**Slide 1: Knowledge Translation Conference**

KT Solutions for Overcoming Barriers to Research Use

Hosted by SEDL’s Center on Knowledge Translation for Disability and Rehabilitation Research (KTDRR)

October 26-28-30, 2015

Technology Transfer Planning Template

What to do when “the private sector/industry” is your target audience, and “informing products” and “informing patents” are among your KT goals

Jennifer L Flagg

Center on Knowledge Translation for Technology Transfer

University at Buffalo

October 28, 2015

716-204-8606

<http://sphhp.buffalo.edu/cat/kt4tt/html>

Copyright © by KT4TT, University at Buffalo. All right reserved.

**Slide 2: Acknowledgement:**

The contents of this presentation were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90DP0054-01-00). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.

**Slide 3: What Makes a Good TT Plan?**

* Describe the proposed device and the project goals.
* Detail who will be carrying out the project’s activities.
* Describe the key stakeholders.
* Demonstrate competitive advantage
	+ Identify competing products and other alternative solutions
	+ Describe how the proposed device is superior
* Identify potential barriers to success, and ways to overcome those challenges.

Image of smiling face showing a “thumbs-up” on right side of slide.

**Slide 4: What is the TTPT?**

The Technology Transfer Planning Template (TTPT) is currently being developed as an online tool that asks simple questions to guide technology transfer and commercialization activities. Resources and examples are provided throughout the online tool to give users an idea of how to respond to each question.

* Questions based on:
	+ Steps from the Need to Knowledge (NtK) Model for Commercial Devices
	+ Evaluation criteria used for SBIR commercialization plans

**Slide 5: What is the TTPT?**

*Who is it for?*

* TT plans required for NIDILRR funded RERCs
* Commercialization plans required in Phase II SBIR proposals for all funding agencies
* Any project intending to generate new commercially viable devices

*When would it be used?*

* When first fleshing out a project idea
* Generating a grant proposal
* Generating a TT plan
* Creating reports to share with potential partners
* To log and report project milestones
* When seeking ideas to overcome a project barrier

**Slide 6: How is the TTPT connected to the KTPT?**

The TTPT reflects the considerations that should be addressed by investigators who are planning to generate technological innovations. It is particularly relevant to those who intend to partner with industry to bring the new innovation to the market.

* KTPT Question 5
	+ *“Which KU’s or audiences will you target?”*
		- Private sector/industry
* KTPT Question 7
	+ “*What are your KT Goals for each KU/audience?”*
		- Inform product or patent
* TTPT redirects users to the KTPT for projects that end with research outputs and are not continuing on to develop a prototype.

**Slide 7: What does the TTPT look like?**

Screenshot image of the Technology Transfer Planning Template interface.

Technology Transfer Planning Template written across top, moving down the page is the following:

Navigation bar on top with links to Home, Account, and Log Out

Navigation bar on left side of screen with links to Create new plan, Saved drafts, Frequently Asked Questions, Video Tutorial, Example Plans, TTPT User Manual, and Resource Materials.

Progress bar shows completion status at 3/14.

Question in bold: As described by the end users, what problem does your product solve or what unmet need does it fulfill?

The problem is…

Within response text box: People who have physical disabilities may be unable to complete everyday tasks around their homes and offices due to mobility limitations.

Blue button for Save and continue

Guidance: Explain why end users will need/want your product. Describe the “pain” it eliminate, and/or what job functions it performs.

Resources: Tools to help you identify your target market’s problem:

* Affinity Diagrams
* Internal Idea Capture System
* Netnography
* Open Innovation
* Strategyzer Business Modeling Tool
* Delphi Method
* Ethnography
* Focus Group
* Lead User Analysis
* One on One Interviews
* Anthropometry

Examples: Review the Automatic Pill Crusher example, which describes the primary and secondary target markets' problems and the plausible solution.

Navigation bar on bottom with links to Help, Contact Us, and About

**Slide 8: How does the TTPT currently work?**

* Two sets of questions:
	+ High-level overview
	+ The specifics- define the device’s market, document research, development and production plans, and outline the device’s path to market.
* Examples and resources are provided for most questions.
* TTPT outputs include paragraph form summaries, tables of responses, and timelines.

Small screenshot of the TTPT page described on Slide 6 is shown in upper right hand corner.

**Slide 9: Overview: Project Description, Roles and Goals**

* What are you creating/developing?
* As described by end users, what problem does your proposed device solve? Or, what unmet need does it fulfill?
* How?
* What aspects of the project do you plan to complete? (Conducting research, conducting engineering development, producing the device)
* Who will be responsible for manufacturing, selling, and servicing your device in the market?

**Slide 10: Overview: Identifying Stakeholders**

* Who will use your device?
* Will someone prescribe the device to the user?
* Who will pay for the device?

Image on right of four different colored hands putting together puzzle pieces into a complete circle.

**Slide 11: Overview: Competing Products**

* How does the target customer currently meet the need the device is addressing? Or, if there are no readily available alternatives, how is the customer currently getting around this problem?
* Why is your device superior to existing alternatives?

Image on right of red and gold ribbon with text saying #1 Product!

**Slide 12: Overview: Barriers**

* What problems might you encounter in creating, testing, transferring, and selling your device?
* How will you overcome or avoid those problems?

Image on right of green running man symbol jumping over blue mountain with the word “Obstacle” written in it.

**Slide 13: Overview Output Reports and Next Steps**

* Executive Summary is produced from responding to first set of overview questions.
* Second set of questions asks for detailed descriptions and timelines.

Image on right of printer

**Slide 14: Research, Development, and Production Activities**

* Research Activities
	+ Process, timing and goals
	+ If ending project here, proceed to KTPT
* Development Activities
	+ Engineering specifications
	+ End-user involvement
	+ Alpha and beta-prototype testing
* Production Activities
	+ Materials acquisition
	+ Production capabilities
	+ Marketing and sales
	+ Test marketing
	+ Launch
	+ After sales service and support

Image on right shows Need to Knowledge Model game board- accessible description can be found here: <http://sphhp.buffalo.edu/content/dam/sphhp/cat/kt4tt/pdf/description-of-the-need-to-knowledge-model-game-board.pdf>

**Slide 15: Proposed Output Reports and Potential Uses**

Timelines, Paragraph Summaries, and Lists of Responses

* Create technology transfer plans
* Build business case to share with potential manufacturing partners
* Grant proposals
* Project tracking
* Guide resource allocation

**Slide 16: When will the TTPT be available for use?**

* Fall 2015- Test user interface and TTPT content
* Winter 2016- Refine TTPT based on participant feedback
* Spring 2016- Conduct beta testing
* **Summer 2016- Launch TTPT for public use!**

**Slide 17: TTPT Webpage**

KT4TT Website

 R&D Projects

 Development

 TTPT

<https://sphhp.buffalo.edu/cat/kt4tt/projects/development-projects/technology-transfer-planning-template.html>

Image on right shows KT4TT webpage for Technology Transfer Planning Template, which says the following: Early stage planning for technology transfer and commercialization can dramatically improve the chances of a product or service succeeding in the marketplace. But, planning takes time and know-how to be effective.

Technology and Commercialization Planning Template

The Center on KT4TT is creating a Technology Transfer Planning Template (TTPT) to help grantees better understand the ins and outs of commercialization and technology transfer, while streamlining their planning process.

The template will offer:

* An intuitive interface for detailing project steps and milestones
* Simplified access to the NtK Model components
* Links to tools and informational resources to help plan and complete critical process steps

Important Notice: The template is currently under development, and expected to be available for use in 2016. Check back for status updates, or email Jennifer Flagg at jlflagg@buffalo.edu to be added to our mailing list for TTPT updates.

Current Resources: While we complete development of the streamlined planning template, other resources are available.

* NTK Planning Template
* NTK Model Full Text Version
* NTK Model Game Board Version

**Slide 18: KT4TT Web Resources**

Image on left shows KT4TT website Publications by Topic webpage. Picture of books is followed by the following text and list: Here is a carefully selected sample of scholarly publications generated through the Center on KT4TT. Each document offers specific lessons drawn from our policy analysis and practical experience in the field of technological innovation.

* Issues in Science, Technology & Innovation Policies
* Three States of Knowledge – Origins, Relationships & Transitions
* Comprehensive Model of Technological Innovation
* Tools for Effective Knowledge Translation
* Tools for Successful Technology Transfer
* Tools for Achieving Invention Commercialization
* Market Research Resources

Image on right shows screen shot of KT4TT Technical Assistance for Non-NIDILRR Grantees webpage with red circle around RERC Technology Transfer Plan Resources.

* Technology Transfer Plan Quick Reference Guide
* Grantee Technology Transfer Checklist

Technology Transfer Plan Quick Presentation Guide

**Slide 19: Additional Resources**

Focus Technical Briefs

* KTDRR’s KT Library- Technology Transfer section: <http://www.ktdrr.org/ktlibrary/articles_pubs/tt.html>

Assistive Technology Outcomes and Benefits

* Volume 9: Knowledge Translation and Technology Transfer in Assistive Technology (2015) <http://www.atia.org/i4a/pages/index.cfm?pageid=4638>
* Volume 6: State of the Science in Technology Transfer (2010) <http://www.atia.org/i4a/pages/index.cfm?pageID=3899>

**Slide 20: Thank you!**

Image of stick figure next to large red question mark.