



The surprising power of a testable hypothesis

Lynn Zhang

Manager of Data Science, MarketDial

 **MarketDial**



True or false: If one testing idea is good, multiple ideas—tested all at once—are great.

YEAH, NO.

While it's tempting to test multiple changes at a time because you trust your intuition and you need the answers right now, *it simply doesn't work*.

It takes actionable insights to drive higher sales or improve customer experience. Test more than one hypothesis at once and results get muddled. You're left with uncertainty: *What worked? What didn't? Why?*

So how do you go from *"I just know"* to *"This is how I know"*?



CONFUSING RESULTS VS. CLEAR DIRECTION

A restaurant wants to *test a range of ideas* ... from changes to pricing, to hours, to signage, to uniforms. *Test all the changes at once* and the results will be as *disorienting* as dining in the dark.

EMPOWER STRATEGIC TESTING

Make it easy for your team to create a strong, testable hypothesis to drive a clear action.

A testable hypothesis will tell you what you need to know. It should:

1.



DEFINE YOUR
INTENT.

2.



BUILD A
LADDER OF
KNOWLEDGE.

3.



ENABLE SUCCESS
ACROSS YOUR
ROLLOUT
FOOTPRINT

1 Define your intent.

What do you want to impact and at what level? Why does it matter? What do you expect the result to be? What will you do with the insight?

This is the difference between a random road trip and **being intentional about your destination**:

Before you start, you should know why you are going there, the route you'll take, and what you'll do once you've arrived.

2 Build a ladder of knowledge

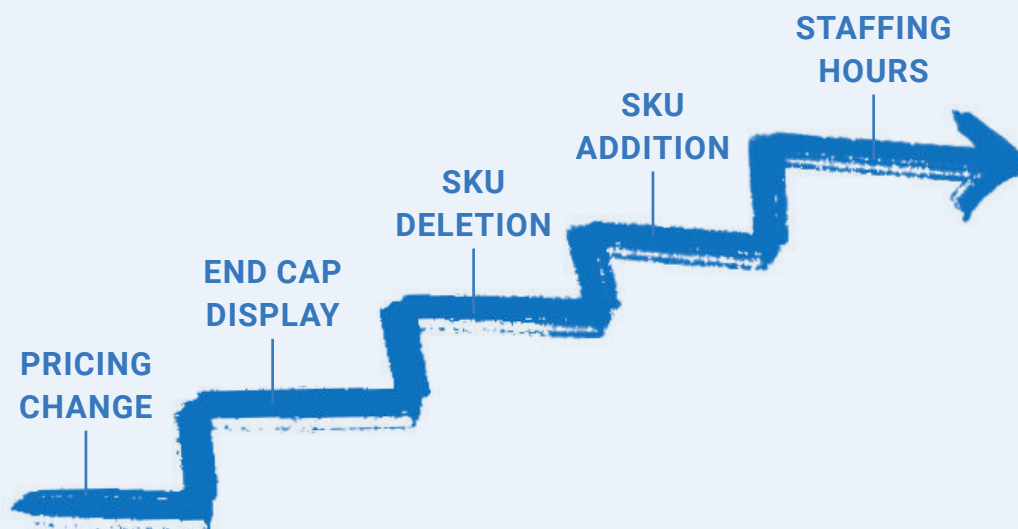
Do this by **testing one variable at a time**. Don't leapfrog to the top or you'll fall short of what you need to know.

Again, it's tempting to try to test pricing, merchandising, and marketing campaigns as a holistic effort—and then try to back out each impact individually. It's just **not reliably possible** to generate trustworthy findings. Compare that unfocused effort with this **clear one**: Will a new visual design for our coffee endcap generate positive revenue lift for coffee products?



TESTABLE HYPOTHESIS EXAMPLE: THE STRENGTH OF NO.

Can you increase revenue by replacing sale items with non-sale items in a high traffic location? Turns out you can't—at least that's what a client **discovered by testing it**. This **specific, actionable insight** enabled the client to fail fast and move to an initiative that did **create the desired revenue lift**.



BUILD A LADDER OF KNOWLEDGE BY
TESTING ONE VARIABLE AT A TIME.

3 Enable success across your rollout footprint

Are your findings actionable generally in all locations or do they only apply in a subset? Make sure you're designing your **treatment** and **control sets** to reflect the rollout group.

Also consider what that **lift and confidence** need to be, at a minimum, for rollout. Although tests may be performed at specific stores, **the results will affect all**. So make your hypothesis general enough to be inclusive to create results that can be **replicated**.

“Clients tell us that using the software is straightforward and simple—providing guardrails to help ensure success”

— LYNN ZHANG

Advance your testing culture with a simple system and responsive support

Whether you are new to testing or have a lot of experience, implementing a user-friendly system like MarketDial **guides your team** in creating a strong, testable hypothesis. The software includes a **calendar** that makes it easy to plan where tests are taking place to **avoid overlapping initiatives**.

Clients use the calendar to manage their overall testing flow, enabling them to **prioritize** and then **execute the strategy per the plan**. The software also includes an automatic filtering feature to ensure that **previous sites are not included in new tests**—if that's what you prefer.



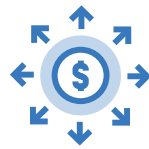
Whether you are new to testing or have a lot of experience, implementing a **user-friendly system** like MarketDial guides your team in **creating a strong, testable hypothesis**.

React quickly to natural experiments

There's a lot to test that you can control. However, challenges and opportunities often arise that you cannot:



- Regional regulations that impact your ability to sell product, for example.

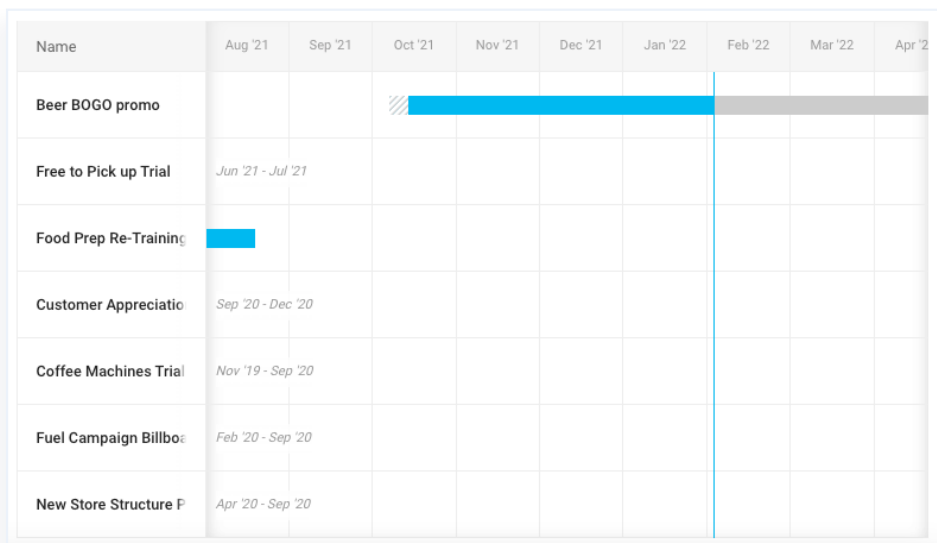


- Issues related to the pandemic forcing a **change** to your **business model**.



- **Competitors** opening locations near you.

These pop-up situations demand a **nimble way** to consider solutions that will **mitigate the bad** and/or **maximize the good**.



CALENDAR VIEW

The software includes a calendar that makes it easy to plan where tests are taking place to **avoid overlapping initiatives**. Clients use the calendar to manage their overall testing flow, enabling them to **prioritize** and then **execute the strategy per the plan**.

FILTERING LOGIC

The software also includes an automatic filtering feature to ensure that **previous sites are not included in new tests**—if that's what you prefer.

How did we generate your sample? ^

Number of sites initial group: 487	Number of sites after exclusions: 339	Number of sites selected: 10
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[Download All Site Exclusions](#)

Site Exclusions	Sites Removed	Sites Remaining
<input checked="" type="checkbox"/> Site is not open for a full year.	111	376
<input checked="" type="checkbox"/> Site is not included in rollout group.	0	376
<input checked="" type="checkbox"/> Site is an outlier.	9	367
<input checked="" type="checkbox"/> Site is not included in treatment tag.	0	367
<input checked="" type="checkbox"/> Site has been designated skipped by user.	0	367
<input checked="" type="checkbox"/> Site is in another test.	28	339
<input checked="" type="checkbox"/> Site does not sell the tested products.	0	339

Know that I am **at your side** along with the other **MarketDial data scientists**. Our Client Success team is here to help tweak a hypothesis or refine your approach based on our **deep understanding** of your needs and our experience in helping others in your industry succeed.

By Lynn Zhang, Manager of Data Science, MarketDial



Why MarketDial

More than [100](#) leading companies and global brands rely on MarketDial to help them create a culture of experimentation with [intentionally easy A/B testing](#). MarketDial's simple interface makes asking "*what if?*" the cost-effective protocol for intelligent action. Learn how [now](#).



Lynn Zhang

MANAGER OF DATA SCIENCE, MARKETDIAL

Lynn is an accomplished data scientist with a product focus. Passionate about working closely with clients, she is adept at translating their feedback into features that advance the MarketDial app. Lynn has Economics and Mathematics degrees from the University of Chicago, and a background in economic consulting. An eager learner, she revels in trying new recipes from different cultures, mastering the nuances of gardening, and challenging herself with adventurous hiking and bouldering.



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FOR CPG

PRICING AND PROMOTIONS

- How do different promotions impact sales, margins and units?
- Are there some promotions that are more effective than others?
- What impact do changes in price have on the business?
- How does price elasticity vary by category or customer segment?

LOYALTY AND CUSTOMER EXPERIENCE

- Do loyalty programs improve performance?
- How do new business initiatives impact customers?
- Do certain customers respond to loyalty efforts better than others?
- What types of loyalty benefits are most effective with customers?

VISUAL MERCH

- Which types of visual merchandising are the most effective?
- Is the incremental investment in visual merchandising worth it?
- Does changing the layout, flow, and design improve store and/or category performance?



SEE MORE AT

marketdial.com/industries/retail

FOR RETAILERS

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VISUAL MERCH AND STORE PLANOGRAMS

- Which types of visual merchandising are the most effective?
- Is the incremental investment in visual merchandising worth it?
- Does changing the site layout, flow, and design improve store and/or category performance?

OPERATIONS AND LABOR/STAFFING

- How do site employees and site ops impact site performance?
- How does the way a site is staffed and managed impact sales and conversion?
- Are increases in labor spend ROI positive?
- How does a reduced wait time at checkout impact customer satisfaction?

FOR GROCERS AND CONVENIENCE STORES

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- How do different promotions impact sales, margins and units?
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FOR RESTAURANTS

PRICING AND PROMOTIONS

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- Are there some promotions that are more effective than others?
- What impact do changes in price have on the business?
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LOYALTY AND CUSTOMER EXPERIENCE

- Do loyalty programs improve location performance?
- How do new business initiatives impact the customer experience?
- Do certain customers respond to loyalty efforts better than others?
- What type of loyalty benefits are most effective with customers?

VISUAL MERCH AND STORE PLANOGRAMS

- Which types of visual merchandising are the most effective?
- Is the incremental investment in visual merchandising worth it?
- Does changing the layout of the site, flow, and design improve location and/or category performance?

OPERATIONS AND LABOR/STAFFING

- How do site employees and site operations impact the performance of the location?
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