Microsoft

BOOK OF NEWS

AI in Business

November 13, 2018 | San Francisco

Contents

Foreword

Top performing companies like Adobe, Arcos, AB InBev and Walmart are already using AI to transform their business. Sentiments towards AI have shifted as companies recognize the critical role it will play in their business transformation. According to Gartner 46% of companies are planning or actively experimenting with AI[1].

There is undeniable momentum building. We're at a tipping point where AI's impact is clearly recognized. AI-generated business value will more than triple from $1.2 trillion in 2018 to $3.9 trillion by 2022, according to Gartner[2].

And at Microsoft, we are seeing strong momentum. Over1.2 million developers have discovered and tried Azure Cognitive Services, and over 360,000 have signed up to use Azure Bot Service. Customers can get started with conversational AI in a matter of minutes using our Virtual Assistant Solution Accelerator, creating a starting point to dive in further.

Yet the same Gartner source revealed only 4% of CIOs have already invested and deployed AI3. So, what's holding back other businesses? Many businesses are struggling to understand where to start and how to get the most value out of AI. Moving from experimentation to large-scale implementation can be daunting. And many organizations lack the technical skills, data scientists and the culture required to make such a big shift.

From developers to business teams to the CEO, companies need to understand how the cloud, AI and data combine to enable business transformation. But that doesn't mean we all need to become data scientists. With the right tools, even non-technical employees will be able to create and use AI.

For example, Microsoft is adding simple, no-code features for modern business intelligence to Power BI, enabling any employee to build AI into their strategy. Making AI less complicated can help a business stay agile, fueling faster collaboration among business analysts, data scientists, developers, and IT professionals.

That's just one part of the continuum of Microsoft offerings that help businesses of any size easily deploy AI solutions. Azure Machine Learning, for example, supports customized AI solutions, while Azure Cognitive Services can uncover useful information hiding in the most chaotic and unstructured data environments, then allow developers to add AI capabilities with a few lines of code.

We all share a responsibility to build and use AI in a trusted manner. AI, like technology innovations before it, will have lasting impact on society. Microsoft believes our industry should come together with customers, partners and public institutions to determine the standards and guidelines to build trust in AI, which is why we participate in forums like the Partnership for AI.

Earlier this year, Microsoft published *The Future Computed*, a book that looks at AI and its impact on society. The *Future Computed* lays out six core principles that should guide the work around AI. Four core principles of fairness, reliability & safety, privacy & security, and inclusiveness underpinned by two foundational principles of transparency and accountability. We also created an internal advisory group, the Aether Committee, which advises the company on our approach to responsible AI, and how to put our ethical principles into practice.

In this Book News, you will find a guide to the news announcements we are making on November 14, with summaries and links for more information. You'll also learn how Adobe, Arrcos, Anheuser-Busch InBev, and Walmart are adopting AI in the enterprise. Additionally, all press materials will be available on the press Microsite, accompanied by event photos, videos and more. Please note that the content in the link will be live at 6:00 a.m. PT on November 14th.

- The Microsoft Team

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CHAPTER 1
Microsoft AI by the Numbers
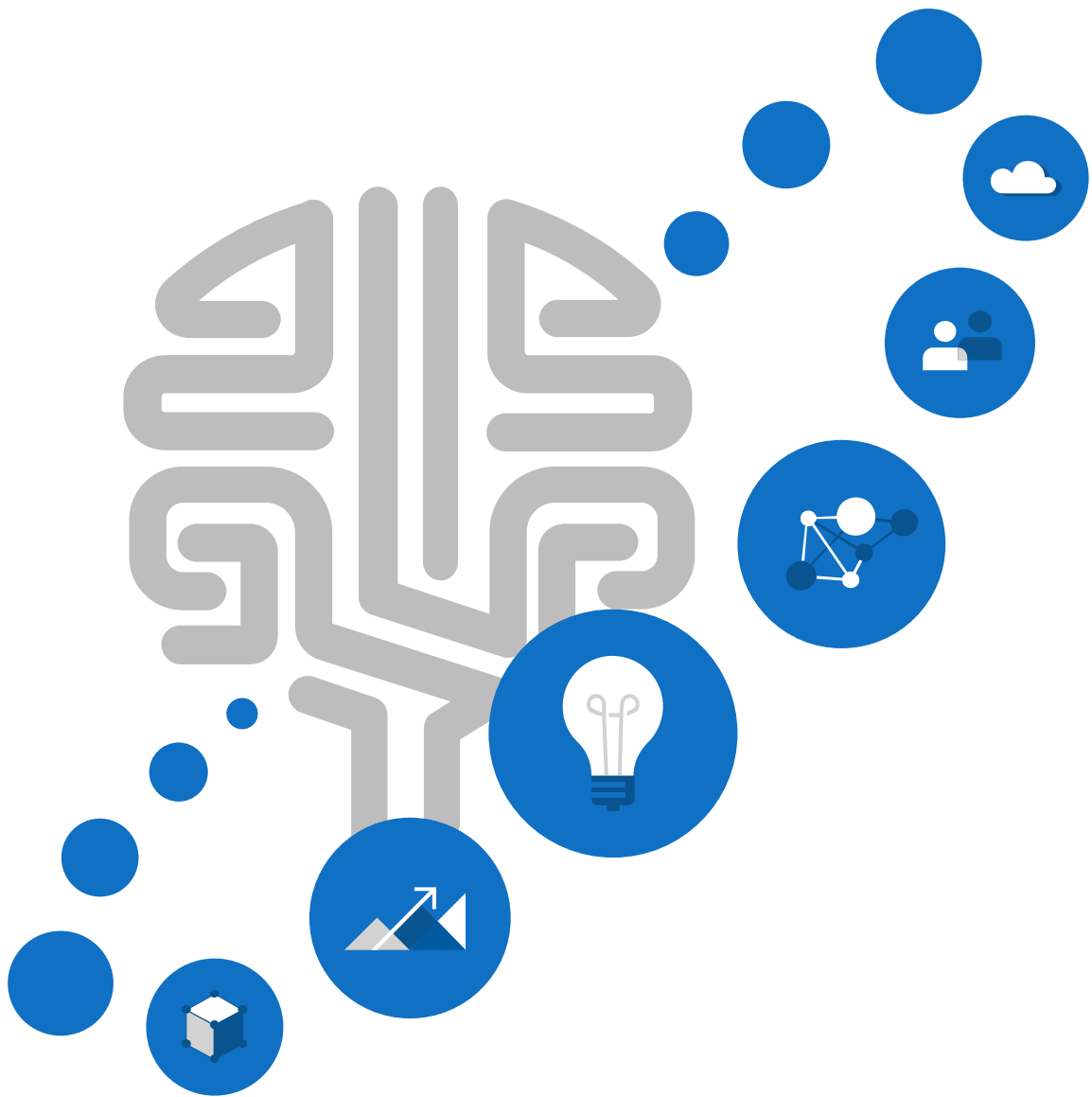
Microsoft AI by the Numbers

Azure Machine Learning

Azure Machine Learning serves over 500M real-time predictions per month, and over 200M batch predictions per month.

There are well over 10k models being deployed as web services per month. These models cover a wide range of business scenarios: from sentiment analysis to anomaly detection, from support ticket auto-routing to research article recommendation. Some of the more interesting uses include:

- Predict the health of ocean-faring refrigerated shipping containers.
- Predict if downloaded software packages are malware or not.
- Predict commuter bus arrival time.
- Identify flower growth state using clustering algorithms.
- Predict credit card holder default.

Azure Bot Service

Over 360,000 developers have signed up to use Azure Bot Service.

There are greater than 35,000 active bots a month.

More than 1,000+ companies generating over 35 million messages a day.

Azure Cognitive Services

To date, more than 1.2M developers have already discovered and tried Azure Cognitive Services.

Cortana

There have been 18 billion questions asked of Cortana, an agent that has millions of active users today across 13 countries.

Bing

Bing powered search accounts for more than 35.4 percent of US search market share on PC.

Translator

Microsoft Translator, part of Azure Cognitive Services, supports 11 speech languages (Arabic, Chinese, English, French, German, Italian, Japanese, Portuguese, Russian and Spanish) for subtitling. 60+ text languages are supported when the audience participates in the conversation, using a language outside of the 10 speech languages.

Other related AI stats

In January 2018, Microsoft researchers reached human parity on the Stanford question answering data set (SQuAD). It uses Wikipedia articles to measure how well a computer system can read a document and answer questions about it. Microsoft currently occupies 11 of top 30 positions on the Stanford SQuAD leaderboard, more than any other company.

Microsoft said in August 2017 the company had created speech recognition technology with a word error rate of 5.1 percent, or about the same as human transcribers, using the Switchboard speech recognition task.

In March 2018, a team of Microsoft researchers were the first to announce they had created a Chinese to English translation system that can translate sentences on a commonly used test set of news stories, called newstest2017, as well as a person.

Intelligent Cloud/Azure

Commercial cloud revenue was $8.5 billion in Q1FY19, growing 47% year over year. Azure revenue increased 76%.

Over 95% of Fortune 500 companies have at least one Microsoft cloud enterprise service, and over 75% have at least three.

Microsoft – and particularly Microsoft Azure – has been on an open source journey to maximize customer choice and flexibility – approximately 40% of VMs on Azure are Linux.

Azure has more regions than any other cloud provider with 54 Azure regions announced.

Azure has the most comprehensive compliance coverage of any cloud service provider with 79 major certifications and attestations.

With more than 4.6 million monthly average users, Visual Studio Code continues to be one of the most popular development environments globally, which is reinforced annually in surveys from Stack Overflow, State-of-JavaScript and golang.org.

Microsoft uses Windows Server, System Center, the Microsoft Cloud Server, Bing, Office 365, and Microsoft Azure in our global datacenters and operations centers.

CHAPTER 2

Azure Cognitive Services Updates and Enhancements
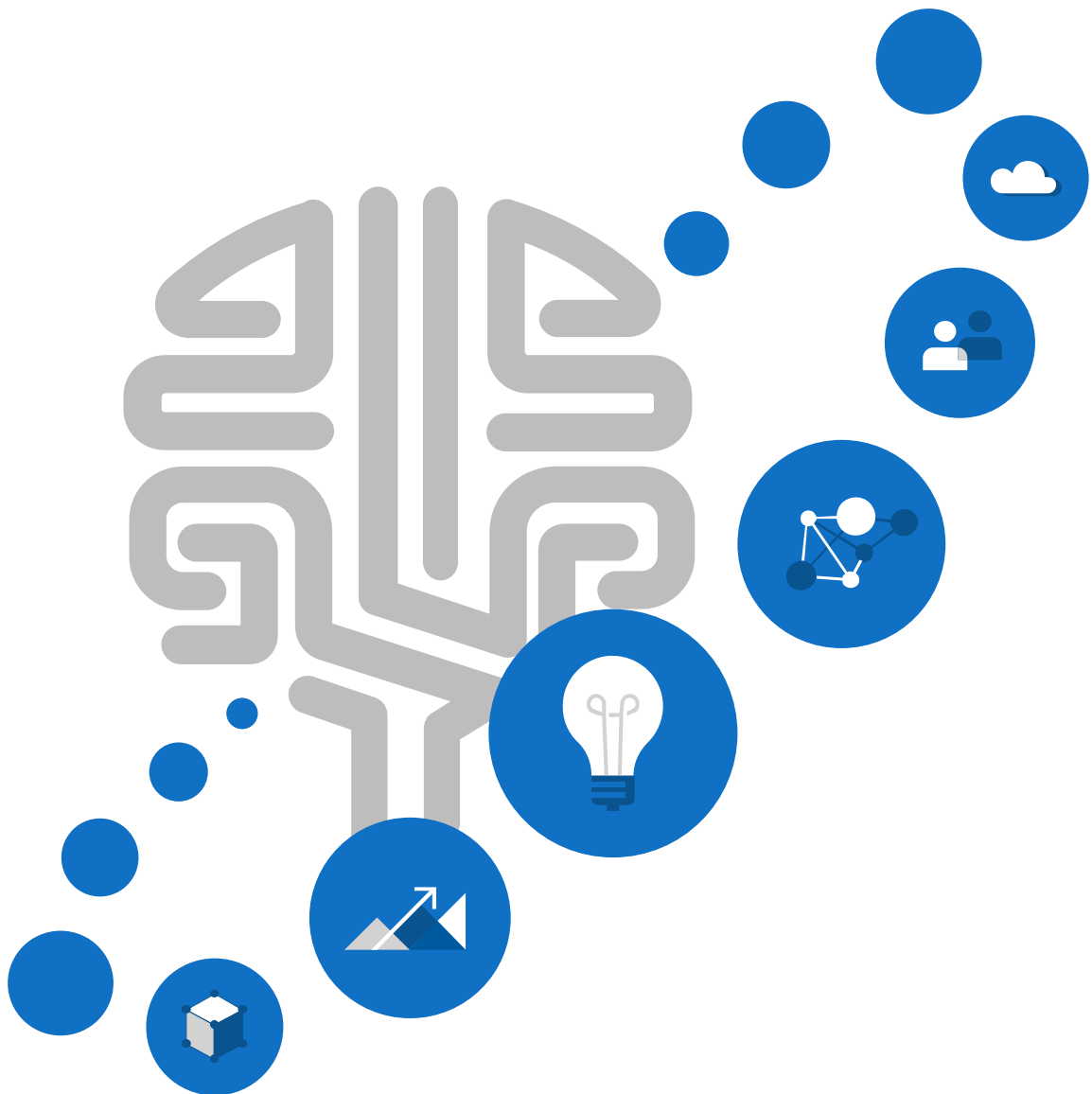
Azure Cognitive Services Updates and Enhancements

Cognitive Services Containers

Starting November 14, container support will be available in preview for Computer Vision, Face, and Text Analytics with more Azure Cognitive Services available in containers in the future.

With ever-increasing volumes of data being generated across organizations, customers need the flexibility to deploy AI capabilities in a variety of environments. By deploying Cognitive Services in containers, customers can analyze information close to the physical world where the data resides, to deliver real-time insights and immersive experiences that are highly responsive and contextually aware.

Cognitive Services containers enable customers to build one application architecture that is optimized to take advantage of both robust cloud capabilities and edge locality. With containers, customers can upgrade to new versions of AI models deployed in their solutions at their own pace. Customers can also test new model versions before deploying them in production in a consistent way, whether running on the edge or in the cloud.

Go to the [Microsoft AI Blog](#) and contact the [WE Rapid Response Team](#) to learn more.

Logo Detection in Custom Vision Service

Starting November 14, Custom Vision Service will add support for logo detection, allowing businesses to create their own logo detector quickly and easily. Customers can build their own logo detectors to help them search for and locate their logos in their media libraries or to generate analytics for their social media feeds. Logo detection is a specialized type of object detection suited specifically for logos that can be small, skewed or confused within a larger picture (for example on the sidelines of a soccer match, on a building sign in a cityscape, or on a scanned form.)

Visit [Microsoft Azure Cognitive Services](#) and contact the [WE Rapid Response Team](#) to learn more.

Translation Improvements

The Microsoft Translator API has been updated with new translation systems for Chinese and German from and to English, significantly improving translation quality and expanding application scenarios. Translation quality for these languages has increased due to [Microsoft's human parity work from Chinese to English](#).

Go to the [Microsoft AI Blog](#) and contact the [WE Rapid Response Team](#) to learn more.

CHAPTER 3
Conversational AI
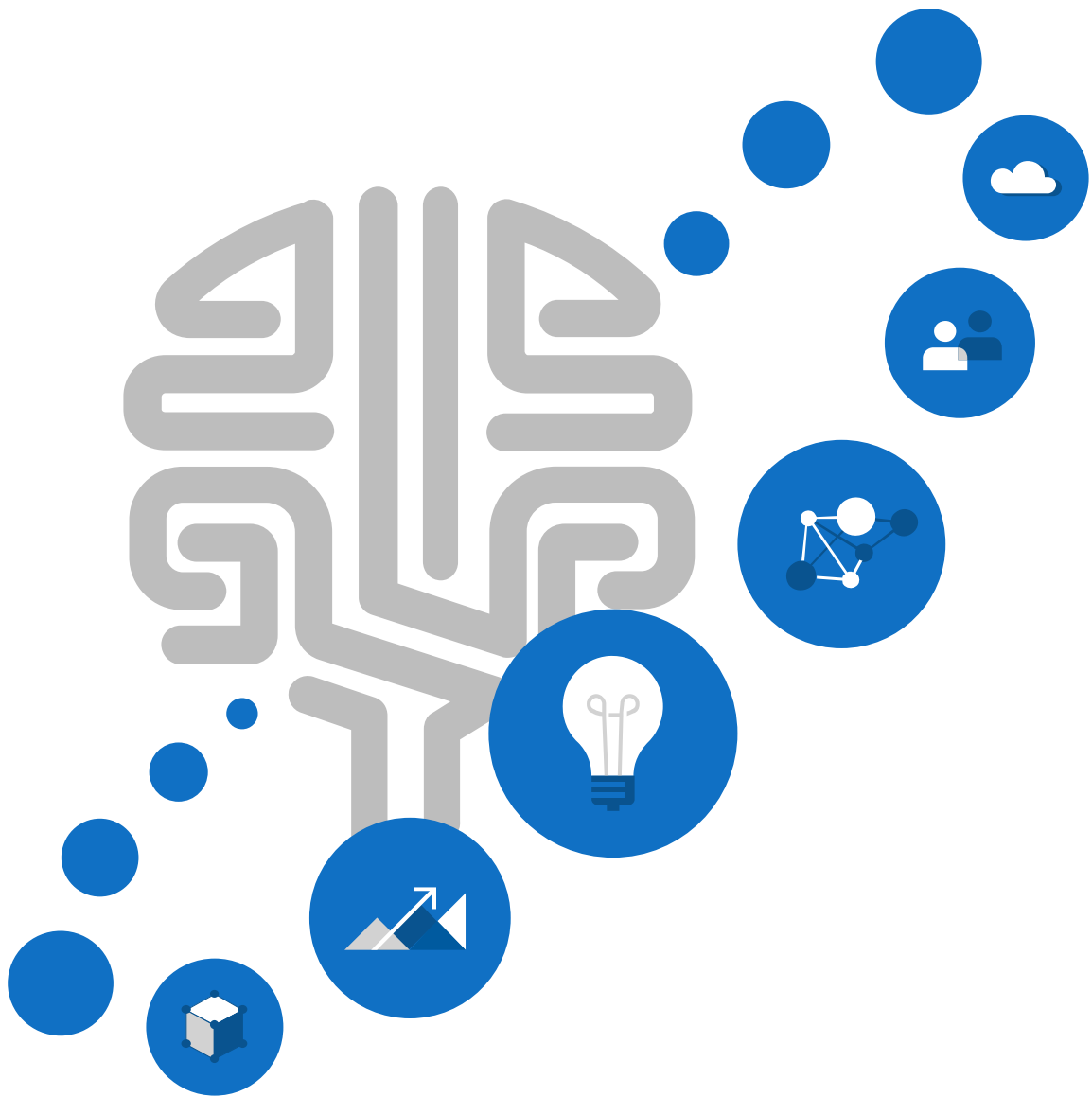
Conversational AI

Solution Accelerator for Virtual Assistants

Available November 14 in preview, we are providing a solution accelerator for virtual assistants enabling organizations to quickly develop their own branded virtual assistant. Building conversational AI capabilities into applications is becoming more important as consumers are expecting more natural experiences with virtual assistants. Microsoft has an open and flexible approach enabling organizations to build conversational AI experiences with the Microsoft Bot Framework. Enterprises do not have to build the language models from scratch, the solution accelerator for virtual assistants includes a calendar, point-of-interest, linked accounts and to-do skills and more.

Go to the Microsoft AI Blog and contact the WE Rapid Response Team to learn more.

Bot Guidelines

Starting November 14, Microsoft will publish a new set of guidelines and recommendations for responsible design of conversational AI systems. These guidelines are aimed at helping organizations to design a conversational AI interface that takes a responsible approach to user data and builds trust in the service that the bot represents.

Go to the Microsoft AI Blog and contact the WE Rapid Response Team to learn more.

Azure Bot Services

Available on November 14, we are announcing several updates to Azure Bot Services including new enhancements for Microsoft Bot Framework including Bot Builder SDK 4.1, Emulator GA and Webchat. In addition, Azure Bot Service will feature a new customer support template to help build a fully functional out-of-the-box customer support bot. These updates will enable developers to more quickly and easily design, add intelligent capabilities, deploy and manage bots.

Go to the Microsoft AI Blog and contact the WE Rapid Response Team to learn more.

Microsoft to Acquire XOXCO

On November 14 at 6am PT, Microsoft will announce that it has signed an agreement to acquire XOXCO, a software product design and development studio known for its conversational AI and bot development capabilities. The company has been paving the way in conversational AI since 2013 and was responsible for the creation of Howdy, the first commercially-available bot for Slack that helps schedule meetings, and Botkit, which provides the development tools used by hundreds of thousands of developers on GitHub. Over the years, we have partnered and been inspired by this work. With this acquisition, we are continuing to realize our approach of democratizing AI development, conversation and dialog and integrate conversational experiences where people communicate. We're excited to welcome the XOXCO team and look forward to working with the community to accelerate innovation and help customers capitalize on the many benefits AI can offer.

Go to the Official Microsoft Blog and contact the WE Rapid Response Team to learn more.

CHAPTER 4
Other Announcements
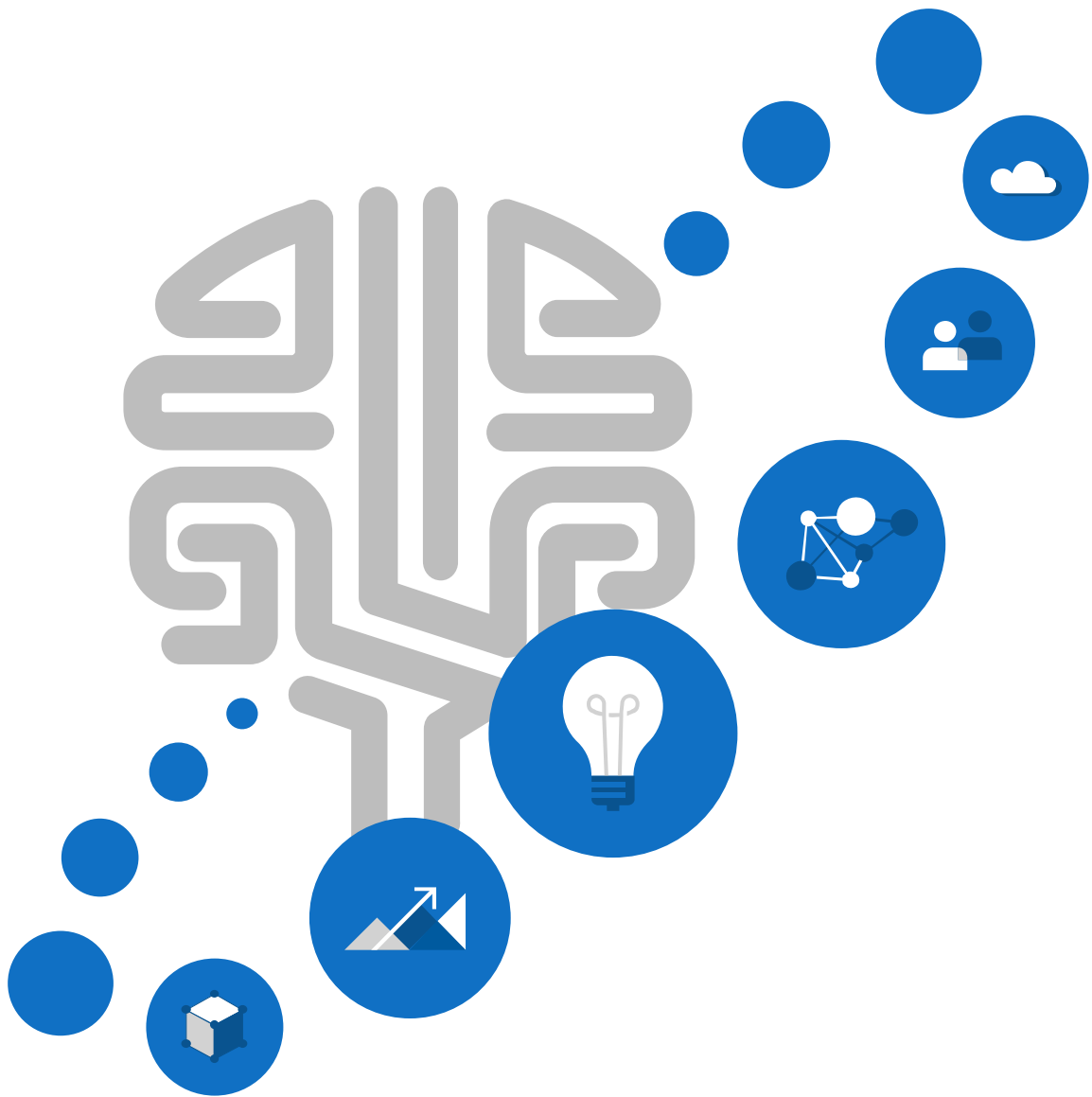
Other Announcements

Power BI AI Integration

Power BI is announcing preview of easy-to-use, no-code AI features for modern business intelligence. With just a few clicks, business analysts can infuse dashboards and reports with AI-powered predictive analytics, forecasting, sentiment, and more, creating new opportunities to discover hidden insights in data.

Business analysts who want to leverage AI to drive better decision-making typically face a complex and time-consuming process where they must work with data scientists, developers, and IT professionals who can build machine learning models and deploy them across the company's data. These updates to Power BI make complex AI more accessible, removing barriers and fueling faster collaboration among business analysts, data scientists, developers, and IT professionals.

Go to the [Power BI blog](#) and contact the [WE Rapid Response Team](#) to learn more.

Carnegie Mellon University

To further advance discovery at the intelligent edge, Microsoft is donating cloud hardware and services to Carnegie Mellon University's Living Edge Laboratory – a testbed for exploring applications that require intense processing and near-instantaneous response times. Microsoft will donate an Azure Data Box Edge, Azure Storage services, and Azure credits for advanced machine learning and AI at the edge – and partnering with Intel to donate an Azure Stack integrated system. As part of this donation, Microsoft is also joining the Open Edge Computing Initiative.

Go to the [Azure Blog](#) and contact the [WE Rapid Response Team](#) to learn more.

AirSim for Unity

Last year Microsoft [released](#) an open-sourced research project called AirSim, a high-fidelity system for testing the safety of AI systems. AirSim provides realistic environments, vehicle dynamics and sensing for research into how autonomous vehicles that use AI can operate safely in the open world. On November 14, we are announcing AirSim for Unity to allow Unity's large user base to leverage the innovations and features in AirSim. Visit [GitHub AirSim Page](#) to download AirSim for Unity to start training your system and visit [Bonsai](#) to learn more about using machine teaching to fast track building intelligence for your autonomous system.

Go to the [Microsoft AI Blog](#) and contact the [WE Rapid Response Team](#) to learn more.

PlayFab Multiplayer Servers

PlayFab Multiplayer Servers uses the power of Azure to dynamically scale a game server, the piece of code written by a game developer that runs on the server to host multiple gamers in a game session (like Minecraft), up and down quickly and efficiently. Microsoft makes it easy and cost-effective for every developer to add franchise-level cloud services to any game. PlayFab Multiplayer Servers enable developers to control costs without sacrificing performance by only paying for Azure resources allocated for gameplay, plus a small pool of stand-by machines. Developers have the option to choose either Linux or Windows to containerize their game server code.

Go to the [PlayFab blog](#) and contact the [WE Rapid Response Team](#) to learn more.

CHAPTER 5
Customer AI Solutions Descriptions
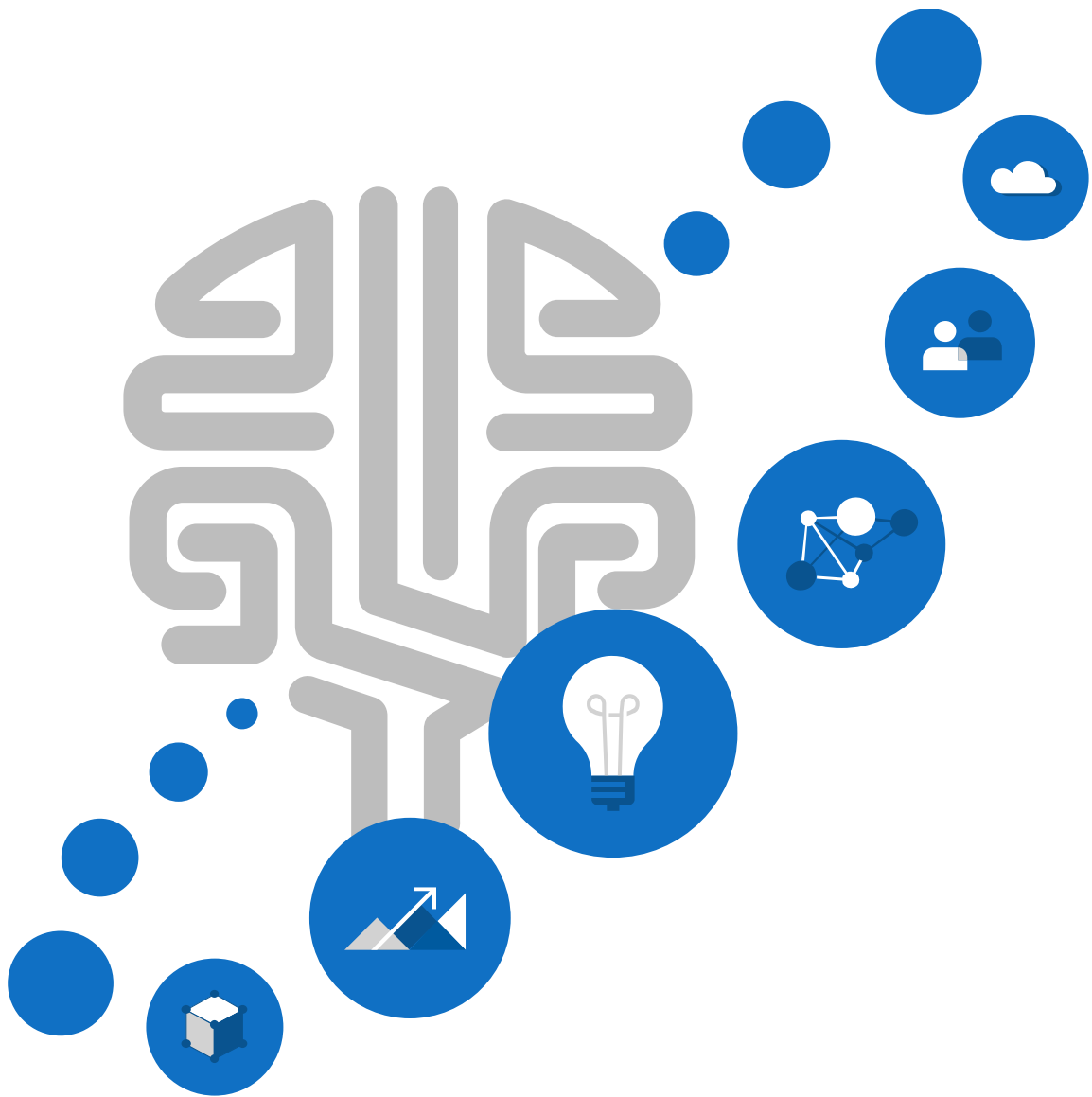
Customer AI Solution Descriptions

Adobe

Adobe strives to empower its customers to build the right skills to effectively utilize the latest technologies. To help, Adobe created a guided intelligence learning platform called Experience League, powered by Microsoft Azure, that helps its customers assess skills within their teams and provide recommended training patterns to help them learn about new features and capabilities. It uses conversational AI tools to provide personalized experiences for users and chat bot technology to reduce friction points as customers move along their journeys. For example, this chat bot or "guide" helps users easily update their profiles, discover answers from the community when they need to troubleshoot, and find upcoming events that they might want to participate in to further their skills development. Additionally, Azure Cognitive Services handles the natural language processing and Azure Bot Service handles the sending of messages to and from users, allowing Adobe to focus on user experience. Adobe's vision for the future is to expand the use of chat bots, not only in Experience League, but to connect to other surfaces where its engaging with customers.

Anheuser-Busch InBev

Anheuser-Busch InBev is a company with hundreds of years of brewing heritage and tradition. To build a company to last for the next 100+ years, AB InBev is using technology to unlock future growth and continue to brew beers consumers love. The company is using technology to drive commercial and operational growth and increase sustainability by moving its IT operations to Microsoft Azure, and is gaining more significant insights into business operations by breaking down data silos and building a global analytics platform. AB InBev has started using AI for a number of business scenarios like planning product assortments, optimizing promotions and planograms, to improving logistics routing and streamlining processes in the warehouse. Additionally, through its SmartBarley program, AB InBev is using AI and drone technology to analyze data to build sustainability metrics and create predictive analytics to help farmers make decisions that will impact yield, quality and resource use.

Arccos Golf

The Arccos Caddie is golf's first AI platform, powered by Microsoft, that helps golfers of all skill levels shoot lower scores by making data-driven decisions on the course. Arccos Caddie incorporates data for every shot a user has taken and layers that information on top of the golf industry's richest data set. Using the power of Microsoft Azure, Arccos Caddie collects and analyzes more than 100 million shots hit by the Arccos community, over 2 million rounds played, over 1 billion geotagged data points on more than 40,000 courses globally and weather conditions including forecasted wind speed, precipitation, temperature and more. By leveraging AI technologies, Arccos Caddie levels the playing field and helps golfers make better decisions on the course.

Walmart

AI and Machine Learning are having a transformational effect on many businesses and industries. Walmart, does not implement any technology unless they are certain that it will bring real value and better the lives of our customers and associates. This goes for AI and big data technologies across our supply chain, operations, and customer shopping experience – both online and in stores. From the personalization and localization capabilities on Walmart's newly revamped website, to how they leverage AI and data to ensure real-time in-stock availability and price adjustments in thousands of stores, to how they train our over 2 million associates around the world to use technology to more seamlessly get their work done, and even how to strategically partner with best-in-class providers, like Microsoft, on all things cloud and data – Walmart believe it's a human and machine combo that will take us to the next level.

CHAPTER 6
Demo Experiences
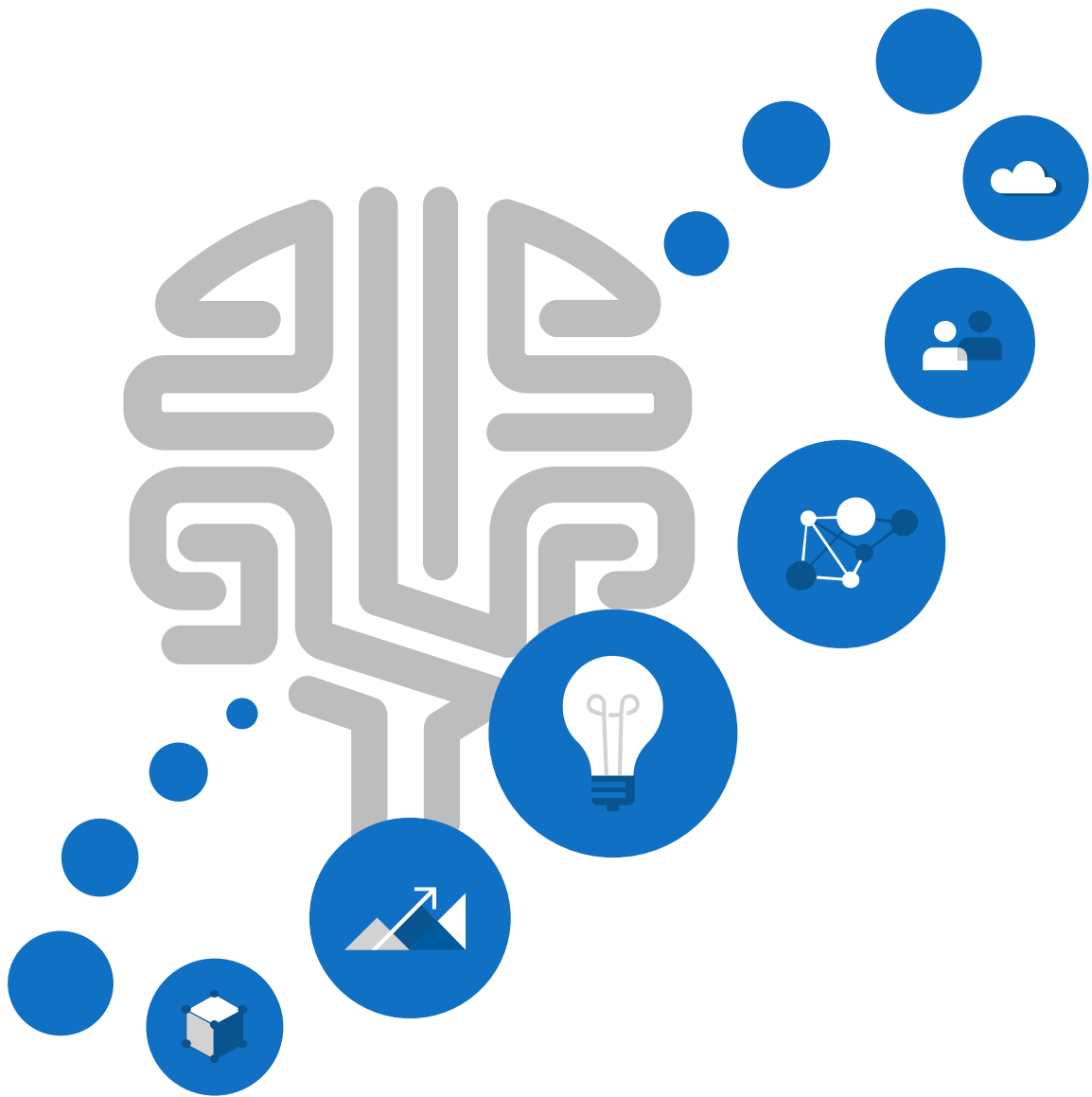
Demo Experiences

Arccos Golf

In this demo, you will see how the Arccos Caddie uses sensor technology and AI to help golfers make better decisions on the golf course. Leveraging Microsoft Azure, Arccos has created a virtual caddie that learns about each golfer's unique abilities and provides objective advice to the golfer based on a rich data set of shot history, geotagged points from courses around the globe, and weather conditions like wind speed, precipitation and temperature, ultimately helping golfers decide what club to use on any given shot in any given instance.

Anheuser-Busch InBev

In this demo, you will learn about AB InBev's SmartBarley initiative, which aims to support 100% of their direct farmers to become skilled, connected and financially empowered by 2025 with the help of cloud, AI and drone technology. The SmartBarley program leverages data, technology, and insights from more than 5,000 farmers in order to solve challenges, improve productivity and reduce environmental impact. Leveraging Microsoft Azure and Azure Machine Learning for data management and predictive analytics, AB InBev aims to help farmers mitigate the impacts of climate change, improve barley crop yields, and reduce the use of resources like water and fertilizers. The solution helps growers detect disease threats earlier, improve logistics planning, monitor crops on all fields, and improve quality.

eSmart Systems

Maintenance of electrical grids is not only time consuming and costly, but it can also be very dangerous. In this demo, you will learn how eSmart Systems developed a connected drone that uses Azure Machine Learning and Azure Databricks to help utility companies reduce blackouts and inspect power lines more safely. The solution brings AI to the edge on Azure IoT Edge and is able to analyze 200,000 images in less than one hour. Back at their control centers, eSmart Systems then uses HoloLens and mixed reality to reproduce issues and dig into design alternatives for faulty components on the grid. As a result, eSmart Systems empowers utility companies to stay ahead of power grid maintenance issues, reduce operational costs, better protect their personnel and serve their communities.

AI for Accessibility

In this demo, we'll show how Microsoft Translator can be used to deliver technology and feature sets that empower people across the spectrum of disability. Part of our AI for Good initiative, we create technologies that empower us all thanks to the promise of inclusive design. Microsoft Translator is an AI-powered communication technology capable of translating many languages for text and speech. In this demo, you will witness Translator's live feature, which allows for real-time, translated conversations in both speech and text, in over 60 languages, simultaneously. Microsoft Translator breaks down the language barrier at home, at work, and in life. This demo will show an example of creating inclusive work cultures whereby people from all over the globe can communicate, collaborate, and share ideas without the barrier of language.

Dynamics 365 AI for Customer Service

Microsoft is making AI innovation faster and more accessible through powerful services, SaaS applications and an integrated platform. With Dynamics 365, we are delivering AI applications that provide out-of-the-box capabilities and insights by unifying data and infusing it with advanced intelligence. In this demo, you'll see how Dynamics 365 AI for Customer Service uses natural language understanding to automatically group cases by support topics without the need for any manual tagging of cases. With minimal bot training, customers can quickly deploy the solution, freeing resources to address other priorities. You'll also see built-in dashboards, interactive charts, and visual filters that provide views into support operations data across channels and highlight areas for improvement that can have the greatest impact, helping you quickly evaluate and respond to key performance indicators (KPIs) and customer satisfaction levels.

Conversational AI

Building conversational AI capabilities into applications is becoming more and more important as consumers are expecting frictionless and natural experiences. Many customers and partners are looking to deliver conversational assistants tailored to their brand, personalized to their customers and made available across multiple applications and devices. In this demo, you will see how our customers like Adobe, Telefonica, and Vodafone are using the Microsoft Bot Framework, specifically Azure Bot Service and Azure Cognitive Services like Language Understanding and Speech to develop conversational agents. You will also see a demo of the new solution accelerator for virtual assistants, which simplifies creation of your own assistant, enabling you to get started in minutes so you can build your own branded virtual assistant. Continuing Microsoft open-sourced approach toward Bot Framework SDK, the open source solution accelerator for virtual assistants provides full control over the end user experience built on a set of foundational capabilities.

CHAPTER 7
Spokespeople Biographies
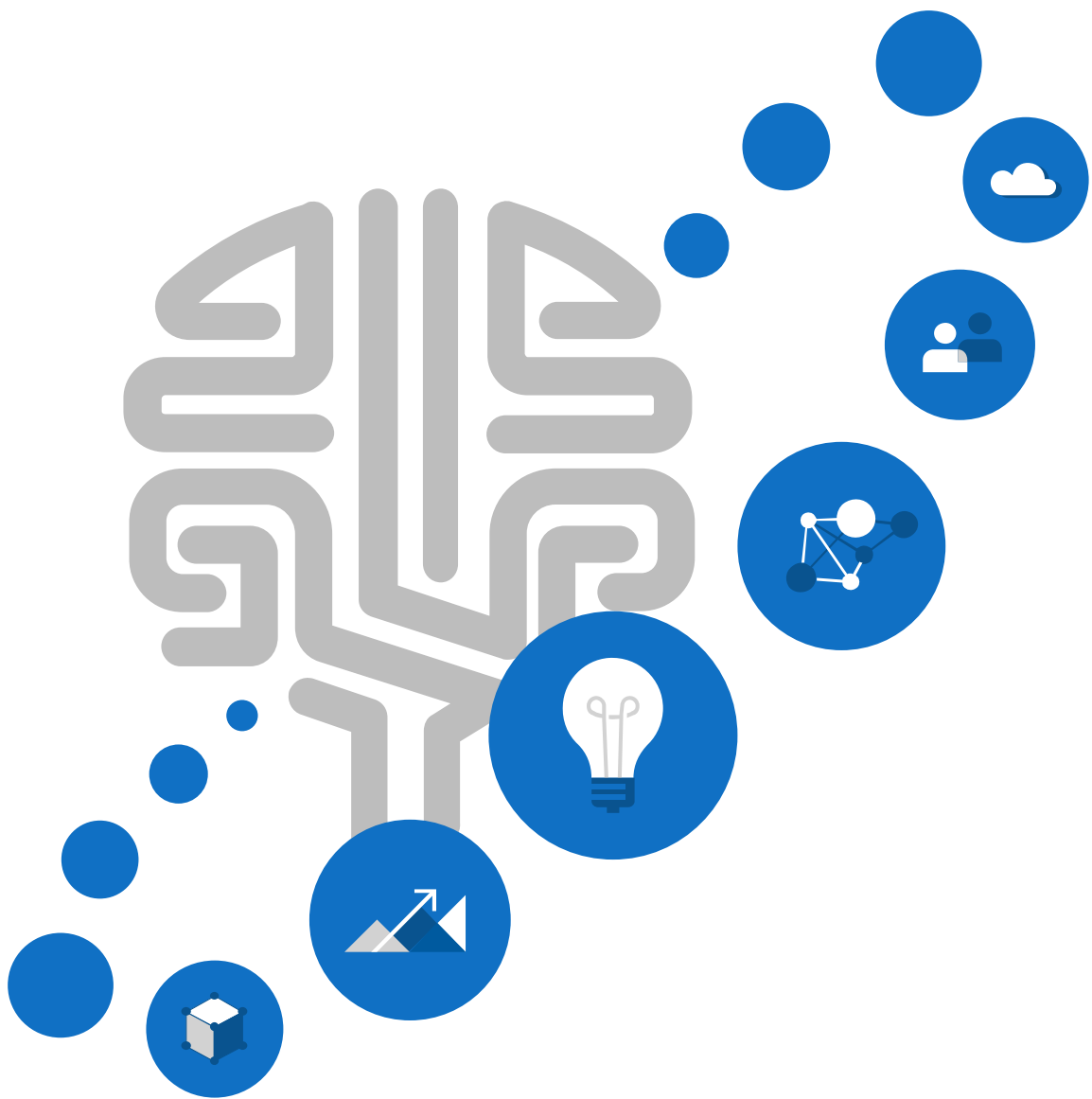
ABHISHEK PANI
Senior Director of AI Product and Data Science, Adobe

Abhishek Pani is the senior director for artificial intelligence products and data sciences at Adobe. He heads a team of data scientists, engineers and product managers responsible for building artificial intelligence and machine learning driven products for Adobe Experience Cloud. He's also responsible for creating the core data science stack to drive optimal customer experience, business operations and product insights and decisions for Adobe's Creative Cloud offerings. His team focuses on developing scalable products for digital marketing, customer analytics, sales optimization, forecasting, content insights and large-scale experimentation. He received his Ph.D. in Operations Research from the University of Maryland and joined Adobe through the acquisition of Efficient Frontier, an online advertising startup, where he headed the research and algorithms team. Abhishek is also an adjunct faculty at Stanford University where he teaches a course on digital marketing at the Graduate School of Business.

TASSILO FESTETICS
Vice President, Global Solutions, Anheuser-Busch InBev

Tassilo Festetics is AB InBev's VP of Global Solutions, where he oversees technology, analytics and backoffice operations teams across the world working to identify, develop and adapt the latest technology across relevant parts of the business. He is focused on delivering solutions that bring enhanced customer experiences, efficiencies through technology and process, as well as opportunities through advanced analytics.

He was born and raised in Austria where he served as an Officer in the Austrian Army Reserve and received a Master's Degree in Microbiology and Genetics from the University of Vienna.

He held positions at Accenture and Ottakringer Brauerei, an Austrian brewery before joining AB InBev in 2007. Throughout his 11 years at AB InBev, he held roles in Finance and Solutions for the Asia Pacific zone. He was appointed VP of Global Solutions at AB InBev in May 2017.

His favorite beers include Budweiser, Hoegaarden and Goose Island – especially its sour sisters.

JACK BROWN
SVP of Product & Software, Arccos Golf

Jack has over 15 years of experience leading software product strategy at companies such as IDE, Vivox and Turbine (WB Games). Most recently as VP of Product at ShapeUp, he drove scaling the platform to more than 3M registered/100K monthly active users which ultimately led to the company's acquisition by Virgin Pulse. As SVP of Product & Software, Jack defines and evangelizes the product roadmap and leads the software team. He earned his BS and MS in aerospace engineering from Boston University/MIT, has contributed to 8 patents in the aerospace and software verticals, and believes strongly in usability, data, analytics and providing value to the user.

Newly addicted to the game of golf, Jack has already improved his handicap by 6 strokes since using Arccos!

FIONA TAN
SVP of Customer Technology, Walmart Labs

Fiona Tan joined Walmart in 2014 and is currently the Senior Vice President of Customer Technology. She is responsible for innovation and engineering execution on all customer-facing technology across Walmart's physical and digital footprint. Her team leverages data and machine learning to drive marketing and advertising campaigns, oversees all personalization capabilities, and delivers the desktop and mobile customer experience for Walmart's eCommerce as well as the technology across point-of-sale systems, pharmacy, specialty departments, and associate productivity apps in Walmart stores. Their goal is to deliver a seamless shopping experience for our customers – while empowering our millions of associates with technology.

Previously, Fiona was Walmart's Vice President of Engineering, responsible for product roadmap and engineering capabilities for Walmart's international eCommerce businesses as well as the Sam's Club business in the U.S. In addition, her team drove technology strategy and operational excellence across Walmart Labs.

Prior to Walmart, Fiona served in a number of leadership roles at Ariba and TIBCO Software. At Ariba, she led a global engineering organization responsible for the strategy, lifecycle, and delivery of the Ariba Commerce Network. At TIBCO Software, she was responsible for a major product line as well as the management of their offshore development centers.

Fiona has a master's degree in Computer Science from Stanford and a bachelor's degree in Computer Science and Engineering from Massachusetts Institute of Technology (MIT).

ERIC BOYD
Corporate Vice President, AI Platform Microsoft

Eric Boyd leads the AI Platform organization in the Cloud + AI division. This organization is responsible for Azure ML, Cognitive Services, ONNX and frameworks, as well as internal platforms providing data, experimentation, and GPU cluster management to groups across Microsoft.

Eric has been at Microsoft since 2009 when he joined to create the Silicon Valley Search Ads team. Eric moved to Bellevue in 2011 to lead the Bing Ads Development team prior to taking on his current role in 2015.

Prior to Microsoft, Eric was the VP of Engineering at Mochi Media, an ads startup that was acquired by Shanda Games. Prior to Mochi Media, Eric was at Yahoo for 10 years; serving as VP of Platform Engineering prior to his departure.

Eric holds a Bachelor's Degree in Computer Science from MIT.

Other Interests – Eric is a Boston Red Sox fan and semi-retired professional blackjack player.

LILI CHENG
Corporate Vice President Conversational AI

Cheng is responsible for conversational AI technologies, including Microsoft Bot Framework and Azure Cognitive Service Language Understanding. She works with external partners around the world, ranging from start-ups to large-scale enterprises, to identify areas of collaboration, drive innovation and deliver solutions. In this capacity, she also manages Microsoft's relationship with the conversational AI developer community.

Within Microsoft, Cheng has diverse talent. She founded the Social Computing Group in Microsoft Research, and Future Social Experiences ("FUSE") Labs. She was the Director of User Experience for Microsoft Windows, and has innovated on technical infrastructure in the areas of real time data and search, including real-time ingestion of Facebook and Twitter firehose data on Microsoft Azure; desktop search which unified the Windows and Office search indexes for Windows; and core search Prior to joining Microsoft, Cheng worked in Apple Computer's Advanced Technology Group on the User Interface research team, where she focused on QuickTime Conferencing and QuickTime VR. Her first career was as an architect in Tokyo and Los Angeles for Nihon Sekkei, and Skidmore, Owings & Merrill on commercial urban design and large-scale building projects. She continues her expertise in architecture by designing online community and partnering with the top design schools around the world for programs such as the Microsoft Design Expo.

Cheng earned her bachelor's degree in architecture from Cornell University and her master's degree from New York University. She has taught classes in Social Software, Design, and Internet Culture at the Harvard Graduate School of Design and at New York University Tisch School of the Arts.

She serves as a board member for AI4All, which partners with top universities to educate future AI talent about AI for social good. She has been recognized by multiple organizations, including Time Magazine ("Future of AI"), Forbes ("Women@Forbes 2018"), Fast Company ("Most Creative People 2016"), New York University ("Tisch 50th Anniversary Creativity Award"), and has given numerous keynotes and interviews including: Wired, Forbes, O'Reilly Media, SXSW.

Other Interests – Cheng lives in the Seattle area, with her husband, and has three boys.

DAVE FORSTROM

Senior Director, Commercial Communications

Dave leads Microsoft communications and analyst relations efforts for AI at Microsoft responsible for helping to extend the company's AI vision and ambition for this next big shift in computing across the world.

Focusing on executive counsel, Analyst relations, communications strategy and news disclosure, he has led teams across the company since 2008. He's led communications for Microsoft's mobile devices, where he oversaw product launch strategy and execution, executive counsel and customer and partner collaboration and fan engagement, amongst other things. He's also managed communications in Trustworthy Computing and Windows, including helping to architect the launch of Windows 10.

Prior to Microsoft, Dave was the co-owner of a national communications firm where he provided strategic counsel and directed the communications efforts of multiple clients in the tech industry. He has a BA in communication and public relations from Brigham Young University.

Other interests – Dave joins Eric Boyd in celebrating Red Sox victory, he's an avid runner and a big family man (father of 7 boys).

JULIA WHITE
**Corporate Vice President, Azure**

Julia leads the marketing team for Microsoft Azure, and is focused on how Microsoft presents its Applications, Infrastructure, Data and Intelligence capabilities to customers and partners. In addition to the primary focus on Azure, the team is also responsible for Microsoft's hybrid cloud assets; including SQL Server, Windows Server, Developer tools and management capabilities. Across this portfolio, Julia is responsible for the value proposition, global go to market strategy, and industry engagement. She also works in partnership with engineering leadership to chart the product roadmaps.

Julia joined Microsoft in 2001 as a product manager in the Enterprise Server team. In 2005, she moved to Microsoft's US sales organization to run channel marketing and sales incentives. In 2007, she returned to product leadership, taking on Exchange Server product marketing. Over the course of the next 8 years, she was instrumental in leading the product's evolution from an on-premises server technology to establishing Office 365 as the leader in cloud productivity services.

Julia has a bachelor's degree from Stanford University and a master's in business administration from Harvard Business School.

CHAPTER 8
Press Resources
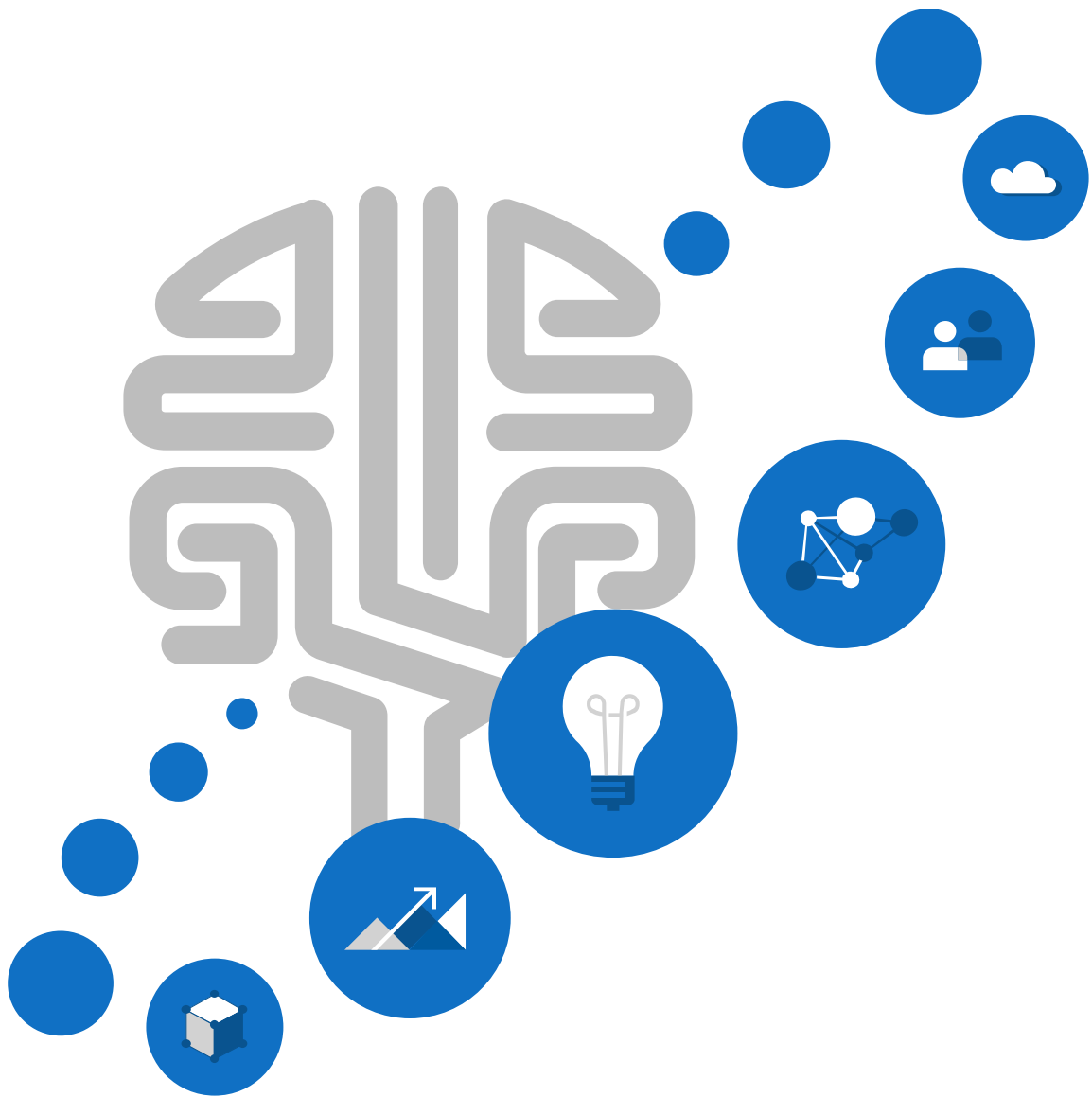
Press Resources

All materials will be live on **the press Microsite** **at 6:00 a.m. PST on Wednesday, Nov. 14th.** Check back later in the day for event images, videos and additional creative assets.

Please join in on the conversation with us! (once the news embargo is lifted at 6 a.m. PT on Wednesday, November 14).

Please tag @Microsoft when posting on the following channels: **Twitter**, **Facebook**, **Instagram**, **LinkedIn**, **and YouTube**.

Please use our official hashtag #MicrosoftAI.