The Evolution of Pattern Recognition

WITH LOSS PREVENTION A MAJOR FOCUS IN RETAILING, REDUCING BOTTOM-OF-BASKET LOSS IS A PRIORITY.

Alec Hudnut, CEO of Evolution Robotics Retail.

In January 2006, Evolution Robotics launched a new company, Evolution Robotics Retail, to focus on bringing object recognition-based solutions to the retail industry. The new company's first product, LaneHawk, is a bottom-of-basket loss prevention solution for retail that is based on Evolution Robotics' visual pattern recognition (ViPR) technology. LaneHawk can identify items on the bottom of a shopping cart and present them at point of sale as part of the transaction.

What role will emerging field of pattern recognition technology have in retailing? To find out, we spoke to an industry expert, CEO Alec Hudnut of Evolution Robotics.

– BY KEVIN O'ROURKE

What were the benefits of spinning off Evolution Robotics Retail?

By launching Evolution Robotics Retail, we created a company that specializes in retail applications. There is huge benefit to having 25 people focus on one market and, during the first two years of the company, on one product. We continue to have close ties with Evolution Robotics in terms of co-development of technologies.

The biggest benefit is that visual pattern recognition technology, which is the core of the LaneHawk system, was developed by Evolution Robotics. That technology lives in more than 2.5 million machines throughout the world, from cell phones and robots to military hardware and LaneHawk.

What is Evolution Robotics Retail's current relationship with Idealab? How has it benefited the company?

Our sole outside investor in this business is Idealab. We have a close working relationship with them. I was previously a managing director at Idealab as part of their new venture group. We really benefit from the innovation and creativity that Idealab brings to all of its operating companies. In addition to shared resources, they have design and public relations, legal, accounting and finance functions that we can buy from them when we need overflow help.

How is Evolution Robotics Retail structured financially? Is there an IPO in the future?

We have been generously capitalized by Idealab, which has allowed us to enter the retail market. The business grew significantly in 2007 and will grow exponentially in 2008. As a private company, we don't talk about revenue or income. But to give some perspective, we are seeing 5- to 15-fold annual increases. We hope to experience a 10-fold increase in 2007. An initial public offering of stock is one of the objectives of the business. It is something we plan to do in the future.

What is LaneHawk's value proposition for retailers?

LaneHawk can improve store profitability by 5 to 10 percent. The basic math is that a typical retailer is losing about $10 per lane, per day in items lost on the bottom of the basket. For example, a typical lane will process 3,000 items per day. Two or three items will be lost on the bottom of the basket. A 12-pack of Coke will go unpaid two to three times a day, which doesn't seem like a lot of money. Because of the margins in the industry, this adds up. If you look at one lane that generates $10,000 per day in throughput, and the lane is operating on one-percent to one-and-half-percent net margin, this is $100 to $150 of profit per day for that one lane. Bottom of the basket loses average about $10 per day.

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LaneHawk will capture 80 to 90 percent of those (BOB) losses. We can add $8 to $9 per savings per lane, per day. That takes a retailer's profit from $100 to $108. The value proposition is that the system generates $2,500 to $3,500 in cash per lane, per year.

What type of investments must retailers make in this technology?

The system sells for less than $2,000. It can pay for itself in less than a year. With larger accounts where pricing is better and basket losses are higher, retailers can get close to a six-month return on investment. The net effect is a 5 to 10 percent improvement in per-store income added to the bottom line.

How will LaneHawk change how retailers look at check-out lanes, particularly the grocery channel?

Pathmark has agreed to install LaneHawk in 10 of its 142 stores. Shoppers Food & Pharmacy has installed the device in six of its 64 locations. We have less than a dozen customers today. We should have LaneHawk installed in more than 1,000 stores by 2008.

We will have more announcements from customers over the next four to six months. Many customers view LaneHawk as a competitive advantage and don't want to talk about it until they are well on the way to deploying across a large number of stores.

Are there plans to expand the company's product portfolio?

We are going to be announcing our second product at the end of the first quarter of 2008. We are not ready to unveil it, just yet, but the product is an extension of our object recognition capabilities into other retail products.

Are you partnering with any major POS system providers?

We partner with both IBM and NCR. LaneHawk is compatible with ACE, SA and ACS. We are reaching out to other point of sale providers. We should be compatible with them within a short time.

Are there plans to sell or license LaneHawk to major POS system providers, thus making LaneHawk part of their offering?

We haven't made a decision on that yet. We continue to work directly with our retail customers and work with integrators like IBM to deliver a robust solution. We may at a later date imbed the LaneHawk technology in the point of sale and the self-checkout systems, but as of right now we are not doing that. **RIS**