

# **Technology Maturation Program**

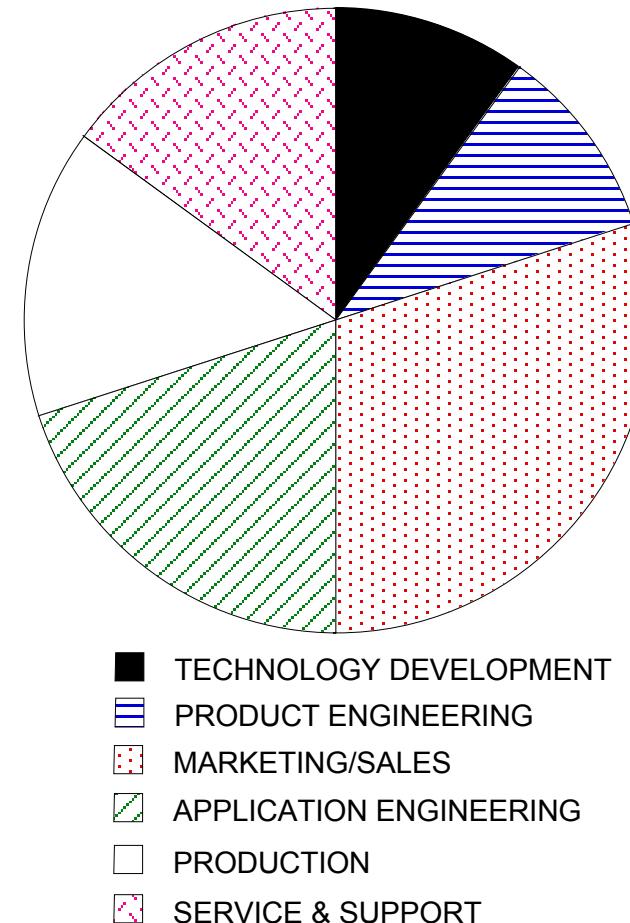
**Presentation to Center 2500**  
**January 19, 2006**

Presented by:  
Kevin McMahon

# Typical Distribution of Effort for Commercial Instrumentation Products at MSI\* (initial 3 years)

## Notes:

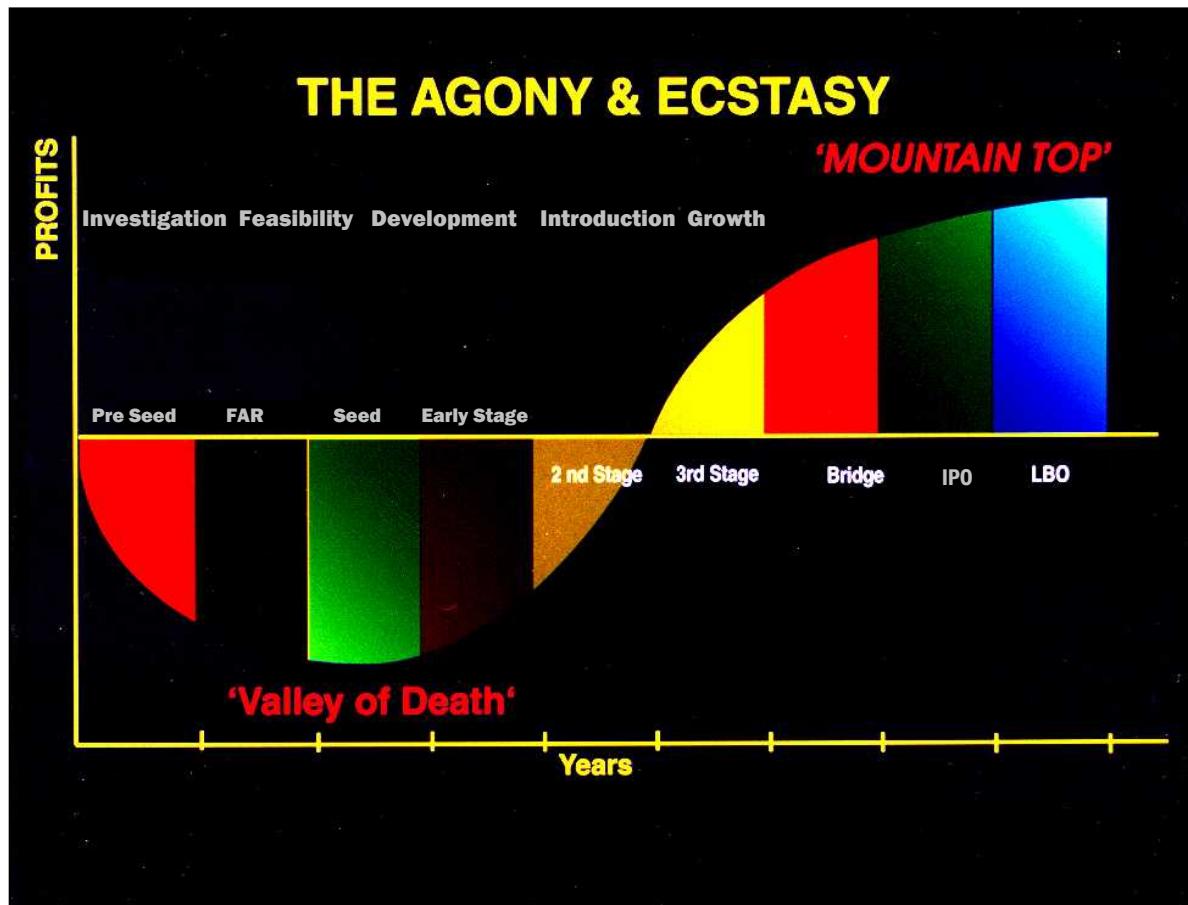
- 1) Technology Development includes all sensor device technology, and manufacturing process technology.
- 2) Product Engineering includes all mechanical packaging, electronic hardware and software design.
- 3) Marketing/Sales includes development of customer driven product specifications, development of product literature, ads, trade-shows, training materials, etc.
- 4) Application Engineering includes product “tuning”, validation testing, and regulatory approvals and certifications.
- 5) After the product is in full production (ca. 3 years after project start) the distribution of effort evolves. (e.g., less technology and product engineering; more production, service and support.



\*Hank Wohltjen, CTO, Microsensor Systems, Inc (MSI) at the "Micro-Analytical Systems Technology Exposition 2004," held August 12, 2004, at Sandia National Laboratories

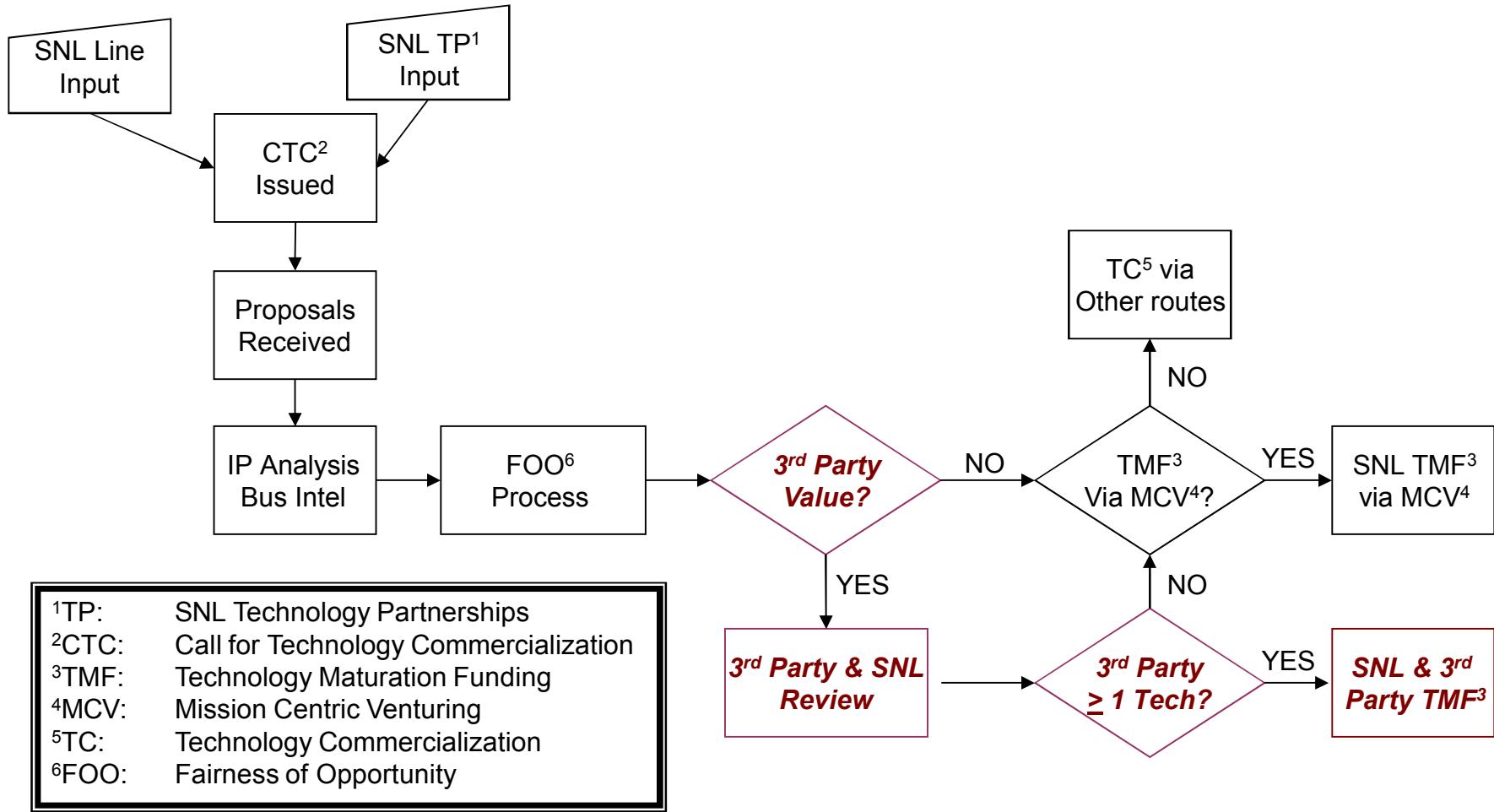
# Why Tech Maturation Funding (TMF)?

*'...to provide funding for highly focused projects to help move early-stage technologies along the road to commercialization past the agony of the valley of death, to the ecstasy of the "Mountain Top"...'*



# Bridging the Valley of Death

## (Sandia's Existing Approach with *3<sup>rd</sup> Party Participation*)



# HOW to submit a proposal...

1. \* *Proposal title*
2. \* *Investigator name(s), organization number(s), phone, e-mail*
3. \* *Invention disclosure(s) ID and/or SNL Copyright number(s) for the technology*
4. \* *Amount of funding requested*
5. Matching funds and source (if you know of any)
6. \* *Abstract describing commercial promise of the work and technical hurdles to be overcome with requested funding*
7. \* *Indication of Department Manager(s) approval for Investigator(s) to pursue project if funded*
8. \* *Brief description of technology (in terms suitable for a non-scientist), focusing on its current state and potential commercial applications*
9. \* *Milestones for proposed work with a budget breakdown. Milestones are short-term, specific, goal-focused events.* For example, good milestones might include:
  - Construction of a prototype
  - Measuring the efficacy/efficiency of a prototype
  - Analyzing of the products of a key experiment
  - Comparison with existing products
  - Examples of milestones that would not receive funding:
    - General development work
    - Work for which no invention has been disclosed
    - Time-specified rather than task-specified work
    - Work for which there is no tangible result that can be communicated to potential licensees
    - The budget for a milestone may include purchase of equipment or time on equipment, outside services including analyses, and the personnel time needed for carrying out the activities specific to the described milestone. In addition to the budget, each milestone must specify a completion date.
10. \* *Also discuss:*  
*How will milestones contribute to eventual commercialization?*  
*Additional work required to develop a commercial product (beyond specified milestones)*
11. Existing companies or potential start-up companies interested in the technology

**\* REQUIRED INFORMATION**

# WHERE to submit a proposal...

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