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 ≠improving outcomes*
  - particularly in equilibrium
- Way forward is to continue testing and refining theories about how and why behavior responds