A STUDY OF PRIZES AND COMPETITIONS

September 2022
Welcome

A STUDY OF PRIZES AND COMPETITIONS
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EXECUTIVE SUMMARY
The findings here are based on a study of more than 580 prizes and competitions from the past 50 years, deep analysis of more than 160 prizes and competitions from 2020, and interviews with more than 50 donors, senior executives, government officials, nonprofit and philanthropic leaders, and academic scholars. Our goal is to better understand the broad and diverse landscape of prizes and competitions and to help inform those thinking about designing a prize of their own. With this goal in mind, Jeff Ubois, Vice President of Knowledge Management at Lever for Change, provides recommendations for designing future prize competitions on page 12.

INTRODUCTION
High-profile individuals and organizations announced well over $100 million in philanthropic competitions aimed at big societal issues in the first half of 2021 alone. These include:

- Elon Musk’s $100 Million Prize for Carbon Removal;¹
- The Royal Foundation of the Duke and Duchess of Cambridge’s Earthshot Prize,² which began recruiting in early 2021 and will award five £1 million prizes per year over ten years;
- Google.org’s $25 million Impact Challenge for Women and Girls;³ and
- The $22 million Stronger Democracy Award,⁴ announced by Lever for Change and ICONIQ Impact.

Prizes and competitions are more popular than ever even while debate around their effectiveness and long-term impact continues. Understanding who sponsors them, how they manage them, and toward what goals may help explain their resilience and their potential future.

To that end, this study describes a broad and diverse landscape of prizes and competitions sponsored by individuals and organizations in multiple industries, administered using different methods, and delivered toward a variety of objectives.

Based on the identification of more than 580 prizes and competitions from the past 50 years, deep analysis of more than 160 prizes and competitions from 2020, and interviews with more than 50 donors, senior executives, government officials, nonprofit and philanthropic leaders, and academic scholars, the study identified the following insights:

- Application-based prizes and competitions increased dramatically over the past ten years.
- Prizes and competitions share similarities across different prize award amounts and administration methods, including prioritizing community and economic development, science, and health, looking for “impact” and “innovation,” and distributing on average a third of the total award amount to winners.
- Sponsors have different motivations for launching competitions, and their definitions of success vary. Some seek to improve conditions for the public, while others benefit from more private gains, such as increasing their network or knowledge.
- Reservations against prizes and competitions include risk, the potential for public criticism, and questions around effectiveness and their returns on investment.
The study also found gaps, including issue areas not represented by prizes and competitions and an overwhelming lack of ex-post evaluation efforts. Filling the evaluation gap in particular would add to our understanding of their impact, how much of it they deliver, and for whom, making for a more informed debate and potentially leading to more effective competitions.

HISTORY OF PRIZES AND COMPETITIONS

Prizes and competitions can be traced back to theatrical festivals in ancient Greece. The most prominent of these, the Great Dionysia in Athens, dated back to the 6th century, where judges were chosen by lottery and winners wore their awards with pride and distinction. These “cultural prizes”, as author and scholar James F. English termed them, awarded artistic and literary achievements. They have continued to this day in local settings like schools and community centers and in global settings, such as televised awards ceremonies like the Academy Awards. Cultural prizes are generally presented ex-post for works already achieved, whereas incentive or inducement prizes are presented ex-ante, to motivate a goal or solution not yet achieved.

There are many examples of incentive prizes throughout history. In 1714, for instance, the British government’s Longitude Act provided £20,000 (about $2 million today) to the person who could “find longitude within half a degree” to help ships identify their locations at sea. Clockmaker John Harrison eventually won this award. Another notable example is the $25,000 Orteig Prize, won by Charles Lindbergh in 1927 after crossing the Atlantic Ocean in one flight; the prize was originally launched in 1919 as “a stimulus to courageous aviators.”

These historic incentive prizes provided inspiration for some of today’s prizes and competitions. The $10 million Ansari X-Prize, established in 1995, was inspired by the Orteig Prize. This X-Prize sought a “reliable, reusable, privately financed, manned spaceship capable of carrying three people to 100 kilometers above the Earth’s surface twice within two weeks.” In 2004, Mohave Aerospace Ventures won the award with its SpaceShipOne, leading to a new private space industry. In 2017, the John D. and Catherine T. MacArthur Foundation launched 100&Change, an open competition for $100 million “to fund a single proposal that promises real and measurable progress in solving a critical problem of our time.” To date, the MacArthur Foundation has sponsored two rounds of 100&Change. The inaugural award went to Sesame Workshop and the International Rescue Committee for educating the young children of refugees fleeing the conflict in Syria, and in 2021, Community Solutions received the second award for their proposal to accelerate an end to homelessness in 75 U.S. communities in five years.

Likewise, in the public sector, the U.S. Defense Advanced Research Projects Agency (DARPA) has used incentive prizes to advance technological innovation. In 2004, the DARPA Grand Challenge was announced to spur autonomous vehicle technologies. During this first iteration of the Grand Challenge, none of the finalist teams was able to complete the route, but in the second iteration in 2005, DARPA awarded the $2 million prize to the Stanford team for successfully traversing the route in the shortest time.
When President Barack Obama signed into law the America COMPETES Reauthorization Act of 2010, it led other federal agencies to use prizes and competitions to spur innovation “from citizen solvers across the land.” According to an interview with a federal official, more than 1,000 competitions were administered by the federal government in the past ten years.Outside the U.S., other governments and political bodies have also used prizes and competitions to uncover innovative approaches and solutions. From 2014 to 2020, the European Union oversaw Horizon 2020 “aimed at securing Europe’s global competitiveness.” The European Commission launched a series of scientific prizes totaling €80 billion, which included the €3 million Materials for Clean Air Prize and a €1 million prize for better use of antibiotics. On December 11, 2020, the European Union announced Horizon Europe, the €95.5 billion successor to Horizon 2020; it will run until 2027.

COMPETITION LANDSCAPE

The landscape of prizes and competitions is diverse across industries, sponsors and objectives. The study’s key takeaways:

**Application-based competitions**

- Application-based competitions have increased dramatically over the past decade. As Figure 1 below shows, there was not only a robust growth in competitions from U.S. federal agencies, but also significant growth in the private sector. High-profile private competitions such as the Ansari X-Prize and the Netflix Prize, the rise in federal agencies’ use of competitions, and philanthropic programs like the Gates Grand Challenges and Skoll Awards have all raised the profile of prizes and competitions and likely inspired more.

![Figure 1](image-url)
Relative to nomination-based competitions, application-based competitions appear less likely to be sustained over time. The application-based competitions in this study were compared to more than 100 nomination-based competitions to study their relative longevity. The nomination-based competitions remained active longer overall. This could be in part due to the recent increase in application-based competitions, but it could also be a result of their differences in objectives:

- Nomination-based competitions tended to focus more on ex-post prizes, honoring work that had already been achieved. Application-based prizes were more often designed to incentivize solutions to problems.
- Many application-based competitions finished their course once a solution had been achieved. The application-based competitions that have continued longer have tended to use a broader definition of the problem.
- Some sponsors host multiple competitions over time with different objectives. Notable examples include DARPA and the XPRIZE Foundation, Inc., as well as the suite of challenges the John S. and James L. Knight Foundation ran in the early 2010s.

In 2020, most application-based competitions awarded a total prize purse of less than $5 million. About 87% (142 out of 163 total) of the application-based competitions hosted in 2020 had a prize purse totaling less than $5 million. The average total prize purse was around $3.6 million, but that was skewed by the MacArthur Foundation’s 100&Change competition with a $100 million total prize purse. The mean total prize purse was $800,000. See Figure 2.
Competition Sponsors and Funding

- **Most prize and competition spending was provided by private funders.** Despite the fact that government and private entities hosted similar numbers of competitions, the vast majority (81.1%) of competition funding came from private sponsors, as shown in Figure 3.

**Figure 3**

<table>
<thead>
<tr>
<th>Sponsorship Type</th>
<th># of Competitions</th>
<th>Aggregate Prize Purse (of $587.5M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private, with administrator</td>
<td>36.2%</td>
<td>35.6%</td>
</tr>
<tr>
<td>Government, with administrator</td>
<td>14.1%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Joint, with administrator</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Private, self-administered</td>
<td>12.3%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Government, self-administered</td>
<td>11.4%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Government, self-administered</td>
<td>5.9%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Joint, with administrator</td>
<td>0.6%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

- **Private funders with external administrators provided nearly 70% of aggregate spending on prizes and competitions.** Government sponsors that self-administered competitions provided less than 20% of total spending, despite hosting similar numbers of competitions as private funders with external administrators. This difference could be the result of varying budget sizes or of the fact that prizes and competitions managed by the government require greater internal oversight and may also be limited in the degree to which they can partner with and pay external administrators.

- **Most government funders administered prizes and competitions themselves.** In contrast, most private sponsors tended to use external administrators. This difference is likely due to regulatory and budgetary differences, but capacity could also be a reason. Federal agencies may not only sponsor competitions with higher technical complexity, but they tend to have greater in-house technical expertise to evaluate submissions than private sponsors.

Issues Addressed by Competitions

- **Community and economic development, science, and health received the largest award amounts of the 2020 competitions’ total prize purse.** Arts and culture, sports and recreation, and international relations received the least amount. Philanthropy and religion did not make the list. See Figure 4.
Human rights and unknown or unclassified were awarded the highest total prize purse. The high ranking of unknown or not classified is skewed due to MacArthur’s 100&Change. Arts and culture, sports and recreation, and education rank in the smallest number of competitions and were awarded the lowest total prize purse amounts. Again, not listed are philanthropy and religion. See Figure 5.

Community and economic development, science, and health are the top issue areas across different ranges of total prize purse. Environment was high ranked in the range of $100,000 to $5 million prizes. Philanthropy and religion did not make the list.
● Science and health are most consistently listed in the top five issue areas across different total prize purse sizes. Regardless of the range of the total prize purse, science, health, and community and economic development were awarded the highest number of shares of the aggregated prize purse, followed by human services and environment. See Figure 6.

**Figure 6**

**COMPETITION DESIGN**

There are many similarities in design across prizes and competitions.

- **Competition descriptions tend to lead with the terms, “innovation” and “solution.”**
  The most common key criteria across application-based prizes and competitions from 2020 were “impact,” “innovation,” “feasible” (or “feasibility”), “potential,” and “scale” (or “scalability”).

- **Most seek “impact.”** “Impact” is the most common key criterion across different amounts of total prize purse; “Solution” and “new” are the most common words used to describe the criteria. “Impact” is the most common key criterion across different amounts of total prize purse; “Solution” and “new” are the most common words used to describe the criteria.

- **Most competitions do not award the total prize purse to a single winner.** Each prize winner receives on average about a third of the total prize purse. The minimum possible award size a single participant can receive is on average less than 10% of the total prize purse. In the final selection, less than one-third are selected as winners.
SPONSORS’ MOTIVATIONS

In addition to reviewing published motivations and origin stories, the study conducted in-depth interviews with leaders across industries to find unpublished motivations for funding—and not funding—prizes and competitions. The following set of findings was informed by those interviews:

- **Success is defined differently across competitions.** Defining success at the outset leads to different measures of success throughout each competition, such as:
  - **Publicity and sourcing:** This can be measured through media hits, page views, and other engagement metrics to define the competition’s “reach.” Those who defined success this way tended to be linked closely to administering the competition.
  - **Outcomes:** Because many competitions seek to solve a problem, success would mean that the problem was solved or that the winner(s) advanced a solution.
  - **Value proposition:** A successful competition provides value to its audiences and is less focused on who wins or what solutions are advanced.

- **Sponsors’ motivations include public and personal benefits.** As Figure 7 illustrates, prizes and competitions can have both public benefits—improving conditions for society—and personal benefits—raising the sponsor’s profile and strengthening their network and knowledge base.
  - **Public benefits** can include inspiring new ideas, increasing visibility for the problem and working solutions, and solving or advancing solutions to the problem.
  - **Benefits to sponsors** can include increasing their knowledge of the field, strengthening their network and their profile within the network, and addressing key organization needs.

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**Figure 7**

<table>
<thead>
<tr>
<th>Benefits to the Public</th>
<th>Benefits to the Sponsor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspire or foster new ideas</td>
<td>Improve awareness and knowledge of the field</td>
</tr>
<tr>
<td>Generate publicity for the problem and the solutions</td>
<td>Raise sponsor profile and strengthen the network</td>
</tr>
<tr>
<td>Solve the problem, and if not, help develop solutions</td>
<td>Address key organizational needs</td>
</tr>
</tbody>
</table>
• **Sponsors continue to have reservations about prizes and competitions.** Despite the many benefits that prizes and competitions offer to its participants, sponsors continue to have and voice reservations.
  ○ Sponsors tend to be risk-averse, and competitions can draw more media and public attention than traditional grant programs.
  ○ Sponsors’ fear of public scrutiny may have increased due to today’s political environment.
  ○ Prizes and competitions tend to require a heavier lift for sponsors in terms of capital, labor, and time, than other types of philanthropic grant programs.
  ○ Some sponsors question the effectiveness and returns on investment of prizes and competitions.

**SCARCITY OF EX-POST EVALUATIONS**

Through research and interviews, this study found a glaring lack of evaluation efforts after the prize or competition is awarded. The study’s findings are consistent with a 2009 McKinsey and Company study, which found that “over 40% of [sponsors surveyed] say they either ‘never or very rarely’ evaluate the impact of their prizes, while a further 17% report doing so only ‘every few years.’” As a result, there is a scarcity of data on the impact prizes and competitions can have, as well as the benefits to participants and the returns on investment for sponsors.

**Notable Efforts**

Despite the lack of evaluation throughout the philanthropic prize and competition landscape, there are notable exceptions, particularly in government and academia. These include the Impact and Innovation Unit (IIU) of the Government of Canada, the Business Plan Competition at Rice University in the United States, and USAID’s Water and Energy for Food Grand Challenge (WE4F), which has an extensive library of reports available for public consumption.

The IIU, which partners with other Canadian government agencies to launch a variety of challenge prizes, recently launched a venture with its statistics department to “conduct an assessment of Impact Canada’s current suite of challenges.” The ongoing effort plans to track all participants from past challenges, evaluating the current status of their enterprises and the extent to which their participation in the challenge may (or may not) have impacted their trajectories.

Rice University’s Business Plan Competition currently shares on its website an extensive history of the results of the many start-up and entrepreneurial competitions, dating to 2001. The data include total funds raised by participants and winners, the number of dollars raised by each class, the number of active enterprises, and the number of successful exits.

These evaluation efforts can potentially help sponsors and administrators better understand their impact and inspire more support for their work. Yet such efforts are overwhelmingly rare.
SOME RECOMMENDATIONS FOR CHALLENGE ORGANIZERS
by Jeff Ubois, VP, Knowledge Management, Lever for Change

For donors who may be considering launching a new challenge, competition, or prize, the findings in this report point to some recommendations for designing a successful competition:29,30

- **See what’s been done before.** In most cases, there are related prizes that have been tried, and it’s worth learning from them. If the prize is large, consider working with an organization that has run prizes similar to the one you are designing.

- **Engage with other funders early.** They can help recruit applicants and provide expertise and even additional funds.

- **Build equity into the process.** At their best, competitions help donors break out of their bubbles and consider more than the usual grantees, and allow participants to communicate with potential donors directly, without a reliance on pre-existing social connections. Although recognition prizes in particular may tend to prove “the Matthew Effect” (to those that have, more shall be given), budgeting enough to recruit an appropriately wide range of ideal participants could help mitigate this effect.

- **Don’t waste the time of would-be applicants.** Make eligibility criteria clear-cut, be honest about the chances of funding, and match the complexity of the application to the award size.

- **Check the prize criteria with as many people as you can before you launch.** Are the criteria clear, do people of different backgrounds in the applicant pool, judging panel, or target audience understand them in the same way, are they complete, or might they exclude something wonderful?

- **Decide how you intend to manage the relationships with participants after the award is announced and the funds are disbursed.** Do you want them to report back on how their projects turned out? Will you set milestones tied to a gradual payout? Would you like to see an evaluation of the projects? Do you intend to remain involved in other ways?

- **Plan in advance to publish what you find** and let participants know you may share information they provide to you. Running a prize generates tremendous amounts of information about and insights into a field. Sharing the information and proposals gathered in the process benefits the prize participants who are not funded initially (because they may come to the attention of other funders) and can provide insights for others working on the issue that is being addressed.

- **Design for many winners.** Consider the challenge as an end itself, not only as a means to solving a critical problem. Highlighting a problem, bringing additional attention to the issues surrounding it, strengthening an ecosystem, leveraging additional investments, and elevating the most promising solutions will benefit all who participate; a challenge may be a wild success even if the critical problem may not be entirely solved, and the number of “winners” may be larger than the number of organizations funded directly.
CONCLUSION

Prizes and competitions have been prevalent throughout history and have grown even more pervasive in recent years. Understanding who sponsors them, how they manage them, and toward what goals may help explain their resilience over time and their potential for continuing to grow into the future. Increasing evaluation efforts beyond their rare instances today could help inform the impact they can have on both winners and other participants and help demonstrate their value and returns on investment to potential sponsors, participants, and the general public into the future.
References


4 “Impact Challenge” Google.org, Google LLC. 2021. impactchallenge.withgoogle.com


7 “The History.” Longitude Prize, Nesta Challenges. 2019. Longitudeprize.org/challenge/history


14 Holdren, John P. “America COMPETES Act Keeps America’s Leadership on Target.” National Archives and Records Administration. 6 January 2011. obamawhitehouse.archives.gov/blog/2011/01/06/americacompetes-act-keeps-americas-leadership-target


“Skoll Awards.” Skoll Foundation. 2021. skoll.org/about/skoll-awards


Water and Energy for Food https://we4f.org/we4f-publications, a portfolio of programs and evaluations.


Lever for Change connects donors with bold solutions to the world’s biggest problems—including issues like racial inequity, gender inequality, access to economic opportunity, and climate change. Using an inclusive, equitable model and due diligence process, Lever for Change creates customized challenges and other tailored funding opportunities. Top-ranked teams and challenge finalists become members of the Bold Solutions Network—a growing global network that helps secure additional funding, amplify members’ impact, and accelerate social change. Founded in 2019 as a nonprofit affiliate of the John D. and Catherine T. MacArthur Foundation, Lever for Change has influenced more than $1 billion in grants to date and provided support to more than 145 organizations. To learn more, visit www.leverforchange.org.