


# **The Superpowers and Shadows of A/B Testing**

**Balancing Data-Driven Success with Bold Innovation**

**How many of you use A/B testing to build a product?**

**Fail fast, learn and pivot**



**Every idea is a bad idea. No  
idea performs the way you  
expect once you collide it  
with reality.**

– Marc Randolph

**One in every seven A/B tests is a winning test.**

**– VWO**

Estimated Total: \$545.91  
Priceline Trip Number: 666-583-485-18



VIP BLUE

**Congrats Michael!**  
Your VIP Blue status has earned you up  
to 50% off Orlando hotels

[See Hotels](#)

#### Minivan from Orlando Intl Airport (MCO)

 Budget



PICK UP  
**Fri, January 24, 2025**  
12:00 PM

DROP OFF  
**Fri, January 31, 2025**  
12:00 PM

#### Pick-up information

Pick-up: Budget Rent a Car  
1 Jeff Fuqua Blvd., Orlando International Airport, Orlando, FL 32827  
[Get Directions](#)

Budget Rent a Car Confirmation Number: 1193906US2

Driver Name: Michael Moore

Car Type: Chrysler Pacifica or similar  
Make / model not guaranteed

✓ Unlimited Mileage  
⚙ Automatic Transmission  
❄ Air Conditioning

Pre-register online for expedited pickup:

[Check-in Now](#)

#### Rental Car Contact Information

Budget Rent a Car  
Phone Number +1 866-671-7282

[Cancel your reservation](#)  
[Read all policies and terms](#)

[Modify Reservation](#)



Need help with your trip? [Chat with Penny](#)

## Save big on your next hotel

### Save big on your next hotel

Travel more and spend less with huge discounts on hotels

Hotels Flights Bundle & Save Cars Cruises

Where to?

Check in - Check out  
06/23/2022 - 06/24/2022

2 Adults, 1 Room

☒ Bundle & Save ☐ Add a car ☐ Add a flight

Find Your Hotel

Book a hotel with free cancellation for flexibility

On a multi-destination trip? [Book up to five hotel stays](#)

### Introducing Pricebreakers

Search Pricebreakers



See 3 popular hotels at a heavily discounted price.



See 3 popular hotels at a heavily discounted price.



See 3 popular hotels at a heavily discounted price.

### Shortcut to savings

Unlock exclusive coupons, early access to sales and more when you sign up for Priceline emails



#### FLEXIBLE BOOKINGS

Plans change. That's why we offer free cancellation on most hotels & rental cars.



#### INCREDIBLE DEALS

Check out with confidence. Priceline members always get our best price.



#### NO FLIGHT? NO PROBLEM

Bundle hotel & rental car deals to build your perfect getaway. No airline required.



#### HELP 24/7

We're always here for you - reach us 24 hours a day, 7 days a week.

Fall Savings

### Save on Rental Cars!

Plan your getaway and enjoy up to 20% off top rental car brands. No coupon required.

Find Your Deal



### Don't miss these hotel + flight deals



Hotel + Flight  
Orlando, FL

\$204



Hotel + Flight  
Miami, FL

\$295



Hotel + Flight  
Las Vegas, NV

\$394

Hotels Flights Bundle & Save Cars Cruises

## Save big on your hotel

Save with exclusive rates

Where to?

Check in - Check out  
06/23/2022 - 06/24/2022

2 Adults, 1 Room

☒ Bundle & Save ☐ Add a car ☐ Add a flight

Find Your Hotel

Book a hotel with free cancellation for flexibility

On a multi-destination trip?  
[Book up to five hotel stays](#)



### MEMORIAL DAY SALE Save \$100

Use code MEMORIALDAY2022 to save \$100 on Express Deal hotels when you spend \$500!

[Text Link](#)

### Introducing Pricebreakers



See 3 popular hotels at a heavily discounted price.

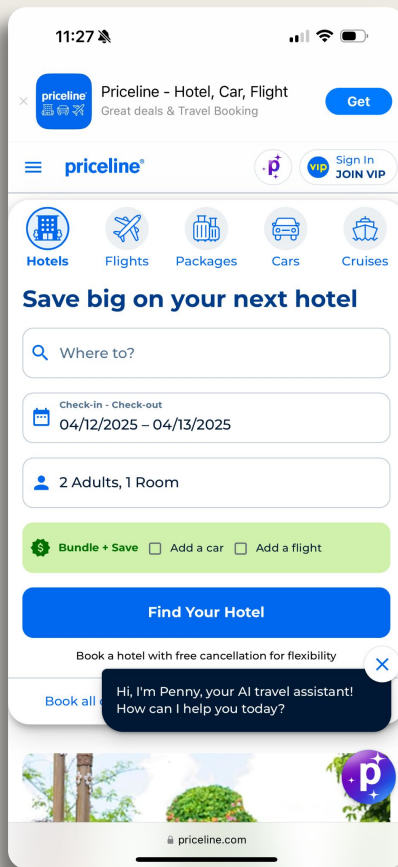


See 3 popular hotels at a heavily discounted price.

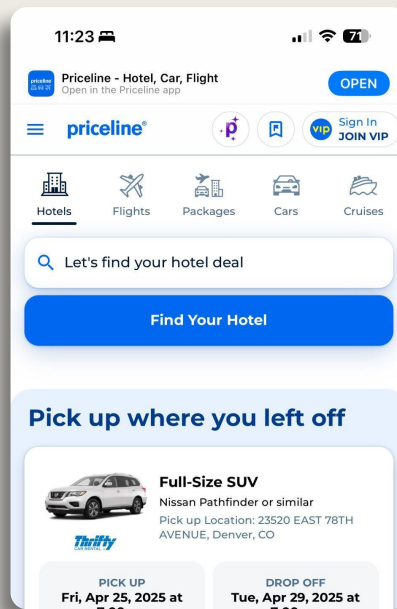


See 3 popular hotels at a heavily discounted price.

## Control



## Variant







**Every superpower has a shadow**

**Experimentation**

**Reactivity**

**Precision**

**Tunnel  
Vision**

**Evidence**

**Analysis  
Paralysis**

**Scalability**

**Complexity**

# **Icarus Paradox**

Strengths, when overused, can lead to failure.



**Lessons I've learned**

# Beware of the Biases

1

**Case Study**

**GROUPON®**

# Bias Creeps In — Even with Testing

## Confirmation Bias

A tendency to favor information confirming pre-existing beliefs.

Only seeing the early data wins.

# Bias Creeps In — Even with Testing

## **Survivorship Bias**

The tendency to only remember tests that worked.

Ignoring the users and merchants who never came back.



# Bias Creeps In — Even with Testing

## **Sunk Cost Fallacy**

The tendency to continue investing in something even when it's failing or no longer beneficial.

Doubling down because too much had already been invested.

**You can't avoid  
bias, but you  
can outsmart it**

**Think about what could prove you wrong**

**Pay attention to what's not working**

**It's OK to stop or change course**

# Culture & Curiosity

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# Meet Josh



**Name:** Josh Baskin

**Age:** 12

**Job:** VP of Product Development, MacMillan Toy Company

**Key Skills:**



Brutal honesty



Flipping pencil erasers like missiles



Winning at racquetball



Making fart noises

**Special Power:** Says what everyone else is thinking,  
but afraid to say





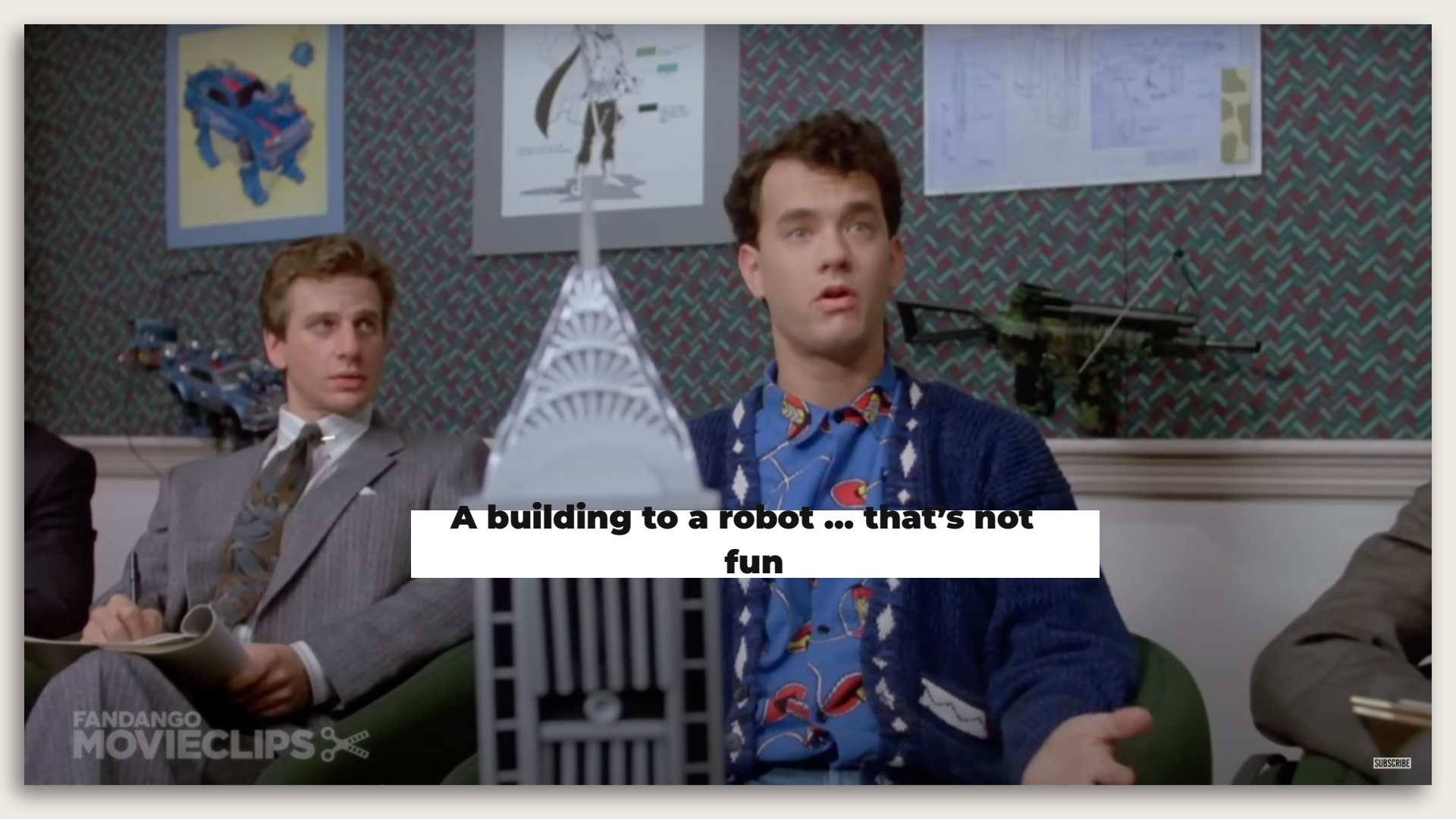


I don't get it.

A man with light brown hair, wearing a dark grey double-breasted suit, a light blue striped shirt, and a dark blue tie with a small pattern, stands in an office. He is looking slightly to his left with a serious expression. The background features a wall with a repeating geometric pattern in shades of green and red. To the right, a whiteboard is visible, showing a vertical axis with percentages from 0% to 100% in increments of 10%. The top of the whiteboard has the word 'Percentage' and a dropdown arrow. The bottom right corner of the whiteboard has the word 'PIR' and a 'SUBSCRIBE' button.

**What exactly don't you get?**





**A building to a robot ... that's not  
fun**

A man in a dark suit and patterned tie stands in a room with green patterned wallpaper. He is holding a piece of paper and looking towards a whiteboard. The whiteboard displays a line graph with multiple data series. To his left is a wooden podium. In the foreground, a model of the Chrysler Building is visible. A white text box with black text is overlaid on the image.

**If you read the industry breakdown ...**



**I still don't get it.**



**What don't you get, Josh?**

**Couldn't it be a robot that turns  
into a bug?**



A man with light brown, wavy hair, wearing a dark grey suit, a light blue and white striped shirt, and a dark blue tie with a circular pattern, is looking down and slightly to his left with a serious, questioning expression. The background is a green and brown patterned wall.

**A bug?**



**Interesting**



**So the robot turns  
into a bug?**



What?!?!?

A medium shot of a middle-aged man with thinning light brown hair, wearing a light blue and white vertically striped dress shirt and a purple and gold paisley tie. He is looking slightly to his right with a faint, knowing smile. The background is out of focus, showing green foliage and a patterned wall.

**Well done, Josh. Well done.**

# Culture & Curiosity

## Psychological Safety

A good culture makes it safe to speak up.

Josh said, "I don't get it" in a room full of executives.

## Learning Mindset

A good culture values learning, not just agreement

The team had data and features, but Josh's question sparked a real conversation.

## User Obsession

A good culture is focused on who it's for.

Josh wasn't impressed by the robot, he just wanted to know if it would be *fun for a kid*.

**How do I create a  
culture that believes in  
curiosity?**

---

**It starts with leadership**



**Leadership is a choice, not  
a position.**

– Stephen Covey

**Optimization is the Tool.  
Innovation is the Outcome.**

**3**

# Local Maxima

A point where **small changes** no longer yield **significant improvements**.



# Optimizing the Burger.





# The Burger



## Can it be better?

Should we add more sesame seeds to the bun?

Try a different cheese blend?

Toast the bun slightly longer?

A juicier patty?

# One Franchisee Thought Bigger Than Burgers

~~This broke every rule :~~  
**What if we serve  
breakfast?**

They didn't open before 11am.

They didn't serve eggs.

No breakfast menus

No early staff

No morning supply chain



# Global Maximum

The **optimal solution** that can be achieved by **testing different variations** of a **design, feature, or strategy.**

**25%**  
of McDonald's revenue.



**Morning Drive-Thru**

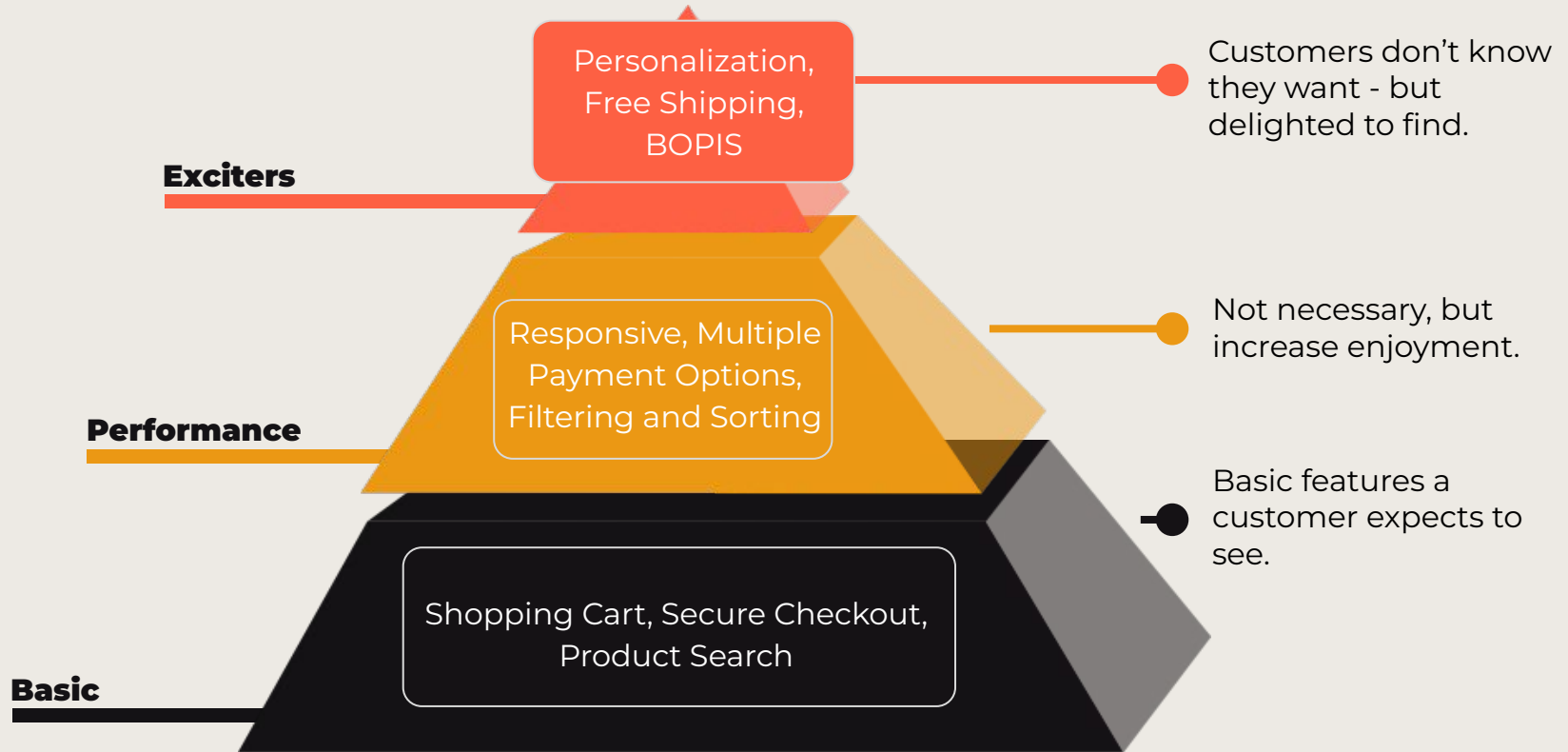
A new customer behavior



**Breakfast**

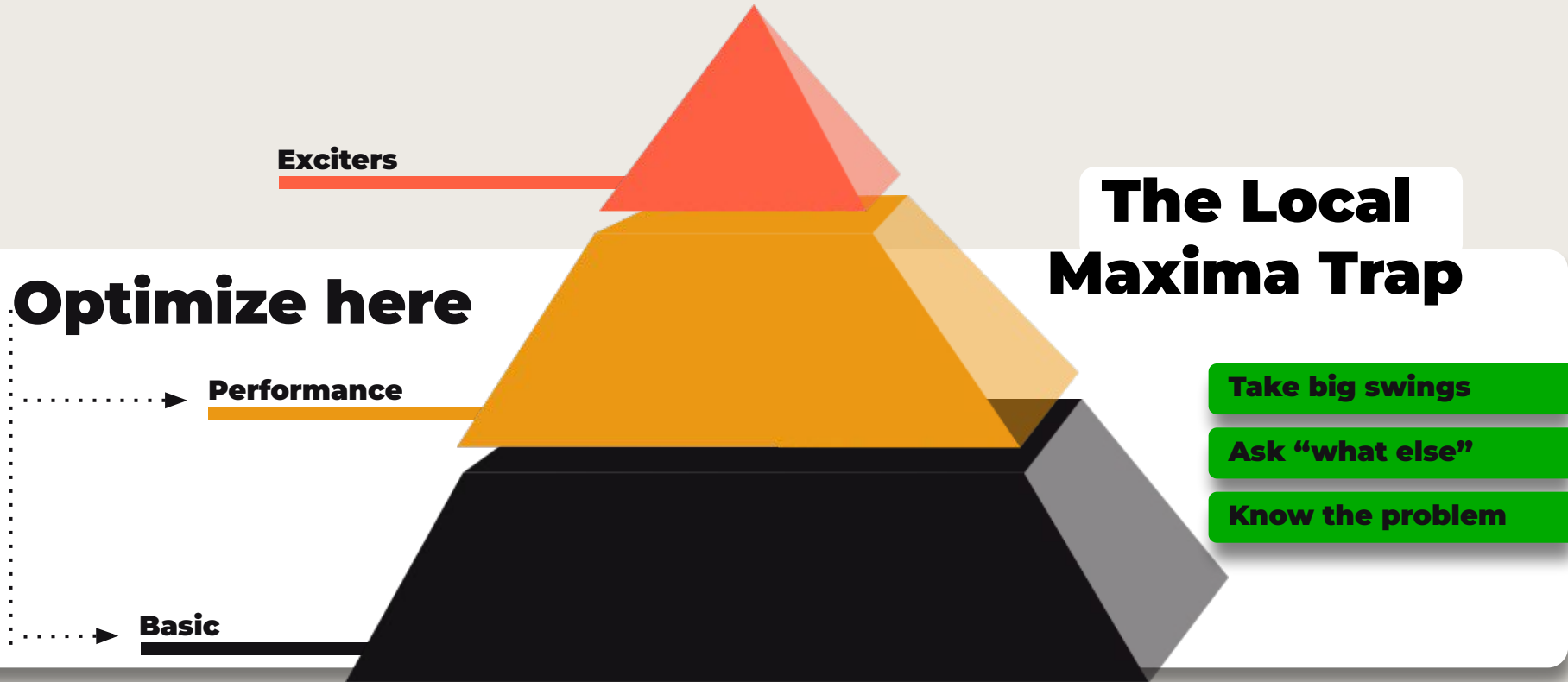
A completely new market

# Kano Model





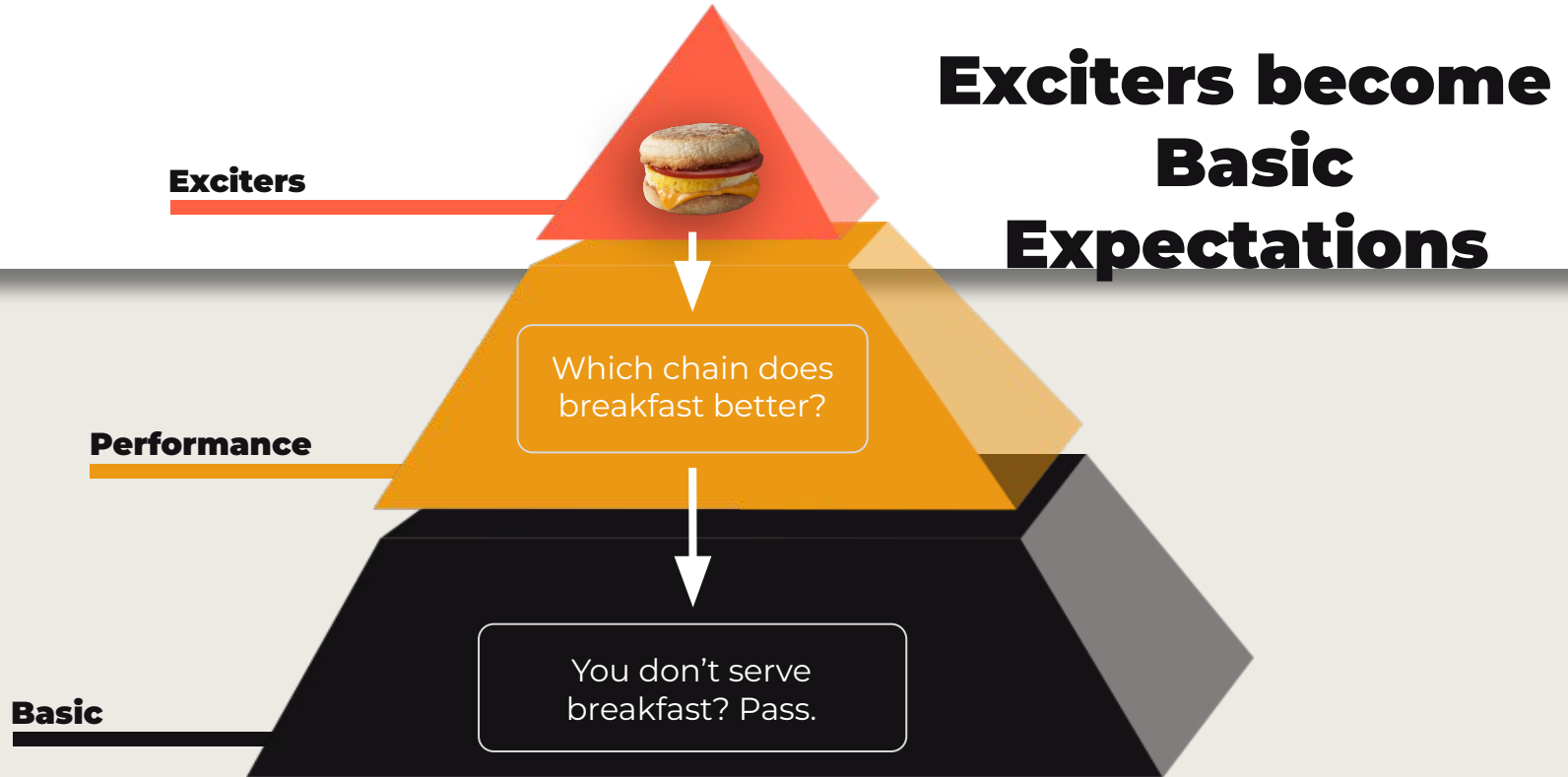
# Kano Model



# Kano Model



# Kano Model



# Innovation

**The process of introducing something new or improving something existing,  
leading to significant progress or change.**

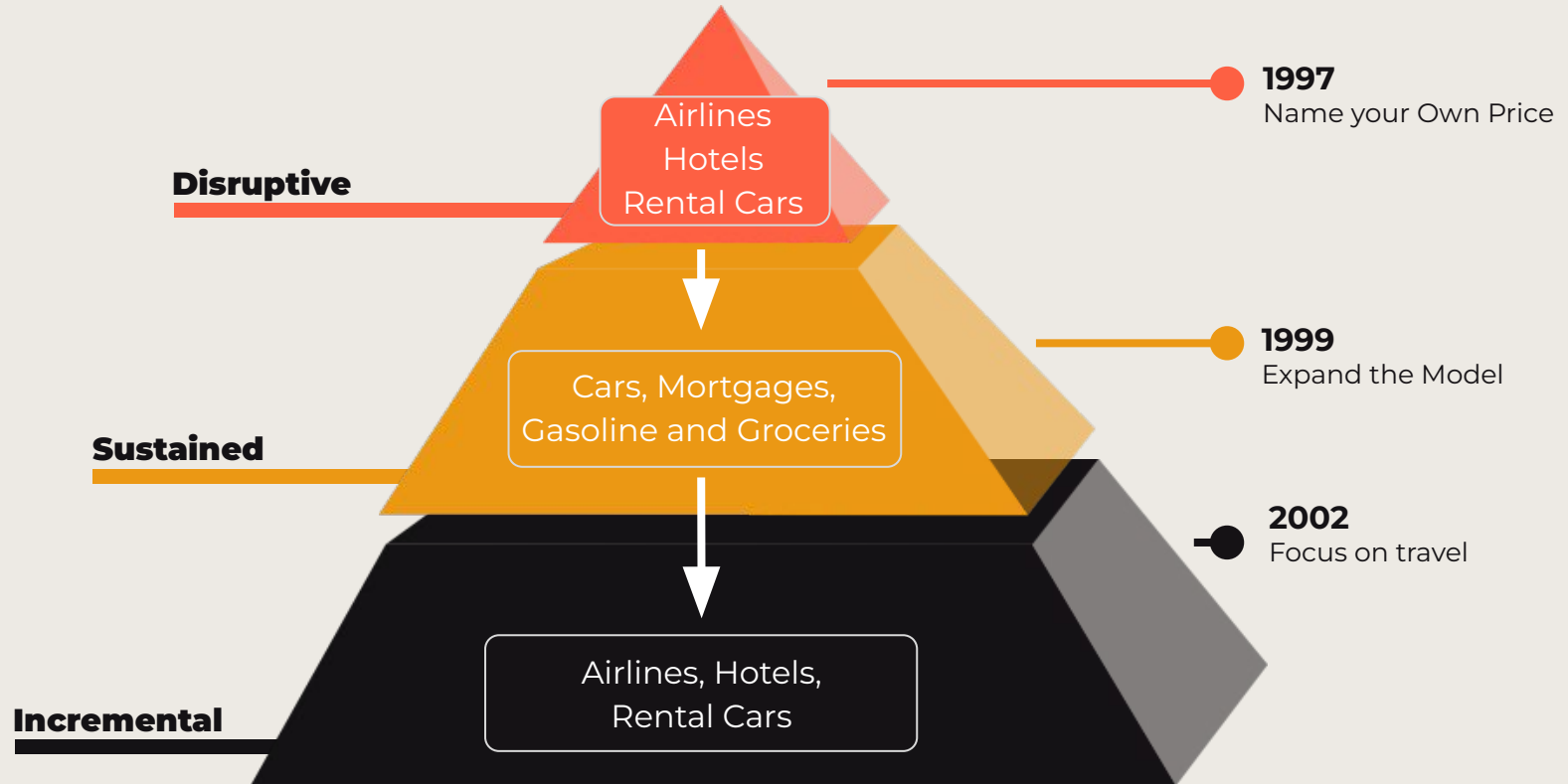
# Innovation & Optimization



# Innovation & Optimization

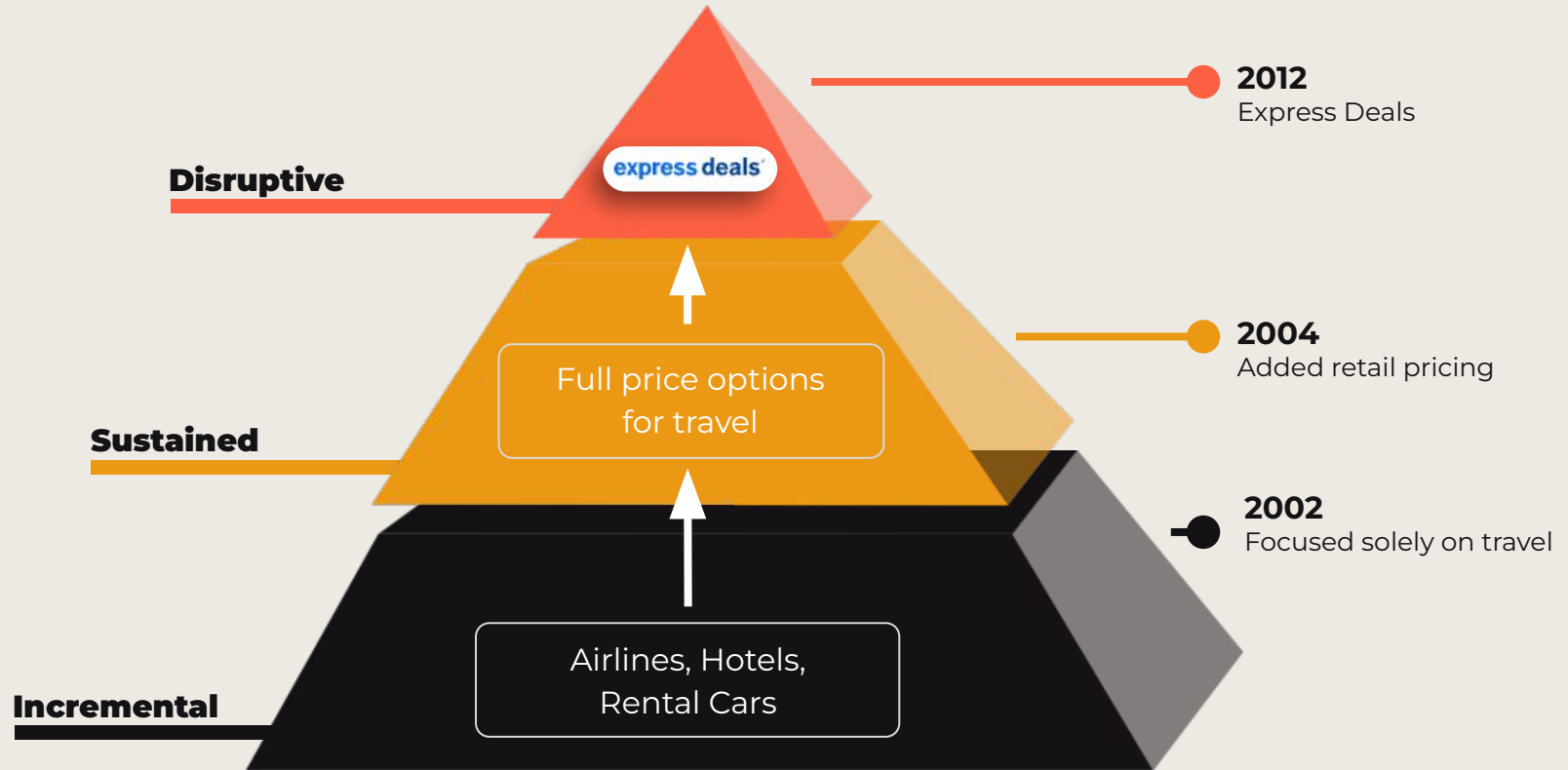


# Innovation & Optimization

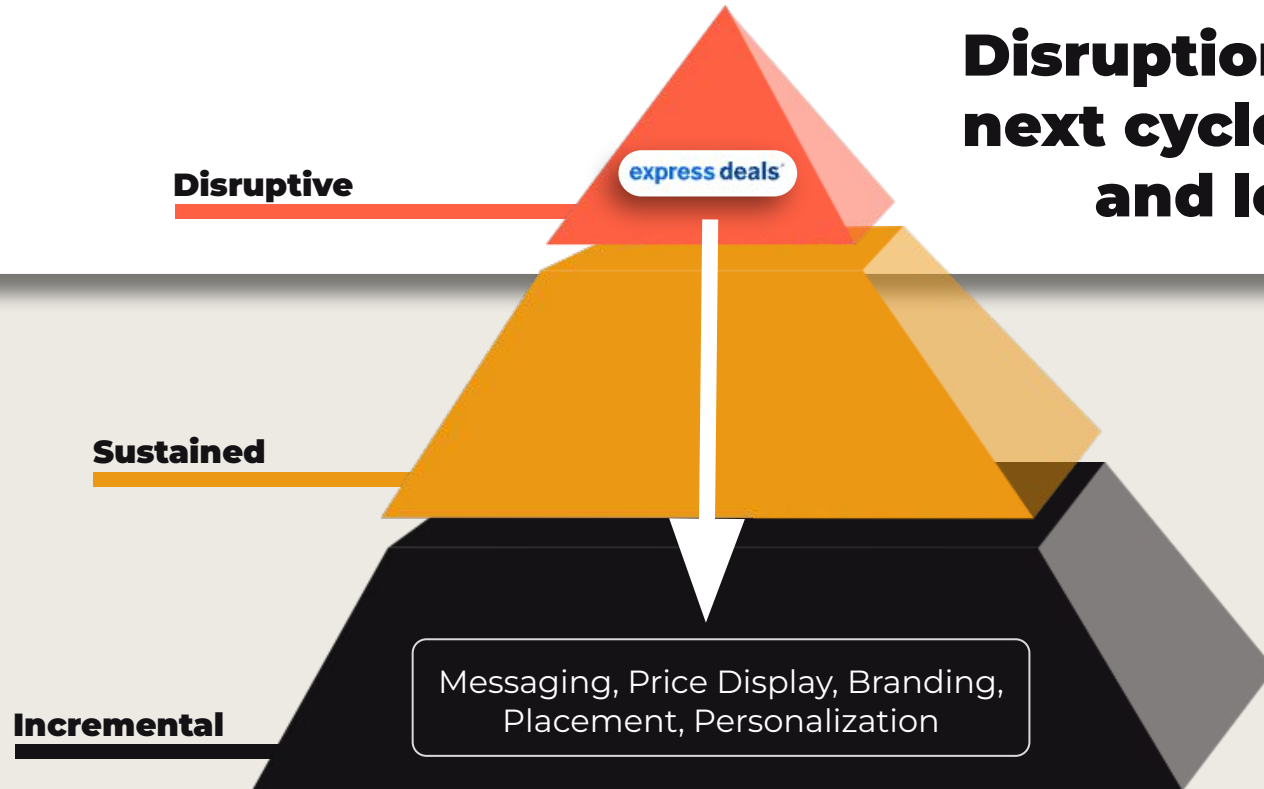




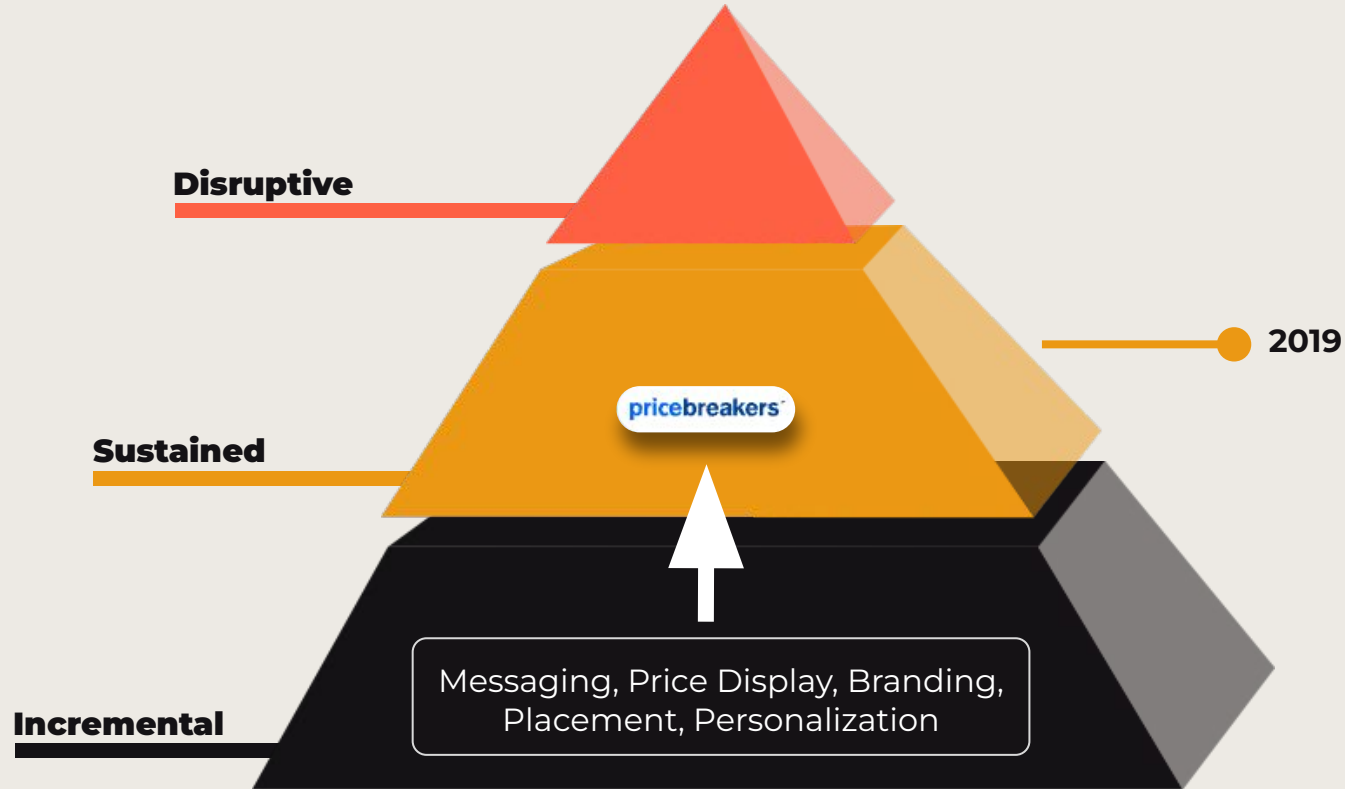
# Innovation & Optimization



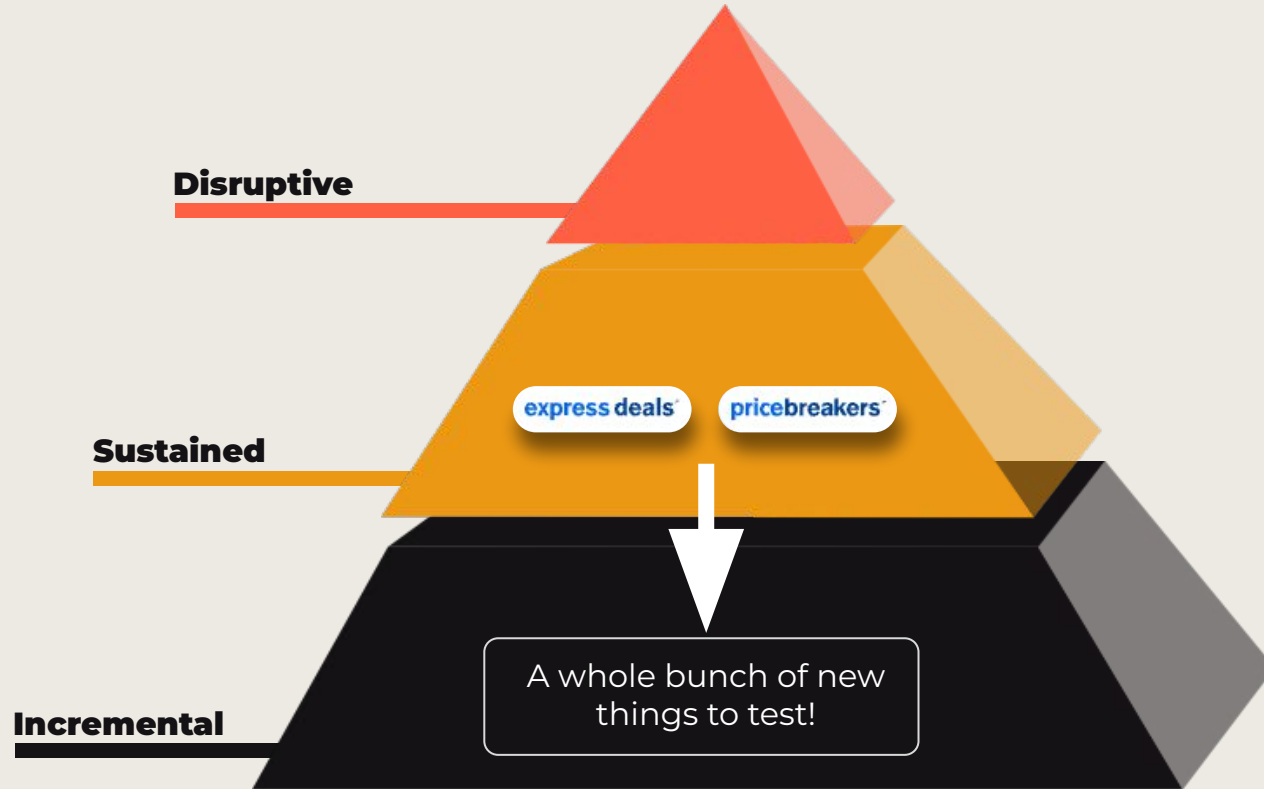
# Innovation & Optimization



# Innovation & Optimization

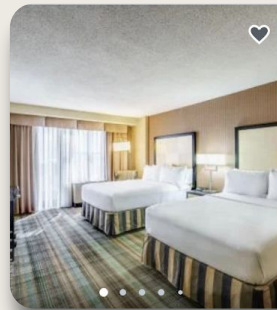


# Innovation & Optimization



**Use A/B Test to Learn, Not  
Just Optimize**

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TOP BOOKED

### The Watson Hotel

Midtown West - Hell's Kitchen [View Map](#)

- ✓ Free Internet Access, Swimming Pool, Facilities
- ✓ Free Cancellation Available

7.1 703 Reviews | 3.5-STAR HOTEL | \$\$\$

PRICELINE VIP

Price drops  
when you  
sign in

[Show me](#)

Non-VIP price

**\$287**

\$1,722 for 6 nights

Choose



### The Gallivan Hotel Times Square

6.1 202 Reviews | HOTEL

PRICELINE VIP 49% Off

was \$299  
**\$151**  
per night

Lower price because you are a customer!



### Westin New York Times Square

✓ Pay Later Available

8.6 1397 Reviews

PRICELINE VIP 33% Off

was \$199  
**\$133**  
per night

Lower price because you booked flight!



### Park Central Hotel Central Park

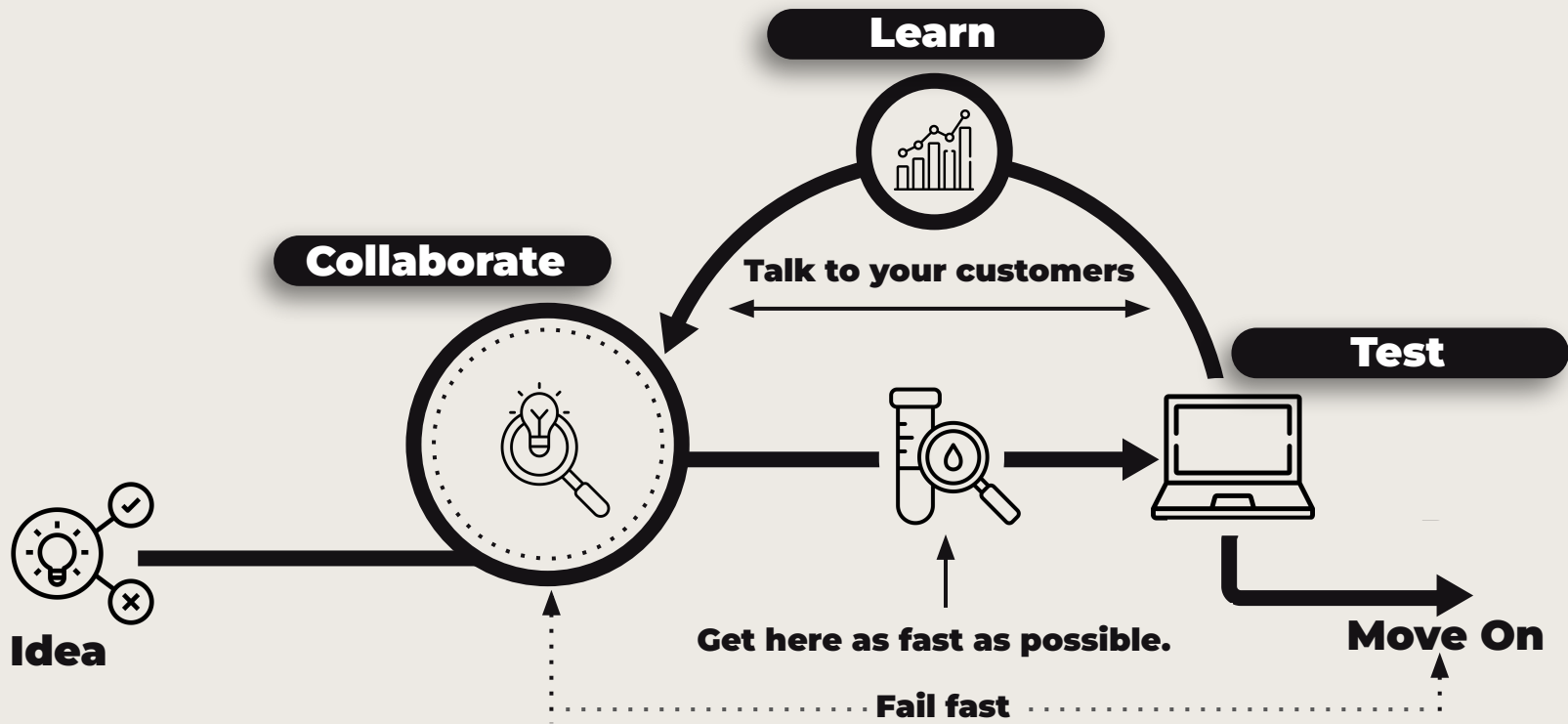
✓ Free Cancellation

7.8 3282 Reviews

PRICELINE VIP 84% Off

was \$205  
**\$32**  
per night

Lower price because you are a customer!



MVP  
The fastest way to **learn** how to build a **product** with the **least amount of effort**.



**Learn early. Learn fast.**

You don't need full designs, perfect prototypes, or months of research.

# Crash Landings

5



**There is no innovation and  
creativity without failure.  
Period.**

– Brené Brown

# What do these products have in common?



# They All Started as Mistakes



**Tried to melt**



**Tried to stick**



**Tried to stay flat**



**It Floats!**



**Tried to clean**

**Failure leads to  
success**

**Normalize Failure**

**Make it expected**

**Model Failure**

**It starts with leadership**

**Celebrate Failure**

**Reward the risk, not just the win**

# And, Remember

**Beware of strengths that become shadows.**

**Optimization is the tool innovation is the outcome.**

**Be Josh - Be bold.**

**Make the breakfast sandwich. Look beyond the obvious.**

**Culture beats process. Be the leader.**

**The more you test the more you learn.**



**Thank you.**

**in/rleffel**