

Building a Transfer Office

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What is the role of transfer offices?

- Convert the research results into Intellectual Property (IP)
- Maximize the benefits of such IP for
 - The researchers themselves
 - The Institution
 - The Public at large



Do we need special transfer offices?

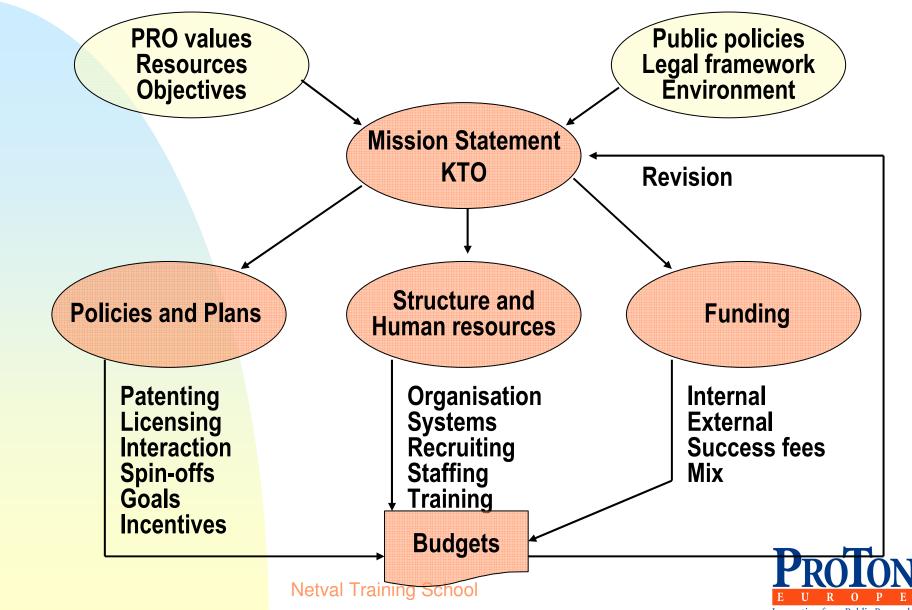
For	Against
 Professional help needed to create, manage and commercialise IP Factor-in the institution's objectives and policies Non-monetary returns Limit the conflicts of interest 	 Unnecessary interface with Industry. May interfere with department objectives of funding research Temptation to sustain KTO existence rather than institution's objectives.

Only accepted by the stakeholders if adds value



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A Planning Framework



Innovation from Public Research

Mission statement

- Strategy and objectives of KT
- Must be very clearly defined and adhered to by all relevant stakeholders
- Support from Institution at highest level is essential
- Should be explicit enough to provide guidelines for the detailed policies
- To be reviewed periodically



Institutional Context

Determine parameters:

- Governance
- Led by academics or professionals
- Company, unit or university department

Align TO's purpose with Institutional policy



Legal, Financial & Political Arena

Consider:

Public Policy

- Plans from regional, national governments
- Funding structure and Levels

Legal framework:

- regulations on ownership
- regulations on use of research results

Economic environment:

- labour market
- type of industry



Values, Resources* & Objectives

Audit and evaluate

- Culture
- Relative weight of departments
- Fields of scientific excellence
- Past experience in knowledge transfer
- Researchers' attitude
- * include tangible and non-tangible resources



Policy Goals

Support Institutional Goals:

- Income
- Graduate Jobs
- Relationships
- Reputation

Observe Government and Funder's Goals:

- Government has expectations from research and will fund compliance
- Funders have their own agenda.



Internal Objectives

Review objectives:

- Generate funding support for research
- Encourage innovation in faculty and students
- Reward, retain and recruit faculty and graduate students
- Open career opportunities for graduates
- Facilitate creation of spin-outs



Minimum Policies

- First ownership of results
- Invention disclosure procedure
- Licensing
- Collaborative research with industry
- Spin-off creation
- Incentives, profit sharing
- Conflicts of interest



First ownership of results

- Legal status of researchers
- Adoption of University Policy
- Review before publication policy
- Administration of research contract
- IP management skills
- Manage conflicts of interest

The cornerstone of any KT system is a well defined (and accepted) IP ownership and management policy reflecting institution's values and objectives



Creating Intellectual Property

- Confidentiality agreements (Know How)
- Invention disclosures
- Patenting, utility models
- Copyrights (computer programs, databases)
- Trademarks

Results and Ideas <u>cannot be protected as such</u>. Only: -their economic applications (patents, utility models) -their forms of expression (copyrights) can be protected by statute



Invention disclosure form

- **1** Serial number (internal, given by TO, record keeping purposes)
- 2. Title
- 3. Summary description
- 4. State of the art (attachment, references)
- 5. Problem solved by the invention
- 6. Detailed description (attachment)
- 7. Inventors (list with personal contact details, nationality, employment)
- 8. Contributions to the invention (description by each inventor)
- 9. Funding (research contracts)
- 10. Collaborations (external collaborations, compensated or not)
- **11.** Confidentiality (incorporation of third party confidential information)
- 12. Use of materials (beware of MTAs)
- 13. Publications and disclosures (articles, conferences, thesis, etc.)
- 14. Possible licensees (uses the relationships of the inventors)
- 15. Signatures (evidence of agreement to university policies)
- 16. Witnesses (2 skilled in the art, declare read and understand invention)



Beware of the death spiral!

- Patents are (very) expensive in Europe
- Filing too many patents may severely jeopardize the sustainability of the KTO
- The continuing commitment of the inventors is essential (moral contract with KTO)
- There must be a clear benefit in the value chain
- Techniques to reduce and delay patenting costs
- Requires good command of IP management
- Commercialise as soon as possible
- Abandon quickly if response not encouraging.



Finding Licensees

- Facts sheets showing benefits
- Target potential licensees by desk research
- Involve the inventors
- Use existing relays (IRC, Yet2Come, etc.)
- Offer realistic terms
- Leverage collaboration on proof-of-principle.
- Requires business development skills and knowledge of sector



Collaborative Research

- Promote the Research capability of the Institution
- Probably the logical place to start at KT office
- Adopt clear policies and have them accepted by both the Institution and the Partners.
- Use Responsible Partnering guidelines
- Lambert model agreements (+ background)

Takes a lot of convincing, but may be the most efficient knowledge transfer technique.



Spin-outs creation

- Develop entrepreneurship spirit
- Provide training for SME management
- Adopt clear and motivating policies for knowledge transfer and assistance to spinouts
- Develop tools if possible (Incubator facilities, use of university resources, access to seed capital, networking,..)



Develop the transfer office

- Achieve wide consensus on Mission
- Develop corresponding policies and objectives based on benchmarking
- Organisation and staffing
- Funding
- Reporting and communication



Staffing

- Administrative skills. Need to follow a large number of projects. Management tools are helpful. IP administration.
- Generic skills. Contract law, licensing, IP laws, company laws.
- Business development skills (essential in the Business model). Industry experience in each relevant sector is almost a must.



Recruiting and training

- Development route: Scientific degree + motivation + outgoing personality + training. Takes 2-3 years to become operational
- Recruitment route: people with 5-10 years industry experience in project management or business development. May not fit university pay scales
- ProTon: training, staff exchanges, job opportunities, mobility, graduating program



Typical organisation structures

Model	Emphasis	Legal status
Legal model	Ownership Policies governance	Legal department of PRO
Administrative model	Administrative processes, relationship with research base, contract research, licensing	Dedicated department of PRO
Business model	Managing & commercialising IP, collaborative research, business development, spin-offs, seed capital	Subsidiary of PRO
Outsourcing	Bundling IP	Independent company



Maintain Strategic Relationships

- Inventors and researchers.
- University Managers & Governors
- University administration
- Industry partners
- Government



Goals and Benchmarks

- Goals clearly defined
- Compatible with mission statement
- Feasible
- Pushing the envelope?



Reality Check – Aligning Structures

- What does the institution want from KT
- Who is responsible for achieving that
- What level of responsibility do they have
- How are they structured and supported
- What processes are in place to identify & evaluate IP
- What processes are in place to exploit it
- Who decides how it is exploited
- Using what criteria
- What controls are on the process



Developing People

- Development route: takes 2-3 years to become operational.
- Recruitment route: people with 5-10 years industry experience.
- Reward & Retain.
- Training, staff exchanges, industry placements, mobility, career opportunity.



Funding of Transfer Office

Aim for a balanced portfolio:

- University allocation of funds (+ benefit in kind, services and campus resources)
- Public funds from government and agencies. (essential during the establishment phase)
- Share-in revenues from KT*
 - O/H on collaborative research
 - Share of license income

 Share of capital gains from spin-outs (cost and pricing to sustain/justify KT activity)



Planning Knowledge Transfer

- Knowledge Transfer is a long term business and must be covered by long term plans.
- Deployment should be progressive. It takes time and a lot of communication to convince the stakeholders.
- Plans to be revised periodically and made consistent with mission statement
- Endorsement at highest level is essential



Policy = Metrics

- Measuring success depends on what you want to achieve.
- By what measures would you judge success in:
 - A) generating long term income
 - B) developing relationships
 - C) Reputation & profile
 - D) Graduate jobs



Some potential measures

Missions	Objectives	Achievements in Year 2???
Collaborative research with companies	 Keep ownership of results Licence options or profit sharing schemes Increase research turnover 	
Licences	 Number of applications Proportion licensed out Awareness of IP issues 	
Spin-offs and partnerships Investments	 Number of spin-offs Second round funding achieved New seed capital fund Strategic partnerships 	
Indigenous Industry	 Consultancy & access to facilities Student Placements Goodwill 	



Reporting and Communication

- Essential to report regularly on activity to researchers and other stakeholders
- Benchmarking on results and resources with comparable institutions
- Revise budgets and plans regularly
- Build confidence
- Share the vision
- Report successes



Summary: what is involved in implementing a KT function?

- Clear mission statement, consistent with nature of institution and expectations of stakeholders
- Reflected in adequate policies and incentives (less than 50% of the survey institutions had policies)
- Agree on <u>realistic</u> objectives (benchmarking)
- Obtain involvement of the academic community (less than 15% in surveyed institutions)
- Organize accordingly:
 - Good practices
 - Professional staffing (business development skills)
 - Structure and infrastructure
 - Funding



Benefits from efficient KT

- Recognition of the utility of the research function, hopefully leading to better funding
- Attracting more funding from private sources, leverage more public funding
- Conducive to excellence in research
- Attracting good scientists for recognition and career opportunities

The sustainability of the research function of universities is at stake



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Conclusions

- Universities are called by the Public to play a more active role in the Innovation Process
- Good practices exist and have been shown to be successful by those practising them
- ProTon Europe can help.

