



End-user Application Development

Client

Our client, a well-known manufacturer of colour laser printers, wanted to encourage customers to make full use of their printers' facilities. In particular, they had identified a gap in the colour printing market for small and medium-sized enterprises (SMEs): the majority of SMEs use external print shops to provide basic business documents such as headed notepaper, pro formas, banners, business cards, and our client wanted to offer its SME customers an easy way to produce such documents in-house in a cost-effective manner.

Assignment Objectives

The prime objective was to produce an easy-to-understand, robust, standalone application which would provide SME end users with the knowledge, process guidance and support to help them create, control and produce effective business documents in-house, thus realising cost savings through reduction of printing costs by reducing reliance on external print providers. The application was to be deployed via the utility CDs that ship with all the company's colour laser printers.

What we did

The assignment was split into two phases: phase one saw the creation of a version 1 software product for sale within the retail market (PC World and branded outlets), and phase two provided an updated version of the software based on new requirements. In both phases we took an iterative approach to requirements definition, development, test and review. This meant that the client received frequent updates to the software showing regular progression against stated requirements; moreover we were able to manage changes more readily and ensure that the impact of requested changes was communicated quickly to the client (in terms of any additional time and cost).

The solution we produced incorporated a simple but effective process-based approach to the production of common print materials (e.g. business letters, business cards and banners), developed using the Microsoft .Net framework, providing a browser-based interface to a local process execution engine. The application could easily be loaded onto almost any standard desktop PC and run in either stand-alone or networked mode, and the user interface was designed with clarity and ease of use in mind. Thanks to the use of Microsoft Agent technology the application featured an additional level of user interaction enabling the user to execute processes and receive spoken instructions from the software whilst simultaneously working in their chosen document creation application. Additional components of the application included printer discovery, printing advice, and a set of print utilities to support in-house colour printing.

What we achieved

In addition to providing our client with a very robust application to support their sales effort towards SMEs, the resulting application, featuring 'Merlin the Print Wizard', won the Silver Award for Software Innovation from the British Computer Society (BCS).