



# Adobe Summit

# Establish Your Experimentation as a Business Product

The Home Depot

**Damien Hopkins**

Sr. Manager, Experimentation, Home Depot

**Ryan Tincknell**

Sr. Enterprise Architect, Adobe Professional Services

# Adobe Summit



# Welcome



**Damien Hopkins**

Sr. Manager, Experimentation



Experience spans industries & roles: Sales Vertical, Program Strategy & Execution, In-house Consultant, Product Management, more recently evolving teams from ad-hoc services to full Product teams at scale.

**Experimentation Achievements:**

- **Evolve Experimentation Team** from ad-hoc services to enterprise product
- **Scale Data-Driven Testing** from 60 days down to 21 days (with average 14 day testing cycle)
- **Expand KPI-Focused Business Impact** with 200+ metrics to use insights that inform decisions & document value tests create

**For fun:** Tech Geek | Remodeled half of my house from stud to complete | Avid Downhill Mountain Biker | have a passion for modifying almost anything I can



**Ryan Tincknell**

Sr. Enterprise Architect



Adobe Professional Services leader with 20+ years experience creating value through solutions strategy, personalization, analytics and marketing research:

- Industry-specific experience across financial services, travel & hospitality, ecommerce, automotive, healthcare and B2B services/products
- Straddles the fence between technology and business to ensure solution visions he creates with client leadership get transposed to the right requirements and technical constructs with delivery teams.
- Has a heart and passion to do cool things with marketing technology and getting clients excited about the opportunity their data presents.

# Before we begin...

## Who is this session for?

- Experimentation program managers & company leadership looking to expand testing
- Customers struggling to scale their testing capabilities

## What is this session about?

- Experimentation maturity & how to grow
- Methods to expand from ad-hoc testing to establishing it as a business product

## What will I walk away with?

- How to define my own experimentation roadmap
- Organizational blueprints & reference material
- People, process, technology components needed to scale

# Adobe Summit



# AGENDA

- Growth Challenges
- Testing Maturity
- Building Out Testing As An Enterprise Product
- Design Your Organizational Structure To Meet Use Cases
- Reference Material



Home Depot encountered a variety of challenges after being tasked with expanding experimentation capabilities to scale value creation demonstrated through a series of initial wins with Adobe Professional Services, Thought Leadership & Technical Support

## OPERATIONAL

- Build more value, not just more tests
- Expand test volume with flat, or fewer resources
- Centralizing Content Management instead of creating a new one for testing
- Data driven audience segmentation & experimentation prioritization



## STRATEGIC

- Prioritize Experimentation Cross-Functionally driving the value it returns
- Define a Revenue Proposition based on the impact tests have on audiences
- Evangelize Experimentation from .com to Enterprise
- Create Personalization via Omni-channel Experiences

# Running Experimentation should be as easy as riding a bike, Right?



We are launching Next Week!!!

Did you test to make sure nothing breaks & we hit benchmarks?

No.

Just do a quick test and then launch



# But is it really that easy...



Boss, I was just told this will take several weeks

Why will it take several weeks?

Apparently I did not provide a Hypothesis and the data will not be available?

...





# Experimentation continuously gets more complex as the Experience continues to evolve



## BIKE VIEW

### Product

- Road bike
- BMX bike
- Mountain bike

### Experience

- Flat Road
- Terrain/Skate Park
- Downhill or High Climb

### Execution

- What will I like
- How long should I ride for
- What do I want to achieve
- Does it meet the expectations



## EXPERIMENTATION VIEW

### Product

- Project Management Platform
- Testing Platform
- Analytics Platform

### Experience

- A/B Test
- MAB (Multi-Armed Bandit)
- Personalization

### Execution

- Hypothesis
- Power Analysis
- Measurable Data
- Insights & Recommendations



# As maturity of Personalization & Customer Journey continues to evolve, so does Experimentation capabilities

INCREASE IN MATURITY SCALES THE VALUE YOU GET IN EXPERIMENTATION





# Evolution in anything, Product, Marketing, Data, you name it... Experimentation has challenges too in how to it needs to think about its maturity

AVOID  
PITFALLS  
WITH  
PROGRAM  
GROWTH

## Center of Excellence

Product  
Management

Governance

Project Management

Annualized Incremental Revenue

Data Science

Opportunity  
Prediction

Forecasting

Development  
Optimization

Agile Methods

Next Recommendation

Automations  
Platform

Artificial  
Intelligence

Customer  
Journey Review

Machine  
Learning

Program  
Management

Tools & Tech  
Data Modeling


















EXPERIMENTATION  
AS A SERVICE

EXPERIMENTATION  
AS A PRODUCT

# As maturity evolves, so do People, Process, and Tech as well as the Experimentation Types & Execution

**PEOPLE**

 CONSULTANTS	 CONSULTANTS	 PLATFORM DEV	 CONSULTANTS	 PLATFORM DEV	 QA & QC
 .COM & APP DEV	 .COM & APP DEV	 QA & QC	 .COM & APP DEV	 DATA DEV	 PM
	 ANALYSTS & DS		 ANALYSTS & DS	 ARCHITECTS	


**PROCESS**

<ul style="list-style-type: none"> <li>❖ Facilitator/order taker</li> <li>❖ Un-defined hypothesis</li> <li>❖ Heavy Manual E2E Operations</li> <li>❖ No Optimization</li> <li>❖ Focused on Engagement Metrics</li> <li>❖ One &amp; Done Testing</li> </ul>	<ul style="list-style-type: none"> <li>❖ Minimal Facilitating</li> <li>❖ On-Demand Testing</li> <li>❖ Hypothesis Recommendations</li> <li>❖ Deeper Learning &amp; Insights</li> <li>❖ Omni-Channel</li> <li>❖ Algorithmic Testing</li> <li>❖ Forecast &amp; Prediction on 200+ Metrics</li> </ul>
---	---

**TECH**

 ADOBE TARGET	 GCP & DATA WAREHOUSES	 ADOBE ANALYTICS & TOOLS	 ADOBE WORKFRONT	 IN-HOUSE AUTOMATION & SOLUTIONS	 ML, AI, & STATS
--	---	---	---	---	---

**TESTING**

 A/B	 GEO / EXPERIENCE	 MVT	 C/MAB	 OMNI-STRATEGY	 ML & AI
--	---	--	--	--	--



# As we continue to elevate EaaP, true scale has to have thought leadership in Operations and the social responsibility in elevating the Organization

## Operational Advancements



Data Science



Auto-test creation via API

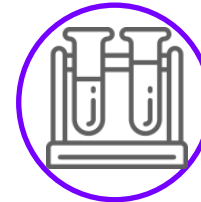


Semi-Automated reporting



AI & ML – natural language generation, anomaly detection

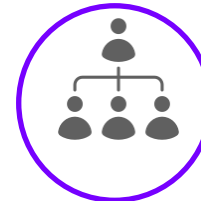
## Org Structure & Expansion



Experimentation – centralization vs decentralization vs CoE



Experimentation best practices & cross-business application



Team & Organization Design – defining skillsets and people needs



Tools & Technology that enable the expansion of Experimentation

# NEXT STEPS & TAKE AWAYS

## Experimentation as a Product (EaaP)

Converting Experimentation from a Ad-hoc Service to an Enterprise product, enabling stakeholders, business unit, and the organization to activate:



Empower Key Business Decisions before releasing Feature, Products, and Services



Activate Omni-Channel Personalization & how to incrementally increase customer satisfaction & revenue



Continuously Advance Experimentation enabling Data Driven Testing & Culture of Experimentation



### Slide vs Chart

Beyond just measuring engagement & how business decisions are made, its about transparency, extensive data, & recommendations



### EaaP

Overview of maturity of Experimentation as a Product & how EaaP can be thought of in your world



### Blueprints

High level process maps on what, where, & how to think about EaaP orchestrations & implementation



### Tips & Tricks

Enabling thought leadership on elements that are often missed when mastering EaaP and its journey

# Blueprint

High level process maps on what, where, & how to think about EaaP orchestrations & implementation



# Targeted Experience Maturity Blueprint | Scale Test Creation



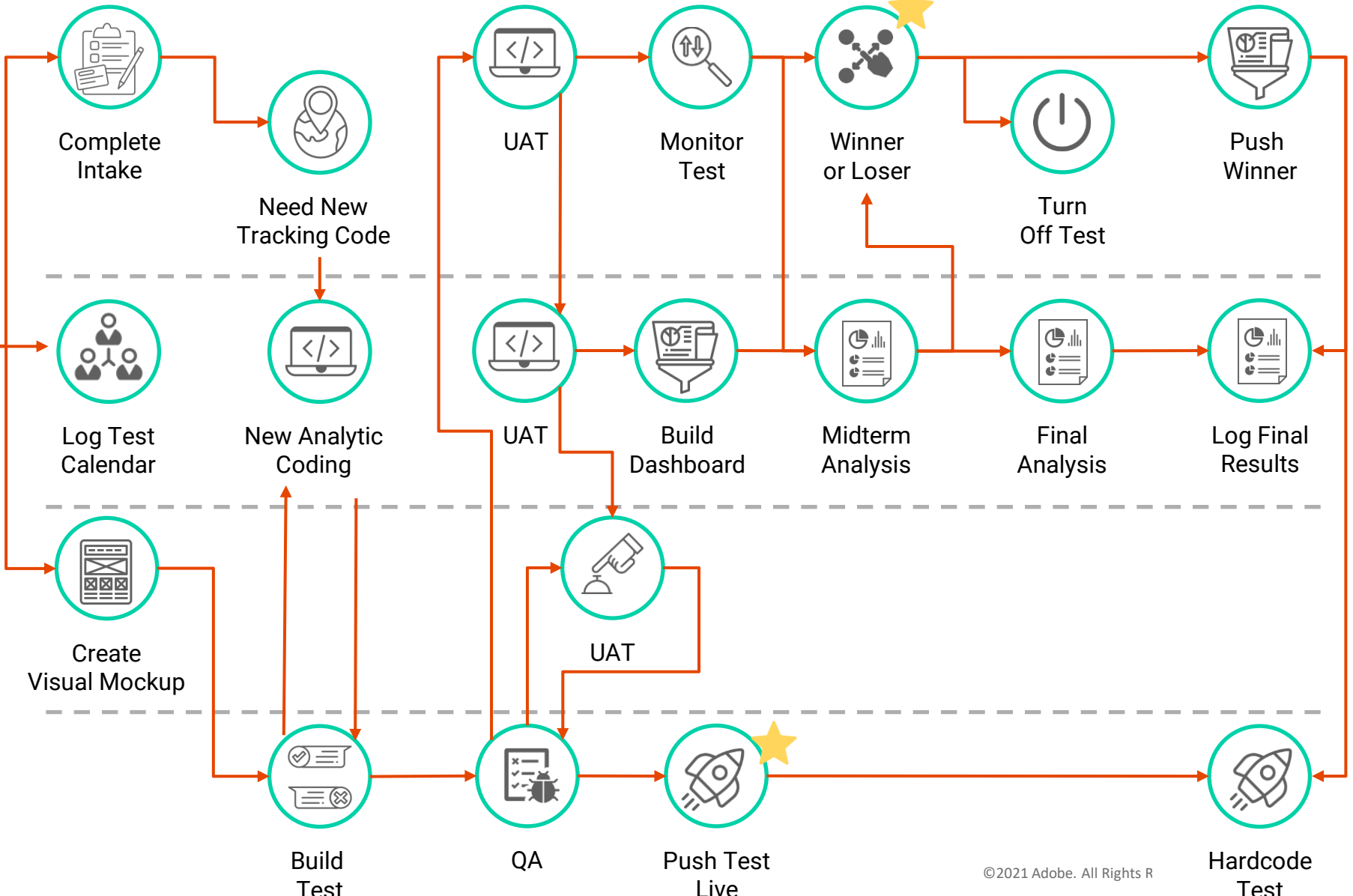
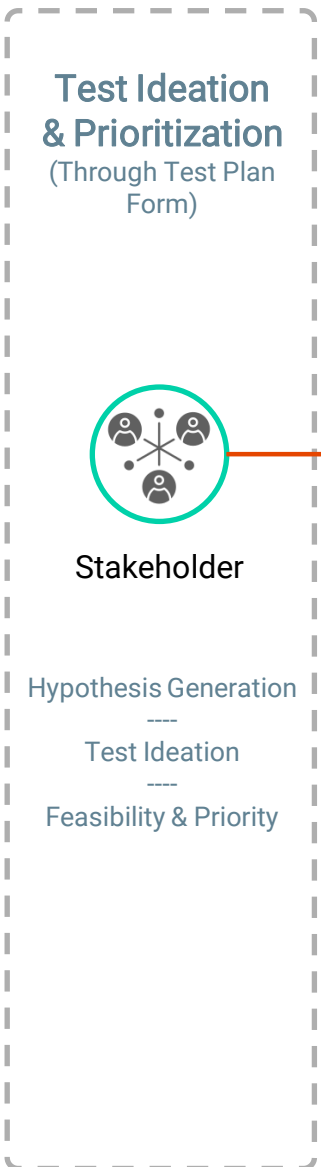
★ Check for data aggregation & validation of Experience

**BUSINESS**

**ANALYTICS**

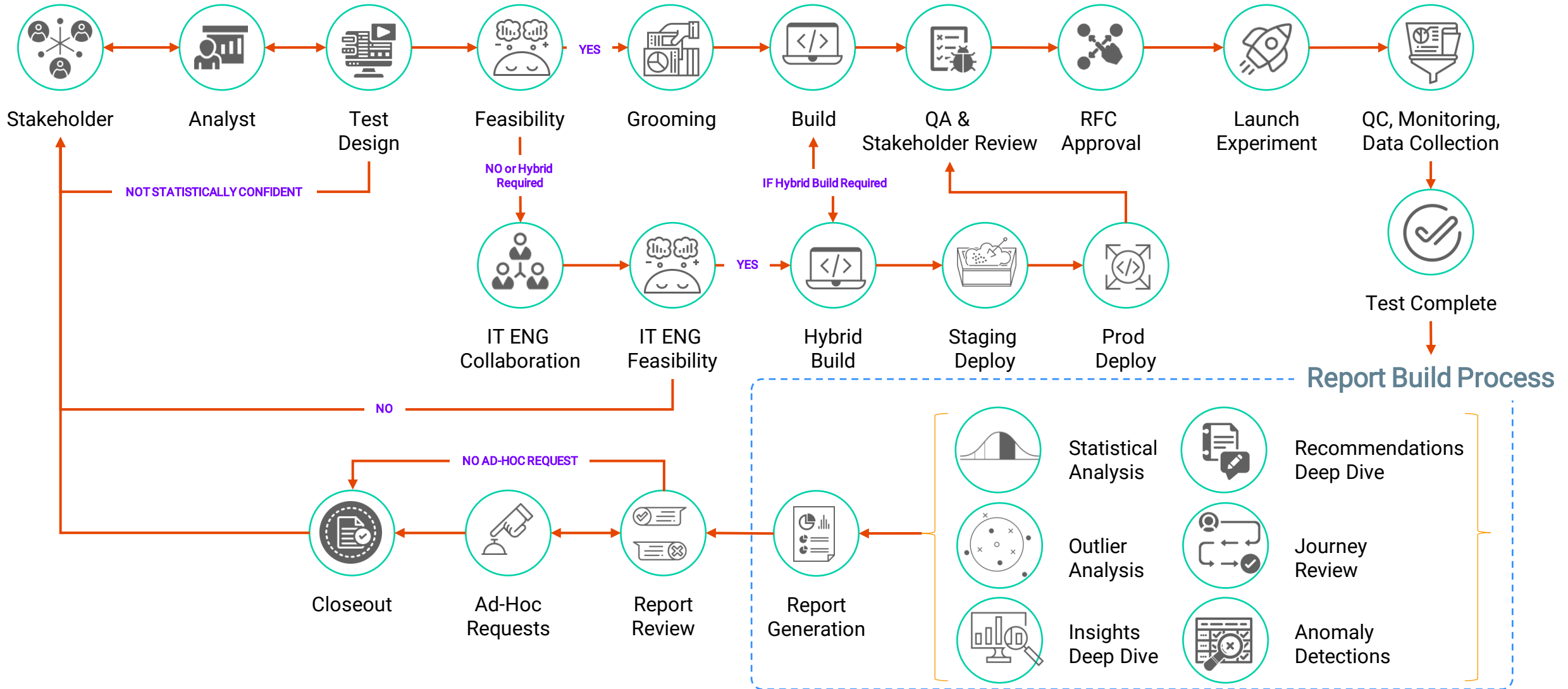
**DIGITAL EXPERIENCE**

**SYSTEMS DEVELOPMENT**





# Personalized Experience Maturity Blueprint | Reduce Effort & Establish Experimentation as a Product (EaaP)



# Slide vs Chart

Its beyond just measuring  
Engagement & business decisions  
are made, its about transparency,  
extensive data, & recommendations





# <Test Name> | Test Setup, Report Criteria & Sources

**Hypothesis** <Hypothesis Statement>

### Test Setup

<b>Control</b>	<Control Experience>
<b>Test</b>	<Test Experience>

- PIP Page : The shipping experience on page will show a reduced ETA for shipping Delivery Date by XX day
- Shopping Cart : The shipping experience on page will show a reduced ETA for shipping Delivery Date by XX day
- Checkout Page : The shipping experience on page will show a reduced ETA for shipping Delivery Date by XX day on the right rail for shipping products

### Traffic

- This is an even-split A/B test
- Each test group has 1/2 of production traffic assigned
- B2C has 100% of total traffic assigned to this test
- B2B has 100% of total traffic assigned to this test

### Campaign ID

<b>PC &amp; MW</b>	123456
<b>Control</b>	<b>234567:0:0</b>
<b>Test</b>	234567:1:0

### Metrics

<ul style="list-style-type: none"> <li>CR</li> <li>AOV</li> <li>RpV</li> <li>Cart Add Visits</li> <li>Units Per Transactions</li> <li>Cart adds from PIP</li> <li>Exit Rate on PIP</li> </ul>	<ul style="list-style-type: none"> <li>Exit rate on Shopping cart</li> <li>Exit Rate on Checkout Page</li> <li>Orders by Fulfillment Type</li> <li>Cart add visits on PIP by Fulfillment type</li> <li>CR for fulfillment types</li> <li>Payment Types</li> <li>Fulfillment Types</li> </ul>
---	--

### Incremental Revenue Calculation

Conversion bps loss from Test Experience

- \* Last 52 Full Weeks Test page Visits
- \* Last 52 Full Weeks AOV
- \* Seasonality Adjust Parameter

= Site-wise Negative Annual Incremental Revenue

rev doc: [Excel](#)

### Segments

<ul style="list-style-type: none"> <li>Desktop</li> <li>Mobile Web</li> <li>B2C</li> <li>B2B</li> <li>Department</li> </ul>	<b>Exclusion</b> <ul style="list-style-type: none"> <li>Excluding Tablet, IE, Firefox</li> <li>Excluding Beta Traffic</li> <li>Excluding Tablet Devices</li> <li>APP</li> </ul>
---	---

### Analysis

- Statistical Analysis (Stat Sig 2 of 3 Gross Sales)
- Outlier Analysis (.XX% removal)
- Insights & Recommendations (Complete)
- Anomaly Detection (Complete)
- Journey Review (N/A)

### Data Sources

- Production environment customer analytics <data tables>
- Business environment testing analytics <data tables>
- Business environment business analytics <data tables>
- Production environment financial metrics <data tables>
- Production environment shipping and customer metrics <data tables>





# Example of speed to Experimentation and how to segment requirements to achieve results



## Easy Testing

0 - 3 DEV DAYS



## Med Testing

3 - 7 DEV DAYS



## Complex Testing

7 - 30 DEV DAYS

Evaluation  
30+ Days DEV DAYS



	Easy Testing	Med Testing	Complex Testing	Evaluation
<b>Testing Types</b>	<ul style="list-style-type: none"> <li>- Experience Targeting</li> <li>- Geo Targeting</li> <li>- Segmented Simplified On Demand Personalization</li> <li>- Simple Redirects</li> </ul>	<ul style="list-style-type: none"> <li>- A/B Testing</li> <li>- MAB</li> <li>- MVT</li> <li>- Multi-personalization</li> </ul>	<ul style="list-style-type: none"> <li>- A/B Testing</li> <li>- MAB</li> <li>- MVT</li> <li>- Omni Channel Personalization</li> <li>- Algorithmic Testing</li> </ul>	<p>Experimentation as a Product should be examining whether the Experiment should be broken down to MVP Product &amp; Testing states</p>
<b>Build &amp; Data</b>	<ul style="list-style-type: none"> <li>- CMS Authoring &amp; Automated Testing</li> <li>- E2E Process Automation</li> <li>- Data Automation (High Level Insights)</li> </ul>	<ul style="list-style-type: none"> <li>- Dev Build</li> <li>- Hybrid Process Automation</li> <li>- Data Automation (High Level Insights) + Deeper Insights &amp; Recommendation</li> </ul>	<ul style="list-style-type: none"> <li>- Multiple Team Builds</li> <li>- Larger Project/Product Management</li> <li>- Data Automation (Deeper Levels) + Advanced insights, Research, Data Science Modeling &amp; Recommendations</li> </ul>	
<b>Visits &amp; Traffic</b>	<ul style="list-style-type: none"> <li>- ~7k visits per test to reach confidence</li> <li>- Traffic Prioritization - LOW</li> </ul>	<ul style="list-style-type: none"> <li>- ~20k visits per test to reach confidence</li> <li>- Traffic Prioritization – Low to High</li> </ul>	<ul style="list-style-type: none"> <li>- ~100k visits per test to reach traffic</li> <li>- Traffic Prioritization – Med to High</li> </ul>	<p>Evaluate tools &amp; tech, people, and processes as this may be an indicator for something else</p>
<b>Examples</b>	<ul style="list-style-type: none"> <li>- Banner</li> <li>- Content</li> <li>- Holiday/Event</li> <li>- Template Designs</li> <li>- No net new functionality or tracking</li> </ul>	<ul style="list-style-type: none"> <li>- Page Alteration deviating from Governance or Templates</li> <li>- Running multiple variations of the same test requiring additional time for setups and systems checks</li> </ul>	<ul style="list-style-type: none"> <li>- Complete Page, Checkout Flow &amp; Header Redesign</li> <li>- New Algorithmic Modeling</li> <li>- Reconfiguring E2E Customer Journey</li> <li>- Companywide alignment &amp; delivery</li> <li>- Custom eVars &amp; Tagging</li> </ul>	

# Tips & Tricks



Enabling thought leadership on elements that are often missed when mastering EaaP and its journey

# 9 TIPS & TRICKS TO MASTER EXPERIMENTATION VIA EXPERIMENTATION AS A PRODUCT



## Map the Team & Work



**Standardize Roles, Responsibilities & Define relevant Performance Goals**



**Map steps to complete & identify critical juncture points**



**Centralize Activity Management & Handoffs via Project Management Tools**

## Identify Infrastructure



**Evaluate short/long-term maturity goals & Take Action**



**Map Data, Platform & Integration Requirements**



**Data-Handling & Insights Driving Iterative Opportunities**

## Implementation & Elevate



**Change Management & Process Enablement Plans**



**Evangelize Testing & Operationalize Test Workflows**



**Operational Delivery via critical thought & actionable insights**



# Q&A





