Nimble RCTs
A Powerful Methodology in the Program Design Toolbox
Challenge

A = Designing the right program or policy

B = Implementing the chosen program or policy well

Success = A x B
What goes into “B”? 

Suppose a program is selling something (immunizations, savings accounts, rainfall insurance, mobile money, etc.)

Good marketing (text, testimonial, channel, color, etc)
Right pricing
Offer timed on the right day
Offer timed at the right time
Offer sold to the right person in the household
Nimble RCTs...

- AKA rapid fire or A/B tests
- Short-term outcomes
- Often operational questions like take-up (buying, accepting, messaging, clicking, viewing)
- Typically use administrative data
- Key distinguishing features:
  - Faster than traditional RCTs
  - Cheap (if no surveys involved), maybe even negative cost
  - Operational focus (typically)
What Can You Measure with a Nimble RCT?

• Short-term outcomes for which good administrative data is available, such as:
  • Product take-up
  • Program enrollment
  • Attendance
  • Adherence

i.e., outcomes that are earlier or “higher-up” in the theory of change
What Do We Mean by Higher Up on the ToC?

Example of a Theory of Change:

Figure 1: Nutrition for All’s Theory of Change

**NEEDS**
- Severe malnutrition in children caused by a lack of calories and insufficient nutrients

**ACTIVITIES**
- Train CHWs to identify
- Enroll malnourished children in NFA program
- Provide monthly nutrition supplements & training to families
- Monthly follow-up visits track nutrition status

**OUTPUTS**
- Trainings are conducted
- Malnourished children identified
- Families enroll in the program
- Families receive supplements and advice on nutrition

**OUTCOMES**
- Families adopt improved nutrition practices
- Families serve children NFA food supplements
- Rates of childhood malnutrition drop

*The organization and its theory of change are fictional.*
How Do Nimble RCTs Differ from Traditional RCTs?

<table>
<thead>
<tr>
<th></th>
<th>Rapid-Fire RCTS for Product Design</th>
<th>Welfare Impact RCTs</th>
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</thead>
<tbody>
<tr>
<td><strong>Intervention</strong></td>
<td>Usually a low-cost <em>modification</em> to an existing product</td>
<td>A modification to an existing product or an entirely new product.</td>
</tr>
<tr>
<td><strong>Data Sources</strong></td>
<td>Largely <em>administrative</em> (internal databases such as usage logs, transaction histories or click rates)</td>
<td>Administrative &amp; <em>survey</em> (including household survey collection)</td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td>Limited to first-order outcomes like <em>take-up</em> and <em>usage</em> of the product in question</td>
<td><em>Welfare</em> outcomes such as income or consumption, as well as usage of complementary and substitutable products</td>
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Pros & Cons
Pros

• Credible insights into program design
• Quick results and highly actionable data
• Relatively low cost
• Useful first step
Cons

• Limited outcomes measurement
• Limited ability to generate knowledge
• Small effect sizes
• They usually require large samples
How to start?

- Have practical question to tackle
- Embed staff with partner
- Test administrative data source, and process for pulling data
- Design series of tests. Do a few, then tweak and iterate.
MineduLAB

MineduLAB is an innovation lab for education policy housed within the government of Peru.

Ultimate goal: allowing the Ministry to use evidence to improve children’s learning
MineduLAB Structure

 IPA and J-PAL technical assistance
• Research support: Board of Researchers (F. Gallego, S. Galiani, C. Nielson) and one Research Manager.
• Institutionalization: Operational manual development, institutionalization strategies development, dissemination.
Institutionalize the production and use of evidence

Create an institutional learning unit within a (government) organization that allows for systematic incorporation of evidence in its policy cycle
Conclusion: Nimble RCTs

• A powerful methodology in the program and product design toolbox

• A rigorous and cost-saving measure

• A great way to adapt an evidence-backed program in a new context/with a different population

• A way to improve design through effective tweaks (not a way to measure overall programmatic impact).

• A complement, *not* substitute for welfare-measuring RCTs
IPA’s Right Fit Evidence Unit
Helping organizations make learning-oriented M&E a reality in the development sector

How do organizations get here?

Right-Fit

Learning

Too little
• No accountability
• Limited learning

Wrong data
• Non-credible “impact”
• Too slow to use

Too much
• Unmanageable
• Not actionable

Cost

Credible
Collect high quality data and analyze the data accurately

Actionable
Collect data that can help you make choices, and commit to act on it

Responsible
Ensure the benefits of data collection outweighs the cost

Transportable
Collect data that generate knowledge for other programs
Thank you
Examples from IPA’s Portfolio

Text messages from bank → savings deposits & balances: Varied gain/loss, mention of goal, etc.

Text messages from bank → repayment of loans
- **Success:** Philippines. Including Account Officer name → higher repayment
- **Failure:** Peru. Messed up randomization, re-randomized individuals each month

Listening rates of messages in Liberia: Testing listening rates of different audio messages aimed at reducing intimate partner violence as preliminary “lab” work

Mobile money take-up in Pakistan: Worked with Pakistan’s leading mobile money provider, Telenor Easypaisa, to explore ways to increase adoption and usage of the mobile money among unbanked poor