TOOLKIT

Product Testing: A Guide to Getting Started

ACCION VENTURE LAB

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LET'S SET THE SCENE.

You're an early-stage fintech company with great potential and promise. Your user base is growing, and you want to continue building products that help you meet some ambitious growth and revenue goals.

The best and fastest way to get to product-market fit is to **test, evaluate, and implement** new ideas in a way that promotes innovation without sacrificing quality or time.

We're here to help you do just that.

IN THIS TOOLKIT, WE'LL COVER…

- Building a test-friendly culture in your organization
- An experiment framework
- How to prioritize your tests
- Building the test plan
- Reporting results
- How to implement your findings

Note: Much of this toolkit is inspired and resourced from Optimizely's Testing Toolkit, which can be found here: https://www.optimizely.com/resources/testing-toolkit/

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Building a Test-Friendly Culture

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Why Should I Test?

More Data, Less Intuition

Testing allows you to **compare and contrast** different user experiences – and show **clear statistical differences** in how they interact with your product.

Track the History of Your Product

You can **measure your changes** and see how they have affected key performance indicators across various customers at various times. And, you can even **re-test ideas from the past** to see how they fare!

Get Your Team Aligned with Product Changes

Open and frequent testing allows for **more team members to suggest changes,** allowing for more frequent opportunities to test – and encouraging a more agile approach to software development.

Testing is also becoming faster, more efficient, and cheaper than ever – making it a more reasonable choice!

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Important principles for a good testing culture

Measure Everything

- Dashboards to **measure and track KPIs**
- Tools to **track user behavior** on the application
- Discuss **key data points** in team meetings and make decisions based on the data

Determine Ownership

- Responsibility for Product KPIs can be broken down within the Product/ Engineering function
- Website/Marketing KPIs can be given to Marketing organization
- Testing should be a joint effort between both

Set Ways of Working

- Deadlines and measuring/testing/ reporting phases should be outlined (e.g. **"cycles of work"**)
- Testing Frameworks
- Prioritization and deployment

We'll provide some resources to help with this

How To Test: Framing, Prioritizing and Executing

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A Primer for Test Building

1. Set the Stage

What are we trying to solve? *(ex. low user adoption of a particular feature)*

What is the metric of success we measure against? *(Revenue, DAU/MAU, churn)*

What is the experience we want to test? *(Layout of app features, landing pages, contacts)*

2. Predict Outcomes

Proposed Change *(specific and focused - ex. changing order of menu, button design, etc.)*

Hypothesized effect *("[Change] will cause [metric] to [increase/decrease] by [%,#]")*

3. Test Details

Test Method

Qualitative and Quantitative data to use for testing

Select audiences to target

Duration needed to get proper sample size

Prioritize for impact and complexity

Test!

5. Report and Act

What to Share

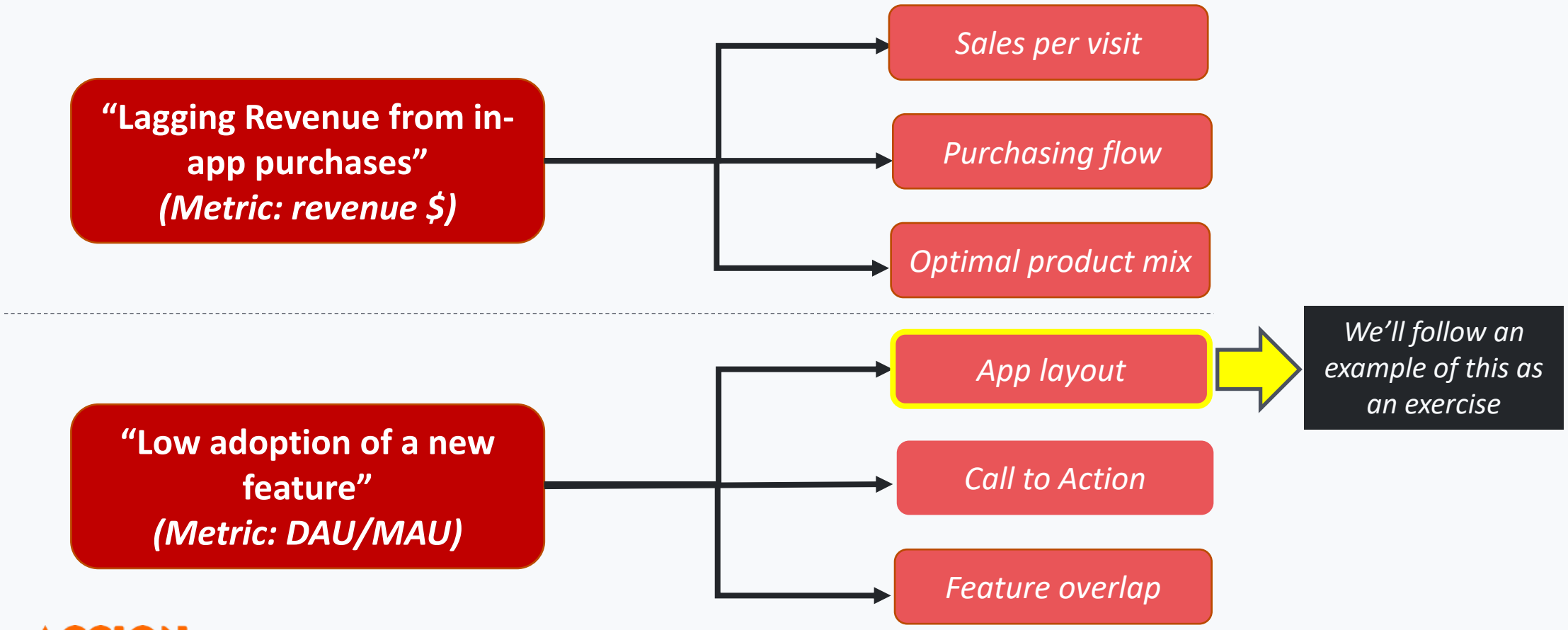
How to Share and With Whom

Deciding What to Implement

What to Test: Start Broadly, Break it Down

Problems to solve are usually macro-level and measurable…

…and can be broken down into various attributes of your product



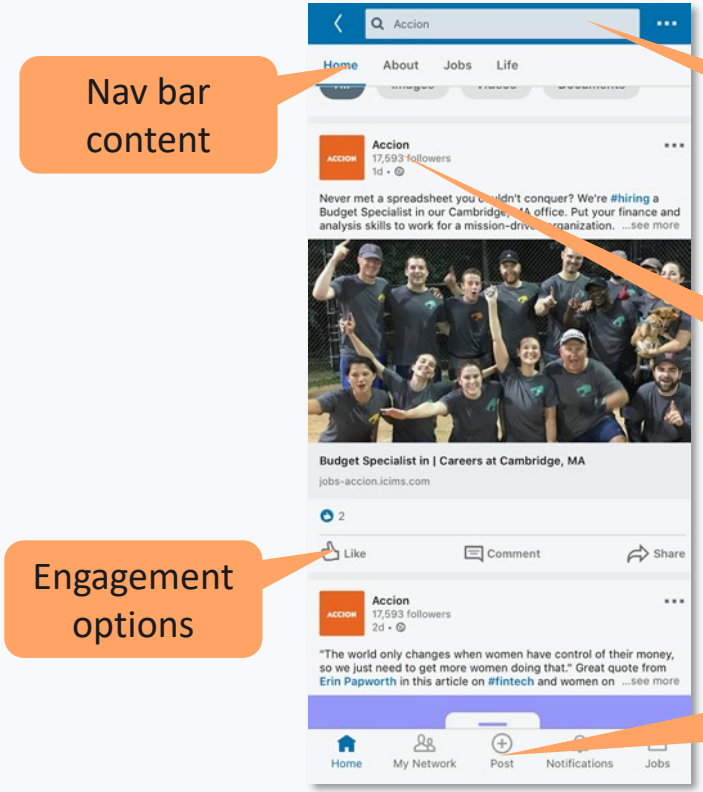
Defining the attribute helps set boundaries around what to change – and potential outcome

Our Attribute to Test:
App Layout

You Could Consider Testing…

- **Action button placement**
- **User flow**
- **Content presentation**

(REALISTIC!) Hypothesized Effect:
"xx% improvement in feature visits"



This layout can be tested in a variety of ways

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Testing takes many forms – and vary in complexity

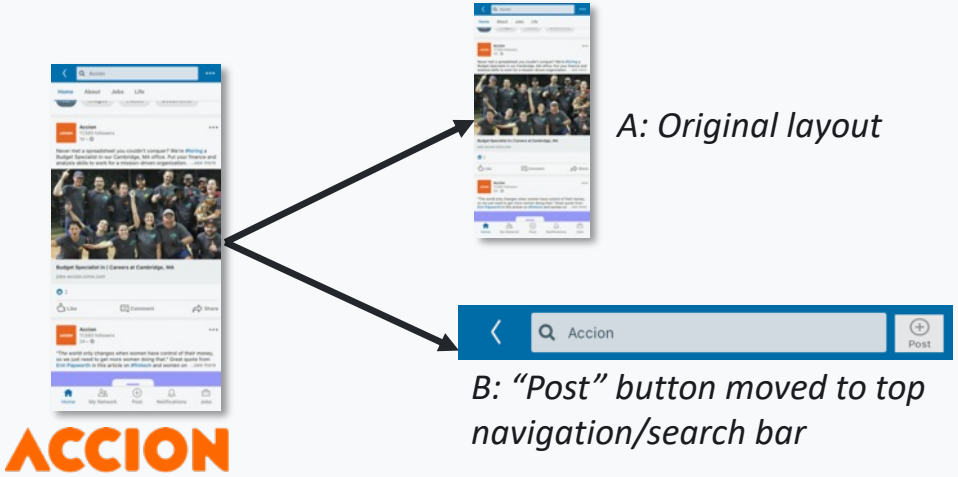
Two Popular Options: A/B Testing vs. Multivariate

A/B Testing

What it is: *testing two variations of app or webpage design against one another*

What's it good for: *testing a single variable or concept; bucketing your users into two distinct groups; smallest sample size needed*

What it's not good for: *testing more complex design changes and user flow*



A: Original layout

B: "Post" button moved to top navigation/search bar

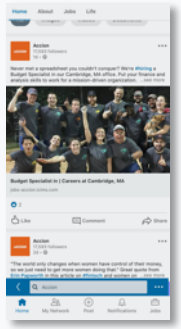
Multivariate Testing

What it is: *testing many variations of app or webpage design against one another*

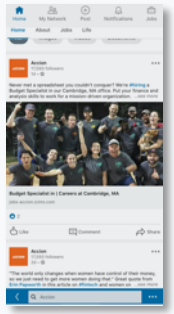
What's it good for: *can help with targeting large-scale changes in product design*

What it's not good for: *small user samples (requires lots of traffic); a set of A/B tests would suffice for many design changes*

v1: Original



v2: Moved search bar to bottom



v3: Swap of search and button bar

v4: Search and button bars on top

Then, determine the time required to get a good sample size for your test

Test Details

1. Calculate Sample Pool

Your test pool will depend on several factors, such as:

- Daily Active Users (DAUs)
- % of users typically interacting with the item you're testing
- % of DAUs that will receive the test

2. Minimum sample size

Your sample size will be based on a few statistical goals:

- **Desired Confidence Level**: how "confident" do you want to be in your tested outcome?)
- **Margin of Error**
- **Standard Deviation** (σ)

3. Determine your duration

Test Duration must be at least

$$\frac{\textit{Minimum Sample Size}}{\textit{Daily Sample Pool}}$$

Also is helpful to account for day-to-day-changes in DAU and other factors that may affect your testing pool

Go here for a handy calculator to determine test duration and more details on sampling

Note: if you have low user numbers, you may want to consider testing long enough for directional purposes

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Finally, which test you decide to run will depend on the potential impact and the challenges of executing

Test Details

Determine the impact your change could make

Assess a score of 1 (low impact) to 3 (high impact) for each criteria

Determine the ease in measuring the impact

Assess a score of 1 (more difficult) to 3 (less difficult) for each criteria

What is the metric of success we measure against? *(Revenue, DAU/MAU, churn)*

Secondary metrics to test

+

Duration needed to get proper sample size

Sample size needed to achieve significance

+

Technical ease of the change

(1= most complex)

(3= least complex)

=

Total Score

(higher is better; min= 3 max= 9)

You can use the included Experiment Prioritization Framework to assess your various testing options

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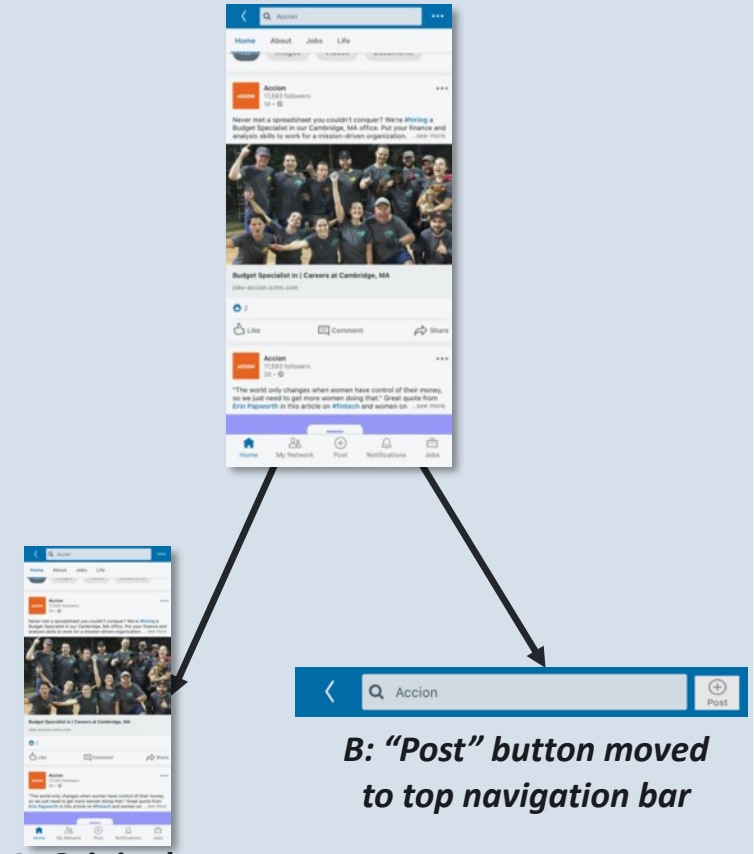
Example: Let's take our CTA proposal and test it

Test Type: A/B



A: Original Layout

B: "Post" button moved to top navigation bar

Your Hypothesis:
"20% improvement in feature visits"

Test Logistics and Statistics

- Daily app users: 3,000
- Typical visit rate: 20%
- % of users to test: 100% (half of users will get the variation)
- Confidence interval: 95%

*Based on our calculation, you will want to run this test for **4 days** to get a proper sample.*

*We recommend tools like **Google Analyze, Optimizely, or VWO** to administer your test to your site/app visitors.*

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But also: you can use this for offline products!

As an example, if you're an MSME lender, you can A/B test…

Loan terms (APR, tenor)

Payback frequency (weekly/every two weeks/monthly)

Servicing method (agent, app-based, etc.)

Establish a hypothesis:
"x% higher take rate"
"x% lower default"
"x% lower PAR"

Some considerations

- Ensure that there is an **anchor point** between test groups (similar credit score, branch, etc.)
- Testing will not provide instant results and **may take more time to implement**
- Ensure that testing outcomes are **recorded effectively** so they can be analyzed in a reasonable way and steers toward potential outcomes

Early companies should consider a few important realizations when testing

Patience is key – it takes time to test.

Be honest with your data – if you have fewer site/app visits, testing will be drawn out longer. **Avoid multivariate tests** if you're looking to make quick decisions on which path to take.

Use a trusted testing tool.

Reputable testing tools will ensure **your data privacy laws are secured** while testing. Transactional data collected outside a secured environment that a testing platform provides runs the risk of privacy issues.

Test your ideas with the right users.

Ensure that you're running tests with users that **fit into your target demographic for a product.** For example, testing an idea designed for high net-worth individuals with a lower-income user segment could steer users toward the wrong kinds of behaviors. (Testing tools can help with this!)

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Reporting your Results and Some Considerations

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Implementing your Results: Some Considerations

Don't Implement Everything.

Your results may not be worth the time and effort to make a change – **consider the cost, time to adjust, and whether the change moved the needle enough.**

If your A/B test resulted in a 5% improvement in visits, it's probably not worth adopting.

Consider More Tests.

Are there other product features or user behaviors you want to test against the metric you want to move? **Explore other potential tests from your prioritization guide.**

Refer back to Slide 10 for the list of potential things you could test next – opportunities abound.

On-Cycle Implementation.

Don't carve out space to implement changes – **schedule them into your design and code sprints** to ease pressure on your engineering/UX teams.

A simple button placement may seem simple, but it can take 2-3 sprints before there is space to implement it.

Sharing results with your team is a crucial step

What should we share?

What was tested?

Why did we test it?

What were our expected outcomes?

How did we measure success?

Who did we test it with/how long?

What emerged as the "winner"?

What are the implications/next steps?

What should we test next?

How do we share it?

- **Presentations (*for stakeholders, determining next steps/go-ahead plans*)**
- **Lunch and Learn sessions (*for broader, org-wide lessons learned and updates)***
- **Technical/Engineering Blogs *to showcase team's data-driven focus)***

Additional Resources

- G2’s suggested A/B Testing tools: https://www.g2.com/categories/a-b-testing
- Optimizely’s **Resource Portal:** https://www.optimizely.com/resources/
- **Experiment Prioritization Framework Worksheet**

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