iPARK

Jordan's Innovation Catalyst

Spin-off Considerations for Academic Institutions

Drivers and models for equity and non equity participation

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Contents

1- Commercialization of Academic Research Outcomes

Why and How?

Innovation

- Innovation is about going against the tide, taking the road less taken, surprising your peers, challenging norms, in short, innovation is the opposite of obvious!

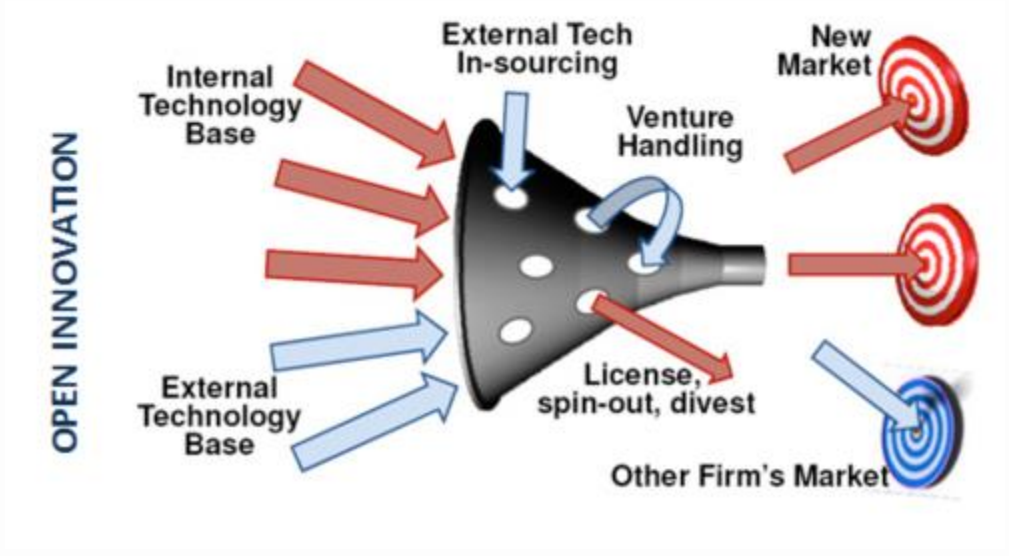
- Innovation is not easy, if it was easy/obvious, it would not be innovation

The Basic truth about Intellectual Property #1

Intellectual property protects the unique position the owner has in a market

- An inventor is the only one allowed to exploit the invention
- A publishing rights owner is the only one that can publish
- A brand owner is the only one that can use that brand
- Members of a group that has a geographic indication are exclusive users

Open Innovation Perspectives



- Industry perspective: reduce risk and cost by shifting early development to the wider community
- Innovator perspective: the smallest institution in smallest economy can have a backdoor to global enterprise

New Industry Paradigm

Modern Industry

Knowledge is a factor of production, just like raw materials

Knowledge Economy

Technology is a product, and its common form is Intellectual Property

The Basic truth about Intellectual Property #2

Most intellectual property is developed as a means of securing partnerships

- TTOs looking for licensees
- SMEs looking for global industry partners
- Global industry partners looking for representatives in new markets
- Authors looking for publishers

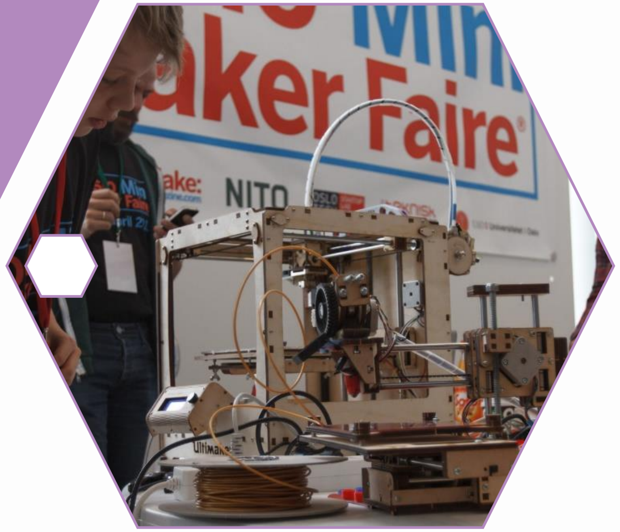
The Dual Role of IP

For large industry/multinationals

- Patent to protect

For everyone else

- Patents as a means for partnership!



The Overall Mission of Universities

Must never forget why we have universities

University missions = Create Knowledge + Spread Knowledge

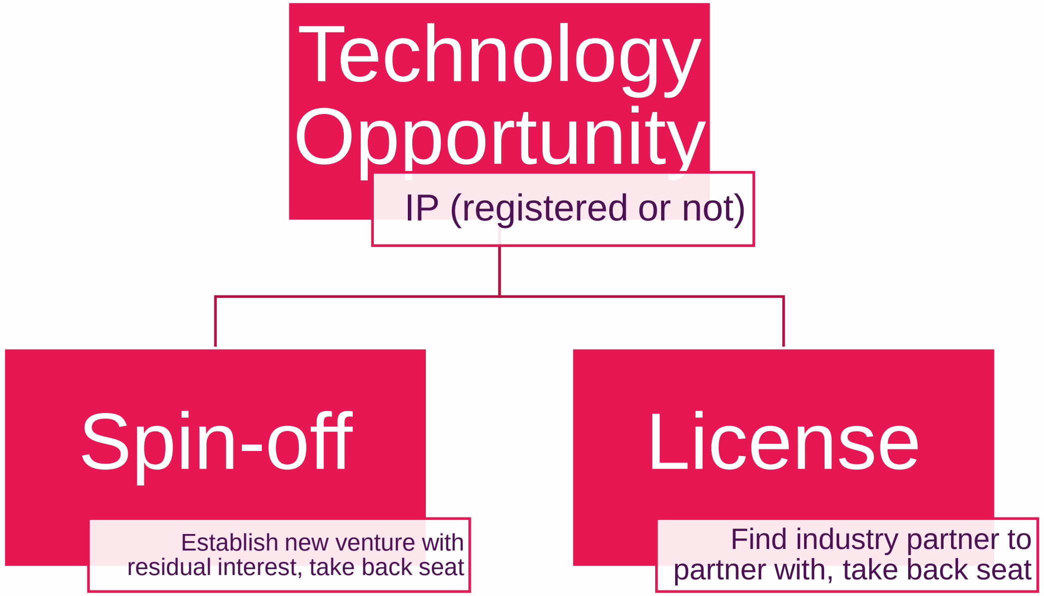
- Research activity naturally creates solutions to societal problems, even if unintentional. How do we capitalize on that in an institution not designed to deliver solutions?
- Step 1: move research results outside academic institution ASAP

2- Commercialization Models and Limitations on the Spin-off Model

Moving research results off-campus

Creating Societal Impact from Academic Research Results

commercialization, capitalization, valorization, etc.



- Best pathway depends on too many factors including the nature of the technology, technology maturity and market readiness, the nature of the market in which commercialization will take place, research team experience and capabilities, research team continued involvement, actual opportunity on hand, regulatory constraints, institutional strategies, etc.
- **The actual pathway will happen on its own. You will probably not be able to force it, but you can easily block it!**

Spin-off vs License

Spin-off

- Create new independent legal structure to commercialize
- Residual "equity-like" interest from institution in spin-off (<20%)
- Normally, "right of first refusal" to inventor
- Research team involved long-term
- Be aware of conflict of interest
- Spin-off strategy might include licensing
- Licensing from institution to spin-off needed
- No institution involvement in operations

License

- Find existing commercial partner to commercialize
- Simple payment terms, probably royalty (<5%)
- Normally implemented by TTO
- Research team rarely involved long-term
- Be aware of conflict of interest
- Licensee strategy might include licensing
- IP normally crucial
- Material transfer/ data transfer normally similar to licensing

Factors that Lead to Spin-off Creation

- Researcher interest and capabilities
  - Connections, industry experience, entrepreneurial spirit, business sense
- Academic institution interest and capabilities
  - Rules, regulations, norms, separate asset management arm
- Supportive ecosystem factors
  - Access to capital, infrastructure, governmental regulations
- Technology specific issues
  - Profitability, license-ability, non standard business models
- Market specific issues
  - Partner accessibility, problem focus

Institutional Issues related to Spin-offs

Regulations:

- No or poor IP policy
- No clear pathway from owning IP to licensing IP
- No mandate/model for licensing to related parties (spin-offs)
- Bad deal terms
- Hyper-legal-conservatism
- Limitations on activity of academics

Capabilities

- TTO team not able to close deals with related parties at win-win terms
- No asset management arm or clear means of managing equity

Best Practice

- Gain normal equity of 5-12% alongside the founding team in return for licensing the IP to the spin-off
- Manage the equity through a specialized arm (e.g. trust fund)
- Have separate affiliated accelerators and VC funds to invest cash and enable start-up growth and success

3- Models of Vested Interest in Spin-offs

Spinoff workarounds

Making Gains from Spinouts

- A spin-off is a startup, it makes money to it’s owners by:
  - generating profit and paying dividends (becoming a profitable firm)
  - being sold (becoming an attractive asset)
- Both eventualities create wealth for **owners** (shareholders, partners, etc.)
- Owning shares in startups is a specialized activity
- Doing this activity wrong can harm the university and the startup

Equity Participation Mode

- Spin-off generally grants the university percentage ownership
- University generally claims its pro rata portion of proceeds.
- Equity may never become liquid
- TTO may have difficulty valuing the shares received from a license

Non-Equity Participation Mode

- Alternative to outright ownership
- Became prevalent in university-spin-off licensing agreements
- No claimed shares in the spin-off company
- In order to secure its IP assets, the university would ask for a percentage of proceeds from any liquidity event (dividends, divestment).
- This claim may or may not be diluted (by subsequent capital), and the claimed percentage is usually one-third of the usual equity percentage.

Benefits of Non-Equity Participation Mode

- Aligns long-term interests of licensor and licensee
- Not subject to inflation if based on a proportion of product sale
- Can be monetized to accelerate payments and mitigate some clinical, regulatory, and commercial risk
- Mitigates risk of initial overpayment and enables preservation of cash until product is commercialized.

Risks Associated with Non-Equity Participation Mode

- It is used under assumption that product will be commercialized within IP term
- The ongoing royalty payments to licensor will have negative impact on profitability of product

Spin-off Workarounds

Remuneration Instruments Non-Equity Participation

- License fee.
- Patent costs.
- Royalties.
- Milestone payments.
- Sublicense revenues.
- Exclusivity fee.

Non-Equity Remuneration Instruments

License Fee

- **A fixed cash payment made at the time the license agreement is signed.**
- In some cases, university spin-offs agree to pay as a license fee an amount that is sufficient to reimburse the university for its sunk costs for patent filings.
- the spin-off may be able to negotiate a deferral of all or a portion of this fee for some period of time or until the spin-off has raised a certain amount of capital.

Non-Equity Remuneration Instruments

Patent Costs

- **Spin-off assumes control of prosecuting the patents at its own expense.**
- More often, the university will maintain some degree of control over ongoing patent prosecution and will require the spin-off to reimburse it for those costs.
- The spin-off may want to avoid being obligated to cover costs to seek patents in countries that are not commercially important to it or to be responsible for 100% of the patent costs if the spin-off does not have exclusive rights to the patents in all fields of use.
- The spin-off may want to closely monitor the activity of patent counsel to ensure that the company’s IP strategy is being implemented and that the associated costs are understood and approved in advance.

Non-Equity Remuneration Instruments

Royalties

- **A percentage, typically in the low single digits, of its revenues from sales of products that utilize the licensed technology.**
- In general, royalties are based on the amount of “net sales” by the spin-off of products or services that involve the use of the licensed patents.

Non-Equity Remuneration Instruments

Sublicense Revenues

- **Licenses grant the spin-off the right to sublicense the university technology to third parties.**
- In some cases, the university will simply earn the same royalty on sales by a sub licensee as it would on sales by the licensee.
- It is also common to allocate a share of the proceeds from a sublicense between the spin-off and the university.
- Numerous approaches to sublicense revenue sharing are possible – ideally, a spin-off should take care to negotiate one that fits both its preferred business strategy as well as likely alternative strategies.

Non-Equity Remuneration Instruments

Exclusivity fee

- Spin-off is committed to pay a certain amount to the university in exchange of the timeframe the spin-off is benefiting from the exclusive license

Non-Equity Remuneration Instruments

Milestone Payments

- Lump sum payments that are payable to the university upon the completion of certain major events
- Such as the closing of a significant financing, obtaining regulatory approval of a product or completing the first commercial sale of a product.

Quasi-Equity Participation Mode

- **Gives returns similar to equity without outright ownership**
- A common participation mode in start-ups financing but not that common in universities/spin-offs relations.
- Gives This form of financing allows the issuer flexibility and value.
- It is usually is based on a start-up/spin-off future cash flow projections.
- Unlike equity participation, quasi-equity participation may not be subject to dilution of ownership stake.

Quasi-Equity Participation Instruments

- Subordinated debt/loans
- Convertible notes
- Preferred shares/stock (?)
- Simple Agreement for Future Equity (SAFE)
- Royalty-like payments on liquidation events for shareholders

Quasi-Equity Participation Instruments

Subordinated debt/loans

- **License for revenue that is deferred as an interest bearing loan**
- Have a lower repayment priority than senior loans but a higher one to preferred shares or equity.
- In the event of default all other lenders are repaid before the holders of subordinated loans.
- Since the interest payments as well as the capital repayments are subordinated, the risk of loss in the event of default is substantially higher than for senior loans but lower than for equity.
- Generally, there is no collateral (security) required so interest rates are higher to cover the higher risks.

Quasi-Equity Participation Instruments

Convertible Notes

- **A form of short-term debt that can convert into equity at the right time, giving the university momentary ownership (typically in conjunction with a future financing round)**
- The investor would be lending money to a start-up/spin-off and instead of a return in the form of principal plus interest, the investor would receive equity in the company

Quasi-Equity Participation Instruments

Preferred Stocks/Shares

- **Equity-like instruments that ranks senior to common shares upon profit distribution and upon liquidation.**
- Entitle the holder to a fixed-rate dividend, paid before any dividend is distributed to holders of ordinary shares.
- Holders of preferred stock also rank higher than ordinary shareholders in receiving proceeds from the liquidation of assets if a company is wound up.
- Holders do not have the right of strategy and direction of the company.
- Preferred shares are characterized by high risk and high return

Quasi-Equity Participation Instruments

SAFEs

- **SAFEs are like convertible debt but are converted to equity at a discount to subsequent equity valuation**
- valuation at which SAFEs convert is capped at a certain amount.
- investment contract between a start-up company, and an investor that gives the investor the right to claim equity in such entity upon certain triggering events, such as future equity financing (usually led by a venture capital fund) or sale of the entity
- Compared to convertible notes, SAFEs may have similar conversion features to convertible notes, but lack the maturity date and accruing interest.

Quasi-Equity Participation Instruments

Royalty-like payments on liquidation events for shareholders

- The licensor gains a portion of any liquidation gained by the founding team due to their initial holdings
- Subject to dilution and grants similar rights as equity
- Difficult to manage

Final notes

- It is important to align approaches with institutional strategy, regulations and capabilities
- Even MENA institutions with explicit regulatory instruments to own shares struggle with this and normally fail to do so
- A preference to ownership without the capability to do so will kill all spin-offs
- There is normally a non-written researcher privilege towards creating spin-offs ahead of licensing