

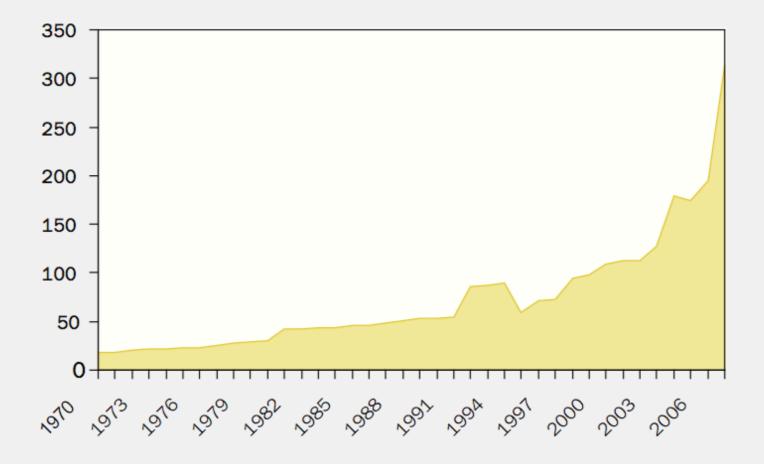
e-Lab Inducement Prize

Background research

Prizes are growing exponentially

Exhibit 2: Aggregate prize purse, prizes over \$100,000

US Dollars, millions



Source: McKinsey dataset of 219 prizes worth \$100,000 or more

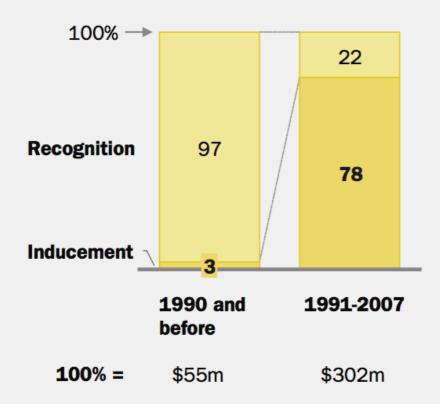




Especially inducement prizes

Exhibit 3: Growth in inducement prizes

Percentage of announces purses



Note: No data for 2 prizes

Source: McKinsey dataset of 219 prizes worth \$100,000 or more





Prizes can drive innovation with high ROI

Prize

Innocentive platform

XPRIZE platform

Shell's Springboard Prize

The Super Efficient Refrigerator Program

Impact

30% of prizes that previously stumped experts were solved by Innocentive's community

Innovation contests return somewhere between 10 and 40 times their initial investment

Return on investment of between 200% and 900%

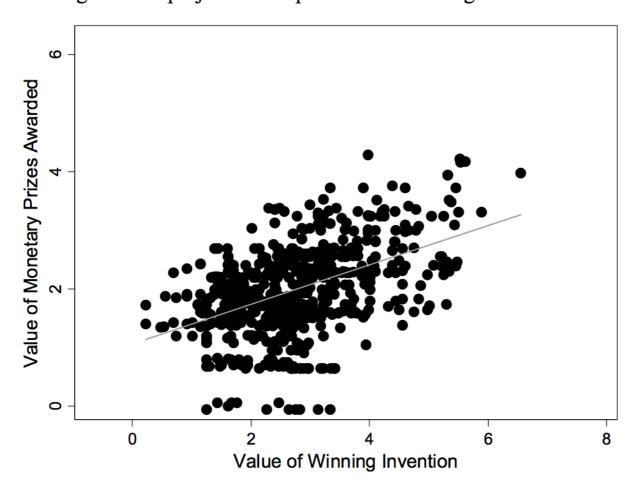
Offered a \$30 million prize in 1992 for a highly efficient, CFC-free refrigerator design. A year later, Whirlpool won with a 25% more efficient design. Similarly designed refrigerators now make up a third of the U.S. market





Note: prize amount isn't that important

Figure 2. Regression plot of prizes awarded against the projected sale price of the winning invention.



Notes: Variables are specified in logs with an estimated beta of 0.34 (s.e. 0.02). The projected sale price of the winning invention is obtained for 662 observations reported in the *Journal of the Royal Agricultural Society of England*. In this sample of data, the mean sale value for a winning invention is £30.25 and the mean value for a monetary prize is £9.70.

"Interestingly, a medal's prestige seems to be a stronger motivator than cash. 'People are much more induced by winning a medal award than by winning a monetary award,' says Tom Nicholas, one of the Harvard authors. He hypothesizes that 'it's much easier to market a product having won a medal." – McKinsey





Process is key to making a prize effective

"Prizes fail when the sponsor fails to understand how much effort and investment is required beyond the simple 'economic capital' of the award itself. A sponsor might imagine that a prize that carries cash value of, say, \$50,000 requires around \$60,000 or \$75,000 a year to run. But depending on the kind of prize and the field of endeavor, the actual costs might be \$500,000 or more when you include raising public awareness that a prize exists, inducing people to nominate and apply, mounting a publicity campaign, and administering the whole program." – Jim English the author of 'The Economy of Prestige'





XPRIZE process

- 1. Identify a goal that represents a breakthrough in a particular area.
- 2. Research the problem in consultation with experts and board members.
- 3. Find sponsors—preferably from the private sector.
- 4. Identify teams, ideally bringing with them a variety of perspectives.
- 5. Announce a substantial prize with great fanfare.
- 6. Generate maximum publicity.
- 7. Encourage outside investment—upward of \$100 million for the Ansari XPRIZE.
- 8. If successful, award the prize purse and intellectual property to the winner.





XPRIZE process

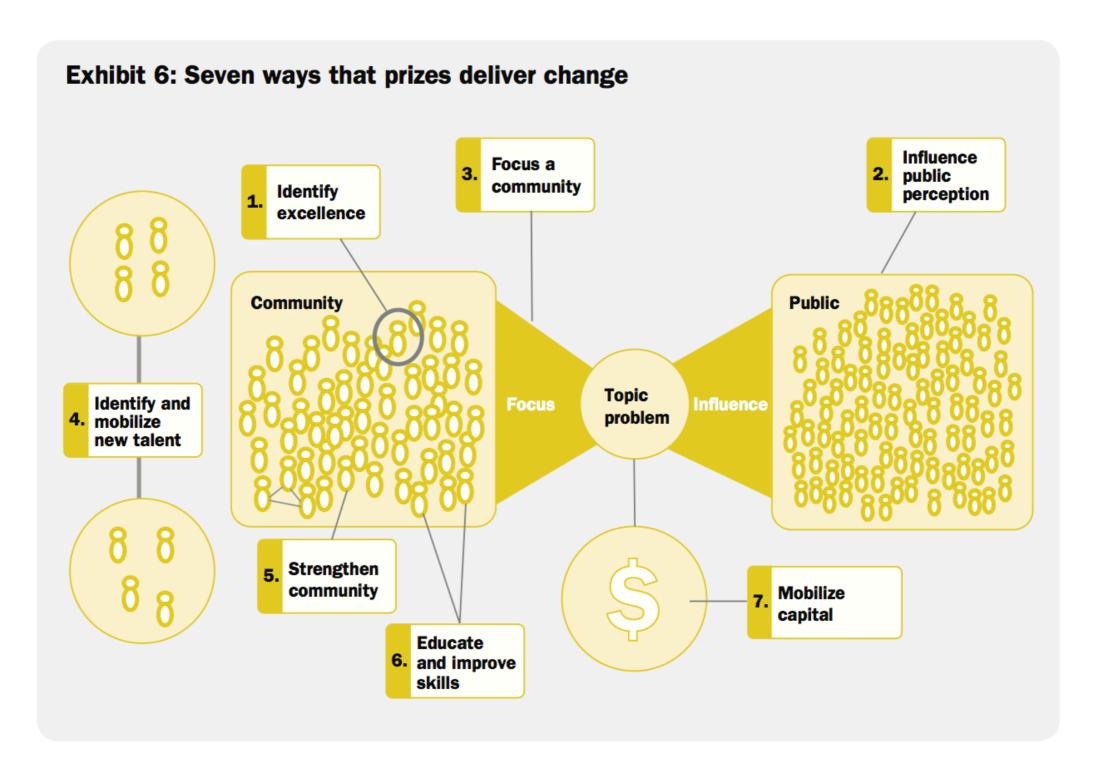
Key first step

- 1. Identify a goal that represents a breakthrough in a particular area.
- 2. Research the problem in consultation with experts and board members.
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- 5. Announce a substantial prize with great fanfare.
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- 7. Encourage outside investment—upward of \$100 million for the Ansari XPRIZE.
- 8. If successful, award the prize purse and intellectual property to the winner.
- 9. Missing step few XPRIZE winners have been successful at scaling up their ideas (e.g. Automotive XPRIZE winner hasn't engaged an OEM 4 years later)





What is the goal of the e-Lab prize?







Potential goals

- 1. To identify existing actors achieving excellence in the electricity sector
- 2. To change the public's perception of electricity as a stagnant sector
- 3. To focus the community on solving an important barrier
- 4. To engage and mobilize new talent to solving the sector's problems
- 5. To create an opportunity for actors in the sector to collaborate
- 6. To educate and improve skills of actors in the sector
- 7. To mobilize capital for the scale up of an idea





Prize goal can help determine prize structure

Key structural questions

Spectrum of answers

Do we want to target a particular problem?

Specific vs. open ended question to answer

What kind of project ideas do we want to stimulate?

Steel in the ground vs. early stage idea

Do we want to create new teams?

Single organization entrants (no matchmaking) vs. matchmaking or facilitating team-building

Do we want to help scale the idea?

Prize capital only vs. targeted leveraging of outside capital

Do we want to steward the process?

Longer term process with e-Lab member engagement vs. no engagement before decision





What prizes are out there already?

Existing prizes related to e-Lab

UNDP Renewable Energy

Challenge





Demonstration projects







Electricity related



DER specific (likely US focused)

Early phase ideas





Where could e-Lab add value?

Existing prizes related to e-Lab

UNDP Renewable Energy

Challenge





Demonstration projects





1. Identify and help scale up best, disruptive solutions to electricity system problems

Electricity related



DER specific (likely US focused)

2. Engage new people in creatively addressing problems in electricity

Early phase ideas





Potential topics for the e-Lab prize

- 1. Distributed energy resources for low income applications James
- 2. New solutions to utility business model problem Owen





Path forward

- 1. Agree on areas of greatest need for electricity system transformation that a prize could help meet
- 2. Fit goals for the prize to that need
- 3. Chose structure and topic to fit those goals







Appendix

Most successful at defining excellence, changing perceptions and strengthening a community







Potential prize 1 – solution scale up, high involvement

Goals

- To identify existing actors achieving excellence in the electricity sector
- 2. To create an opportunity for actors in the sector to collaborate
- 3. To educate and improve skills of actors in the sector
- 4. To mobilize capital for the scale up of an idea

Structural components

- 1. Could be specific or general question
- 2. Steel in the ground demonstration project
- 3. Facilitated team building to create the demonstration project
- 4. Targeted leveraging of outside capital for winner to deploy the demonstrated idea
- 5. Engagement and mentorship from e-Lab members





Potential prize 2 – idea catalysis, low involvement

Goals

- To change the public's perception of electricity as a stagnant sector
- To engage and mobilize new talent to solving the sector's problems

Structural components

- 1. Could be specific or general question
- 2. Early stage ideas
- 3. Single organization entrants
- 4. Light touch engagement of outside capital potentially though VC pitch
- 5. Little engagement before decision



