ASTP 2018 survey report – data collection and analysis -

Laura Kreiling, ASTP Survey Committee member

20.02.19 | Bundeskonferenz Technologie Allianz
A2 “Measuring KTT internationally”
ASTP is the premier, pan-European association for professionals involved in knowledge transfer between universities and industry.

900+ members
320+ institutions
40+ countries

Membership is open to all individuals involved in the transfer of knowledge, science and technology.
Goal is promoting and professionalising knowledge transfer practice. Our main focus being on knowledge transfer for professionals and technology transfer offices.

Our mission is to help with professional development via courses online or in-person. We collect and publish data, success stories and other information relevant to the knowledge transfer field and its stakeholders.
Who can apply?
Anyone involved in knowledge and technology transfer in the European innovation ecosystem.

Individual Membership
- Full Membership €250/year
- *EPL Special Price €150/year
- Associate Membership €60/year

Student Membership
Full Membership €60/year

Group Membership
For more info contact arlyta.wibowo@astp-proton.eu
Business Developer

www.astp-proton.eu

DIGITAL RESOURCES AND PUBLICATIONS
- Best practice and success stories
- Survey reports on KT activities
- Conference presentations and videos
- Newsletters
- KT Vacancies

ADVOCACY
- Representing members at a European level in innovation and Knowledge Transfer policy
- National Associations Advisory Committee (NAAC)

COMMUNITY
- Sharing experiences and knowledge
- Network of National Associations
- Special Interest Groups (SIG)
- Online Forum
- Access to global ATTP network

NETWORKING
- Events: Fall Meeting and Annual Conference
- Access to KT/TT international community

CUSTOMISED SERVICES
- Customised On-Site Training
- Peer Review
- Access to international innovation and KT experts

ASTP-PROTON MEMBERSHIP

20.02.19 | “Measuring KTT internationally” - Laura Kreiling
Committees

- **National Associations Advisory**
  32 European national associations in K/TT are active NAAC members

- **Professional Development**
  training courses, masterclasses, on-site trainings and site visits, to facilitate your career development in technology transfer

- **Digital resources**
  digital training content, platform development

- **Marketing and communications**
  website, social networks, logo, branding

- **Programming Committee**
  the programme for the annual conference and fall meeting

- **Survey Committee**
Survey Committee

Meet volunteer members of the ASTP Survey Committee, whose main activities revolve around the ASTP annual survey on Knowledge Transfer (KT) activities. Their main responsibilities are to set up the indicators and prepare the questionnaire, to analyse data collected from the ASTP annual survey on KT activities and to report the results, which offer valuable insights into European KT Officers’ activities and outputs. Published annual survey reports can be found here.

https://www.astp-proton.eu/resource-center/publications/
4th survey in a row (2014-2018, i.e. data FY2012-2016)
2. Survey Report 2018

Participation (absolute)

Number of responding KTOs per country year-on-year comparison

Based on FY2016 data

<table>
<thead>
<tr>
<th>Year</th>
<th>Reporting year</th>
<th>Participating KTOs</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>FY2016</td>
<td>474</td>
<td>25</td>
</tr>
<tr>
<td>2017</td>
<td>FY2015</td>
<td>419</td>
<td>21</td>
</tr>
</tbody>
</table>
2. Survey Report 2018

Content
1. KT Offices
2. Intellectual Property
3. Agreements with industry
4. Commercial contracts
5. Commercial revenue from IP
6. Spin-offs and start-ups
2. Survey Report 2018

Content

1. KT Offices

2. Intellectual Property

3. Agreements with industry

- Staffing level:
  - 228 KTOs reported a total of 2,251 FTE (full time equivalent), an average of 9.9 FTE
  - Majority (63) reported 2-5 KTOs

- Budget
  - 75 KTOs spent €100.5 million for their operational costs (excl. costs dedicated to IP borne by the KTO and PROs)
  - 153 KTOs and their PROs spent €43.7 million on intellectual property protection

- Number of PROs
  - Of 90 KTOs, 75 KTOs indicated that they are dedicated to one PRO
  - 5 KTOs are working with 2 PROs and 8 KTOs with 3-9 PROs
2. Survey Report 2018

Content

1. KT Offices
2. Intellectual Property
3. Agreements with industry

<table>
<thead>
<tr>
<th>KTO's IP Activities</th>
<th>No. of responding KTOs (n)</th>
<th>Total</th>
<th>Average per KTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of invention disclosures</td>
<td>450</td>
<td>12,394</td>
<td>27.5</td>
</tr>
<tr>
<td>Number of priority patent applications</td>
<td>245</td>
<td>4,059</td>
<td>16.5</td>
</tr>
<tr>
<td>Number of patents first granted</td>
<td>138</td>
<td>1,814</td>
<td>13.1</td>
</tr>
</tbody>
</table>

- 22% filed 1-5 priority patent applications
- 38% filed 1-5 patents
2. Survey Report 2018

Content

4. Commercial contracts

5. Commercial revenue from IP

6. Spin-offs and start-ups

Licenses are by far the most popular means for the commercialisation of IP.

<table>
<thead>
<tr>
<th>Commercial Contracts</th>
<th>No. of responding KTOs (n)</th>
<th>Total</th>
<th>Average per KTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licenses</td>
<td>422</td>
<td>45,645</td>
<td>108</td>
</tr>
<tr>
<td>Options</td>
<td>179</td>
<td>188</td>
<td>1</td>
</tr>
<tr>
<td>Assignments</td>
<td>227</td>
<td>370</td>
<td>2</td>
</tr>
<tr>
<td>Research materials licenses</td>
<td>154</td>
<td>348</td>
<td>2</td>
</tr>
<tr>
<td>Software licences</td>
<td>308</td>
<td>37,489</td>
<td>122</td>
</tr>
</tbody>
</table>
3. Data analysis – new chapter

• Alternative approaches to normalization*:
  1. Longitudinal time-series analysis (3 years)
  2. Ratio – analysis

• Rational:
  standard metric-based comparison may miss possible confounding factors, which include: (a) the core mission of the PRO (b) the source of the research funding (c) the PRO and KTO size (d) the economic ecosystem of the region or country (e) the maturity of both the PRO and KTO (b) differences between individual KTOs.

* Normalization is typically based on research budget or research FTEs
3. Data analysis – ratio analysis

• Aim:
  • *demonstrate* what general trends and distributions exist, how they can be *interpreted*, and if deviation from those trends exist, how they might be *explained*.
  • To develop a *complementary set of metrics* in conjunction with standard KT metrics for *KTO management* to derive insights and initiate changes

• Key findings:
  • Patterns do emerge from the ratios
  • There is value in analysing these further on the individual KTO as well as on the transnational/European level with a view to demonstrating
    (a) differences across EU regions
    (b) differences between individual KTO
3. Data analysis – PAT/IDF ratio

Recording and protecting intellectual property - Patents to invention disclosures (PAT/IDF)

- Findings: patent filing is not strongly correlated to IDFs
  - 71 of the 130 samples report a ratio between 0 and 0.5 (see histogram)
  - On average 0.45 patent filings per IDF \( \Rightarrow \) 45% of IDFs lead to a patent filing.

- Offering possible reasons for outliers:
  - A ratio of Pat/IDF much higher than the mean may indicate:
    - IDFs are only collected or recorded when the patentability has already been evaluated;
    - Patents are filed initially as a matter of course and triage occurs mainly at the end of the priority year;
    - A ratio greater than 1 may indicate that an IDF is not collected for each patent filing or several filings are done from a single IDF;
    - There is some institutional pressure which encourages a lot of patent filing.
  - A ratio of Pat/IDF much lower than the mean may indicate:
    - No triage by meeting or phone is done prior to recording of the ID;
    - Patent budget is limited;
    - If patent filing is limited by novelty it may be that some training on publication timing is required;
    - A significant proportion of reported inventions are not in a technical field and not appropriate for patent protection.
4. Conclusions

- Thank you to all participants of the FY2016 survey
- Download the 2018 survey report
- Survey 2019 is closing

Any questions?

Contact

laura.kreiling@u-psud.fr

http://www.ritm.u-psud.fr/researchers/laura-kreiling/
https://www.astp-proton.eu/organisation/committee/survey-committee/