

# Contextualized Knowledge Translation Packages for Technology Transfer and Product Development

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## What is KT4TT?

- KT4TT in the Context of NIDRR Technology grantees means the application of KT theory & practice in R&D to more effectively apply TT processes and generate TT outputs.
- Goal is to have NIDRR technology grantees increase the application of their outputs by manufacturers, clinicians, researchers, policy makers, brokers, and consumers.



# **What is the Overall Mission of the KT4TT Center?**

- Mission is to Provide Resources and Technical Assistance to Improve Both the KT and TT Skills of NIDRR Technology Grantees.



## Presentation Focus

- Need for Contextualized Knowledge Packages.
- What is a Contextualized Knowledge Package (CKP).
- Focus on Manufacturer / Industry CKP.
- What are the 5 Key elements of a Mfg. CKP?
- Detailed Explanation of what each Element is Comprised of.



## Presentation Focus

- Developing your Mfg. CKP – what you need to know.
- Do's and Don'ts of Company Interactions.
- Does it Work? Examples...
- Summary.
  - Other KT4TT resources.



# Need for a CKP on Research Findings

- Background
  - Academic researchers have a traditional dissemination approach.
  - Few researchers undertake the task of translating their research findings.
  - Researchers will leave Knowledge Translation to University TTO's or serendipity.
  - Quoting Stephen Covey – Researchers should “*Begin with the end in mind.*”



# Need for a CKP on Research Findings

- Background
  - Each Stakeholder group needs research findings to be presented in a format they are conversant in.
  - Each stakeholder group receives research findings through different mediums or venues.
  - Researcher must become conversant in these various methods of Knowledge Translation.
    - How? Examples: Writers Brigade, ACOUG – AAC RERC .
  - For a Mfg. CKP, you must learn what type of information is important to this stakeholder group and in what format.





# Need for a CKP on Research Findings

- Need to know What to Say, How to Say it, and When to Say it.
- Need to identify a 'Hook' – something that is very important to the reader and how to draw them in to reading your message and gaining their interest.
- Need to Become Knowledgeable of the Industry you are Approaching and use that Knowledge as you develop the CKP.
- If University employee, need to use TTO's resources and experience as a guide in the development of CKP.



# What is a Conceptualized Knowledge Package (CKP)?

- First and foremost a CKP is **NOT** a Business Plan!!!!
- CKP is a tailored presentation of new research findings, research methodology or a new device or concept (innovation).
- Formulated to meet the specific context requirements of one of 6 different audiences or stakeholder groups.
- CKP is a modified Value Proposition Package.
- Researcher translates features/functions of his/her research discovery into a vision for a marketable consumer product.



# What is a Conceptualized Knowledge Package (CKP)?

- Six different stakeholder groups are:
  - Clinicians/Practitioners
  - Manufacturing/Industry
  - Consumers
  - Policy Makers
  - Brokers
  - Researchers - other members of the Research community

# Industry or AT Manufacturer CKP

- We project that researchers will only have 5 minutes of a key licensing individual's time for review of research findings.
- 5 Key elements of a Manufacturer CKP
  - Executive Summary
  - Background/Current Situation Section
  - Technical
  - Marketing Section including IP position
  - Consumer Involvement /Testing /Input



# Delivering Solutions to Problems Involves Progress across Three Knowledge States

Stop and let us define terms:

Research → **Discovery** → Translation → Utilization ↓

Development → **Invention** → Transfer → Integration ↓

Production → **Innovation** → Release → Lifecycle



# Executive Summary

- Variations of Summary dependent upon stakeholder group and purpose (license, information for consumer, etc) for CKP.
- For a Manufacturer CKP brief paragraphs will include:
  - Product Need Area
  - Product Solution – your research findings, invention or methodology
  - Target Market/Market Size
  - Business Opportunity for Mfg.
  - Marketing Strategy
  - Intellectual Property Status
  - Consumer Information (involvement in development or purchase intent price point information)



# Background / Current Situation

- Optional section
  - Details current status and current state of the science
  - For an invention, details how target market is currently addressing or not addressing the need
  - For an invention, details issues related to problems associated with the defined need
  - Requires target market interaction – primary market research



# Technical Section

- Technical Product Description
- Invention/Product Features
- Ergonomics
- Human and Environmental Factors
- Any other Technical Considerations





# Marketing Section / Intellectual Property Status

- Target Market
- Market Projections
- Market Growth
- Competing Products & Manufacturers
- Opportunity for the Invention
- Marketing Strategy
- Sales Projection
- Intellectual Property Status



# Consumer Information

- Details of Target Market Research
- Primary Market Research Performed
- Purchase Intent
- Price Point



# Developing Your Manufacturer CKP

- What you Need to Know:
  - Know the Industry, the players, the product development cycles.
    - Who are the companies? What are the trade shows? How do they introduce new products?
  - What are the mark-ups for products in this industry?  
3:1, 4:1, 6:1 or higher (software).
  - Do they routinely license products?
  - Will they accept your NDA?
  - Will they only accept patented products?
  - Any product differentiators?



# Do's & Don'ts of Company Interactions

- Do know the industry and its players.
- Do know product development cycles (examples – 18-36 month time frame).
- Do not completely design your invention into a commercial product, present it and expect it to be well received.
  - Company product designers will feel threatened.
  - Do understand that company product designers may have internal constraints.



# **Do's & Don'ts of Company Interactions**

- Do learn what new technology or features cost today.
- Do be a resource to the company.
- Don't attempt to have all the answers.
  - No one knows the industry and the market for products in an industry better than a company that has been operating in the market for years.
- Communication- partnering/brokering role is of tantamount importance.
- Be patient and persistent – corporate review lags, personnel changeover.

# **Do's & Don'ts of Company Interactions**

- How to succeed?
  - Engage the company – say the right things.
  - Be perceived as a resource. Bring something of value to the party.
  - Make sure you are not perceived as a threat to anyone in the organization. You are competing against internal product champions for corporate resources.
  - Mention consumer involvement in your design process.
  - Present design and functional features to be incorporated into the new product.



# Do's & Don'ts of Company Interactions

- How to Succeed:
  - **Follow Up**. Ask for a specific date and time for the next conversation.
  - **Follow Up**. Make the call at that date and time. If progress is made, that's great. Either way – ask for a specific date and time for the next conversation.
  - **Follow Up**. This is a contact sport. If you are asked for anything, deliver it on time.



# Does it Work?

**Yes!!!**

Example: Handout provided: AAC mfg. commented the following when he received a CKP:

*“The CKP is well written and structured in a way that relates to AAC manufacturers. The need is articulated very well. The Technology Description and the links to the website were helpful in giving a sense of the degree to which these topics have been researched and the breadth of the solution.”*





## Does it Work?

- KT4TT Center has been doing a variation of a CKP for years with very positive feedback and results.
- Takes time to perform all the tasks needed.
- Some NIDRR grantees such as the **Rehabilitation Engineering Research Center** for the Advancement of **Cognitive** Technologies (**RERC-ACT**) has enlisted their University to assist.
- Others have enlisted volunteers (ex. AAC writer's brigade).
- Research Sponsors (i.e. NIDRR and others) – feel that time and resources should be set aside for Knowledge Translation efforts.



# Summary

Translating Knowledge for the Benefit of Stakeholders is of paramount importance.

Learning the method and medium for translating and distributing new research findings is a necessary step in all research projects. Knowledge Translation should be planned and budgeted for by all researchers.

Goal is to benefit the target population of the research in the first place. Make a Difference with your work!!!



## Summary

- Visit the [kt4tt.buffalo.edu](http://kt4tt.buffalo.edu) web site for additional information, more examples and a chronological step by step guide for inventors.
- Electronic handouts are available on the ATIA web site and there are also a few hard copy handouts available here too.

*Thank you!*