

# **Guidebook of IP/Technology Transfer**

# **Track 3**

## **Advanced-level Tech Transfer Professional**

### **Topic 3.14**

#### **Managing Your Time: The Art of Technology Portfolio Management**

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# The Art of Technology Transfer Management

**Requires management skill from two perspectives:**

- Managing individual technologies  
(and their inventors)
- Managing a technology portfolio

# The Art of Technology Transfer Management

## Managing individual technologies

- The essential expertise of the Tech Transfer Professional
- A successful outcome (i.e., commercial use rights of an IP/invention to a capable implementer via a license contract with “win-win” terms
  - depends on the TTPs ability to manage the IP/invention from start to finish
- The TTP must understand the overall process, a preferred “trajectory” to a successful outcome, and be capable of making the **right decision at the right time** to maintain the proper trajectory for success

# The Art of Technology Transfer Management

## Managing inventors

- The TTP should proactively manage the expectations, involvement, and interests of inventors
- Each inventor should feel like they are important clients of the TTP – regardless of how the TTP ranks it
- All inventors are created equal. Don't forget this. Treat all inventors as equals – no more, no less
- However, inventors in positions of power and authority should probably receive some extra attention in order to further the cause of tech transfer and the TTO

# The Art of Technology Transfer Management

## Relationships with inventors

- Inventors are often quirky and idiosyncratic  
that's what makes them inventors!
- Learn to appreciate the quirks and unique personality traits of inventors – avoid judging, pigeon-holing, or categorizing in a derogatory manner
- However, there are always a few problematic inventors
- Problematic inventors can easily take more TTP time than is reasonable;
- The TTP needs to develop the art of managing such problematic inventors

# The Art of Technology Transfer Management

## Relationships with inventors

- Always be respectful of any inventor's time – do not waste it
- Avoid talking too much – avoid telling “war stories”
- Listen more, talk less
- Ask the inventor about the invention, be interested in how it fits in their professional life; be interested in them as individuals.
- Enjoy light dialog and good conversation
- Small doses of light humor, at appropriate times is a good idea

# The Art of Technology Transfer Management

## Relationships with inventors

- Always be authentic – don't try to appear more knowledgeable than you are
- Do lots of homework, study, and preparation work to bring value to each conversation
- If you don't know an answer – say so and go find the answer
- Converse with inventors as you would if you invited them to chat in your living room – relaxed, conversational, friendly

# The Art of Technology Transfer Management

## Relationships with inventors

- Suggestion: find some area/topic that you are particularly interested (technical, creative, social, etc); dedicate yourself to becoming knowledgeable in that area/topic
- It would be a good idea if this area/topic was also related to your tech transfer profession
- Always be kind. Look for opportunities to do some acts of kindness for inventors, those around inventors, colleagues, TTO staff, etc.

# The Art of Technology Transfer Management

- The TTP should develop a “sixth sense” of when an IP/invention needs attention
- This can be developed by making a case list, and reviewing it often
- As you systematically scroll through your case-list, know the status of each:
  - (IP, tech development, marketing, licensing, communication with inventors, and with companies)
- You will run across cases that you are not certain of their status – put these on your “to do” list
- If any on the “to do” list involve a needed call to an inventor or potential licensee to “check in”
  - make these calls a priority

# The Art of Technology Transfer Management

- Using external “triggering” events/actions is a useful strategy to stay on top of things– but, don’t let IP/invention linger without attention for too long
- Triggering events can include:
  - patent office action
  - new technical development from inventor
  - new patent filing, patent issue
- Every IP/invention should have its own “next steps” towards progress:
  - What are they?
  - What can the TTP do to make them happen?

# The Art of Technology Transfer Management

**Every IP/invention should have its own “next steps” towards progress: what are they? What can the TTP do to make them happen?**

- This ability – to envision, imagine, create an effective pathway forward – is the key to TTP success
- Meditate on this:
  - what are the best next steps for moving the IP/invention forward?
  - how can I use my knowledge, tools, resources, and connections to create positive action?
- Then, do it: take action .....

**MAKE THINGS HAPPEN**

# Managing a Technology

**Is the core expertise of the Tech Transfer Professional**

Nothing is more important than the management of an individual invention

For each invention submitted to the TTO, a successful outcome depends on the TTP's ability to:

- work cooperatively in rapport with the inventor
- evaluate the technical qualities of the invention
- assess the IP potential
- understand its market relevance and value proposition
- design and implement a commercialization strategy
- implement a tech marketing campaign
- successfully negotiate a win-win license agreement

# The Art of Managing a Technology

**Relationship with inventors is critical. In interactions with inventors, the TTP should:**

- Make each inventor feel respected and that they are in the hands of a professional
- Strive to maintain a friendly relationship
- Be a good listener (more listening, less talking)
- Be responsive – i.e., timely

(inventors complain TTPs are slow in respond to emails, texts, calls)

- Remain open minded and receptive to inventor's thoughts, ideas, opinions
- Act so that inventors perceive their invention is one of your most important ones

# The Art of Managing a Technology

**Relationship with inventors is critical.**

**In interactions with inventors, the TTP should:**

- Keep good notes on discussions with inventors

This will allow you to remain engaged and knowledgeable across many different technologies and inventors – over significant time periods

- NEVER be forgetful about an invention/inventor; this is an “unforgiveable sin”
- Be an effective ombudsman – have answers or get answers for inquiring inventors
- Avoid being (or being perceived as) a bureaucrat

# As the Manager of a Technology

**The TTP is like a symphony conductor.... or**

- Impresario
- Initial entrepreneur
- Champion
- Catalyst
- Initiator
- Facilitator
- Architect
- Creator

# Managing a Technology

## Like a symphony conductor or Impresario

- The TTP doesn't play all the instruments, just knows how the music should be played, keeps the process/music flowing according to the musical score (i.e., the IP development plan)
- The TTP is always thinking of how to move the technology along its path of development think two or three steps ahead, and start setting the stage to achieve those two or three steps
- The TTP knows how and when to bring in other players and resources into the process

# Managing a Technology

## ***As the initial entrepreneur, the TTP:***

- Develops a vision for commercialization of the invention
- Conducts research that will confirm market relevance
- Engages with any resource that can be helpful in any step of the commercialization process
- Is always on the lookout for a potential CEO, COO, Advisory Board members, professional service providers, and any other relevant talent
- Keeps his/her eyes open for potentially interested investors
- Develops some aspects of an early business plan

# Managing a Technology

**Along with the inventor, the TTP is *a champion* of the technology and inventor. In this role, the TTP is:**

- Optimistic
- A cheerleader for the invention, the inventor, and inventor's research activities
- Advisor and helpful critique
- Honest and encouraging
- A promoter and advocate for the invention and inventor, at all times

# Managing a Technology

## *As a catalyst*, the TTP:

- Understands he/she is not an inventor or implementer of commercialization, but a connector of these actors
- Considers how to best use their limited time to cause positive action to take place
- Is always looking for opportunities to make a serendipitous connection, introduction, etc. between actors and resources involved in commercialization
- Doesn't get "bogged down" in details of any one technology and its commercialization process
- Must remain able to move easily and quickly between inventions and inventors

# Managing a Technology

***As an Initiator,* the TTP knows he/she must always be willing to take the initiative to make things happen:**

- reach out to inventors
- conduct technical/IP/market assessments
- recommend filing (or not)
- begin a tech marketing campaign
- contact potential licensees
- be the first to draft a Term Sheet
- keep negotiations moving and “on the front burner

# Managing a Technology

## ***As a Facilitator, the TTP:***

- Understands how to “grease the skids”, to “lubricate the wheels” to make any aspect of commercialization go easier, quicker
- Is always looking for opportunities to create an opportunity, to lower barriers for action, to make it easier for actors to connect
- Often makes introductions among and between inventors and entrepreneurs, entrepreneurs and investors, and any other actors in the process
- Naturally makes connections between inventors and outside IP professionals

# Managing a Technology

## *As an Architect, the TTP*

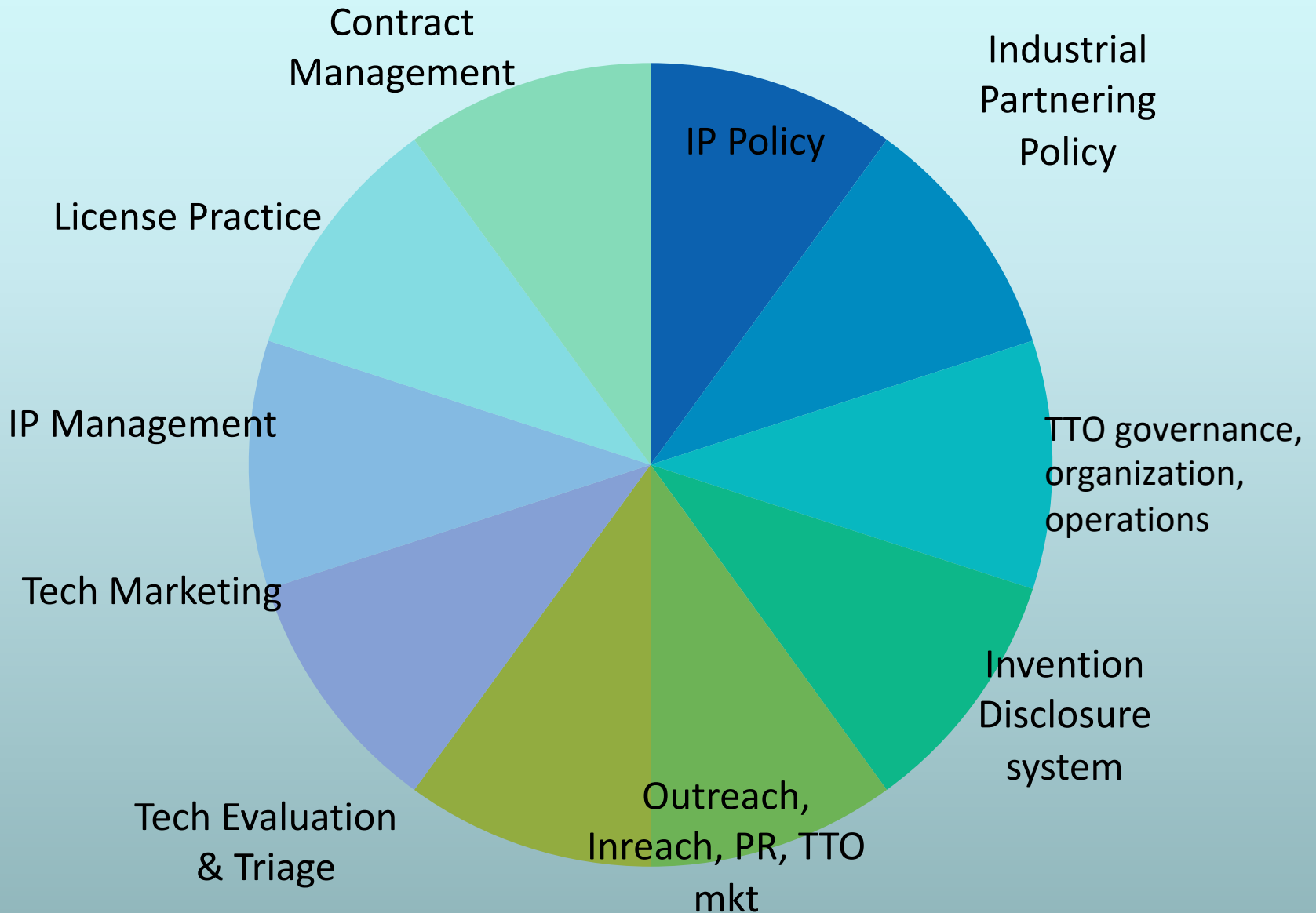
- Envisions and then designs a commercialization pathway for the invention
- Designs an effective IP management strategy that fully integrates an invention's inventiveness, market relevance, and potential value proposition(s)
- Creates and implements a technology marketing campaign
- Designs a value capture envelope that will be embodied in a license agreement – and creates a pathway to realize that outcome

# Managing a Technology

**The TTP should keep the big picture in mind when managing an individual technology and the portfolio:**

- The tech transfer process is multifaceted, with numerous “moving parts”
- The TTP should understand the role that all these parts play in managing one or all his/her technologies
- If the TTP doesn't understand some part, find out

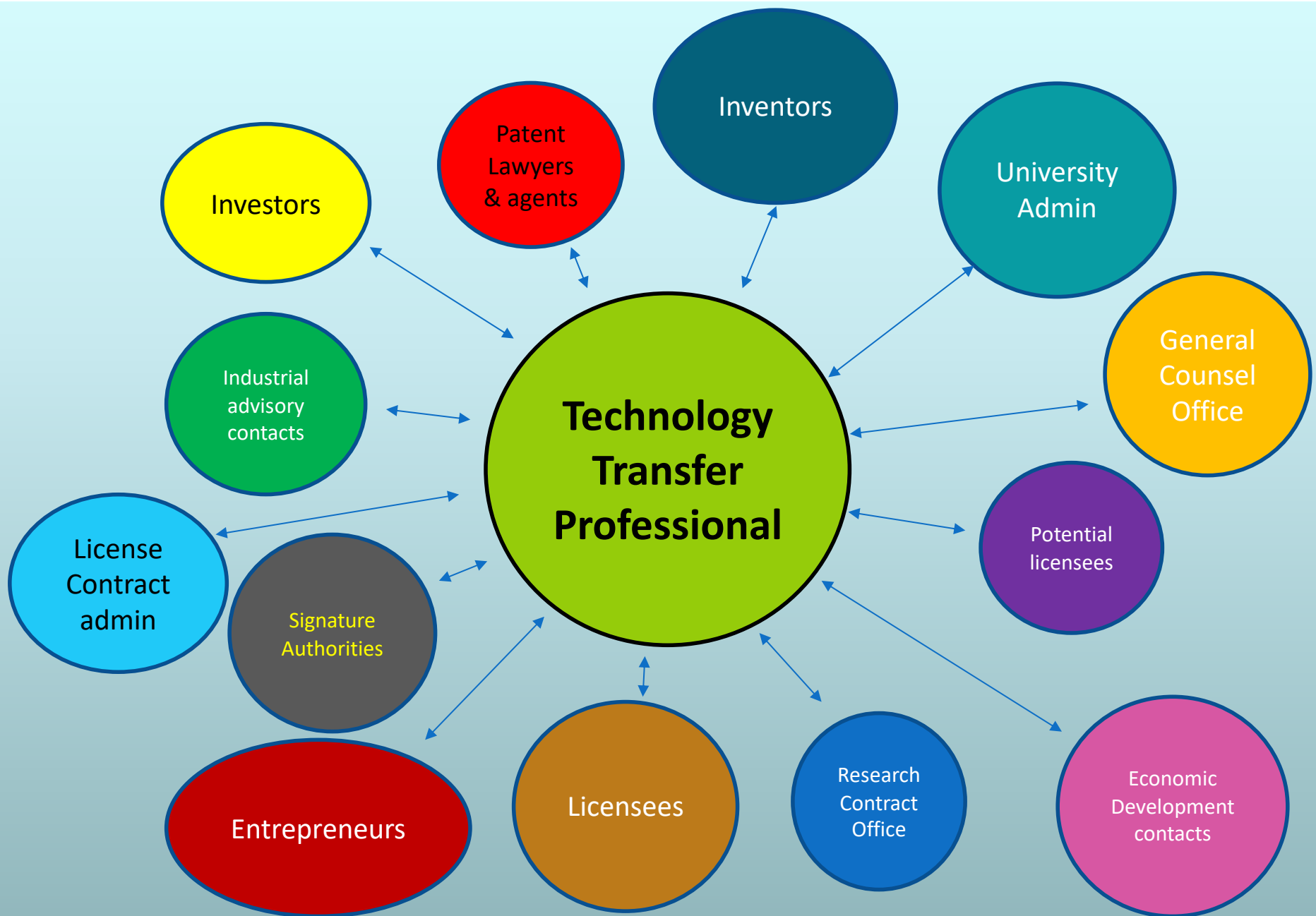
# Technology Transfer System



# The Managing a Technology

**The TTP should keep the big picture in mind when managing an individual technology and the portfolio:**

- The tech transfer process involves multiple entities, many different professional contact
- The TTP should understand the role that these entities and relationships play in managing any single IP/invention, as well as his/her whole portfolio



# Managing a Technology

**The TTP should keep in mind the step-wise, tech transfer process that most IP/inventions will follow**

- Rapport with inventors and will-be inventors
- Receipt and processing of invention disclosures
- IP and market relevance assessment
- IP management and tech marketing
- Dialogue with potential commercialization partners
- License negotiation, drafting, signing
- Post-signing license management

**Keep track where each IP/invention is in the process**



## The IP/invention Commercialization Process

# The Art of Managing a Technology

## TTP's relationship with the technology is critical

- Be curious, invest the time to learn about it
- Be interested
- Find out what's "cool" about the invention
- Develop a "Technology Vision"

What could it do? Where does it fit?

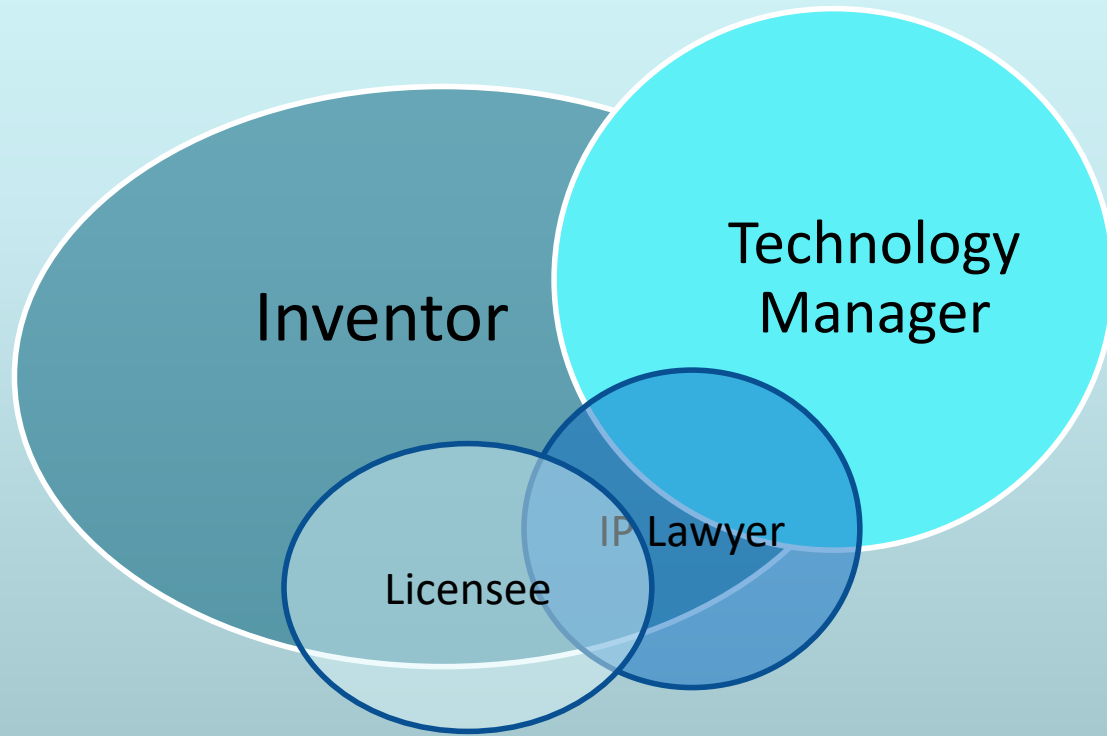
- Have a game plan for its path to licensing
- Every day, ask: "what can I do today to move the technology along its path?"
- Do it today

the TTP should NOT be a procrastinator!

# The Art of Managing a Technology

## **TTP's relationship with the technology is critical**

- The TTP is the pivot point for the critical intellectual integration of inventor, IP professional, potential commercialization partner (licensee)
- The TTP is not the “boss” or “supervisor” and should not dictate; however, the TTP must control the ultimate outcome of the process
- Effective people (i.e., professionals) management skills is essential



**Tech Transfer Professional Orchestrates these Relationships**

# The Art of Managing a Technology

**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

\*While it's true that the TTP's most important client-person is the inventor, acting as if the technology is the primary client will produce the best outcome for all concerned

# The Art of Managing a Technology

- Maintain momentum (don't forget it)
- Know when to let it rest for awhile  
(like a good wine?!)
- ALWAYS be open to serendipity
- Use your Whole Mind:  
Analytical (left) and Creative (right)

# Managing a Technology Portfolio

# The Art of Technology Transfer Management

## Managing a technology portfolio

- Is the essential “macro” or “meta-management” skill that successful TTPs must master
- The fact is: TTPs must simultaneously be fully responsible for multiple IP/inventions
- Like a juggler and his balls, the TTP must NEVER let an IP/invention “fall to the floor”

# Managing a Technology Portfolio

**The first key question: how many cases are you managing?**

1-5

5-15

15-30

30-50

50-100

100+

How you manage your portfolio depends entirely on how many you are managing

# Managing a Technology Portfolio

**The first key question: how many cases are you managing?**

1-5: Each technology receives 100%-20% of a  
Tech Manager's time (40hrs/wk – 8 hrs/wk)

15-30 Each technology receives 7%-3.5%  
TM's time (2.8hrs/wk – 1.4hrs/wk)

50-100 TM's time (2%-1%) (48mins/wk – 24mins/wk)  
100+

How you manage your portfolio depends entirely on  
how many you are managing

# Managing a Technology Portfolio

**For each Portfolio size, the TTP will use different management techniques, tools, processes**

**1-5:** Each technology and inventor receives significant amount of attention. Little need for database use. TTP can be hands-on involved in tech development activities. Frequent contact with all inventors. TTP does all the tech marketing

**15-30:** Technologies and inventors get somewhat less attention; some form of database necessary to track cases; TTP must be very selective in hands-on involvement. TTP delegates some tech marketing tasks, if possible

**50-100:** TTP must be selective in how and where time is used; prioritization of cases; delegation of tasks to others whenever possible; info database is essential; regular database review, flags etc.

**100+** requires high skill; very knowledgeable of where to apply efforts, delegation of tasks necessary; reinvention of management

# How to manage this situation:

## Never enough time

- Triage and selecting 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 other to help (inventors, departments)
- 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 technologies naturally take more time:
  - 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)

# **Track 3**

## **Advanced-level Tech Transfer Professional**

### **Topic 3.14**

#### **Managing Your Time: The Art of Technology & Portfolio Management**

**Dr. Richard S. Cahoon**

Thank you