Field Experiments and Beyond for R&D in Retail Finance

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(Happy Anniversary PCC!)
An Approach to R&D

• Design an innovation based in part on theory and evidence from cutting-edge social science
  – Product /service development
  – Product/service features
  – Pricing (and underwriting)
  – Marketing
  – Disclosure
  – Messaging (feedback and reminders)
An Approach to R&D

• Design a test of innovation that:
  – Tests some theory of how markets (don’t) work
    • Market failure (e.g., asymmetric information)
    • *Decision failure (e.g., limited attention)
    • Policy failure (e.g., limited enforcement)
  – Measures impacts of innovation on:
    • Supplier outcomes (e.g., profits, client satisfaction)
    • Client outcomes (account balances, financial condition)
  – Using randomized/control methods to isolate *causal* impacts of the innovation
An Approach to R&D

• Implement tests by tweaking day-to-day operations of a partner
  – Financial institution
  – Nonprofit
• Evaluate results and make recommendations for strategy, further testing
  – And sometimes for broader policy, programs
Examples

• Three examples of R&D motivated by “decision failures” identified in research on “behavioral” decision making:
  – A new product
  – A new marketing strategy
  – A new messaging strategy
Product Test Example: Borrow Less Tomorrow

- Motivation: for many, highest/safest return investment is... paying down expensive debt
- We designed a product that:
  - helps people make a simple plan to accelerate
  - offers option of enlisting peer supporters
  - sends people reminders about plan and upcoming payment
  - monitors payments and notifies clients (and supporters) when falling off-track
- Pilot-tested in Tulsa in early 2010
  - 20% take-up rate
    - without target marketing
    - without any menu of commitment options
  - Preliminary and early results on debt reduction looking encouraging
Borrow Less Tomorrow: Scalable?

• What would product look like at scale?
  – Payment accelerator algorithm
  – Menu of commitment options
    • Performance bonds, “cut me offs”
    • Goals based on total borrowing, not borrowing anew, etc.
  – Automated monitoring and messaging
• Who has cost advantage for doing this?
  – Credit bureaus/report-monitoring services
  – (Online) account aggregators and financial management apps
  – Credit counseling agencies
• What’s revenue model?
  – Subscription (as part of bundle sold retail, or wholesale)
  – Performance bond proceeds
  – Loss-leader for cross-sells
Marketing Test Example: Ad Content for Expensive Loans

- Setting: payday loan-like market, South Africa
- Former, dormant borrowers of large lender
- Sent direct mailers with randomized price and advertising content
- Ad content had large effects relative to price
- Content that increased demand:
  - triggered visceral/automatic response
  - not thoughtful/deliberative responses
- Scalable? Sure. Lots of opportunities for direct (social) marketing tests.
  - Take what have learned here and apply to other (more desirable?) behaviors: advice take-up, savings, debt reduction
Messaging Test Example:
SMS Reminders for Savings Deposits

• Setting: 3 mid-sized banks in three different countries, new savings account clients
• Test: do (text-message) reminders increases savings account balances?
• Method: randomly assign different reminders at account level
• Results:
  – Reminders increase savings by 6%
  – Mentioning specific goals has incremental effect
  – Scalable? SMS cheap. Email also worth testing.
What Have We Learned?

• Can use behavioral economics to:
  – Change consumer behavior
  – Improve our research partners’ bottom lines

• Have we improved consumer outcomes? Not necessarily.
  - E.g., do reminders make people save more on net?
  - Or do people borrow more (expensively) to maintain consumption?

• Have we learned enough to inform policy design?
  – In most cases, not yet...
Some Key Questions Going Forward: Outcome Measurement

• Critical for policy evaluation
• More holistic outcome measurement. Cost is a big issue. Possible solutions:
  – Online surveys
  – Develop summary statistics for financial condition
  – Credit reports
  – Do research with firms that do client account aggregation!
Some Key Questions Going Forward: What Can/Should Policy Do?

• What will market do?
• Need behavioral theories of market equilibrium with
  – Complete picture of consumer responses
  – Given how firms compete for consumers
  – Subject to regulation under costly enforcement
• This is a tall order
• Need much more data and theory, much of it non-experimental, on how:
  – Behavioral biases relate, fit together, influence outcomes
  – A behavioral “g-factor”?
    • Learn from decades of research on intelligence/mental abilities
In Meantime

• Important to be circumspect about our ability to prescribe good policy based on existing evidence
• Lots of potential, as evidenced by ability of small, scalable innovations to change behavior
• But: changing behavior not $\neq$ improving outcomes
  – particularly in equilibrium
• Way forward is to continue testing and refining theories about how and why behavior responds