

Panel 3:

Commercialization

(Demonstration, Deployment, and Consumer Acceptance)

Ben Finkelor

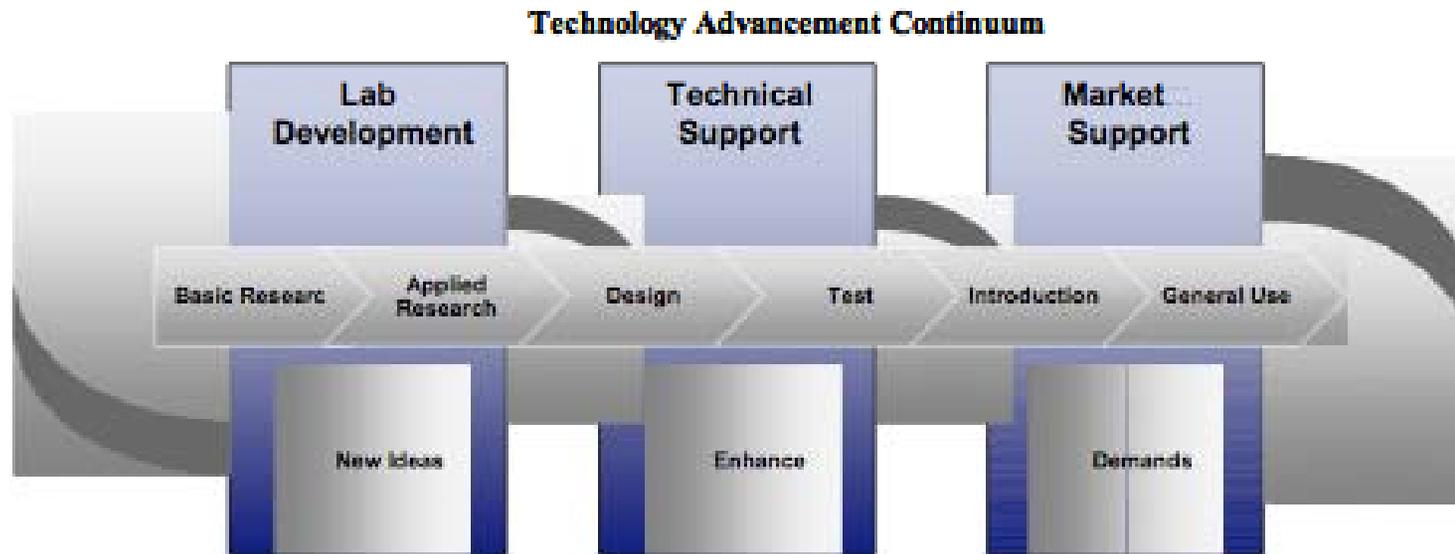
California Energy Efficiency Strategic Plan

Stakeholder Workshop

July 11, 2011



Traditional Linear Model of Innovation Process is Oversimplified

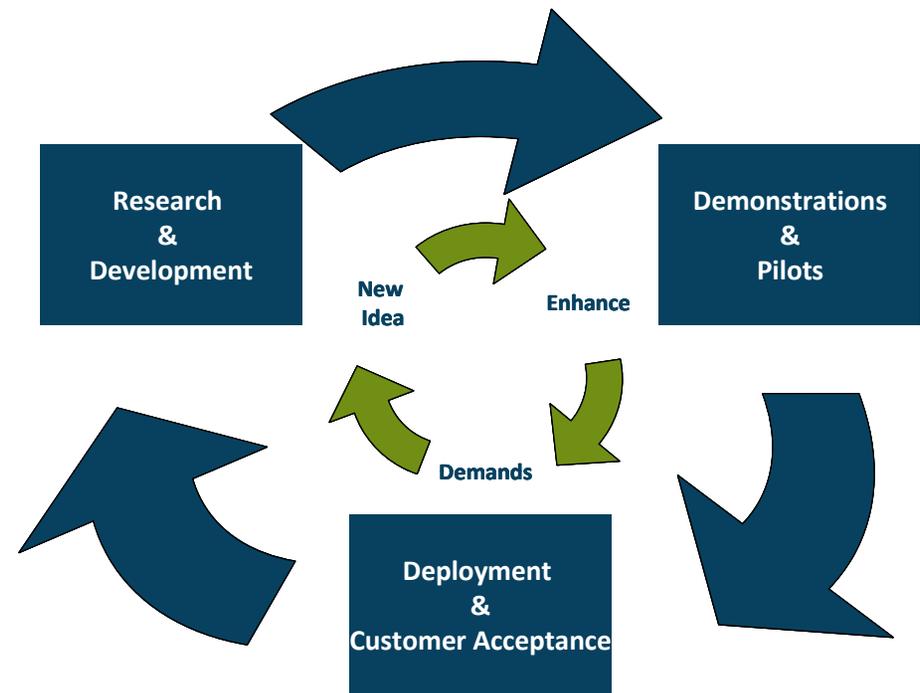


CEESP Jan 2011; Section 11 p. 79

- RDD&D
- 180° Perspective Switch from “Technology Push” to “Market Pull”
- Ask not what the customer can do for you...

Innovation Process is Actually Complex and Continuous

- Need to understand the customer needs
- “Technology Push” activities are important
- “Market Pull” Activities are equally important
- And they are important throughout the process.



Advancing ZNE Goals Requires Market Pull Activities

- Enhancing **Market Intelligence**
- Increasing **Information Dissemination**
- Driving **Consumer Acceptance**

Enhancing Market Intelligence Means Understanding and Engaging Customers

(Customers are really Stakeholders)

- Understand how they identify themselves
- Learn about them through primary research and secondary research
- Engage customers in generating solutions
- Put them on project advisory committees

Case Study: Multi-Tenant Light Commercial Building Retrofit Project

Energy Commission - PIER Funded Program

- Project Launching this Summer
- Integrated lighting/envelope/HVAC retrofits w/ financing
- Full-scale demonstrations with at least 3 California utilities



Increasing Information Dissemination Leverages Existing Information Channels

- Understand how consumers acquire information
- Engage and leverage those information channels
- Leverage channels whenever possible

Case Study

Energy Efficiency Innovation Summit

- To be held on campus the week of November 7, 2011
- Program Goal: To accelerate the commercialization and adoption of advanced energy efficiency technologies in key market sectors, including: the hospitality industry and corporate campuses,
- Objectives:
 - Celebrate and share best practices and successful product installations of energy efficiency by large end-users within identified market segments.
 - Influence manufacturers and other solutions providers to create product offerings that better match the needs of the end-users



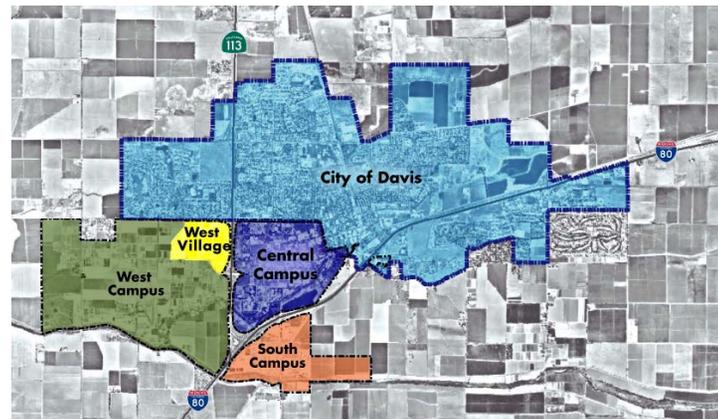
Driving Consumer Acceptance Requires Positive Personal & Social Experiences

- Each customer needs at least a non-negative experience
- Use real-world demonstrations
- Avoid large rollout of solutions that have risk for negative response.
- Understand the social drivers and find ways to affirm consumer decisions

Case Study: West Village as a Living Laboratory

Programmed to Become Country's largest Zero-Net Energy Community

- Highly visible, 220 acres, 340 single family homes, 1200 student rental units, 45,000 sf commercial/retail space, recreational space
- Opportunity to Analyze Policy, Market, Consumer Behavior and to Improve User Interface, and Develop and Demonstrate Emerging Technologies



In Summary: Successful Innovation Dependent on Market Pull Activities

- Customers are not just end-users – they are Stakeholders in the broader eco-system
- Customers should be engaged early and often
- Understand their needs and how they make decisions
- Leverage existing consumer information channels
- Real-world demonstrations are a powerful tool