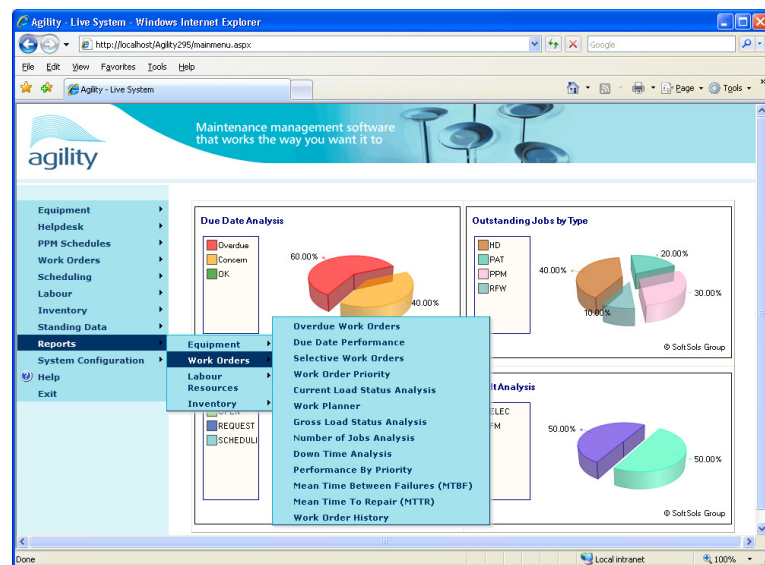


# Simple Efficient Maintenance

What do a water company, car parking company, electronic component manufacturer and an NHS hospital all have in common? They have all recognised the need to invest in modern software technology to drive improvements in their maintenance efficiency.

The quest to drive down maintenance costs, improve maintenance efficiency and manage compliance related records with a computerised maintenance management system is not new. The number of success stories however is sadly limited and many sites revert back to in-house spreadsheets and access databases as their engineers veto the system and refuse to update records in a timely manner.

Why is this? The answer can be found by looking at the majority of maintenance applications on the market; too many features, an unattractive user interface and too complicated to use. Compare this with your favourite web sites and on-line stores where within a few clicks you have booked your flights, reserved your seat and been prompted to reserve a car parking place.



## ***Simplicity requires Sophistication***

The key to introducing maintenance efficiencies is to keep the maintenance system simple. But keeping things simple for the end user means plenty of sophistication behind the scenes.

The first step to ensuring that a computerised maintenance system is effective is to keep the user interface as simple as possible. Like the successful on-line stores the maintenance system needs to present attractive and easy to use screens that engage the end user and fulfil their function quickly and simply.

The car parking company wanted a simple way of capturing faults centrally so that the facility manager could gain an overview of recurrent problems, monitor contractor performance and improve the efficiency of the maintenance operation. But how could they ensure that the car park superintendants provided the raw data? The answer, a simple web based system that presents the user with a set of common faults in drop down boxes that relate to the site and type of equipment. There is no need for the user to type on the keyboard and new faults can be reported with a few mouse clicks. Once the fault has been reported, the system immediately notifies relevant staff by email and the facilities manager is in control of the problem from start to finish.

The NHS Hospital had been using a maintenance system for several years but it was not delivering benefits as engineers were failing to record details of work done. By introducing a new system and presenting engineers with a small selection of clean simple screens that relate specifically to their role they now get work orders closed immediately. The system provides feedback to the hospital departments in real time providing better customer service and the data collected helps them plan remedial work more effectively.

An electronic components manufacturer has understood the importance of simple screens and manages 100's of work orders a day with engineers simply selecting work from a computer screen based on the type of work and priority. With a simple mouse click they can logon to the job and labour hours and utilisation are monitored automatically. As well as recognising the improvements that come from engaging the end user effectively they have also understood how today's technology allows systems to integrate seamlessly.

### ***Efficiency from integration***

RFID technology is being used in the engineering stores to automate the stock issue and return process. As engineers remove parts from the store they will pass through a turnstile which captures details of the parts taken and the engineer who took them. As the maintenance system knows which jobs they are logged onto it's easy to marry up the parts to the work order as long as the two systems can talk to each other.

The integration is built using Microsoft Web Services and is a real life example of Microsoft's claims that ".NET-connected solutions enable businesses to integrate their systems more rapidly and in a more agile manner."

The water company are using Microsoft Navision as their corporate purchasing and stores solution and while they wanted a new maintenance work order system to improve the efficiency of their maintenance planning they were quite happy with the Navision system for stock control. Once again Web Services technology has made it possible to integrate the systems so that the maintenance package receives details of all relevant stock transactions. There are now enormous opportunities to monitor true equipment maintenance costs and improve maintenance efficiency.

### ***Sophisticated IT does not have to be expensive***

The technology behind these scenarios is incredibly sophisticated and requires a high level of investment from software authors to ensure the end result is simple for end users to operate. The good news though is that commercial products are now accessible to even the smallest organisations. The underlying .NET technology from Microsoft can be deployed with a free version of their SQL Server Express database for smaller systems and products like Agility have very attractive commercial licensing terms. There simply is no reason not to keep life simple.

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