



Here's what's coming in the world of robotics and AI. Investors: Are you ready?

By Bill Studebaker

Any experienced investor knows that a down market isn't something to dread. In fact, if you're investing for the long term, it's something to celebrate. If today's market has you wondering where to invest to help bolster your portfolio down the road, one of the most exciting places to look is robotics, automation, and AI (RAAI).

What's happening in RAAI today can feel like it's been plucked straight out of a science fiction fantasy. But make no mistake: these innovations are 100% real—and they are poised to drive a whole new level of disruption in every industry in the next 12 to 18 months. Healthcare. Financial Services. Transportation. Manufacturing. Agriculture. Retail. The list goes on. For investors, understanding what's coming and, even more importantly, how to gain exposure to the companies that are driving this dramatic change, could be the ticket to a truly future-proofed portfolio.

Here are some of the most exciting changes to watch for in 2019:

1. **Commercial drones will take off.**

If you still think of drones as hi-tech toys, prepare to have your mind blown. Drone technology has advanced considerably in the past 18 months, turning this once 'flying camera' into a tool that is revving up to disrupt a slew of industries, including agriculture, architecture and construction, manufacturing, and delivery. New developments in [BVLOS \(Beyond Visual Line of Sight\)](#) and recently [relaxed FAA regulations](#) are paving the way.

2. **Massive adoption of AI will transform the healthcare industry.**

The medical field is seeing the light when it comes to the very real benefits of AI in all things healthcare. [Machine learning](#) is already helping physicians make smarter decisions by making it easier to view and analyze patient scans. [3D printing](#) matches

medical devices to the exact specifications of patients. [Genomic sequencing](#) makes it possible to diagnose and treat diseases earlier than ever, and [robot-assisted surgeries](#) are improving surgical outcomes and reducing the cost of care. No industry is more ripe for change, and RAAI is delivering.

3. **Collaboration between humans and robots will skyrocket.**
Collaborative robots—or cobots—are designed to support the work of humans in a wide variety of environments. [Cobots](#) are more affordable than ever and easy to install in defined workspaces, a combination that opens the door to use by small and mid-sized businesses that must accelerate their supply chains to compete with the giants that have completely disrupted the manufacturing and retail industries. Cobots make human work faster, safer, and cheaper, which makes them a must-have for businesses in 2019.
4. **Autonomous vehicles will deliver Level 4 autonomy.**
[Level 5 autonomy](#) requires capabilities that work predictably in all environments all of the time. And while that Holy Grail remains beyond our grasp—for now—Level 4 autonomy, which requires that self-driving vehicles work in some places, some of the time, is ready for use in limited situations. The result: autonomous vehicles will begin to appear in a variety of geo-constrained environments such as airports, closed campuses, and retirement communities, laying the groundwork for wider adoption and acceptance as technology gets closer and closer to Level 5.
5. **Winners and losers will be defined by how quickly they adopt robotics and AI.**
[Sears and Toys 'R' Us](#) are just the latest examples of companies that were market leaders who failed because they failed to adapt in the new RAAI-driven economy. As robotics and AI continues to march forward, winners and losers in every industry will be increasingly defined by how willing they are to evolve their processes and business models to take advantage of the latest advancements. Those who are unwilling or unable to make the shift will be next on the chopping block.
6. **The fear of robots will finally begin to dissipate.**
There will always be adversaries who love to shout about the danger of robots taking over the world, but as RAAI technologies become more visible in our everyday lives, [the benefits of robotics and AI](#) will begin to outweigh the fear of the unknown. In reality (virtual and non-virtual!), robots and AI are light years away from having the level of intelligence to create a threat. As robots' ability to make our lives easier, healthier and, yes, more fun increases, the perception of the 'evil robot' will slowly but surely work its way back into the realm of science fiction.

What is even more exciting is that this is only the beginning. Looking forward into the next decade, today's advancements will seem like baby steps in comparison to what robotics, automation, and AI will be able to achieve—and deliver—in the years ahead. Investors who grasp this reality today know just how important it is to begin to capture this growth opportunity now.

The [ROBO Global Robotics and Automation Index](#) was created more than 5 years ago with the sole mission of giving investors a way to gain this much-needed exposure in the earliest stages. Including more than 80 stocks across 12 subsectors in 14 countries, the index is driven by deep research, the insights of some of the leading experts in the fields of robotics and AI, and a focus on market-cap diversification. By maintaining minimal overlap (<2%) with the ACWI and <35% overlap with newer, less sophisticated robotics and AI-focused indices, the ROBO index may be the ideal option for anyone who is hoping to make robotics and AI a valuable part of their own future—for decades to come.