Beatles for Sale: Behavioral Engineering for Cultural Markets

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Motivation

- In 1997, the British rock group Marillion raised US$60,000 in donations by means of a fan-based Internet campaign to sponsor an entire U.S. tour.
- Marillion has since used this method successfully as a way to fund the recording and marketing of its albums, like Marbles (2004), and Sounds That Can't Be Made (2012).
Motivation

Many other ‘cultural products’ came into existence thanks to crowdfunding by potential consumers:

- Movies
- Video games
- Art books
Motivation

Fundraising mechanisms typically have the following features in common:

- Potential customers donate money
- The project is produced as soon as the money raised exceeds its costs
- Donors consume (some of) the fruits of the project
An example

- $N = 1,000$ consumers
- Value $v_i \sim U[0, 100]$ iid
- Fixed costs $C = 60,000$
- Zero marginal costs
- # items: $n \leq N$
An example

- Mechanism 1: FCFS, $p = \frac{C}{n}$
- Mechanism 2: dynamic VCM
- Mechanism 3: auction
- Mechanism 4: VCG mechanism
Research questions

- What mechanism is the most efficient?
- What mechanism maximizes the product developers’ revenue?
- What mechanism maximizes the likelihood that the to-be-developed product raises a sufficient amount of money?
- How do consumers perceive various selling mechanisms?
Methodology

- Design table: Theory
  - Auction theory
  - Mechanism design theory
- Windtunnel: Laboratory experiments
- Testing in the field: Field experiments
Issues

- Multi-unit demand
- Within-mechanism feedback
- Perishable/non-perishable
- Limited/unlimited supply
- Perceived fairness