

Learning from Innovation Tournaments

Christian Terwiesch and Patrick J. Brennan

Just as American Idol can winnow down thousands of wannabe singers into one potential superstar, companies can use a tournament strategy to manage innovation and capitalize on new ideas. From January to May 2012, more than 1,700 ideas were submitted during an innovation tournament conducted at the University of Pennsylvania Health System (UPHS). With only a handful being selected for implementation, there were, by definition, failures. But the tournament process itself was a win for UPHS. All of the entries came from employees who were energized and enthusiastic about making a difference. Holding an innovation tournament isn't as simple as asking employees to email their ideas: the focus of the tournament needs to be identified, the structure defined, a marketing campaign rolled out, and a judging process established. Christian Terwiesch and Patrick J. Brennan shared the process of, and the lessons learned from, UPHS's innovation tournament when they spoke at the June 1, 2012, Mack Center conference.

In most companies, getting a good idea into the works is usually out of reach for regular employees, be they technicians, lawyers, doctors, engineers, researchers, or members of the administrative staff. As in many large organizations, the budget is a top-down process. "It's really hard to get ideas upward bound in the organization from the rank-and-file," said Brennan, chief medical officer, UPHS. At UPHS, middle managers and higher are involved in the budget implementation process, so running a tournament adds new perspectives.

Uncovering the nascent talent within an organization does not have to be daunting. Terwiesch and coauthor Karl T. Ulrich wrote *Innovation Tournaments: Creating and Selecting Exceptional Opportunities* (Harvard Business

Press, Boston: 2009), which introduces a model for managing innovation and driving innovation throughout even large organizations. "We have done research on creativity/idea generation for many years. Around 2005, we were collaborating with Merck on improving innovation in their research labs. We were asked to help Merck think about which was the best method to manage the 'idea contestants' in the race for the next block-buster drug," Terwiesch said. "So we were thinking about the best way to think about the idea generation and selection process and we found that the *American Idol* methods were actually quite powerful. At the input, you have thousands and thousands of wannabe singers—or breakthrough drugs—and by applying a rigorous process, you come out at the other end with a star."

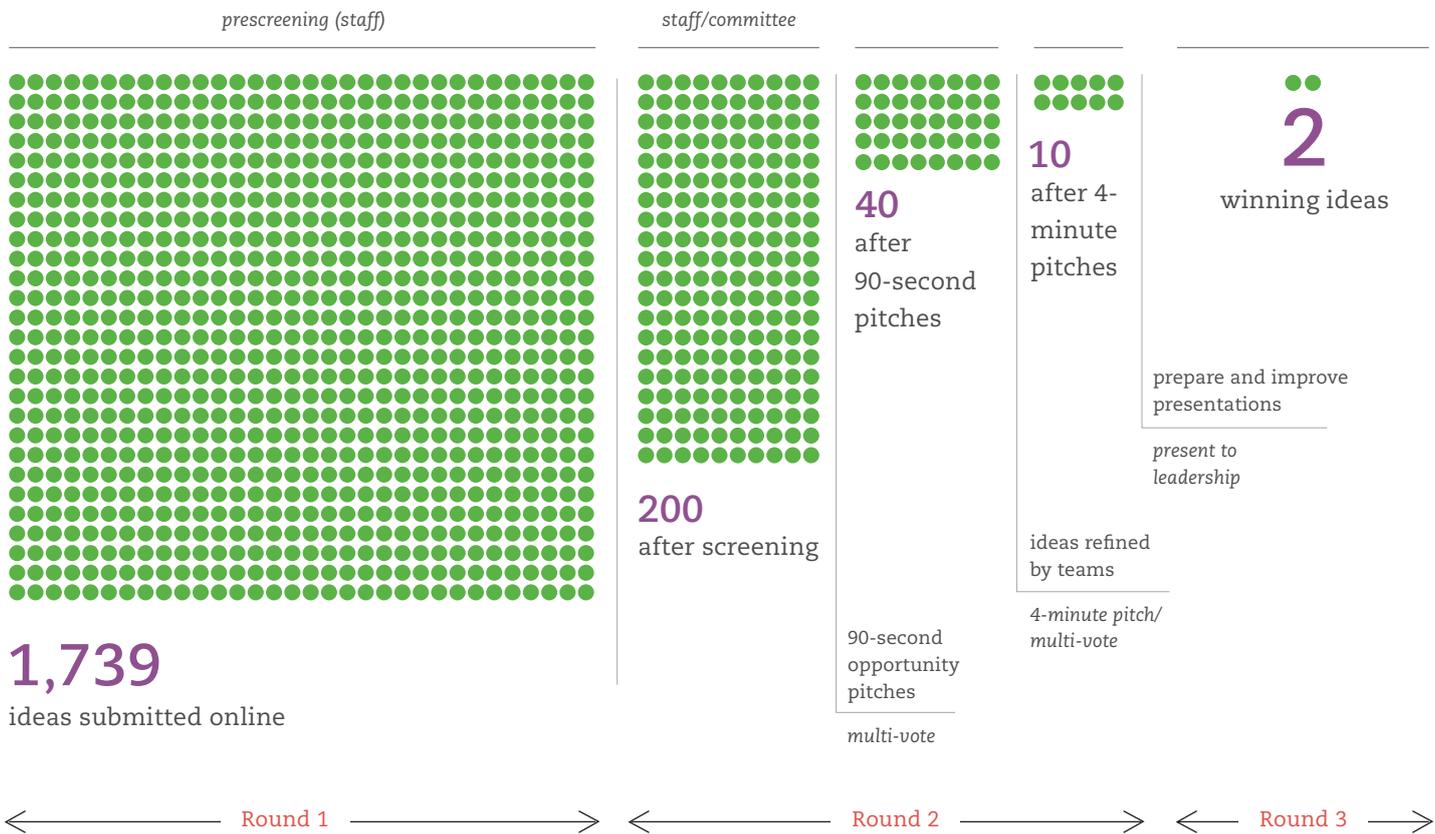
AMERICAN IDOL, MARCH MADNESS

“There was enormous participation in terms of submissions,” Terwiesch said of the UPHS tournament. “But there was even greater participation in terms of interest in the ideas and the rating of the ideas. We expected some 500 submissions, given the size of the organization. But we hit that number in the first couple of weeks; in fact, we had to cut off submissions at one point.” There were 1,739 ideas submitted altogether. Dubbed “Your Big Idea,” the tournament was launched in January 2012 and the winning ideas were announced in May 2012.

Focus

The first challenge was to define the focus of the tournament, said Brennan. At the beginning, all Brennan and other executives knew was that they wanted to involve the whole organization. If the focus of the tournament was too narrow, many employees would have been excluded. For instance, one early focus was improving hand washing by physicians and nurses, but this topic was deemed too narrow. “As we got narrower with our focus, we found we were getting underneath some of the processes and perhaps cutting out many groups of people within the organization,”

The Penn Medicine Innovation Tournament: What Happened



Brennan said. “At the end of the process, we decided that the issue that was really burning a hole in the organization at the moment, and one that everyone could wrap their minds around, was the patient experience. That became the focus of the tournament.”

Of the approximately 1,700 submissions, almost a quarter were suggestions for patient amenities; the next-highest category of ideas submitted was for technology optimization.

Structure and Execution

Once the focus was defined, the executives at UPHS decided to use a sports tournament structure, where ideas, rather than teams, would go through elimination rounds. Employees could go online and rate the ideas; Terwiesch explained that of the 1,739 ideas submitted, there were 66,000 ratings submitted via the tournament’s website. Even employees who did not submit ideas nevertheless participated by ranking the entries.

“We originally planned to keep the submissions open for 6 weeks, but we had to cut it short because we had more than we had expected and we began to see repetitive ideas, and repetition on top of repetition,” Brennan said. As ideas moved through the filters at the different stages of the tournament, they were modified, expanded, and developed further. “The submissions consisted of two- to four-sentence descriptions of an idea. Then the organization voted. On the Big Idea website there was a constant stream of ideas that were also being reviewed,” Brennan said.

In March 2012 (“March Madness”), ideas were prioritized through crowdsourcing and prescreened by a steering committee. This narrowed down the field to some 200 ideas. In the next step, the authors of those 200 ideas were invited to a workshop. There, they were given time to prepare and present short “opportunity pitches.”

These pitches went through a voting phase by the other workshop attendants, leading to ten ideas coming out of the workshops. These ten ideas were then presented to a panel of judges.

The panel included the CEO, the board chair, nurse managers, physicians, and other executives. Absent from the judging were financial considerations, Brennan said. At the end of the ten presentations, the executive team uploaded summaries of each presentation and all employees were able to vote online or using cell phones, similar to *American Idol*. As the votes came in, the judging team could see them in real time. The ballots from the executive team and the crowdsourced votes were considered in selecting the ultimate two winners: patient kiosks and online scheduler.

Interestingly, neither the highest-rated idea nor the two winning ideas were considered as very radical innovations. “While the ideas submitted were not as novel as we had hoped for, they were not without impact. The most significant impact was a cultural one,” Brennan said. “There was enormous interest and engagement. Approximately 10% of the workforce submitted ideas. And the pace of this process was extraordinary. What we saw in this process was an ability to move the organization quickly from a concept to an organizational phase and come out at the end with an idea that was implemented fairly quickly.”

EMPOWERING EMPLOYEES

Employees whose ideas were not ultimately selected as one of the final five were recruited into teams to work on the remaining ideas and help move them further on in the process, and management provided training for the teams. “This training will help develop the skills of people at a variety of levels of the organization in terms of selling their ideas and putting them in touch with others who will be able to help

them,” Brennan said. As Brennan sees it, an innovation tournament doesn’t have any losers. Even if a winning suggestion is not ultimately successful after implementation—and there are specific metrics to determine success—just getting employees involved is a win for the organization. “We wanted this tournament to be an egalitarian process, where we gave everyone an opportunity to submit an idea,” Brennan said. Knowing that management is listening to them can empower employees.



Profile

CHRISTIAN TERWIESCH

Andrew M. Heller Professor of Operations and Information Management, The Wharton School; Senior Fellow, Leonard Davis Institute for Health Economics at the University of Pennsylvania

Christian Terwiesch’s research on Operations Management and on R&D and Innovation Management appears in many leading academic journals. Professor Terwiesch has researched with and consulted for various organizations, including a project on concurrent engineering for BMW, supply chain management for Intel and Medtronic, and product customization for Dell. Most of his current work relates to health care and innovation management. His latest book, *Innovation Tournaments*, was published in 2009. The novel, process-based approach to innovation outlined in the book was featured by *BusinessWeek*, the *Financial Times*, and the *Sloan Management Review*.



Profile

PATRICK J. BRENNAN

Chief Medical Officer and Senior Vice President, University of Pennsylvania Health System

Dr. Patrick J. Brennan is an infectious diseases physician, professor of medicine, chief medical officer, and senior vice president for the University of Pennsylvania Health System. He leads patient safety and quality initiatives focusing on reducing health care-associated infections and unplanned readmissions and on improving medication safety. He also developed the Center for Evidence-Based Practice to apply scientific evidence to clinical operations. Dr. Brennan is a member of The Joint Commission’s Patient Safety Advisory Group, which develops national patient-safety goals to prevent unexpected occurrences involving death or serious physical injury.

Key Points

- Innovation can be managed through a rigorous process, with a clearly defined focus, within any organization.
- An innovation tournament’s winning ideas are often not as novel as expected.
- Innovation tournaments can energize the culture of an organization.
- Employee participation and enthusiasm in an innovation tournament is a positive side effect.