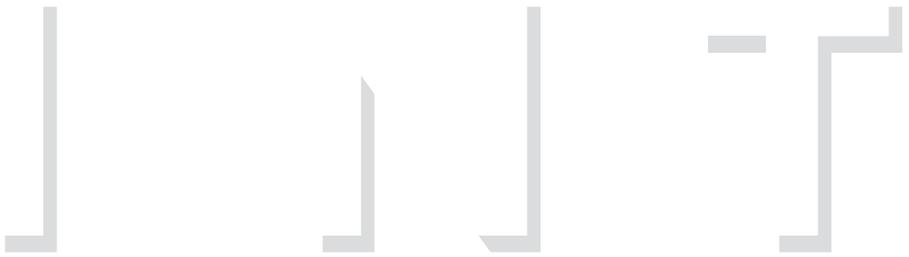




THE BEST INTERFACE IS  
NO INTERFACE



BY



GOLDEN KRISHNA



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## **The Best Interface Is No Interface**

Golden Krishna

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**Art Director** Golden Krishna

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THE BEST INTERFACE IS  
NO INTERFACE

*The Simple Path  
to Brilliant Technology*

BY GOLDEN KRISHNA

**Thank you for your**

**Kinship**

Meaghan Gordon  
Gopal TK Krishna  
Rajakumari Krishna  
Alvin Krishna  
Dean Krishna  
Reena Krishna  
Veer Krishna  
Asha Krishna

**Criticality**

Doug LeMoine  
Bob Lindstrom  
Nate Clinton  
Nancy Peterson  
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Darren Meiss  
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Timo Arnall

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Sue Cooper  
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Lea Westort  
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Lisa Wills  
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Oleg Yusupov  
Honey Mae

**Thoughtfulness**

Rex Hammock  
Candra Provenzano  
Garrett Heath  
Jesus Gil Hernandez  
Matt McInerney  
Nick Fogle  
Kontra  
Valle Hansen  
Brian Lemond  
Nick Fogle

# Foreword

Ellis Hamburger

Why do phones ring?

Back when the telephone was first invented, ringers were used to call our attention to important incoming messages. They sounded like alarms, shrill electrical burps and gurgles that duly represented the urgency. And people loved it. Much as early travelers took pride in flying and dressed up for the occasion, phone callers were happy to be in demand, picking up at a moment's notice, even if it meant leaping off the toilet and tripping mid-stride on one's underwear.

Today, ringers are just annoying. Why couldn't someone just text to see if I'm available instead of calling and interrupting what I'm doing? Some might even say, "Why call at all?" As our lives have become increasingly oversaturated with screens, social networks, and smart watches, there's less time than ever for unplanned interaction. So, the ring isn't as useful as it once was. In fact, it's downright disruptive in most scenarios, so some of the most popular communication apps ditch the ring entirely.

As a reporter at *The Verge*, I interviewed Snapchat CEO Evan Spiegel before the launch of the company's video chat and texting features. Spiegel said something that really stuck out to me: "The biggest constraint of the next 100 years of computing is the idea of metaphors," he said. "For Snapchat, the closer we can get to 'I want to talk to you'—that emotion of wanting to see you and then seeing you—the better and better our product and our view of the world will be." Instead of allowing you to ring friends for a video chat, as with FaceTime or Skype, Snapchat forces both users to be present inside a chat window before video can begin.

So, instead of texting someone to set up a FaceTime call, you can simply chat them on Snapchat, and if they log on, you can start a video chat when you're both in the same conversation. The "Hey, want to chat?" text replaces the ring entirely.

You might have thought that Snapchat's mission was to bring "ephemeral," disappearing messages to the masses, when it was only one facet of a bigger idea that Spiegel had been stewing over. He had been thinking about digitally replicating the ways we talk in real life—ephemerality just happened to be one means of doing so.

The point isn't to remove the ring, or to make photos disappear after they've been seen. The point is to understand how we use communication products today, how we live today, and to embrace those pieces of information. Thus, this example isn't as much about altering product interfaces as it is about removing them whenever possible.

For the tools we use every day, people are always going to take the path of least resistance and choose utility and pragmatism above all else. In other words, why swipe through TV channels

by waving your hands when pushing a remote control button is so much easier? Further, why press a button at all when you can simply call out the name of the channel you want to watch? Or, instead of having to speak the channel you want, maybe your TV automatically flips to the Bears game because you watch them play every Sunday.

Getting to the root of our daily errands, conversations, and projects will yield the next age of contextual tools. The key is forgetting what we've learned about interfaces, and using our instincts (instead of hot trends like "ephemerality") as guides.

I find most Jonathan Ive quotes to be overly trite, vague, or abstract; but this one from a recent *\*Vanity Fair\** interview resonated with me: "It's part of the human condition that if we struggle to use something, we assume that the problem resides with us," said Ive, referring to his initial frustrations with computers in the mid-'80s.

Ever since, Ive has made his mark on the world by constantly adapting to our changing needs, and admitting that tried-and-true solutions to old problems won't always become the solutions to new problems. For example, Apple has shown no reluctance to cannibalizing the success of old products and ideas (like the iPod's click wheel) when better product ideas come along.

Being able to snub our sentimentality about interfaces, old and new, will be critical. I first heard Golden Krishna speak about this very idea in his first-ever lecture—in front of an audience of over 1,500 people. When I wrote a small snippet about it on *\*The Verge\**, it got more attention than other talks from massive companies like Google. Why? People are inherently drawn to new ideas and not old, derivative ones. People are drawn to hope for better solutions, even if they manifest themselves in tiny, seemingly insignificant ways.

*\*Ring, ring.\**

*Ellis Hamburger was a reporter for the technology news and culture website The Verge from 2012–2015. Now he's working in marketing at Snapchat.*

# Welcome The Problem

## 1 p.03

### Introduction

Why did you buy this book?

Um, why did you buy this book again?

## 2 p.05

### Screen-based Thinking

Let's make an app!

Tackle a global issue? Improve our lives? No, no. When smart people get together in Silicon Valley they often brainstorm, "What app can we make?"

## 3 p.25

### Slap an Interface on It!

Slimmer TVs! Faster computers! And an overlooked epidemic of awful.

We've seen huge leaps in consumer technology, like high resolution displays and multi-core processors. But there's an awful trend that is taking us away from what really matters.

## 4 p.45

### UX ≠ UI

I make interfaces because that's my job, bro

UX is about making great experiences. UI is the field of user interfaces. Somewhere along the way, we blurred the two, and today we try to solve problems with screens. UX is not UI.

## 5 p.49

### Addiction UX

Click here to cut down your belly fat by using this one weird tip

Some companies created to solve problems for a large number of us have become advertising companies, chasing eyeballs, and hoping to get you addicted to their digital products.

## 6 p.59

### Distraction

"Will you marry me?"  
"Sorry, I was sending Alice a text. What'd you say?"

Many interfaces are designed to grab your attention for as long as possible, and that distraction is having huge effects on us, our children, and our society. Interfaces are taking us away from what really matters.

## 7 p.63

### Screen Insomnia

I love staring into a lightbulb! Me too!

Don't you love staring into our light-emitted screens? Me too. Interfaces are the best. And the light the screens emit might be seriously damaging our health. Yay! I love gadgets!

## 8 p.73

### The Screenless Office

The best interface is no interface

There was a time in which our lives were filled with paper, and we dreamed of a utopian paperless world. Now, instead, our lives are filled with screens. And I think it's time to dream of a screenless world.

# Principle One

**9** *p.85*

## **Back Pocket Apps**

This app goes perfectly with my skinny jeans

What if instead of designing systems to be touched and tapped, we avoided screens, embraced typical processes, and made apps that worked best when our phones are in our pockets?

**10** *p.111*

## **Lazy Rectangles**

That's a great wireframe. We nailed it. We're going to make a billion dollars.

A great wireframe is a great design, right? Um, no. Good experience design isn't good screens, it's good experiences.

# Principle Two

**11** *p.127*

## **Computer Tantrums**

Your password must be at least 18,770 characters and cannot repeat any of your previous 30,689 passwords

We're in the middle of an exciting moment in technology. But despite the incredible power of a computer, technology systems are often created to act like a three year old. They throw unexpected tantrum error messages, demand our attention and ask dumb questions. They expect us to serve them.

**12** *p.135*

## **Machine Input**

I saved your life, and I didn't even need a password

We build technology. Why not build technology that serves us? User input is a hassle. Let's aim to stop asking people for the name of their childhood best friend, and start designing systems that take advantage of sensors.

**13** *p.147*

## **Analog and Digital Chores**

I know, I suck at life.

We're forgetful, fragile, and busy. Computers should do the things we don't want to do, that we don't know we should do, and that we aren't able to do.

# Principle Three

**14** *p.161*

## **Computing for One**

You're spécial

You're unique. You have your own set of preferences, desires, and interests. But that's not how we build software.

We make software for an average. But some data scientists have taken an opposite approach.

**15** *p.173*

## **Proactive Computing**

In the future, I'll talk to my computer!

If technology knows all about us, we don't want it to be spreading gossip to the girl we've had a crush on since third grade.

# The Challenges

## **16** *p.185*

### **Change**

You hate this book?  
Thank you.

This book goes against generally accepted practices in Interaction Design that have led us to more and more screen-based thinking. And if you hate that, I don't blame you. In fact, I thank you for making this book stronger.

## **17** *p.187*

### **Privacy**

The machine will "learn" about me? No thanks.

Well, okay. Obviously the world isn't black and white. Less isn't always more. The best interface isn't always no interface. Here are the exceptions.

## **18** *p.199*

### **Automatic**

Automatic solutions are terrible. Look at Clippy!

Automatic solutions scare people. And they should. Because they're really hard to do correctly. But when we get them done correctly, they become an indispensable part of our lives.

## **19** *p.203*

### **Failure**

What happens when it all falls apart?

If we count on all these magical things running in the background, what happens if they break?

## **20** *p.207*

### **Exceptions**

Less is sometimes more

# Conclusion

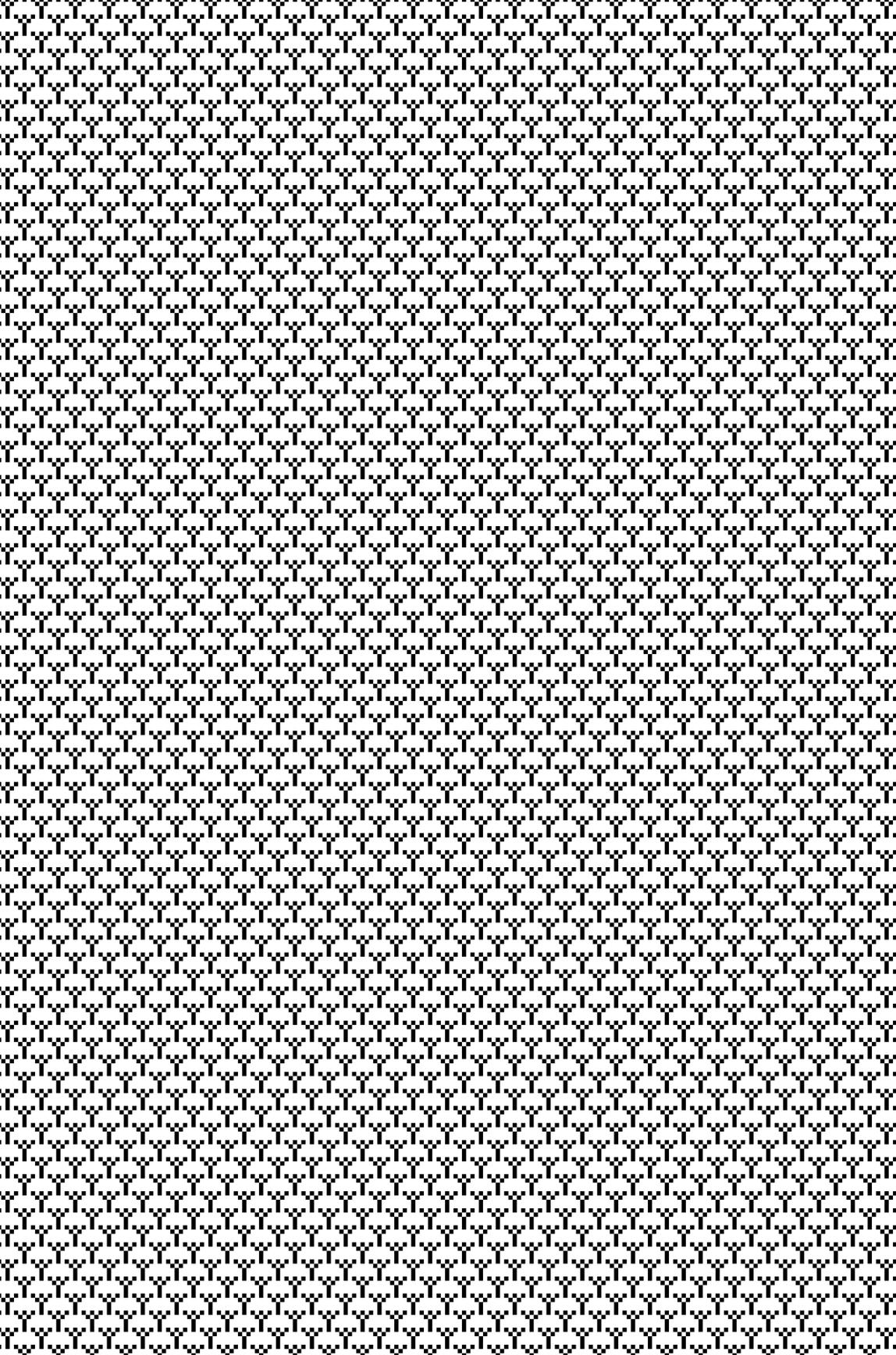
## **21** *p.213*

### **The Future**

Wow, this is boring

## **Appendix A** *p.217* Endnotes

## **Index** *p.237*



### **3. Slap an Interface on It!**

Slimmer TVs! Faster computers! And an overlooked epidemic of awful.

You can't write a tech book today without giving credit to us. It truly is impressive what we've done as a society—teachers to venture capitalists—to push important technology forward.

*Good job, everyone.*

## THE PROBLEM

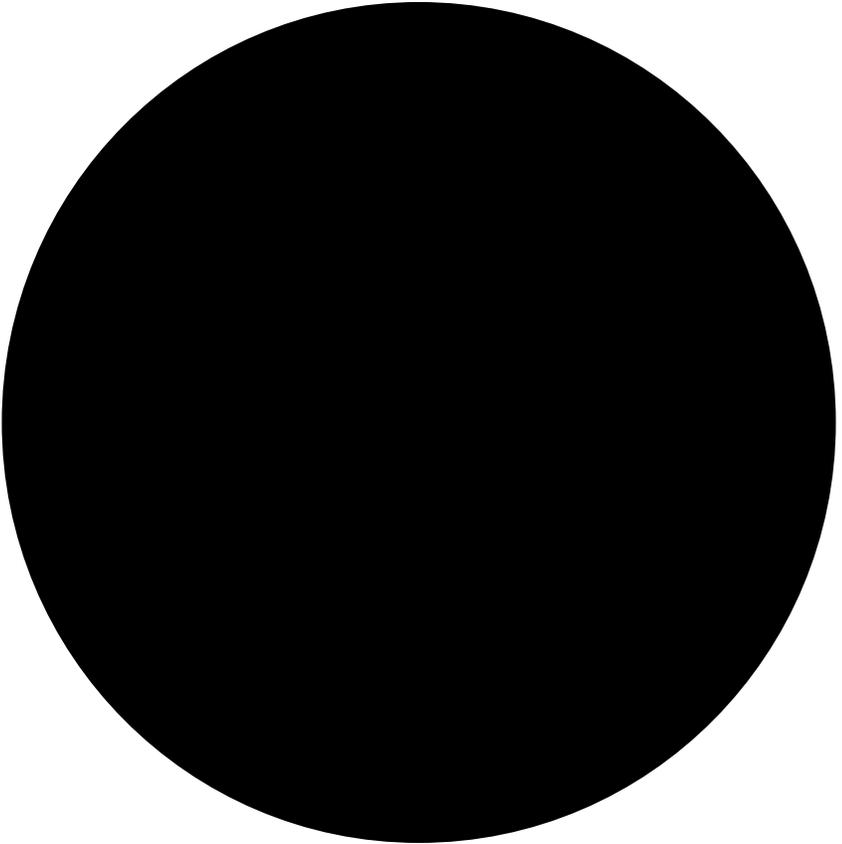
Let's say we filled your entire hard drive with high-definition movies. The dot below represents how many movies you could have stored on the largest hard drive you could buy in 2006:



About 180 movies (4GB movies on a 750GB hard drive)

SLAP AN INTERFACE ON IT!

Seven years later, on the largest hard drive available, you could store enough movies to watch them for 125 days straight.



About 1,500 movies (4GB movies on a 6,144GB hard drive)

## THE PROBLEM

Imagine the black background on this page represents the percentage of American adults who had access to fast, broadband Internet speeds in 2000.

15%

SLAP AN INTERFACE ON IT!

The black on this page is how many had access to broadband speeds about ten years later.

94%

**We're not only able to store more of the things we love, we've also made it possible to get the things we want faster than ever before. Say the height of this paragraph represents how fast you could download a three-minute song on America's fastest smartphone Internet connection in 2009.**

3 seconds

**This is how fast it was three years later.**

1 second

There's really so much to celebrate in technology today. We've created materials that reduce the sun's glare. Really. We've made screens that have greater clarity than ink on paper. We've not only built a really useful Internet but made it available across almost the entire world at really fast speeds in the palm of our hands. It's kind of ridiculously amazing how awesome we are.

Our list of technological achievements is long, but an awful trend is emerging. A growing epidemic in the way experiences with technology are built.

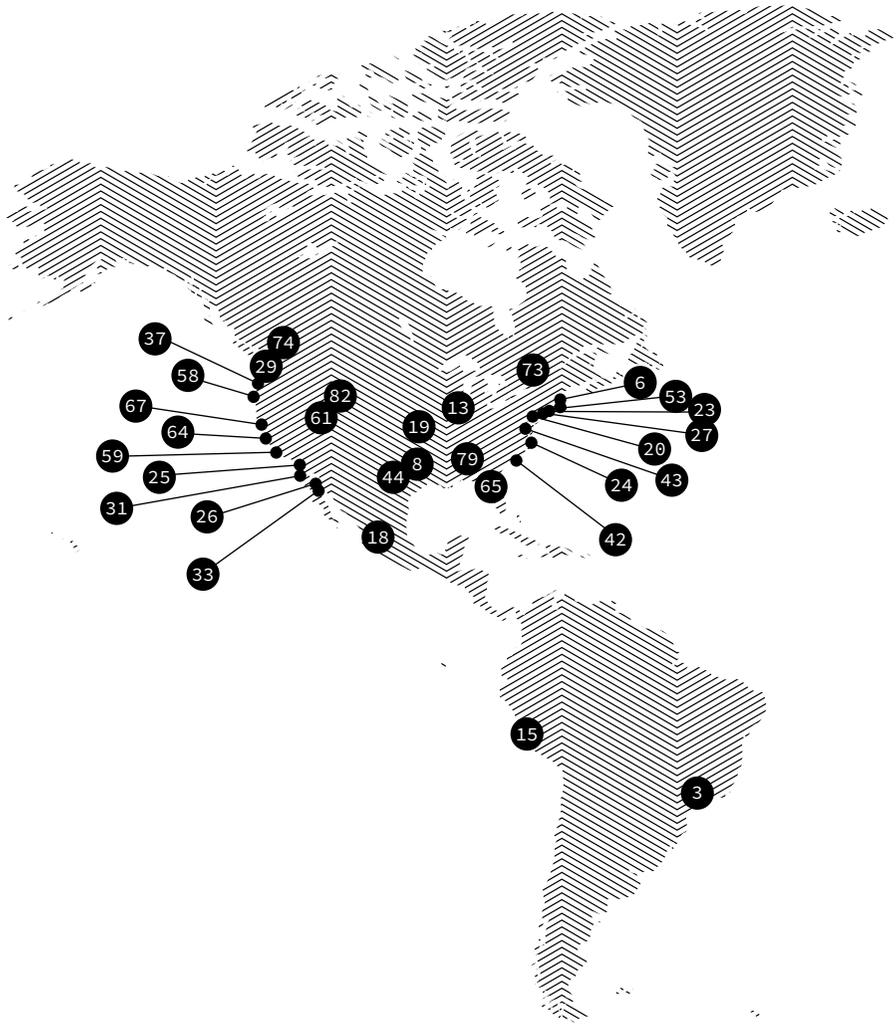
I'm a user experience (UX) designer. That means my job is to understand your common, everyday problems and to use technology to solve

## SLAP AN INTERFACE ON IT!

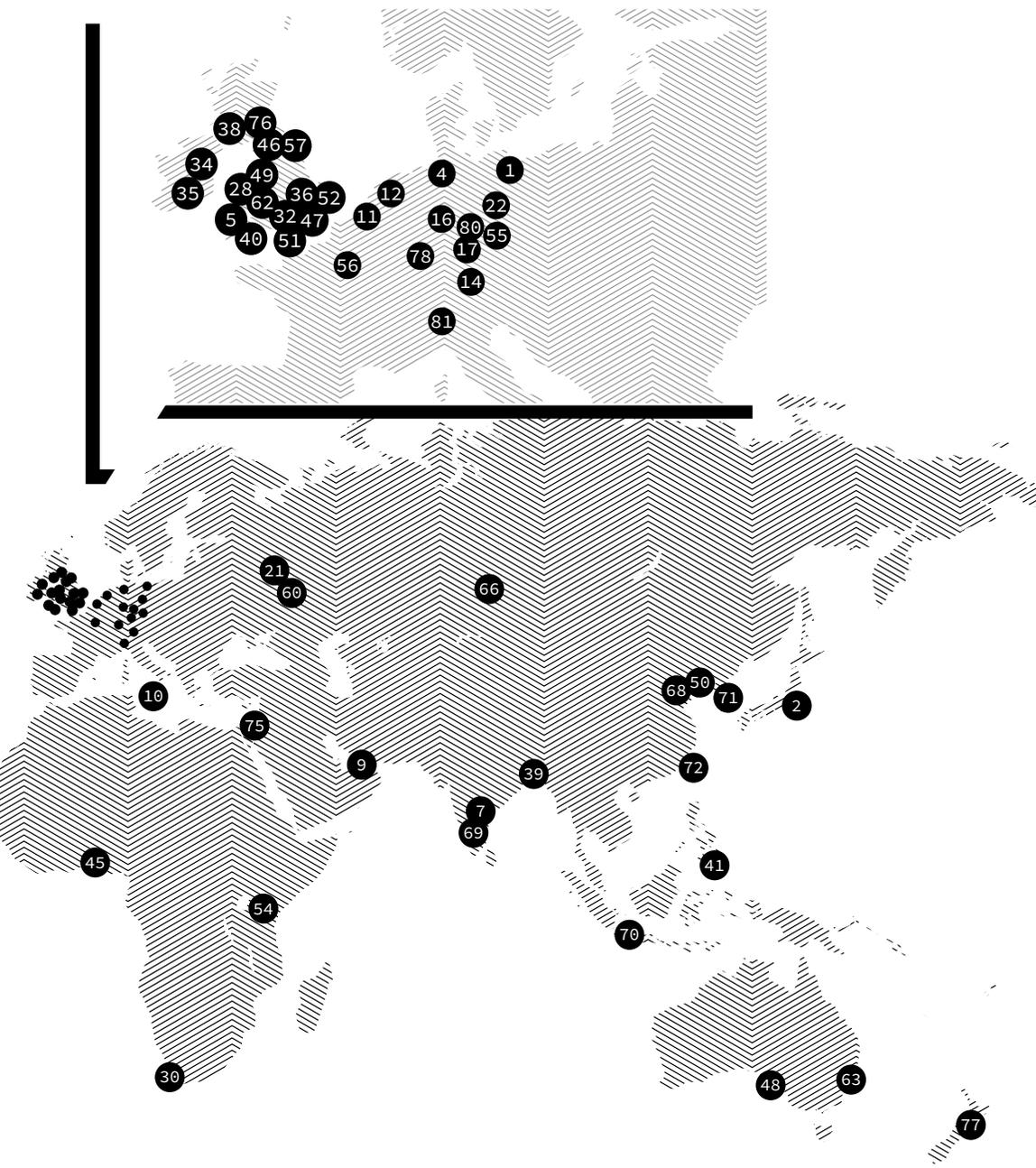
them. I've worked at an innovation lab for Zappos, where I helped design and imagine the future of how a customer service company could solve customer problems. I've worked at a Samsung innovation lab, where I helped design and imagine new services and consumer electronics to solve people's problems. And I worked at Cooper, a design consultancy where we solved everyday problems for our clients' customers.

My job is to solve people's problems, but as an industry we've gotten away from solving people's problems. As an industry, we've gotten caught up in a globally evident technological impotence of me-too thinking that is taking us away from real innovation.

1. BioCon Valley, 2. Bit Valley, 3. Brazilian Silicon Valley,
4. CFK Valley, 5. Cwm Silicon, 6. Cyber District, 7. Cyberabad,
8. Dallas-Fort Worth Silicon Prairie, 9. Dubai Silicon Oasis,
10. Etna Valley, 11. Food Valley, 12. Health Valley, 13. Illinois Silicon Prairie, 14. Isar Valley, 15. Lima Valley, 16. Measurement Valley, 17. Medical Valley, 18. Mexican Silicon Valley/Silicon Valley South, 19. Midwest Silicon Prairie, 20. Philicon Valley, 21. Russian Silicon Valley, 22. Silicon Allee, 23. Silicon Alley, 24. Silicon Anchor, 25. Silicon Beach, 26. Silicon Border, 27. Silicon Bridge, 28. Silicon Canal, 29. Silicon Canal, 30. Silicon Cape, 31. Silicon Coast, 32. Silicon Corridor, 33. Silicon Desert, 34. Silicon Dock, 35. Silicon Docks, 36. Silicon Fen, 37. Silicon Forest, 38. Silicon Glen, 39. Silicon Goli, 40. Silicon Gorge, 41. Silicon Gulf, 42. Silicon Harbor, 43. Silicon Hill, 44. Silicon Hills, 45. Silicon Lagoon, 46. Silicon Lane, 47. Silicon Mall, 48. Silicon Mallee, 49. Silicon Mill, 50. Silicon Peninsula, 51. Silicon Pier, 52. Silicon Roundabout, 53. Silicon Sandbar, 54. Silicon Savannah, 55. Silicon Saxony, 56. Silicon Sentier, 57. Silicon Shipyard, 58. Silicon Shire, 59. Silicon Shore, 60. Silicon Sloboda, 61. Silicon Slopes, 62. Silicon Spa, 63. Silicon St, 64. Silicon Surf, 65. Silicon Swamp, 66. Silicon Taiga, 67. Silicon Valley, 68. Silicon Valley of China, 69. Silicon Valley of India, 70. Silicon Valley of Indonesia, 71. Silicon Valley of South Korea, 72. Silicon Valley of Taiwan, 73. Silicon Valley North, 74. Silicon Vineyard, 75. Silicon Wadi, 76. Silicon Walk, 77. Silicon Welly, 78. Silicon Woods, 79. Silicotton Valley, 80. Solar Valley, 81. Ticino Valley Area, 82. Wyoming Silicon Prairie (also called the Silicon Range)



**“Innovation” centers around the world.**  
 (Sources: *Wired* magazine, *Inc.* magazine, CNBC, Wikipedia)



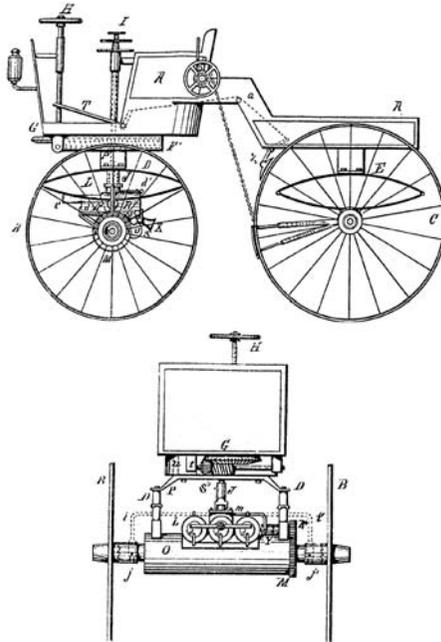
*Oh, the unoriginal places you'll go.*

Guy Kawasaki, formerly an advisor for Google and Apple, once gave these words of advice: “There’s one more thing you need to do: Aim higher than merely trying to recreate Silicon Valley. You should try to kick our butt instead.”<sup>1</sup>

Many brilliant thinkers, dreamers, designers, engineers, developers, and entrepreneurs have made and will continue to make great strides enriching the human experience through technology in many of these locations. But in an ultracompetitive global market where fast and lean are more valued than deep thinking or original solutions, many of us—including myself—have been caught up in reactionary rectangles, thoughtless habits, and the self-delusion that the way things have gone the past few years is the way we should keep going forever.

Put yourself in the mind of an “innovative” company, and let’s play a game.

SLAP AN INTERFACE ON IT!



(Source: USPTO)

## Q: HOW DO YOU MAKE A BETTER CAR?

Above, is one of the earliest patent drawings for an automobile. The technologists of the day solved a real problem with transportation. And as a result, the car changed the way we live. The way our cities are built. Who and what we can see, and when and where we can see them.

So today, utilizing the amazing technological progress we've made in the over one hundred years since, what technique have modern technologists used to improve the car?



(Source: John Weippert, Tom Worthington / CC BY 3.0)

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## **A: SLAP AN INTERFACE ON IT!**

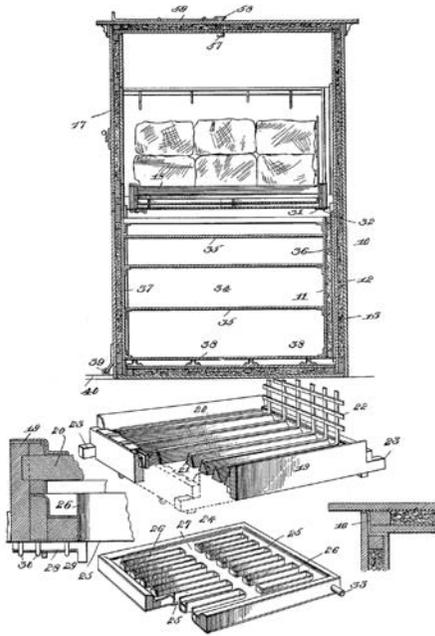
Who would need to look at the road while driving? Leaning over to touch a screen is so much more fun.

Telsa's one of the most innovative companies in the world—that's why they've got a seventeen-inch touchscreen center console. Sure, there are haters. Some lost soul at *The Verge* wrote, "I don't want a web browser in my car, and more importantly, I don't want the drivers around me to have one."<sup>1</sup> But consider scrollbars in your center console. I know. Amazing.

Among the many wonderful options for screens in your car, there's BMW's Mini model with a screen in the middle of the speedometer that—yes, really—lets you check your Twitter and Facebook instead of focusing on how fast you're driving.<sup>2</sup>

*Driving is about the road? Nah, it's about screens, brah.*

SLAP AN INTERFACE ON IT!



(Source: USPTO)

---

## Q: HOW DO YOU MAKE A BETTER FRIDGE?

Above is one of the earliest patent drawings for a refrigerator. The technologists of the day solved an important problem: keeping our food fresh. And it goes without saying, the refrigerator also changed the way we live. Domestic and international food distribution has changed enormously thanks to the refrigerator, and fresher and healthier choices are now more readily available to more people thanks to innovations that came from drawings like this.

## THE PROBLEM



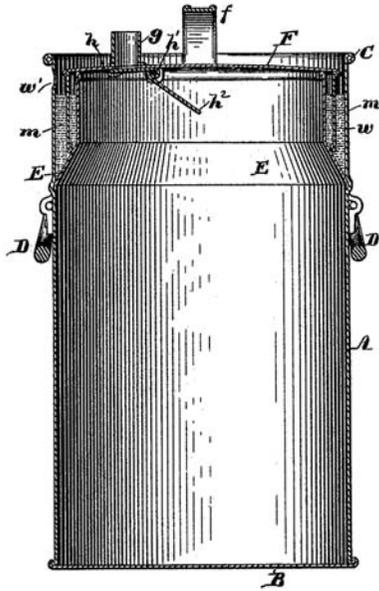
Screenfridge (Source: Electrolux)

---

## A: SLAP AN INTERFACE ON IT!

Yes! This is where I want to look through my photo albums. Other manufacturers offer fantastic features like updating our Evernote when we go to get ice.<sup>3</sup> Or listening to Pandora from the refrigerator door. With the most wonderful refrigerator models today we can, obviously, update Facebook and Twitter above the ice dispenser.<sup>4</sup>

SLAP AN INTERFACE ON IT!



(Source: USPTO)

---

**Q: HOW DO YOU MAKE A BETTER TRASH CAN?**

## THE PROBLEM



Recycling bins in London (Source: Bonnie Alter / CC BY 2.0)

---

### **A: SLAP AN INTERFACE ON IT!**

Hope you got this obvious one: You can make a better trash can by turning it into a \$47,000 LCD recycling bin, so that you can see if it's raining outside when you're standing outside in the rain. One hundred of these incredible bins were installed in London just before the 2012 Olympic Games to help the city show off its futuristic wonders.<sup>5</sup> And why not? Screens are so futuristic.





(Source: Golden Krishna)

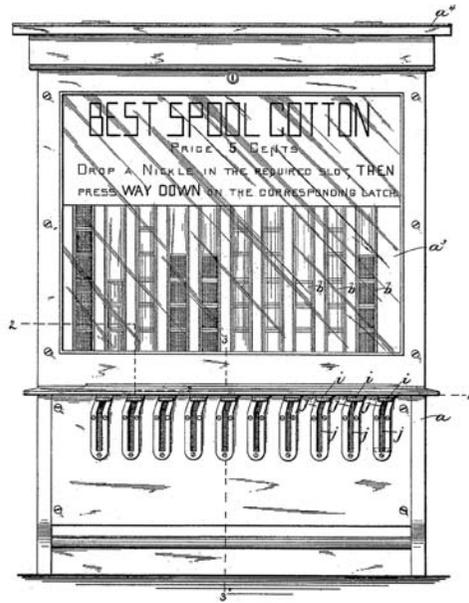
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## **A: SLAP AN INTERFACE ON IT!**

*Finally. I'm so sick of talking to people.*

Customer service saviors like Chili's and Applebee's have installed these kinds of touch-screen ordering systems in thousands of restaurants across the country to replace frightening conversations with another person. A Chili's senior vice president once told the *Wall Street Journal* that the interfaces get more people to buy more stuff—like coffee and desserts that flash on the screen.<sup>6</sup> That's obviously a great thing for America's diet. And since I'm basically just staring at my phone the whole time while dining with my friends anyway, what's the harm of another screen on the table?

SLAP AN INTERFACE ON IT!



(Source: USPTO)

**Q: HOW DO YOU MAKE A BETTER VENDING MACHINE?**



(Source: IntelFreePress / CC BY SA 2.0)

---

## **A: SLAP AN INTERFACE ON IT!**

Thank you! I hate seeing the product I'm about to buy through clear glass.

That's why companies like Coca-Cola and Pepsi are working on touch interfaces so that you can order your favorite drinks through a series of menus and error messages. As *USA Today* wrote of Coca-Cola's efforts, "This teen-targeting, touch-screen dispenser flavors self-created beverages in micro-doses. It may be Coke's best hope to keep Millennials fully engaged, socially involved and buying fizzy drinks at a time industry sales are falling faster than water down the drain."<sup>7</sup>

*Duh. Touchscreens are totally going to help sales.*

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