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From the Phoenix Business Journal:

<https://www.bizjournals.com/phoenix/news/2017/12/19/my-view-what-the-fourth-industrial-revolution.html>

My View: What the Fourth Industrial Revolution means to business education

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Welcome to the Fourth Industrial Revolution, where advanced technology recently helped a paralyzed man walk, where machines talk to each other in a smart factory, where appliances are controlled remotely using the internet, and where massive amounts of data are being processed with complex algorithms to predict consumer behavior or make real time decisions for autonomous vehicles to operate.

You may also know this explosion in technology as Industry 4.0. It builds upon the Digital Revolution — with a fusion of exponential advances in the physical sciences and biological sciences through new technologies, including artificial intelligence (AI), genomics and the Internet of Things (IoT).

It's redefining how we live and work, and while it offers tremendous opportunities for innovations that create great benefits to all, it comes with many risks, especially to businesses that are not prepared for the rapid changes and their consequences. For example:

- **Disruption** is already happening in health care, banking, real estate, the energy sector, manufacturing, retail and many other industries. Companies must plan for and adapt to disruption and, more importantly, be able to identify innovations that will better position them in the competitive world.

- **Workforce development** is critical to success. By 2020, an estimated 35 percent of the skills demanded for jobs across industries will change. Automation will be prevalent in several industries with profound impact in the nature of the workforce. Seasoned professionals will need to be re-trained



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and younger generations must be proficient in new skills.

- **Security vulnerabilities** will continue to increase as more devices are connected to the internet. This is nothing to gloss over, especially when cyber crime costs are expected to jump to \$3 trillion by 2021. Small and medium-sized businesses are easy targets for hackers, and the costs to recover data can be staggering — \$690,000 for small businesses and more than \$1 million for middle-market companies, according to the [Ponemon Institute](#).

Earlier this month, the University of Arizona Eller College of Management hosted a special event at our recently-expanded Eller campus in downtown Phoenix. UA President Robert Robbins, Chris Camacho, president and CEO of the [Greater Phoenix Economic Council](#), and I discussed the forces unleashed by Industry 4.0. The exponential waves of innovation already are set in motion, as evidenced by Waymo's autonomous vans that will be test-driven on local roads and Amazon's plans to deliver packages to our doorsteps via drone in the future.

We also discussed how colleges and universities — in particular business schools — need to approach higher education in the new environment with closer connections with industry and immersive learning environments that lead to interdisciplinary experiential work.

Over the next year, we will provide more opportunities to learn about this societal shift. We welcome ideas as we plan future workshops and panel discussions. Whether you are a business owner, manager, entrepreneur or community leader, it's time to embrace this new era and all the changes that go along with it.

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