

Rising from the ashes

Having emerged from the collapse of HiWave in 2013, Redux has developed a touch and sound technology whose time may just have arrived. By **Neil Tyler**.

Created in 2013, Redux emerged from the ashes of HiWave (formerly NXT) which, until it went in to administration, was a leading developer and producer of components and devices that used innovative sound and touch technologies.

Following HiWave's collapse, Redux acquired the company's IP portfolio and engineering resources and has, since then, been working to develop technologies to help manufacturers deliver more usable, responsive and robust haptic and panel audio solution products.

"Worldwide, billions of machines are getting smarter, but the user experience is still holding us back," claims Nedko Ivanov, the company's new CEO. "We are working with leading brands in the automotive, industrial and consumer markets who are looking to deploy our haptic technology to provide users with a truly interactive user interface that not only provides tactile feedback, but also audio in next generation displays, control panels and consumer devices."

Appointed in November 2015, Ivanov brought with him more than 20 years' experience in the hi-tech sector.

"Originally from Bulgaria, I've worked with a number of blue-chip multinationals and VC-backed companies," he explains. "Before I was asked to join Redux by the company's investors (Redux is privately funded), I served as CEO of BullGuard, a supplier of antivirus and mobile security solutions for the consumer market. We built a very successful and profitable business and that's really the brief I'm working to at Redux."

Turning a profit

Ivanov's time at BullGuard saw the company develop an award-winning portfolio of products and helped establish it as a leading company in a market traditionally dominated by much larger vendors.

"I joined the company at the end of September 2011 and, during the next three years, refocused the business and was able to deliver consistent growth."

He also brought profitability to the business for the first time, taking the company from a complete write-off to a successful, growing business in just four months.

The investors behind BullGuard, who are also involved with Redux, appreciated his success in turning around what had been a dysfunctional company and he was their first choice when they came looking for a CEO to take Redux to 'the next level'.

"While I've worked for a number of different businesses, I like being able to make a difference and have a direct impact on a company," Ivanov says.

He is brutally honest when it comes to his appointment at BullGuard.

"If I'd known what I was going to be walking into, I doubt I would have accepted the position. There were – how can I say it? – a number of skeletons in that particular corporate cupboard."

He admits that, while there was no 'silver bullet' to address the company's problems, he changed its customer focus by targeting fewer, but more loyal, ones and by building a much more valuable customer base.

"Whether it's a B2B or consumer oriented business, each is unique with their own challenges. But what is true of both is that you need to make a clear assessment of that business' strengths and weakness. Once that's done, it's 'back to basics' – understand your customers, manage money in and out and identify the strategic opportunities available to you. Don't hesitate, trust your gut and your judgement and don't hold off taking bold decisions when you need too."

When he was approached last year, Ivanov was both impressed and excited by the technology at Redux.

"The company has developed a truly disruptive technology that is protected by more than 180 granted patents globally and what we are offering is a new generation of user experience.

"More importantly, it can be applied to so many different market segments and the company has wide engagement with a growing number of Tier 1 customers. We want to bring the experience of using our technology to as many consumers as possible.

"I'm looking to transform this business and my intention is to take the company to the next level commercially."

Redux's Surface Sensation haptics will enable, for example, automotive companies to implement switches, sliders and

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Nedko brings more than 20 years of international experience in the hi-tech sector gained within blue-chip multinationals and VC-backed companies. Most recently, he served as CEO of BullGuard, where he built a successful, highly profitable and growing global business and created significant shareholder value.

controllers on steering wheels, in doors and on the dashboard, delivering what the company believes will be ‘an exceptional user experience’.

“While we are moving away from buttons to touchscreens, their replacements need to feel natural,” suggests Ivanov, “and the user needs to be able to locate them by feel and, when pressed, have them convey information that won’t require the user to take their eyes off the road.”

Design requirements

Using Surface Sensation, haptics engineers will be able to implement solutions that will be capable of exceeding today’s design requirements, while at the same time – ‘reducing cost, ending button failure and delivering a much high quality user experience’, according to Ivanov.

“That same technology, however, can also provide a much improved audio quality by using the device’s housing,” says Ivanov.

In the case of mobile phones, for example, Surface Sensation

transducers can be reconfigured to create stereo audio, as well as haptic waves.

“We can turn the screen into a high quality loudspeaker, eliminating the need for an embedded speaker. When it comes to mobile phones, we are not only saving valuable real estate and creating a waterproof housing, we are eliminating the need for additional speaker holes and most importantly, improving the audio quality.”

From haptics to sound, Ivanov is looking at a massive, addressable market – anywhere the user needs an interface, he suggests.

According to Ivanov, a growing number of companies are interested in the technology and are investing time and money in proof of concept devices – whether that is industrial controls, automotive dashboards or mobile phones.

“While it’s hard to break into a market, it has not been hard to gain peoples’ attention,” he admits. “The technology works, funding is in place and we are aiming to break even by 2018,” he concludes. “And while the company still has a long way to travel, we have all the ingredients in place to deliver what is required.”