

# Extending Your Innovation Toolkit – Crowdsourcing Ideas and Solutions

## Abstract

In the age of start-ups and ever advancing technology, companies need to constantly find new ways to solve problems and delight customers.

Conceptualizing ideas that help deliver on those objectives is easier when organizations learn to tap into the power of innovation crowdsourcing. Through various platforms, companies can gain access to an array of 'solver communities' which can help tackle problems and generate compelling solutions that will thrill the marketplace, displace competitors, and enhance business performance.

This paper offers a sneak peek into how innovation crowdsourcing works, the core steps involved in the crowdsourcing process, and a recommended approach to launch a scalable capability.

## A New Face to an Age-old Method

In the 17th century, measuring longitudes was difficult and caused shipwrecks and deaths. In 1714, the British government crowdsourced a solution from its citizens in exchange for a price of £20,000.<sup>1</sup> The practice of inviting large groups to contribute ideas or solutions to problems or opportunities is therefore not new.

Digital technologies and social media however have made crowdsourcing ideas and solutions easier for organizations by vastly increasing the number of 'solvers' or innovators available to them.

In the Digital Age of exponential change, companies must adapt continuously. It requires constant and rapid ideation, experimentation, and implementation of a risk-balanced portfolio of strategic options.<sup>2</sup> Those options include innovations, from the incremental to the radical, in products, services, business models, customer experiences, talent management structures, business capabilities, and more. Successful innovators mine ideas from multiple sources, including employees, competitive intelligence, strategic partnerships, customers, vendors, and Big Data mining.

Top performing companies are predominantly 'multi-modal', that is they use a variety of innovation 'tools,' such as corporate venture capital, innovation labs, and accelerators and incubators. In what has been described as the age of ideation<sup>3</sup>, crowdsourcing is becoming another more commonplace tool in leading brands' 'innovation toolkits.' Take-up varies across sectors. The majority of top brands in FMCG and consumer electronics are avid users of this open innovation tool. Only 20% of automotive and media and entertainment companies leverage it. Finance, insurance, and retail industries lag further.<sup>4</sup>

## Crowdsourcing Deconstructed

Creative crowdsourcing typically takes the form of 'challenges' to source content and ideas. Innovation is the most frequent and fastest growing application.<sup>5</sup>

Figure 1 shows the core steps involved in the crowdsourcing process.



Figure 1: High-level Crowdsourcing Process

Three channels exist for innovation crowdsourcing. One uses crowds of employees. The other two involve external crowds where the organization engages wider 'solver communities.' An enterprise may do this with its own crowdsourcing portal using home grown or third-party idea or innovation management systems. A plethora of suppliers including Spigit, Imaginatik, and Brightidea are thriving. Alternatively the organization may use a third-party 'crowdsourcing platform' such as Innocentive, Kaggle, GrabCAD, or One Billion Minds. These help companies connect with the communities of solvers and manage the process.

One survey says the average annual number of internal challenges is about 10 while external challenges is less than one.<sup>6</sup> The lower number of external challenges is likely due to enterprises' concern over confidentiality and intellectual property protection. However, precautions can be taken to mitigate the risk of 'showing your cards' to competitors and 'giving away the farm' to solvers. Third-party crowdsourcing platforms allow an enterprise to disguise the brand, and industry- or company-specific language can be 'genericized' in the problem statement. Also, before a solver can participate in a contest, s/he must accept conditions around non-disclosure and transfer of intellectual property ownership.

'Sponsors' of crowdsourcing contests, that is the owners of problems for which new and novel solutions are sought, come from across the enterprise, though Innovation, Technology/IT,

Operations, the Executive Team, and Human Resources are cited as the most prolific users.<sup>7</sup> Innovation crowdsourcing as a capability is either centralized, decentralized, or a hybrid. While no statistics exist for the split between these models, one survey provides a proxy: Almost 50% of the time a formal innovation team manages the software that enables crowdsourcing.<sup>8</sup>

## The Value of Crowdsourcing

Innovation crowdsourcing goals vary, but the top objectives relate to changing behavior and performance. A majority (86%) cite 'building a culture of innovation' as a key reason. 'Increasing employee engagement in innovation' is popular (78%) as is 'building collaboration and creativity skills within our employees' (73%). 'Developing better products and services,' 'accelerating new product and service development,' and 'reducing cost and inefficiencies' score 31-32%. Only 17% of respondents select 'engaging with external groups to innovate.'<sup>9</sup>

While the majority of enterprises do not yet track the ROI of innovation crowdsourcing<sup>10</sup>, the three main benefits cited include:<sup>11</sup>

- More and better ideas – 'good ideas can come from anywhere' is the golden rule
- Collective intelligence – thanks to the combinatorial magic delivered by the 'collision' of participants' diverse insights, knowledge, and perspectives
- Speed – crowdsourcing is essentially massive parallel processing

Examples abound of applications in the business world. Here are three to whet your appetite:

- Cambia Health, an innovative insurer from Portland Oregon, realized \$4 million in cost savings from a single, internal process improvement-focused challenge. It generated over \$60 million in revenue with a sales engagement tool imagined during another internal contest.<sup>12</sup>
- In an external crowdsourcing campaign, GE awarded a young Indonesian engineer \$7,000 in prize money for reducing the weight of a jet engine bracket by 84%, saving millions of dollars' worth of fuel savings each year per aircraft.<sup>13</sup>

- The world’s leading brewer Anheuser-Busch sought input from its customers while developing a craft beer. 25,000 collaborators participated and the result was Black Crown, a golden-amber lager.<sup>14</sup>

## Getting Started – A Recommended Route

In the early days of an enterprise’s crowdsourcing journey, TCS recommends an operating model that borrows the best from both centralized and decentralized approaches. A hybrid or shared service model enables consistent delivery of best practice capabilities (see Figure 2) to potential challenge sponsors across the enterprise as well as provides economies of scale and encourages use of common standards and metrics. It keeps the identification of ‘problems worth solving’ closest to customers and to the ‘people, processes, and technology’ responsible for delighting those customers and ensuring a fiscally viable enterprise. The shared service and the challenge sponsors collaborate to determine which problems worth solving are right for crowdsourcing generally and for which channel specifically – internal, external through own portal, or external through third-party platform.

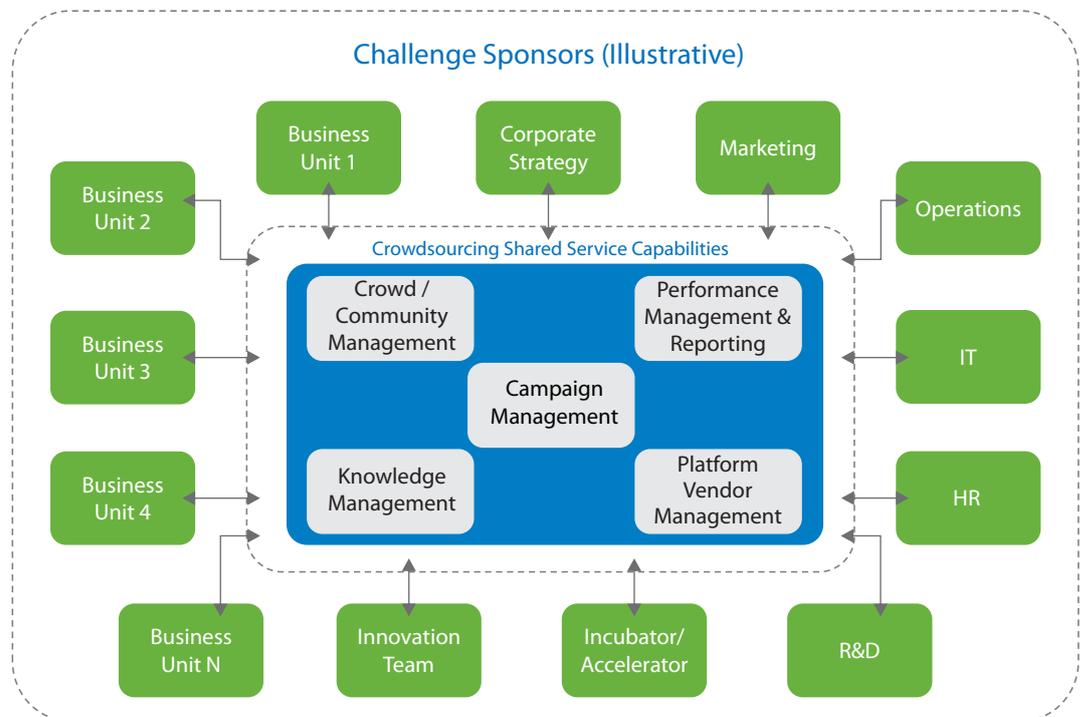


Figure 2: A Hybrid Operating Model

Campaign Management involves collaboration with sponsors of crowdsourcing challenges, and planning, managing, and communicating throughout the event. That includes carefully crafting the problem statement, developing evaluation criteria, briefing juries, assessing solvers' innovative solutions, and celebrating winners and other contributors.

Crowd/Community Management encompasses the identification and curation of relevant crowds. Depending on the problem, an appropriate solver community must be chosen. Access must be managed, incentive and reward frameworks developed, and communities of interest nurtured.

Knowledge Management necessitates maintenance of a searchable database of past campaign inputs and outputs that can be re-used to provide inspiration for future challenges or solve other problems.

Performance Measurement & Reporting requires a 'Balanced Scorecard'-based set of KPIs for benefits tracking and shared service performance management. Leadership, the enterprise, and its crowds must be updated with progress and results to encourage continued participation and delivery of required outcomes.

Platform Vendor Management covers the identification and vetting of third-party crowdsourcing platforms to add to the channel portfolio. Contractual relationships must be negotiated and managed such that the shared service will have the right mix of channels from which to choose to execute each campaign.

## Build, Test, and Learn

As one crowdsourcing enthusiast puts it: "Crowdsourcing is growing a future where companies, governments, organizations, and individuals can ask millions of the best and brightest to chip in, to collectively shape the way our species answers our most challenging questions."<sup>15</sup>

As with all new initiatives in the Digital Age, enterprises must rapidly and iteratively build, test, and learn their way to establishing the right crowdsourcing capabilities for their strategic business purposes.

Like any innovation process, it requires a willingness to experiment and evolve, as well as the realization it won't always deliver results. Refinements will be made along the way, successes analyzed, and failures dissected. From these the organization learns what's best for it.

John Harrison, the maverick watchmaker who won the Longitude Prize forty years after it was announced, didn't get it right first time. Nor was he the only solver. By opening up the challenge to the crowd, however, the British government found a solution to a seemingly unsolvable problem and in doing so saved thousands of lives.<sup>16</sup>

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## About The Author

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Courtney Wood leads the Innovation Management Consulting capability at Tata Consultancy Services (TCS). Courtney has spent over 25 years in management consulting and banking, supporting both large and early stage enterprises in establishing high performing growth and profitability engines by developing the right business strategies as well as designing the right business capabilities and executional roadmaps to remain competitively sustainable in an ever more dynamic and complex world.

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