Meet the 2017 RBR50: Top 50 Robotics Companies
Editor’s Note
by Eugene Demaitre, Senior Editor

The past year marked a period of solid advancements for the robotics industry, and 2017 looks to continue that trend. The International Federation of Robotics expects strong growth worldwide, especially in industrial robots.

The U.S. was well-represented in this year’s RBR50 list, with 32 of the companies residing in the states. That’s no surprise, since the U.S. has a mix of strong university research, a healthy investment climate, and applications across numerous sectors, from manufacturing and military to supply chain and surgical.

The number of industrial robots in North America grew 10.2% to 30,875 units worth $1.8 billion in 2016, according to the Robotics Industries Association.

It’s also no surprise that industrial powerhouses such as Germany, Japan, and China are represented, but don’t count out rising robotics nations such as India and Canada or smaller ones such as Denmark and Estonia.

A dozen companies, or 24%, are new to this year’s RBR50. That’s slightly less turnover than in past years, but it reflects the fact that certain end-user industries are stable, if still growing. We plan to look at startups separately later in the year.

What does it take to be a leader in the robotics industry? We received many nominations, and we ultimately chose 50 companies based on three key attributes: commercial success, innovation, and influence.

Commercial Success
As in the each RBR50 list of the past five years, the “big four” of industrial automation -- ABB, FANUC, KUKA, and Yaskawa Motoman -- remain on top. They all serve automotive manufacturing, which is the first and still the biggest user of robotics. However, they’ve also provided robots for materials handling and responded to the rise of collaborative robots, or cobots, which could extend automation into small and midsize enterprises.

Midea Group’s purchase of Germany-based KUKA validates the latter’s success and reflects the desire of China, which is regarded as “the world’s factory,” to work more closely with those who can help it increase its robot density.

Similarly, Siasun, China’s biggest maker of industrial robots, has reportedly been scouting in Europe for potential acquisitions. U.S. companies would do well to watch for such team-ups to make sure they stay flexible and open to such partnerships themselves.

Just behind manufacturing, supply chain and logistics are the areas of most interest in automation. We expect these segments to continue growing this year, driven...

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by e-commerce expectations of nearly instantaneous customer satisfaction.

Several robotics executives have told us that they foresee a day coming soon when the entire supply chain is automated -- from taking an order and personalized manufacturing of, say, shoes or a car, to packing, shipping, and delivery. No human would touch the product until it’s received by the consumer.

Companies such as Aethon, Clearpath, Locus Robotics, Omron Adept, Seegrid, and of course, Amazon Robotics (formerly Kiva Systems) are poised to build on and benefit from this interest.

Several companies on our list are clear leaders in their respective fields, including DJI for drones, Intuitive Surgical for surgical robotics, iRobot for consumer vacuum cleaners, and The Lego Group for toys and education.

Not only are Lego and iRobot household names, but they've also made the idea of robots in the home more palatable. Amazon Alexa and Google Home are just the beginning of social robot appliances and what one company called “a pipeline into the home.”

Innovation
Perception, manipulation, and mobility, in combination with artificial intelligence, are constantly improving. The organizations that are advancing and combining these technologies for practical uses promise nearly unlimited growth for the robotics industry as a whole.

Gripper provider Robotiq is among the few companies to make the RBR50 list for all of the past five years, on the basis of its development and support of gripper technology, which works with fellow listee Universal Robots’ arms.

A number of AI companies made this year’s list. Google parent Alphabet and IBM Watson are working to provide big data analytics and machine-learning capabilities much like Amazon Web Services has been the leader for cloud computing.

How will the emerging Industrial Internet of Things combine with AI and mobile robots? We’ll be watching the agriculture, healthcare, service, and more industries for answers in the coming year.

The major automakers, including this year’s RBR50 listees Honda and Toyota, are investing billions of dollars in self-driving car research and development.

This includes R&D around sensors, infrastructure, and AI. The more cautious carmakers have said they’re developing “driver-assist” tech rather than rushing to replace humans, but fierce rivals (and RBR50 members) Uber and Waymo want nothing less.

Interesting enough, Honda and Toyota are also noteworthy for working on service robots to help aging populations worldwide.

We’re always on the lookout for novel and genuinely helpful applications, such as ULC Robotics’ Cisbot, offered through a Robotics-as-a-Service (RaaS) model for inspecting live gas mains.

Influence
Component makers are the unsung heroes of the robotics industry, with Intel, Maxon, and Micromo providing key parts inside many models of robots. As software and AI become bigger differentiators, expect to see new companies alongside hardware providers.

One didn’t need to look far at this January’s Consumer Electronics Show (CES) in Las Vegas to see the influence of SoftBank Robotics (formerly Aldebaran). SoftBank’s Pepper is a humanoid social robot already in use in stores in Japan and Europe and starting to roll out in the U.S., and it had a host of imitators at CES 2017.

In addition, SoftBank has established a $1 billion Vision Fund to build up the entire industry, not to mention the ecosystem for its own products.

Many businesses have pivoted from consumer to commercial markets, particularly those in the drone, 3D printing, and therapeutic robot spaces. We’ll be watching all of the RBR50 companies throughout the year to see how they execute against their business models.
Coming Soon: Top 10 Breakouts!
This year’s nominations were very competitive, and our team had the challenge of sorting through many worthy companies.

At the same time, comparing a midsize company such as Vecna Technologies, which makes telepresence, logistics, and service robots, to defense giant Lockheed Martin or Alphabet, which has multiple divisions, is like comparing apples and oranges.

So this year, we’re trying something new: We’ll be breaking out five Top 10 lists around components, construction and infrastructure, healthcare, industrial automation, and logistics and supply chain.

Some of the RBR50 will be on these breakout lists, but we’ll be able to focus more on what’s happening in different vertical markets.

If your company didn’t make this year’s RBR50 but you think it should be on one of these Top 10 lists, let us know!
How we benefit from progress

Taking a closer look at blood

Under power: from “furka” to “gotthard”
# RBR50 2017 Companies

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<tr>
<th>Company</th>
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<th>Industry</th>
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<td><strong>KUKA Robotics</strong></td>
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<td><strong>Lego A/S (The Lego Group)</strong></td>
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<td><strong>Locus Robotics</strong></td>
<td>United States</td>
<td>Supply Chain</td>
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maxon precision motors  
Country: United States  
Industry: Components

MICROMO  
Country: United States  
Industry: Components

Nvidia  
Country: United States  
Industry: AI, Vehicle

Omron Adept Technologies  
Country: United States  
Industry: Supply Chain

Open Bionics  
Country: United Kingdom  
Industry: Manufacturing

OTTO Motors  
Country: Canada  
Industry: Supply Chain

Rethink Robotics  
Country: United States  
Industry: Manufacturing

Robotiq  
Country: Canada  
Industry: Manufacturing

Savioke  
Country: United States  
Industry: Service

SCHUNK  
Country: Germany  
Industry: Manufacturing

Seegrid  
Country: United States  
Industry: Supply Chain

Siasun Robot & Automation  
Country: China  
Industry: Manufacturing

Simbe Robotics  
Country: United States  
Industry: Supply Chain

Soft Robotics  
Country: United States  
Industry: Supply Chain

SoftBank Robotics  
Country: Japan  
Industry: Service

Starship Technologies  
Country: Estonia  
Industry: Supply Chain

Toyota  
Country: Japan  
Industry: Service, Vehicles

Uber  
Country: United States  
Industry: Vehicles

ULC Robotics  
Country: United States  
Industry: Infrastructure

Universal Logic  
Country: United States  
Industry: Manufacturing

Universal Robots A/S  
Country: Denmark  
Industry: Manufacturing, Supply Chain

Vecna Technologies  
Country: United States  
Industry: Service, Supply Chain

Waymo  
Country: United States  
Industry: Vehicles

WowWee  
Country: China  
Industry: Consumer

Yamaha Motor  
Country: United States  
Industry: Vehicles

Yaskawa Motoman  
Country: United States  
Industry: Manufacturing
About Robotics Business Review:

Robotics Business Review (RBR) is the only publication dedicated to the business of commercial robotics. Whether you’re investing in, developing or purchasing robotic solutions, RBR provides an unparalleled view into this rapidly developing and growing market so you can stay informed, do your job better and be competitive.

RBR members have full access to our growing company index including insights on RBR50 companies, insider interviews, whitepapers, industry reports, podcasts, webcasts, and financial reporting.

Our members span the robotics ecosystem and use RBR to:

• Stay up-to-date on global trends and areas of growth and development in robotics
• Know where to invest their time, money and resources in robotics
• Cut through noise and hype to support better business decision-making and stay ahead of the competition
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As a thank you for downloading this whitepaper, use code WPRBR5017 to save $200 on your membership.

We hope you take advantage of this offer and join RBR’s community of informed business professionals who are actively investing in, developing, purchasing and profiting from commercial robotics.