget
- Planned agenda

Should conform to the call for project proposals (if any)

Project proposal to get funds

- Project-based funding
  - From various sources: International (bi- or 'n'-national), Europe, National (ANR), Regional, Local

Other funding sources:
- Recurrent funding (state funding)
- Contracts with companies

Money incentives for companies (in France)

- CIR : Tax credit for research activities
  - 30% research expenses deducted from taxes
  - PhD recruitment: salary * 2
- CII: Tax credit for innovation
  - For product oriented projects
- CIFRE
  - Financial help for recruiting a PhD candidate in collaboration with a research lab

Project execution

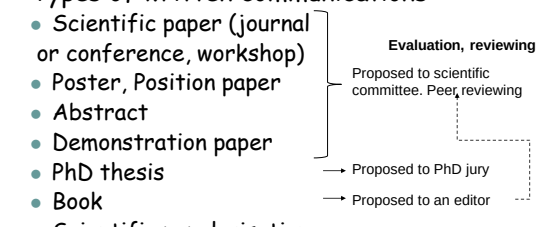
- Project organization
  - Organize recruitment (if any)
  - Meetings, coordination between stakeholders
  - Reporting (reached milestones)
  - Communication (web site, scientific paper)
  - Budget management (plan, execution)
- Research plan execution
  - See next slide

Core research activity

- Topic definition
  - Reformulation, sub-topics definition
- State of the art (continued)
- Research hypothesis
- Modeling, solution design
- Evaluation, experimentation
- Reporting, publication, patenting
- Perspectives of use, perspectives of research

Scientific communication

- Contribution to the research community
- Types of written communications
  - Scientific paper (journal or conference, workshop)
  - Poster, Position paper
  - Abstract
  - Demonstration paper
  - PhD thesis
  - Book
  - Scientific popularisation



Scientific communication

- Types of oral communications
  - Presentation in a conference
    - Main paper
    - Poster, short paper
  - Seminar
  - PhD defense
  - Panel discussion (popularization)

Web publications, open publication

Web is easy, fast, efficient

But

Peer reviewing is required for validation

→Open publication, Example: arxiv.org

→On line and open peer reviewing, Example: Semantic web journal

Why publishing?

- You make research progress
- You get recognition (your CV, your career)
- You participate in a community, you are identified as belonging to it
  - Receive feedback from peers (existing propoals, comments on your work)
  - Listen and discuss about ideas
  - Plan new projects with others

Agenda

Who needs research?

- We as humans
  - Intrisic need. Understand, improve
- States, regions, cities…
  - Technological independence (strategy of mastering the key technologies)
  - Local employment, for the next economic activities
- Companies
  - Create technical evolution (competitive advantage)
  - Develop new products and markets

48

The link between research and teaching activities

- Research ←→ teaching : " A Roundtrip"
  - Teaching with concrete examples
  - Clarify, formalize for a deeper understanding
  - Teach advanced topics for future workers
- Research activity offers opportunities for internships, PhDs
- Teaching put in touch with young talented students

49

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The end

50