

JUMP: Turning Ideas into Solutions

Caroline Hazard

CSRA Inc., Contractor to the Oak Ridge National Laboratory

BECC, 21 October 2016

ORNL is managed by UT-Battelle
for the US Department of Energy



Agenda

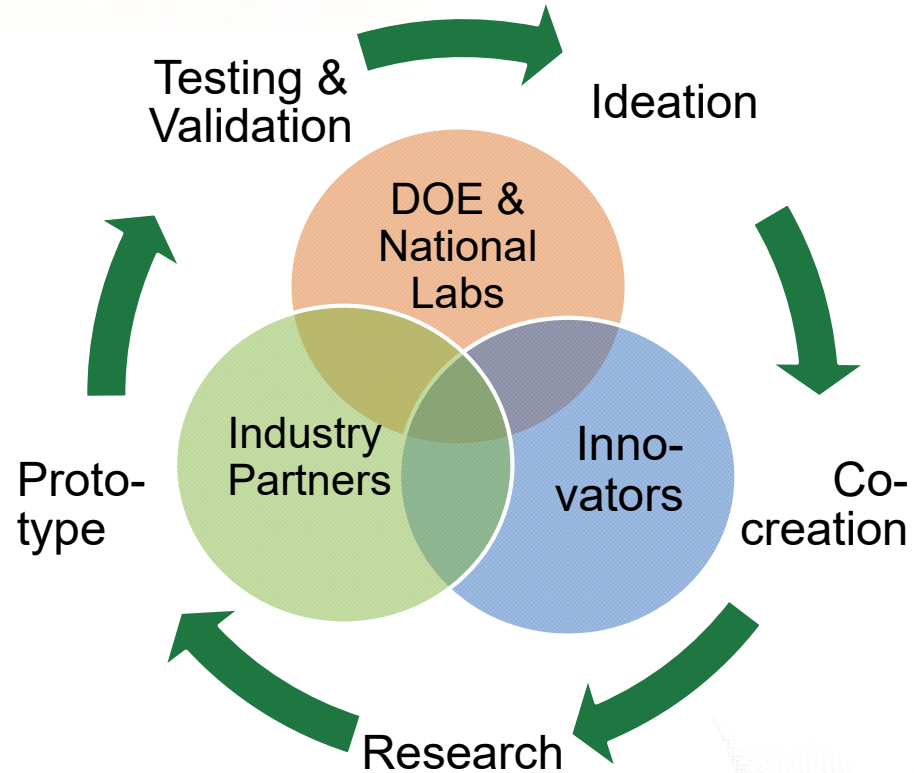
- Why Crowdsourcing?
- Introducing JUMP
- Co-creating Results
- Summary Lessons Learned
- Next Steps



Crowdsourcing to Accelerate Innovation

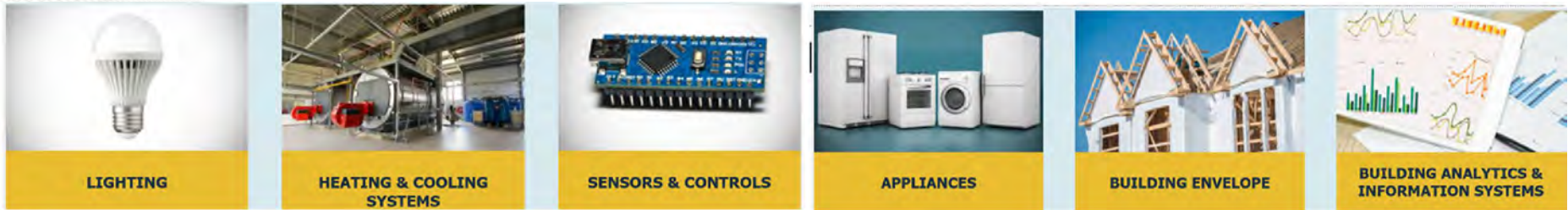


*Designed to engage **industry partners** in co-developing campaigns relevant to the **most pressing industry challenges**, to **accelerate Tech2Market***



jump.ideascale.com/

How does JUMP work?



1 CALL FOR INNOVATION LAUNCH

National laboratories work with industry partners to identify a challenge and outline a community "call for innovation," including possible prizes, and post it to JUMP.

2 IDEA SUBMISSION DEADLINE

All interested innovators, researchers, small businesses, and individuals are invited to join JUMP and share ideas for solving the challenge.

3 VOTING DEADLINE

The JUMP community is encouraged to review, discuss, and vote on posted ideas.

4 JUDGES DECISIONS ANNOUNCED

A panel of expert judges convene to discuss ideas and vote, then determine which is most suited for further development based on feasibility and savings potential.

5 FUTURE COLLABORATION ANNOUNCED, IF APPLICABLE

Industry partners consider judging decisions and determine next steps for development.



A Summary of JUMP Activities in FY16



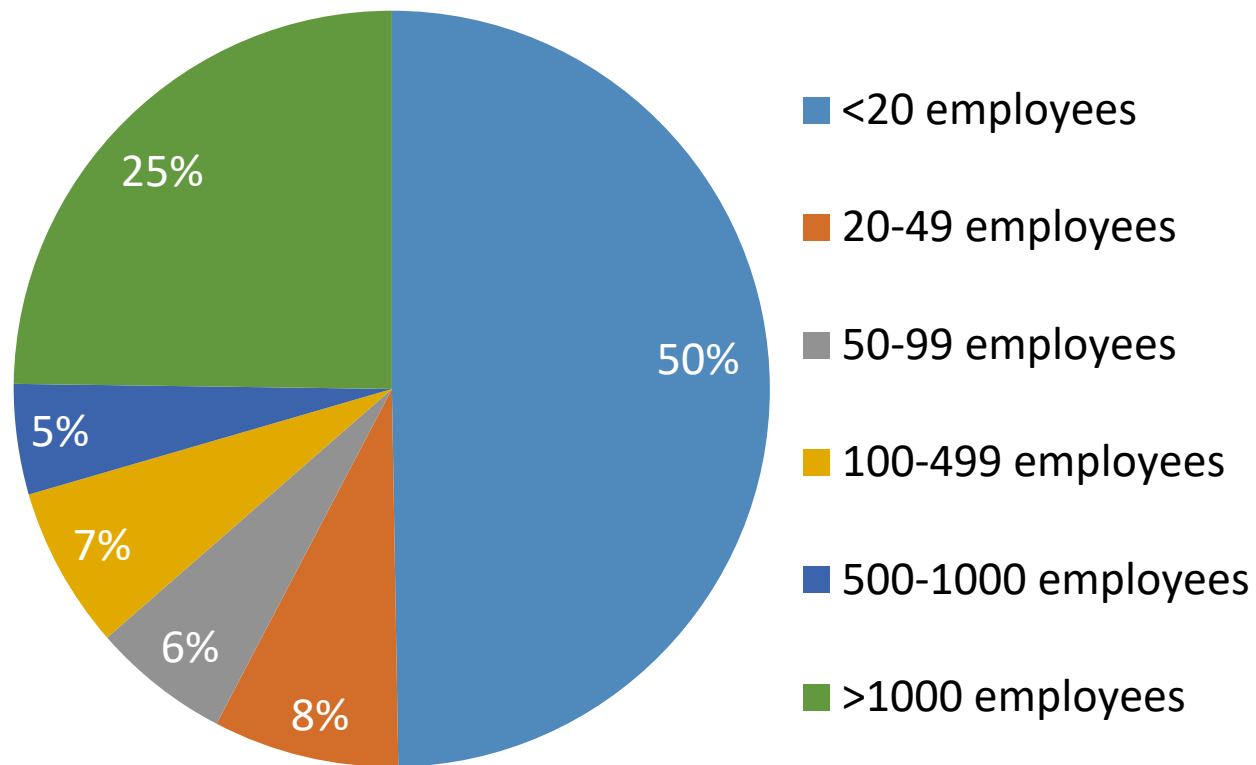
- **12 industry partners**, 13 Calls for Innovations launched
- **10 winning ideas** primed for advancement
- Incubating a **Community of Innovation**
 - **263% growth**, reaching **1,322 users** registered for JUMP since the site launch
 - Hosted **JUMPathon regional events** to engage in co-creation and ideation
 - **Active discussions** exhibited with 816 votes and 172 comments
 - Over **70k JUMP page views** during more than **22k user sessions**
 - A **2,000+** JUMP Mailing List!



Who are our JUMP Innovators?

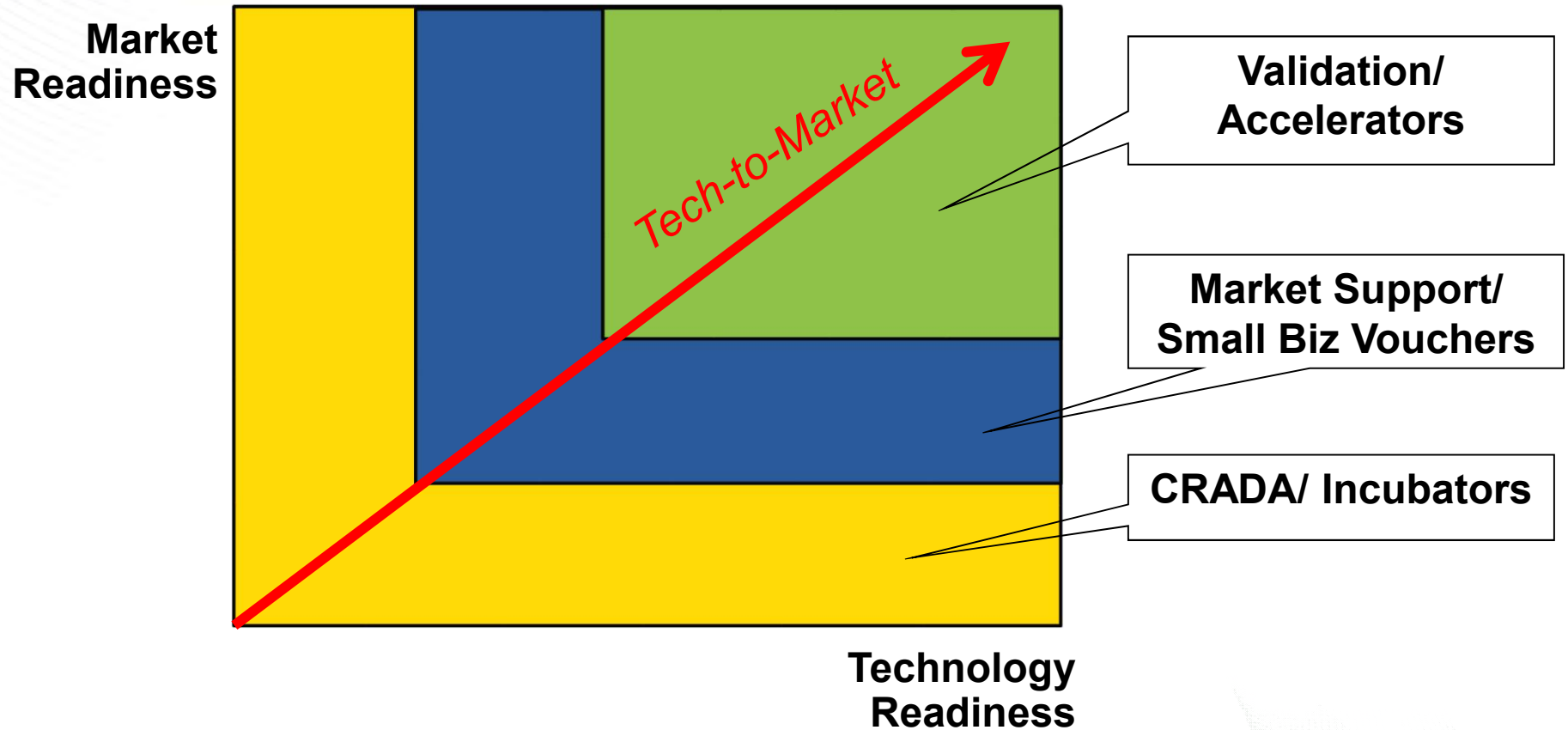
The majority are individuals and small businesses

Organization Size for JUMP Users*



* Total 1,300 members

Advancing Winning Ideas to Market



Channeling winners towards appropriate investments to move ideas forward

A.O. Smith Call for Innovation Winner



The Challenge

- Using a 50 gallon water heater, deliver an equivalent amount of hot water as one with a 65 or 80 gallon tank, without increasing water storage temperature

The winner



Benjamin Knopp

- **Idea/Solution:** Embed the cold water dip tube in a phase change material (PCM) inside the tank so that as cold water flows down the dip tube it absorbs heat stored in the PCM, thus increasing the hot water supplied by the water heater.
- **About the winner:** Benjamin's background is residential energy efficiency.

Status and Next Steps

- **\$5,000 cash award** from A.O. Smith
- **NDAs are signed and patent is pending**
- Water Heater supplied by A.O. Smith for the **prototype**
- **\$20K** in-kind technical support from ORNL
- **Monthly** meetings targeting finalizing the prototype by **early 2017**

“The problem is that very few inventors are successful and it is difficult to know where to begin. As an individual, JUMP is the platform I was looking for to express my creativity and innovate with collaborators.” Benjamin Knopp

FEMP Call for Innovation Winner



The Challenge

- **Identify near commercialization or newly commercialized innovative energy saving technologies that are currently underutilized in the federal building space.**

The winner



Scot Duncan

- **Idea/Solution:** A High-Efficiency Dehumidification System (HEDS), which has shown significant energy savings in dehumidification.
- **About the winner:** Scot is a small business owner who developed HEDS in 2007. In the early 2000's he worked on energy efficiency improvement projects with the Navy and he started noticing mold, which inspired his developing HEDS.

Status and Next Steps

- **\$50K** for ORNL to **test and validate the technology**
- Data to be collected in summer of 2017

“We are on the verge of commercializing a technology that can substantially cut energy waste and solve the relative humidity control problem and create healthier buildings at the same time” – Scot Duncan

Summary of Key Lessons Learned

Overall Approach:

- ❖ We see a market need for the JUMP platform
- ❖ Industry Partner market pull helps ensure high quality participation and follow-on resources to accelerate tech-to-market
- ❖ Cash or valuable in-kind contribution is crucial to attract quality ideas
- ❖ Vetting interests and capabilities is essential for advancing winning ideas

Outreach:

- ❖ Innovative ideas are more likely to come from outside the specific industry
- ❖ Writing a simplified problem statement is key to the success of the Call
- ❖ Consistency, transparency, and ACTIVITY on the site enables a lively crowd

Advancing Winning Ideas:

- ❖ Connecting resources and expertise of industry and the Labs helps fill knowledge gaps
- ❖ Setting expectations on the Partner's role in advancing idea forward is crucial

Join JUMP and Get Involved!

❖ 2017 will feature focused Calls for Innovation

- ❖ Envelopes
- ❖ Heating and Cooling
- ❖ Open Forum (under discussion)

❖ We want to connect with you!

- ❖ Regional Events, Webinars
- ❖ Energy Exchange 2017
- ❖ ASHRAE
- ❖ JUMPathons



jump.ideascale.com/

Discussion



Contact information

Caroline Hazard
Caroline.Hazard@csra.com

Melissa Lapsa
lapsamv@ornl.gov

Visit our website:
Jump.ideascale.com

