

Session 1: Building & operating a TTO

**Organizational structure and staffing,
Strategic Positioning of TTO within an Institution,
Activities, workflows and institutional processes**

Richard Cahoon

Who's Speaking



Richard Cahoon PhD

Richard Cahoon, Adjunct Professor at Cornell University, specializes in technology transfer, IP management, and commercialization. With over 30 years of experience, he has advised governments, universities, and global organizations on innovation ecosystems, IP strategy, venture creation, and technology-driven economic development in over 25 countries.

Affiliation

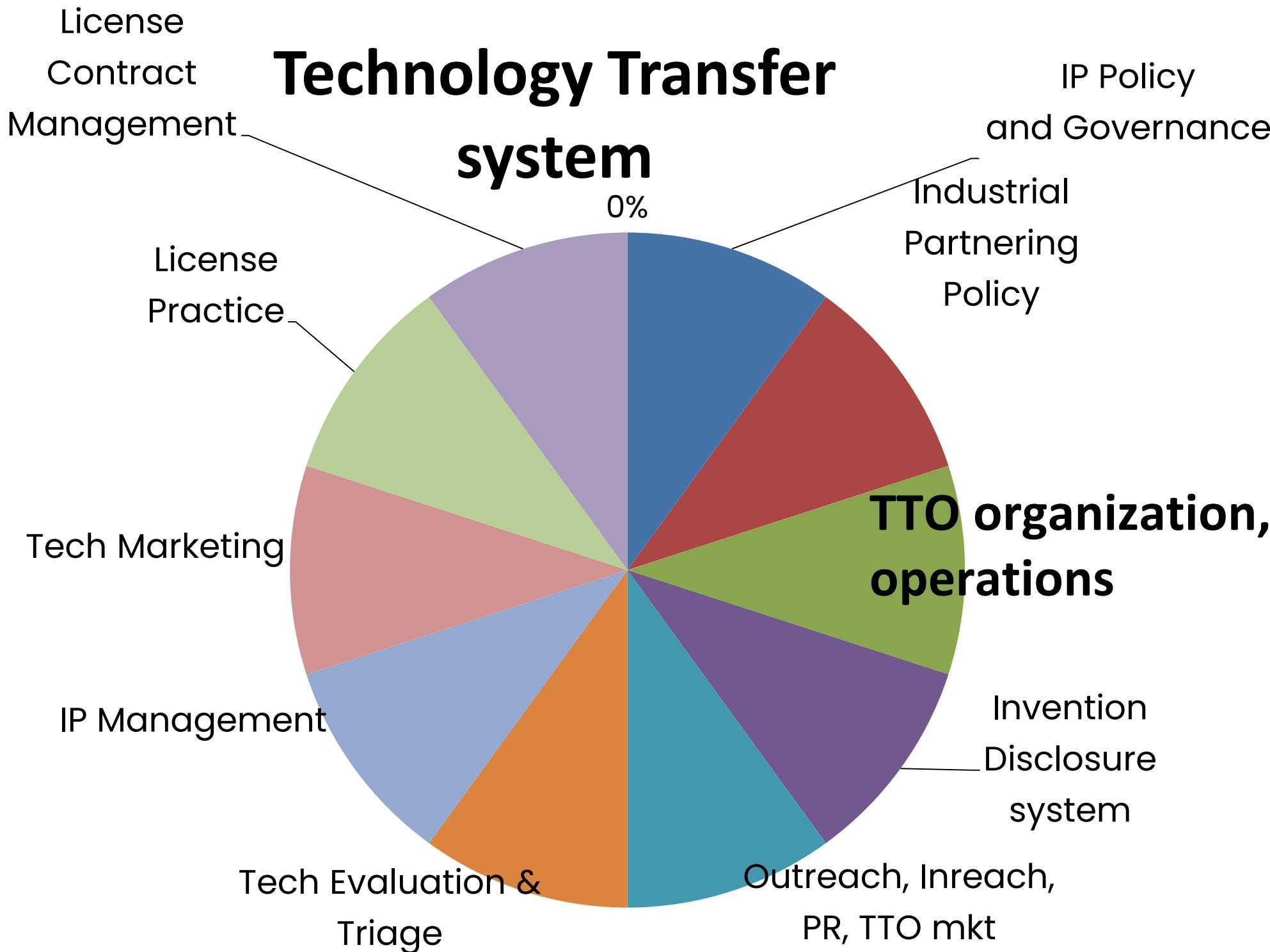
- Past Association of University Technology Managers, USA (AUTM) Board of Directors
- President, BioProperty Strategy Group, Inc.
- Head of Tech Transfer, Cornell University



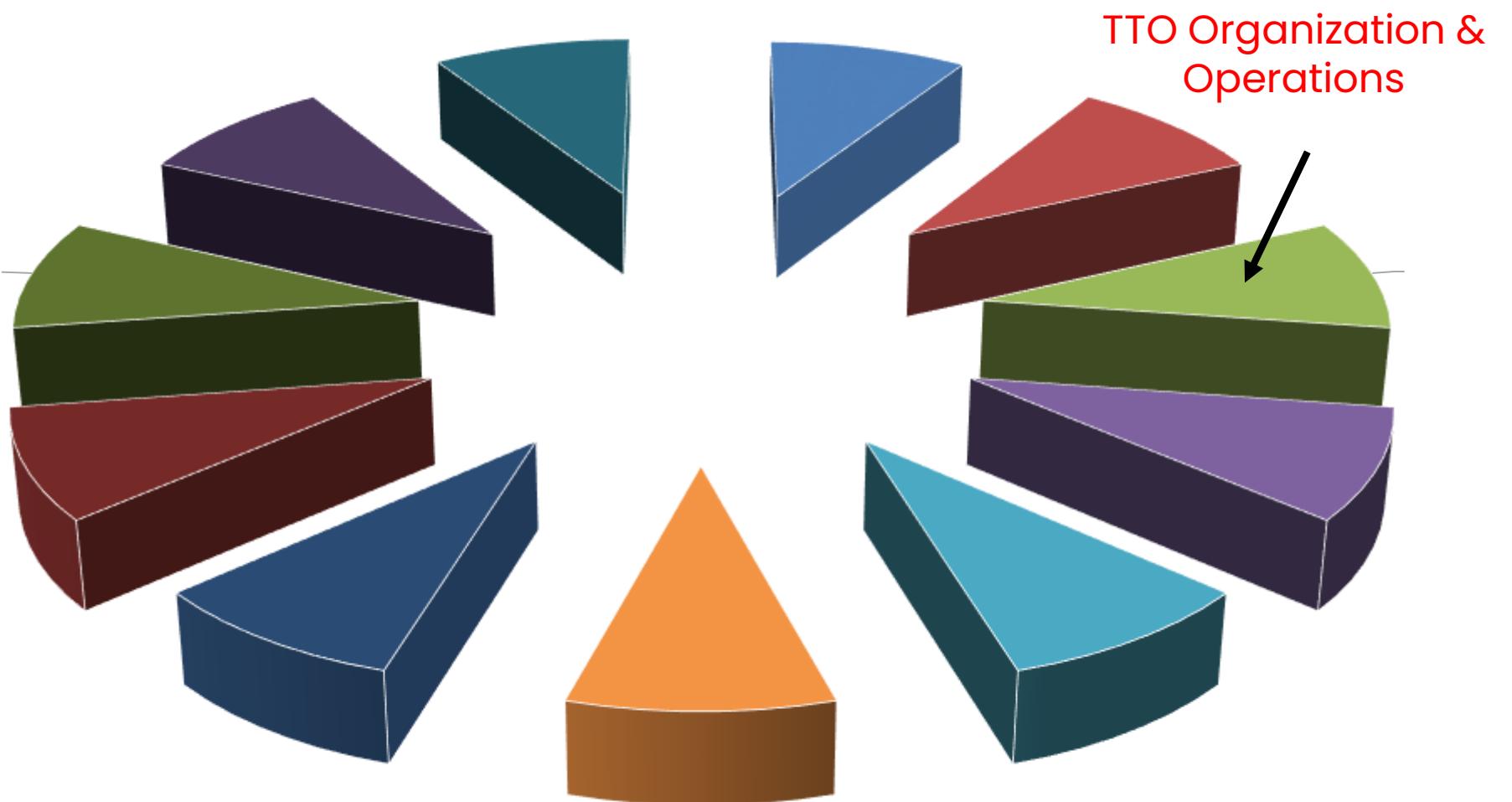
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Building & Operating a Tech Transfer Office (TTO)

- Organizational structure and staffing
- Strategic Positioning of a TTO within an Institution
- Activities, workflows and institutional processes



Technology Transfer



Organizational structure

- Is there an IP Policy?
- Is the TTO a separate office/function or part of some other function (e.g. sponsored research contracts)
- Is the TTO a centralized IP function at the institution?
- Is there a Director/Manager?
- Who does the TTO report to?
 - VP for Research? VP for Finance?
- Does TTO have signature authority?
(separation of license transaction and institution)
- Relationship between TTO and Legal Office?
- Is there a governing or advisory body (e.g., IP committee)

Organizational structure

- Administration infrastructure?
HR, business expenses
- Are TTO personnel institutional employees?
- What is the funding model for the TTO?
share of license revenue?
budgetary support?
combination

TTO Staffing

- Full-time Director/Manager?
- Operational model:
 - Tech Manager as pivotal
 - Case Management Team

Technology Transfer Office **basic staffing:**

- Director/Manager (hopefully Full-time)
- Tech Managers (turn-key invention management)
- Administrative Manager
- Support Staff

Building and Operating a TTO

Positioning the TTO within the Institution

- » Is tech transfer centralized at the institution?
(IP Policy is comprehensive & unified across institution)
- » Who does the TTO report to?
- » Research administration? Financial administration
- » Story: the “battle for the soul” of Cornell’s TTO
- » The KEY: A compelling story that Tech Transfer is an integral part of the overall mission of the institution:
 - doing the public good
 - bringing technology to fruition to solve real problems
 - creating economic development
 - enhancing the institution’s reputation

Building and Operating a TTO

Positioning the TTO within the Institution

- Relationship of TTO to institution's legal office
- TTO ALWAYS gives educational and research missions, and academic traditions of the institution priority over IP/tech transfer
- Signature authority (IP docs, license agreements)
- TTO should keep institutional leadership at arms-length from IP negotiations transactions
- TTO should always take the lead in negotiation of IP licenses (not inventors)
- IP Policy should give clear ownership to institution for any patentable invention made by institutional "personnel" in the "course of their institutional duties"
- TTO should prioritize technology advancement and dissemination, and the public good over revenue generation

Building and Operating a TTO

Positioning the TTO within the Institution

- The TTO should emphasize the critical role IP/tech transfer plays in getting inventors' inventions invested-in and developed to solve problems

NOT

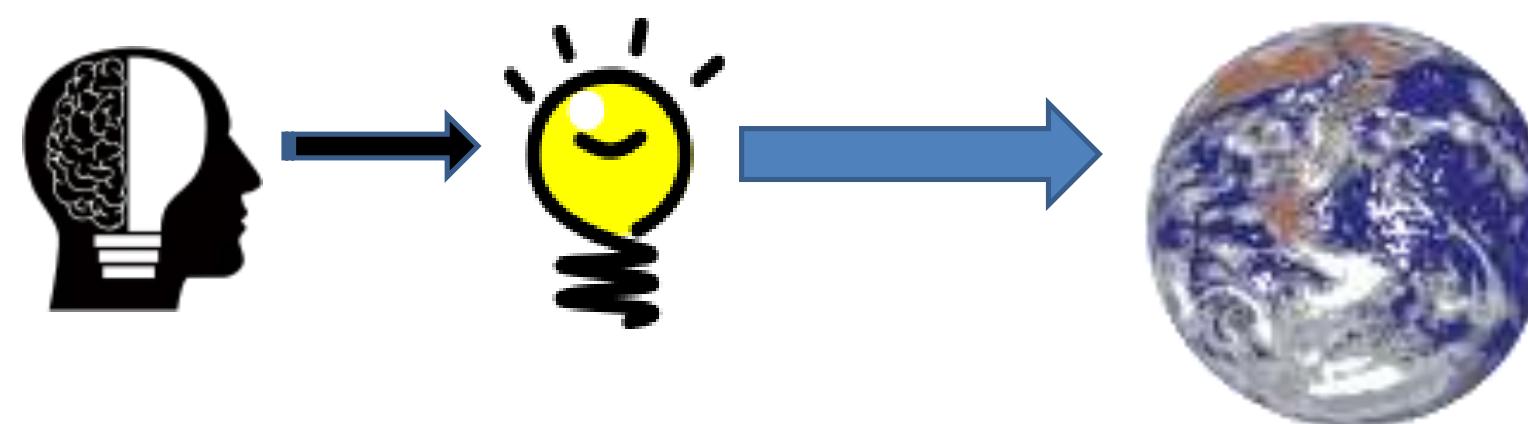
as a pathway to realizing significant revenue



The goal of IP-based, technology transfer from Public Sector Research Institutions should never be revenue generation....



The focus is on technology development, advancement, dissemination, a primary part of the university mission



Activities, Workflows and Institutional Processes

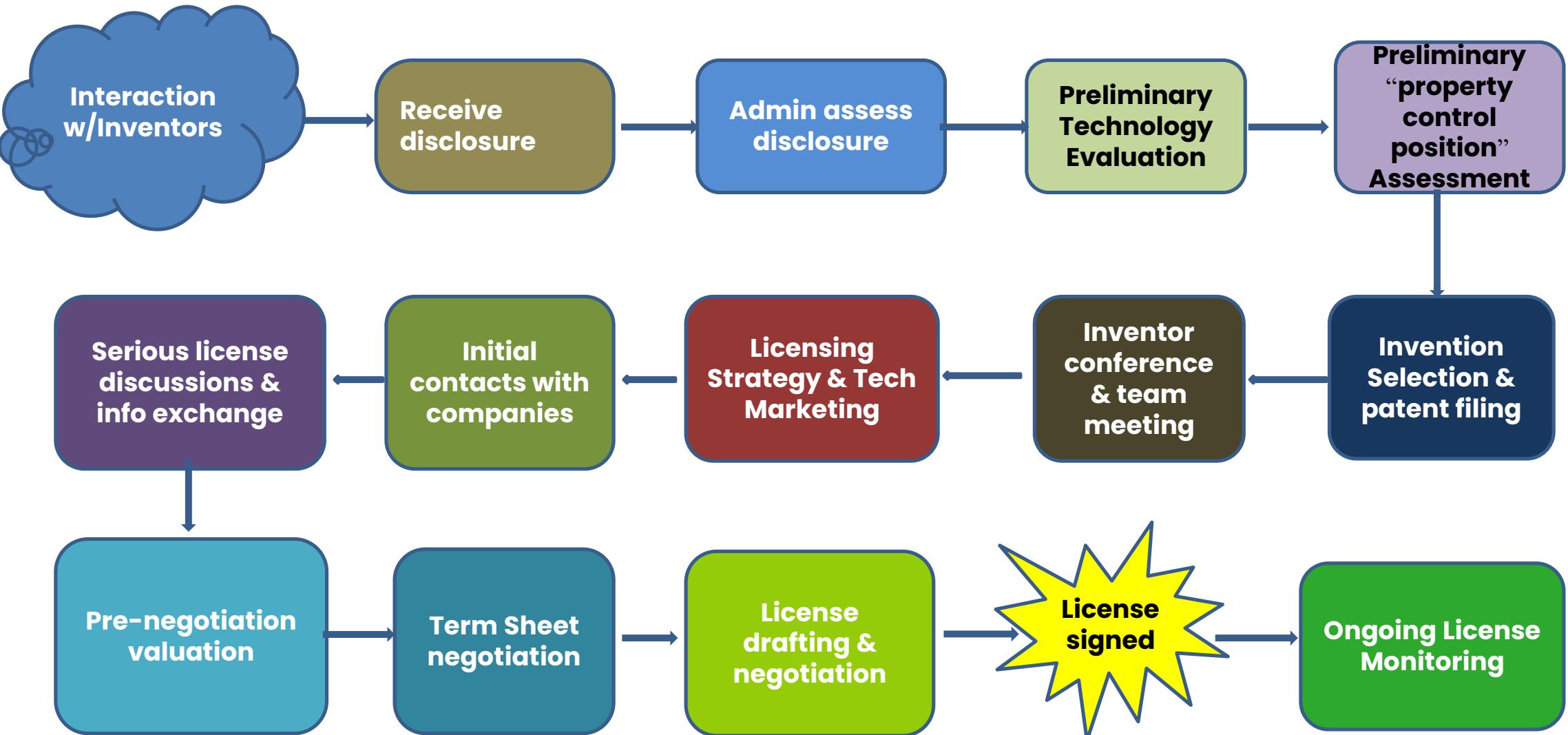
Activities, Workflows, Institutional Processes

- The Invention Disclosure as focal point
- TTO/Inventor engagement
- Invention evaluation, triage & selection
- IP management
- Tech Marketing
- License negotiation and consummation
- License monitoring
- Revenue collection and distribution to recipients

Technology Transfer Office responsible for:

- All IP Policy implementation
- Manage Invention Disclosure process
- Relationship management with inventors
- Invention evaluation & triage
- Patent filing, prosecution, maintenance
- Other IP management
- Technology Marketing, proactive “partnering”
- License negotiation, drafting, signing
- Contract monitoring and management
- Revenue collection and distribution
- IP Policy “troubleshooting”

The IP/invention Commercialization Process



- » Is there a Director?
Full-time?
- » What is the number and skill-level of staff?
(#Tech Mgrs linked to # disclosures/yr)
 - * Rule of Thumb: Tech Manager to have no more than 24 **new** Invention Disclosures per year
- » Is there sufficient administrative staff support?
(linked to IP/TT activity)
- » Sufficient business infrastructure
(records, accounting, contract management, etc.)

TTO Organization

Key role of Tech Manager

The person responsible for shepherding an invention through the IP/tech transfer process

Typically:

- Science/engineering education & background
- Business experience a big plus
 - entrepreneurial, big company, SME
 - business development (also a big plus)
- Good “people skills”
- Analytical & Creative
- Optimistic, proactive, doer
- Makes things happen

TTO Organization

Key role of Tech Manager

There are two kinds of people in the world:

those who **CAN DO**

and those who **CAN'T DO**

There are two kinds of **CAN DO** people in the world:

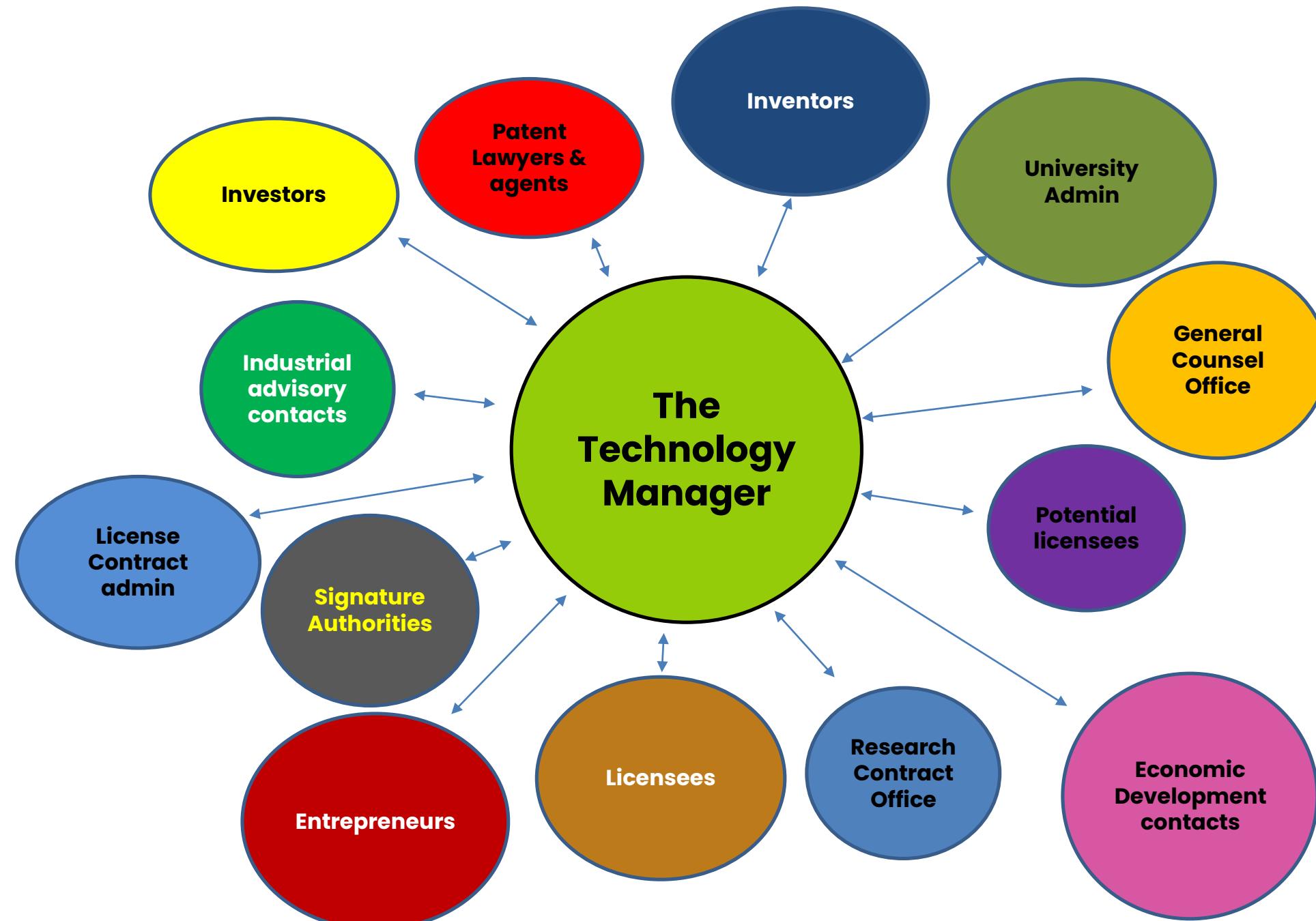
those who **CAN DO**

and those who **WILL DO**

Tech Managers are **CAN DO** and **WILL DO** people

In a typical model, the Technology Manager:

- Has “turn-key” responsibility for each assigned invention disclosure
- Responsible for shepherding invention through entire process
- Primary relationship with inventor(s)
- Actively markets/promotes/develops the IP/technology opportunity
- Primary contact with potential licensees
- Negotiates and drafts license contract
- Remains “ombudsman” for relationship and contract



The typical model:

Tech Manager has “turn-key” responsibility for each assigned invention disclosure

Other models and variations

- › “Committee” approach (not recommended)
- › Tech Transfer Team (Tech Manager as QB, Dir. as Coach)
- › Tech Manager “deputy” in a Dept or Center

Small TTOs: Director also a Tech Manager

Large TTOs: Director is not a Tech Manager

Some recent trends:

- Tech Marketing Assistants
(an acknowledgement of Tech Marketing importance)
- Start-up Specialists
- Outreach to “non-traditional” sources of inventions
(arts, architecture, music, design, etc.)

In-house legal?

Authority to retain and manage outside lawyers?

What is focus of Tech Mgrs time? (analysis, marketing, CRM, entrepreneurship, etc)

A budget for business development/tech marketing?

What is the funding mechanism for TTO?

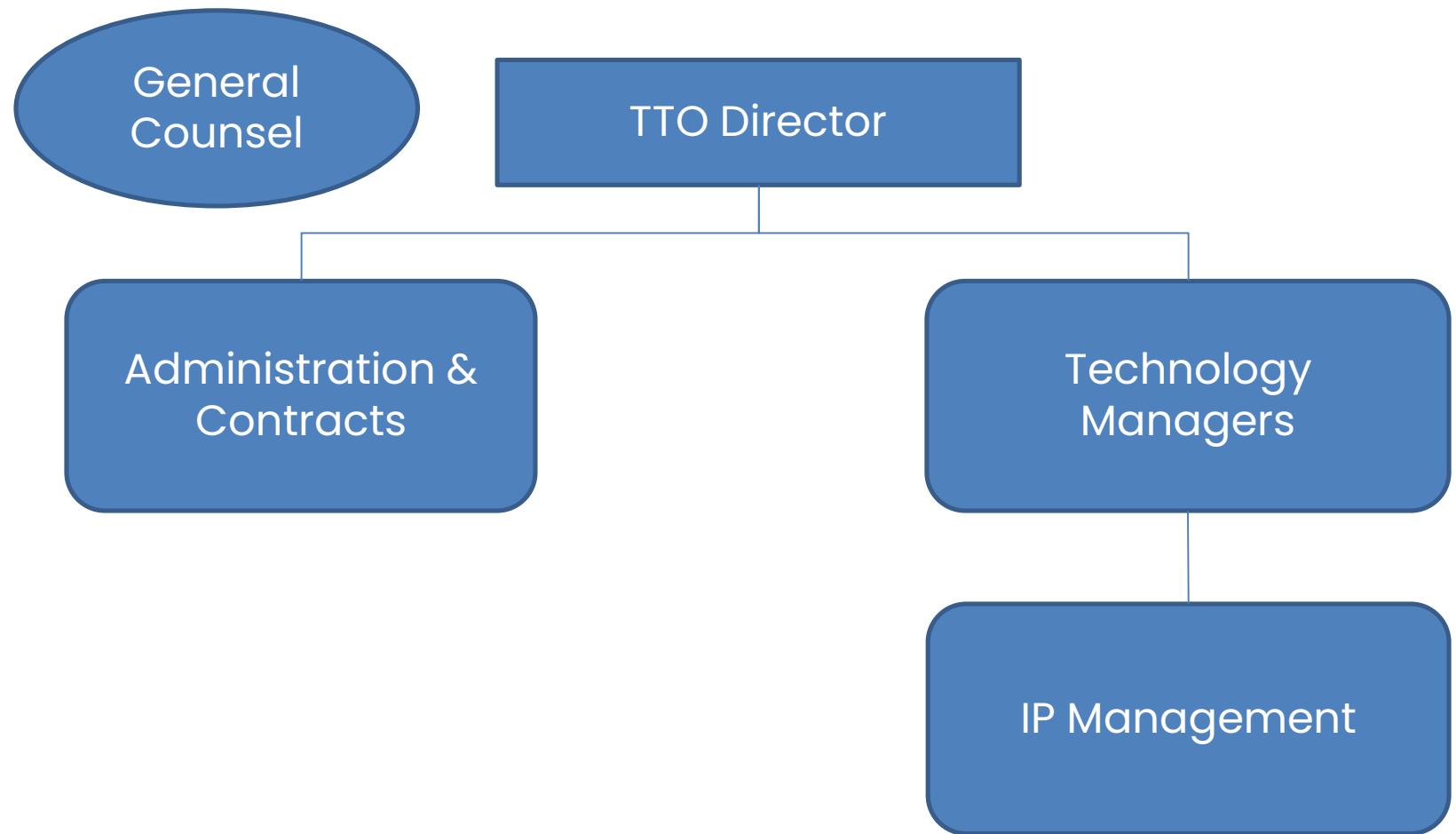
TTOs often share admin infrastructure with other departments

What is the funding mechanism for TTO?

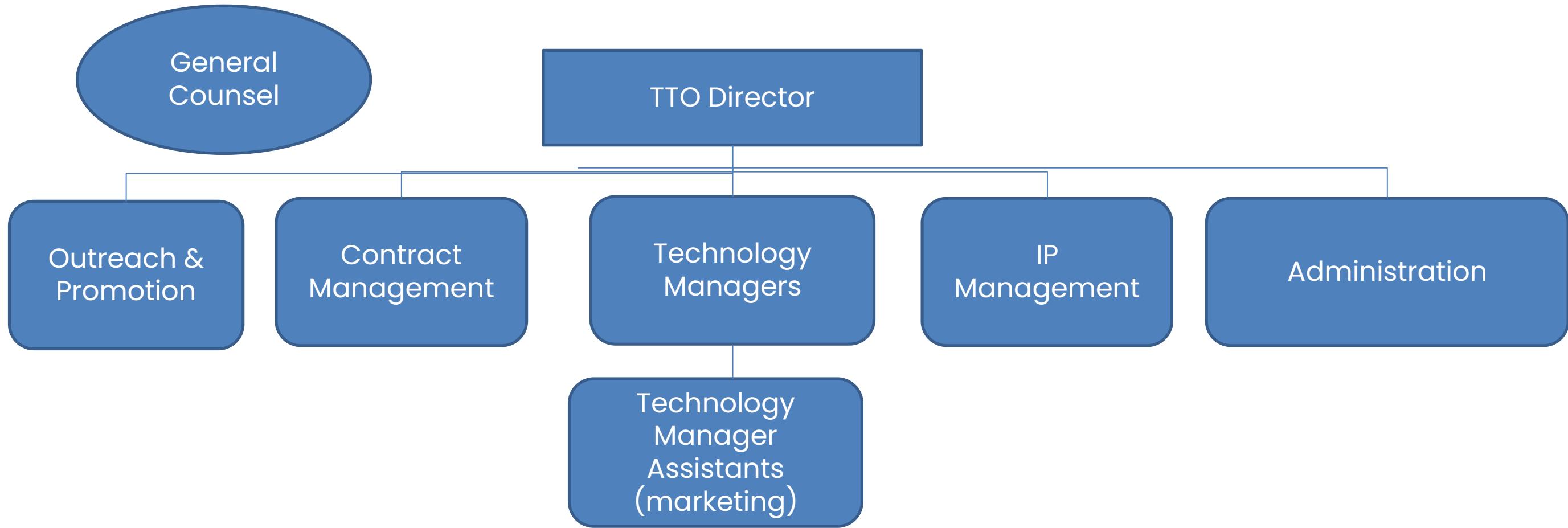
- An item in an executive's budget?
- Guaranteed share of license revenue?

Issues to consider:

- Start-up and early stages vs. maturity
- Sustainability vs. variability
- Salaries and stability
- Sufficient funding for IP protection
- Buffering the TTO against short-term financial goals



Cornell University 1990
Technology Transfer Office, Functions/Departments
Personnel: 8



Cornell University 2010
Technology Transfer Office, Functions/Departments
Personnel: 35

- Fact of Life: there's never enough staff
- The Cornell example:
- TTO requests for more staff resulted in ROI projections (significant \$ expectations of institution leadership)
- This proved to be a major mistake
- Focus on service & **IMPACT** not revenue return
- Recruit, hire, train, retain the right people for the job
- Focus on optimizing the process

Hire, train, retain the right people for the job

Hire people with demonstrated will-do track record

Tech Mgrs: **Attitude** as important (maybe more?) as aptitude
business development mindset;
proactive, creative,
interpersonal skill, high EQ
optimistic
resilient and resourceful
sense of humor

Since there's never enough staff:

- Requires careful thought about where/how time is invested
 - e.g., invention analysis vs. marketing;
more good deals - rather than fewer "perfect" deals
- Work towards efficiency
- Never forget key relationships
 - (inventors, potential/existing licensees – make them feel valued)
- Evolve to task differentiation
- Don't lose responsiveness (use efficient communication)
- Don't neglect PR, outreach, promotion
 - inspire and tell the TTO story

How to manage this situation: Never enough time

- Triage and select only viable technologies
(with a reasonable chance to be licensed)
- Support systems – administrative staff to help with disclosures, IP management, contracts
- Manage your time – it is your most valuable asset
 - do not waste it
- Understand your role: facilitator, promoter
- Remember your role as catalyst
- Leverage your efforts by getting others to help
(inventors, department staff)
- Have a reference number system for managing the cases (e.g., a docket system)

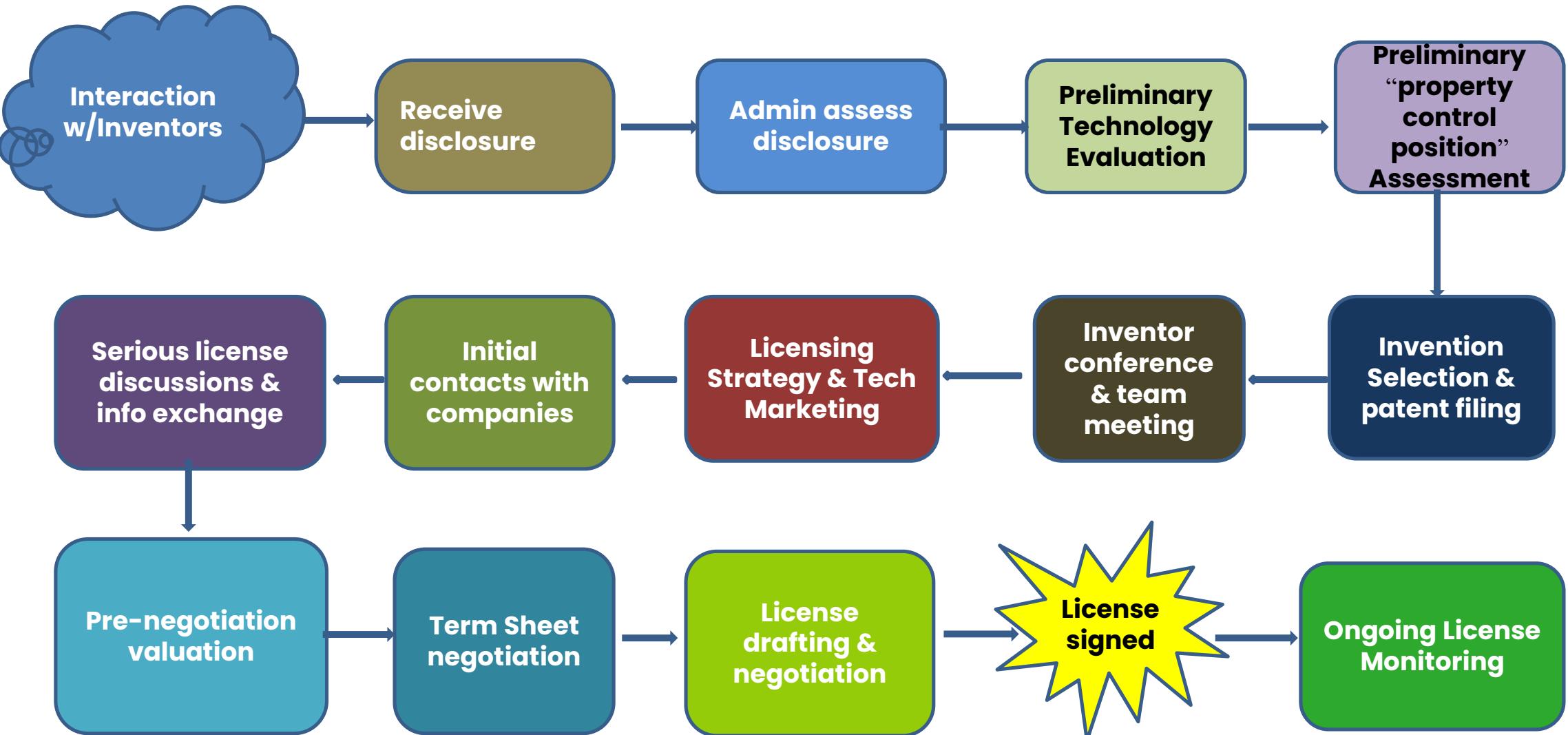
How to manage this situation: Never enough time

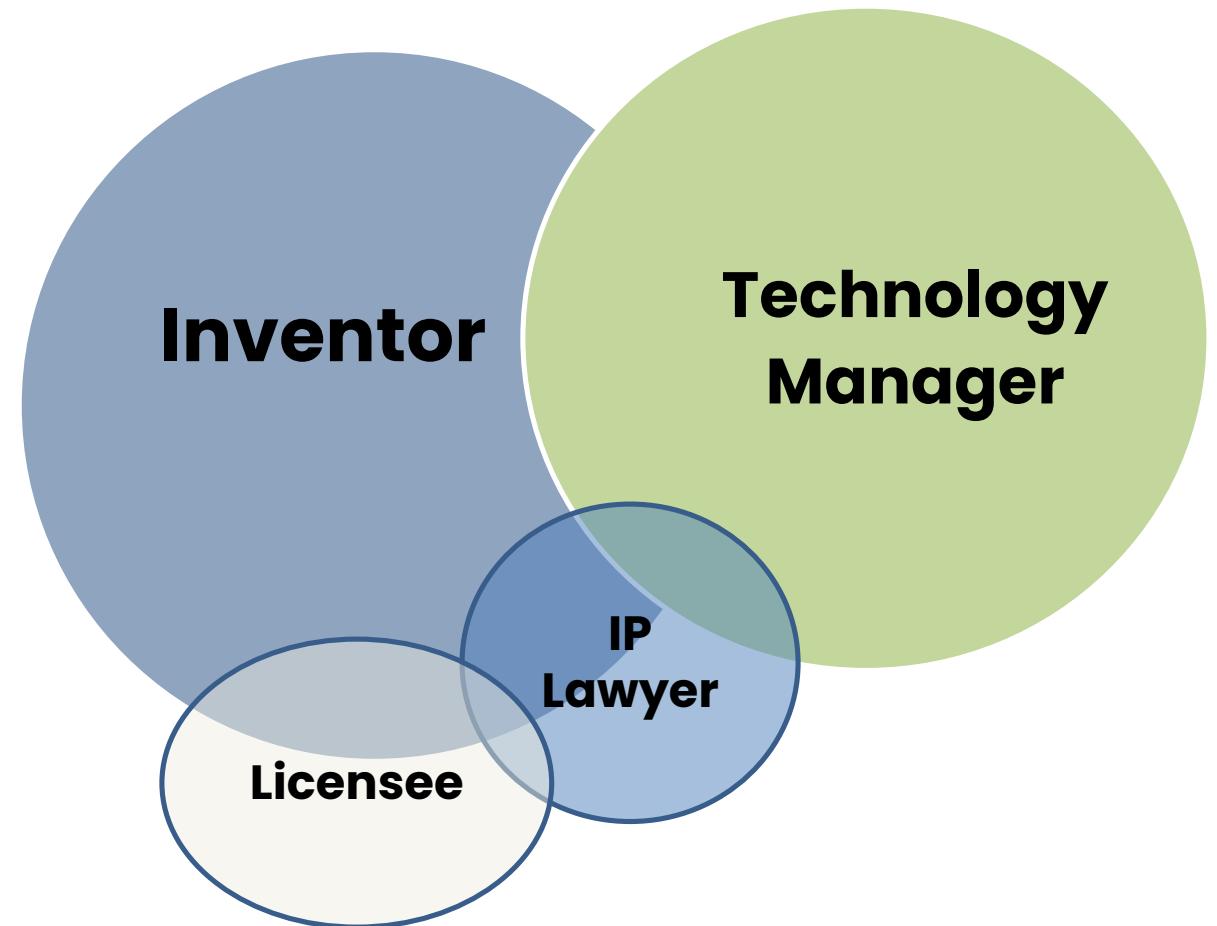
- In each portfolio, certain inventions naturally take some precedence:
 - New Invention Disclosures – priority
 - Filed, not licensed – highest priority
 - Filed, licensed – low priority
- In each portfolio some technologies are more valuable and deserve more time

The Technology Manager

- » “Manager” doesn’t fully convey the creative, visionary, entrepreneurial aspect of the role
- » More like a symphony conductor.... or
Impresario
Initial entrepreneur
Champion
Catalyst
Initiator
Facilitator
Architect
Creator

The IP/invention Commercialization Process





Tech Manager orchestrates these relationships

Remember your true client:

The Technology

- Its success is your goal
- If you fail, it can't help the world
- Always look out for its best interest

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TTO Organization & Operations Small vs Large TTO Perspectives

How to manage this situation: Never enough time

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 - Invention disclosures – priority
 - Filed, not licensed – highest priority
 - Filed, licensed – low priority
- In each portfolio some technologies are more valuable and deserve more time

How to manage this situation: Never enough time

- Maintain tech marketing tracking logs
- Consider using students to help with technology marketing
- Don't create problems – solve them
- Keep things simple
- Look for opportunities to market multiple technologies in same effort
- Do periodic reviews of your whole portfolio (do it in a team setting?)
- Establish "trigger events" for each technology (patent filing, office action)

- Director has dual focus on TTO strategic management – and tech management
- Hiring good Tech Mgrs is critical – self starters, generalists, business development mindset
(right attitude is essential)
- Requires development of good working relationship with inventors
- Triage & Selection of viable technologies of utmost importance
- Know the art: each inventor perceives that their invention is your most important one; don't spend too much time on any one invention

- Seek admin support outside the TTO (VP Office?)
- Be on the lookout for allies across campus
- Strive for a very early stage tech development fund
- Engage in the local/regional innovation ecosystem
- Be a good colleague



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