All right. So we're in Chapter 3: The Era of the AI Chatbots.

Where we are, that's where we are today. So we understand what a chatbot is. You know that it's just a piece of code that wants to mimic a human interaction in a conversation. We know the history of chatbots. You know they started in 1966. We've gone basically where it started to where it's at. So we have a good idea of where we are in the world of chatbot, right?

They imitate but they don't understand this directly from Claude, which is a chatbot. So something that you have to understand about chatbots which is the most critical component right now is because we don't have a general AI and we have a specific AI, that means we don't actually have anything that understands any of the words that you're saying.

It just understands the statistical probability of the next word that would solve the problem for you. So it's not like you're actually having a conversation with something that understands the conversation. Not like that at all. What it is is it's a math program where you say X plus Y and it solves, right?

Y equals MX plus B and you give it Y and it knows MX plus B. So it's just a math program that actually mimics but it isn't there. Okay? It's critical to understand that. There's nothing there. There's no human-type consciousness within this AI. It's just a math problem. Don't refer to it as a thing because it's not a thing.

It's trying to confirm that this thing has consciousness is the problem that a lot of people are going to run into once they start interacting AI and chatbots. Understand that this is not a thing. This doesn't exist. It doesn't have any sort of relevance whatsoever. So, where we are right now is the most complicated math program that's ever really ever existed so it almost can fool you. Don't get fooled.

So where are we at? So chatbots like Siri and Alexa can basically handle open-ended conversations on any topic. They've been trained on quadrillions worth of text. You know, one to fifteen zeros. So when you say, "Hey Siri or hey Google or hey Alexa or whatever that is, that listening and then turning that into text and then going and using nearest neighbors and using natural language processing to go and figure out what it is that you're saying and then respond back. That is basically the pinnacle of AI right now that we have.

It just would amaze somebody in the nineties or in the early two thousands. Just hand them the phone and allow them to converse with GPT or with Siri. Basically, it's almost as close as you can get to conversing directly with the computer, but you're not actually conversing. So it's really critical to understand that.

When you say, "Hey, Siri," what it's doing is it's listening for whatever words you give it. And then it's solving the math problem of the statistical probability of the words that come after the words that you ask.

So if you say, "What is the capital of Paris?" statistical probability is France. It doesn't know what Paris or France is. It doesn't understand countries. It doesn't understand words. It just knows over the quadrillion training. Anytime somebody said, "What's the capital of France?" It's Paris. So it just solves that. It doesn't actually know anything.

So that's the critical thing to understand and to move forward with is, yes, it actually can answer the question for you. And because it seems like it knows things, it's easy to put anthropomorphize this thing and to put like a soul into it. Doesn't have that. It's not a human. It doesn't have any sort of cognizant understanding of what it is. It just has a statistical probability of the next words in order.

The most critical thing for you to understand about chatbots is that even the most complex GPT4 is just a math program. There's nothing there that actually has any sort of awareness in any way. So even though they have a whole level of conversational competence that we never had in the past, and we have these AI-driven chatbots that allow you for novel and for disparate interfaces, it doesn't know anything. It doesn't reference anything. It doesn't have knowledge the same way that a human would.

So don't get confused when you start talking to the GPT or start talking to Bard and it starts giving you information that you can easily think, "Hey, this thing knows things." It knows nothing. It doesn't create. It only replicates. It's critical that you understand that AI doesn't create. The only thing it does is replicate and iterate on what it already has known. It has no ability to change or make something outside what it's already trained.

So even if it's completely wrong, objectively, it doesn't matter if it's trained on that. If it trains a penguin can't fly, it knows a penguin can't fly. If you ask it if a penguin can fly, it says "No." If you train it that a penguin can fly and you ask it if a penguin can fly, it says "Yes." Because it doesn't know what a penguin is. It doesn't know what flying is. It doesn't know any of this.

The critical component is to understand that it doesn't have context. It doesn't have any sort of knowledge whatsoever. Okay. So even though Siri seems like she understands you, there's no she. It's nothing. It's words that are solving a problem.

So play this back as many times as you need to before you really understand this. That it's not a thing. It doesn't exist. It doesn't have any sort of output other than a statistical probability of analysis even though it seems completely different. It seems like there's something there and as much as you can give it, it'll give back to you. Don't get caught in that trap. Don't get caught in the trap of this is a thing. It's not. There's nothing there.

Critically important that you understand that, as important that you get the CEO on board with being AI-driven, is you understand that the thing that you're driving is not a thing. It is literally just a math equation and another tool that you're using in the toolbox.

So if you think it has answers, it doesn't. There's no answers because it doesn't understand questions. It only knows statistical probability of the words that is going to come after based upon what you've given it. Supercritical you understand that.

Future of chatbots. What are they? What are we doing? Where are we at? So basically at the end of the day, what's going to happen is you're going to start having more inputs. Just like we learned before, inputs, transformation, outputs. A chatbot is a transformation system. You give it an input, it transforms that input and gives you an output.

You're going to have things like YouTube input. You're going to be able to have the chatbot watch a video and then come back and tell you what that video is about. Or it's going to allow you to create videos with the chatbot by talking to it. You're going to have social media like Facebook. You're going to have individual bots for each individual person. And I think eventually what will happen here is you'll have assistance that will allow you to converse and post real-time on social that will go and find other people.

And basically you'll have like assisted-bots that will go through and handshake and find people that are like you. Your bots will talk first and then they'll introduce you.

Twitter, same type of thing. You're reading and disseminating information, making sure that the people that you're talking to are real people. You're going to have bots that are going to be as real as a human going through and creating content for brands. That's just an AI.

Telephony. So right now you kind of have the ability to do automation with Google or slightly with Apple, but mostly with Google. So you can have it listen for phone trees. You can have it listen while it's on hold. You can have it call you back when the person comes back on the line.Basically the days of phone trees and having to go through and hit zero or one or five, that's over. And that's all through these chatbots. It's built in Google.

Again things like LinkedIn. Now LinkedIn is a little bit different than other socials because this is actually you. So your chatbot has to have your voice and it has to be in your timber and tone because this is in LinkedIn. It's basically the last bastion of actually verified human identity.

So you can't just post willy nilly with chatbots. It doesn't work right now. So eventually what's going to happen is you're going to be able to train your chatbot and it's going to be able to go and post for you. Comments, curation, web conversations, all this stuff is just going to be with the bot. User research. It's going to send out surveys. And going to get those surveys back. Going to be able to actually go and make recommendations on your business based upon those surveys, based upon those inputs. It's going to be able to transform all things because you're going to be able to feed it all things.

So what did we learn here? We learned that we are in the era of AI chatbots. We understood that an AI, as we know is a very narrow AI. It is not a thing. It is only a math equation. It is solving for the right hand side of the left hand equation. It doesn't actually create anything. It only actually imitates.

So it takes everything that it was trained. And it looks at the statistical probability of the words that will solve the problem that you're giving it. No matter what, if it's trained on bad data, it's going to give you bad data. It doesn't understand anything.

Then we looked at the future of chatbots, and that's going to be more inputs, basically. You're going to allow it to be sending in YouTube, LinkedIn, Twitter, Meta, all of these different inputs to the chatbot, which then will allow you to actually real-time talk with everyone in your social media. Will allow you to post into your social media. Basically, your chatbot is looking into like a social media system. So, we're in this era right now. All of these things are being built. This isn't the future. This is right now.

In the immediate future, you're just going to start adding in all kinds of inputs, and you're going to be able to get outputs out. So, for instance, you're going to be able to give the chatbot a Facebook post. And it's going to go and disseminate that Facebook post to all the other social networks but it's going to be in your voice because it's your robot that you trained.

Again, the most critical thing takeaway from this lesson is that the AI is not a thing. It doesn't have a soul. It literally is a math equation. So if you look at it that way, you can understand how to manipulate your inputs to get your outputs. Chatbot is nothing but a statistical probability to determine the next words in line.

Next, we're going to look at real world examples of how people are using chatbots in the real world. We're going to take a look at the technologies and the ideas behind them. And then we're going to look at the ethical and moral complications that are coming with chatbots. And then we will look at the future of chatbots beyond this era of AI.

Hopefully you enjoyed this so far, learning so much and we'll see you in the next one.