**Smart-glasses company North raises $40-million in new financing**

[Josh O’Kane](https://www.theglobeandmail.com/authors/josh-okane/) Technology Reporter-KITCHENER, Ont.-Published May 19, 2019

North is in the process of manufacturing smart glasses that use holographic technology.

Seven months after the Kitchener, Ont., wearable-tech firm North Inc. announced it had pivoted to making smart glasses, the company’s chief executive officer acknowledges it has had some growing pains.

In the past few years, North – formerly a motion-sensing-armband maker called Thalmic Labs – has made several big announcements, most of them good news. In September, 2016, [it revealed](https://www.theglobeandmail.com/technology/intel-amazon-back-ontario-tech-firm-thalmic-labs-with-key-funding/article31947250/) it had secured one of the largest venture-capital raises in Canadian history, bringing in nearly $160-million led by Intel Capital, Amazon’s Alexa Fund and Fidelity Investments Capital. In October, it unveiled how that money was being invested: [consumer-focused “smart” glasses](https://www.theglobeandmail.com/business/article-waterloo-wearables-startup-turns-its-focus-to-glasses/) called Focals with a screen that beams select messages from a cellphone into the wearer’s line of sight; unlike Google Glass, they really looked like normal glasses. Four months later, however, [North laid off](https://www.theglobeandmail.com/business/article-waterloo-wearables-startup-turns-its-focus-to-glasses/) as many as 150 of its nearly 500 staff.

Those layoffs came as the company hit the brakes on a number of undisclosed projects to focus on Focals, its co-founder and CEO Stephen Lake said in an interview at North’s headquarters this month. In the meantime, the company has quietly raised US$40-million in convertible-debt bridge financing from prior investors Intel, Amazon and Fidelity, according to a source familiar with the company who was granted anonymity because they were not authorized to speak publicly.

The financing round, the source said, would help the company fund operations until a more significant round in the coming months, which could potentially be tied to a new version of the glasses. Mr. Lake acknowledged that North had raised more capital this year, although he would not confirm the amount, and said that it would not be raising further money this year. But he said the recent financing would help give the company greater flexibility as it puts its energy into refining a brand-new product in the nascent category of consumer-friendly smart glasses.

“We think we have a great product, but we’re learning from the first consumers who believe in the same vision and mission we have,” Mr. Lake said. That includes adding functionality based on their suggestions and complaints, he said. In recent weeks, it has added features such as flight information, transit directions and music through Spotify.

While the CEO declined to reveal any numbers about the demand for Focals, he pointed to the success of the pop-up truck the company built in its parking lot last winter and sent down the West Coast. Focals require customers to book online and be fitted for a custom pair in person; Mr. Lake said that each of the truck’s stops, in cities such as Seattle, Portland and San Francisco, were fully booked with appointments, sometimes two at a time. North has since built a second pop-up truck, and he expects both to make regular appearances along the east and west coasts.

As for North’s two retail locations on Toronto’s trendy Ossington Avenue and in Brooklyn’s Cobble Hill, “our footprints are huge,” Mr. Lake said – 3,200 square feet and 5,500 square feet, respectively. They were designed for bottlenecks from 30-minute fitting appointments, but appointments wound up taking half that time or less, and crowds weren’t building up. “In the next cities, we’ll be experimenting with the right format that makes sense for the product,” Mr. Lake says.

The February layoffs were “never the first choice" – but still, "a tough-but-necessary choice to set us up for success long term,” he said. “We made a decision to focus … so it means saying no to some things and it ultimately meant changing the team.”

Carmi Levy, a London, Ont.-based tech analyst, said in an interview that it will take time and increased effort for North to usher mart glasses into the mainstream. Demand for the product is low right now, he said, which would put North in a hard financial position – one that would require extra financing and reduced costs.

The analyst said the smart move would be for North to find partners, such as telecoms who already sell smartphones, to help sell the product. “We’re still not at a point where consumer awareness is where it needs to be,” Mr. Levy said.

Kitchener tech darling North reveals layoffs, four months after pivoting to smartglasses

[Josh O’Kane](https://www.theglobeandmail.com/authors/josh-okane/) Technology Reporter-Published February 22, 2019

North Inc., the heavily financed wearable-tech company that became one of the Kitchener-Waterloo tech scene’s biggest rising stars this decade, laid off “a number” of employees this week as the Ontario company cut costs following a massive pivot and rebrand.

Tech website the Verge [reported on Friday](https://www.theverge.com/2019/2/22/18236253/north-focals-smart-glasses-150-employee-lay-offs) that North laid off 150 employees on Thursday – which would represent nearly a third of its work force – but the company would not confirm that figure to The Globe and Mail. The federal government subsequently suspended payments from a $24-million investment it had announced for North last November that was contingent on job creation.

“In order to succeed long-term, we’re faced with some tough decisions,” said Stephen Lake, North’s co-founder and chief executive, in an e-mailed statement. “We decided to lay off a number of employees yesterday in order to focus our resources and ensure we have sufficient runway to execute on our upcoming milestones over the next 18-24 months.”

Last October, the company revealed it had shifted its focus from a motion-sensor armband to “smart” glasses on the back of [one of the biggest venture-capital deals in Canadian history](https://www.theglobeandmail.com/technology/intel-amazon-back-ontario-tech-firm-thalmic-labs-with-key-funding/article31947250/): a nearly $160-million funding round announced in 2016 led by Intel Capital, the Amazon Alexa Fund and Fidelity Investments Canada. The funding helped the company scale up its manufacturing muscle, bringing its employee ranks to nearly 500 by last fall as it staffed up a plant to make the new smartglasses.

But Mr. Lake suggested on Friday the company had overinvested in certain parts of its growth as it shifted focus to smartglasses. "Over the past several years, we grew quickly to bring Focals to market,” he wrote. “In the leadup to their launch, we made big bets across R&D, manufacturing, retail and more. Those risks were the right choices at the time, and helped us create a product that set a new bar in our category of everyday smart glasses.”

The federal government declined to say how much of its repayable $24-million investment had already been paid out to North. It marks the first time Ottawa has suspended an investment from the year-and-a-half old Strategic Innovation Fund. “We are currently in discussions with the company to establish the best path to repayment, while protecting existing jobs," Innovation Minister Navdeep Bains said in an e-mailed statement.

Formed by three friends from the University of Waterloo in 2012, the company formerly known as Thalmic Labs became one of Waterloo Region’s most heralded success stories after BlackBerry Ltd. began falling behind in the smartphone market. Its gesture-controlled Myo armband – which used electrical activity from the wearer’s body to control other devices – was hyped as a major advancement in wearable technology earlier this decade, but it was meant to be used in conjunction with other products and never reached mass adoption.

Last year, the company stopped selling the Myo, changing directions entirely as it revealed a project it had secretly worked on for years. [In October, it unveiled Focals](https://www.theglobeandmail.com/business/article-waterloo-wearables-startup-turns-its-focus-to-glasses/), smartglasses that can flash messages and notifications into wearers’ sight lines that look far more like standard glasses than previous generations of smartglasses, such as Google Glass.

They initially retailed for US$999 a pair. Consumers could purchase them online, but had to visit shops in either Toronto or Brooklyn, N.Y., to have them custom fitted. It announced “pop-up” fitting showrooms in Seattle and the San Francisco Bay Area earlier this month.

The pivot was seen as bold in the tech community, given the failure of previous generations of the technology to make a dent among North’s target market of everyday consumers; most other smartglasses makers had shifted their efforts to enterprise customers, such as manufacturers. In the four months since Focals launched, their early success has been unclear. The company, though, has since lowered their price point to US$599. North would not disclose sales numbers, but a spokesperson said they had sold out this month at their Seattle pop-up location.

In December, North also bought the technology and intellectual-property assets from Intel Corp.’s shuttered smartglasses division for an undisclosed amount.

Waterloo wearables startup Thalmic Labs changes its name, turns focus to smart glasses

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A once-sawdust-ridden corner of a former woodworking shop in Waterloo, Ont., is now a tightly sealed laboratory where even a single speck of dust is considered a threat to the big gamble that one of the region’s highest-profile technology companies is undertaking.

Thalmic Labs − the Kitchener company best known for Myo, an armband that lets users control devices through gestures − uses this room to perfect micro-optic projectors that must operate with utmost clarity. Across the building, blue-smocked assembly staff embed these projectors into the arms of custom-designed “smart glasses,” where they’ll shoot neon light onto holographic film embedded in the lenses – and bounce neon notifications for e-mails, texts and meeting times into the back of wearers' right eyes so they appear an arm’s-length away.

After years of quiet that saw the six-year-old company raise a staggering US$120-million Series B financing round led by Intel Capital, the Amazon Alexa Fund and Fidelity Investments Canada, and hire hundreds, Thalmic will reveal a pair of big surprises on Tuesday. As it officially changes its name to North Inc., it’s also unveiling a long-planned strategic pivot: smart glasses it has branded “Focals.”

Eschewing the once-hyped tech-first designs such as Google Glass that marked the most recent generation of smart glasses – clunky devices that invited sartorial mockery, dissuaded mass adoption and forced the Alphabet Inc. company to give up targeting them to consumers more than three years ago – North wants its smart glasses to be, first and foremost, glasses.

In recent years, smart glasses have largely become an enterprise product; the Vuzix Blade and Sony’s SmartEyeglass, for instance, target sectors such as manufacturing and health care. If a player can win over consumers, it could stand to cash in.

Some analysts are projecting interest in smart glasses to boom: One report from BCC Research found that while the single-eye-display smart-glasses market was worth just US$225.9-million in 2017, it could rise to US$9.3-billion in 2022. But focusing on the consumer comes with few guarantees for success; it didn’t work for Google, and Intel, a major investor in North, just this year axed its own consumer-focused smart-glasses play.

North believes it can succeed by making smart glasses with the wearer, not the technology, as its biggest priority.

Co-founder and chief executive Stephen Lake, 28, frames the company’s mission as a question: “How do we give you the magical benefit of tech in a way that allows you to be present in the world in front of you? With technology that’s there when you need it, and invisible when you don’t."

So Mr. Lake and his team designed Focals to be as minimally invasive as they could make them, with the technology crammed largely into their arms, making them slightly wider than average. Each pair will be custom-fitted to the user at two locations to start, on Toronto’s Ossington Avenue and in Brooklyn’s Cobble Hill − there’s more to come next year − with the help of an 11-camera 3-D scanner and an optician. Focals will come in two shapes, three colourways, a range of sizes and a US$999 price point inclusive of any prescription costs.

Once connected to an Apple or Android phone via Bluetooth, users will only see alerts North considers essential, such as messages, reminders and directions. With a built-in microphone and an index-finger ring featuring a tiny, thumb-controlled joystick called “the loop,” wearers can toggle through features and respond with voice and gestures.

Focals' physical controls will be limited to that joystick; save for ongoing customer care, the days of the arm-waving Myo are over; sales were discontinued this month. In fact, the company formed as Thalmic Labs by three friends from the University of Waterloo in 2012 was plotting a smart-glasses play before the public could even get their hands on Myo.

The armband, which first shipped in 2014, responded to electrical activity in the wearers’ arm muscles. It was meant to be used in conjunction with other products as the company saw a big future in virtual and augmented reality – such as, say, vision enhanced by smart glasses. But that kind of tech didn’t reach mass adoption.

So Thalmic quietly set up a small team to work on a product of its own. By the time the company was developing a second version of Myo, Mr. Lake says, half of Thalmic was working on eyewear.

The decision meant making deep investments in research and development, which finally explains the company’s massive 2016 growth-capital fundraising round. But as they developed Focals, Thalmic’s team hit “hundreds” of road blocks, Mr. Lake says. After leading holography experts told the company that they couldn’t embed a holographic lens in a prescription lens, for instance, the company set out to do it on its own.

“So many parts of what we’ve done, people have told us along the way, ‘There’s no way that can be done,’ " says co-founder and software-division chief technology officer Aaron Grant.

This meant creating manufacturing tools and processes entirely in-house, filing for hundreds of patents and hiring hundreds of specialists; what was a 50-person shop when Myo first shipped is now nearing 500 staff. “For any other startup in any other part of the world, that’d be tough, but we had the luxury of being in the same town as BlackBerry,” says co-founder Matthew Bailey, its CTO in charge of hardware.

To sell the new product, the company tapped into another Canadian success, nabbing Marie Stipancik from Clearly Contacts to lead eyewear design. To complement the futuristic technology of Focals, Ms. Stipancik turned to the past for inspiration, playing off of silhouettes inspired by the eyewear of Diane Keaton’s Annie Hall and Michael Caine’s Harry Palmer.

The last generation of smart glasses had other priorities. "They started with function, and tried to fight their way back to form,” Mr. Lake says. North’s approach, he says, is the opposite. “They’re a pair of eyewear before you even think about the technology inside.”