<u>Overview of Pull Mechanisms</u>

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Incentive prizes are one type of "pull mechanism" – results-based market incentives designed to overcome market failures and catalyze innovation. Experts often make a distinction between "recognition" prizes that honor past achievements and "inducement" or "incentive" prizes that encourage participants in the competition to achieve a particular goal. In a 2009 report, McKinsey identified six prize archetypes that provide a useful framework for identifying types of prizes that can best achieve different types of goals:

- **Exemplar Prizes** that define excellence within an area.
- **Point Solution Prizes** that aim to spur development of solutions for a particular well-defined problem. Solutions can include software applications, algorithms, predictive models, ideas, business plans, policy proposals, designs, or prototypes.
- **Market Stimulation Prizes** that try to establish the viability of a market to address a potential market failure, mobilize additional human talent and financial capital to jumpstart the development of a new industry, or change public perceptions about what is possible.
- **Exposition Prizes** that are designed to highlight a broad range of promising ideas and practices, attract attention, and mobilize capital to further develop the winning innovations.
- **Participation Prizes** that create value during and after the competition – not through conferral of the prize award itself but through their role in encouraging contestants to

change their behavior or develop new skills that may have beneficial effects during and beyond the competition.

- **Network Prizes** that build networks and strengthen communities by organizing winners into new problem-solving communities that can deliver more impact than individual efforts.

Other types of pull mechanisms include:

- **Advance Market Commitments**: Binding commitments to purchase, or to subsidize purchase, of a certain volume of a product at a fixed prize, if the product meets pre-defined performance characteristics (pneumococcal vaccine and Department of Energy examples discussed above).

- **Buyer's Consortia**: Cooperative agreements between purchasers of products that leverage the combined buying power of those purchasers to drive down the price of products, such as a buyer's consortium set up for Maine school districts to purchase specialized software and specific assistive technology devices.

- **Pay-for-Success Bonds**: Under a Pay for Success bond, also known as a social impact bond, the financing organization and the Federal, state, or local government enter into a contract that specifies the population to be served, the outcomes to be achieved, the measurement methodology to be used, and the schedule of payments to be made. The financing organization works with philanthropic and other investors to invest in innovative, data-driven service providers that can achieve results. One example of a pay-for-success bond program is an initiative in New York targeted at reducing recidivism in adult males.

- **Milestone-based Payments**: Payment terms in a standard grant or contract in which the payment for each performance milestone established in the statement of work is not made until the milestone is proven to have been achieved. One example of this approach has been successfully demonstrated in NASA's Commercial Orbital Transportation Services (COTS) program.
- **Priority Review Vouchers**: An accelerated regulatory review offered to products that meet certain performance or cost criteria, such as the FDA Innovation Pathway and USPTO's Patents for Humanity.
- **Patent Buyout**: An offer to buy out the patent rights to a product that meets specified performance conditions at a set price (price for patent usually marked up over market value; followed by placing of the patent into the public domain to encourage competition for commercialization of the product). One example is the purchase of the patent for the Daguerreotype process by the French government in 1839.