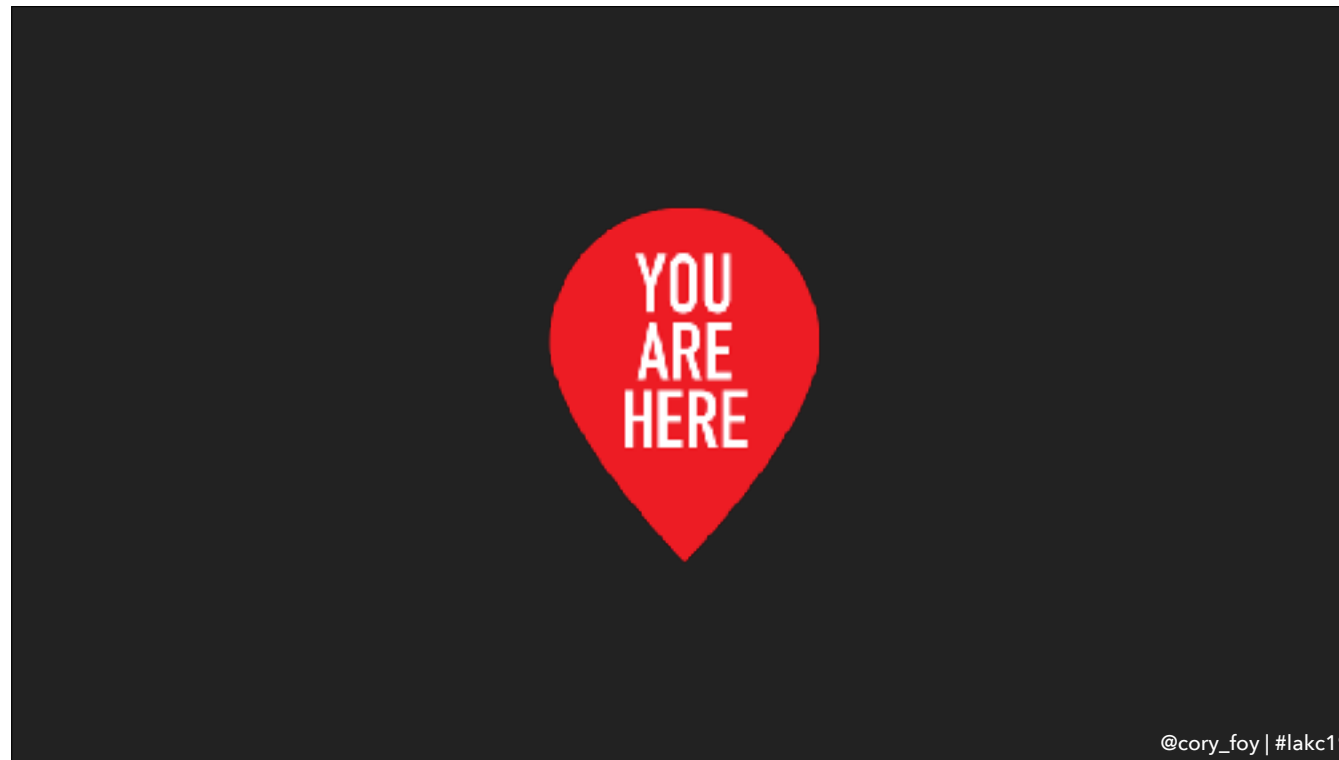
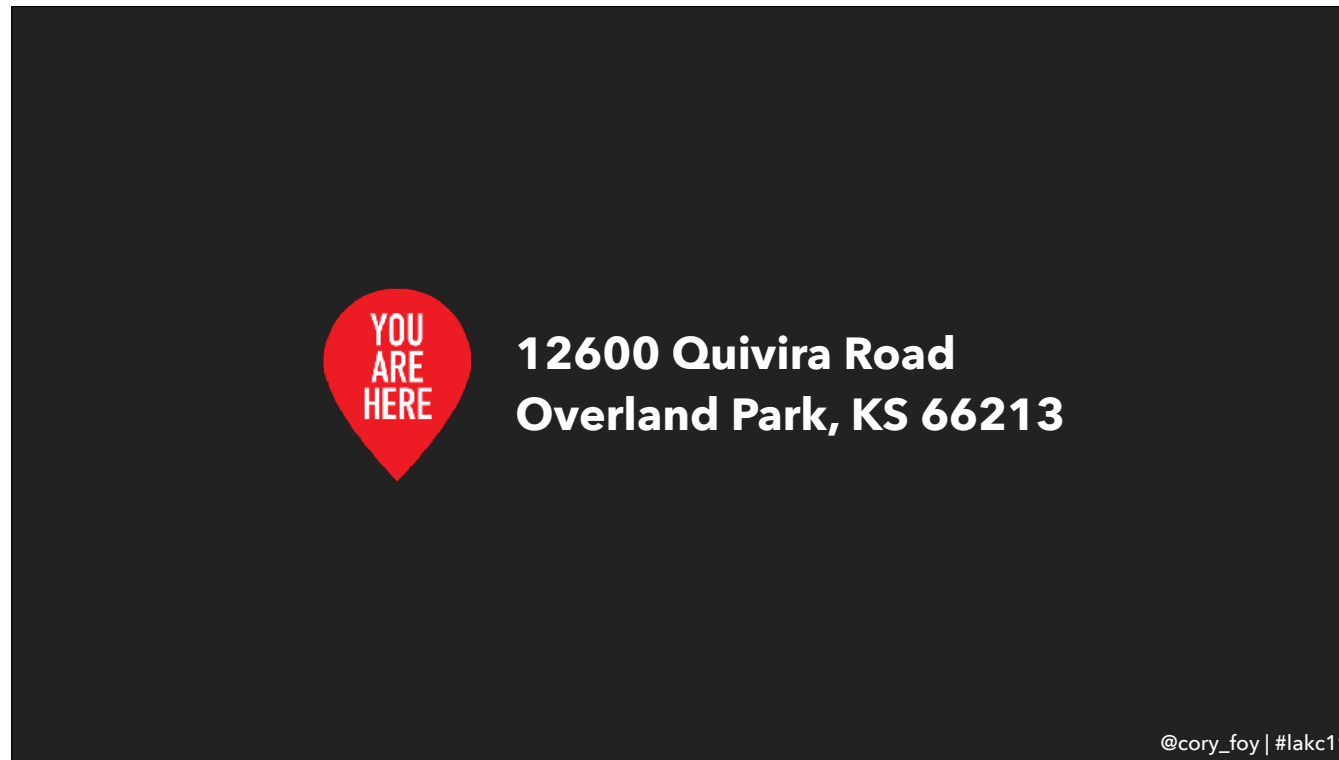




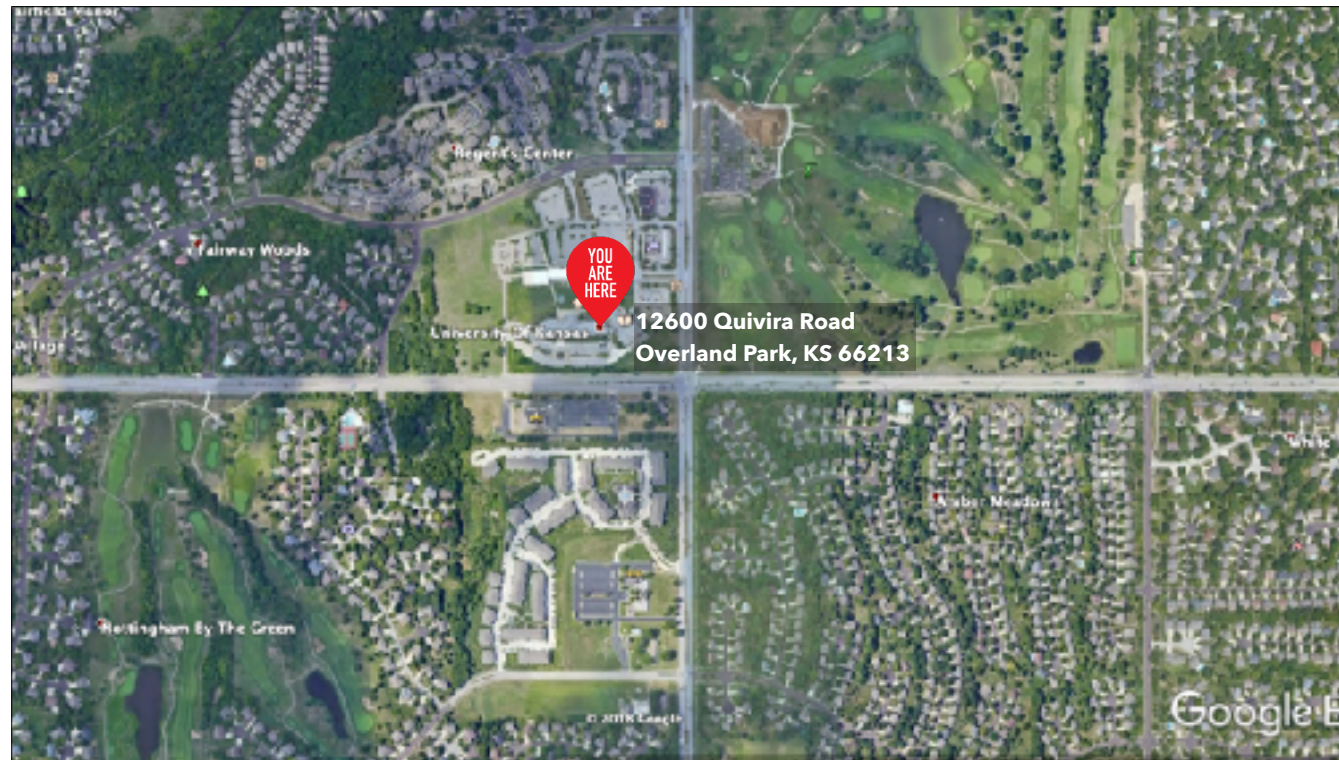
Good Morning! I want to start with a simple exercise. Where are we right now? University of Kansas, Specific Room. We are here.



Can we get more specific? Sure! Here's the address of the building



We can get even more specific - here's a Google



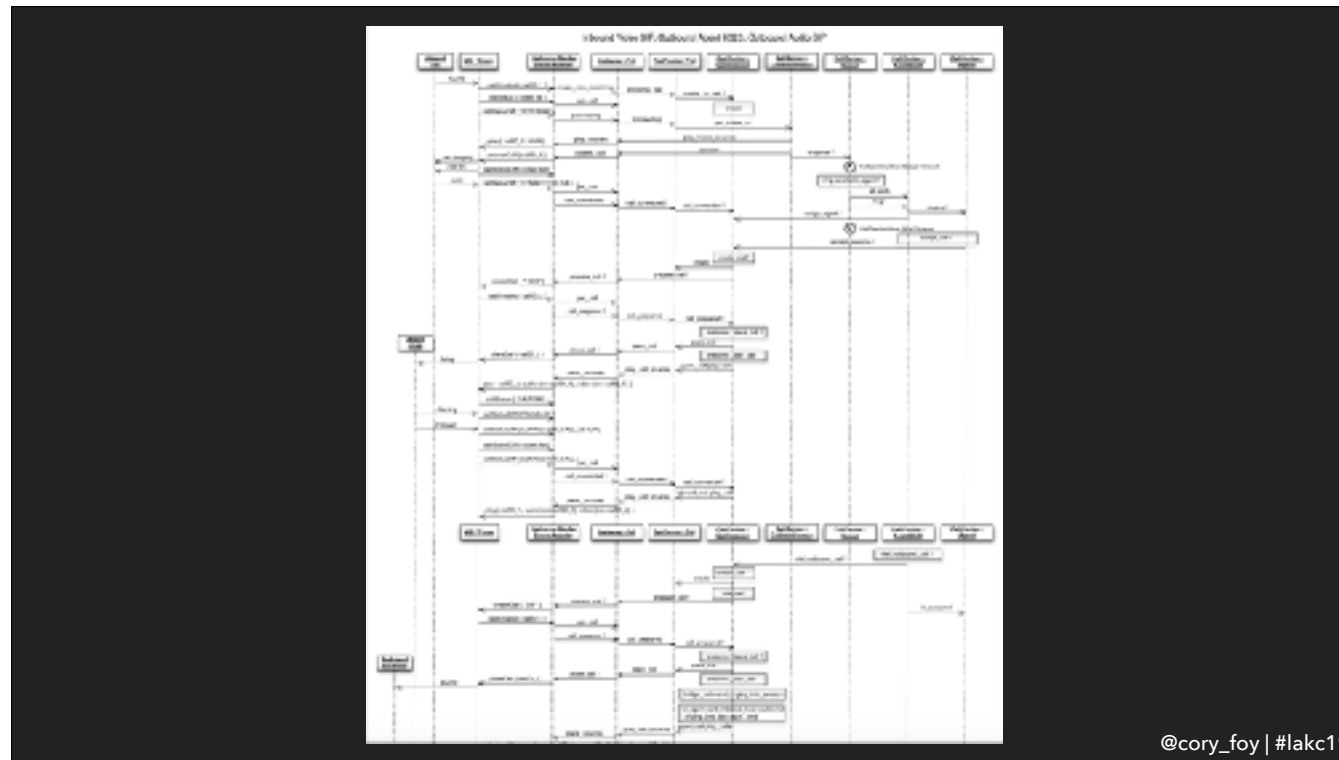
Map of the building and the surrounding area In fact, we can get even more specific - here's a Topography



map at a 1:24000 scale of the campus and surrounding area. Do we have more information than we did to start? Tons! In fact, let me give you one additional piece of information.

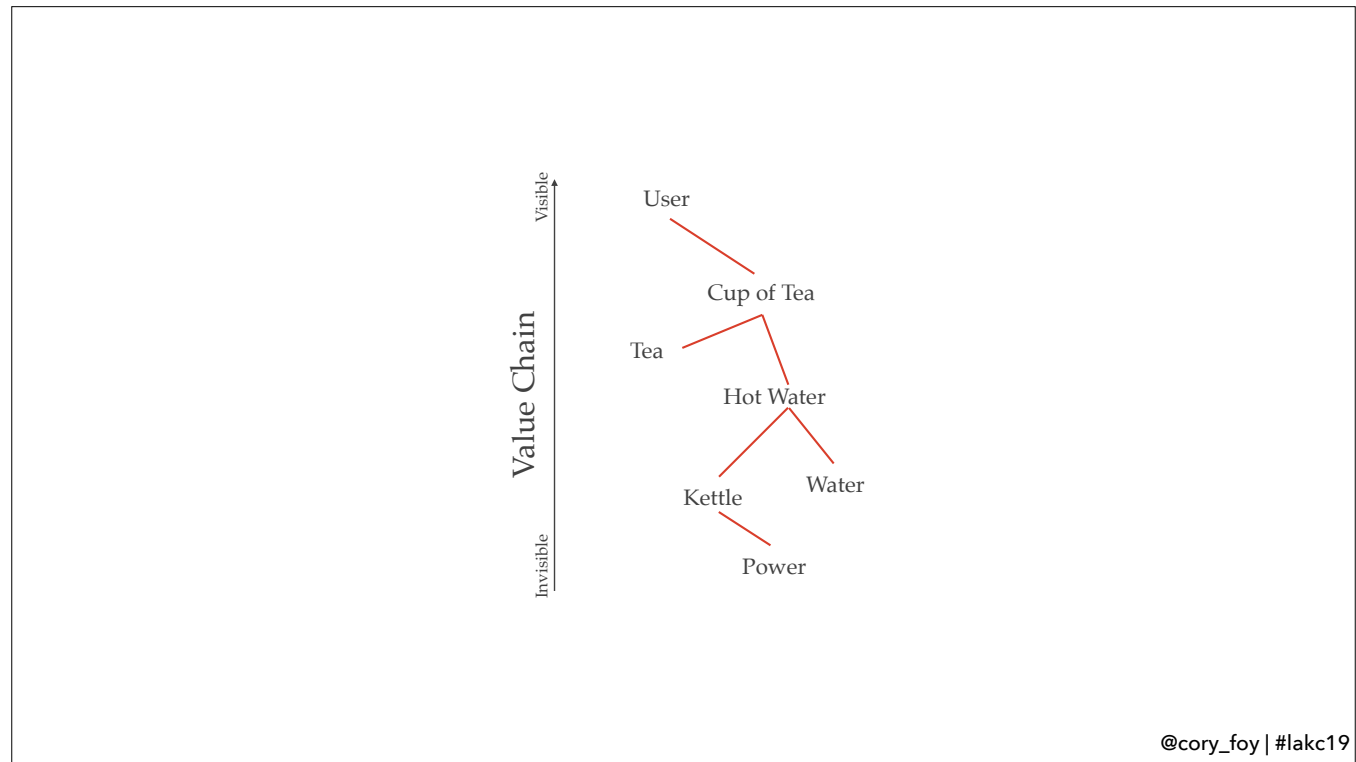


Did you know that a group of flamingos is called a Flamboyance? It's true! How many of you knew that already? For those who didn't, congrats! You have even more information than when we first started this session. Suddenly, the definition and value of the word "information" just shifted for some of you. For a moment there it seemed like I was going somewhere with this, adding useful information along the way, but in fact I'd argue that all of that information - even the flamingos - is useless information. In fact, I'll give you some more examples



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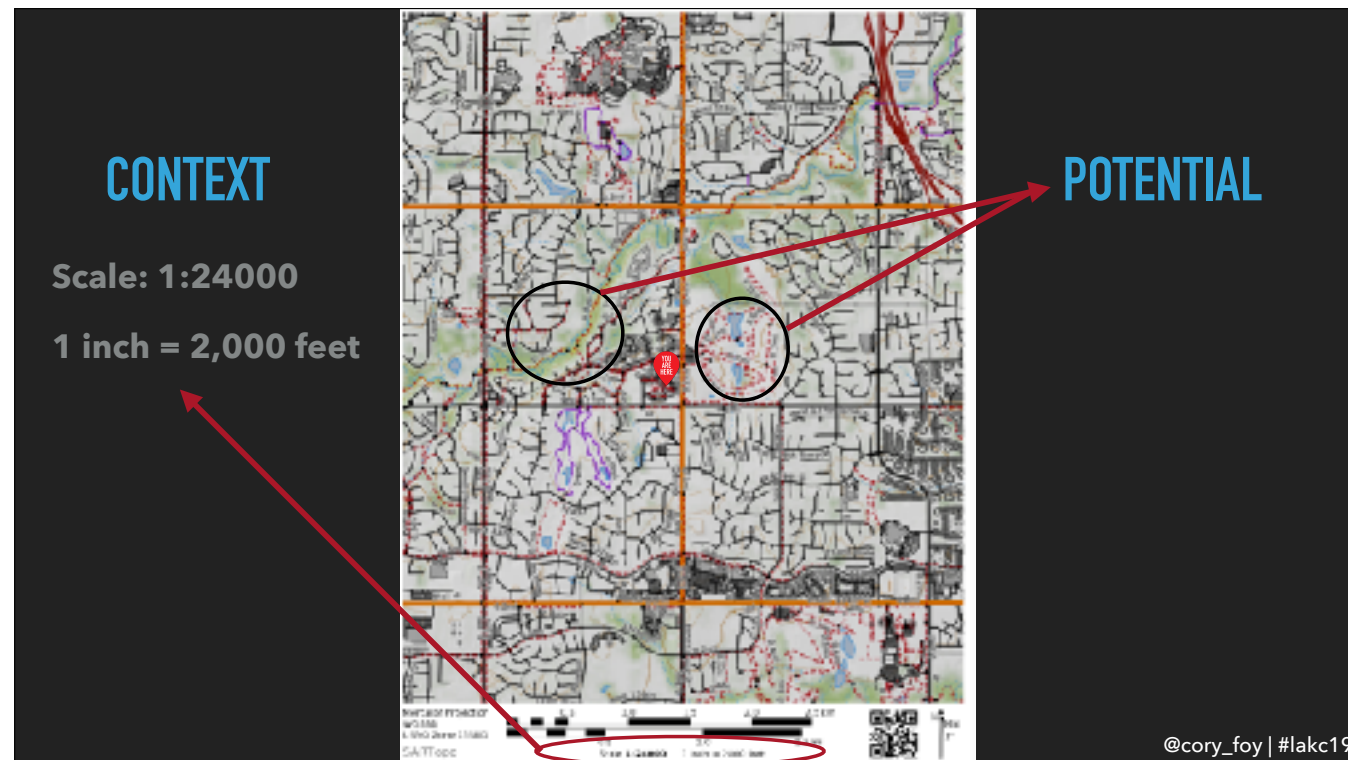
Here's a sequence diagram of a system I worked on. Usefulness of information? Flamboyance level.



Here's another diagram of the value chain of components necessary to make a cup of tea. Usefulness of information? Grumble level -



which happens to be the name of a group of pugs. You see, all of these things are the same value because we're doing the same things with them - nothing. Ok, except for maybe the pugs because who doesn't need some pug pictures to start their day. Now, if I said I needed us to go to the closest body of water, we can look across all of our information and figure out that - based on this context - one of these contains *useful* information.

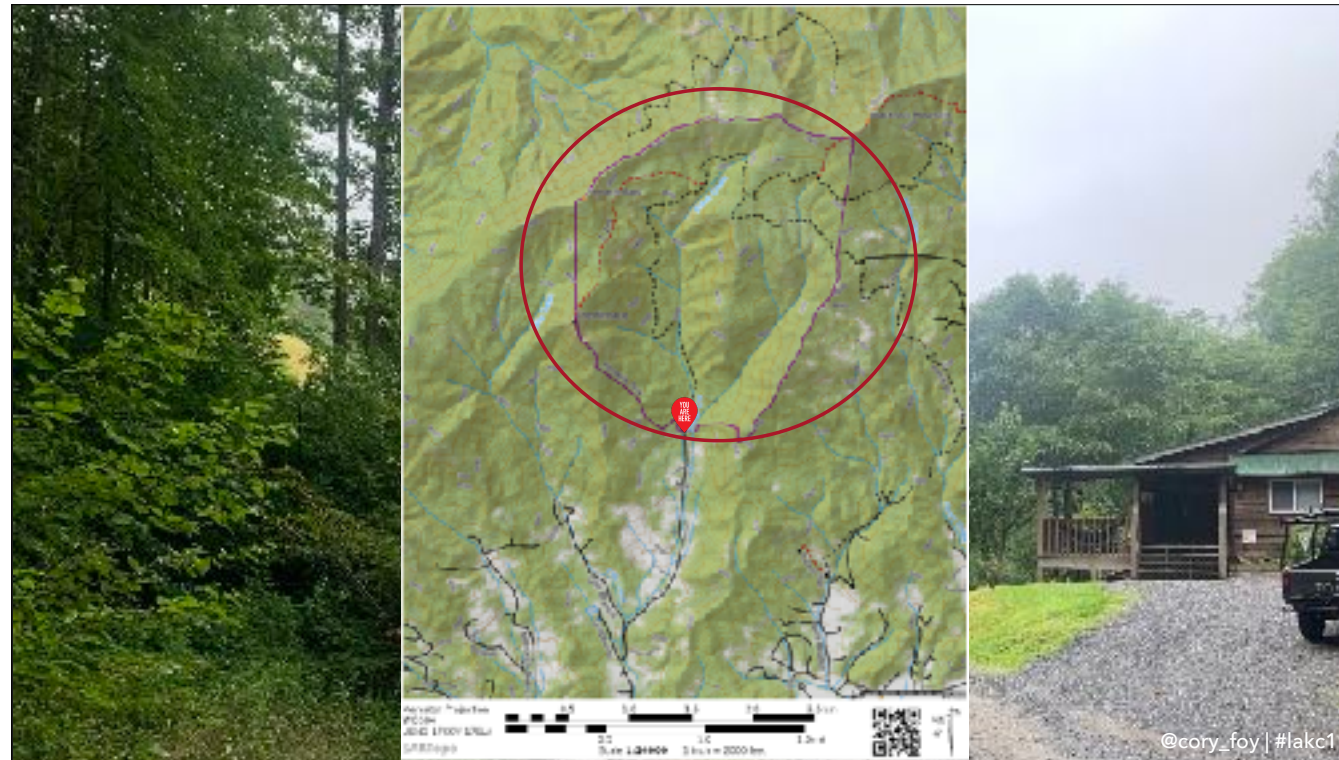


This map is at a 1:24000 scale, meaning each 1 inch is 2,000 feet of travel. We can look at our components and determine motion and direction and use that to plot out strategies of where we could get to our goal.

For example, these lakes are the closest, but also require crossing a major road, which means we need a specific set of gameplays - especially if we need to take a hose to it, or make multiple trips.

Whereas this creek is further away, but maybe we control all of the property between us and them. But there's also the risk that the creek won't have water in it.

So information can have potential, but that potential has to be unlocked in a way that can be captured and communicated to further a goal. We need context.



Now let's look at a different map for a second. Picture yourself in the wooded mountains of Western NC. You and a group of friends have just completed a day hike, and it's dusk as you get back to the parking lot. Suddenly, someone comes running up to your group and frantically explains they were leading some Boy Scouts on a hike but realized when they got back to the parking lot that one of them was missing. Worse, this scout - who is 10 years old - is an insulin-dependent diabetic without his medications, and they don't know where he is. Can your group please help?



Luckily for this Boy Scout, this group of friends happen to be emergency medical professionals consisting of doctors, nurses and paramedics, and one - me - is even a trained Wilderness Search and Rescue professional, so we were both happy and excited for the possibilities to use our skills to help! Also lucky for this Boy Scout is that it's our second to last day of our Wilderness EMT class and we're actually starting our final practical exercise, with the frantic person being our instructor.

We had back into the woods and about a mile in cross a stream where our group leader stops us all to discuss our strategy. We're in the area where we think the boy is, so it's important for us to sync up, especially because it's almost dark, and certainly will be very soon. However, one of our group members - Michael - doesn't hear our group leader, and doesn't immediately stop.

Now, let me tell you about Michael. He's an ER doc from Canada, and was late every single day to class. But he was also the quietest, most unflappable person in our whole class. So I wasn't totally surprised that he didn't hear our leader, so I called out, "Hey Michael! Hold up a second, our group leader wants"

And then it happened. Michael screamed.



AAAAHHHHHHH!!!

And he fell down on the ground in the most spectacular way, screaming the whole way. AAAAAHHHHHH!!!

Now, as you can imagine, we're all, uh, shocked. We don't immediately see anything like an alligator, or a bear trap, or rattlesnakes, so we rush over to him. We immediately discover two things.

First, Michael's leg is broken. An open tib/fib fracture of his lower left leg

Second, the fracture is actually make up that has been expertly done under his pant leg, and



Michael was actually a plant in our group for the victim, betraying the trust of us all!



So we worked to stabilize Michael and splint his leg. We had been informed not to expect any kind of evac until morning, so we knew we had to set up camp with whatever we had in our packs. So we got working - clearing a space, making sure Michael didn't go into shock, setting up a makeshift shelter, and starting to settle in for the evening. But we weren't done yet. Just when things settled down, our group leader was walking over to a spot and suddenly went down in grand mal seizures.



We kept two of us with Michael, and one of the ER docs and I went to our group leader. Once we stabilized her, we realized that she was a *second* plant in the group, made so we'd have to deal with both a traumatic injury and a medical emergency in the field. So we got her covered, a shelter set up for her, and starting side eyeing each other wondering who was going to betray us next.

The funny thing is, at the start of the mission, we all knew there was no boy scout. It was 8:30pm already, we had a class of 25 or 30 people, and there were 5 rescue groups being tested, so it was highly unlikely they had found five 10 year olds to hang out deep in the woods by themselves waiting to be found at night. But we never cross-referenced those concerns, nor did we question the mission we were given. We believed the story.

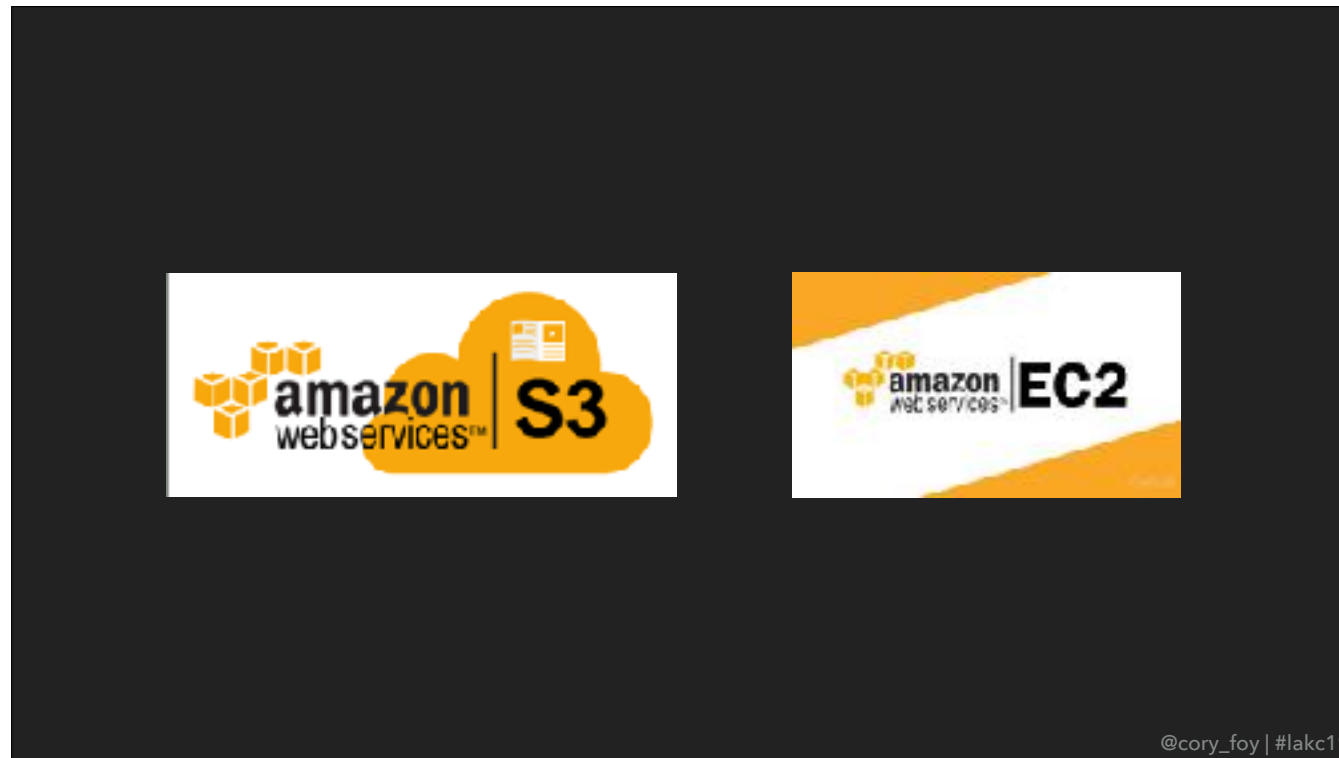


THE PERSON TELLING THE STORY
DETERMINES WHAT'S POSSIBLE IN THE
STORY

Jabe Bloom

@cory_foy | #lakc19

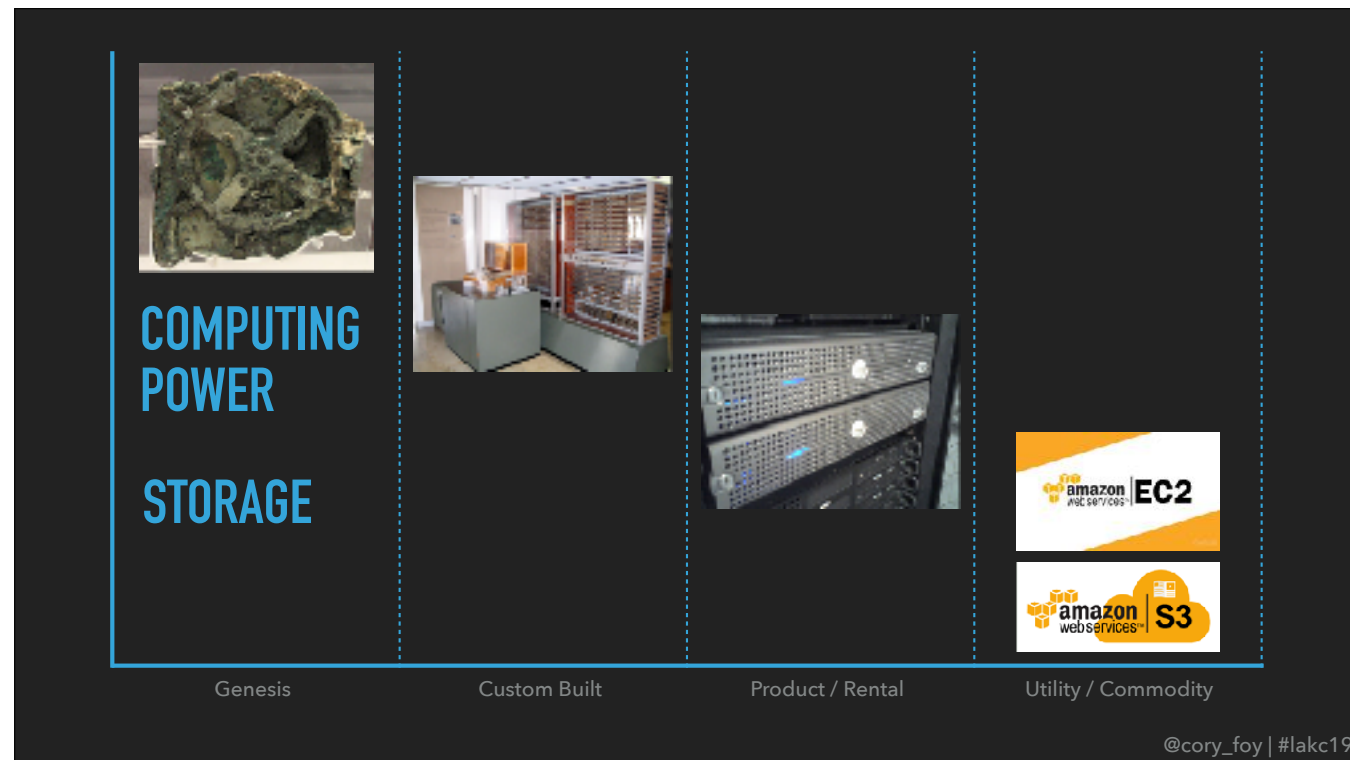
We believed the story, because as Jabe Bloom once told me "The person telling the story determines what's possible in the story" and we didn't have the tools to do anything else. But let's rewind even further. 13 and a half years ago, a new story with a new set of tools was announced that similarly got people excited for the possibilities of how it could help. On March 19th, 2006,



Amazon released a pair of services that revolutionized the technology industry - and businesses that rely on technology. Those services were the Simple Storage Service - S3 - and Elastic Compute Cloud - EC2



And like Michael and our group leader, the story we had was that they were part of us! Trusted partners we could go out and save the world with. What were these services exactly? They were the penultimate evolution



They were the penultimate evolution of something at the heart of all technology - computing power and storage. When computers and storage were first created, everything was incredibly futzy and custom - and expensive! Then things evolved, and computers and storage became things that had enough standards to be custom built. Then for a long time both computers and storage evolved further to become products we could purchase and have at our fingertips, so if we needed more, we went and bought and configured more. Then came networking and the internet, and we could start storing and retrieving things that were in other places, centralizing our information. Suddenly, with this release of Amazon's services, we could now leverage computing power and storage similarly to how we use electricity - as a utility we could spin up or down on demand, and simply be billed for.

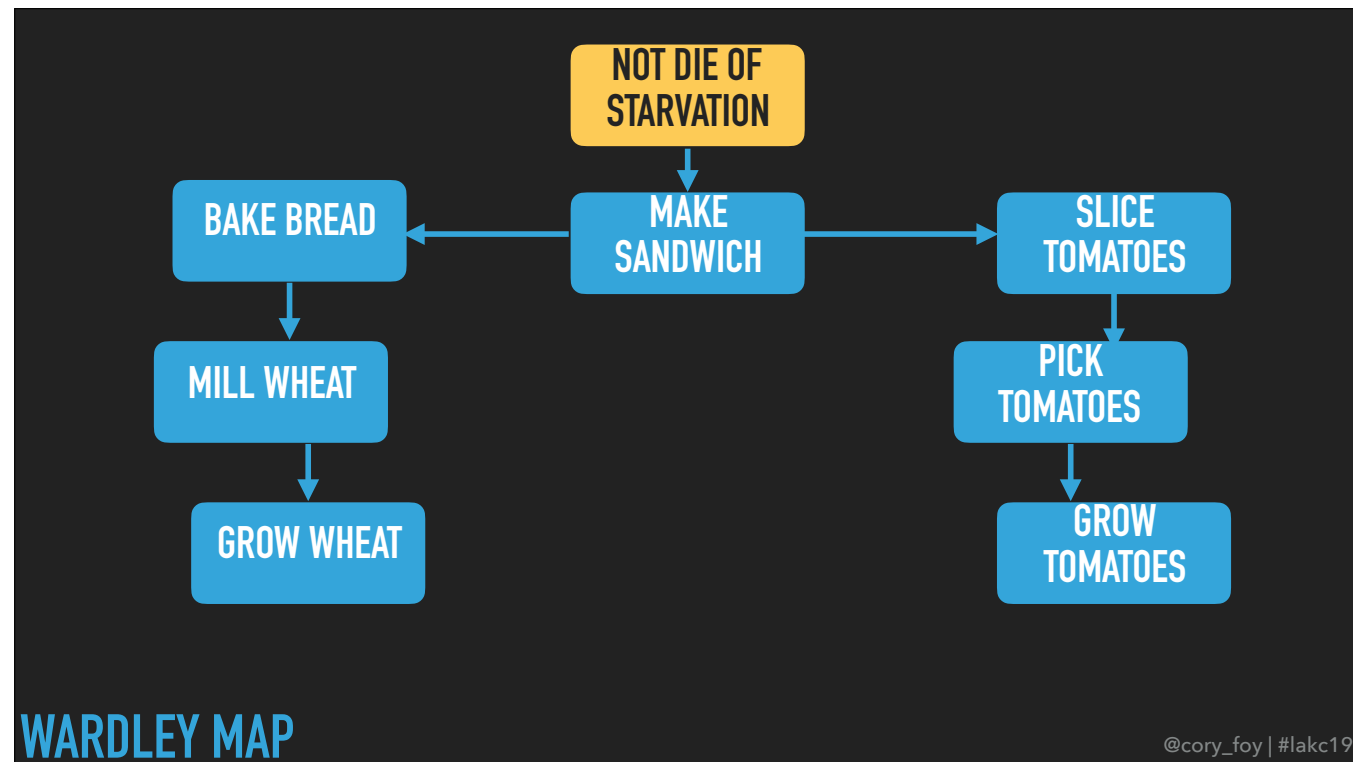
What came next was a decade of innovation as the market embraced these services, integrating them into just about every application we've seen since (or it certainly feels that way when AWS has an outage!). But like our Boy Scout story, there was something



we weren't questioning. And that was whether AWS was actually part of our team, or

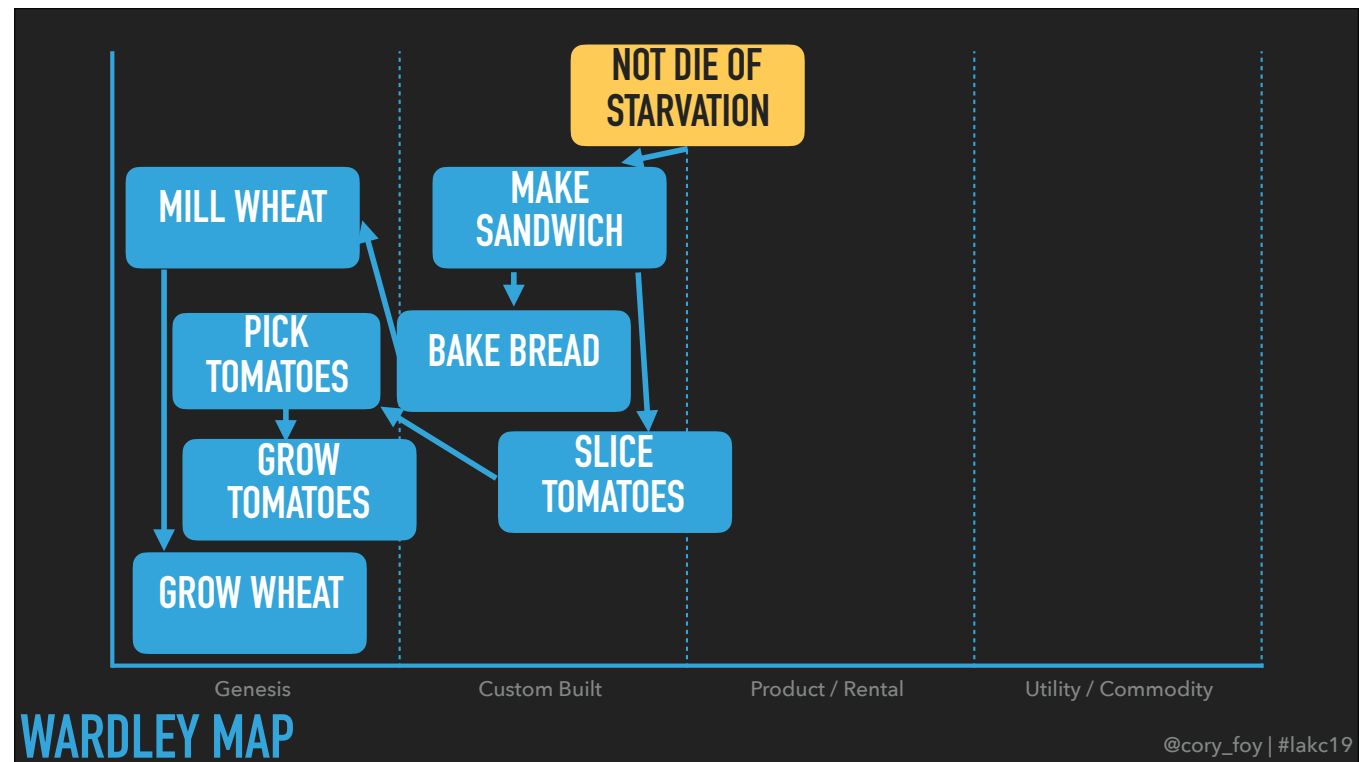


whether they were Annie Wilkes sneaking up behind us with a sledgehammer to take us out. But unlike our rescue team, we have some tools we can use to figure out what to worry about, or more importantly, figuring out what's possible outside of what a story teller wants us to hear. One such tool is a Wardley Map

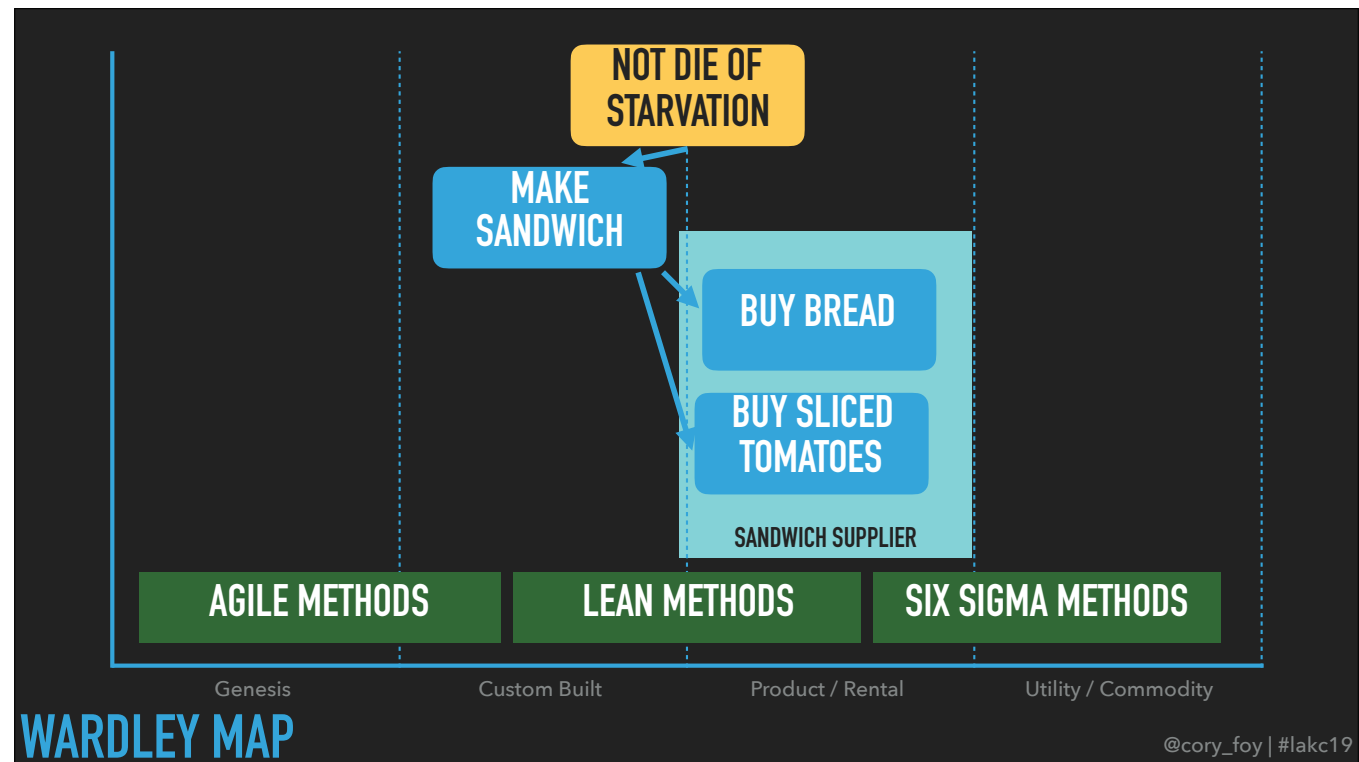


One such tool is a Wardley Map which we saw an example of earlier. We start with user needs, and then map out a value chain of components necessary to serve either those needs directly, or supporting components servicing those needs.

So far all we have is a graph of components. To turn it into a map we need to apply movement

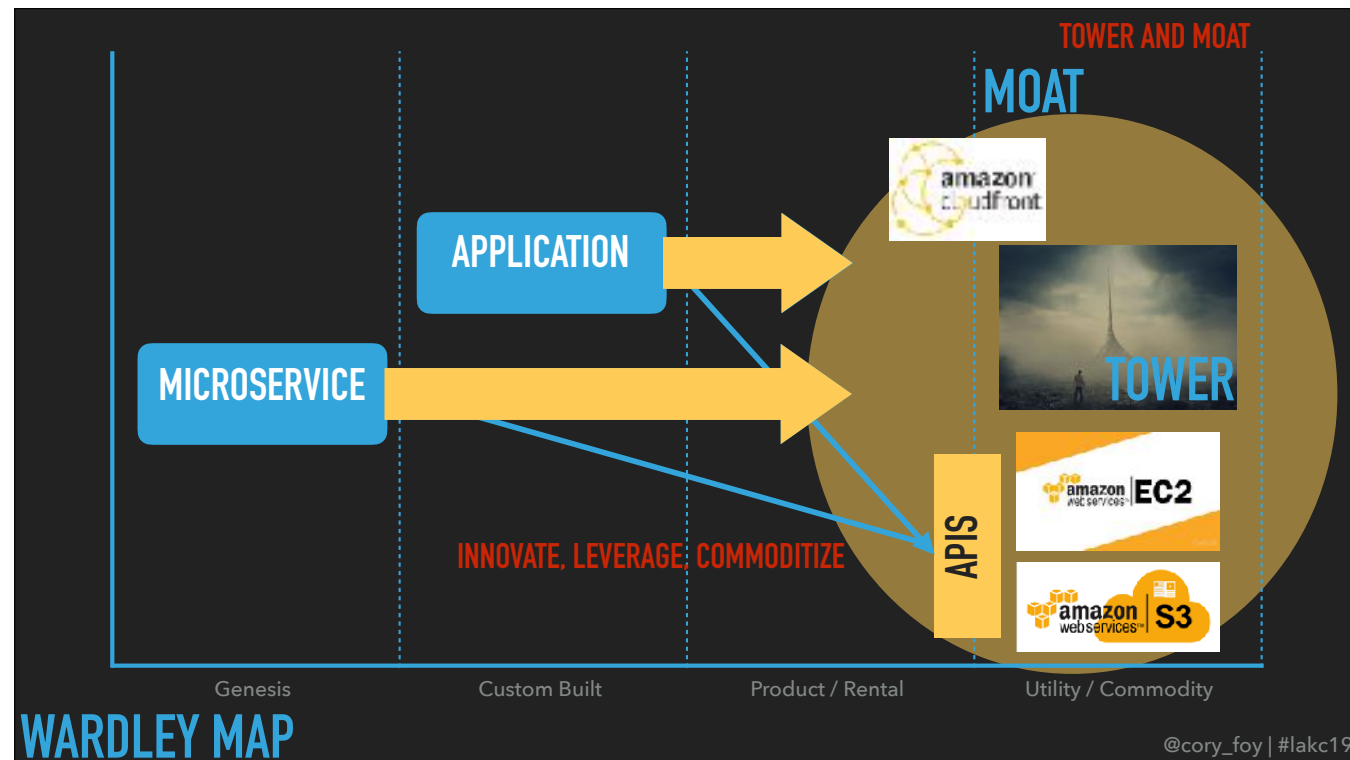


which Simon Wardley does using Evolution of components from Genesis through Utility along the x-axis. The underlying assumption is that components will evolve



along some time horizon, so seeing where that evolution is primed gives us clues into where we can make plays. In addition, the phase of component determines the type of method we need. Components in a Genesis phase are highly fluid, and require adaptive, agile methods. Whereas productized or utility components are more of a six sigma approach, since we're focused on operationalizing and scaling them with Lean and Kanban approaches somewhere in the middle.

Taking this idea of a Wardley Map



we can look at the components of the technology space and realize that what Amazon was providing wasn't storage or compute directly - it was APIs to that capacity. These APIs became integral parts of higher order components - our applications. But from the unique position they sit in, Amazon can see those innovations occurring - and has the market capital to commoditize them before the creators can - when it's valuable enough.

This strategy is two-fold. The first part is a gameplay known as ILC - Innovate, Leverage, Commoditize. By creating APIs others consume, Amazon can see the innovations, leverage that innovation work happening, and commoditize the innovation - effectively using their APIs as Sensing Engines for the entire industry

But what makes this especially destructive is they're capable of combining the ILC play with a Tower and Moat strategy. This strategy means that the APIs are their towers, and anyone who comes close to them gets swallowed by the moat - the commoditized services they can offer for free which surround the key APIs.

For example, I create videos, and once I have the final video Amazon has a workflow - for free - where I can drop the source file into an S3 bucket, and CloudFront will pick it up, process the video into several formats, and spit it back out into a fully hosted video with varying bit streams. That's tough for anyone to compete with!

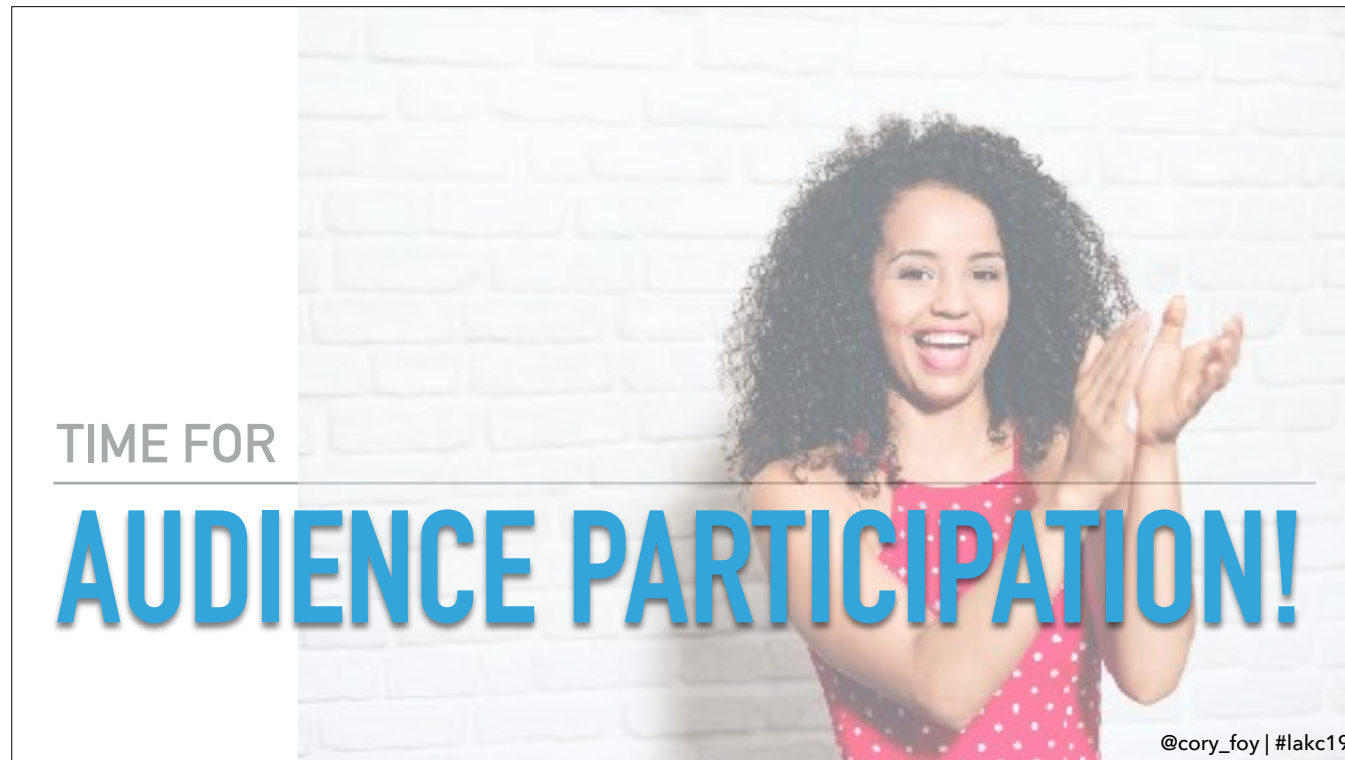
And so what began happening was that businesses started being eaten by Amazon.



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The engineers would all happily turn on the Re:Invent web stream to see what cool new things they were going to get to play with, only to suddenly see an Amazon Executive announcing the engineer's own product as a new, free service from Amazon.

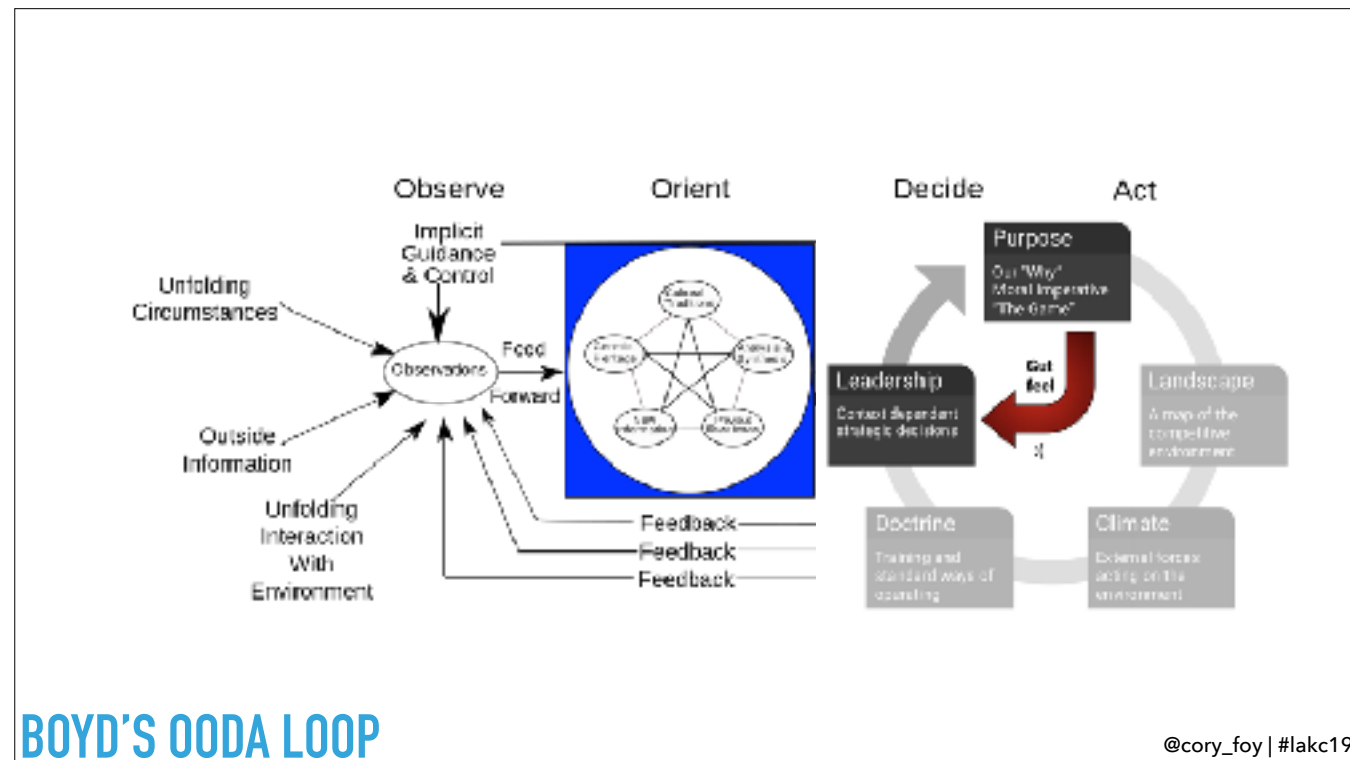
In effect, what was happening was these companies were being commoditized by their own partner. But yet, they couldn't see it coming - even though it would have been obvious had they stopped to talk to their group. So why didn't they? What stopped them?



In order to understand why, I'm going to need three volunteers.

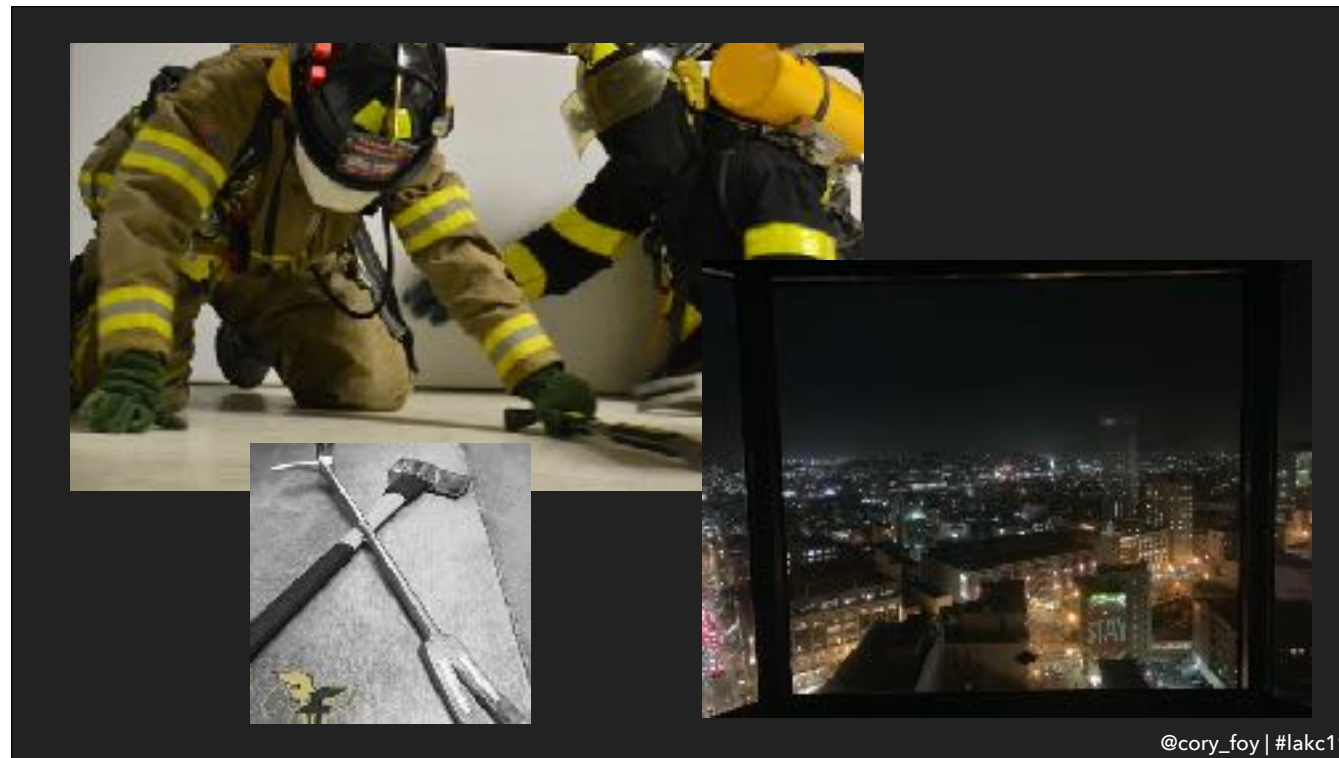
A big round of applause for our volunteers!

So let's deconstruct a little of what happened here. When <name> took off the blindfold, they had to figure out where they were, then figure out where <name> and <name> were, and *then* figure out what signs they were holding and who to point at. And in that second round they had to act to reduce an unexpected threat. These steps can be defined by a process



John Boyd developed for fighter pilots known as the OODA loop. OODA stands for Observe - Orient - Decide - Act. So the blindfold comes off and you observe your surroundings. You then orient yourself to the environment based off your observations and internal operating model. You then make a decision based on your information, and take action. And as we saw in the second round, this isn't a one and done - it's a continual loop.

In a lot of organizations I assess and coach, there's a bias towards Decide-Act. Let's make a decision *now* and move on it *now*. This is seen as "moving fast" or "moving fast and breaking things". But just like a pilot who can take greater risks when they are on a visual approach instead of an instrument-only one, if we don't have clarity we risk catastrophic failure.



For example, many years ago I was leading my crew in a rescue exercise on the 10th floor of an abandoned office building scheduled for demolition. We were working on a search technique called a "left-hand" or "right-hand" search where we follow a wall for as far as we can with one hand, reaching out with our other hand, or our partner, looking for people trapped by the fire, and pulling a rope or hose behind us. When we reached the point we had to turn around so we didn't run out of air, we'd mark the point and leave the rope or hose so the next crew could rapidly go to where we left off at. To simulate fire conditions, our air masks were blacked out, so we couldn't see anything.

We had reached the time limit on our air, and as the lead crew member it was my job to mark our location. The easiest way was to take a special tool we carry - a halligan bar - and stick it in the wall then attach the rope to it. So I found the wall, reared back and went to slam the halligan bar in when suddenly my arms were grabbed by one of the instructors leading the exercise. And I'll never forget his wise words, "Uh, hey, that's a, uh, window, so let's have you put the tool over here".

Up until that point we were able to make rapid progress clearing the room without the luxury of observation or orientation. But the bias towards acting in place of observation nearly led to catastrophic consequences.



But you all aren't here because you're doing Search and Rescue in smoke-filled high-rise buildings, or searching deep into the woods at night looking for injured hikers and hoping your teammates don't betray you. You're here because you don't want Amazon, or Microsoft, or Apple or one of your competitors or partners sneaking up behind you and taking you out. Well, neither did MedCo, Inc.



MEDCO, INC
Your Trusted Partner Since 1994

(In this presentation, MedCo, Inc is a fictitious company. Any similarities to previous or current companies is purely coincidental. Forward looking statements are based on pure conjecture and no knowledge of Amazon's execution plans)

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MedCo, is a (fictitious) leading provider of Electronic Health Record software for physicians across the country. They've been around for 25 years, building a loyal base of customers who use their software to create, update and transmit health record data for their customers' patients. Like many other providers, MedCo's executives recognized the advantage from Amazon's cloud offerings, and embraced it early on. What they saw was the advantage



to focus on higher-order systems by assembling and integrating commoditized components from lower levels. For example, users needed a secure way to enter and retrieve records from their system.

To do that, they needed the patient's information, and a way of entering information, as well as searching for and retrieving that information. They also needed to ensure they could audit who looked at records and restrict access - so security was paramount. They also needed to attach various pieces of data to records such as charts, test results, imaging, etc.

Underlying that meant some pretty basic stuff - databases to store the information, storage for keeping the attachments, and security across all of that. They also could have spikes of capacity, either when onboarding new large systems, or when big events happened. At first they had built and managed that themselves, but as Amazon matured they were able to offload more of scaling and management to Amazon's services, enabling their teams to focus on other innovations.

Then, towards the end of 2018, the team flips on the live stream for the Re:Invent conference. They see all kinds of cool tools, until they hear them mention something about EHR records. Their ears perk up, and suddenly Amazon announces Amazon Comprehend Medical, software specifically targeted at providing insights based on machine-learning analysis of EHRs. "Whew", the CTO exclaims, "I thought we were in trouble there for a second!" Looking at how



the software works, it's clear that ACM is focused on extracting a bunch of information using machine learning from free text - which is pretty cool, but something MedCo solved a while ago by setting up the ability for customers to create rules for language extraction. They even had the ability for people to share these rules as specialized "Extraction Automation Rules" or EARs (wink, wink) to rapidly get started.

"Besides," the CTO continued, "they're going to have to solve the problem of getting all of those records into their system, which we have a 25 year head start on. Let's take a look and see how we could potentially leverage this in case anyone asks about it, but I'm not worried right now"

It was a good, fun story to tell each other.



6 months later, and "anyone asking about it" is an understatement. All of their major customers have heard about ACM, and are wanting to know how they could leverage ACM's capabilities using MedCo's software. One of their largest customers - Basic Health - went so far as to write an EAR which connected the information they had from MedCo directly into the ACM system. Then the bad news comes in. Amazon releases a specialized set of connectors for the main competitors in the EHR space - including MedCo - allowing customers to enter information using an Amazon tool and it populates in both the original system and Amazon's new beta system for managing EHRs. Any information uploaded by this tool is automatically processed by ACM, and customers using the tool get real-time alerts to information discovered by ACM in Amazon's EHR tool.



Within 18 months of the ACM announcement MedCo, a player in the industry for 25 years, was looking for a buyer, and sold their assets to another player in the space after seeing customer and market share plummet to Amazon.



While this may seem like an exaggerated tale, it's not. Businesses after businesses are finding themselves in the crosshairs of Amazon. That last article lists iconic companies like UPS, FedEx, Walgreens, Macy's, Costco and "Every Grocery Store on Earth".

So let's step back, before the buyout, before the customer questions, and before the Amazon announcement, and look at some key things we can do to give us a fighting chance of keeping our business from being commoditized.



**THE ART OF WAR IS OF VITAL
IMPORTANCE TO THE STATE**

Sun Tzu

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I started this session by asking where we were. To continue on the theme of philosophical questions I now ask, "who are we?". In short, our starting point needs to be understanding our purpose



- our moral imperative, what we're doing and why we're doing it. Now I don't mean this:

From: <https://strategy-madlibs.herokuapp.com/>

Our strategy is collaborative. We will lead a disruptive effort of the market through our use of artificial intelligence and data leaders to build a digital business. By being both open and agile, our customer focused approach will drive internet of things throughout the organization. Synergies between our blockchain and learning organization will enable us to capture the upside by becoming networked in an innovative world. These transformations combined with culture due to our social media will create a virtual reality through platform and leaders.



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"Our strategy is collaborative. We will lead a customer focused effort of the market through our use of revolution and data leaders to build a platform. By being both agile and open, our sustainable approach will drive artificial intelligence throughout the organization. Synergies between our ecosystem and culture will enable us to capture the upside by becoming cloud based in a networked world. These transformations combined with growth due to our social media will create a competitive advantage through blockchain and leaders."

Because that's a strategy generated from an online Madlib generator, and it combines aspects of gameplay, doctrine, methods, approaches and just the right hint of what my uncle in Tennessee would call "BUUULLL HOCKEY" to make us feel good. But we don't want something that just makes us feel good.

A graphic with a dark gray background. At the top, a thin white horizontal line spans the width. Below it, a blue speech bubble with a tail pointing down and to the right contains white text. Below the bubble, the title 'Amazon's Mission Statement' is written in a light gray sans-serif font. In the bottom right corner, the text '@cory_foy | #lakc19' is written in a small, light gray font.

**OUR VISION IS TO BE EARTH'S MOST CUSTOMER-CENTRIC
COMPANY; TO BUILD A PLACE WHERE PEOPLE CAN COME
TO FIND AND DISCOVER ANYTHING THEY MIGHT WANT TO
BUY ONLINE**

Amazon's Mission Statement

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We want something that challenges us, that pushes us. Amazon's mission and vision is "to be earth's most customer-centric company; to build a place where people can come to find and discover anything they might want to buy online."

A graphic with a dark grey background. A blue speech bubble shape contains the text "OUR VISION IS TO BE EARTH'S MOST CUSTOMER-CENTRIC COMPANY; TO BUILD A PLACE WHERE PEOPLE CAN COME TO FIND AND DISCOVER ANYTHING THEY MIGHT WANT TO BUY ONLINE". Below the bubble, the text "Amazon's Mission Statement" is written in a light grey font. In the bottom right corner, the text "@cory_foy | #lakc19" is written in a small, light grey font.

**OUR VISION IS TO BE EARTH'S MOST CUSTOMER-CENTRIC
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Amazon's Mission Statement

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"Anything they might want to buy online". These 7 words require us to rethink every thing we think we know. Because there's lots of stuff I'd like to buy online, but don't expect it to always be possible. But Amazon isn't bound by that same thinking of possibilities - they look for ways to remove those restrictions. People want to buy food online for dinner today and have it get there in time? What do we need to do to make that possible? Disrupt an entire transportation industry? Find ways to extract the most value we can out of our warehouse workers? And do it for delivery costs that actually cost us money so we can own the market on it? Let's go!

And this is where Purpose is so important. When we talk about the actions we'll take, we'll have a whole host of positive and negative game plays. Our imperative may focus on environmental impact, social justice, equity and equality, or sustainability.



**EMPOWERING HEALTHCARE
PROVIDERS TO SEAMLESSLY
COLLECT, ANALYZE AND IMPROVE
PATIENT OUTCOMES THROUGH DATA**

@cory_foy | #lakc19

For MedCo, their purpose was simple - "Empowering healthcare providers to seamlessly collect, analyze and improve patient outcomes through data". Let's see how that plays in.

Amazon Comprehend Medical

Extract information from unstructured medical text accurately and quickly
No machine learning experience required

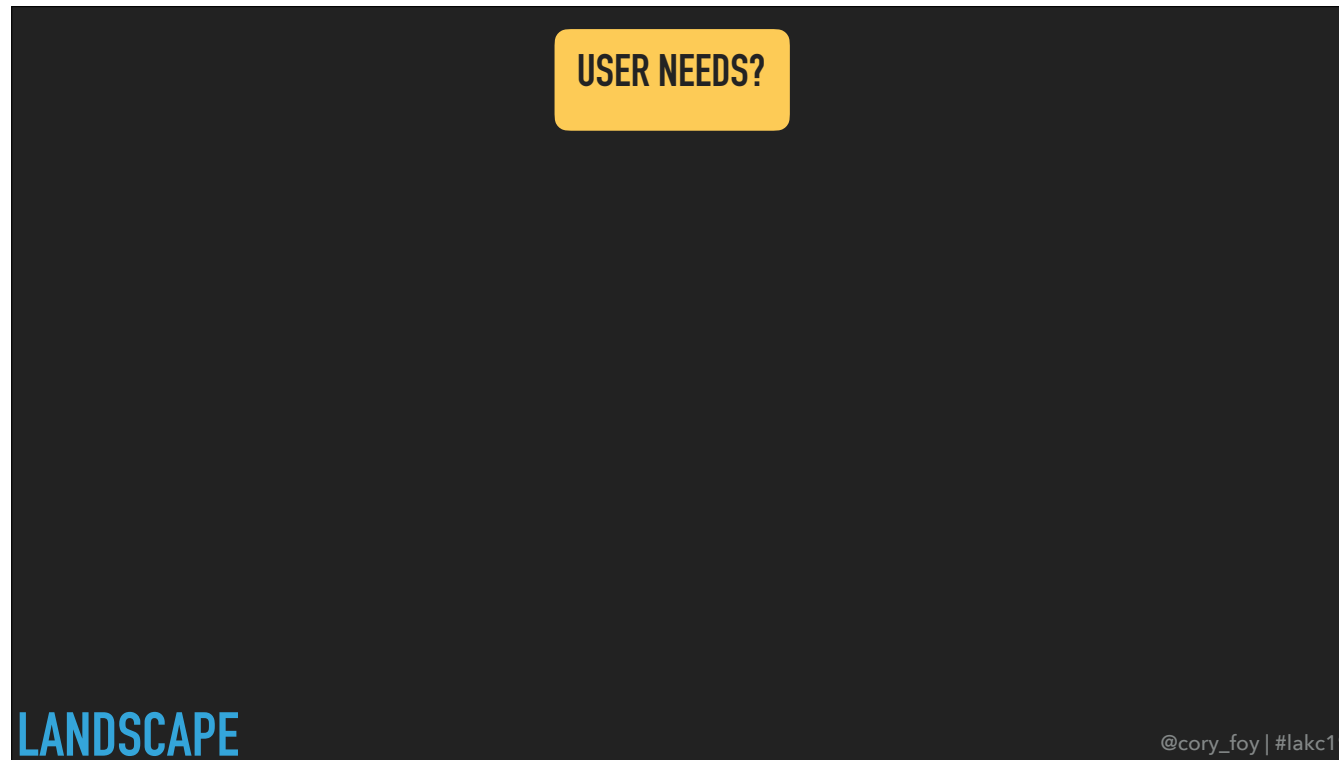
Get started with Amazon Comprehend Medical

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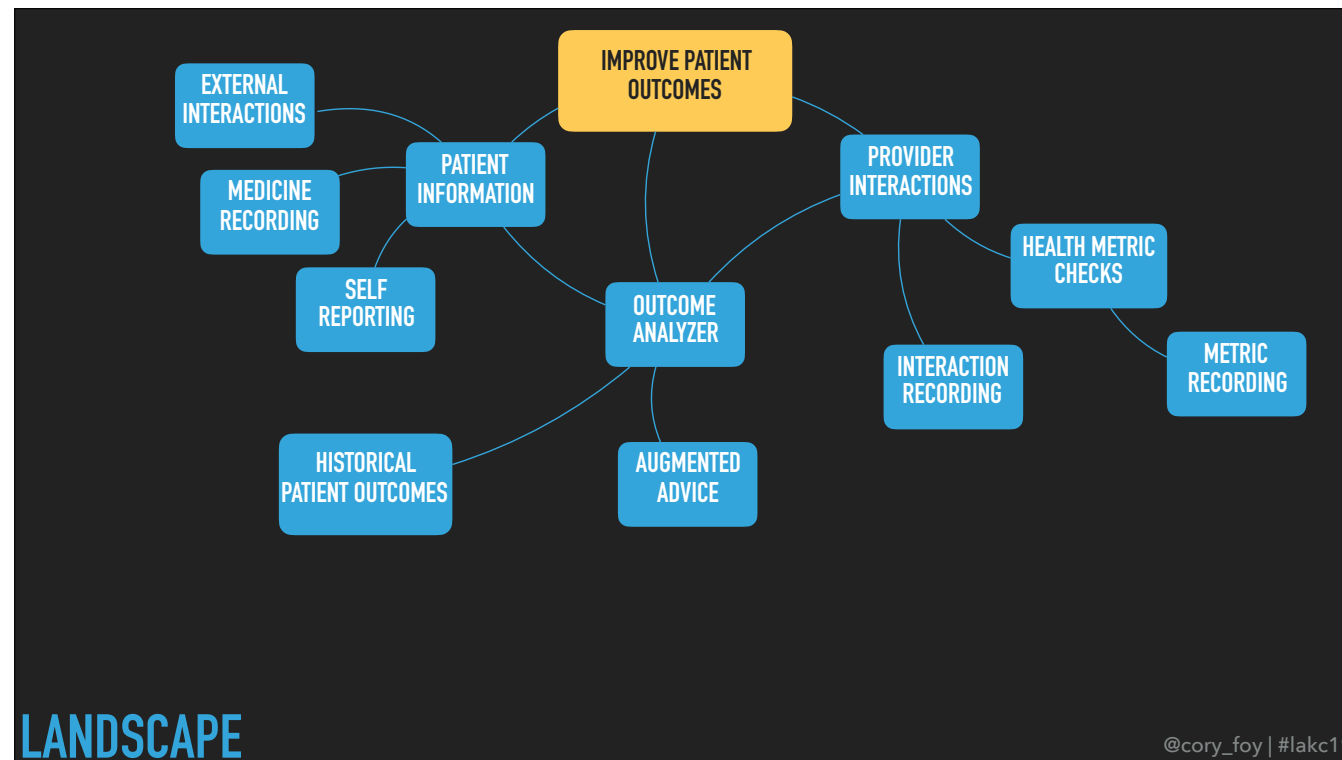
Now, when the announcement came out, MedCo's CTO immediately jumped into the Decide-Act. He told a story based on gut feel - to himself and his staff - where the impact of the ACM product couldn't hurt MedCo. If we remember back to Jabe's words about the story teller telling what's possible, we can see part of why the threat wasn't taken seriously.

<name> didn't have the luxury of telling that kind of a story, did they? When they took the blindfold off, they could see the danger. They didn't have a choice but to use Observe-Orient cycles.

MedCo's reaction of not seeing the danger, and not activating those cycles, is familiar to me because I've had many clients over my career with similar challenges. And the first thing we start with is a map of their landscape. But to get a map of the landscape, we have to make sure they have a clear understanding of their customer's needs.



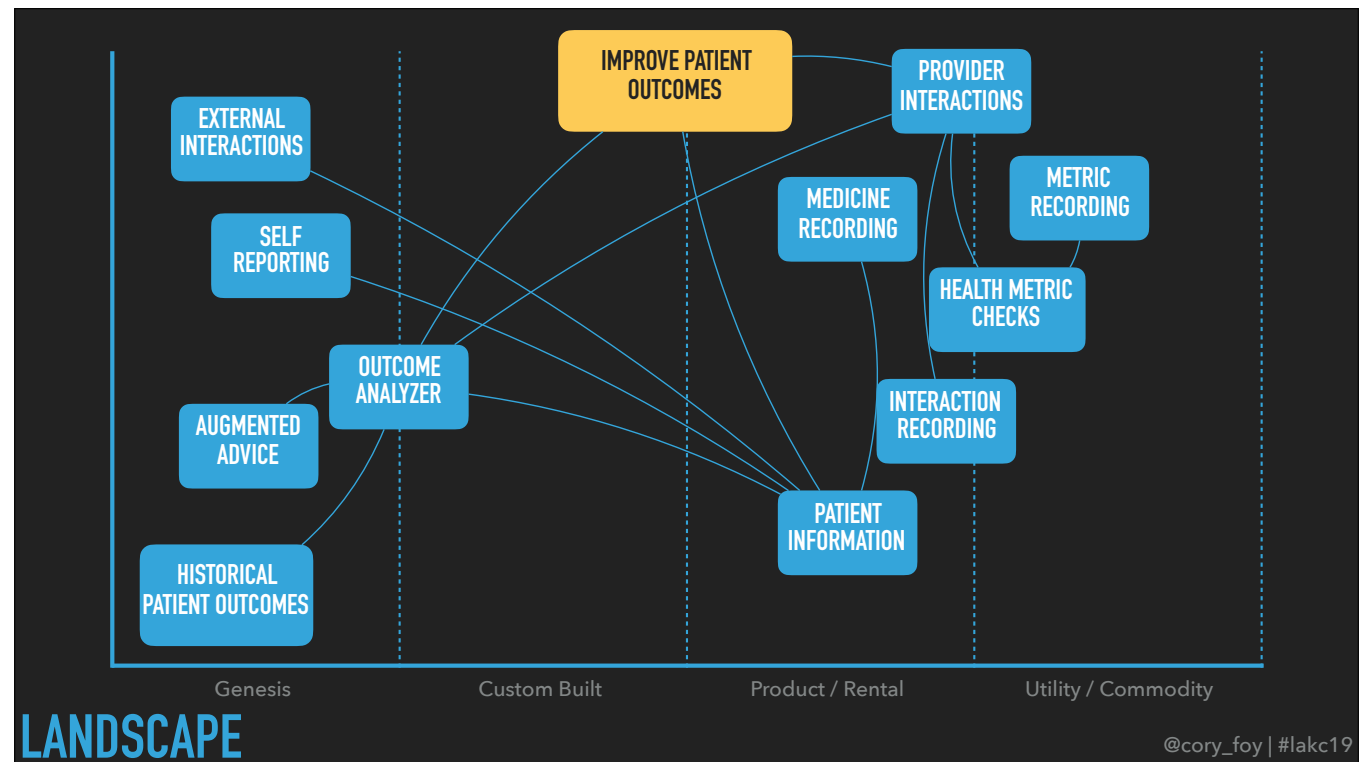
Can you define why people use your product? What their needs are? And we have to be careful we're not inventing needs to justify features. If we have a feature used by 0.2% of our customers, we should be really careful about suggesting that's a top level user need (unless those customers make up a much higher portion of our revenue). So let's go back to our purpose for MedCo



and pull out "Improve patient outcomes" as a top level need. We now look at the components necessary to get there. We obviously need a patient, and data about the patient. We also have interactions with healthcare providers, and the need to record those interactions. We need some baseline of outcomes for patients, which itself requires potential medical problems, treatment methods, and potential outcomes. We may also need ways to record interactions the patient themselves have - how they take their medicines, over the counter medicines or herbal medicines they take, environmental concerns, and workplace risks.

Finally, we need ways of analyzing this data, and synthesizing the results. We could even suggest options during treatment entry or patient interviews, or flag concerns about plans which historically have led to poorer outcomes.

As you can imagine, this can get complex, rapidly. But more importantly our goal isn't to capture every possible permutation of components. We're using this to understand the landscape and where we can make plays at. But we need one more thing.



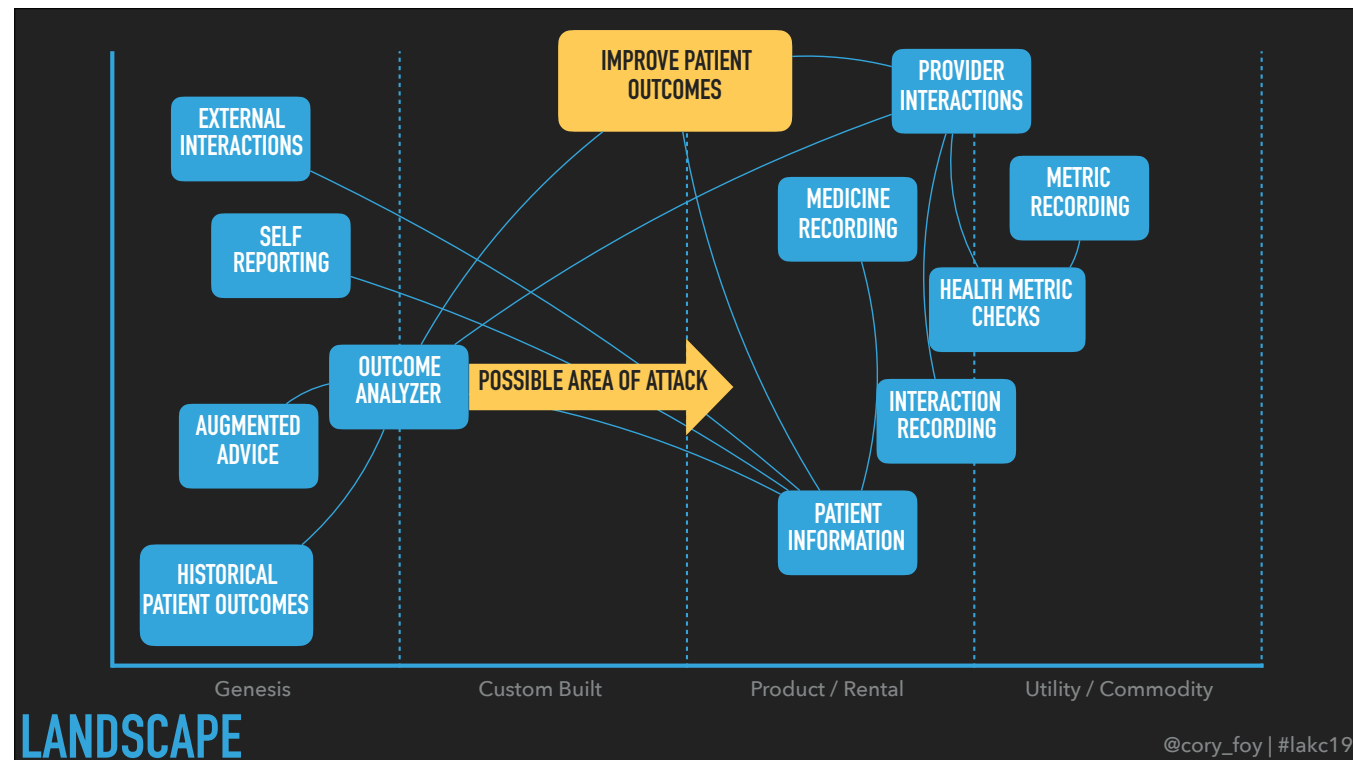
And that's to make this a map. Most of these components are going to lie in different areas of the evolutionary lifecycle. The pattern that emerges is that many of the components that are a key part of meeting this user need are either commoditized, or genesis. This can represent risk for us as we're ripe for takeover from players who can offer innovation on top of the commodity since we may be far away from bringing to market anything in genesis. We may also find components who should be commodities, but we're not treating that way.

**HOW DO YOU TREAT A COMPONENT?
HOW DOES THE REST OF THE INDUSTRY
TREAT THE SAME COMPONENT?**

Cat Swetel

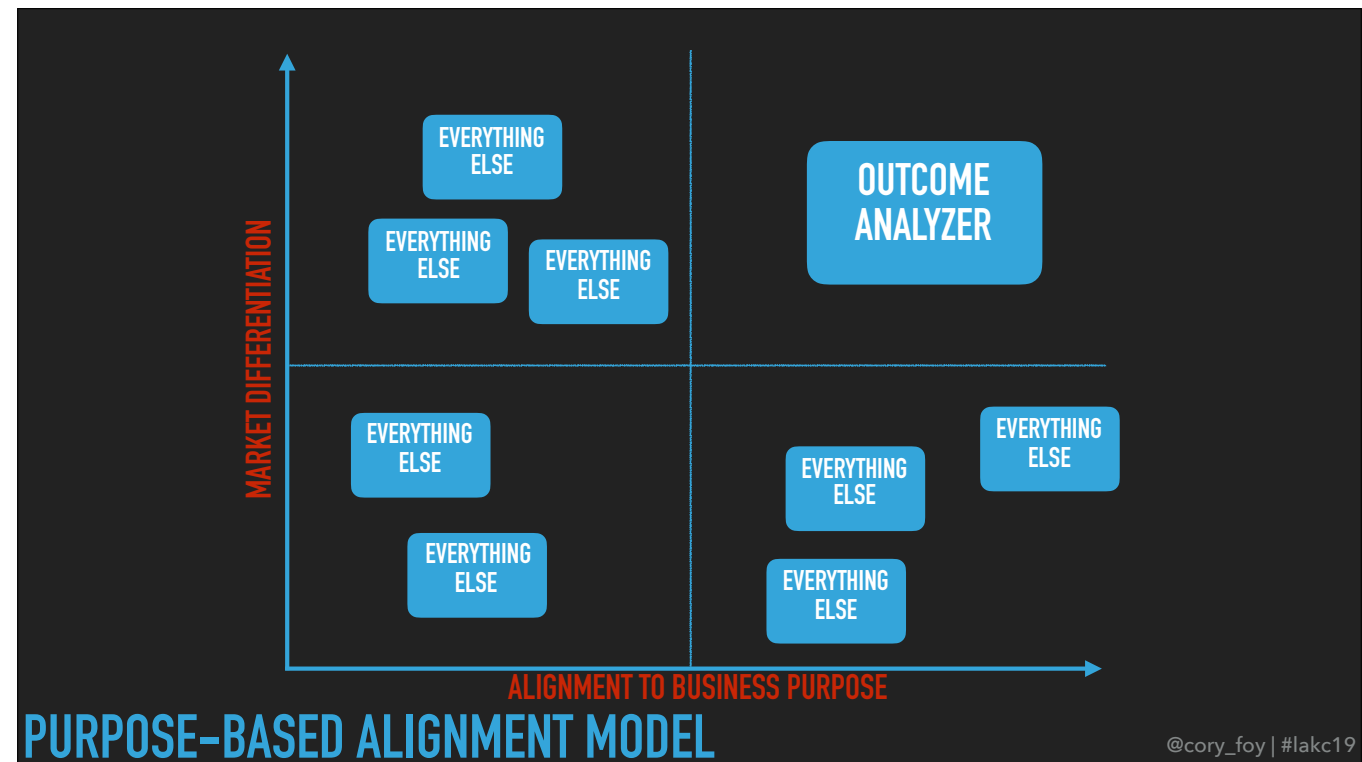
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Cat Swetel has the idea of looking at how the rest of your industry is treating a component, then being conspicuous about how you're treating it. If it differs, you better have a good reason for that!



With a map in place, we can look at the area we can attack. Note I'm explicitly not saying we can look at "how" we attack or "why" we attack - yet. We're looking at the landscape to see what possible movements there are. What we're looking for are components ready for evolution towards commoditization, or commoditized components we can leverage to solve new user needs by assembling them in innovative ways.

In our current map, the area most primed for this movement is around outcome analysis. What does that mean for MedCo, exactly? The first thing is that if we're moving from Genesis towards Product, we're going to have a lot of iteration and innovation we'll have to work through, so we'll need high agility methods. But the other thing we want to communicate is the context for our work - our Commander's Intent - that we're making a bet towards improving this as an important investment for the future of the company. I can actually use a quadrant model

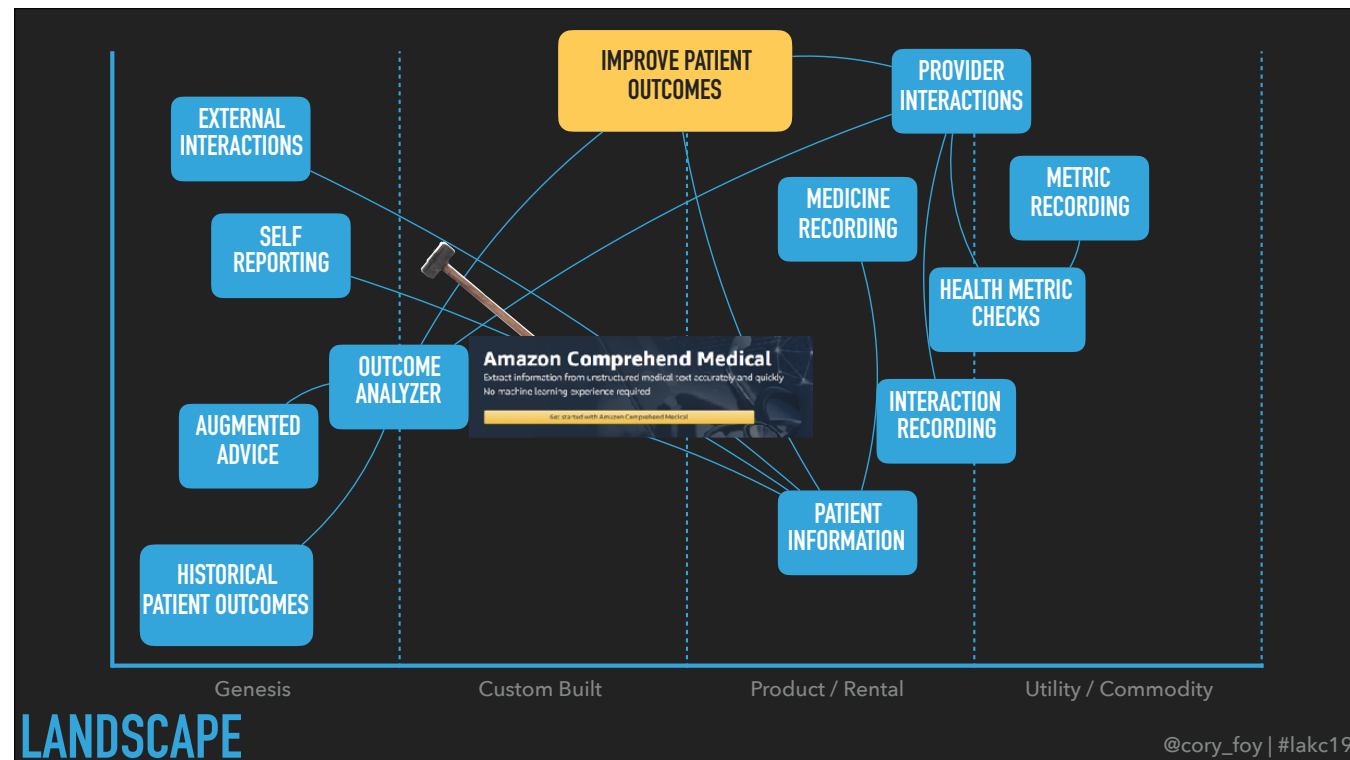


like the Purpose-Based Alignment Model and show that outcome analysis would be in the upper right, which as we know means "good" or "important" and our other stuff wouldn't be, which as we know means "not important". But when we switched to this, we lost all of the context around the landscape and movement. So we can tell people it's important for us to "make progress" on Outcome Analyzer, but really this is just a place for us to attack in our landscape. We need more information for teams to be able to act on it.

| Category | Climate Patterns (Rules of the game. Patterns that are applied across contexts regardless of user choice) | | | |
|-------------|---|---|--|---|
| Components | Everything evolves through supply and demand competition | Rates of evolution can vary by ecosystem (e.g. consumer vs industrial) | Characteristics change as components evolve (Salomon & Stokey) | So choice over evolution (Not Deced) |
| | no single method fits all (e.g. in development or prototyping) | components can co-evolve (e.g. printing with software) | Evolution consists of multiple waves of diffusion with many checks. | Commoditization vs Centralization |
| Efficiency | higher order systems create new sources of value | efficiency does not mean a reduced spent (Jensen's Paradox) | Capital flows to new areas of value | creative destruction (Joseph A Schumpeter) |
| | future value is inversely proportional to the uncertainty we have over it. | Evolution to higher order systems results in increasing local order and energy consumption | | |
| Speed | Efficiency enables innovation | Isolation of communication mechanisms can increase the speed of evolution overall and the diffusion of a single example of change | increased stability of lower order systems increases ability & speed of re-combination | Change is not always linear (discontinuous & exponential change exists) |
| | Shifts from product to utility tend to demonstrate a punctuated equilibrium | | | |
| Inertia | Success breeds inertia | Inertia can kill an organisation | Inertia increases the more successful the past model is | |
| Competition | Competitors actions will change the game | most competitors have poor situational awareness | | |
| Prediction | Not everything is random (physics vs biology) | Economy has cycles (peace, war and wonder) | two different forms of disruption (predictable vs non-predictable) | A "war" (point of industrialisation) causes organisations to evolve |
| | You cannot measure evolution over time or adoption, you need to embrace uncertainty. | The less evolved something is the more uncertain it becomes | | |

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Another part of that information is climatic patterns. These are patterns applied across contexts. For example, three key patterns we probably care about here are "Higher order systems create new sources of value", "Efficiency enables innovation", and "Success breeds inertia". Oh, and one more: "Competitors actions will change the game"



Because if we look at our landscape, Amazon's ACM announcement changed the game. They are attacking the one place in the landscape we identified as the highest value area for us to attack. MedCo's CTO's response came from a place of inertia. If we didn't identify that area and attack it early on, then we're behind the game on it with this announcement. This doesn't mean that we're dead in the water, but we're going to have to be able to make significant movements - rapidly.

Let's stop here for a second and look at the difference in what we've learned over the past 10 minutes. MedCo was a successful company, and when Amazon announced ACM MedCo used story telling to weave a narrative where the possibility of failure wasn't in the story at all, or was a very minor character. The CTO had no instructor to keep him from chucking that Halligan Bar through the window, and though he didn't fall through it immediately, when the team came back to it they went right through the window to their demise.

But by stepping back and mapping out our landscape, our user needs, our component evolution, we have a much clearer picture of the risks from the announcement. We also have the tools to explore new options in our landscape in a way that stories by themselves may not open up. And if those risks and options are unsurmountable, we can find a way to get ourselves in good order for a decent sale, rather than waiting until all our customers go away.

But a sale isn't where we're at, because we have at least one area of attack. We have a "where". And we have some climatic patterns influencing us. But now we need to evaluate some "how's" to see what those options look like.

| Category | Gameplay (context specific patterns that users can apply) | | | |
|-----------------------|---|-----------------------------|--------------------------------|--|
| Over Perceives | Expansion | Resisting | Creating artificial crisis | Confusion of status |
| | Brand and marketing | Fear, uncertainty and doubt | Artificial competition | Lobbying / counterplay |
| Accelerators | Market establishment | Open approaches | Exploiting network effects | Co-operation |
| | Industrial policy | | | |
| De-escalator moves | Exploiting neutralism | IPR | Monopolising constraints | |
| Dealing with toxicity | Big is a pole | Disposal of liability | Sweat and dump | Refactoring |
| Market | Differentiation | Pricing policy | Buyer / supplier power | Harvesting |
| | Standard game | Two men standing | Global disturbance | Trading |
| Defensive | Threat acquisition | Raising barriers to entry | Hypercompetition | Defensive regulation |
| | Limitation of competition | Managing inertia | | |
| Attacking | Directed investment | Experimentation | Denial of gravity | Uncovering bottlenecks to entry |
| | Paul's mode | Power to lower barriers | Playing both sides | |
| Strategies | Alliances | Co-creation | Generating engines (R&D) | Cover and most |
| | Two factor markets | Co-opting and intercession | Shrink and extend | Channel conditions & disintermediation |
| Competitor | Ambush | Fragmentation play | Reinforcing competitor inertia | Clipping |
| | Misdirection | Restriction of movement | Talent raid | |
| Additional | Land grab | First mover | Fast follower | Weak signal / horizon |
| Police | Licensing play | Insertion | Designed to fail | @cory_foy #lakc19 |

Simon Wardley lists 63 different gameplays across 11 categories. An important aspect of Gameplays is that they are context specific - for example, when we were trying to find the bodies of water earlier, running a pump and a hose from those ponds to here requires a large pump, an appropriate sized hose, and the capability of shutting down the road we're crossing. So like our information at the beginning of the session, these have potential, but require context.

POTENTIAL GAMEPLAYS

- ▶ Education
- ▶ Brand + Marketing
- ▶ Network Effects
- ▶ Exploit Constraints
- ▶ Limitations of Competitors
- ▶ Disposal of Liability
- ▶ Differentiation
- ▶ Pricing Policy
- ▶ Center of Gravity
- ▶ Fool's Mate
- ▶ Alliances
- ▶ Innovation-Leverage-Commoditize
- ▶ Embrace + Extend
- ▶ Reinforce Competitor Inertia
- ▶ Restriction of Movement
- ▶ Bundling
- ▶ Standards Play
- ▶ Land Grab
- ▶ Ecosystem
- ▶ License Play

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Taking the context from our current landscape and the awareness of our situation, the following is a list of 20 possible gameplays MedCo could start with. This is a similar list to ones I've brought before executive teams on mitigating a significant existential threat like MedCo's to their businesses. But even with context and landscape, not all of these gameplays are viable, because we need another input

| Category | Wardley's Doctrine (universally useful patterns that a team can apply regardless of context) | | | |
|---------------|--|--|---|--|
| Communication | Be transparent (a bias towards open) | Focus on high situational awareness (anticipate what is being considered) | Use a common language (necessity for collaboration) | Challenge assumptions (ask up and question) |
| Development | Know your users (e.g. customers, shareholders, regulators, staff) | Focus on user needs | Think fast, inexpensive, incremental and frequent (aka, formerly agile) | Remove waste and duplication |
| | Use appropriate methods (e.g. agile or lean or not) | Focus on the outcome not a method (e.g. water based development) | No perfection (it doesn't matter if the cat is black or white as long as it catches mice) | Use standards where appropriate |
| | Use appropriate tools (e.g. marketing, financial models) | | | |
| Operation | Reduce entropy (free, steadily eliminate political entropy, promote transparency) | Reduce time (remove bottlenecks) | Think small (as in know the details) | Prioritize known over efficiency |
| | Do better with less (continuous improvement) | Set exceptional standards (great is just not good enough) | Manage failure | |
| Alignment | Provide purpose, mastery & autonomy | Think small (as in teams, "two pizzas") | Distribute power and decision making | Think epochs and attitudes |
| | Design for constant evolution | There is no one culture (e.g. pioneers, settlers and now pioneers) | Ask the best | |
| Learning | Use a systematic mechanism of learning (a bias towards data) | A bias towards action (focus on shaping the story) | A bias towards the new (be curious, take appropriate risks) | Embed in your ecosystem (acts as future strategy engine) |
| Leading | No one owns (take responsibility) | Move fast (an imperfect plan survives better to achieve than a perfect plan executed tomorrow) | Take big (inspire others, provide direction) | Strategy is iterative not linear (can change again) |
| | Strategy is complex (there will be uncertainty) | Commit to the direction, be adaptive along the path (pursuing the river by feeling the stones) | There is no core (everything is transient) | Be humble (listen, be willing, have fortitude) |
| | Exploit the landscape | | | @cory_foy #lakc19 |

- Doctrine. These are universally useful patterns we can apply, and certain gameplays require a higher level of doctrine application. For example, the baseline mapping requires the doctrine of knowing our users. But the notion of taking on something in Genesis requires having high levels of agility, so we need to be able use appropriate methods. You should all have a copy of this, and if you notice the color chart, it's a cheat sheet Simon Wardley created to give you a handy way of evaluating your organization's doctrine, just by coloring some boxes.

So out of the 20 or so gameplays, there are several I'd have MedCo focus on based on their current landscape and doctrine.

SUGGESTED GAMEPLAYS

UNDERLYING NEED: HIGH AGILITY OPERATING MODEL

CENTER OF GRAVITY

Why do customers love us? How can we reinforce that - or find where they don't and make sure they're not easily exploitable?

DIFFERENTIATION

What are the things that set us apart from our competitors? Are there ways to slow the pace of competitors closing the gaps on these?

RESTRICTION OF MOVEMENT

How can we make it hard for customers to move - either through restrictions, or because the value of our platform is so great?

EXPLOITING CONSTRAINTS AND LIMITATIONS

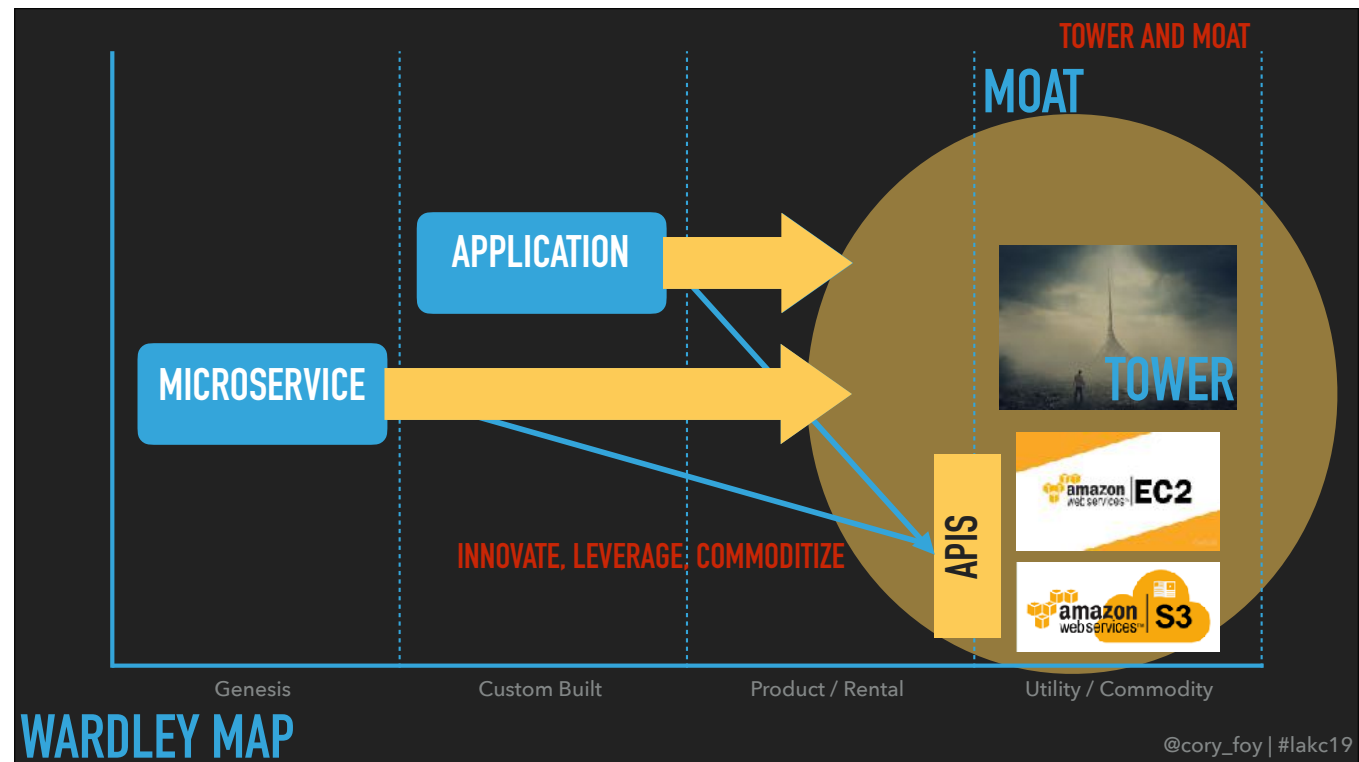
Why do customers love our competitor? Why would they move? Can we exploit weaknesses and limitations our competitors have?

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From an Operating Model perspective they are going to need high agility. So we need to examine the current organization to understand the way people are incentivized to understand whether agility can take root in a way they'll need - specifically around risk/reward tradeoffs and short cycles.

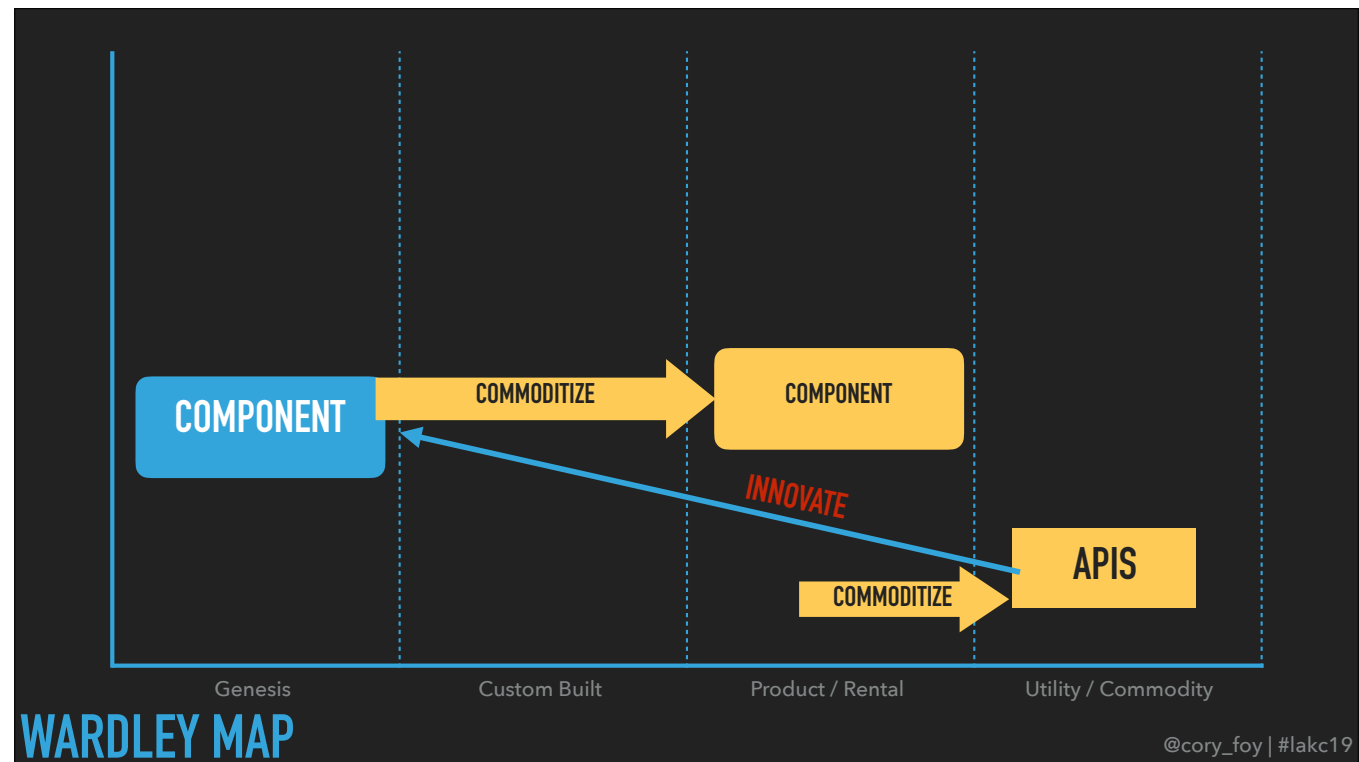
They have a lot of components in a Product / Utility phase which probably covers a large chunk of their existing business. So they're going to need to make a Center of Gravity play - in short, understanding why customers love and support them and bringing that front and center. Along side that, looking at reasons people don't love them, and seeing if they are things that could be exploited easily by a competitor.

A Differentiation gameplay is critical, but not the key gameplay. We obviously need a clear understanding of the differentiators and how we can leverage them, but for someone like Amazon, they can close those gaps quickly.

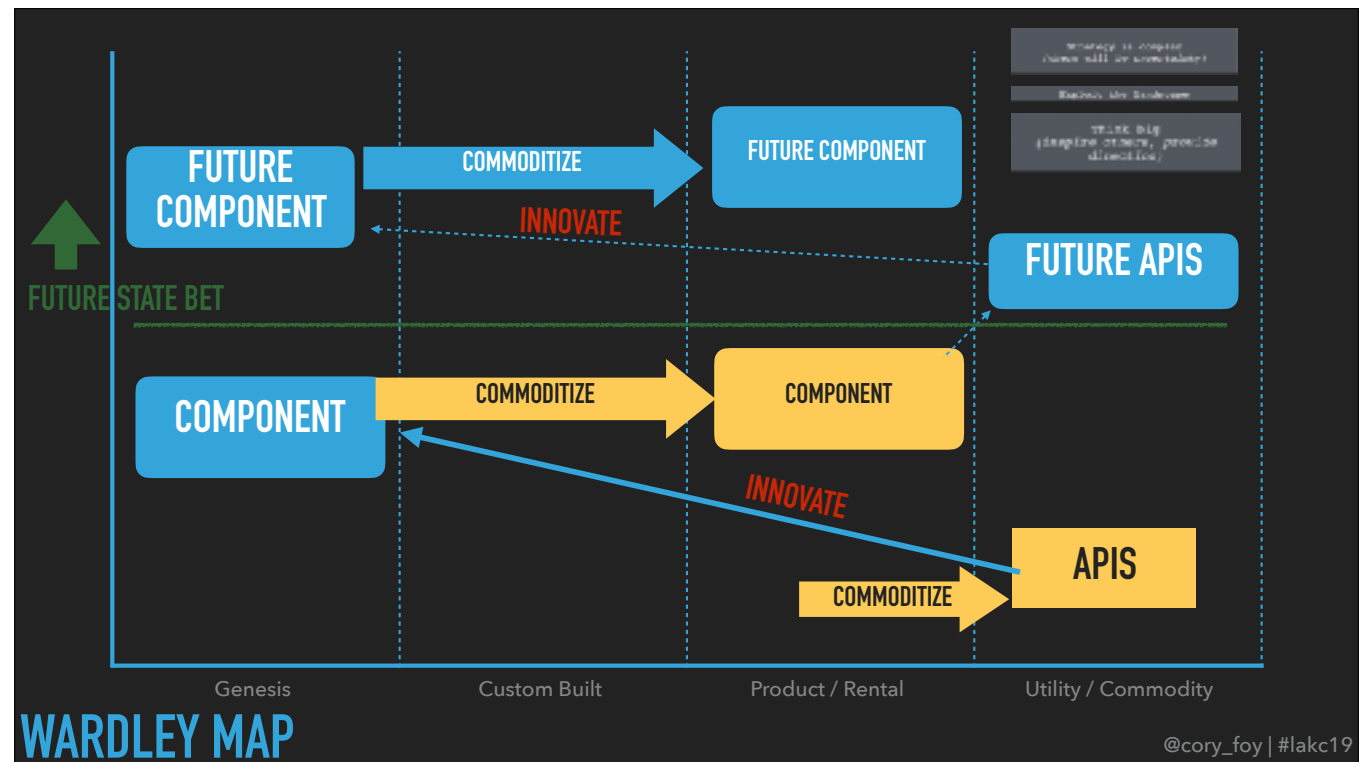


We're competing against a partner, one whose APIs we'll be using to build this competitive response! Because of this, we're still in danger due to their ILC / Tower and Moat play. As a recap, that's the danger that they can use APIs as sensing engines to see how the market is responding, and then commoditize the innovations coming out of it, oftentimes at a reduced cost or even no cost.

Now, we could choose not to counter this. We may have a niche market that is very profitable, and they're not going to be able to play in it as easily or within a time span we care about. But let's assume that we want to compete - we don't want to just survive, but thrive and grow. We want our space back!

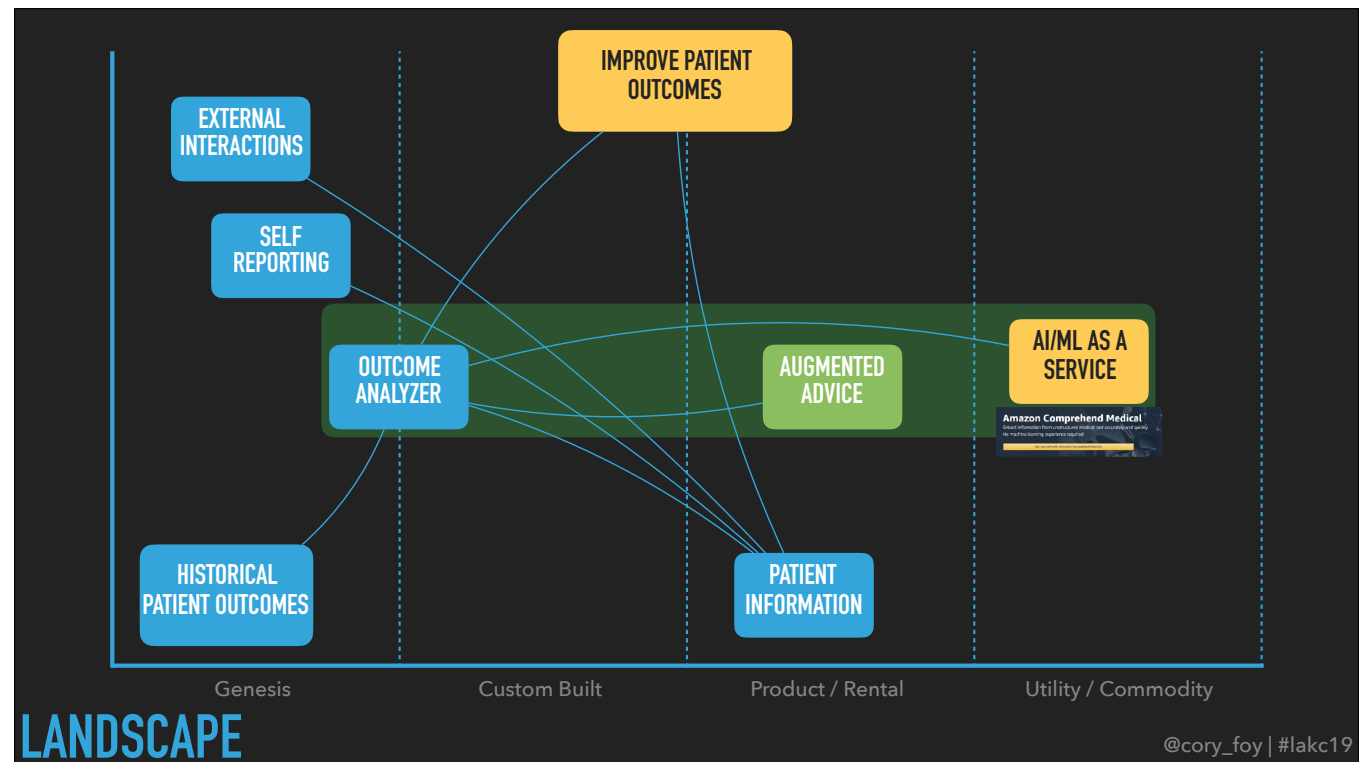


So if we do want to compete, then we can leverage the fact that the weakness to Tower and Moat built on ILC is that the ILC play works at the next higher order of components. Meaning - it relies on the innovations being built off of commoditized downstream components they own, and then getting data from that to commoditize one level up.

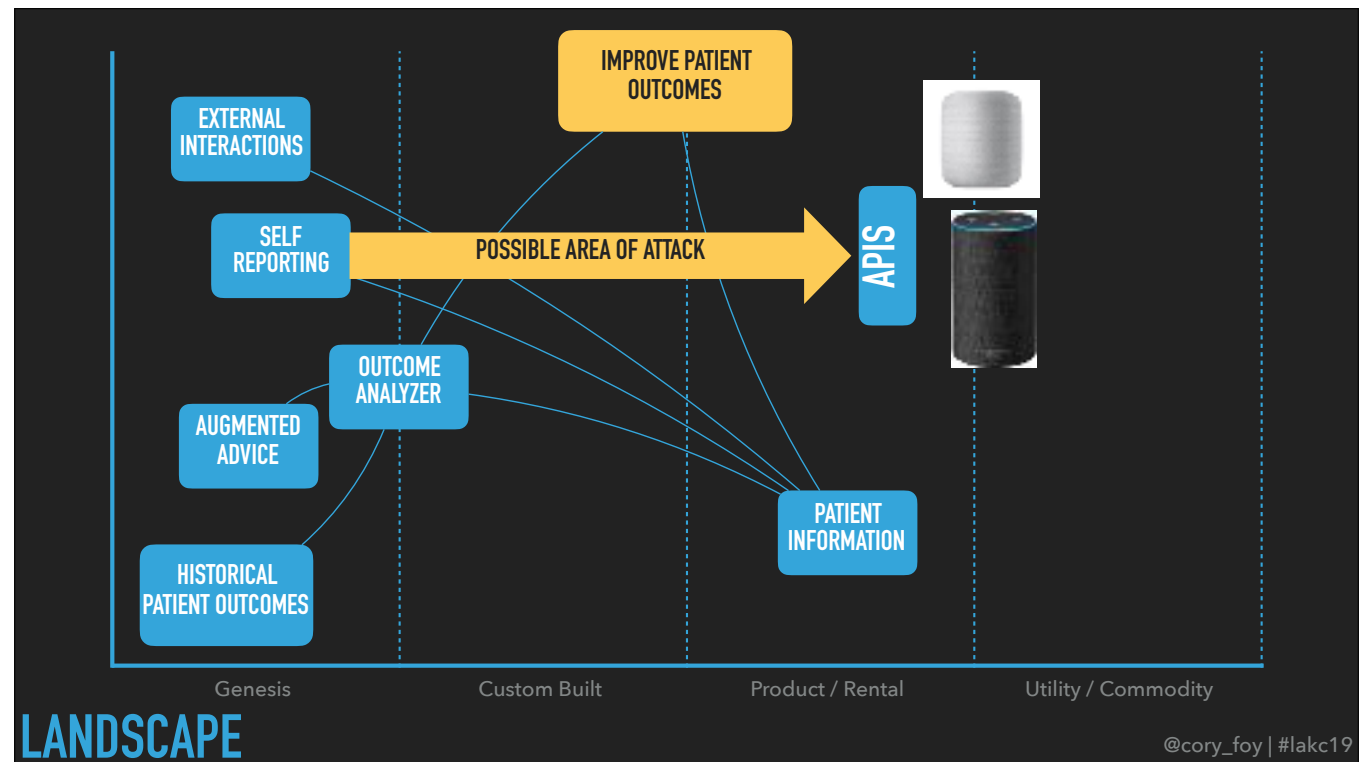


Because of that we have one more gameplay we can leverage - and that's the First Mover advantage of building our own ILC play. To do that, we'll have to make some innovative bets - some gambles based on the future state of the landscape that require working two or three moves ahead. This means embracing uncertainty and thinking big to exploit the landscape.

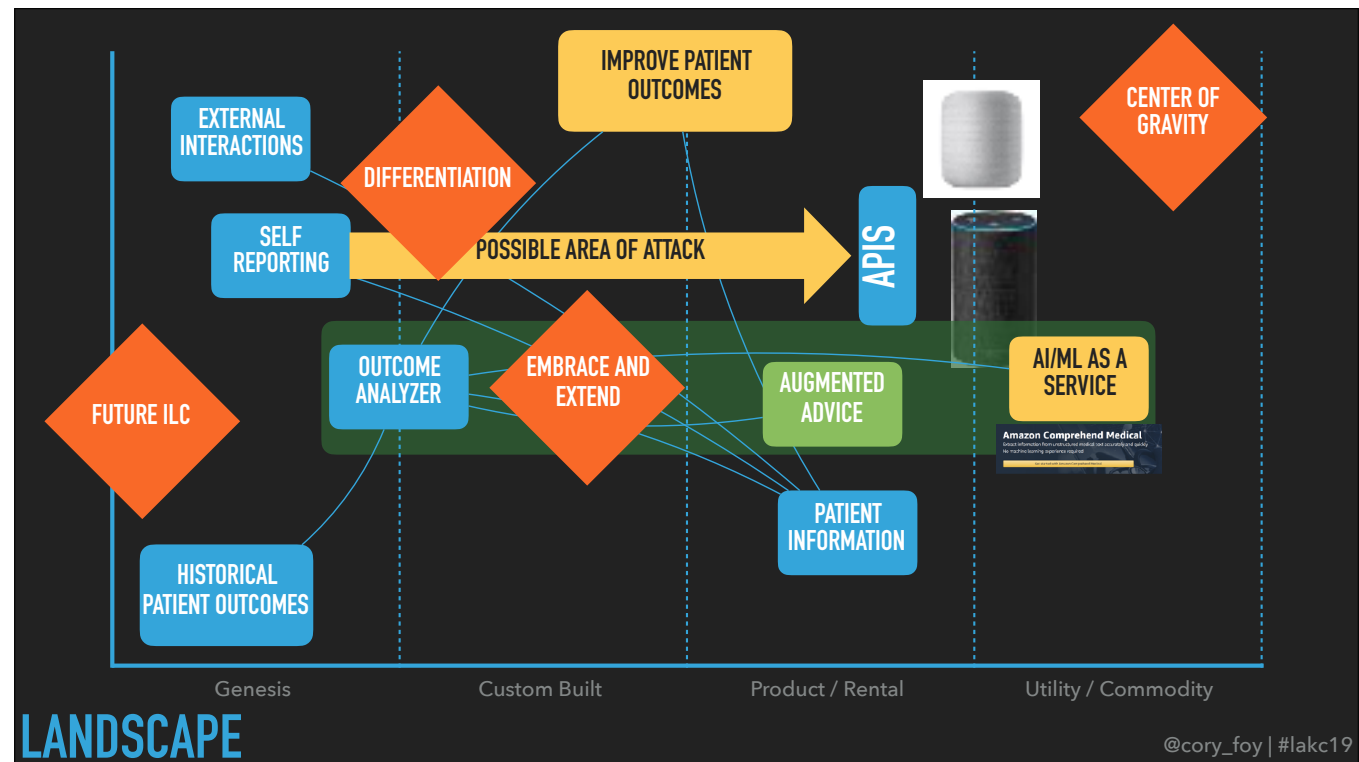
For example, if we're working under the assumption that components will evolve, and that as components get commoditized they can create new sources of value, we can look across our landscape for genesis or custom built movement towards productization. We know that the analysis engine itself will move towards utility, so we can look at what the landscape would look like there.



One option would be an embrace and extend. We take the AI as a Service Amazon is offering, embrace it, and then extend it with our own analysis, outcomes and data you only get by using their engine through us. Now we control the data feed coming in and can use it as a sensing engine for higher order innovation.



Another option would be to embrace outside data. AI is only as good as the information - and biases - built in to it. Patient outcomes - since that's our goal - are as much contingent on early and accurate diagnosis as they are patients actually following through with the information. But high quality data outside of the clinic or hospital is typically difficult to capture, and if we look at our landscape there's a clear gap in capturing that information outside of Genesis. So we could invest in building systems that allow patients to report on their out-of-care regimens, even reminding them to take their medicines, or measuring aspects of the household (air monitoring for COPD patients looking for smoke). This opens up a new market that Amazon is not in - though with their other acquisitions could be, which is a risk we'll need to take into account. But by exposing APIs for this information, other people can innovate on top of them, giving us the data advantage.



So let's look at where we are. We've taken off the blindfold and found a landscape where a lot of our current investments are in commoditized products. Our key strategic plays are in areas that our partner - and deep pocketed competitor - has now announced their own play in. However, we see a two-pronged gameplay that we can succeed with - the first in shoring up and highlighting the thing customers love us for, and the second in investing in some long-term, but risky, gameplays to break out of the tower and moat play we've found ourselves in the middle of.

In short, we've found the sledgehammer before it got us. Or, at least, we've found the person carrying the sledgehammer and are doing our best to not just point it out, but take proactive action.

So now we have to execute this play. And if you thought figuring out the play was a lot of work, do I have a good last story for you.



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One of the trickiest things about a house fire was all of the things you had to think about immediately and all at once. On the way you have to look at ingress and egress, prefire plans, water sources, and locations of incoming apparatus. Arriving on scene you have to rapidly evaluate the situation and then make one of the most critical calls - passing or taking command.

Taking command was generally an easy choice. It meant that the fire was large enough that any immediate action you took wasn't going to have a significant impact. So you'd set up command - not that you wouldn't do anything, you would start getting hoses laid, but also figuring out the attack strategy for the incoming units.



But passing command? That meant that you could have an impact, now. Or that someone was trapped. Or possibly trapped. And now you have lots of decisions to make, but also some givens. You and your partner are going in, on air, and with a hose. But where and how? And what are you going to do when you get in there?

If you're rescuing someone, you might want to knock the fire down just enough to execute a rapid search. Knock it down too much and you get huge amounts of steam - which not only reduces visibility, but can kill someone. Attack the fire from the wrong direction and you risk spreading it into the unburned portions of the house, possibly trapping people there.

But with all of those risks, we had a set of principles we executed with. Personal Safety, Life Safety, Property Safety. Know people are scared, and might hide in strange places. Try to reduce the amount of water damage. Try to save pictures and other memorabilia. And constantly know the conditions and the exit strategy.

[illegible]

When an organization switches to Acting on their strategy, they don't get a perfect start any more than we did. You don't get to sit everyone down and say, "OK, we're starting fresh! Team A, you build this, Team B, you build that, and we'll combine them all and conquer this market!". Instead, you typically have lots of plans already in progress. You have maintenance work, and technical debt, and improvements. You have teams structured to go after scaling and operationalizing components, not rapidly iterating.

So, like a fire captain arriving to a house fire, you need to do a

SCENE SIZE UP

- ▶ Capacity to Deliver?

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scene size up. I won't go into the in-depth assessment model I use - which I'm happy to share with anyone who wants to talk about it over the next two days - but we can look at a rapid assessment.

First, what's our capacity to deliver? There are many ways to do this, but effectively how much time do we spend across maintenance, escalations and feature work? I typically have teams use story points for everything - they can even post size! That tends to be something people can easily grasp, although I've also employed cycle time metrics equally as well.

SCENE SIZE UP

- ▶ Capacity to Deliver?
- ▶ Measures of Successful Execution of Gameplay?

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Second, what levers will we use to measure successful execution of gameplays? From a Lean Thinking perspective, it's not enough to just ship something - we should be able to measure the expected impact of it. When we're in a battle, we need a way to know whether we're making progress.

SCENE SIZE UP

- ▶ Capacity to Deliver?
- ▶ Measures of Successful Execution of Gameplay?
- ▶ Current Portfolio?

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Third, what's our current portfolio look like? Here I want to know the expected impact of the items in-flight, the size of them, and what - if any - projections we have about completion. We also want to look at whether there are increments inside of the items we can achieve if we need to cut it off sooner.

SCENE SIZE UP

- ▶ Capacity to Deliver?
- ▶ Measures of Successful Execution of Gameplay?
- ▶ Current Portfolio?
- ▶ Sequence of Work to Succeed?

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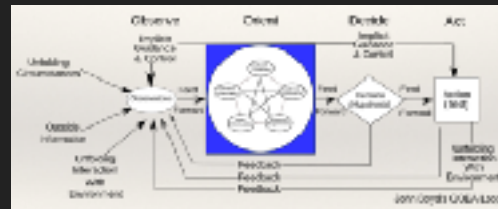


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Finally, what's the sequence of the work we need to do to succeed with what our gameplays look like? I prefer the term sequencing over prioritization, because we may sequence lower priority work sooner for a variety of reasons, not least that we have the capacity to service the lower priority work, but not the higher priority work due to skills gap imbalances.

SCENE SIZE UP

- ▶ Capacity to Deliver?
- ▶ Measures of Successful Execution of Gameplay?
- ▶ Current Portfolio?
- ▶ Sequence of Work to Succeed?



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From here, we execute on our plan. There are lots of ways of balancing this - OKRs can be effective, but incremental portfolio management is my preferred strategy. But regardless we need to remember the principles of <name> and our Sledgehammer - use cycles to Observe, Orient, Decide and Act.



With their new found strategy, MedCo was able to successfully respond to the market threat. It wasn't all roses - Amazon's launch cut a chunk of customers who wanted both the benefits of the platform as well as the ability to centralize their costs. But MedCo's compelling vision for competing allowed them to close a pretty sizable Series E which they invested in building out an upgraded analytics engine capable of sourcing information across providers, and launched a suite of innovative in-home medical assistant devices built on top of smart speakers and sensors that helped their customers - and their patients - find more effective ways to follow their treatment plans and watch for other ways to improve.



As for us? After 4 hours in the woods successfully tending to our patients our instructors - who had been hiding out in camouflage - emerged from the woods and gave us the all clear to evacuate our patients. We packed up our equipment and made the trek back to the parking lot and headed back to our campsites for a well-deserved rest - so we could come back the next day and face the real test of our written finals. But that's just how it goes sometimes when you jump in to rapidly evolving situations.

KEY TAKEAWAYS

START WITH PURPOSE

GAIN SITUATIONAL AWARENESS FROM YOUR LANDSCAPE

UNDERSTAND THE CLIMATE AND YOUR DOCTRINE

FORMULATE HYPOTHESES

LEAD THE ACTION

CONTINUE THE LOOP – ALWAYS BE OBSERVING AND ORIENTING

Wardley Maps Wiki: http://wardleypedia.org/mediawiki/index.php/Main_Page

Mapping Mondays: <https://blog.coryfoy.com/mapping-mondays>

Simon's Book (WIP): <https://medium.com/wardleymaps>

Contact Info: foyc@coryfoy.com

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I hope you enjoyed the talk - here's a summary of the key points you can hopefully take back to your organizations, as well as some links to learn more about Wardley Mapping. You also have in your seats a physical Wardley Map my friend Ben Mosior created for his Learn Wardley Mapping dot com course, as well as Climate, Gameplay and Doctrine sheet's. For the Doctrine sheet Simon Wardley suggested taking a stab at filling in for your organization. And if anyone has any questions, I'll be hanging around here for a bit, and will be at the conference the next two days. Thank you for your time and enjoy the rest of the conference!