

# BRIGHT IDEAS AND BUSINESS BASICS

THE CARE AND GROWTH OF AN ENTREPRENEUR



Not yet 30, the enthusiastic 12 year old is still very much evident in the man Kurtis McBride is today. From raising mice in his parents' house to running his own company his passion for an entrepreneurial life is clear.

**At 12 years of age Kurtis McBride embarked upon his first entrepreneurial venture: raising mice in his parents' basement. Selling the mice to the local pet shop for a tidy per mouse profit of 50 cents, Kurtis' business grew exponentially until the volume of mice finally exceeded his parents' patience. They shut him down.**

Nearly 15 years later, Kurtis was in business for himself once again.

Being his own boss was not something Kurtis actively thought about. He explains, "When I considered my future, I always figured I would be middle-management in a big company." This was not to be. When Kurtis entered his 4th year in the Systems Design Engineering program at the *University of Waterloo*, he happened upon an idea he would nurture along during the completion of both his undergraduate and Masters degrees. Eventually, this idea evolved into *Miovision*.

**Kurtis "...grabbed a couple friends and said 'let's start a company.'"**

"The idea came to me during one of my co-op work terms. To earn extra money I took some work as one of those guys standing at an intersection counting cars. During eight hour weekend shifts – through all kinds of rotten weather – I convinced myself there had to be a better way to do this."

That 'better way to do this' became Kurtis' 4th year engineering project. Pulling together five other students, Kurtis embarked on a project to write software that was capable of converting digital traffic recordings into data. Utilizing computer vision (object tracking) and video sequencing (locking onto and following an object), he believed data could be analyzed far more economically and efficiently than with manual methods. Virtually an untouched arena, Kurtis capitalized on this market gap as his signature MA project.

While working on the project, Kurtis "...grabbed a couple friends and said 'let's start a company.'" Together with Kevin Madill and Tony Brijpaul, the three launched *Miovision* while Kurtis was still completing his MA. The company quickly became cash-flow positive.

One Masters degree and a year later, the three partners took a hard look at their business and determined it made sense to move the company out of the consulting field. Their goal: To choose a market vertical and develop a product. Narrowing their interest to traffic, they saw great potential in the smaller market of 'counting cars'. In the years that had passed since Kurtis' days counting cars, the field still remained manual.

"In theory there are two ways to start a hi-tech company. Raise money and pretend to be massive or find a small high margin niche as a base to build a company," recalls Kurtis regarding their decision to pursue traffic.

In March of 2006, Kurtis moved his young company into the *Research + Technology Park's Accelerator Centre*. The decision to relocate the company happened to coincide with the leap to become a product company. But in order

to see this vision through, their consulting work and the revenue associated with it had to stop. They finished their contracts and, with a small-scale staff of seven and a small amount of financing, stretched their funds to last an entire year to free the team's time for product development.

They had several challenges to conquer. Using a camera to digitally record traffic flow, the electronic data would have to be converted to identify what was actually a 'car' and exactly what that car was doing. Foreground images like pedestrian traffic and weather patterns like cloud cover, snow and rain made it difficult to differentiate what was background – and what was car.

Says Kurtis, "Think of how humans see and how the eye works. When we look at something, a signal is sent to our brain to digest what it is we are seeing. We understand what is a car or what is a pedestrian or what is a cloud. The software had to do just that."

When their year was up the team had their product and two beta customers. It turned out there was 'a better way' just as Kurtis thought all those years ago. Their method of digitally counting cars and analyzing data indeed turned out to be more efficient and effective than traditional methods. The video/web based technology helped reduce the cost of collecting, analyzing and reporting accurate traffic data by replacing manual traffic data collection with an automated turning and movement count system. Transportation companies and municipalities constrained by the cost of people management now had a new option.

Twelve months later, their two inaugural beta customers had grown to 40. At the end of 2008 Kurtis relocated *Miovision* to a new and larger facility. Their numbers had grown faster than anticipated and they had held off on a move as long as possible. But when visions of a hardware product appeared on the horizon, Kurtis realized it was the right time for a move.

**"The best thing I learned was... we had to remain focused early on."**

Where other companies worked on several products at once, Kurtis held back on expansion until their first endeavour proved fruitful. "I learned my lessons early on. Due to the small pool of money we had to learn quickly and cheaply. The best thing I learned was that those who begin with a larger pool of money have the urge to do as many things as they can and end up burning through the money fast. With too much money, you don't learn your lesson until you're broke. Since we didn't have a lot of funding, we had to remain focused early on."

"Eventually we found ourselves at a point where—in order to reach greater heights—we needed to design the hardware ourselves. Initially we lacked the experience and expertise to build the product ourselves. But over time as

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## JACQUI MURPHY: CONNECTING THE DOTS

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Our due diligence takes into account who makes up the start up, what the competitive value proposition is, and if there is an industry pain requiring a solution. Our preference is to start talking to companies in the early days. There are certain patterns with start-ups, and we're often able to identify

the risk factors early on. The goal is to mitigate risk while increasing the possibility of return on typically 'high risk' start-up ventures."

**WORKING ABOUT TOWN...** Working at *Tech Capital*, Jacqui is in contact with almost every company or organization along the path of a start-up. That includes organizations like *IRAP*, *OCE* and the *Accelerator Centre* which specifically supports early stage entrepreneurs, local universities, local tech organization *Communitech* and everything in between.

"What's great about this area is that we're all collected together," explains Jacqui. "All you have to do is point down the street at the *Research + Technology Park* to see a physical manifestation of technology. It is a dedicated space that exists to support technology companies. You can't walk there without bumping into and starting a conversation with a tech CEO, or David Johnston, or a young entrepreneur."

"People on the fringes make sure everyone is part of this technology eco-system. Outsiders point to this community and ask 'How did you do this?' 20 years of collaboration is what formed this incredible technology infrastructure connecting us to each other."

Jacqui understands such connections intimately. In 2008 she won the *Communitech* 'Community Impact Award' which recognizes leaders at the forefront of technology. Says Jacqui, "When I accepted my award I looked around the audience and thought—I know this room. I had worked with just about everyone—they had all been involved in my journey."

On a journey of her own making, Jacqui continues to challenge the boundaries of new worlds. As one of the few females in the country in the venture capital business, it is likely she will be connecting an entirely new string of dots. Keep your ears open; you'll be hearing more about Jacqui Murphy. ■

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we became more and more involved, it seemed a logical progression to develop the expertise with the procurement and manufacturing process in-house."

A gracious individual, Kurtis acknowledges the company's success is truly a team effort. He is quick to attribute their

aggressive growth to several factors including marketing and job execution.

All of the partners are heavily involved in the company and determine their roles based on what they do best. For the rest, they hire to fill the gap. Kurtis intuitively recognizes when it is time to move on. Of his own contribution he explains, "I'm a bit of a bull in a china shop. It's my job to find all of the pieces. I make a mess, set the stage, and move on. I do what has to be done and when the timing is right, we hire someone else to continue where I left off. So far, they all seem to do a better job than I do!"

**"Someone took the time to help me...so I'm committed to helping those just out of the gate."**

Just as he had mentors throughout his venture, Kurtis finds great satisfaction in providing mentorship for the up and coming. Someone took the time to help me along the way. I recognize I can't give back to those who helped me – so I'm committed to helping those just out of the gate." With his 'pay it forward' attitude, McBride makes himself available by investing what little time he has left in his day to guide those who are interested in following in similar footsteps. ■

# R+T PARK A DIFFERENT VIEW

Balance: a state of equilibrium; an equal distribution of form and function working together.



The development in the park has stayed true to the environmental considerations and guidelines laid out for the park in the *University of Waterloo* Master Plan 1992.