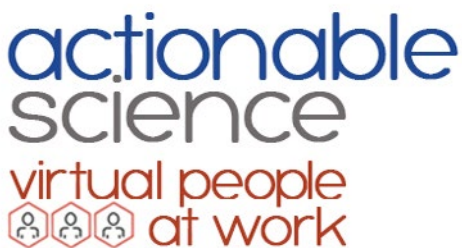




Microsoft powers an automated workforce from Actionable Science



“Being part of the Microsoft ecosystem and partnering with Microsoft was one of the best decisions we’ve made. We’re extremely, extremely happy that we made the decision we made.”

—Saurabh Kumar,
Cofounder and CEO,
Actionable Science

Actionable Science and the next AI wave

In 2016, Saurabh Kumar knew the next big wave of artificial intelligence was coming. Based on this, he cofounded Actionable Science, an AI startup that would make operations significantly more efficient, enabling a more economical model in which humans don’t have to participate in every single transaction.

The decision to partner with Microsoft has opened the door for Actionable Science to enable its AI-driven Virtual People within the entire ecosystem of Microsoft products and services. That has led to advantages for the technology—and the business.

The AI employee has arrived

Kumar thinks about Actionable Science like a staffing agency. “A company has consultants and employees—and now they will also have virtual employees. In a way, we are in the business of providing that virtual staffing. So the people we provide need to be able to converse, of course, but also be knowledgeable in their respective areas.”

To that end, Actionable Science provides a growing portfolio that currently includes four types of virtual employees—

HR assistant, IT Help Desk agent, financial product sales consultant, and customer service agent—to midsize corporations, including banks and credit unions.

“AI has the potential to be a great leveler for midsize companies,” says Kumar. “AI and Virtual People can help make a midsize company feel, to the consumer, like a large company.”

Growing AI in the Microsoft ecosystem

Actionable Science works with Microsoft technology in multiple ways. For instance, a customer could tell an IT Help Desk Virtual Person (also called a bot), “I need to change my password.” Actionable Science uses the cognitive services of Microsoft Language Understanding Intelligent Service (LUIS), combined with data the customer has already provided, to understand the customer’s intent.

But if the customer says, “I’m logged out of my database account,” that’s different than changing a password, and LUIS understands that. If the customer is hosted in Office 365, Actionable Science can use its integration with the Microsoft ecosystem to log the customer back into the account through Active Directory services.

Microsoft products at the heart of the plan

The ubiquity of Microsoft products and services among enterprise customers was a huge selling point for Actionable Science when selecting a partner. Microsoft gives the company access to all the powerful services, resources, products, and technologies it needs to create, operate, and expand for development. For example:

- Microsoft Azure—A trusted foundation with a high degree of customer confidence, Azure provides the cloud-based computing platform that's the backbone of the system.
- DocumentDB—Because many customers already use DocumentDB for their data and file storage, Actionable Science gains efficiency.
- LUIS—LUIS provides what Kumar calls "one of the most interesting of all the cognitive capabilities." "Our bots can have a deep understanding of a particular kind of interactions and have long-running dialogues about these things," he says.
- Microsoft Emotion API—This API helps bots interact in a more appropriate manner with customers.
- Microsoft Vision capabilities—Because many interactions with Virtual People involve documents such as mortgages or HR files, document recognition, processing, and storage are powerful Microsoft capabilities for Actionable Science.

Actionable Science also uses Power BI to provide customer analytics and rich visualizations for better decision making. "Our customers can log in to an admin portal to see how their bots are performing, what's working, what's not, and how to fix it," Kumar says. "Using Power BI, customers can get analytics, graphs, charts, and dashboards customized for their industry needs.

Partners from the beginning

The Microsoft team has provided extensive support to Actionable Science throughout the development and launch of its products. "Whether it's technical, support, or business questions, we've also had joint conversations with our customers on one side and Microsoft representatives on the other," Kumar says.

Artificial intelligence is still in its infancy, and Actionable Science is working to find where it can be a real business advantage. Working in the Microsoft stack, the company is finding and capitalizing on deeper insights within the natural interactions between Virtual People and real ones.

"We're in the first inning of a long game," Kumar goes on. "Microsoft is very committed to the space—and we're just scratching the surface."

"We've had fantastic support working with the Microsoft organization."—Kumar



Challenges

- Partnering with the right technology company that has a long-term commitment to artificial intelligence and the resources to support a startup in a fast-changing field
- Finding and integrating with a technology and business ecosystem that is both ubiquitous and open to the kind of advancement Actionable Science seeks
- Getting the technical and strategic insights that allow Actionable Science to focus on its own strengths while leveraging and enhancing emerging products like the Skype for Business video service by adding Virtual People to the core product experience

Results

- From untangling insurance questions to helping with HR needs, Actionable Science Virtual People are providing deeper and more valuable personal interactions every month—and the possibilities keep expanding.
- Actionable Science has been able to add value to its services through its partnership with Microsoft, such as integration with the business communications service Skype for Business, Office 365, and others.
- Microsoft's sponsorship of Actionable Science in the Azure cloud has provided a big boost to the technology and the business.

Snapshot

- Organization: Actionable Science
- Industry: Artificial intelligence-driven solutions—Virtual People
- Location: San Ramon, CA
- Website: actionable-science.com
- Customer since: 2016