A 'Product Stewardship' Database Development: PaintWise, Agrecovery & GardenWise.

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Abstract

This 3R Group Microsoft SQL/Access Database poster displays the development of a database solution for the 3R Group. 3R is a company that design, implement and manage product stewardship programmes in New Zealand. Product Stewardship enables businesses to accept responsibility for the environmental impacts of products - from the time they are produced until the end of their useful life (3R, 2011). The Poster highlights the unique problem 3R Group had with data capturing and reporting and how that was solved by a Microsoft Server Express 2005 back end database connected to a Graphical User Interface developed in Microsoft Access 2007. The Database now allows easy data entry and report generating from one central data source, with efficient use of staff resources and time.

Keywords

Sustainability, Product Stewardship, Database, Microsoft SQL Server, Microsoft Access Runtime, 3R Group

Introduction

3R Group is a revolutionary company that maintains and develops Stewardship programs like Resene PaintWise and Agrecovery. To maintain these programs, data capture and data integrity is very important. Before the Database was implemented, 3R Group used multiple spreadsheets and

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manually generated reports, wasting valuable time. A solution to bring all data and reporting into one, time saving product was required.

Methodology
The Database solution was developed with close communication with all users. Initially, a model driven based design was developed, then a live prototype of the proposed Database. This prototype was tested by all users before a final product was built.

The database was developed using a Windows 7 Laptop as a client connected to a server running Windows Server 2008.

Structure
The poster is structured with all the key information around 3R Groups logo in the center. It outlines the Purpose of the database, Alignment of the Project with 3R Group, Problem statement and Database Specifications.

The poster also shows a pictorial view of 3R Group Database from the server, through to the Main Screen, Order Screen and a Packing Slip. A brief background of 3R Group is included at the bottom of the poster.

Results
The Database is currently running live at 3R Group. The database was developed in Microsoft Access 2007 and packaged as a Microsoft Access 2007 Runtime application.

The Product Stewardship system is now able to be monitored and organized on a wider scale due to the database. The process of developing the database also helped 3R understand and document their business processes better.

Conclusion
For 3R Group, a Microsoft Access Graphical User Interface connected to a Microsoft Server back end is the best solution to manual spreadsheets. It now allows staff to enter data, retrieve data and generate reports from one program.

References

3R Group.(2011). *Welcome to 3R Group limited.* Retrieved June 3rd, 2011, from http://www.3r.co.nz/

Microsoft Access Runtime 2007.(n.d.).*Access 2007 Download: Access Runtime.* Retrieved June 3rd, 2011, from http://www.microsoft.com/downloads/en/details.aspx?familyid=d9ae78d9-9dc6-4b38-9fa6-2c745a175aed&displaylang=en

Microsoft Server Express 2005.(n.d.). *SQL Server 2005 Express Edition.* Retrieved May 20th, 2011, from http://www.microsoft.com/sqlserver/2005/en/us/express.aspx

Windows Server 2008 Logo.(2008). *Windows sharepoint servers 3.0 as a solutions platform.* Retrieved June 8th, 2011, from http://grounding.co.za/blogs/neil/archive/2008/10/19/windows-sharepoint-services-3-0-as-a-solutions-platform.aspx