



# INNOVATION DECODED PODCAST EPISODE 4

## AUDIO TRANSCRIPT

### AI: THE NEW INGREDIENT FOR GROWTH

[Leena Rao]: Josh, how often do you go to the gym?

[Josh Klein]: Probably not as much as I should. Why?

[Leena]: Because today we're going to talk about how a combination of AI, the right data, and human-machine collaboration is set to disrupt everything, including your workout.

[Josh]: Hey everyone, this is Josh Klein.

[Leena]: And this is Leena Rao. Welcome to Innovation Decoded, a podcast dedicated to breaking down the new technologies that are transforming the way we live, work and think.

[Josh]: Leena, did you know that traditionally gyms have made most of their money by selling memberships to people who don't often use their services. There's a report in 2017 by the National Bureau of Economic Research that showed that 95% of people who have a gym membership go less often than they thought that they would. But recently a host of app-based startups are allowing people to use their smartphones to find, book, and pay for fitness classes at participating gyms and studios.

[Leena]: That's right Josh, and this new service is upending the traditional business model for gyms. These new digital platforms allow for real-time data capture regarding when, where, and how people want to take classes, and then it uses the AI to predict what type of class a person would like. The apps make people actually want to go to the gym by providing them with suggestions of classes near them that will pique their interest.

[Josh]: These technologies are changing how these businesses create value and make money. For example, ClassPass, the oldest of these new app-based fitness startups, has grown from zero revenue to pulling in around \$150 million annually.

[Leena]: But disruption enabled in part by AI isn't just about growing revenue. And it certainly extends beyond just the fitness industry. In fact, it's nothing short of transformative across the entire economy.

[Leena]: Paul Daugherty is Chief Technology and Innovation Officer at Accenture. He co-wrote a book called Human + Machine: Reimagining Work in the Age of AI. He explained how tech like AI challenges the way business gets done at an event launching Technology Vision 2018. That's Accenture's annual report on the latest tech trends.

Copyright © 2018 Accenture  
All rights reserved.

Accenture, its logo, and High  
Performance Delivered are  
trademarks of Accenture.



[Paul Daugherty] What is the role of innovation? How do you develop that innovation architecture in your intelligence enterprise? That's something every company needs to think about... How do you build the intelligent enterprise?... You need a different mindset and approach we think to deal with this. This isn't about applying tech to the business you do, it's about reimagining and reinventing the new business that you could do.

[Leena]: Developing a new way of thinking about innovation can lead to revenue growth, but not without another ingredient. Paul believes that data, and how it allows humans and machines to work together, is the key to unlocking value in almost every industry. Let's listen to how he explained this shift to a group of influencers at a panel hosted by Wired magazine at the World Economic Forum in Davos.

[Paul Daugherty] I think it's really early in the evolution of AI and what we can do with it. We're going to continue to see advances in algorithms and more and more data applied to problems. I think we should think of this as the start of really the age of innovation in the way we apply intelligence into solving business problems.

[Leena]: But how does a company use the right kind of data to power the type of human-machine collaboration that actually changes the way they do business and uncovers new ways to make money?

[Josh]: For a Paris-based company called Flint, the answer is cobots, a type of bot designed to learn by collaborating with humans. That means the bots need humans just as much as humans need the bots.

Benoit Raphael, Flint's co-founder and Chief Robot Officer, has been experimenting with how a combination of good data and human interaction can make AI-powered bots more useful.

[Benoit Raphael] What we need to understand is that the robot can be good at to predict... but they can be wrong... Robots can help us, but first we need to interact with them and not just listen to them.

[Josh]: So, AI isn't just some sort of sausage grinder where you shove data in one end and business value comes out the other. It turns out that making sure that a company's employees or customers can work properly with an AI is an important aspect to unlocking that value.

[Benoit Raphael] In the world of artificial intelligence, the world of prediction with a lot of data, we need to decide what story we want to tell.

[Josh]: Accenture Research launched a project using Flint's cobots that looked at the ways this human-robot interaction could work in the real world. Accenture had 50 researchers from around the world train a cobot to act as their virtual personal assistant. The cobot was tasked with sifting through hundreds of thousands of articles every day and providing the researchers with only the most important bits. Philippe Roussiere is Innovation Services Global Lead for Accenture Research.



[Philippe Roussiere] We looked at how we could grow efficiencies in tracking relevant news. All our researchers suffer from the fear of missing out or the FOMO as they track important news in their relevant industries or functional business areas or geographies. They really have a lot of info thrown at them. They need to carve out time to do that and to do it efficiently.

[Josh]: But using existing technologies like RSS or keyword scanning wasn't going to cut it. Accenture wanted a smart technology, something that would provide a laser focus on broad topics like supply chain technology or gender diversity, stuff for which the Boolean search logic, the Google Field for example, doesn't work very well. Roussiere wanted something that individual researchers could train to increase their efficiency over time. The result was a project that taught Roussiere as much about people as it did about robots.

[Philippe Roussiere] Some of the people make extensive feedback and input into the model, and it forced us to rethink how our researchers are actually looking for relevant news. And they benefited as well. They say to us, "Hey, we're learning actually, how we're ourselves even thinking about searching for relevant information by the way that the machine is asking us to validate whether what they found, what the algorithms found, is relevant or not.

[Josh]: The type of human-bot interaction that powered Roussiere's project is starting to happen throughout the economy. You can find examples of successful human-bot interactions in sectors thought of as old or traditional, like regular media.

[Leena]: The news media is just another space that's being disrupted by technology and a reimagining of business models. In fact, the pressure this disruption puts on revenues of traditional newspapers is a global phenomenon.

Il Secolo XIX has been delivering news to people in Northern Italy for generations. Founded in 1886 in Genoa, the newspaper has tried to keep up revenue in a pretty difficult media landscape by establishing a multi-channel digital presence and also playing an active role on social media. Now it's integrating AI into its production of content to help its journalists produce more unique stories. Stefano Ramagli is Il Secolo's IT director.

[Stefano Ramagli]: One of the big challenges now is to keep up the reputation of the newspaper, and that can be achieved by creating quality content.

[Leena]: Enter Il Secolo's AI-powered editorial assistant. Using advanced machine learning techniques, the assistant employs algorithms powerful enough to analyze and classify the paper's content in real time. When one of Il Secolo's journalists starts a story, the assistant continuously checks the text for data consistency and potential links to other sources.

The editorial assistant also leverages one of the company's greatest strengths: its 130 years' worth of archived material, all currently stored digitally.

Copyright © 2018 Accenture  
All rights reserved.

Accenture, its logo, and High  
Performance Delivered are  
trademarks of Accenture.



[Stefano]: The AI-assistant tool can provide the journalist with additional related content by checking the database of our digital historical archives for stories relevant to what the journalist is writing about. The tool can cross reference people, organizations and places mentioned in the article and it can help the journalist integrate that information into the new content.

[Leena]: The use of the AI-powered editorial assistant gives Il Secolo a leg up on the competition by burnishing its reputation for producing cutting-edge, high-quality journalism, which drives subscriptions, reader loyalty, and ultimately, revenue. And the human-machine collaboration allows the paper's journalists to focus on what they are really good at: tasks that involve distinctly human qualities like tracking down a story that subscribers will actually read.

[Josh]: Freeing people up to do things that are uniquely human is one of the major ways human-machine collaboration creates value for a business. Eva Sage-Gavin, Senior Managing Director of Accenture Strategy, Talent and Organization, has been following the development of human-machine collaboration for decades.

[Eva Sage-Gavin]: If you almost look back for over three decades now from the early days where machines may have been fully under human being control, when human beings were still doing redundant tasks, but not yet really enhancing the human experience, or being predictive or anticipatory.

[Josh]: But more recent technological developments have not just simply freed people from repetitive tasks. Advances in AI are liberating people to become more productive and drive revenue growth.

[Eva Sage-Gavin]: I think the biggest moment for me was when we moved into the period that I'd call "machines as partners in the workplace." We sometimes call them now "digital workers," in being able to do things that we as humans couldn't do as well. I think when machines became our partners in doing what they do best on data and analytics, and letting humans do what we do best on judgment, empathy, creativity, adaptiveness, that's in the last decade where the biggest breakthrough has come in my mind.

[Josh]: Perhaps no industry has more of a need for human empathy and adaptiveness than medicine, and advances in technology are creating space for healthcare professionals to leave the analytics to the machines. AI is enabling medical researchers to mine data from electronic medical records to uncover new insights and conduct virtual experiments that test hypotheses more efficiently.

It's also allowing healthcare professionals to diagnose diseases faster and with greater accuracy. Dr. Andrew Beck is a pathologist, and the CEO of PathAI, a startup that uses AI and machine learning to help pathologists make faster, more accurate cancer diagnoses. And this helps the physician get to the treatment decision sooner.

[Andy Beck]: There are certain things AI systems can do really well, like identifying patterns in a very reproducible, predictable way. Particularly when humans provide the AI systems with tens of thousands or hundreds of thousands of examples of that pattern. And the type of pattern I'm thinking of is like, what does cancer look like under the microscope. And that's one where if you provide the computers with enough examples, it can actually begin to automatically identify that pattern within a slide.

Copyright © 2018 Accenture  
All rights reserved.

Accenture, its logo, and High  
Performance Delivered are  
trademarks of Accenture.



[Josh]: And when the machine recognizes those patterns, it can produce a report noting whether or not it thinks a patient has cancer. All the doctor has to do is go in and use his or her decades of experience to confirm or refute the machine's findings, leading to a much faster diagnosis. The automation of the process enables machines to more accurately and quickly identify cancer and then lets doctors spend time doing what really matters: making people feel better.

[Leena]: You know what Josh, it occurs to me that all the examples we've looked at in this episode have something in common. They're disrupting business by setting up a human-machine collaboration. And that allows people to focus on what they're good at. Here's Paul again from Davos.

[Paul Daugherty] With this human plus machine age we're moving into an age not where machines have to take control, it's about how we design this future and what decisions we make as leaders. I think we're moving to an age of human empowerment where, just like every technology since the first axe or whatever arrowhead we ground as human beings, we use technology to help ourselves. I think it's the same with this technology.

[Josh]: So, Leena, what have we learned?

[Leena]: We learned human-machine collaboration isn't only about disrupting the status quo. It's actually unlocking value in businesses and driving new revenue growth.

[Josh] This has been Innovation Decoded by Accenture. Join us next episode, when we'll uncover more stories of how technology is transforming business.

Copyright © 2018 Accenture  
All rights reserved.

Accenture, its logo, and High  
Performance Delivered are  
trademarks of Accenture.