

# Automating Microsoft Word

## Case Study: Engineering Firm

by

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ABC Engineering Co (a fictitious name for an actual company) provides non-destructive testing of heat-exchange boiler tubes using the latest techniques—ultrasound, eddy current, etc. The time to do the testing is limited and they work round the clock on-site. On returning to their office they again have a very limited time to complete 100s of Inspection Reports while being continuously interrupted by other matters that require immediate attention.

The reports are complex and incorporate text, tables and graphics. In the past, for each report they would use a similar report they had done previously as the template and use the familiar delete/add & cut/paste methods for creating the new report. Despite their best efforts, the approach they used was time consuming and invariably resulted in many errors. Moreover, to produce end-of-the-year management reports, they had to re-enter key information from the Word reports in Excel; this process took an enormous amount of time

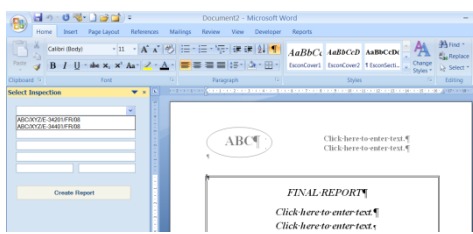
They contracted with RJ Info Matrix to automate the process. The new system, which has by now been used to generate hundreds of reports, separates the data entry from the report generation. The system consists of:

- A database created in Microsoft SQL Server 2005
- A data-entry program written in Visual C# 2005
- A Microsoft Word 2007 automation add-in written using Visual Studio Tools for Office 2005.



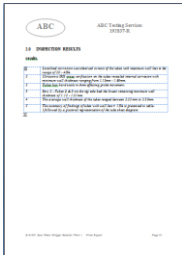
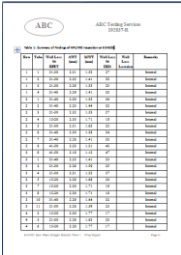
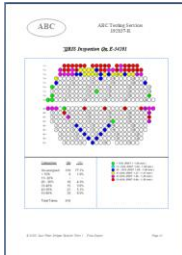
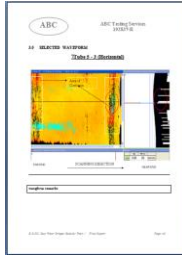
### Database & Data-entry programme:

	<ul style="list-style-type: none"> <li>• The data for an Inspection consists of text, tables, and graphics.</li> <li>• Where possible, the data is selected from look-up tables; otherwise, where possible, the data is validated on entry.</li> <li>• This ensures that the data entered is accurate.</li> <li>• The data-entry is fast and efficient and can be done even by less experienced staff.</li> </ul>																											
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## Report Generation:



- The report is created from within Word 2007 and is based on a template.
- The user selects a report & clicks *Create*
- The report pulls data from the database and fills-in the document taking less than 30 secs.
- Parts of the document are protected and cannot be modified; the user can modify other parts of the document.
- The report is automatically assigned a name and saved at a pre-defined location making it easy to find it later.
- If the data is modified, the report can easily be re-generated.
- Sample pages of the report are shown below.

**Benefits of the system:** Data-entry is fast and accurate. Errors are easily caught and rectified. Creating the document takes less than 30 secs! The data is available later for any variety of management reports.

In the next case study we will show the use of a Word 2007 Office Business Application to automate the process of creating conveyancing documents for a Law Office — letters, forms, legal documents.

For further information and flash demos please visit [www.ramjay.com](http://www.ramjay.com) or contact Nishanth at 9740808440 or send an eMail to me at [samten@ramjaya.com](mailto:samten@ramjaya.com).