

What Generative AI is doing, and will do, to Analytics

**vampires doing improv, in the style of muppets,  
wideshot, 4K, high detail --ar 27:10 --style raw  
--stylize 77 --v 6.0 --c 2 --seed 1337**

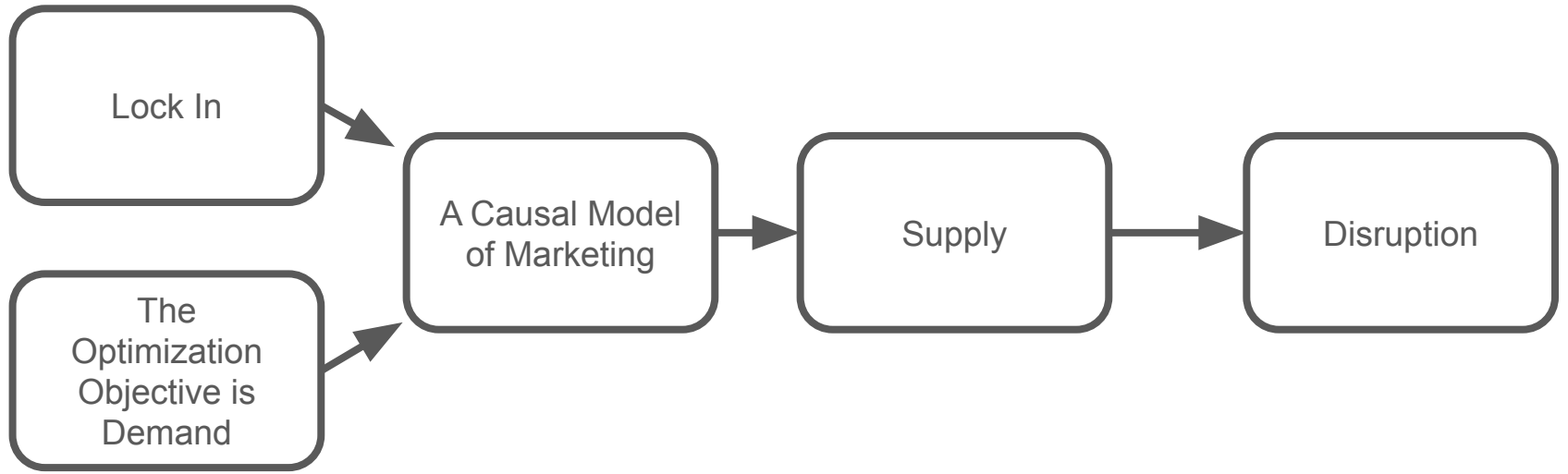
**((VAMP))**



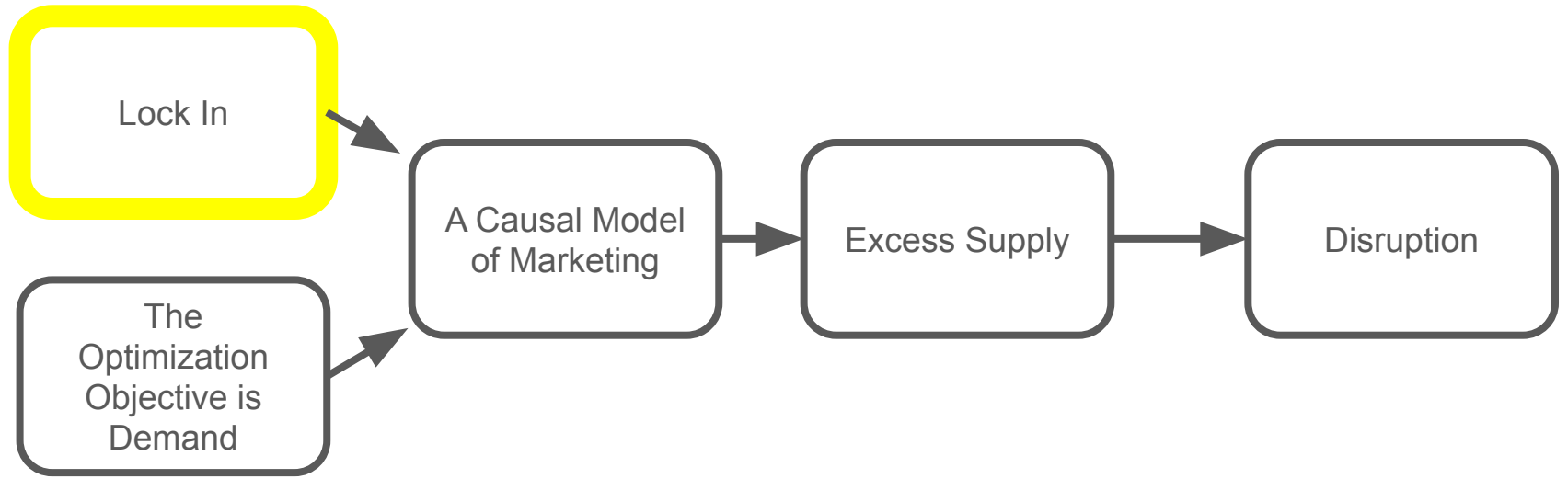
VAMP is American for improvise. I do better when I VAMP at the start. I get to know the room. Ease my nerves. So who's here?  
(((VAMP)))



Thank you! Yes, yes you can download all of these slides after the talk. Even the words that I am using right now – live. So you can relax! Okay? Enjoy. Let's have some fun together!



This is the talk. We'll do lock in and the OO of Marketing. If those assumptions are accepted, it's a quick skip to supply, and we'll get to the talk's promise about Generative AI and analytics.

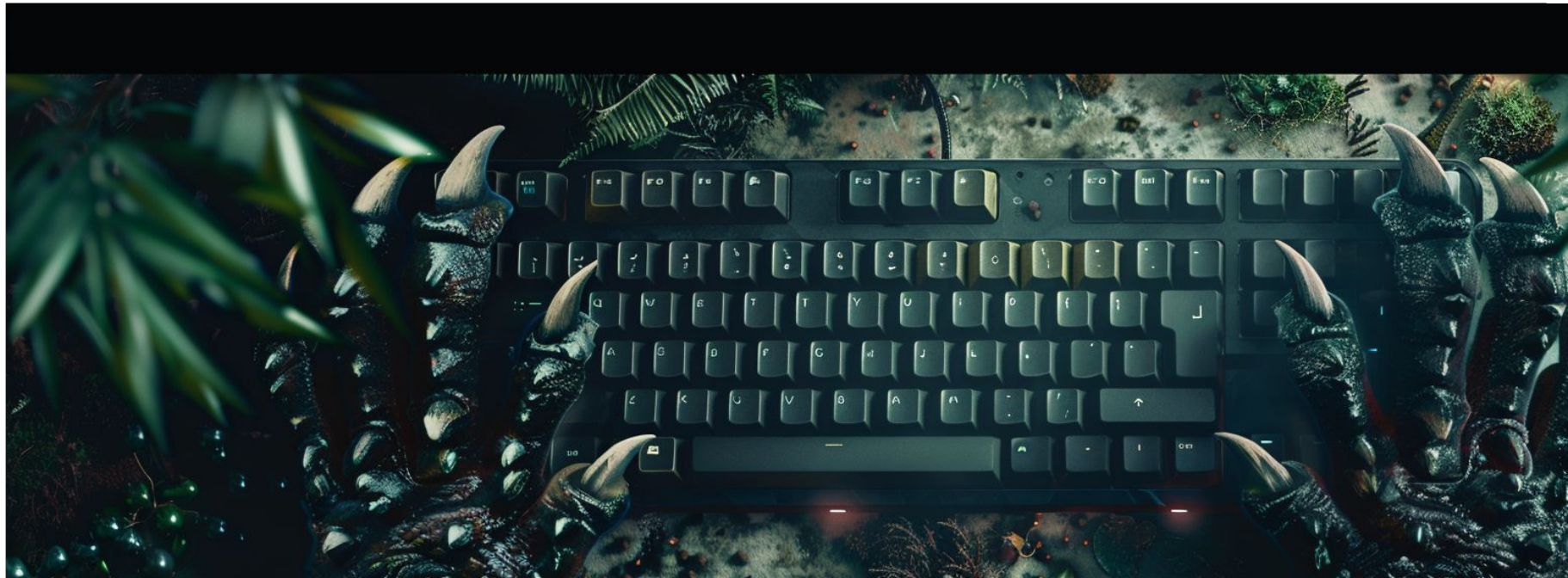


Let's start with the idea of lock in.

**Thelen, K. (2004) How institutions evolve:  
The political economy of skills in  
Germany, Britain, the United States, and  
Japan. Cambridge University Press.**

There are many kinds of lock-in. I've experienced some deep, Thelenesque deep, institutional lock-in myself, and some things simply don't change...ever. You've experienced technical lock-in





Behold the QWERTY keyboard. We were all taught it's deliberately inefficient design and nobody in this room is going to change now. Right? It's locked in. It's hard technical lock-in.





Print had hard lock-in: their business model, medium, mindset. As static, unchanging, as ***locked-in***, as the QWERTY keys on their typewriters. Some saw the meteor coming. New Media!



And they brought their esthetics with them. Web 1.0 looked like brochureware because that's what they knew. We got banner ads because that's what print was: ads that looked like banners.



So, in analytics, we counted server HITS because that was a proxy for what print counted. Sometimes they used the same surveys to justify reach, with interesting assumptions.





And how we ever did suffer with reach in digital marketing analytics. How many times did we repeat that a unique visitor doesn't mean a unique person? And did it ever matter?



The shift to Web 2.0, the interactive web, complete with the horrors of responsive design and macromedia flash represented ... a change of pace from the static page print paradigm.





This chasing of the desktop, android, ios app aesthetic, but for the web document, gifted ... unto us all ... the blissful joy of JQuery, and later...React. What a gift React has been!





And in analytics, we had all sorts of tag mismanagement for awhile because **state** in React was so utterly, wonderfully, incredibly ... expertly ... managed. Wasn't it?

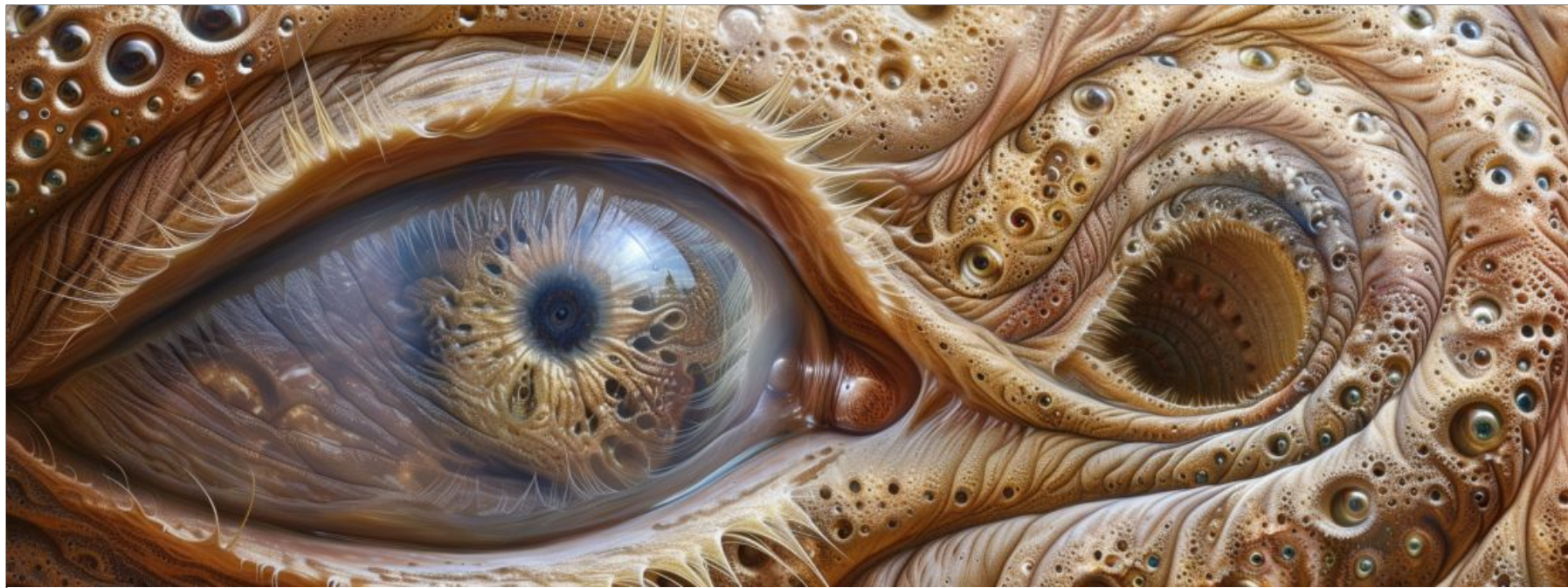


Then conversational interfaces really broke some people, for there were no pixels to push, no wireframes to misread, no preferences to debate. And consumers channeled themselves.

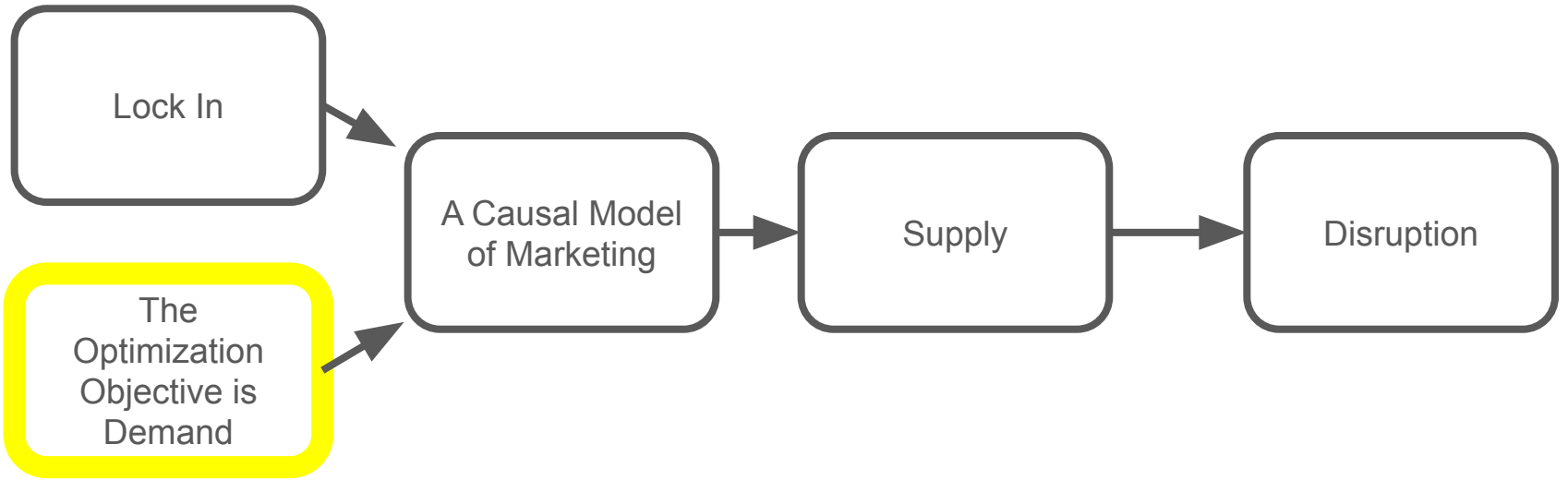


Unlike the QWERTY keyboard, some lock-in inherited from print turned out to be soft because we broke out of it. The transition from static to dynamic experiences was ... interesting

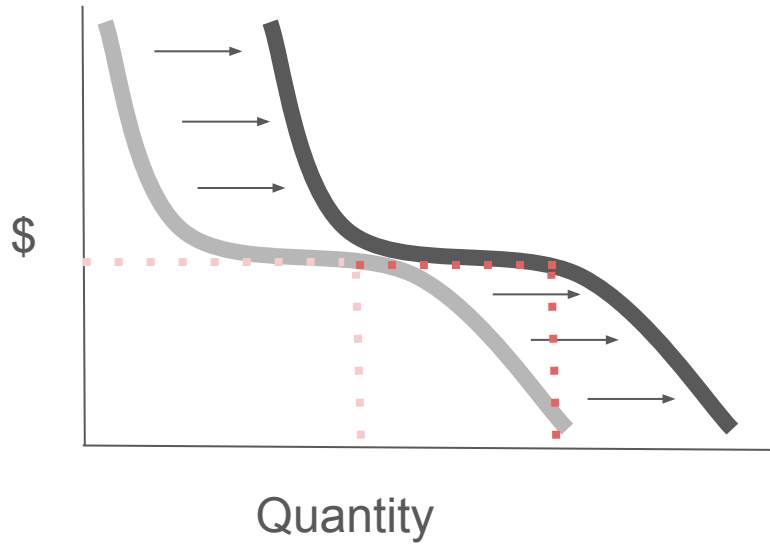




But we made it! And everytime we spiral upward ... we end up ahead. Collectively, we know more today than we knew yesterday. We know more because of analytics. It's progress!



Progressing towards demand. The whole point is demand.  
That's ultimate optimization objective of marketing:



It's to shift the demand curve to the right. A rightward shift means we can sell more at the same price or less for more. Why do we insist that it must always shift?

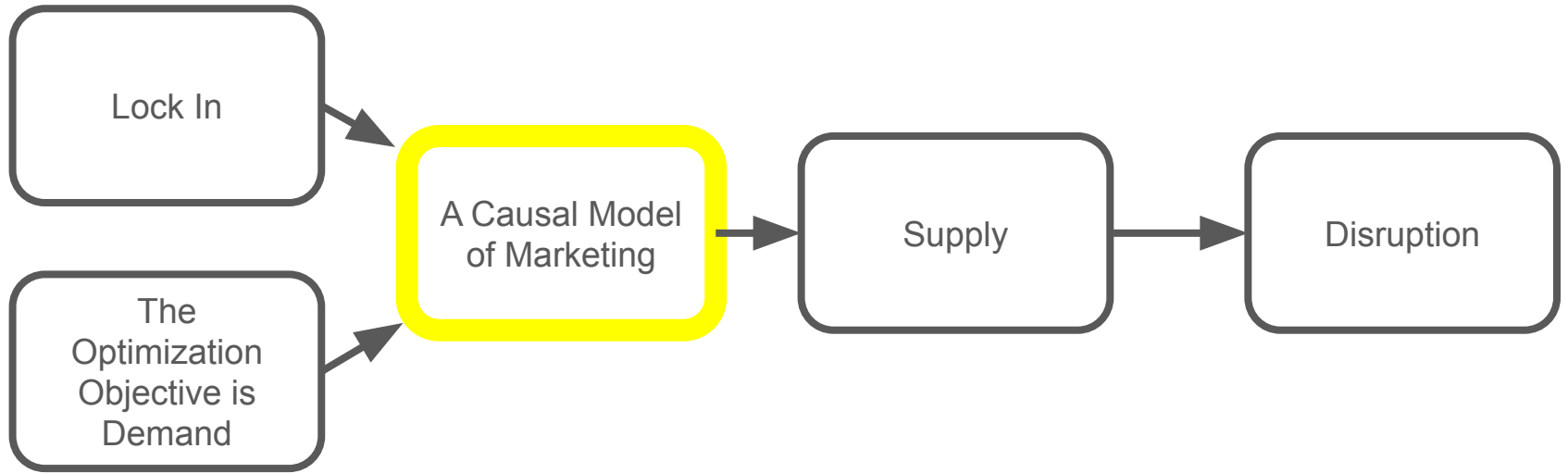




Because it's been locked-in since the enlightenment. It's part of a system to keep inventors inventing, investors investing, consumers consuming. It's probably the hardest lock-in.



It's just our existence. It permeates the WEIRD (west, ed, ind, rich, dev) countries. And people really do suffer where it isn't locked-in. It's a necessity, an imperative, a deal: create demand.



So how do we keep up our side of the deal? How do we shift that demand curve?





We have heuristics! We use the Four P's of marketing: product, placement, promotion – and the fourth p: increased price is a function of a demand curve.

Bass, F. M. (1963). **A Dynamic Model of Market Share and Sales Behavior.**  
Proceedings, Winter Conference American Marketing Association, Chicago, 269.

We invent better ***products***. Frank M. Bass told us in '63 what ad agency execs didn't want to hear: want ***superior*** market share? Make ***superior*** products. Product innovation drives share.



We ***place*** the product or service where consumers can get them with ease. Want children to demand candy? Put colourful packaging at their eye level so they demand it. Loudly.

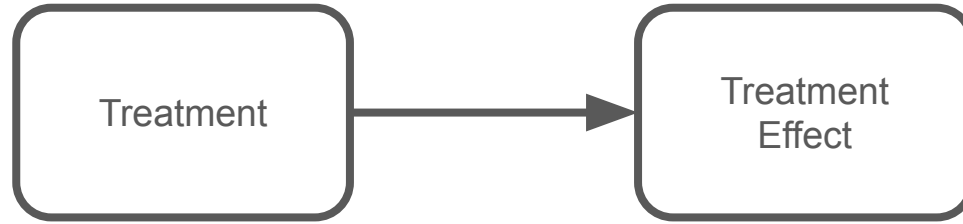




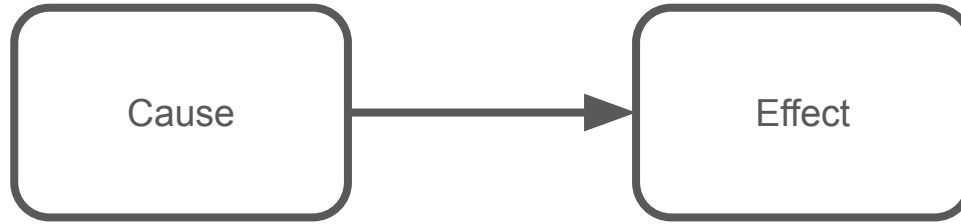
We ***promote*** our understanding of the customer needs, in words they need to hear from us to confirm their understanding of their own needs, with our well priced, placed, product.



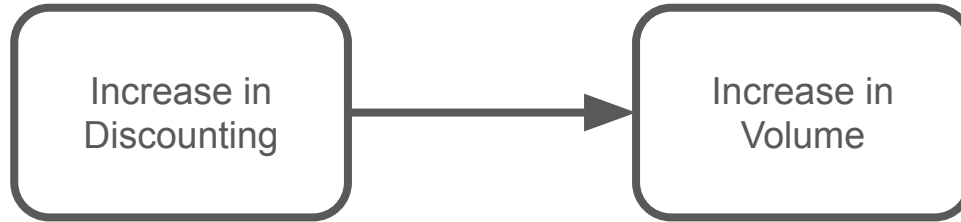
Marketing Analytics is the science of marketing data analysis. We use marketing analytics to understand the cause and effect relationships among the P's and the demand curve.



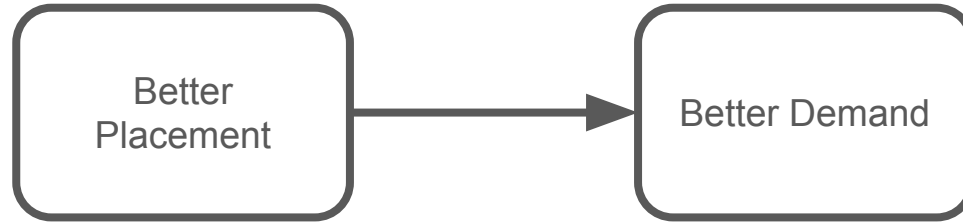
It's quite simple: Marketers treat a market and we observe a treatment effect.



Be-**Cause** we manipulated a treatment, surely, it *must* have had an effect. And there is a bias, curiously, *conveniently*, in emphasizing *only* the *positive* effect in our narratives.

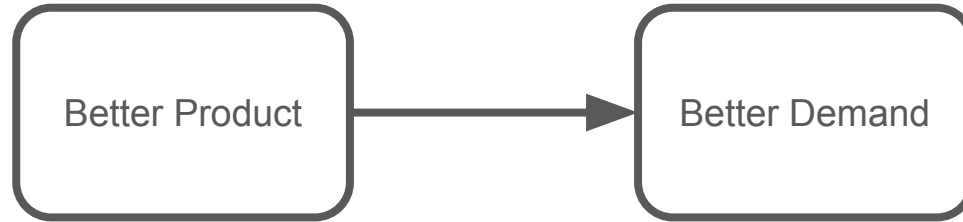


Be-**Cause** we increased discounting, the treatment effect was an increase in volume. Who could have predicted that? Who saw that one coming?

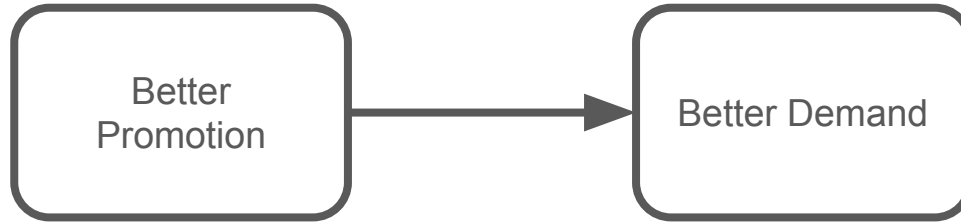


Be-**Cause** we had better placement, in more places – like when we put everything on the Internet – the effect was greater demand.

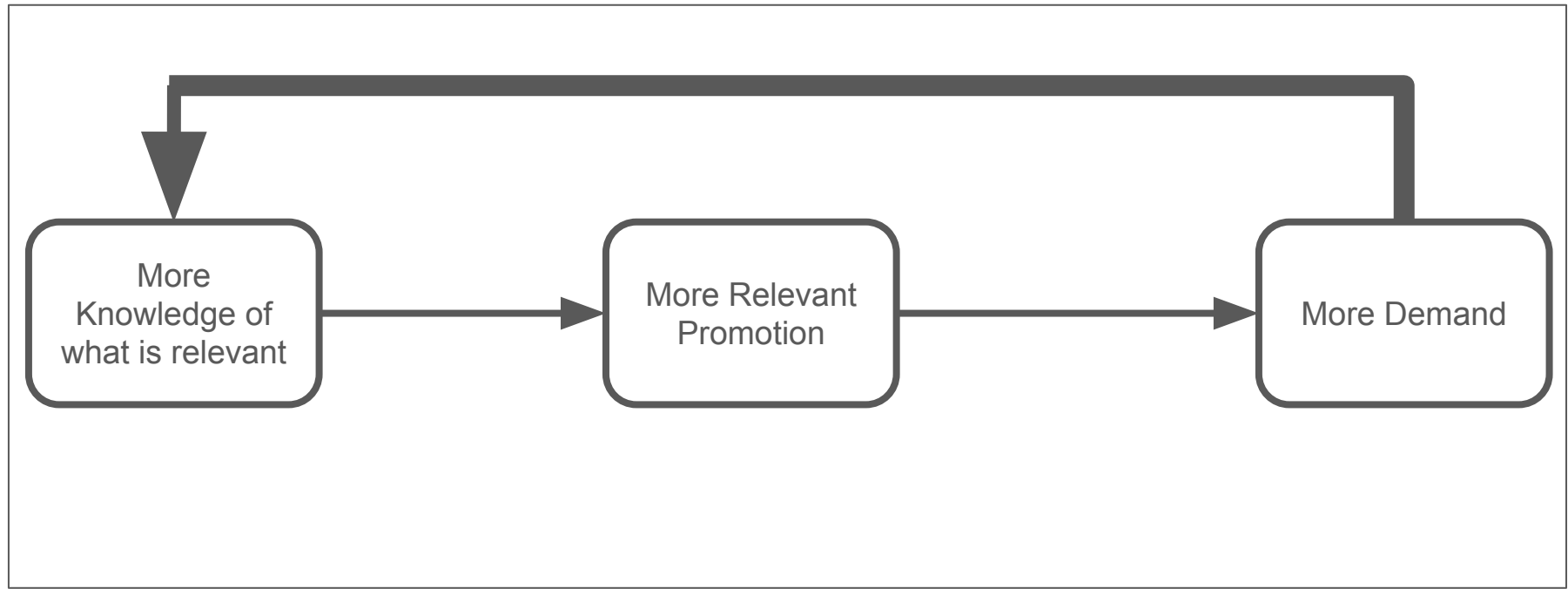




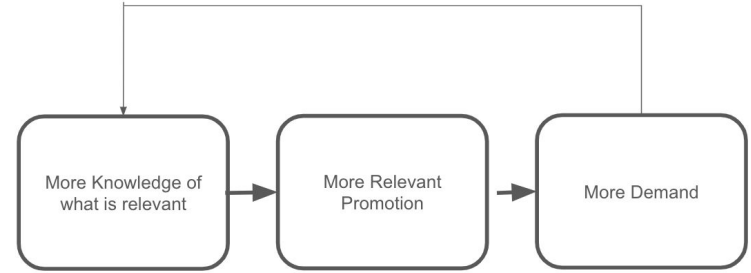
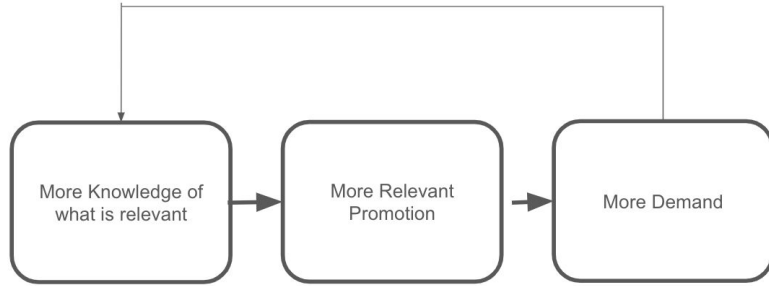
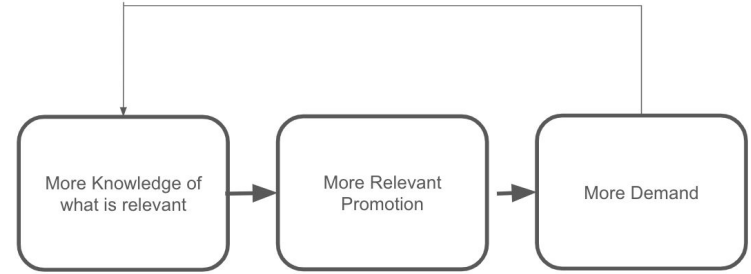
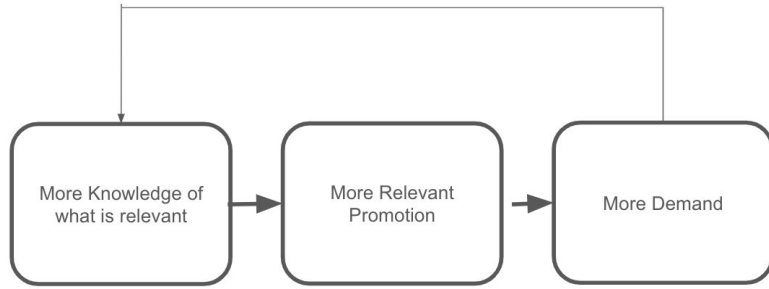
***Be-Cause*** we invented a better product that is: bigger, faster, easier, thinner, sweeter, louder, hotter, smarter, greener, fairer, accurater, privateer, all the er's – we got better demand.



Be-**Cause** we manipulated a promotional treatment, it had an effect on demand. Eh? That's interesting. Let's focus on promotion.

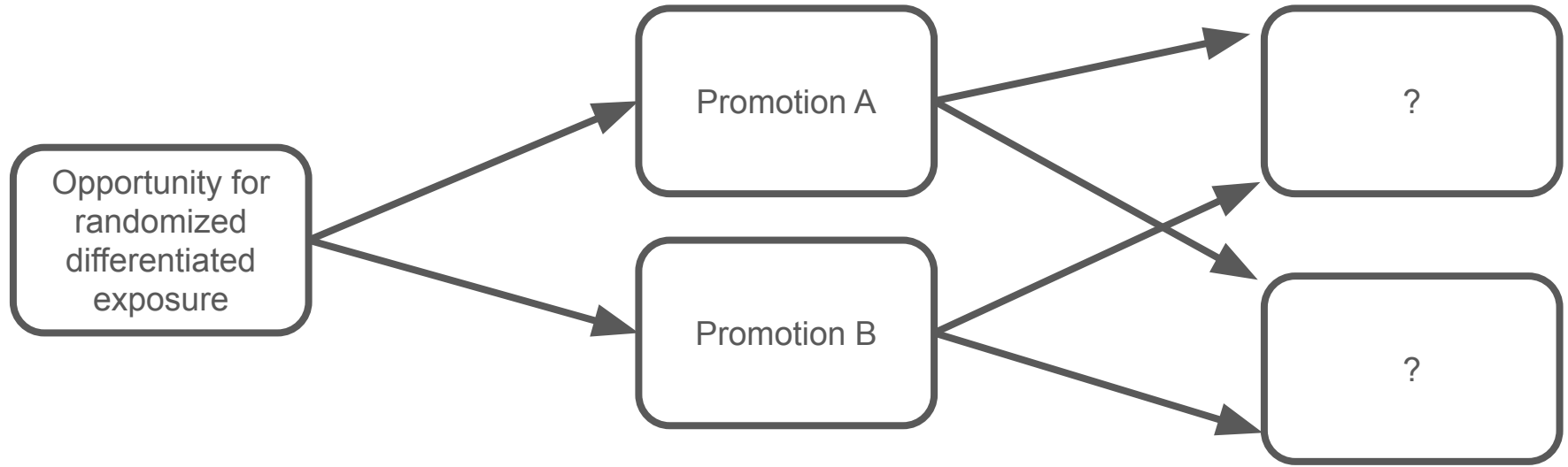


What happens when there's feedback? When knowledge of demand is used to feed the system that generates demand? We get better relevance. We get better at bettering demand.

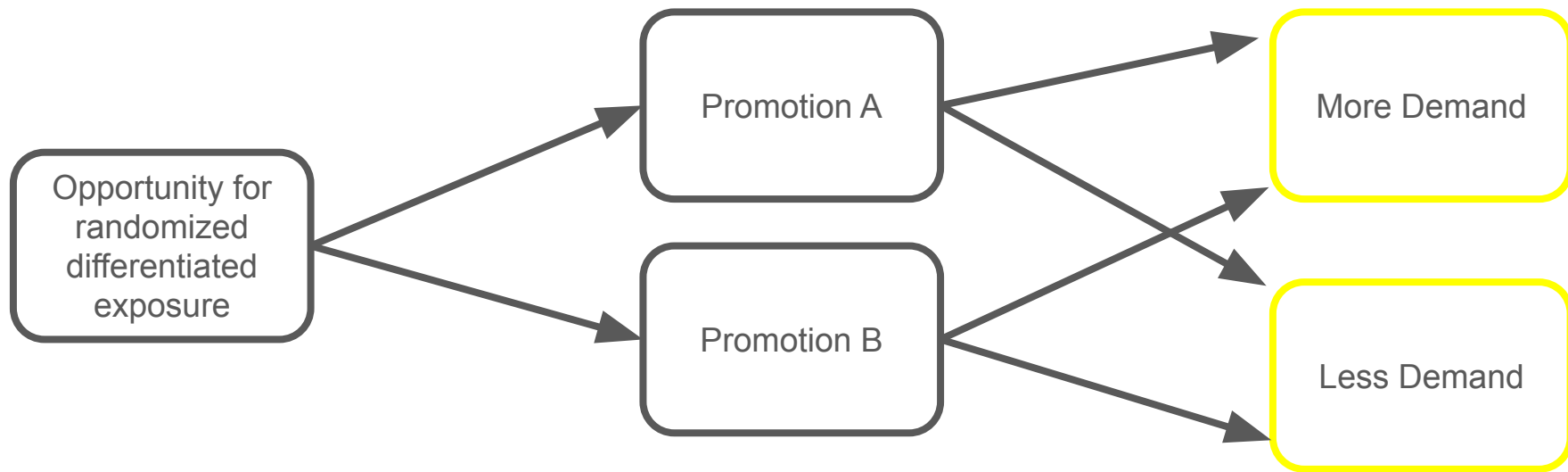


What happens when we shorten the time of each cycle? We can get more cycles. Assuming that knowledge updates, faster cycle times should yield faster learning and more demand.



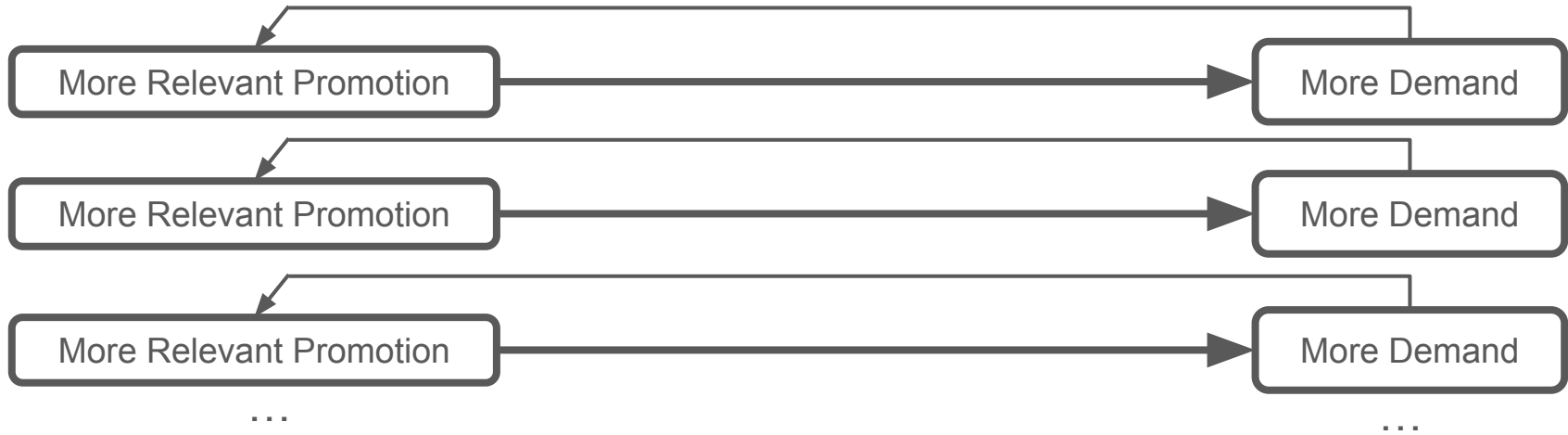


When we treat different groups of people to different treatments, assigned at random, we get to quantify the treatment effect relative to the treatment.



So we get the chance to learn faster because we can quantify the incremental change in demand. And we can scale that further:

## Randomized Control Test Feedback Loop



Using the Randomized Control Trial, the RCT, as the number of treatment effects goes to  $n$ , the number of feedback loops could go to  $n$ . Now you're juicing your reach – working every dollar!

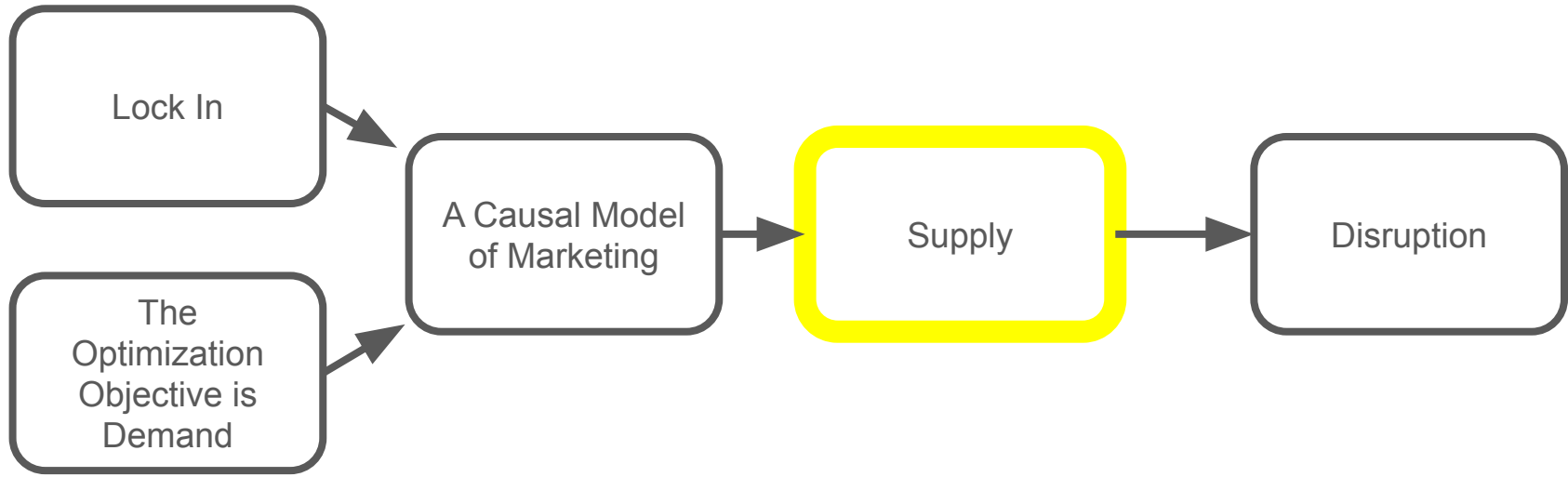
Hauser, J. R., Urban, G. L., Liberali, G., & Braun, M. (2009). **Website morphing.** Marketing Science, 28(2), 202-223.

The idea of using data about the promotee, the target (a harsh term), isn't novel: recommendation engines, personalization, morphing to adjust to the the individual are known tech. In fact,



Urban, G. L., Liberali, G., MacDonald, E.,  
Bordley, R., & Hauser, J. R. (2014).  
**Morphing banner advertising.** Marketing  
Science, 33(1), 27-46.

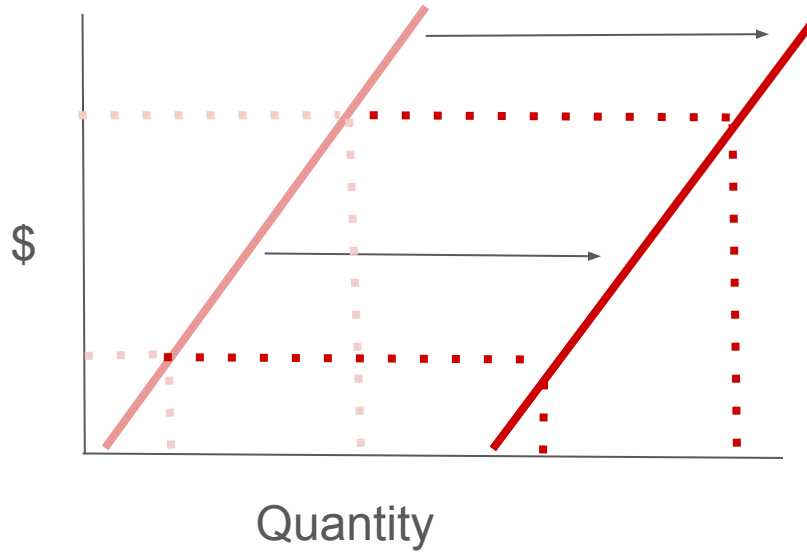
...the concept extended to banner ads as recently as 2014.  
Morphing promotion to match the cognitive mindset of the  
consumer generated a lot of lift. But the creative cost too much!



The cost of creative is a major brake: on morphing, on learning, on shifting the demand curve. So the problem of the cost of ***creative*** is ***interesting***...isn't it?

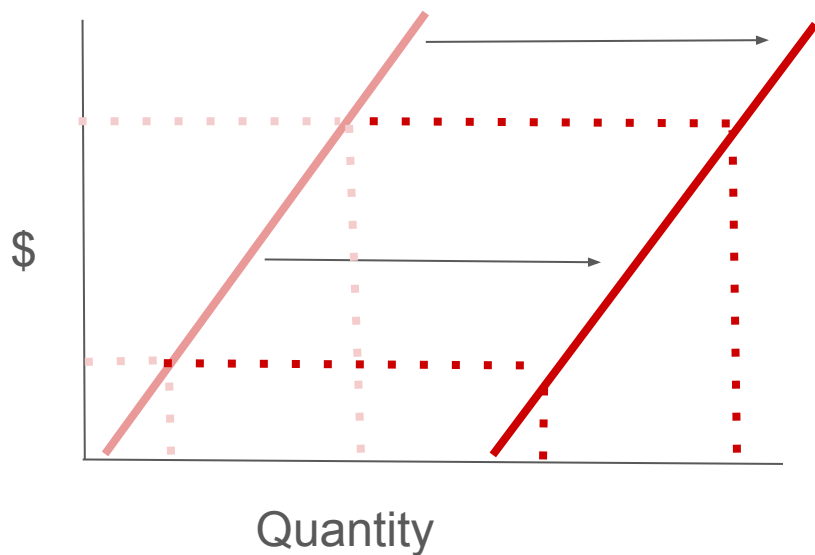


Generative AI enables cheaper creative, cheaper creative cognition, cheaper co-intelligence, so it ought to affect some curve ... right?



It ought to affect the supply curve. What happens as the cost of promotional creative collapses? Well, you can get a lot more supply for the same money; or the same supply for less money.





The firm can either pocket the savings, or, because it can afford to trial more treatments, it can scale what it learns about the demand curve and shift it. It can afford to scale exploration.

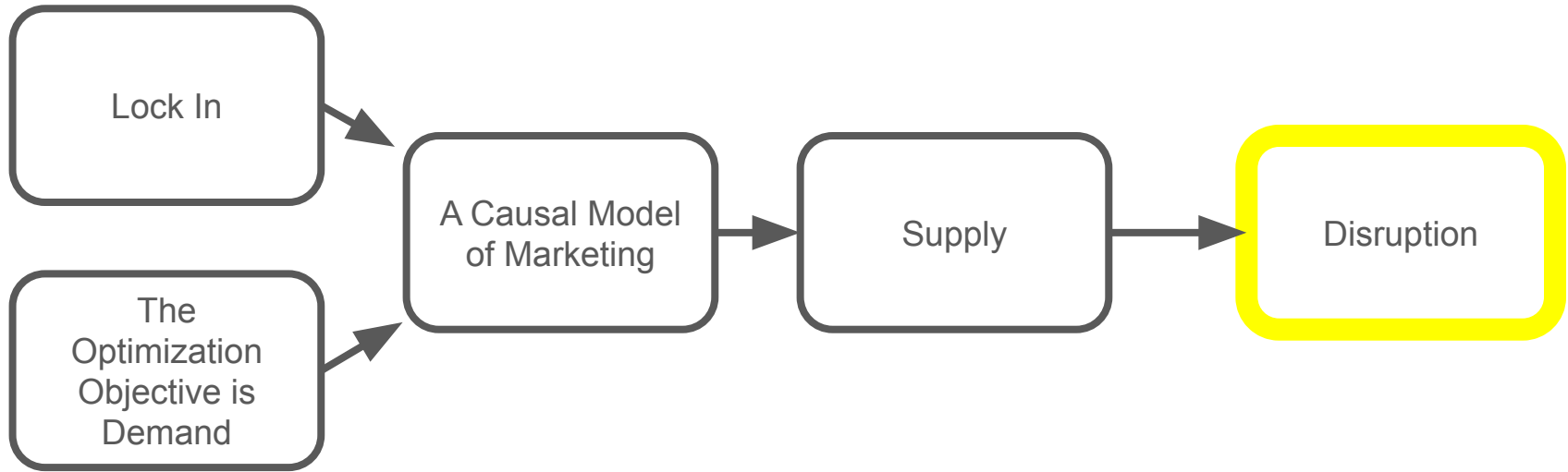


What happens when a few people get a lot better at something a lot faster? When the cost of cognition falls? What do you get?

“History is just one fucking thing after another.”

— Alan Bennett

((scan room for signs of agreement))

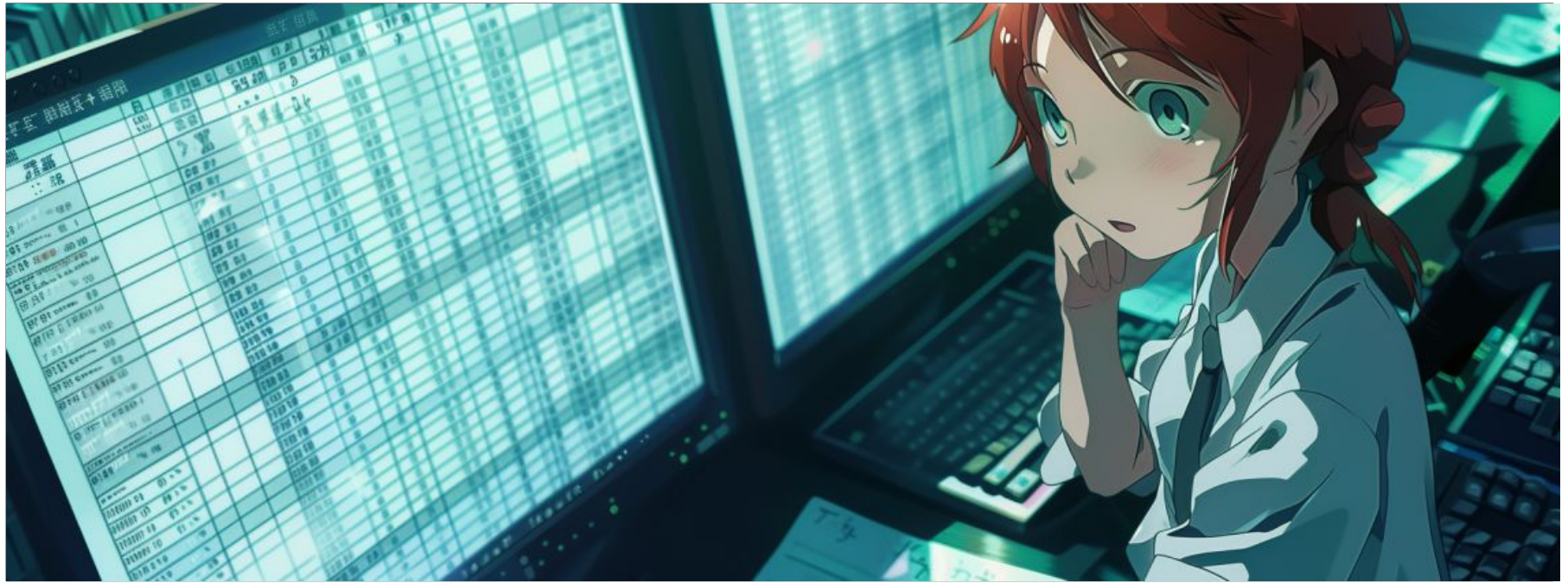


Disruption. Every successful entrepreneur understands that their role is to lower the barriers: to enable imitation of the innovators. What does it mean for us? It probably means...





...demand for better instrumentation within & about dynamic experiences: evaluation, generative conversational interfaces, generative creative interfaces, and morphed A/V ads.



It could further accelerate marketing analytics from an **excel**-lent observational practice to an **accele**-rant, valuable, demanded, predictive and even generative system of systems.





Because what if multiple AI Agents understand and intervene on different aspects of causality depending on their perspective - their model? Who – or – what coordinates those perspectives?



Some technologies, like Motif Analytics, could be useful for enabling a human-in-the-loop to orient on what's going on, and to explain to other humans why it's happening. Could be neat?





And what of adversarial agents? Haven't we already experienced this? We've all had that cocktail of snakeoil and bitters that is SEO, haven't we? How has that worked out?



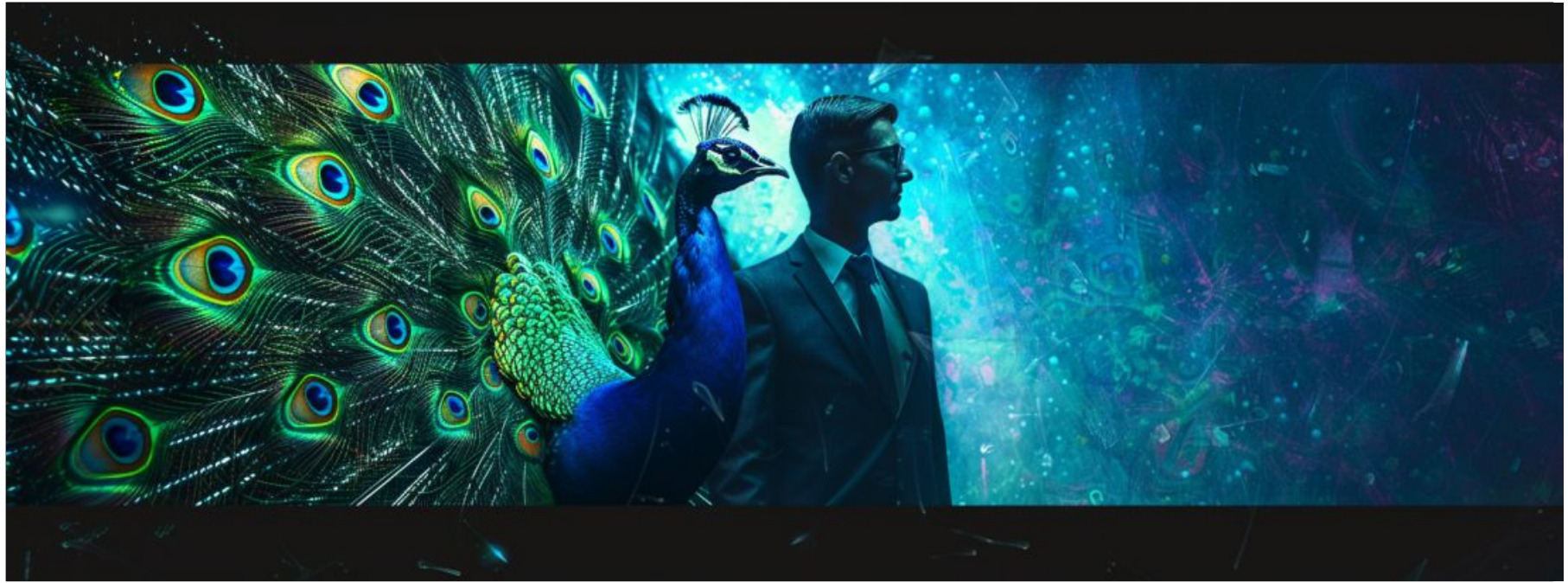


Consumers might hire their own agents to protect themselves from GAI spam. How will they disclose themselves to some brands while concealing, protecting, their attention from others?



I'm thinking about Privacy by Design and the impact that privacy preserving data management will have on the ability to make predictions about treatment effects as this all scales...





...and how centralized entities choose to compete. What does it mean for marketing when both the incentives and capabilities for deception scale?



Doesn't this sound a lot like what happened with mainline digital marketing analytics in the nineties, naughties, and teens? All the change and none of the change management?



You can see it coming. Do you want to do this again? Is it time to white knuckle it a few more years?

((((gesture with fists)))





What of those of us without knuckles? The knuckleless? Could this generative disruption be useful for generating new experiences with analytics, to affect reality, to break out?



For most of you, your relationship to feedback loops is empowered and positive because you have great stances, tools and experiences – ***and increasing autonomy to act.***



Which stances and tools will you use for observing, orienting, deciding and acting? How much better can we get at getting better?





Remember, we've been through this before with HITS, 1st, 2nd & 3rd party data, react, broken tags, SEO. You've experienced four full dimensions of complexity and horror already.



So you got this! Think about rebranding change management so that it'll be better this time, and pressing that demand curve hard to the right. Don't fear the meteor. Embrace your *inner* meteor.



The present isn't nearly as locked-in as it seems. Even though the edge is quite ragged, there is a lot of opportunity, we're in it together and together we'll advance. We'll progress.



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Thank you for your attention. Who has the first question?