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## ***The Value of Partnering with Academia***

*By Dr. John R. Wright, Jr., CSIT and Mr. Stephen Harris*

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Mr. Stephen Harris is President and CEO of Rixan Associates, Inc. Based in Dayton, Ohio, Rixan is the exclusive Distributor and value-added reseller of Mitsubishi Electric and Mitsubishi Heavy Industries robot systems in North America and is one of the largest suppliers of light payload robots in America with an installed base of over 10,000 units. Mr. Harris has a degree in Chemical Engineering and worked with Nalco Chemical Company for nine years prior to joining Rixan, where he was Vice-President from 1983 to 1990, before assuming his current position. An active supporter of NAIT, Mr. Harris has provided major grants to Kent State University, Indiana State University and Millersville University to establish Rixan Automation Laboratories to train future technologists.

## The Value of Partnering with Academia

By Dr. John R. Wright, Jr., CSIT and Mr. Stephen Harris

In today's global marketplace many companies may need to compete using Total Quality Management (TQM) strategies to enhance their productivity and effectiveness. This is certainly true in the United States. Partnering is one concept that is a staple strategic concept in TQM. "The simplest way to understand the concept of partnering or the strategic alliance is to think of it as working together for mutual benefit" (Goetsch & Davis, 2006, p. 143). In this issue of the JIT, we will highlight the value of partnering with academia through Rixan Associate's first-hand experience in deploying the concept with three different institutions of higher learning.

Rixan Associates, Inc. of Dayton, Ohio was established in 1959 and is a leader in the field of robotic automation. They are the exclusive distributor, service center, and value-added retailer of Mitsubishi robots in North America. The Department of Industry and Technology at Millersville University of Pennsylvania produces technologists and applied engineering professionals in many technical areas including that of automation and control. It was only natural that the two entities might explore a collaboration that would mutually benefit the two.

In 2004, Rixan Associates, Inc., entered into a Public/Private Partnership Grant with Millersville University of Pennsylvania's Department of Industry and Technology. Trading hardware for intelligence, Rixan outsourced some of their new product software evaluation work to Millersville's faculty. This allowed their key engineering and technology personnel to focus their talents (intelligence) on immediate issues that produce income. Millersville's faculty was accessed to examine a new software product that had some potential commercial interest to Rixan. Through

the partnership, Millersville gained additional robotic hardware, software, and training for its faculty, as well as release time for its principal investigator. In exchange for this, Millersville provided Rixan with a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis in the form of a white paper on the product that was examined. A successful partnership was born.

"Partnering with academia is a natural fit for any technology-based industry, providing that the companies involved find the right fit and infrastructure to make their goals mutually beneficial" (Klahorst, 1999, ¶ 2). The Millersville University academic relationship is the third successful partnership for Rixan. In 2003, Indiana State University partnered with the company providing a next generation of new robotic experiments and exercises for Rixan's training program. Indiana State's key faculty also optimized the company's existing training course materials. Kent State University, Rixan's first academic partner, provided graphic arts assistance to make the company's industrial training classes more appealing in 2000. Each of these partnerships were established and enabled by meeting the mutual needs of the partners involved. These strategic alliances have been highly advantageous to Rixan Associates, and the academic institutions involved.

"The benefits [to industry] of using university expertise for analytical assistance are considerable, particularly if equipment costs are prohibitive or if the analysis is performed irregularly" (Klahorst, 1999, ¶ 5). Academic institutions often provide a means for companies to validate and/or test new products and processes. This is what most companies think of when they hear the term "partnering." The benefit of partnering, however, is broader and potentially more

potent than this. Through the enactment of partnership agreements between academia and the industrial sector, value is also added to the preparation of the students enrolled in our academic institutions. “The benefits students receive from these industry-academia programs [partnerships] go far beyond those that emerge from classroom lectures and textbook case studies. Instructors who cite current, relevant research results are able to provide undergraduates, graduate students, and executives with direct examples of theoretical concepts applied to the real world” (Stank, 2004, ¶ 7).

“What types of projects are suitable for university partnerships? Not all projects are conducive to academic collaboration. Long-term goals are easier to address than short-term goals. For an urgent, customer-based problem, you might not want to rely exclusively on academic resources. Universities march to a different drummer than businesses - the beat of the academic calendar” (Klahorst, 1999, ¶ 3). Having stated this, however, one may still explore a plethora of partnering opportunities with the academic com-

munity. Academic partners have time and intelligence working for them. They are able to approach a problem without bias, analyze the data, and provide clear, unambiguous solutions unfettered by convention. It is an enlightened avenue to problem solving that bypasses a process where the company’s engineers often are faced with defending their preconceived conclusions. In addition, the industry partner benefits directly by focusing the company’s resources on immediate, income generating activities and relying on the academic partner to provide longer-term strategic perspective.

Remember that “good” is never “good enough” in a total quality environment. Quality is about continuous improvement. As proponents and advocates of the TQM philosophy, industrial technologists should continue to try and improve our respective organizations, finding areas in which we may all mutually benefit and make us more competitive. Perhaps if we continue to trade hardware for intelligence, our future technology and engineering graduates will have trained on the latest,

state-of-the-art industrial equipment with professors that have maintained an important link to the industrial sector. Certainly this will make us stronger and more competitive as a nation in this globally competitive world.

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