Paul: Let me start with you, Todd. Now Todd, you are the CEO of Mindgrub, a digital experience agency. You do a lot of really interesting work in the digital space. My first question I'm going to direct to you. How is generative AI impacting the digital user experience now? How do you see that evolving in the near future?

Todd: AI, in general, is impacting what we do in a number of ways. I actually equated to throwing Jimmies on an ice cream cone, and that AI is used all over the place from recommendation of engines to chat bots to generative content. Where the biggest disruptions are is in the places where organizations will generate a lot of content. Marketing teams, for instance, we're seeing a lot of marketing teams displaced.

We've seen the whole companies take 100-plus person marketing teams, and largely replace them with AI generated content, and then retool them for higher and better use cases of their time. We also see organizations, they have to produce the number of RFPs and proposals, which is largely a human manual effort with a lot of human capital, that is also getting displaced with AI to at least produce a draft. I think human intervention is needed in anything AI produces, but it can have a lot of time savings these days.

Paul: Now, that's really interesting. I think we're going to unpack that. Darrell, I'm going to bring you in on this here in a moment or two because I think that with generating the content, while there's a lot of ease and efficacy to generate lots of content, of course, there's a danger in trademarking and intellectual property. Like you said, Todd, you have to make sure that the human is inserted in the process so that a proper caution is in place. Todd, you're the head of a digital experience agency, and you provide creative and technical solutions for your clients, a whole number of clients. How do you see generative AI impacting firms such as yours?

Todd: We use it in a number of places. Our developers right now are basically doing pair programming with AI tools. We use Copilot, which is a Git tool. We also use ChatGPT for producing some draft methods for a larger program that we might be writing. That's really a technical spot that we're using it. Then our marketing team now, unless it has to be original content, I happen to write for *Forbes* and *Fast Company,* and they forbid using AI. I might actually have it clean up a sentence or two, but I originate all the content there because of those copyright issues.

In some cases where we're supporting clients that have large e-commerce websites, and it's a matter of getting as much volume of content out there as possible in a number of different genres, or to different user personas to drive traffic back to the e-commerce site, a lot of that now we're basically setting up automation to produce that content, and deploy it to the internet to drive those links back where that used to be entirely a human capital effort before.

Paul: Then Darrell, like I said, let me bring you in on this. As with other cutting-edge technologies, but sometimes regulation has an uphill battle to keep pace with development. Things just develop so fast that unless you're an AI lawyer, it's probably hard to keep up with that. Can you share how some of the current laws and regulations apply to generative AI?

Darrell: As we know, technology just seems to be moving at a more rapid pace at all times. Yet, the joke is the law moves at a glacial pace. We already rely on laws today to govern internet issues that were past decades before the existence of the internet. The law is always catching up. What's interesting in the AI space, there actually are a number of existing laws that are relevant, and that do apply, and that do technically already regulate elements of AI. A good place to start is actually in the privacy space. The European Union passed its General Data Protection Regulation about five years ago. What's interesting about that law, it deals specifically with personal data elements.

Todd: The interesting thing on that is that ultimately a man doesn't create intellectual property either. It's a combination of lots of ideas. Anybody that comes up with unique idea, they weren't born in the cave independent of every other human, and

look at it still, it looks just like you. If you listen to the audio, it sounds really similar to you. You can tell it's AI though. It's a little chunky. It's not as smooth as the video that we're looking at now.

As that technology improves, you could just insert a script in AI and it'll generate an entire movie for you at a fraction of the cost. Not just the writers, but the actors themselves, the video, the imagery is going to be produced by AI as well. Super interesting and fine.

Paul: I know. I remember, years ago I had talked to somebody at a global organization, and she had been at an AI conference in Beijing, I think it was. This is when Trump was still president of the United States. The conference organizers in Beijing, they had used AI to create a video of Trump speaking in perfect Mandarin or Sichuan to welcome the attendees. It was like, and it begat like this whole conversation because it was so real that it fooled people and it's-

Todd: That was deep fakes. You can't trust anything you see online anymore.

Paul: What David Brin would call the End of Photography as the Proof of Anything. Now, Darrell let me ask you, going back to the regulatory process. It seems like there's got to be a place for the technicians to help us unpack the ramifications of what is being developed because the technology is so cutting edge. In your experience Darrell, how have developers engaged in the regulatory process to date? Do they need to become even more involved? If so, how and why?

Darrell: They have been engaged. I think we've probably all seen some pretty high profile recent engagements. The Open AI, CEO Sam Altman, recently spoke before Congress. Then I think it may have been just last week, the CEO of Microsoft, Brad Smith had also had some press releases and discussions very openly calling for government regulation. It's clear and obviously OpenAI and Microsoft are partners. Microsoft has obviously invested heavily in OpenAI. We're seeing a very similar message from those two organizations. It's clear that they recognize regulation is coming.

It appears as though the game plan is, they should participate in those discussions, and probably help drive them certain directions. I absolutely think they should be engaged. It is interesting that they also appear to be very frankly and openly discussing about their own concerns about the power of these new technologies, and their concern of how they can be abused. Both Mr. Altman and Mr. Smith were calling for at least within the United States, some type of licensing regime for companies, and some type of government regulatory authority that would oversee the licensing.

Again, depending upon the spectrum of how sophisticated the AI tools may be, just more progressive safety standards and testing standards for government regulatory oversight. I think that's only going to continue, Paul. I know that Mr. Altman had also,

I think there was a bit of some interesting comments made during his European remarks that perhaps also somewhat of a warning for EU to not get too aggressive or too prohibitive in innovation and technology developments. More to come on all that.

Paul: That's interesting. I remember I had done some work on messaging around the GDPR, when it was coming out about five years ago. One of the things that had been shared with me is that the European concept or culture around privacy is quite different than the US concept or culture around privacy. For instance, getting notifications from say, an Amazon that it's your birthday, and that they've noticed you bought these other things, and maybe you would enjoy buying these suggested items, in the US, we would see that as a convenience.

In the EU, they would see that as a creepy intrusion. I think there's a bit of a culture clash there. Todd, let me ask you, with all the conversation and buzz around generative AI right now, what is something that seems to be missing from the conversation? What's your perspective that you feel is not getting enough attention right now?

Todd: I think the thing that's not getting enough attention is really for organizations to understand how to use it. A lot of people see ChatGPT, it was the first thing that really got from an early majority or I should say the innovators into the early majority. People started using it, and they think it's amazing, I can write letters and emails and all this. Individually there's a number of tools that we can use, but I think right now what's missing is businesses to figure out what's the change management around AI right now. Everyone realizes it's super powerful, and there's individualized use cases for it like My Developer is using it to help them write code.

At scale, I think businesses aren't realizing how they can leverage AI. For instance, healthcare systems can drastically improve patient outcomes because they have this treasure trove of data right now. If they were to add simple tools to search against that data and put it in the hands of physicians as they're prescribing medicines or treatments, they can drastically change patient outcomes.

Right now, they're probably using it to write their use mails or help their newsletters. They're not quite figuring out how to leverage it at scale in a lot of cases, and that goes for a lot of industries. It really is a matter of really defining those use cases and making it more than just novelty in a lot of cases to harnessing the power that it can provide.

Paul: Darrell, let me pick that up with you. We'll use Jacobs as an example here, and you can speak to what Jacobs is doing from an enterprise. Jacobs as a company is involved in a lot of different industries that has just tons of domain expertise across the globe. It generates a lot of data, and a lot of information, and also has digital solutions tools, and things like that. There's a lot of ingredients in this generative AI discussion that Jacobs can leverage. What I'd be curious to learn as a potential example to other enterprises, what steps and guidance has Jacobs taken to adopt generative AI in its business and to its culture and its values?

Darrell: Exactly to Todd's comment, it was the sudden rise of generative AI interest within our business caused us to just step back and think how could we combine this

new technology with our decades of experience of solving very complex problems. We thought, "Well, this is still very exploratory in so many ways. We still don't know certain legal ramifications." What we did was we came up with a set of guidelines that we've issued broadly across the business. Those guidelines try to come at the various AI issues for all sides.

First and foremost, we maintain obviously, a lot of very proprietary type of information that we've developed internally. We also maintain a lot of proprietary information on behalf of our clients. The number one thing was we just need to make sure we need to protect the confidentiality of any type of proprietary or business-sensitive information. What that means is we've recommended to our employees that at this point, we should not be uploading or in any way sharing that type of information on any type of AI platform that is outside of our control.

That then dovetails into our current efforts to enter into partnering agreements with potential AI developers so that we can bring some of this incredible technology in house, and use it in a way where we can take advantage of the technological offerings that AI has to provide and incredible data analytics in site, but do it in a safe and secure environment that is dedicated within our Jacobs environments. Number one was, again, protecting the information that we hold as a business. Secondly, respecting intellectual property rights. Like we talked about earlier, we wanted to be sensitive and make sure that in no way are we infringing upon the artistic work of other individuals.

For right now, the guideline is that we should not be using any type of generative AI derived from public content to the extent we can determine it is from public content in any type of our client or external work product. Again, we're exploring ways that we can do this once we have a better understanding of the data sets that are being used, and once we have greater control over the technology itself by bringing it

questions that come in. We keep FAQs updated on our internal intranet site poll. That's how we've approached it to date so far.

Paul: Interesting. I think it's going to be interesting to see how we culturally walk this path with generative AI in terms of the creative arts or that creativity. Even like an engineering or a company that was predominantly an engineering firm has moved into the digital space. There's a lot of different stuff, but highly technical enterprise like Jacobs, there's a lot of creative thinking that goes in, a lot of creative content that's generated. It's going to be interesting to see how a tool like this impacts whether or not people--

I'm just curious, this is just me idly wondering if people will get creatively lazy, where it's like we have this super power, super brain that's super creative, and is able to access all this content to pull together. It's like why do I need to be creative? In fact, creativity could be dangerous because there's so much content out there and it's so searchable now. How could I possibly create something that's original and doesn't fall afoul of an intellectual property or trademark law?

Just leave it to the AI to go and do that. I'm almost wondering if at some point it's going to squeeze a lot of human creativity out because of efficiency, and maybe potential trademark vulnerability, or what. The jury's completely out on that. That's just me idly speculating, but I think it'll be interesting to see the dynamics at play and how creators evolve in that space.

Todd:

been trademarked or copyright before. That developer needs to review the code. They need to review their own code. We do code reviews here, particularly if we might be using, in some cases, nearshore or offshore developers. It goes through a rigorous Q&A process to make sure that there's high code quality, and nothing nefarious is baked into that code. We do a lot of audits for third-party companies that