WBCInno

Different ways of technology transfer at University of Alicante

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Contents

- University Missions
- Knowledge Transfer at UA
- KT – ways of transfer and characteristics
- What we need to foster KT?
- Conclusions

- **UNIVERSITY MISSIONS**
  - Teaching
  - Research
  - Technology Transfer

- **UNIVERSITY MISSIONS**
  - Teaching
  - Research
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WE DO NOT LIKE TECHNOLOGY TRANSFER

- **UNIVERSITY MISSIONS**
  - Teaching
  - Research
  - Technology Transfer

WE PREFER KNOWLEDGE TRANSFER

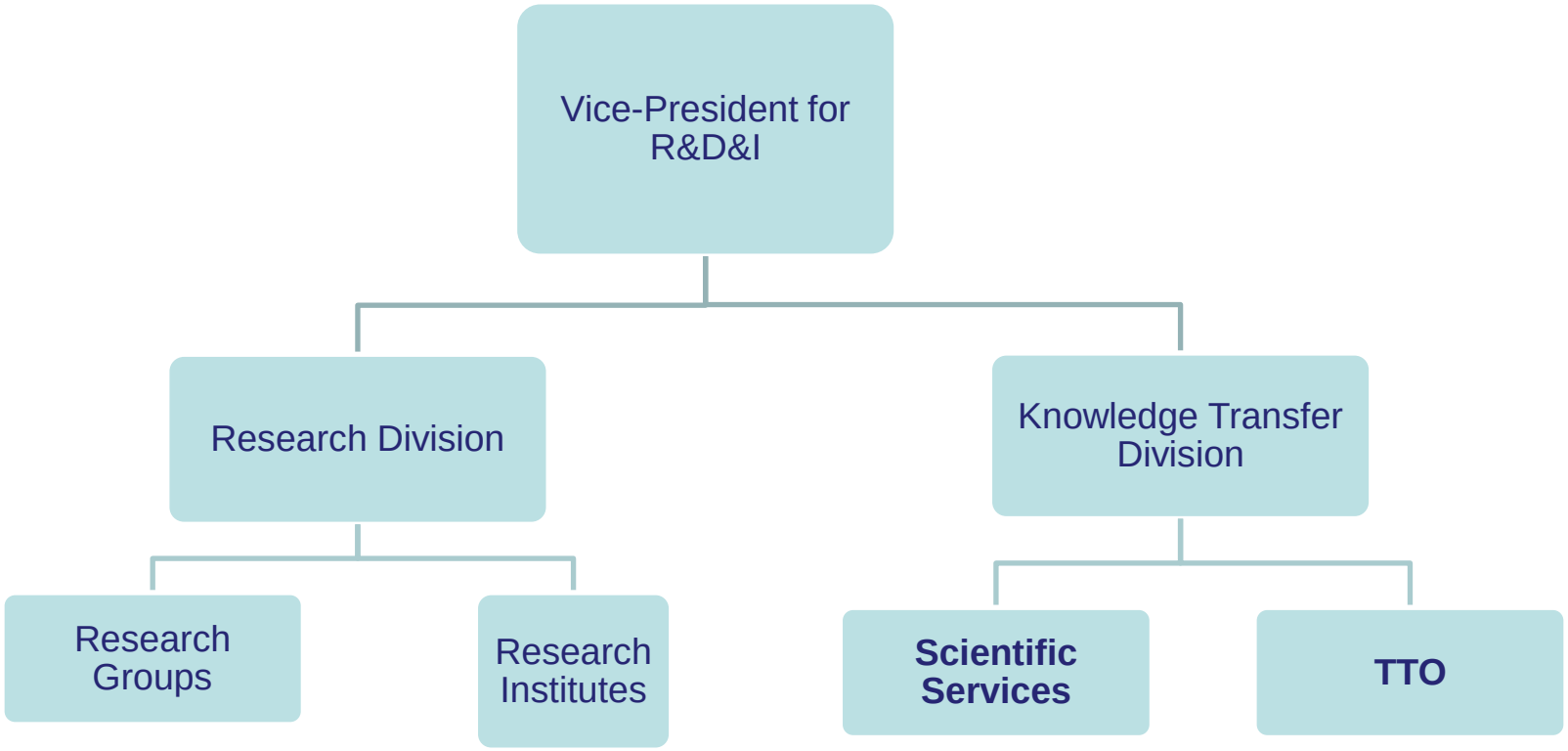
- **UNIVERSITY MISSIONS**
- Teaching
- Research
- Technology Transfer (Knowledge Transfer)
  - Contracts or working on demand
  - Collaborative projects
  - Advanced KT
    - Licenses
    - Spin-off

Who is responsible for KT?

- Researchers

- Technology Transfer Offices (TTOs)

Different ways of technology transfer at University of Alicante



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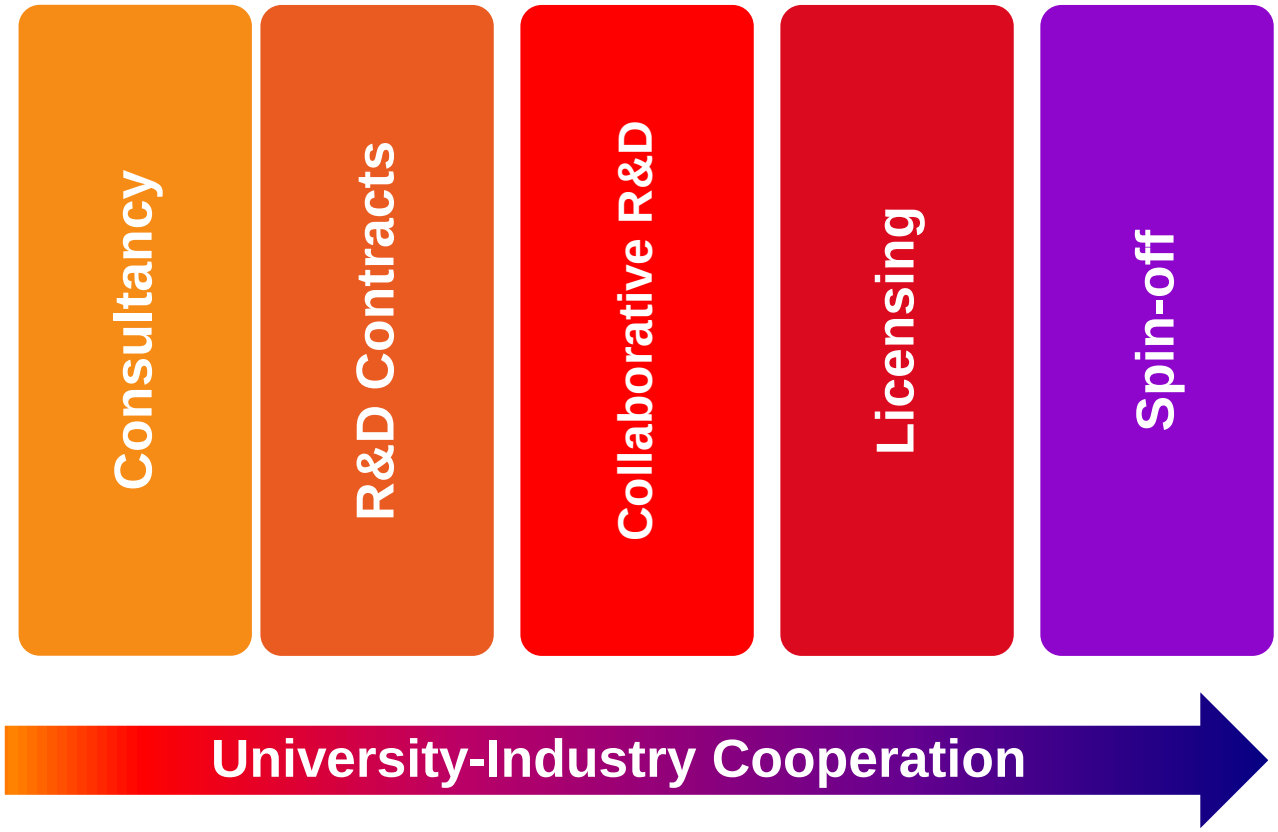


- **Consultancy**

  - A company needs the University to, for example, analyse some samples of a material used in the making of concrete
    - They talk to a researcher or a service within the University
    - Agree on what kind of analysis needs to undertaken
    - Sign the contract
    - The University analyses the samples
    - The company pays for the service, no further contact between the two parties
  - Easy, concrete, the company uses the University expertise and that's it.
  - Not strongly linked

- **R&D contracts**

- R&D on demand → to solve a specific problem
- The University becomes *the research department of a company*
- Research to be carried out by the University
- No results guaranteed
- The contract should specify:
  - Obligations of both parties
  - Duration of the project
  - Budgets
  - Payments
  - Results (future IP, future developments…normally belonging to the company)

- **Collaborative R&D**

- Commercial & scientific goals are shared
- Research to be carried out by both parties
- Risks & benefits shared
- Contracts should specify:
  - Obligations of both parts
  - Duration of the project, responsibilities of each party for each phase of the project
  - Budgets and payments
  - Results → IP management, future developments (hot potato)
- More interaction between both parties
- Usually clloser to market needs i.e. demand

- **Licensing**

- Not always easy to find a client
- Takes a lot of time and energy
  - Technology offers → market places, twitter, linkedin, websites, etc.
  - Identify the offer (what, to whom, why it's interesting)
  - Licensing terms (exclusive/non-exclusive, territory, royalties, payments, future developments, etc.)
- Post-license
  - Researchers are no longer involved
  - The University still involved → returns → inventors
- Science goes directly into market place

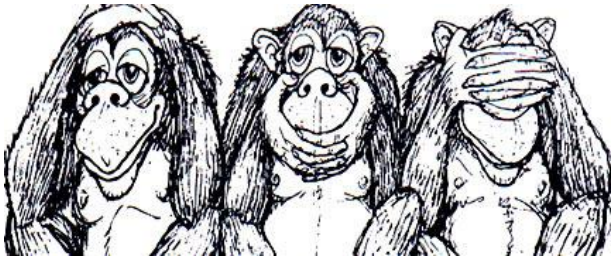
- **Spin-off**

  - The most effective way of transferrng knowledge
  - Spin-offs as a way of fostering growth in the industry sector
    - New sectors arise
    - Cutting-edge technology
    - Job creation
    - Researchers will be more involved → team spirit and commitment
  - Questions regarding conflicts of interest arise → Clear regulations
  - IP needs to be managed
  - A specific environment required
  - Science goes directly into the market place

- **The role UA plays in Spin-off**

  - Promoting the company/Business support
  - Equity share – Alicante Science Park Foundation
  - Not a member of board of directors
  - Technology transfer agreement
  - Shareholders agreement → antidilution
  - Benefits
    - From equity
    - Royalties
    - Technology Transfer Agreements
    - Future collaborations

- **The role of the researcher in Spin-off**
  - Collaborates with the company
  - Inventor, IP
  - Equity
  - Board of directors
  - Working for the company



Some considerations about the team

- Researchers are experts in technology and know-how, not *business*
- Researchers don't necessarily talk *business*
- Researchers and the company are pretty close at the beginning but have different interests in the end
- Researchers often hold shares in their spinout companies

Who should manage the company then?

- I have a friend….MISTAKE.
- My brother…MISTAKE
- My brother, who is a lawyer…WORSE
- Exceptions….

- Get information from: business contacts, networks, investors…somebody with business skills, experience and contacts.

Some benefits of spin-off

- Economic benefits for the researchers
  - As a partner of the company
  - Inventor
- Economic benefits for the University
  - Equity gains, dividends, royalties and payments from the TT contract.
- Other benefits
  - Economic development
  - Job creation
  - Environment attractive to other companies
  - Image
  - New contracts, licences, etc.
  - Entreprenurial environment
  - ….

Different ways of technology transfer at University of Alicante

	Licensing	Spin-offs
Team	Researchers, Low implication	Researchers + sb else → balanced team; high implication
Investment (time, money, efforts) pre / post-license	Significant /Minimum	High (more time consuming, more people intensive) pre and post
Financial Returns to University	Royalties, upfront payments	Royalties, upfront payments, equities, dividends
Financial Returns to the inventors	Royalties (university policy)	Royalties (university policy) + equity gains and dividends, if so
Financial Risk	Modest	Significant
Companies in the market	Well-established	Do not exist or are small

What do we need?

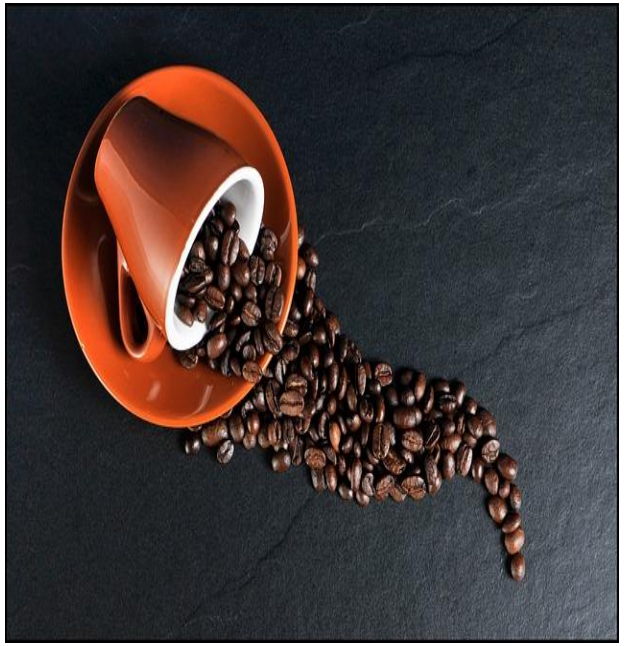
- High quality research
- Clear University policy → interaction with industry within the University strategy
- Clear and concise legislation to foster relations with industry in a simple, flexible way (national, University level)

What do we need?

- KT should have an impact on curriculum development
- Professional structures within the Universities to promote partnerships with industry, industry-university dialogue to detect industry demands→ people able to talk the same language or act as translators
- Specialized courses
- Researcher mobility between University and Industry

What *else* do we need?

- MORE COFFEE!!!!



Why?

- To contribute to economic development
- Society benefits from knowledge
- The University becomes more *real*
- Moving towards the entreprenurial university
- Earn income….

….and KEEP ON WALKING

Conclusions

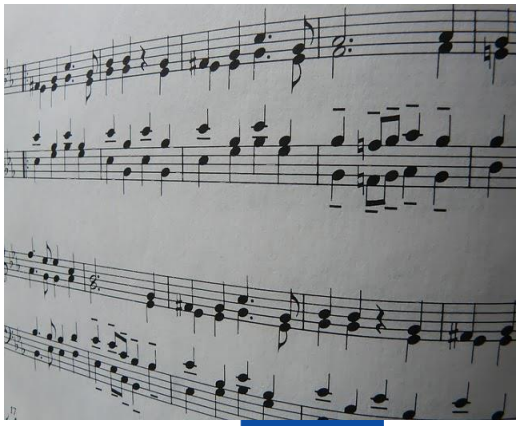
- Universities need to develop the appropriate environment
  - Towards the entreprenurial university with clear, but flexible policy and some support structures such as science parks, incubations, etc.
  - Introducing technology transfer, IP issues in courses, both for students and researchers
- The University should help to create companies but should not interfere in the day-to-day operation

Conclusions

- The importance of the TEAM
  - The researchers play a very important role BUT
    - Generally, they have no business skills
    - Too much stress on the technical issues
  - Conflicts of interest might arise → clear, but again flexible, rules
  - Well-balanced team →CEO with business skills, contacts and experience

Conclusions

- Technology Transfer Offices
  - Must be able to detect potential projects
  - Assist the researchers
  - Have contacts in the “real” world
  - Help the team to put all the NOTES together (IP, technology, investment, team, etc.)



Thanks for your attention!

Questions?.....