

EBOOK

The Product Experimentation Playbook

Everything you need to know to gain value from experimentation



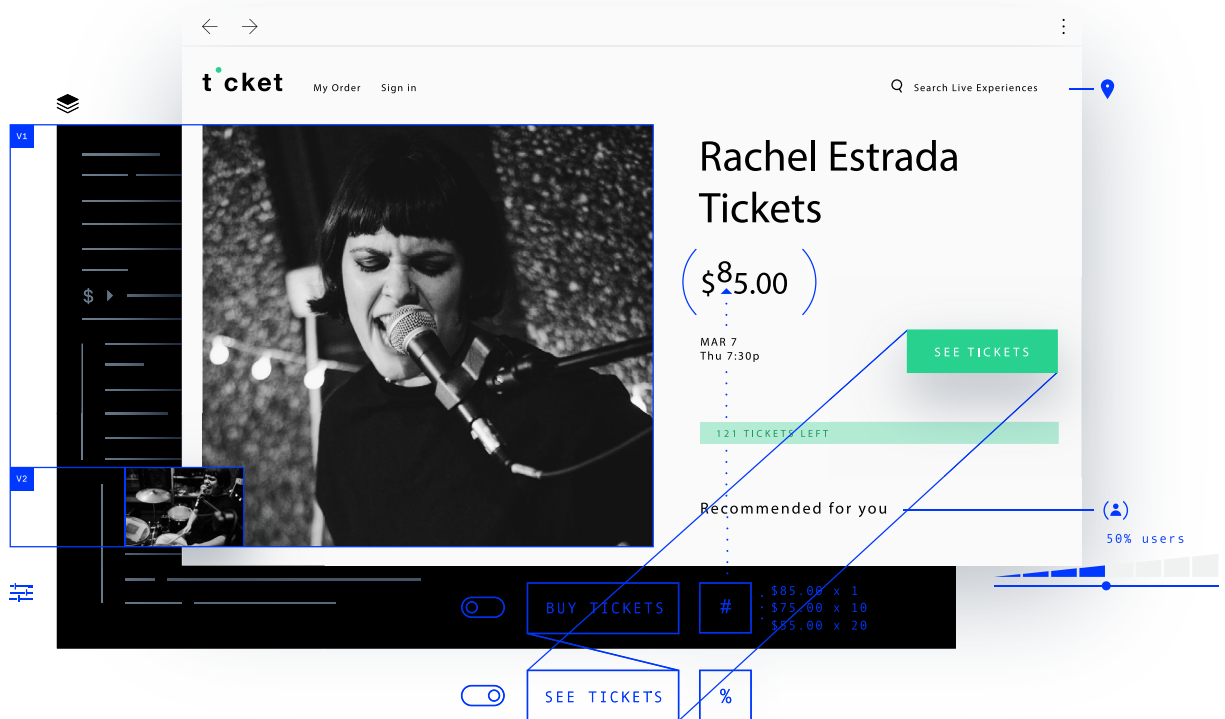
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01

Welcome to The Product Experimentation Playbook

The Product Experimentation Playbook provides the practical first steps to help you get value from digital experimentation. The playbook will guide you through the core processes, providing you with five downloadable worksheets to help you build quality experiments quickly, share results with confidence and implement experimentation across teams.



Digital experimentation includes A/B testing, multivariate testing, multi-armed bandit testing, user research, analytics, and personalization in order to provide the best possible customer experience across all digital touch points.

Digital Experimentation Benefits

Digital experimentation allows you to A/B/n test across the entire customer journey to meet your overall business goals, including:



To **optimize top-line growth** you can test several checkout funnels to see which drives customer purchases.



To **reduce customer churn** you can test a variety of site navigation maps to understand the best actions for a new customer.



To **deliver world class customer experiences** you can test several digital products to know which drives customer engagement.

Most importantly, digital experimentation allows you to make data-driven decisions to meet overall business goals.

What is Progressive Delivery?

Progressive delivery is a modern software development and DevOps practice for gradually rolling out new features in order to limit the potential negative impact and gauge the user engagement with new product features. It builds on the foundation of continuous delivery and expands the practice to include more granular feature rollouts, canarying, A/B testing, and observability.

Together, [digital experimentation](#) and [progressive delivery](#) allow you to accelerate delivery of software confidently and with less risk, control the deployment of new features and experiment throughout the entire product development lifecycle.

The Product Experimentation Playbook will help you create quality experiments from start to finish. It will take you through the best practices for [progressive delivery](#), [experimentation ideation](#), how to [create a winning experiment](#), the [vital roles of results sharing](#) and [experimentation in action](#).



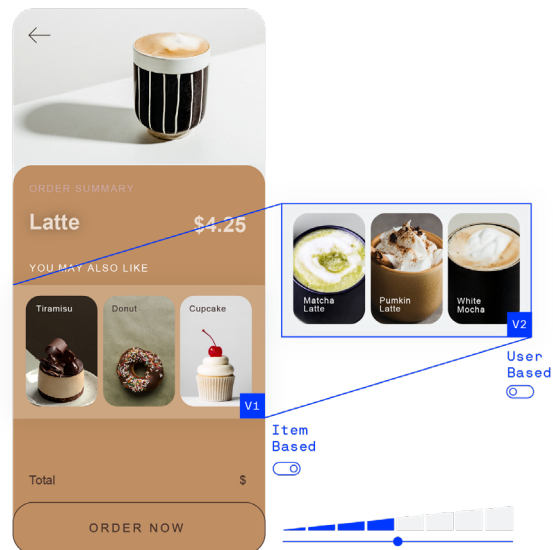
“Product owners are asking more and more to test every change to prove that it does what it is supposed to do - and if not, we can optimize. These learnings are crucial for delivering a convincing customer experience.”

Manager / Customer Insights & Analytics / KLM

02

Product Development Process

As part of the product development process you need to be using feature flags, phased rollouts and experimentation together when launching new features. Let's breakdown what each of these means and how to use them in the product development lifecycle.



Feature flags allow teams to test new features in production, while mitigating the risk of a poor release by providing a way to quickly roll back the feature if necessary via a kill switch.



Phased rollouts let you launch new features to only a portion of your traffic to catch problems or bugs early and often.



A/B/n testing gives you the opportunity to compare multiple versions of certain features to determine which performs best, making sure you're building the right thing for your business.

When it comes to feature flags and phased rollouts, if you detect errors or user backlash you can easily rollback immediately. Since you aren't going straight from 0% to 100% rollout, if you detect an issue at 1% of your traffic, customer sentiment and revenue are minimally impacted.

Feature flags, phased rollouts or A/B/n testing?

When starting out it can be difficult to know when to use one over the other. The key question to ask is: what would deliver the most value depending on your stage in the process?

It is important to remember:

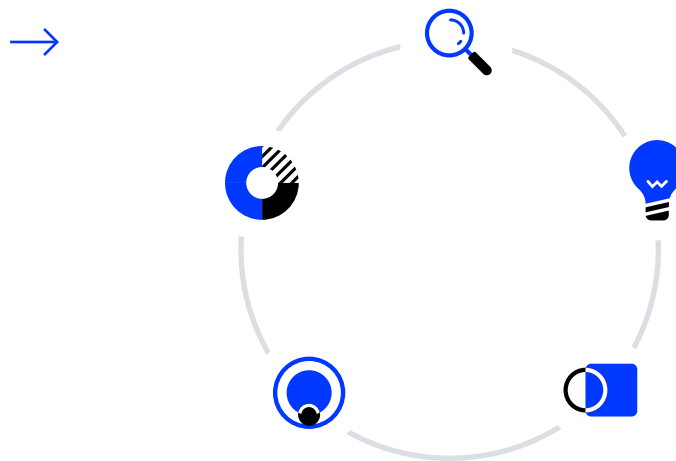
- **Feature flags** give you complete control over a release or launch date by allowing you to easily toggle the feature ON when the rest of the business is ready. If an issue is discovered or your feature doesn't draw the customer sentiment you had hoped for, you can rollback the feature in an instant.
- **Phased rollouts** help mitigate risk by releasing new features to small portions of traffic at once, minimizing the blast radius and measuring your key business metrics with a small percentage of users.
- **A/B/n testing** is best when you have a specific problem to address with measurable metrics and a hypothesis for how your changes will affect those metrics.

To help you, we've created a progressive delivery decision tree that you can use to determine when it is best to set up a feature flag, plan a phased rollout, or run an experiment. Plan the best next step for you by downloading Optimizely's [Progressive Delivery Decision Tree](#).

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Turn Your Ideas into Experiments

The digital experimentation process has five key components. Follow these steps to create quality, data-driven experiments quickly and ultimately accelerate the achievement of your overall business goals.



Research

Collect relevant customer data, both qualitative data (customer surveys and reviews) and quantitative data (web analytics and conversations).

Ideate

Analyze the customer data collected to identify the problem and where improvements need to be made. What problem are you trying to solve for the customer? Determine your key goal and top metric for this experiment.

Refine

Create a problem-centric hypothesis. State what you believe needs to change, what the outcome will be and why.

Plan & Run

Develop an experimentation roadmap that includes key metrics, duration and target audience, and roll out the experiment to a small subset of users.

Review

Analyze the experiments' results to see if the outcome has proven or disproven your hypothesis, share the results internally and define your next steps with data-driven decisions.

How to create an experiment hypothesis

An experiment hypothesis is a bold statement to predict what you think the outcome of your experiment will be, not an open-ended question which you hope the experiment will answer. Above all, an experiment hypothesis is there to be tested. It can be proven right or wrong.

An experiment hypothesis looks like:

“ If _____ ,

The Result:

The predicted outcome of your experiment. Ideally your overall business goal i.e. reduced customer churn or increased conversions.

then _____

The Variable:

An element which has been identified as a problem. It can be modified, added or removed to improve the customer experience.

_____ .”

The Rationale:

Demonstrate *why* you have chosen this variable and that your prediction is built on customer data.

An experiment hypothesis example:

If we set the algorithm for featured products on our homepage to display products from recent categories the user has visited,

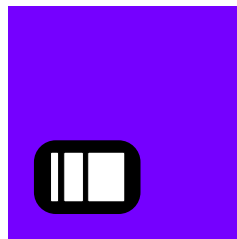
then the percentage of users that click on the featured products and percentage of users that added a product to cart will increase.

Customer surveys showed users find the featured products on the homepage irrelevant. 9 out of 11 state they never found relevant products.

04

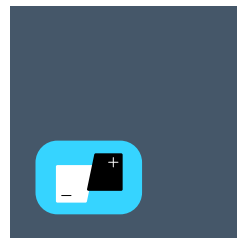
Build a Winning Experiment

Now you know the digital experimentation process it's time to start building a winning experiment. This section of The Product Experimentation Playbook is broken into three key stages with practical steps and editable worksheets to help you map out your ideas and create a clear, solid plan to follow.



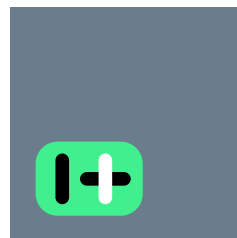
Experimentation Ideation Framework

Put 'pen to paper' and bring your digital experiment ideas to life by filling out the Experimentation Ideation Framework. This template will help you ideate those ideas from start to finish, understand what data you need to collect and build your experiment hypothesis. **Create your first experiment ideas** by downloading Optimizely's [Experimentation Ideation Framework](#).



Experimentation Prioritization Index

Prioritize your experiment ideas by using our Prioritization Index. The Prioritization Index helps you to sort ideas by comparing the **Business Impact** (higher conversion rates, increased revenue or reduced internal costs) to the **Business Effort** (technology and teams needed). **Prioritize which experiments you will run first** by downloading Optimizely's [Experimentation Prioritization Index](#).



Experimentation Roadmap Worksheet

Now that you've prioritized which experiments you will run first, you need to refine your idea by creating an experimentation roadmap, including the top metric you will use to measure success and the audience which will take part in the experiment. **Plan your first experiments** by downloading Optimizely's [Experimentation Roadmap Worksheet](#).

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The Vital Role of Sharing Results

When creating a culture of experimentation, securing executive buy-in is vital. One way to do this is by consistently sharing experiment results with the whole company.

Optimizely's customers have proven that organizations which share experiment results more often are more efficient, and more likely to achieve business results.

Let's imagine a situation where you ran a winning experiment which achieved a high ROI and brilliant customer success. That's great news! Your experiment has accelerated you towards your targets. But, you have not shared your results.

If you do not share your wins with the rest of the organization, how can they see the benefits of experimentation? More importantly, if you do not share your wins with executive stakeholders, how can they see the ROI and customer growth from your experiment?

Sharing results builds a culture of experimentation and secures executive buy-in. Communicate why you created an experiment hypothesis, how you defined your key metrics and audiences, and what impact it had on the business.



“Having data to back up our ideas gives us a voice to surface our views up to a higher-up level. Being able to say that you improved sign ups by ‘X’ percentage, because of what you did, that is a powerful thing.”

Team Lead / Growth & Experimentation / Atlassian

How to share vital results



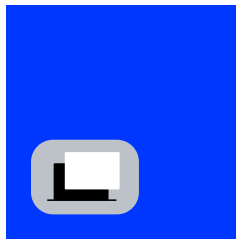
Present to executive stakeholders and demonstrate your digital experimentation findings to them, including your experimentation objectives and goals, results overview and what data-driven decisions have been made.



Share regular emails with the whole organization outlining your experiment and your results. Make use of the organization's internal newsletters to deliver information and learnings across departments.



Host 'Lunch and Learn' presentations for the whole organization. Fill your colleagues lunch hours with informal presentations and discussions on your experiments and the outcomes.



Results Sharing Presentation Template

Build your first presentation by downloading Optimizely's [Results Sharing Presentation Template](#).

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Experimentation in Action

The Product Experimentation Playbook shares a process for experimentation. Now it is over to you! You may have already filled your Experimentation Ideation Framework to the brim with ideas. You may also be looking for some inspiration to start. Luckily we're experts in this area. Here are a few experimentation ideas to kickstart your brainstorming.



Media

Inform and delight readers and viewers with unique experiences to reach key metrics and impress advertisers, including monthly readership, video engagement, return visits, session duration and ad viewability.

Think outside the box.
Experiment on:



Replacing 'trending articles' with 'trending videos' on the homepage



Introducing an article's read time at the beginning of each article



Presenting users with relevant content in the sidebar vs the footnote



Travel

Whisk users away with an outstanding customer experience, converting them from daydreamers to holidaymakers in a few insightful and well-optimized clicks which enable your booking conversions to take off.

Do not fly blind.
Experiment on:



Pre-populating the search landing page from fields



Presenting users with personalized packages on the website homepage



Simplifying the step-by-step design for bookings



Retail

Help users shop 'til they drop and deliver an in-store experience online with personalized, well-optimized product recommendations and seamless checkout experiences to increase your revenue per customer.

Make confident decisions.
Experiment on:



Presenting users with products from recent categories they have visited



Adding videos of the models modelling clothes to product pictures



Increasing visibility of customer reviews and ratings for each product



B2B

Inform and help web visitors with easy-to-use site navigation, relevant product recommendations and clear call-to-actions to generate leads more efficiently and effectively.

Hone in on Results.
Experiment on:



Highlighting popular plans, packages and features on pricing page



Increasing visibility of products and solutions on the navigation bar



Reducing lead forms to the minimum number of components



CONCLUSION

Now it's your turn

The Product Experimentation Playbook has taken you through the key steps to create quality experiments quickly, experiments which put the customer at the center and helped you achieve your overall business goals. Now, it is your turn to put these steps into action.

Put those ideas onto paper by filling in the [Experimentation Ideation Framework](#) and create a winning hypothesis. Prioritize those ideas with the [Experimentation Prioritization Index](#) and develop your primary idea on the [Experimentation Roadmap Worksheet](#). Once you have carried out the experiment, analyze the results and share the key findings with not only the executive team, but the whole organization.

Most importantly, repeat.

As you now know, continuous experimentation helps organizations achieve their business goals.

→ Want some more information on digital experimentation and progressive delivery?
[Talk to us today](#) to find out how we can help you move faster, build quality experiments and drive substantial growth for your business.

Optimizely is here to help you at every step of the way.

We look forward to hearing from you soon.

The Optimizely Team.



“The differentiator for us is ensuring that we experiment our way to a better customer experience.”

Head / Digital Transformation / Sky