



**BERKLEY  
ENTREPRENEURSHIP  
CENTER**

# Bootcamp 1—

SEPTEMBER 28, 2014

HELLO

my name is

**Prof. Luke Williams**

**NYU Stern School of Business  
Berkley Entrepreneurship Center**

**@LukeGWilliams**



HELLO

my name is

mixing



weather



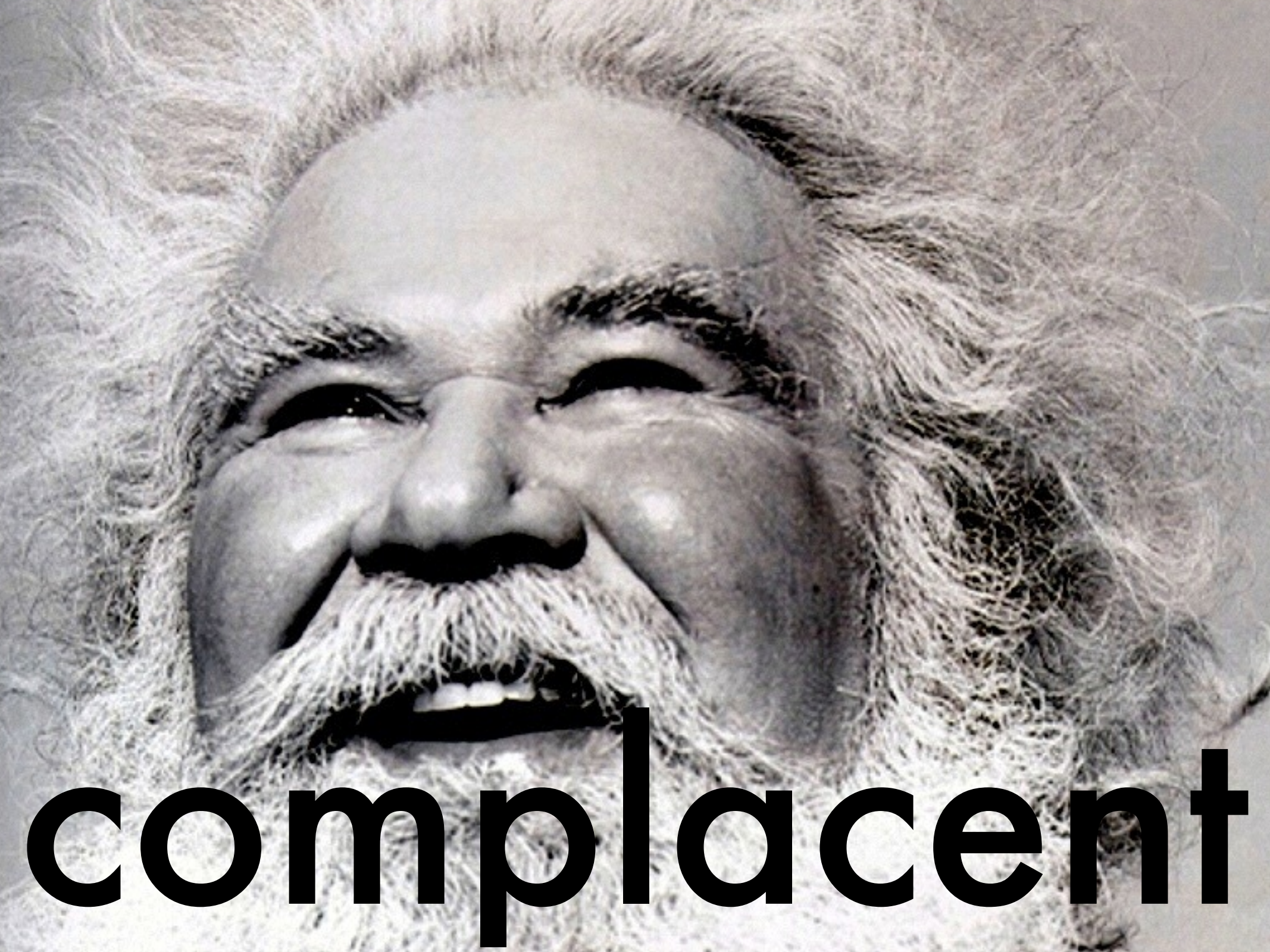
Antique  
Canadian Communication  
Device \$20

ited in Italy

BlackBerry

verizon





**complacent**

**incremental**







corner

that most successful companies will face eventually. It's lucid, analytical—and scary.”

—Andrew S. Grove, chairman & CEO  
Intel Corporation

# THE INNOVATOR'S DILEMMA

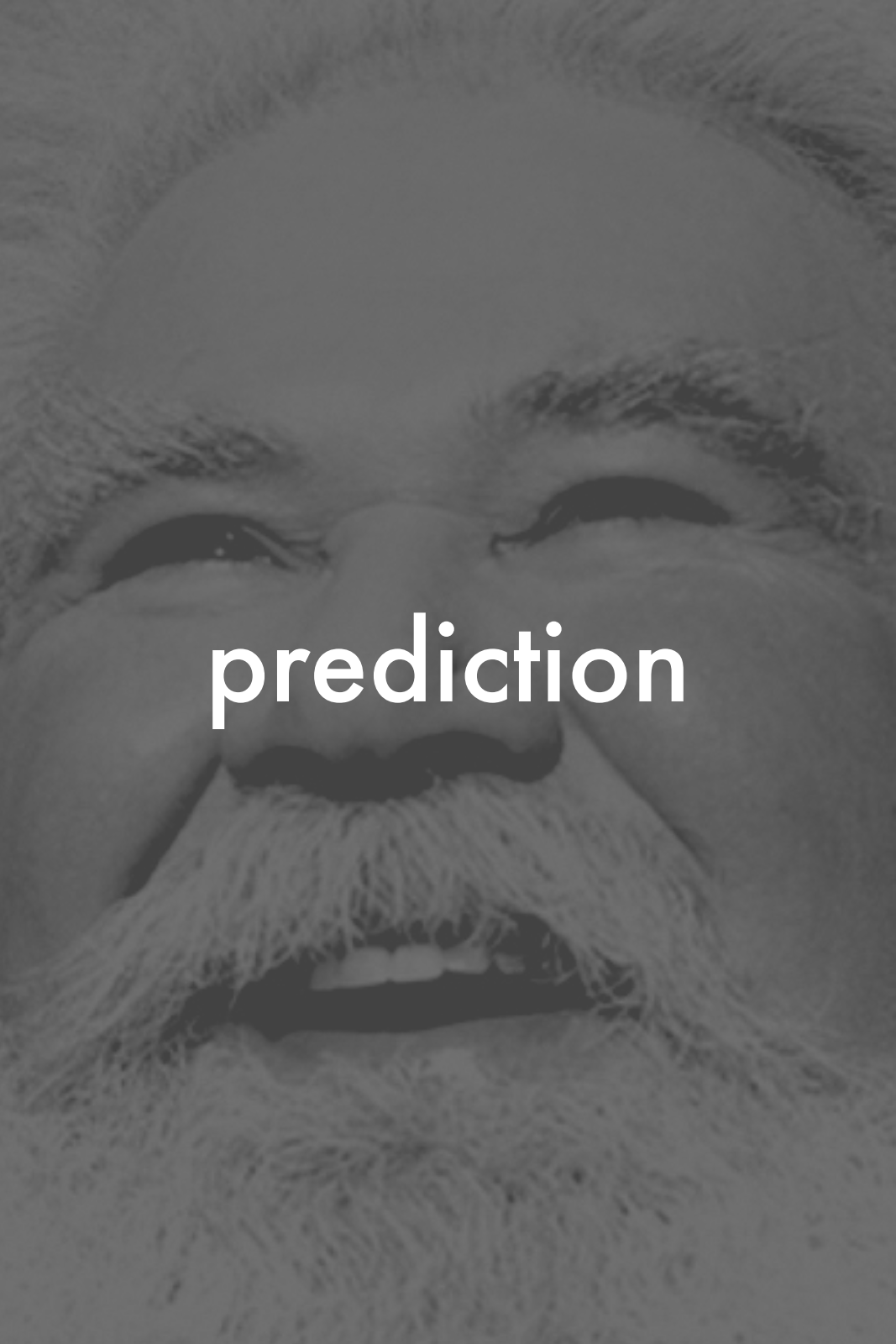


spot & react



BE





**prediction**



**provocation**



# Disruptive Thinking—

1. Craft a disruptive **hypothesis**.

2. Define a disruptive market **opportunity**.

3. Generate several disruptive **ideas**.

4. Shape a disruptive **solution**.

5. Make a disruptive **pitch**.

# Surfacing the Clichés—

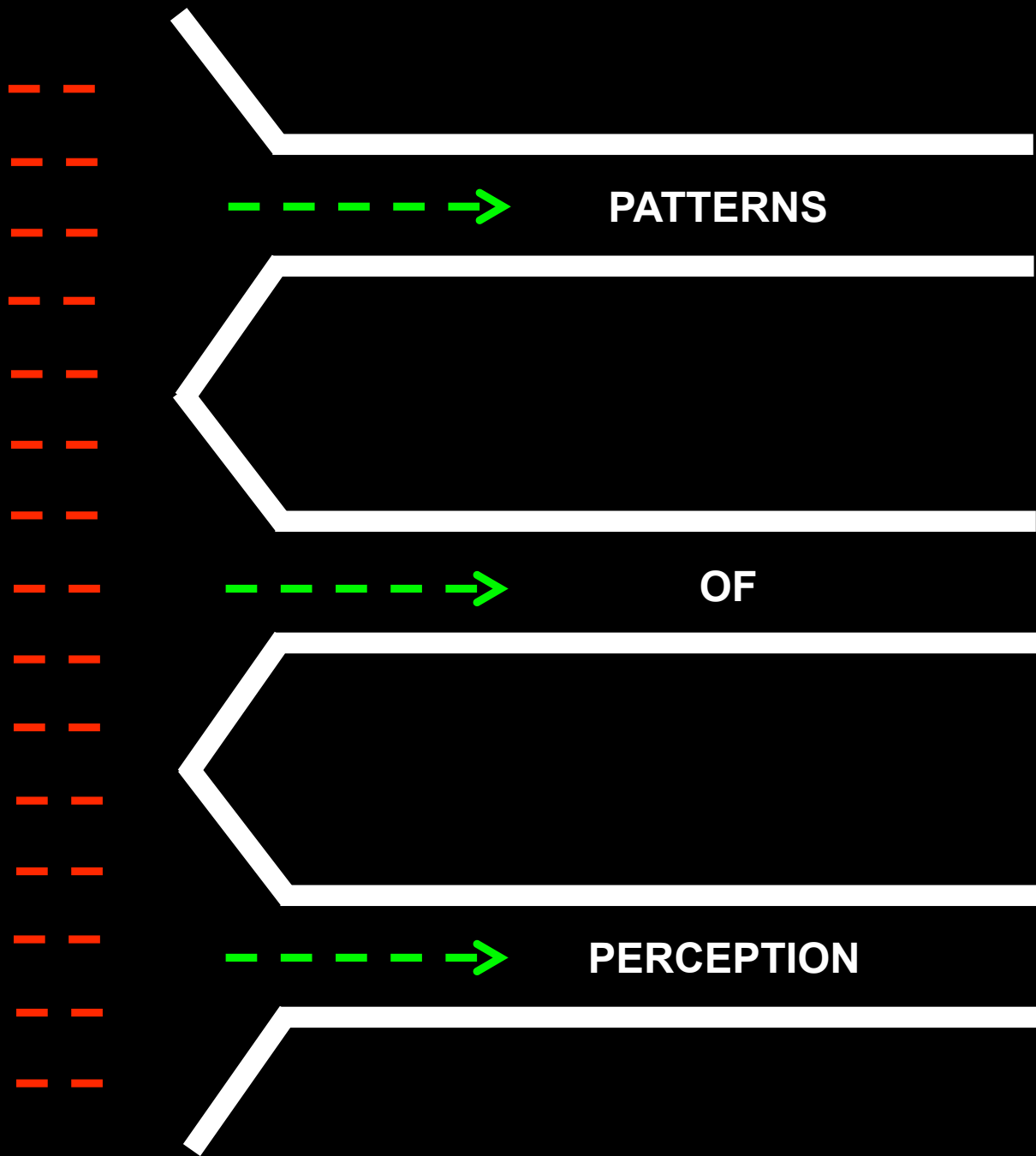


# Clichés—

**The widespread beliefs that govern the way people think about and do business in a particular space.**

“A surplus of similar companies,  
employing similar people, with  
similar educational  
backgrounds, coming up with  
similar ideas, producing similar  
things, with similar prices and  
similar quality.”

— Jonas Ridderstrale and Kjell Nordström, *Funky Business*



# Audit—

Start by getting online and identifying a **handful of direct competitors** in the industry, segment, or category you're focused on.



- **Group together** those with similar characteristics (such as size and resources), strengths (such as brand name, distribution), and strategies (such as high quality).
- **Select one or two competitors in each group** that are pretty representative of the group as a whole. A total of three to six competitors are the ideal number to work with.

- Do research on each competitor and **make a list of the clichés** that keep everyone doing the same thing, competing the same way, or operating with the same set of assumptions.
- The quickest and most efficient way to do this is to **explore company websites, examine their advertising, and read what people are saying** about the companies and their products on blogs and other social media platforms (such as Twitter, Facebook, and Amazon).

- Make your research efforts as **experiential** as possible — order one of a company's products online or sign up for their service.
- If they have a brick-and-mortar presence, **sample those products or services** in person.
- Keep your research activities quick and informal, **intuitive and qualitative**.
- List **any clichés** you think are relevant.

But to keep you from drowning in a sea of information, consider using the following **three filters**:





What Are The

**Interaction** Clichés?

# Example: Rental Car

Face-to-face interaction with a service agent,  
completing a lot of paperwork,  
and renting vehicles by the day.



What Are The

Product Clichés?

# Example: Soft-drink

Soda is inexpensive,

it tastes sweet,

and it's advertised as aspirational.





What Are The

Price Clickés?

# Example: Apparel

Socks are packaged, priced and purchased in pairs.



# Crafting a Disruptive Hypothesis—

A hypothesis is a

reasonable

prediction



A disruptive hypothesis is an

**unreasonable**

**provocation**

In 1981, **Doug Lenat** entered the...

Traveller Trillion Credit Squadron Tournament





What if...

We send a thousand

**defenseless & immobile**

ships into battle?

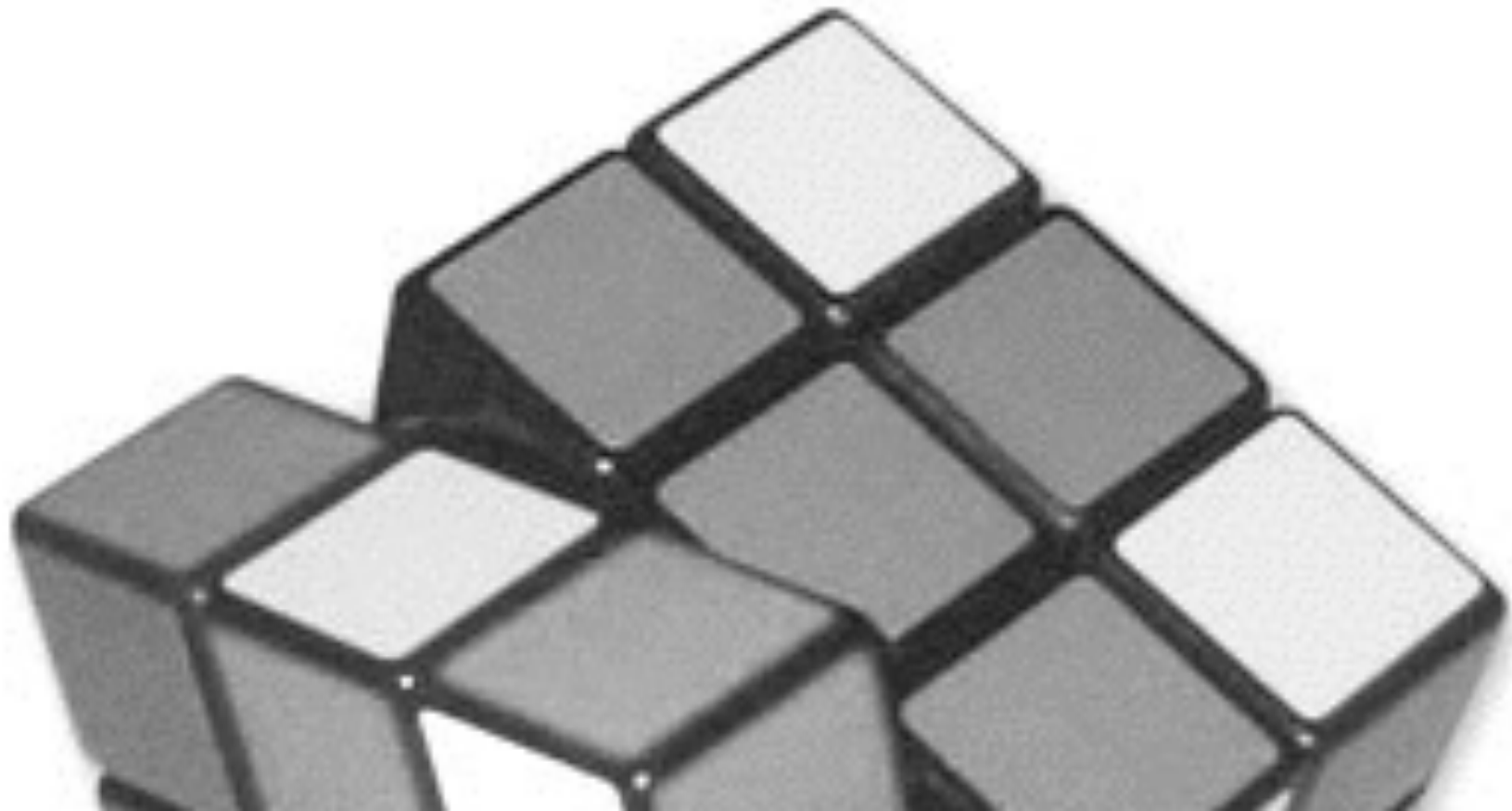
**"Agility."**

What if...

**We sink our own ships**

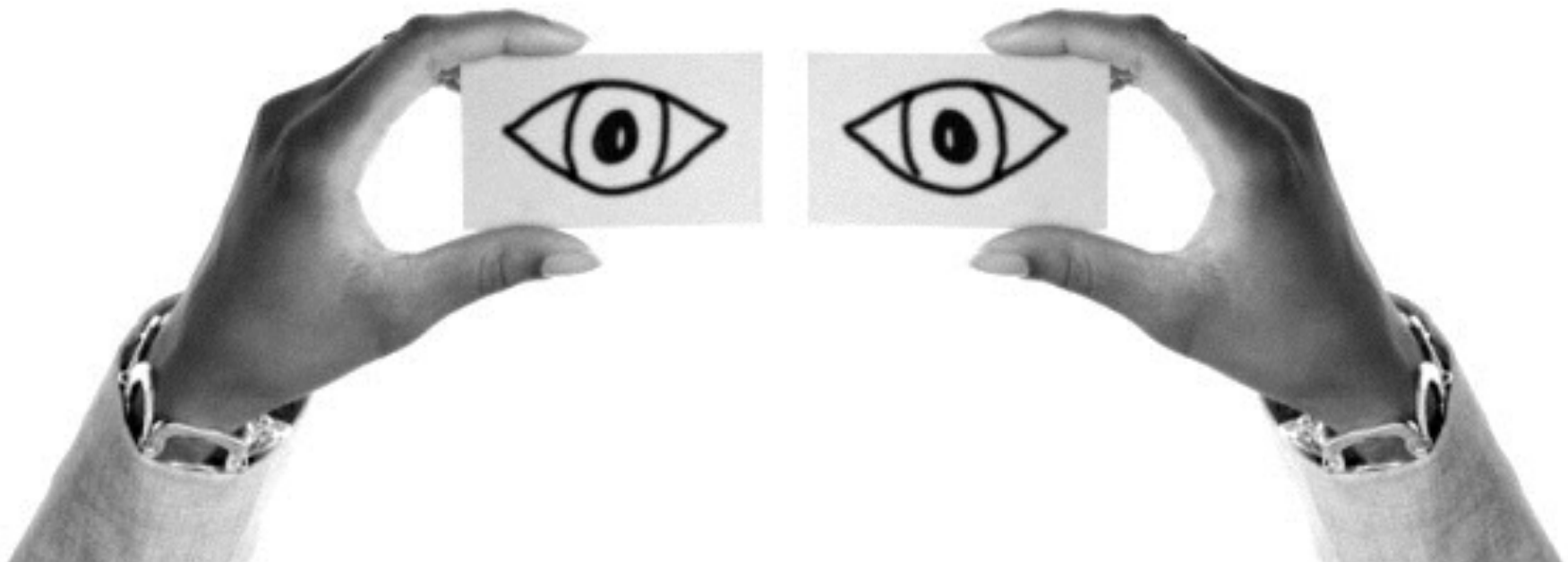
the moment they get damaged?

Take the clichés and twist them like a **Rubik's cube** and look at them from the inside out, upside down, backward, and forward.





You're trying to find a way to **rearrange the pieces**, which in turn will provoke a different way of looking at the situation.



**Specifically, you're looking for something (or things) that you could:**

- **scale up or scale down,**
- **move in the opposite direction,**
- **or completely do without.**

What Can You **Invert?**

**The tide of terror that swept America IS HERE**



# **THE SHINING<sub>x</sub>**

A STANLEY KUBRICK FILM STARRING JACK NICHOLSON SHELLEY DUVALL "THE SHINING" WITH SCATMAN CROTHERS DANNY LLOYD  
BASED ON THE NOVEL BY STEPHEN KING SCREENPLAY BY STANLEY KUBRICK & DIANE JOHNSON PRODUCED AND DIRECTED BY STANLEY KUBRICK EXECUTIVE PRODUCER IAN LADLAN PHOTOGRAPHED IN ASSOCIATION WITH PRODUCED BY CIRCLE CO.



# CLICHÉS

Inexpensive

Tastes good

Aspirational

# HYPOTHESIS

Expensive

Tastes bad

Functional



What Can You Deny?



## CLICHÉS

See customer

Complete paperwork

Cars by the day

## HYPOTHESIS

Don't see customer

Skip paperwork

No cars by the day



What Can You Scale?

## CLICHÉ

socks are sold in  
pairs

## HYPOTHESIS

socks are sold in sets  
of three



Worksheet—

# DISRUPTIVE HYPOTHESES: focus \_\_\_\_\_ group \_\_\_\_\_

## CLICHÉS

### INTERACTION

EXAMPLE: Restaurants provide customers with a menu when they arrive

### PRICE

EXAMPLE: Customers pay for food and service

### PRODUCT

EXAMPLE: Restaurants offer a 3-course meal

## HYPOTHESES

### INVERT

EXAMPLE: What if a restaurant provided customers with a menu only when they leave?

### DENY

EXAMPLE: What if customers were not charged for food and service?

### SCALE

EXAMPLE: What if a restaurant offered a 30-course meal?



**DISRUPTIVE HYPOTHESES:** focus \_\_\_\_\_ group \_\_\_\_\_

Hypothesis #1

A large, empty rounded rectangular box with a thin gray border, intended for writing the details of Hypothesis #1.

Hypothesis #2

A large, empty rounded rectangular box with a thin gray border, intended for writing the details of Hypothesis #2.

Hypothesis #3

A large, empty rounded rectangular box with a thin gray border, intended for writing the details of Hypothesis #3.

## DISRUPTIVE HYPOTHESES: focus \_\_\_\_\_ group \_\_\_\_\_

### Hypothesis #1

What if we *don't charge* for food and service, offer a *30-course* meal, and provide customers with a menu *only when they leave*?

### Hypothesis #2

What if = price + product + interaction?

### Hypothesis #3

What if = price + product + interaction?

The general rule is that the bolder your hypotheses, the fresher the perspective they offer.

So, don't skip this step and don't worry if your "what if's" seem completely ridiculous.

**As you proceed through the process,  
these hypotheses will help you:**

- imagine radically new scenarios,
- ask unconventional questions,
- and discover unexpected advantages.

# Design Research Methods—

# Objective:

To find an opportunity to put your hypotheses into action,  
by carefully observing your customers and their needs.

# To recap

The reason you kick off this process with **disruptive hypotheses** instead of going straight into **contextual research**, is because you must pick apart the existing industry clichés to see things differently.

Provocative **'what if' questions** prepare you to recognize things you didn't notice before and put research observations together in new ways.



# Think of it this way

Hypotheses feed *observations*.

Observations feed *opportunities*.

The next step is to take the hypothesis you just crafted and  
**hone it to something usable.**

Start by thinking about the

**real-world context your  
hypothesis will exist in.**

Who lives there now? What do they need? What motivates them?

# Disruption for disruption's sake is just annoying.

The reason most hypotheses fail to make it past the “what if” stage isn't their lack of creative differentiation;

it's their **lack of customer insight.**



# To cultivate insights and uncover opportunities,

you need to observe the telling moments that reveal what consumers actually feel and do



(as opposed to what they say they feel).

Officially, the methods of understanding the context we're using under the general heading of

# **ethnographic or contextual research.**

It is designed to be quick and informal, intuitive and qualitative, and above all, accessible.

Making  
Observations—

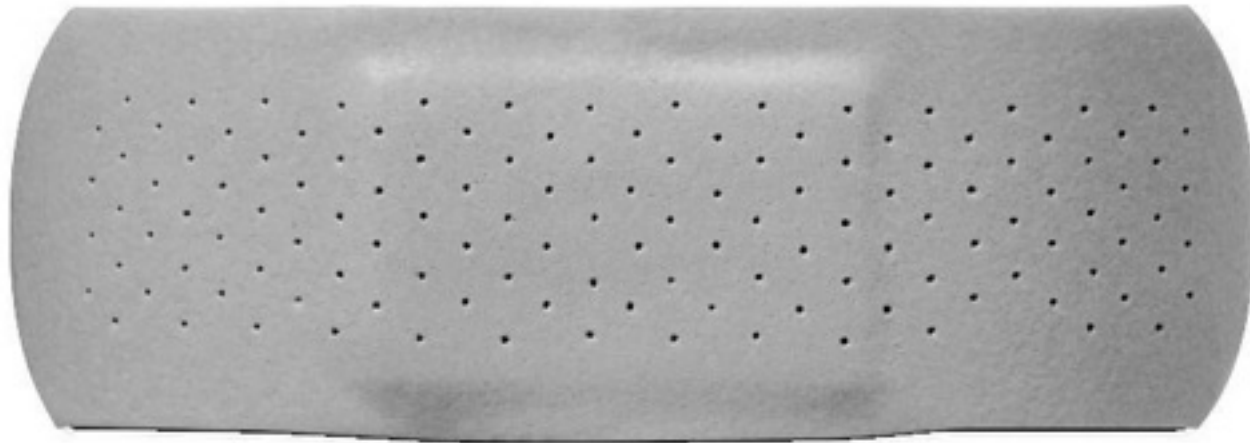
What Am I

Looking For?



The most common answer is

**“pain points.”**



**Problems are seductive** because  
they're usually clear.

The customers' **frustration is visible**  
and, even as an outsider, it's easy to empathize.

It's the small,

**seemingly unbroken aspects**

of a situation that provide the

**richest opportunity areas**

for innovation.

The most common answer is

~~**"pain points."**~~



**"tension points."**



Types of

**Tension**

**Workarounds**

**Values**

**Inertia**

**Shoulds versus wants**

# Workarounds:

These quick, efficient-seeming solutions address only the most obvious symptoms of a problem, not the underlying problem itself.

Workarounds can actually be dangerous because, when symptoms clear up, people lose any incentive they may have had to deal with the real issues.





# Workarounds: Look for...

Keep your eye out for quick and ready fixes that people have created to “work around” less than ideal situations

# Values:

People's values play an important role in their motivations. What do they value? What's important to them? What's not?

Tension is often present when a product, service, or experience is in conflict with the values they find desirable.

**W I R E D**

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WIRED MAGAZINE: 17.09

## The Good Enough Revolution: When Cheap and Simple Is Just Fine

By Robert Capps 08.24.09

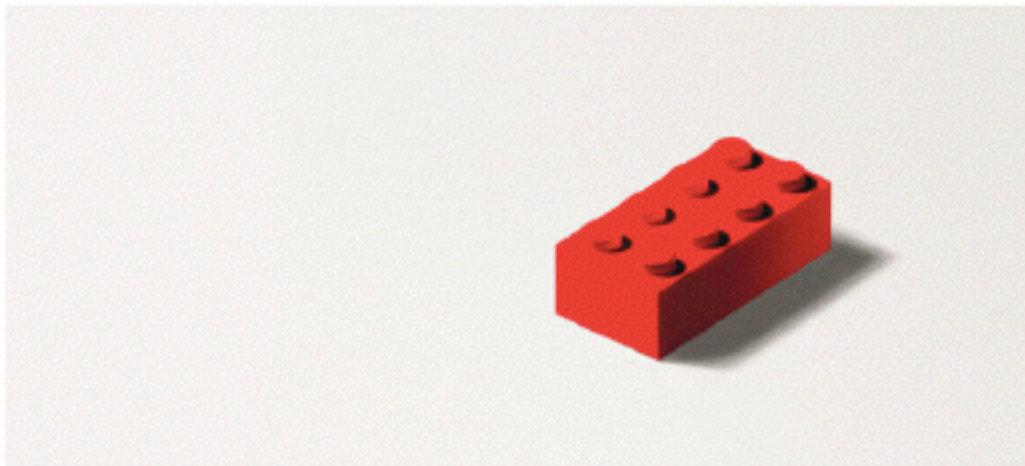


Photo: Kenji Aoki

### WHEN GOOD ENUF IS GREAT

Entire markets have been transformed by products that trade power or fidelity for low price, flexibility, and convenience.

— Erin Bidu



### Phone

Net-based calls can be laggy, and they sometimes drop out in mid-conversation. But they can also be free—even international calls—and it's easy to turn conversations into shareable MP3s. Skype now accounts for 8 percent of international calling.

In 2001, Jonathan Kaplan and Ariel Braunstein noticed a quirk in the camera market. All the growth was in expensive digital cameras, but the best-selling units by far were still cheap, disposable film models. That year, a whopping 181 million disposables were sold in the US, compared with around 7 million digital cameras. Spotting an opportunity, Kaplan and Braunstein formed a company called Pure Digital Technologies and set out to see if they could mix the rich chocolate of digital imaging with the mass-market peanut butter of throwaway point-and-shoots. They called their brainchild the Single Use Digital Camera and co-branded it with retailers, mostly pharmacies like CVS.

The concept looked promising, but it turned out to be fatally flawed. The problem, says Simon Fleming-Wood, a member of Pure Digital's founding management team, was that the business model relied on people returning the \$20 cameras to stores in order to get prints and a CD. The retailers were supposed to send the used boxes back to Pure Digital, which would refurbish them, reducing the number of new units it had to manufacture. But customers didn't return the cameras fast enough. Some were content to view their pictures on the tiny 1.4-inch LCD and held on to the device, thinking they'd take it in later to get prints. Others figured out how to hack the camera so it would download to a PC, eliminating the need to return the thing altogether.

Brisk sales combined with a lack of speedy returns destroyed the company's thin margins, and the camera failed. But the experience taught Kaplan and Braunstein a lesson: Customers would sacrifice lots of quality for a cheap, convenient device. To keep the price down, Pure Digital had made significant trade-offs. It used inexpensive lenses and other components and limited the number of image-processing chips. The pictures were OK but not great. Yet

# THE NEW YORKER

THE FINANCIAL PAGE

## BLACKBERRY SEASON

BY JAMES SUROWIECKI

FEBRUARY 13, 2012

Five years ago, Research in Motion, maker of the BlackBerry, was one of the most acclaimed technology companies in the world. The BlackBerry dominated the smartphone market, was a staple of the business world, and had helped make texting a mainstream practice. Terrifically profitable, the phone became a cultural touchstone—in 2006, a Webster's dictionary made "CrackBerry" its word of the year.

These days, it seems more like the SlackBerry. Thanks to the iPhone and Android devices, R.I.M.'s smartphone market share has plummeted; in the U.S., according to one estimate, it fell from forty-four per cent in 2009 to just ten per cent last year. The BlackBerry's reputed addictiveness now looks like a myth; a recent study found that only a third of users planned to stick with it the next time they upgraded. R.I.M.'s stock price is down seventy-five per cent in the past year, and two weeks ago the company was forced to bring in a new C.E.O. The *Times* wondered recently whether the BlackBerry will go the way of technological dodoes like the pager.

The easy explanation for what happened to R.I.M. is that, like so many other companies, it got run over by Apple. But the real problem is that the technology world changed, and R.I.M. didn't. The BlackBerry was designed for businesses. Its true customers weren't its users but the people who run corporate information-technology departments. The BlackBerry gave them what they wanted most: reliability and security. It was a closed system, running on its own network. The phone's settings couldn't easily be tinkered with by ordinary users. So businesses loved it, and R.I.M.'s assumption was that, once companies embraced the technology, consumers would, too.

This pattern—of winning over business and government markets and then reaching consumers—is a time-honored one. The telegraph was initially taken up mainly by railroads, financial institutions, and



# Values: Look for...

Look for high-priority and low-priority values.

Has there been a change in what consumers' value in the products and services they buy?

Has that change revealed a gap between what consumers want and what's actually available?



# Inertia:

Generally, the more established people's habits, the higher the inertia, meaning they're less motivated to consider alternative choices.

Wherever customers feel trapped by inertia in a situation they find less than desirable is where you'll find tension.



JUNE 19, 2006

INSIDE INNOVATION -- IN PROGRESS

## Case Study: Bank Of America

How it learned that what customers really want is to Keep the Change

### THE PROBLEM

Innovation in services is rare. In financial services, the last big breakthrough was online banking, nearly a decade ago. In October, 2005, Bank of America ([BAC](#)) brought out a radically different product that broke the paradigm. It's called Keep the Change.

The concept solves a critical banking problem -- how to get consumers to open new accounts. The product works like this: Every time you buy something with a BofA Visa debit card, the bank rounds up your purchase to the nearest dollar and transfers the difference from your checking into your savings account. It also matches 100% of transfers for the first three months, and 5% of the annual total, up to \$250 a year. Since the launch, 2.5 million customers have signed up for Keep the Change. Over 700,000 have opened new checking accounts and 1 million have signed on for new savings accounts.

### THE RESEARCH

How did Bank of America create Keep the Change? In the spring of 2004, it hired an innovation and design research firm in Palo Alto, Calif., to help conceive of and conduct ethnographic research on boomer-age women with children. The goal was to discover how to get this consumer segment to open new checking and savings accounts.

For the next two months, a team of five BofA researchers and four researchers from a West Coast consulting firm visited Atlanta, Baltimore, and San Francisco. They observed a dozen families and interviewed people on the streets. They watched people at home as they paid and balanced their checkbooks. They tagged along with mothers as they shopped at Costco, dined at Johnny Rockets, and made deposits in drive-through tellers.

Ray Chinn, senior V.P. for new product introduction, along with Faith Tucker, another BofA senior V.P., saw two themes emerge from the research. In Atlanta, the team met a mother who always rounded up her checkbook entries to an even dollar because it was quicker. People also rounded up their financial transactions because it was more convenient. The second realization: Many boomer women with children couldn't save. For some, it was a lack of money. For others, it was a matter of not being able to control their impulse buying.

### PROTOTYPING

In the summer of 2004, Chinn and Tucker put together a team of product managers, finance experts, software engineers, and operations gurus and held 20 brainstorming sessions. The team generated 80 product concepts, boiled them down to 12, and overwhelmingly favored one: rounding up the financial transactions of consumers and transferring the difference to their savings.

The team created a Web-based cartoon that showed a woman buying a cup of coffee in a store for \$1.50. Then it displayed the rounding up and putting the 50 cents into a savings account. Tucker and Chinn tested out the cartoon and concept in an online survey of 1,600 consumers. The result? Sky-high scores on uniqueness. In December, 2004, Diane Morals, Chinn's and Tucker's boss, pitched the idea to the bank's consumer division and got the green light. The first challenge was a name. A woman in a focus group suggested Keep the Change. That stuck.

# THE NEW YORKER

THE FINANCIAL PAGE

## THE NEXT LEVEL

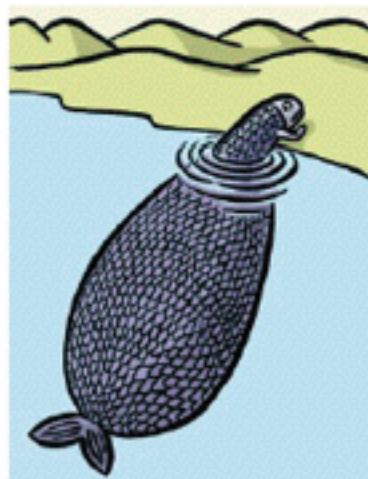
BY JAMES SUROWIECKI

OCTOBER 18, 2010

In the nineteen-eighties, a new kind of chain store came to dominate American shopping: the "category killer." These stores killed off all competition in a category by stocking a near-endless variety of products at prices that small retailers couldn't match. Across America, independent stores went out of business, and the suburban landscape became freckled with Toys R Us, CompUSA, and Home Depot superstores. But the category killers' reign turned out to be more fragile than expected. In the past decade, CompUSA and Circuit City have disappeared. Toys R Us has struggled to stay afloat, and Barnes & Noble is in the midst of a boardroom battle prompted by financial woes. And, last month, Blockbuster finally admitted the inevitable and declared Chapter 11.

The obvious reason for all this is the Internet; Blockbuster's demise, for one, was inextricably linked to the success of Netflix. But this raises a deeper question: why didn't the category killers colonize the Web the way they colonized suburbia? That was what pundits expected. Companies like Blockbuster, the argument went, had customer expertise, sophisticated inventory management, and strong brands. And, unlike the new Internet companies, they'd be able to offer customers both e-commerce and physical stores—"clicks and mortar." It seemed like the perfect combination.

The problem—in Blockbuster's case, at least—was that the very features that people thought were strengths turned out to be weaknesses. Blockbuster's huge investment, both literally and psychologically, in traditional stores made it slow to recognize the Web's importance: in 2002, it was still calling the Net a "niche" market. And it wasn't just the Net. Blockbuster was late on everything—online rentals, Redbox-style kiosks, streaming video. There was a time when customers had few alternatives, so they tolerated the chain's limited stock, exorbitant late fees (Blockbuster collected





# Inertia: Look for...

Keep an eye out for situations in which customers act out of habit.

Opportunities can be created to either break or leverage that inertia.

# Shoulds versus wants:

People often struggle with the tension between wants, which are things they crave in the moment, and shoulds, which are the things they know are good for them in the long term.



## Why Customers Will Pay You to Restrain Them

By [Dan & Chio Heath](#)

We worry about many things. Our kids' grades, our parents' health, the world at large. (Also, will all those unemployed investment bankers have enough to eat?) Add to that list one really odd thing we worry about: our own future behavior. And how we can control it.

Think about a piggy bank, which is like a security system for a world where you're the burglar. In purchasing a piggy, you're paying \$10 to protect \$22 in spare change from your own hands. Life is full of piggy-bank situations, where we crave restrictions on our own behavior. Might your business benefit from helping your customers handcuff themselves?

A piggy bank is an example of a "commitment device" -- a way to lock yourself into an option you might otherwise dodge, like saving money, because you think it'll be good for you. One graduating Stanford business-school student used a commitment device to lock down his own career choice. As reported by Jim Collins in a *Harvard Business Review* article, the student wanted to start a company, but first he needed to pay down some debt. So he took a job at a big company, promising himself that he'd exit after five years and live his entrepreneurial dream. But he also worried about being seduced by the benefits-and-bagels comfort of corporate America. So he wrote a resignation letter, dated for five years into the future, and distributed signed copies to several people he trusted. His instructions: If I don't resign in five years, put this letter in the mail and do it for me.

All of us seek ways to save ourselves from our own weaknesses. Some alcoholics take Antabuse, a pill that makes you sick when you drink. Some obese people undergo gastric-bypass surgery. Some people even live in fear of their own procrastination. They're called college students. In one study, students were told they had to turn in three papers by the end of the semester and were given the option to assign earlier binding due dates for the work. Almost three-quarters of them jumped at the chance, thus saving themselves from a frantic Red Bull -- and -- Wikipedia bender in the last week.

Commitment devices are commonplace in business as well. Google has pledged to give its engineers 20% of their time to pursue personal projects. With that pledge, the company forecloses its ability to claim that time (at least without a lot of grief). Small businesses get in on the act too. Norm Brodsky, an entrepreneur and a writer for *Inc.* magazine, runs a document-storage-and-retrieval business. He committed to taking four weeks of vacation a year, forcing himself to create systems that would allow his operation to run smoothly without him. He was successful, and since then, he has announced an even tougher commitment device: Now he'll take four months of vacation per year. This would appear to commit him to becoming French.

# Shoulds vs wants: Look for...

Look for the tension that lies between wants and shoulds. Treat all customers as highly invested in moving from where they are to where they want to be.

Do they need help “saving themselves from themselves” to get there?



# Developing a Research Plan—



## FOUNDATIONAL

### EXPERT ANALYSIS

- Competitive Landscaping
- Trend-scraping
- Subject Matter Expert interviews
- Usage Analysis
- Analogous Experience Analysis
- Immersion Tours

### CONTEXTUAL INQUIRY

- Interviews & Observation
- Shadowing / Non-invasive
- Environment Intercepts
- Experience Walkthroughs

### SURVEYS

- Web
- Email to Web
- Intercepts

## GENERATIVE

### DIARIES

- Written
- Photo
- Audio / Video
- Behavioral Sampling

### CONTEXTUAL INQUIRY

- Interviews & Observation
- Shadowing / Non-invasive
- Environment Intercepts
- Experience Walkthroughs

### CONCEPT STRUCTURING

- Card sorting
- Affinity Mapping
- Moodboarding

### PARTICIPATORY DESIGN

- Framework validation
- Co-creation exercises

## EVALUATIVE

### CONCEPT TESTING

- Lab Setting
- In-context

### USABILITY TESTING

- Heuristic Evaluation
- Low-fidelity Prototyping
- Hi-fidelity Prototyping

### SURVEYS

- Web
- Email to Web
- Man on the Street

# Your research goals

Will be influenced by the provocative hypotheses you created, and you'll want to focus on the relationship between the customer and the industry, segment, or category.



1.



## Make a list of questions

Determine the kinds of information you'd like to gather by making a list of questions based on your hypotheses.

- How and where do customers interact with the current products and services in your industry, segment, or category?
- What steps do they have to take to purchase products and services?
- How does the industry, segment, or category make the customer feel?
- What is the social network of the customer?
- Is the customer loyal to an existing product, service, or brand?
- What is the level of customer support offered?

2.



## Define the relevant audience

Define the relevant audience: a mix of the target customer population, potential customers, and/or outlier customers.

# 3.

## Work out the **timing** **required.**



Your decision will depend on the size and complexity of your focus, but it should allow for:

- A rapid immersion – 2–3 hours for a quick informal study
- 2–3 days or weeks for more formal research

4.



## Interviews & observations

...in the environment where people use the products and services relevant to your situation.

Allow for multiple observation sites so you'll be able to collect rich information across several environments.

# Pre-arranged, open-ended interview and observation.

The most common type of study.

While you're asking questions designed to get your interview subjects to speak freely,

you're also carefully observing the environment they live or work in and what they're doing while they're there.

Example: Intuit's "Follow Me Home" program

# Noninvasive observation.

Because of constraints such as time or access, you may have to make your observations in public environments without prior permission.

This can reveal a lot of information, especially in high-density areas.

Because you're operating in common public space, there's no need to schedule your observations.

Example: Architect Louis Kahn and how he designed the green spaces between the buildings of the Salk Institute.

# Intercept.

This approach includes visiting a store, watching the purchase process or general customer interactions, and approaching people to speak with.

Your aim is to understand how people make purchase decisions (or decisions not to purchase) right while it's happening.



# Documentation:

Research activities should always be captured by some form of documentation:

- notes
- photographs
- video
- audio
- participant output in the form of drawing, writing, survey, digital entry, prototyping.

# Summary.

1. Make a list of questions
2. Define the relevant audience
3. Work out the locations & timing
4. Plan Interviews & observations

- Open-ended interview and observation, noninvasive observation, intercept

**Tips—**

Tips for

# Interviews

- Ask open ended questions, or questions that require a longer explanation than one word
- Listen and be attentive, even if taking notes at the same time
- Have a dynamic conversation, don't interview from a script
- Allow long pauses
- Ask naïve questions (even if you're the expert) to hear the explanation in their words
- Don't correct people; understand their perceptions and why they may perceive things differently than you
- Remember: the participant is the expert!

Tips for

# Making Observations

During observations, look for:

- Things that prompt shifts in behavior
- Work-arounds and adaptations
- Body Language
- Things people care about
- Anything that surprises you
- Anything that questions your assumptions about how the product or service works
- Anything that you find irrational

Tips for

# Synthesis



# Organizing Your Thinking

Writing your ideas on paper and physically moving them around makes the entire process feel more real to everyone involved.

It also makes it easier to organize your thoughts, and it can help you stay out of some easy-to-fall-into thinking traps.

# Example of an "Insight Board."

This image displays a large, hand-drawn "Insight Board" on a wall, featuring a central mind map, numerous photographs, and many handwritten notes on sticky notes.


**Central Mind Map:** A complex diagram with a central node labeled "AI" and numerous branches radiating outwards, containing various terms and concepts related to artificial intelligence and its applications.

**Photographs:** Several small, square photographs are pinned to the board, showing people in various settings, likely related to the research or project being documented.

**Handwritten Notes (Sticky Notes):**

- Top Left:** "AI is not a technology, it's a mindset." (purple note)
- Top Center:** "Generative AI is not just about text, it's about everything." (purple note)
- Top Right:** "Create words of wisdom in family trees." (purple note)
- Middle Left:** "AI is not a technology, it's a mindset." (purple note)
- Middle Center:** "AI is not a technology, it's a mindset." (purple note)
- Middle Right:** "AI is not a technology, it's a mindset." (purple note)
- Bottom Left:** "AI is not a technology, it's a mindset." (purple note)
- Bottom Center:** "AI is not a technology, it's a mindset." (purple note)
- Bottom Right:** "AI is not a technology, it's a mindset." (purple note)

The board is a visual representation of a complex project or research, organized around a central theme and supported by various pieces of evidence and insights.

A group of four people, three men and one woman, are gathered around a large whiteboard in an office setting. The whiteboard is covered with numerous yellow sticky notes, which they are organizing and discussing. The man on the far right is pointing at a sticky note. The woman in the foreground is looking at the board. The man on the far left is also looking at the board. The woman behind her is looking at the board. The man in the center is looking at the board. The whiteboard is covered with many yellow sticky notes, some of which are organized into columns. There are also some green sticky notes. The people are dressed in business casual attire. The office has a modern feel with a large whiteboard and a comfortable chair. The text "Synthesizing qualitative data." is overlaid on the image.

Synthesizing qualitative data.



Code and organize observations into themes, to lay the foundation for generating insights.

# Cultivating Insights—

What Are **Insights?**

After you gather that information and determine your context,

...you'll organize, filter and prioritize, your observations

and transform them into  
meaningful **insights**.

# Observations and insights are not the same thing.

Observations are raw data, the gradual accumulation of research information that you have consciously and carefully recorded – exactly the way you way you saw or heard it, with no interpretation.



Insights are the sudden realizations that happen when you

**interpret** the observations

and discover

**unexpected** patterns.

# While some insights do spontaneously appear...

Most are generated through a process of organizing, filtering, and prioritizing all the great observations you've gathered and translating them into something meaningful –and actionable.

Even the most mundane observations can be restructured to yield unexpected, yet logical insights.

Insights = Gaps

# Patterns reveal **gaps**

between where people are and where they'd ideally like to be

— between their current reality and their desires.

Wherever there's tension  
(observation), there's a gap.

If you can spot the gap (insight),  
you can fill the void (opportunity).

## Consider the relationship between categories

Look for patterns and tensions in the way your themes relate to each other. Are they on the same level? Or are they talking about different kinds of things?

## Group and regroup

Slice and dice the data in different ways to find meaning. Try moving the post-its around to form new groups.

# Look for What's Unexpected and Ask

## "Why?"



# Layer of interpretation

Asking “why?” encourages you to think through the connections between observations and adds a layer of interpretation.



# New configurations of knowledge

Insights are new configurations of knowledge that enable you, and others, to see the situation in a different, and often, counterintuitive way

- one that draws attention to gaps that had been previously ignored.

Capturing Your  
**Insights**

# Describing insights

When capturing and describing insights, the words and phrasing you use matter.

Insights often fly in the face of conventional wisdom or expectations.

When that happens, use a well placed “but” or “whereas” to draw attention to the contradiction and increase the statement’s impact.

# For example:

Drivers of high-performance cars are not stressed by high-speed driving *but by parking*.

Men who buy premium audio systems like to display them in their living rooms, *whereas women would rather hide them behind plants or furniture*.

Customers are not as interested in its locks per se *but in the possessions those locks protect*.

# Take risks

Be prepared to take risks with your insights.

They don't have to be unmistakably correct; they have to be thought-provoking.

In many research approaches, the pressure to be incontrovertibly right is so strong that there's no space for intuition and intriguing perspectives.

# Not ends in themselves

The most important thing to remember is that research insights are not ends in themselves.

You're generating them to feed the opportunities that will put your hypotheses into action.

Describing an  
Opportunity—

How Do You Describe An

Opportunity?



# There's an opportunity to:

- provide [who?]
- with [what advantage?]
- that [fills what gap?]

# Reframing your hypotheses

Remember that all of your research activities are done to drive the discovery of opportunities.

It's possible that your opportunities may deviate from your original hypotheses as you work through this definition process.

So, you might have to abandon or reframe your original hypotheses to sync it with your observations.

Worksheet—

**DISRUPTIVE OPPORTUNITY:** focus \_\_\_\_\_ group \_\_\_\_\_

**HYPOTHESIS:** What if... ?

**WHO**

**ADVANTAGE**

**GAP**

**OPPORTUNITY:** There's an opportunity to provide [who?] with [what advantage?] that [fills what gap?]

**DISRUPTIVE OPPORTUNITY:** focus In-car driving experience group

HYPOTHESIS: What if... ?

What if cars were not for driving?

WHO

ADVANTAGE

GAP

The person driving the car (as opposed to the passengers)

Productivity (i.e., getting more done while spending time in the car)

Productivity features (i.e., phone calls, checking email) that are specifically designed to be used while driving

OPPORTUNITY: There's an opportunity to provide [who?] with [what advantage?] that [fills what gap?]

Help drivers be more productive in a way that's safe and optimized for driving.