EXSYS Case Study

Houston Company Using Exsys CORVID Knowledge Automation System Software to Support Corporate Families on Overseas Assignments

Using Exsys CORVID Knowledge Automation technology in a novel way, Houston-based International Assignment Profile Systems (IAP Systems, Inc.) assists companies in international business in determining whether candidates for overseas assignments, and their families, will adapt to their new environment in a specific foreign country. The IAP System specializes in detecting situations, issues and concerns in an overseas relocation that could result in a mismatch that would be bad for both the employee and the company.

"By conducting a computer-driven, structured interview using advanced knowledge automation and analytic tools that gather information about the employee and spouse's needs, life style, preferences, parents, children and a host of other relevant subjects, the IAP is able to provide a list of planning issues and adjustments that must occur to insure the success of the assignment," said International Assignment Profile Systems President, Neill Carson, Ph.D.

A compromised international assignment typically costs a company a minimum of $200,000, and may go into the millions, with virtually un-measurable human and relationship costs. Research indicates that as much as 80% of the failures in international assignments are due to adjustment and stress issues in the family or from back-home conditions that could have been anticipated and planned for before the assignment.

IAP's new instrument, the International Assignment Profile (IAP), identifies critical employee and family concerns, and compares these issues to known conditions (both positive and negative) in the specific anticipated location. The IAP uses a "Smart Questionnaire" developed using Exsys CORVID, to interview a family to gather a wide range of information about needs, concerns, and psychological traits, as well as medical conditions, children's needs (both those accompanying and those remaining in the US with relatives), and aging or ill parents. The data is analyzed and clients are provided with a colorful, easy to understand report detailing the family's key adjustments, "sleepers" (issues that might emerge as troublesome after arrival) and pleasant or positive matches that lessen some of the anxiety around the assignment.

The questionnaire phase of the system is very user friendly. Since both the employee and their spouse must fill out separate sections of the questionnaire, it was very important to be able to correlate their sessions, and allow the user to stop in mid-session at any point and be able to pick up later where they left off. Also, since the questionnaire must be filled out for each child, it was necessary to allow portions of the system to repeat for the required number of times. This capability was met through the use of Exsys CORVID's

Java Runtime Applet. The user simply goes to the IAP Web site, logs in and runs the system via the CORVID Runtime applet on a Web page.
The knowledge automation system uses rules to ask questions in a focused manner. It asks no unnecessary questions, but drills down for more details when the input indicates that is appropriate. All data is automatically sent back to an Access database on the IAP server. If the user is not connected to the Web, the same applet and rules can be run stand-alone with the data written to a disk file that can be sent to IAP.

Upon completion of the interview phase, a family's information is strategically analyzed. This is done by another CORVID knowledge automation system. In order to isolate areas of potential concern, the responses are matched against databases and fire neural networks from Ward Systems NeuroShell Classifier to find potential patterns of success or failure. The analytical knowledge automation system looks for the obvious problem areas, and also allows a company's own experience with successes and problems determine the findings. CORVID serves as the "traffic cop", asking questions, retrieving data, firing neural nets, and finally sending all the results to a formatted Word document for transmittal to the client.

The system then integrates Access, Excel, Exsys CORVID and MS Word to generate a comprehensive, easy-to-read report. The report is generated in Word using input from the analysis knowledge automation system and database information. Excel graphics are integrated into the report, again using data from the database. This allows the generation of a very sophisticated report that clearly highlights the pros and cons of the assignment.

IAP Systems moved the system into CORVID when they knew their clients would demand Internet access. In addition to being extremely easy to learn and use, CORVID allowed them to interface readily with the external programs to process data and generate colorful reports, and made deployment to the Web not only rapid, but also financially feasible.

Exsys CORVID allows multiple languages and cultural versions to be presented to the user, with the underlying logic always controlled by the English version. International business is not just Americans going out into the world. Families from Europe are moving to locations like South America; and Asia, and Asians are relocating to the US. Not only does CORVID allow multiple languages, but it also captures the unique features of different cultures in special questions that are asked only to respondents from that location.

All data is retained in the database, and as patterns of success or stress emerge, the system stores these patterns and alerts future users to potential problems or resource issues. Counselors and/or psychologists review each and every report and make comments and suggestions. To see a sample of a full report as a PDF file, go to www.exsys.com/iap

In most knowledge automation system applications the user is presented with an answer at the end of the session. In this case, the report is provided to the HR organization at the employees company. This way the HR group can frankly assess if there are overwhelming risks in the assignment, or what steps may be taken to solve potential problems.

Until the IAP, these issues were either ignored or the information was developed by expensive interviews with specialized personnel. The IAP allows HR professionals, external support firms, counselors, or relocation personnel to have a detailed analysis and summarization of all the personal and family information in one place to plan for a successful assignment.

As many as 70 percent of the large US-based companies expect to send more people abroad for work related purposes. However, companies not familiar with sending employees to a foreign country will incur high costs due to inappropriate assignment placements if they don't analyze their employees' needs and those of their families. A compromised international assignment can take a large toll on a family's psychological well-being, as well as a company's fiscal outlay.

According to a survey by Windham International and the National Foreign Trade Council, 62 percent of most companies provide cross-cultural preparation; 38 percent of companies say they offer no preparation whatsoever. The International Assignment Profile does not replace cross-cultural training or coaching; however, it works in tandem to help insure that both the training, as well as the assignment, will not be compromised by factors that could have been foreseen.

The emotional and security issues in foreign assignments have become far more apparent with the increased threats of terrorism. The climate and status of some foreign countries can change rapidly. Exsys CORVID systems can be rapidly updated and quickly deployed on the Web to reflect international situations and the increased psychological factor.

International Assignment Profile Systems is a Houston-based company, founded by Neill Carson PhD, and Don Young EdD, committed to aiding companies in the expatriate management process using computer-assisted artificial intelligence systems. For more information, log on to IAP's Web site at www.iapsystems.com, and the EXSYS Web Site at: **www.exsys.com.**