

ITTC R&D and the Transfer of Technology



Tim Johnson,
Executive Director,
Operations & Applied Technology

What does ITTC look for?

- R&D activities which fit ITTC's technical focus
- University, state, federal, & industry partnerships
- Opportunities to transfer technologies from research and development activities to industry
- Benefits to Kansas when directly state supported
- Enhancing the educational and research experience of students and faculty at KU

R/D&C FY97 Summary

Research/Development/Commercialization	FY 1997
KTEC Funds	\$ 458 K
Industry Funds	\$ 2,660 K
Federal & Other Funds	\$ 4,312 K
Projects	44
Technologies Developed	11
Number of Participating Organizations	18
Patents or Copyrights	5
Licenses Awarded	5
Technologies Commercialized (KS)	4
License Fees/Royalties Generated	\$ 56.5 K
Equity Positions Taken	0
New Companies Formed	1

Technology Transfer

- Technology Sources
 - Results from sponsored research
 - Developed with a company for their market
 - Developed by KU faculty, staff, and students (proven & commercial potential)
- Types of Agreements
 - License Agreement (cost share + royalty/equity return)
 - Sponsored Research Agreement (pay full cost, larger R&D project)
 - Task Order Agreement (pay full cost, small R&D projects)

FY1997 Licenses

- Five signed license agreements
 - Four were in support of Kansas-industry-led projects.
 - Each resulted in core commercial products.
- General terms
 - cost sharing
 - initial licensing fee
 - royalties based on gross revenues, typically 3-15%
 - until reach royalty cap or 5 yrs (minimum)
 - most are exclusive license for technology
 - restricted field of use: health care, credit union, ...

Recent Commercialization Projects

- Mercury - Remote Therapist Support System
- ProFusion - Internet Meta Search Tool
- VISION - Indexed Video Archiving System
- Piranha - Advancement of Credit Union Teller Software

Mercury

(Remote Therapist Support System)

- Client/server software prototype system
 - physical therapist remote access to a patient database
 - over TCP/IP network via pen-based portable computer
- Partnership with company in Kansas
 - joint development project
 - licensed and delivered to the company
 - company will market the product
 - retains rights for future development
- Start-up company based partially on software
 - experiencing rapid growth
 - attracted outside investment

ProFusion

(Internet search tool enables faster, automated, iterated searches)

- Based upon faculty-developed technology
- Development and licensing of a World Wide Web (WWW) meta-search engine
- Resulting technology spun out into a start-up company
 - license to commercialize and market the technology
 - company pays for further R&D of the technology

VISION

(Video indexing, search and retrieval of digitized video archives)

- Based on faculty-developed technology
- Automatic and real-time
- Companies from east & west coast interested in technology
- Licensed to an existing company
 - up-front license fee plus royalty
 - company pays for further R&D of the technology

Piranha

(Teller application for Credit Union software)

- Client side application for credit-union teller workstations
 - PC-based GUI environment
 - improved access to legacy database server
- Partnership with a Kansas company
 - joint development
 - technology delivered & licensed
- Key to company plans for
 - updating their product line and
 - creating a competitive advantage

Working with ITTC (Project Selection)

- Meet and discuss
 - expectations of Company & ITTC/KU
 - resources required, timelines, feasibility
 - estimated cost, IP issues, technology transfer mechanism, ...
- Decide to proceed
 - prepare project description, initiate project tracking and management
 - final negotiations
 - initiate project

Working with ITTC (Joint R&D)

- Collaborative R&D
 - Federal research initiatives (i.e. NSF, DARPA, ...)
 - Federal R&D, industry led (i.e. SBIR, STTR, ...)
 - State funds for technology development & commercialization (i.e. KTEC-ARMF)
 - ITTC/KTEC support for selected projects

KTEC Centers of Excellence Competitive R&D Awards

- KS industry research or development project conducted at KTEC Center of Excellence (ITTC)
- Co-funded by industry & KTEC (up to 50%)
- Development/improvement of technologies and methods that will benefit the KS economy
- Evaluation and selection criteria (meet guidelines +)
 - potential benefit to KS economy
 - scientific and/or technical merit
 - strength of partners' financial commitment
- Proposals due from Centers by Nov. 14

Why R&D in Information & Telecommunication Technology

- Telecommunication and information technologies shorten time and distance barriers of rural and remote areas
- Access to state-of-the-art information infrastructure aids information deployment and economic development
- Access to new technologies gives companies a competitive advantage
- R&D helps educate & retain a high skilled workforce and leads to high-wage technology based jobs