

Building a better mouse

Anatomy Of A Deal

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Riccardo Cellere Studio300

Dragons' Den presenters Oren Tessler, a chief resident of plastic surgery at McGill University, and Mark Bajramovic, who teaches industrial psychology at the John Molson School of Business

Each week, the Financial Post revisits CBC's previous week's episode of *Dragons' Den*. We capture what the cameras didn't and in the process provide a case study for readers, zeroing in on what pitchers and dragons were thinking and what the challenges for the deal are going forward.

The pitch Oren Tessler, a chief resident of plastic surgery at McGill University, and Mark Bajramovic, who teaches industrial psychology at the John Molson School of Business in Montreal, met at McGill University's MBA program in 2000. The workload had them spending upward of 12 hours a day, seven days a week on the computer churning out assignments and presentations.

"Halfway through our first year, I developed a computer mouse related repetitive stress injury and lost the use of my right hand and arm for several weeks," says Mr. Bajramovic, who was a pre-med student before crossing over to business. "Numbness, pain, most things that you hear about with RSIs, I had it." As a result, he wasn't allowed to use his hand at all for at least 30 days. "The worst part was I was letting down my teammates. They were working these long hours and there I was just sitting there trying my best to participate. "

Later in the semester, Mr. Bajramovic read an article about the market-penetration strategy employed by a leading mouse manufacturer to launch its ergonomic mouse in Europe.

"Oren and I started talking about it and realized that while this mouse was 'more ergonomic' than other mice, from a human kinetics perspective, it still had several limitations. At that time and to this day, most leading mouse manufacturers base their designs on the same Engelbart mouse conformation."

The Engelbart mouse, designed at the Stanford Research Institute in 1968, positions the user's hand in a palm-down position on top of it and translates physical movements into digital signals. It remains the platform for most top-selling computer mice.

"Despite its commercial success, studies have shown the Engelbart design can place the user's hand and wrist in a strained position, which can result in unwanted pressure on the hand, arm, and carpal tunnel of the wrist," Mr. Bajramovic says.

"So the question became, 'What is a truly ergonomic mouse?' With this in mind our mission became to, take the human form and develop a mouse around it." They designed the AirMouse and hold patents for it in the United States and Japan; a patent is pending in Canada.

The AirMouse is made of lightweight breathable fabric that moulds to the user's hand and builds functionality around it. An optical camera tracks motion. It is a wireless, wearable computer mouse that was medically designed to prevent RSI, while optimizing gaming speed and accuracy.

The entrepreneurs have spent \$300,000 to date developing the design and plan to have their next generation prototypes ready by March.

The deal Messrs. Tessler and Bajramovic asked for \$75,000 for a 15% stake. Arlene Dickenson and Robert Herjavec took it -- on air, at least, but it is still in due diligence. To keep the momentum going Messrs. Tessler and Bajramovic have been taking the next steps in product development and getting the word out. They recently attended the Consumer Electronics Show in Las Vegas.

"We received a lot of interest from substantial players in the consumer electronics space who want to take the AirMouse to the next level," Mr. Bajramovic says.

"It has reinforced our belief that our product is a novel approach. The plan going forward is to the traditional computer mouse, which will help relieve a health problem many people have, or may experience, in the near future."

What the experts think Chris Van Staveren, partner in transaction service at KPMG Enterprise Services, was impressed with the presenters and the pitch. "They were smart and strategic. They didn't over-value the company, which is a mistake so many of the entrepreneurs on the show make.

"By going in with a low number and low percentage, it improved the odds of getting a deal. They wanted Arlene for her marketing skills and Robert for his tech savvy and ability to open doors -smart."

Perhaps their most critical challenge will be getting the design and prototype down, Mr. Van Staveren says. "My biggest concern is quality control. It can't break down because people depend on the mouse so much. Their design has more complexities to it than a traditional mouse because it's not just one small box. If they get it right, there will be market demand. If it works it will market itself."

Brad Cherniak, partner at Toronto-based Sapien Capital Partners, an advisory firm to private companies, sees a few more challenges. "They are claiming nothing else like this exists. Nothing like this exists. If I were an investor on this type of deal I would be very focused in due diligence on finding out whether their claim is true. The patent search process is no guarantee that this is the only product of its kind because inventors will often not file a patent to keep their invention under wraps and be first to market. I don't know how high you can build the walls on your patent because it can be knocked off so easily.

"The question is: What else is out there on the launch pad or in the market but just doesn't have traction yet?"

For a company at this stage, every decision is critical, Mr. Cherniak says.

"They have to analyze each of the go-to market opportunities as a separate business. This is a strategic decision, especially since they won't be able to piggy back on someone else's infrastructure. Access to

market should be as simple and cheap as possible. They are going to have to pick one avenue -- medical or gaming. Then if they become a real company with a proven product and even with a small amount of sales they can start to think about licensing agreements."

Gaming, he warns, is a tough channel for new players. "Consumers are very demanding and there is so much competition in that sphere. Are they ready for that market?"

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