APS1012 Management of Innovation – Final Team Projects, Fall 2010

The Commercialization of Academic Research in Post Secondary Institutions

Objective

Investigate the academic commercialization process at the University of Toronto and prepare a report that provides meaningful advice on how the process can be improved. Discuss why it is important to commercialize university research, with reference to:

- Accessing additional sources of revenue through intellectual property rights (patents)
- The trend of decreasing government funding to educational institutions
- Enhancing the university's reputation and brand
- The contrasting motivations of universities and the private sector: R&D by public institutions is for public benefit, whereas private sector R&D is proprietary and not shared with governments or the public

What is U of T already doing to improve the process? What are they not doing, and what can they learn and adopt from other institutions?

Summary

Technology Transfer Offices (TTO) at different public institutions were compared to understand their role in the commercialization process. Private sector research commercialization in Canada was also examined.

Some of the barriers to successful commercialization are found within the various TTOs. Their caseloads are typically high, the screening process is poor, and the contracts they draw up are inconsistent. The TTOs are severely constrained by budgets and staffing levels and this is providing a bottleneck. Increasing the staffing and funding to the TTOs will aid and incentivize the commercialization process.

The University of Toronto was founded as a research institution and has enormous resources and potential at its fingertips. The reasons for the apparently low level of R&D commercialization are investigated and discussed.

Conclusion

Academic commercialization is an integral source of new jobs, academic funding and localized economic value. To promote true growth in the commercialization of academic research, a sustained commitment to university funding encompassing all facets of the research enterprise is required, including exploiting the economic value of innovations. The funding and economic health of a university is one of the most important factors which governs the level of academic commercialization a university achieves. Increases in funds results in better equipped, top-class facilities which increases a university's competitiveness and therefore attract outstanding researchers and graduate students.

The University of Toronto's TTO, the Innovations and Partnerships Office (IPO). will need to stand out on a global scale for it to be more successful. The first step in this direction is to apply the "Best Practices" described in the report; one of the key recommendations is to increase the availability of qualified staff who are fully accustomed to entrepreneurial environments. Such individuals will improve the level of understanding between inventors and IPO and be more able to guide inventors about the requirements and traits of the markets being contemplated.

The commercialization of academic research is a very complex process whose success relies heavily on numerous organizational factors. It is in the University's interest to make this process as simple as possible in the eyes of the inventor. TTOs are created for this purpose, to relieve inventors of the burden of administration and paperwork, to advise and guide, and to promote further creativity. The IPO must project this image, to give inventors confidence and encouragement to bring their ideas forward.