Real world smart glasses

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Few technology topics generate as much noise as wearables, mostly to do with brands known for their consumer products, such as Samsung, Sony and Apple.

Clunky glasses known as the Moverio BT-200 and made by Seiko-Epson are aimed at real applications ranging from aircraft inspections to medical assessments. Image: GizMag

One truth, however, tends to be lost in the discussion: mass-market wearable technology has been with us for more than a century in the form of the wristwatch. And now the company that revolutionised the watch business wants to reclaim some of that legacy.

Seiko invented the quartz watch in 1969 and led the movement away from mechanical watches. It released the first LCD watch in 1973, the first TV wristwatch a decade later and the first wrist computer in the mid-1980s. Seiko acknowledges, though, that it was too early and the products were too expensive.

Now, as Seiko-Epson, it is about to take watches into the "new" wearable market. Last month, it flexed its muscles in the smart glasses arena, releasing the second generation of its Moverio headset, the BT-200.

The first effort, introduced in 2011, was too bulky and it was assumed Epson would bow out of this arena. But now it's also about to unstrap the Pulsense watch and Pulsense band from its production lines, at prices that will probably send Samsung and Sony's accountants back to their spreadsheets.

Epson making wearables

Epson is best known for printers and projectors, but its legacy in watches has given it a 45-year headstart in one crucial respect: when it produced the first quartz watch, the production facilities for such technology did not exist and it had to develop manufacturing capabilities from the ground up. Today, it continues to be a world leader in precision manufacturing.

Epson Pulsesense smartwatch and wrist band is being sold at prices well below those of competitors. Image: Your News Ticker

"The key to our wearable technology is Epson's sensing technology, which we will leverage to produce personal motion and vital-sign sensing products for use in sports, personal healthcare and medical applications," said Minoru Usui, President and Chief Executive of Seiko-Epson, speaking in Japan this week.

"This will present us with many new challenges, but we have the technology to overcome these challenges and many years of experience in producing personal products. We don't produce products by simply assembling components," Usui said.

Glasses for the real world

Epson Director Shikegi Inoue insisted that the wearable category did not represent a new strategy .

"It's not a change. It's based on a strategy introduced five years ago to invest in sensing technologies. Our head-mounted displays originate in our trials in LCD technology, so everything is an extension of our strategy of the last five years."

The BT-200 is being positioned as smart glasses for the real world, especially in commercial applications. For example, it

will allow specialists in fields ranging from surgery to aircraft maintenance to access recommended procedures without turning away from the patient or plane.

A computer screen projected on small LCD panels provides access to applications such as a browser, e-mail, camera and video, running on the Android operating system. Although the device itself is still too heavy to captivate consumers and a linked hand-held device makes operation clunky, it is already changing some professions.

"The consumer applications are the sexy ones, but the real applications are in the business environment," said Rob Clarke, Epson's Vice-President for Marketing.

He offered a startling example: "A hospital has introduced them for doctors and nurses with an application that lets them look through the skin of a patient and see the actual veins. These are the types of application that will drive this market," Clarke said.

Source: Business Times via I-Net Bridge