

# ICC explores global mining opportunities with alum

Whitney Sherrill May 8, 2020



ISU's Innovation Consulting Community partnered with 1988 Redbird alum Mike Kasaba to explore how ready mining operations around the globe are for making the switch to using electric-powered machines in underground excavations.

inflection point—a time of significant change in business, such as the adoption of new technology—for a decade. His journey related to clean energy usage in the mining industry began in 2010 when his company was approached by a mining operation with a business problem.

While he listened to the situation, the ISU alum realized it was his opportunity to “change the world in a very positive way.”

The problem revolved around the mining company's desire to mine deeper underground in an existing mine coupled with its inability to do so because of the high cost of the ventilation system for filtering out the harmful emissions of the diesel-powered mining equipment.

The answer Artisan proposed was the development of zero-emission, battery-powered underground mining vehicles.

For Kasaba, the solution just made sense. Indeed, there are many very tangible benefits to creating greener mining equipment. He pointed “first and foremost” to the health of underground workers, explaining that according to the World Health Organization, “the cancer rates are much higher

Is the mining industry ripe for change?

That's the question a team of Illinois State University students sought to answer this semester.

Through ISU's Innovation Consulting Community (ICC), they partnered with Redbird alum Mike Kasaba '88 to explore how ready mining operations around the globe are for making the switch to using electric-powered machines in underground excavations.

As the founder of Artisan Vehicles, a hybrid and electric vehicle developer, Kasaba has been preparing for this

underground than they are on the surface and part of that is using diesel in underground environments. Imagine being in a cave with a bulldozer for your career, 30 or 40 years. You can imagine what that does to your health.”

Moving away from diesel engines also helps cut down on emissions that are released into the atmosphere and reduces the cost companies face for ventilation systems, which Kasaba observed is “one of the biggest expenses for underground mines.”

In answer to the need, Artisan redirected its attention to focus solely on mining vehicles. Over the next few years, it met with success as its technology was utilized in several different mines. In early 2019, Artisan became a business unit of the Load and Haul Division of Sandvik Mining and Rock Technology, which Kasaba described as “the largest maker in the world of underground mining vehicles.”

Kasaba, who continues to serve as managing director of Artisan, stated he is “very satisfied with what we’re doing, and I’m convinced that the work that we’re doing is saving lives. It’s very rewarding.”

The entrepreneur credits his time at ISU with giving him a “firm foundation” for entering the business world. The 1988 graduate holds degrees in both Management Information Systems and Organizational Management, and he was an inductee for the 2012-2013 College of Business Hall of Fame. Prior to founding Artisan Vehicles, the Redbird alum started a clean energy utility company, built one of the largest solar arrays in California, founded an Internet consulting firm and worked in the telecommunications industry.

When asked what tips for success he has for current ISU students, the alum said they should be advised to “look for mentors. Look for people with the wisdom of how to apply the education that they’re getting to the real world and that link will propel them in their own success.”

Kasaba is doing his part to make those kinds of powerful connections a reality by partnering with the University’s ICC program, which offers students meaningful, hands-on experience by connecting them with real world companies and nonprofits seeking insights about actual organizational scenarios. Participants collaborate to develop practical solutions to real life needs, and along the way, they foster skills employers prize.

This year, 90 students from 24 majors across campus worked on interdisciplinary teams to tackle 14 different ICC projects covering such diverse topics as a food truck feasibility study, an examination of changes in a Major League Baseball team’s fan base and an analysis of how blockchain technology can be applied to the insurance industry.

The ICC projects are different from the typical classroom experience in that there is no “right answer.” Indeed, each client engagement may have multiple possible solutions. It is the students’ job to clearly understand and research the business problem and make a recommendation to their real world client.

“When you’re not provided a rubric and the entire idea is you’re innovating a solution, it teaches you all the really good foundational skills in today’s world,” observed Adam Kuntz, an International Business senior who was one of the six students assisting Kasaba this year by developing a market assessment for the mining industry.

The ISU student members of the mining ICC team were well-suited for the project, as evidenced by the foreign language competency, business understanding, communication skills and work and study abroad experience they brought to the table.

Ana Belmonte, who is pursuing a master’s in Communication and was the team’s project manager, said she and her fellow team members were excited to offer their “knowledge and enthusiasm” to the project.



ISU student members of the mining ICC team and Dr. Peter Kaufman, Marketing Department, College of Business.

“Project management is one of the most important practices and resources that professionals and companies have today,” she observed. “Being involved in a multidisciplinary team like this will help me to develop and master crucial skills, such as planning strategies, managing personnel and executing ideas.”

Speaking of his involvement with the ICC team, Kasaba said, “At this stage in my career, giving back is very important to me. I got a lot out of my education at ISU and have a fair amount of success in my career and so giving back to the University by providing the basis for these case studies is something that I’m excited about.”

The students involved with the ICC project are thankful for his commitment, which included regular virtual meetings with the ISU team.

“Our client is amazing,” said MBA student Johannes Dierkes. “I am thankful for the insights he gave us. He is a very busy business person and still reserved half an hour each week for us. It made me realize that he has high expectations that we gave our best to fulfill.”

As Kasaba noted, the benefit provided by this partnership “goes both ways.” On the one side, his company received “a fresh perspective” regarding the current industry and strategy, while on the other, students had the opportunity to see firsthand what is happening in the world of business and to apply the principles they are learning in the classroom.

“This has taken my schooling to another level,” senior international business major Caileen Calvert said of being a part of the ICC team. “This opportunity gave me the chance to learn about a new industry, build contacts outside of ISU, advance my teamwork and critical thinking skills and practice communication skills.”

MBA student Katie Lorsbach added that being a part of the program gave her a different perspective from that provided by classroom experiences. She also described the benefits of seeing how companies “approach innovation and strategy and how they move into the future and tackle issues and promote products or services that help people.”

Students who participate in ICC do not receive class credit or monetary compensation, but Dierkes does not see this as a drawback for getting involved with the extracurricular program.

“I regard this as an investment that will pay off later,” he shared. “The skills I obtain enable me to find quality jobs, and the payment I will receive is the payoff ... I highly, highly recommend this program to anyone who is motivated to make their resume something special. It is important for students to get this kind of real world experience while at ISU because it will make it a lot easier to find a job after graduation. Employers are searching for talent that show specific skills, which are learned through this experience (e.g. teamwork, being innovative).”

The mining consulting team members presented their final report on their business problem at the end of March.

*To learn more about the program, visit [www.innovationconsulting.community](http://www.innovationconsulting.community).*