Introduction

While the current macroeconomic climate has made problem-solving prize competitions more attractive due to their pay-for-solutions model, it has also made it more difficult for early stage startups to fund their research. This dilemma offers a great challenge to the prize industry: how to provide seed stage funding to innovative startups while leveraging the investment capacity of venture capital. This paper outlines how new models are being explored by thought leaders in the field and concludes with an indication of how innovation around these models should be best directed.

Prize competitions have been used for centuries – dating back to the Longitude Prize in 1714 – but their popularity declined in favor of venture capital (VC) and internal R&D departments during the twentieth century. The tightening of corporate budgets, forced by the financial crisis, have again shifted this balance: as internal R&D budgets are slashed and VCs focus on later stage funding to minimize risk, prize competitions are regaining favor because of their cost-effective value. This has been underlined in an independent UK government study, which found that OmniCompete – now the InnoCentive Grand Challenges Division as of February 2012 – to have a return-of-investment (ROI) of 6.49x (based on 2010 figures).

One of the key challenges in innovation management is how to bridge the divide between research and investors. On the one hand, academics and researchers often lack the business acumen to take their ideas to commercial fruition. And on the other, investors have this acumen, but are financially incentivized to put their efforts into later stage companies.

Belt tightening and shifting priorities have widened this gap. Leading research facilities are moving away from funding basic science research in favor of more directly profitable findings, with Bell Labs' decision to stop funding fundamental physics research being perhaps the most high-profile example. VCs are more inclined toward late stage, less risky, but lower potential investments, leaving a financing gap at the seed stage.

**Prize Venture: A New Investment Model to Finance Prizes**

Just as inducement prizes are altering the way scientific research is done, Grand Challenges are driving new business models for funding innovation.

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Speaking at the OmniCompete (now InnoCentive) Prize Summit in 2011, Amadeus Capital Partners’ investment manager, Jason Pinto, underlined that “venture firms just are not investing in the ‘two guys in a shed’ sort of a business as much as they were. That is a problem.”

Indeed, bank lending levels to small and medium enterprises (SMEs) are shrinking; one study showed that in the UK, bank lending to SMEs fell more than £2bn short of targets in 2011. Governments have less money to spend and less patience to bet on high-risk, multi-year projects given the austerity measures being put in place (especially in the UK and Europe).

As a result, “many long-term fundamental technologies are not attracting the kinds of investment they deserve, even though the potential returns, if successful, would be very substantial.” It is not enough for prize competitions to provide cash prizes to innovative startups. Rather, new models with new approaches to attracting early stage investment should be explored to realistically fill the gap and fund the next generation of innovators.

**New Models for Attracting Early Stage Investment**

In response to the market challenges facing SMEs and funding/lending, this paper explores a range of funding and investment models that have the potential to, when coupled with prize competitions, address the challenges. Effective new models can be built by combining key attributes of existing funding models. For example, certain for-profit and non-profit practices can be combined to share risk whilst splitting the returns to better reflect differing interests (e.g., financial returns for for-profits and social returns for non-profits, respectively). Grants can be combined with prize competitions to ensure a more transparent and level playing field for the distribution of government funds.

New approaches are also of great interest here: crowdfunding is emerging as an increasingly popular fundraising method, and can be combined with prizes so that contributors only pay out awards if a defined challenge is solved. InnoCentive has already proven the prize competition part of this model to great success. Another approach may include a fund which buys a pool of intellectual property, which entrants can then use to solve an inducement prize challenge.

This paper explores the concept of Prize Venture. This term denotes a type of prize competition whereby the challenge structure is used to leverage investment in the prize money.
Case Study: PRIZE CAPITAL® Model

The PRIZE CAPITAL® Model creates a win-win situation for investors and innovators by profitably addressing market failures in a high potential, high risk, and long term investment environment. At the heart of the model is an inducement prize (see graphic below), which attracts innovators (e.g., startups, SMEs) to enter the competition. A non-profit partner provides expert, objective, and unbiased judging of the prizes. In exchange for this incentive, startups that enter the competition must give ‘the fund’ (an investment group affiliated with the competition) certain rights, which may include co-investment options, options on equity, or options on intellectual property.

The initial investment of $n in each competing startup (or the top entries after the first competition round) is an important aspect, because it provides these early stage startups with crucial funding that they would have had difficulty securing from a traditional VC fund. Researchers are guided toward a commercially-viable end result through a strategically-designed prize competition, often set up in stages which act as check-points. Further investment can be provided to competitors that pass these checkpoints.

As an illustrative example (see next graphic), initial checkpoints might be the presentation of a scientific paper outlining the potential of the research in question, followed by a checkpoint which requires initial lab results and eventually prototypes.

“[PRIZE CAPITAL® competitions] focus on critical problems with huge potential economic payoffs, but which are nonetheless attracting woefully insufficient funds from corporations and venture capitalists today.”

Proeuror Josh Lerner, Harvard Business School

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The model has the potential to create a winning situation for startups, non-profit actors interested in social/scientific gains, as well as the fund interested in financial gains. Yet potential drawbacks must be noted: co-investment options can be unattractive to external investors, and thus unattractive to startups. Given that the extent of advantages and disadvantages of the model will depend on the exact industry and challenge, different incentives will in practice have to be tweaked. However, the following benefits are clear and can be adjusted to achieve the most effective balance:

- Startups benefit from cash prizes, investment or options, networking, promotion, visibility and access to investors.

- The PRIZE CAPITAL® fund is motivated by reduced management costs (presuming competition costs are covered by the non-profit actor), and they “bet on every horse in the race,” thereby minimizing the risk of missing out on valuable startups.

- The VCs and investors are not formally connected to the prize competition, so can benefit by “free-riding” on the stimulation effects of the prize. “Free-riding” occurs when the prize process (including detailed criteria and independent expert judging) removes a significant portion of the initial research and due diligence burden from VCs.

- The non-profit actor benefits from increased investment in and attention to a social or scientific cause which would otherwise struggle to attract seed funding.
Prize Venture: A New Investment Model to Finance Prizes

The Outlook for Prize Venture

While the model outlined above is conceptual, important elements of it are present in currently employed investment approaches. The ‘SeedCamp Model,’ for instance, selects a number of high-caliber start-ups, brings them to a specific location, invests in them all, and provides intense mentorship.6 While well suited to IT companies and ventures with low startup costs, it would be difficult to replicate in sectors where startup costs are higher and it takes longer to generate commercial value.

By investing in very early stage ideas in technological fields that promise high returns – but which have traditionally been underfunded due to large initial costs – ‘Breakout Labs’7 provide another noteworthy approach. These Labs address early stage investments that are high risk, but it does not solve the problem – the Labs simply shoulder the risk. While this can fill part of the gap, it may not be very scalable.

Next Steps and Calls To Action

Innovative investment models are most effective in fields with the following characteristics:

1. **High potential industry:** the potential payoffs need to be large in order to attract VCs (both external and internal).
2. **Funding gap for early stage/seed investments:** otherwise startups are likely to be attracted by models, such as prize competitions, without co-investment options.
3. **A problem where clear steps toward a solution can be readily defined:** so that adequate investment checkpoints can be established.

This paper is intended as the starting point for a dialogue on how new funding models can be applied in open innovation. In fact, InnoCentive is currently exploring the practical applications of these models in greater detail with several existing clients. Through this work, InnoCentive has gathered feedback from external experts, added features, and tailored aspects of new programs.

Encouraged by these cases, InnoCentive is eager to involve more organizations in the discussion to build a bigger picture world view of how and where the model can be applied most successfully. To become a part of this process, and see how such business models can be best applied to the unique requirements of your business, consider these next steps:

1. **Identify funding gaps related to your industry:** the first step is to examine the market failures holding back entrepreneurship and innovation in your field or sector. Look for indirect and direct effects. Are failures affecting your organization or other businesses which your organisation relies on? Once you have identified what you want to overcome, you can begin to think

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about how you’re going to achieve it.

2. **Apply the idea to your field/concept process:** initial brainstorming ideas will help you explore how the funding model can be mobilized in a prize competition, or series of prizes, that ultimately achieve your goals and help to overcome your problem. In this stage, you can begin identifying steps toward a solution, which can then be used as checkpoints to frame the fundraising around/provide checkpoints for co-investment options.

3. **Tailor the idea/ideation process:** it is important to use ideation processes to tailor your approach further so as to arrive at the best possible design. Ideas should not only come from expert research and analysis, but also from dialogue with a range of the relevant stakeholders across entrants, investors, and external investors. Furthermore, this process should frame the competition in a way that attracts the best entrants so as to gain access to the most promising co-investment options (e.g., this could include abstracting the problem to make it accessible beyond its traditional technical audience). It may also be valuable to consider and explore partnership opportunities with stakeholders who share your interests in bridging the same funding gap.

4. **Pilot the approach:** launch an InnoCentive Challenge to test the ability of the model to overcome the funding gap in the industry that concerns you. To get the most effective co-investment options, it will be valuable to cast the net as wide as possible. This means you should strongly consider leveraging external problem solver networks in order to tap diverse channels.

### Conclusion

Initial exploration of the Prize Venture suggests real potential to overcome the growing gap between venture funding and seed stage investments. However, a successful response to funding prizes competitions ultimately requires more than just one answer, as there is no one-size-fits-all funding model. Continued leadership in the open innovation field requires fresh analysis, new ideas, and disruptive initiatives. There is therefore a real need to develop new models, explore how they can work, and prepare the groundwork for them to be put into effective practice.

**It is important to use ideation processes to tailor your approach so as to arrive at the best possible design. Ideas should not only come from expert research and analysis, but also from dialogue with a range of the relevant stakeholders across entrants, investors, and external investors.**

**Authored by InnoCentive, Inc.**

**For more information** on how you can easily run your own Challenges to rapidly solve problems and accelerate your innovation outcomes, visit [www.innocentive.com](http://www.innocentive.com) or call **1-855-276-9366** (North America) or **+44 (0) 207 224 0110** (Non-US) to speak directly with a Consultant.
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