



## **Worldwide Spending on Artificial Intelligence Systems Will Be Nearly \$98 Billion in 2023, According to New IDC Spending Guide**

**FRAMINGHAM, Mass., September 4, 2019** – Global spending on artificial intelligence (AI) systems is expected to maintain its strong growth trajectory as businesses continue to invest in projects that utilize the capabilities of AI software and platforms. According to the recently updated International Data Corporation ([IDC Worldwide Artificial Intelligence Systems Spending Guide](#)), spending on AI systems will reach \$97.9 billion in 2023, more than two and one half times the \$37.5 billion that will be spent in 2019. The compound annual growth rate (CAGR) for the 2018-2023 forecast period will be 28.4%.

"The AI market continues to grow at a steady rate in 2019 and we expect this momentum to carry forward," said [David Schubmehl](#), research director, [Cognitive/Artificial Intelligence Systems](#) at IDC. "The use of artificial intelligence and machine learning (ML) is occurring in a wide range of solutions and applications from ERP and manufacturing software to content management, collaboration, and user productivity. Artificial intelligence and machine learning are top of mind for most organizations today, and IDC expects that AI will be the disrupting influence changing entire industries over the next decade."

Spending on AI systems will be led by the retail and banking industries, each of which will invest more than \$5 billion in 2019. Nearly half of the retail spending will go toward automated customer service agents and expert shopping advisors & product recommendation systems. The banking industry will focus its investments on automated threat intelligence and prevention systems and fraud analysis and investigation. Other industries that will make significant investments in AI systems throughout the forecast include discrete manufacturing, process manufacturing, healthcare, and professional services. The fastest spending growth will come from the media industry and federal/central governments with five-year CAGRs of 33.7% and 33.6% respectively.

Figure 1



Source: IDC Worldwide Semiannual Artificial Intelligence Systems Spending Guide 2018H2

"Artificial Intelligence (AI) has moved well beyond prototyping and into the phase of execution and implementation," said [Marianne D'Aquila](#), research manager, [IDC Customer Insights & Analysis](#). "Strategic decision makers across all industries are now grappling with the question of how to effectively proceed with their AI journey. Some have been more successful than others, as evidenced by banking, retail, manufacturing, healthcare, and professional services firms making up more than half of the AI spend. Despite the learning curve, IDC sees higher than average five-year annual compounded growth in government, media, telecommunications, and personal and consumer services."

Investments in AI systems continue to be driven by a wide range of use cases. The three largest use cases – automated customer service agents, automated threat intelligence and prevention systems, and sales process recommendation and automation – will deliver 25% of all spending in 2019. The next six use cases will provide an additional 35% of overall spending this year. The use cases that will see the fastest spending growth over the 2018-2023 forecast period are automated human resources (43.3% CAGR) and pharmaceutical research and development (36.7% CAGR). However, eight other use cases will have spending growth with five-year CAGRs greater than 30%.

The largest share of technology spending in 2019 will go toward services, primarily IT services, as firms seek outside expertise to design and implement their AI projects. Hardware spending will be somewhat larger than software spending in 2019 as firms build out their AI infrastructure, but purchases of AI software and AI software platforms will overtake hardware by the end of the forecast period with software spending seeing a 36.7% CAGR.

On a geographic basis, the United States will deliver more than 50% of all AI spending throughout the forecast, led by the retail and banking industries. Western Europe will be the second largest geographic region, led by banking and discrete manufacturing. China will be the third largest region for AI spending with retail, state/local government, and professional services

ying for the top position. The strongest spending growth over the five-year forecast will be in Japan (45.3% CAGR) and China (44.9% CAGR).

The [Worldwide Artificial Intelligence Systems Spending Guide](#) sizes spending for technologies that analyze, organize, access, and provide advisory services based on a range of unstructured information. The spending guide quantifies the AI opportunity by providing data for 26 use cases across 19 industries in nine regions and 32 countries. Data is also available for the related hardware, software, and services categories. Unlike any other research in the industry, the detailed segmentation and timely, global data is designed to help suppliers targeting the market to identify market opportunities and execute an effective strategy.

### **About IDC Spending Guides**

IDC's Spending Guides provide a granular view of key technology markets from a regional, vertical industry, use case, buyer, and technology perspective. The spending guides are delivered via pivot table format or custom query tool, allowing the user to easily extract meaningful information about each market by viewing data trends and relationships.

### **About IDC**

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,100 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly-owned subsidiary of International Data Group (IDG), the world's leading media, data and marketing services company. To learn more about IDC, please visit [www.idc.com](http://www.idc.com). Follow IDC on Twitter at [@IDC](#) and [LinkedIn](#).

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