



As seen in Maintenance Technology Magazine-

Viewpoint Article - Capturing the Expertise of the Aging Workforce

Is your company concerned about retaining the enormous amount of knowledge that will soon be lost as experienced maintenance workers retire? If the answer is yes, you are not alone; capturing the expertise of retirees is an urgent challenge facing many companies today. These workers collect a wealth of knowledge during their many years on the job, but this information is almost never formally documented or transferred to others. Their expertise includes asset prioritization, asset condition and performance targets, inspection knowledge and general know-how pertaining to the maintenance of critical assets. If companies do not systematically collect this important information while employees perform their jobs, all of this knowledge will be lost upon retirement.



Tradesman performing manual calculations to assess equipment condition.

Most maintenance organizations have become accustomed to manually collecting and storing asset condition data. In fact, this data is most often stored where it's most accessible to the employees – in their personal handbooks. These “little black books” hold enormous amounts of maintenance expertise, and unfortunately, they either disappear or become meaningless when the employees retire.

According to a Hudson Institute study on the state of the workforce in North America, more than 30-40% of maintenance trades people will be retiring over the next five years. This problem is particularly acute in the utilities industry where imminent retirement estimates are as high as 50%.

While retiring rates are increasing, fewer people are entering the maintenance profession. Apprenticeship programs are at their lowest levels in decades. There are various reasons for this trend, but they all lead to a single conclusion – organizations must accomplish more with fewer resources.

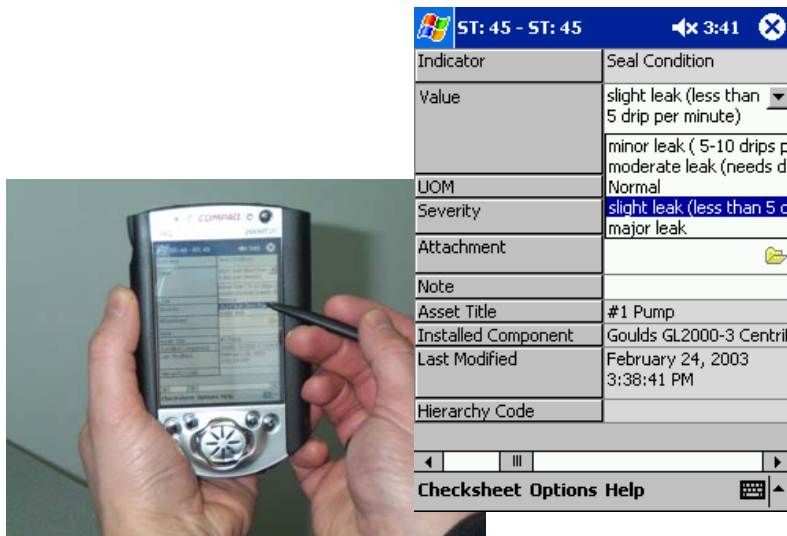
Companies that understand this issue are turning to reliability software, like Ivara EXP, that captures the expertise and knowledge of retiring workers. By taking this action these companies will help to ensure the continuing viability of their operation.

Several years ago a prominent North American manufacturer, realized that the average age of their employees was about 52. They recognized the urgent need to capture the knowledge of these skilled individuals, because as the experienced maintenance workers retired, a tremendous amount of vital information and expertise would be lost. Often an employee would turn in his little black books as he was leaving. In these books he had collected years of experience related to his job, from condition monitoring routes to the tolerance levels of certain condition indicators that he had recorded.

Fortunately today, at this company, there is no crisis when an experienced maintenance professional retires. I recently attended a retirement celebration for one of their employees after 45 years in maintenance. The company had arranged a big party with a cake and the whole nine

yards. For this retirement, there were no little black books to be turned in. Over the last few years, the company had transferred this employee's knowledge into a reliability software system. The reliability software enabled the company to capture, store and disseminate asset health information where and when it is needed, and to keep and leverage their employees' knowledge long term.

Reliability software, like Ivara EXP, enables companies to capture, analyse and use asset health data, as the employees perform their jobs. Information such as condition monitoring inspection routes, tolerance levels of condition indicators and the maintenance work plans required to conduct repairs is now available to all maintenance employees. The software is used to capture years of experience and expertise, enabling companies to efficiently move forward in maintenance after experienced employees retire. It acts as a repository for condition data and all maintenance program information.



Collecting readings using reliability software on pocket PC – with instantaneous feedback on alarm conditions.

The reliability software manages online data, predictive data and visual inspection data that users collect on operator rounds or during routine maintenance inspections. It then analyses data and presents the results in a visual format, using flashing alarms and graphic capabilities to enable users to focus on problem areas. In addition, the reliability software has the ability to compare multiple data points to create a complete picture of the operating health of critical equipment. Employees no longer need to remember or spend time repeating calculations because the software performs them automatically.

The reliability software reduces the overall effort to perform and document the maintenance function and it systematically drives decision making – capturing asset condition knowledge that typically exists only in paper form, to effectively monitor equipment health and to identify the right work at the right time.

By turning to reliability software, like Ivara EXP, companies can capture the expertise and knowledge of retiring workers and ensure the continuing viability of their organization.