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Industrial Research Assistance Program (IRAP)

Region: Ontario Brampton

CaseBank Technologies



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Tony O'Hara, President, CaseBank Technologies

Software that shares mechanics' experiences keeps planes flying

Tony O'Hara knows that companies can lose critical knowledge even without anyone walking out the door. The president of CaseBank Technologies recounts the story of a veteran airline mechanic who solved a difficult problem and then supplied the solution to CaseBank for input into the company's innovative case-based reasoning software called SpotLight. A year later, the same mechanic solved the identical problem - but not until he'd referred to CaseBank's SpotLight software for the solution he'd already forgotten.

"CaseBank Technologies is a specialist in experience-based decision support and knowledge management solutions - helping clients benefit from their hard-earned past experience," says O'Hara from the company's Brampton, Ontario offices.

CaseBank's SpotLight software is a leap ahead of trying to solve a problem through a process of trial and error. The software guides users to the most likely cause of their problem by asking intelligent questions related to the problem's characteristics and accessing a knowledgebase of previous problems and their known solutions. SpotLight is designed for complex systems, ones with thousands of interacting components and subsystems, with an initial focus on the airline industry. In such cases, not being able to quickly repair a problem results in expensive delays and frustrated passengers.



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However, before CaseBank could start helping others get off the ground it needed to gain its own experience. In late 1998, the company was a fledgling start-up, working to develop technology it had acquired from Atlantis Aerospace.

A National Research Council Industrial Research Assistance Program (IRAP) Precommercialization Assistance Ioan provided the company with the working capital it needed to move from a prototype to a product that would be readily adopted in the highly competitive airline industry. From December 1999 to October 2000 SpotLight was put through its paces in a trial run with Air Canada.

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Working closely with Air Canada mechanics, CaseBank saw how SpotLight was actually used. They realized, among other findings, that portability was essential for SpotLight to fit into their workflow, and that IT departments preferred a web browser style interface.

Since that time, SpotLight has taken off. The company has grown from ten to 35 employees, with sales of \$1 million last year, and on-target for \$3 million this year. The software is now supporting airlines flying regional aircraft, and is being used by another corporation to support worldwide field service of its business jet engines. CaseBank has also cemented a strategic relationship with another firm to co-market diagnostic support services to regional jet customers, and is in talks with automotive companies that could soon see SpotLight helping mechanics in that sector.

In February 2001, CaseBank received a \$3.2 million repayable contribution from Technology Partnerships Canada to take SpotLight to the next level of performance in reasoning power and accessibility, developing a system that will provide aircraft maintenance technicians with 24/7 online access to maintenance solutions - even the ones they created themselves and then forgot. ■

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