

Communication device for workplace safety and productivity monitoring

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Three Mexican students devised a system of communication between a chip implemented in helmets or vests of workers from various high-risk industries and a web platform. It provides information such as heart rate and temperature, and records a precise schedule of entry and departure of the user.

The idea led to the creation of the company Prysmex, which received financial support from the National Institute of Entrepreneurship (INADEM in Mexico) in December. It was the only Mexican project among the 70 finalists of the Global Entrepreneurship Summit event held in Nairobi, Kenya, which Barack Obama and worldwide investors attended.

The creators of the technology, Susana Ruiz, chemical engineer, and Patricio de Villa, civil engineer, currently live in Silicon Valley, working at a business accelerator to finish their hardware and network device. The third partner, Iker Arbulu Lozano, is a student of engineering in computer technologies and works at the Monterrey campus, North Mexico, finishing the software.

"We are faithful believers in the Internet of things, in which everything is networked. That is why we created a chip that is placed in a vest or helmet of a worker and is connected to a network that in turn communicates to a [web platform](#) where the administrator can see what the device monitors," says Lozano Arbulu.



Petrochemical, foundries, mining, construction and other high-risk industries may have more information on their workers during hours of operation, for example, to monitor their health and have better and faster responsiveness in accidents; it also has sensors that detect whether the workers are using the safety equipment.

The application provides reports for real-time security, but also location and productivity, since it records time of entry and exit of the workplace, which will be reflected in the nominal payment.

"As part of the improvement we contemplate assigning a new chip every

day, so that the worker can't impersonate another or falsify information provided by the device.

"Regarding the internet of things and communication chips for monitoring the workplace safety and personnel, we are the first Mexican company to attend this issues," says Arbulu Lozano, adding that the sale price considered for development will be of around four thousand dollars for 300 workers.

Moreover, the Global Entrepreneurship Summit is an event driven by the U.S. government to establish relations at the highest level and exchange ideas on entrepreneurship and innovation. In its sixth edition, held last July in Kenya, President Barack Obama attended.

Iker Arbulu tells us the summit opened a business opportunity with companies interested in bringing the product to Africa and the United States.

Provided by Investigación y Desarrollo

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