PhD schemes that link industry and academia: A professional experience

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1. Topic: PhD schemes for the industry

2. Advantages

3. Disadvantages

4. Professional Experience

5. Conclusions
1. Topic: PhD schemes for the Industry

- Big question: Where to do the PhD once you finish the Master thesis?
  - In a university?
  - In a company?

- We will discuss about the pros and cons of carrying a PhD in a company.
In Catalonia (Spain) there was a scheme called **TALENT EMPRESA** that linked academy and industry.

The first call was in 2009. The scheme offered to companies a 3-years cofund to contract PhD candidates to find R&D solutions to enhance company developments.

- **SO! THE TOPIC MUST BE INTERESTING FOR THE COMPANY**
- It must be an interesting opportunity for the student.
In 2013: TALENT EMPRESA scheme

INDUSTRIAL DOCTORATES scheme

- Two thesis supervisors
  - Industry (fund$)
  - University (fund$)

- PhD using industry and university resources (infrastructures)

- Collaboration agreement company-university

- Fund$ for mobility and training of the student
2. Advantages

- Reserch is market driven (applied research in real scenarios for the industry)
- Align state of the art to industrial needs.
- Mutual feedback between the research and industrial worlds.
- Resource availability.
- Results oriented dayly work
- An increase of the experience in developing products, from a professional point of view.
3. Disadvantages

- Information and results are private. That means:
  - Few publications.
  - A confidential PhD dissertations

- Deadline driven

- Fast request of results. PhD schemes focused on engineering sectors.
4. Professional Experience

- Useful to understand market needs
- Time to market is relevant!!
- Looking for commercial solutions Interact with providers
- Importance of being part of a SME evolution.
5. Conclusions (I)

- Carrying the PhD in an industry provides you:
  - Professional experience as an R&D engineer.
  - Market knowledge & result oriented vision
  - Teamwork capacities
- At the same time, the conducted experiments for the industry to improve/build a product are part of the Thesis.
5. Conclusions (II)

• Being part of a SME allows you to understand the internal operations of the company.

• Once you finish the PhD you have professional experience in the industry!!!!
Now which way would you choose? :)  

Sharing research knowledge to the Industry and working for a results oriented team??  

Working alone at the academia?