University of Southern Queensland Faculty of Engineering and Surveying

Improving Information Management & Project Proposal Automation at Data[#]3

A dissertation submitted by

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in fulfilment of the requirements of

Courses ENG4111 and 4112 Research Project

towards the degree of

Bachelor of Engineering (Software) and Bachelor of Business (I.T. Management)

Submitted: October, 2008

Abstract

This dissertation describes a software development project completed for an ICT Solutions company called Data[#]3. Customers utilise Data[#]3's expertise for a wide range of software and hardware projects. The aim of this project was to streamline the production of their project proposal documents.

The Solutions Sales Specialists who prepare proposal documents identified the need to implement additional functionality into an existing piece of software. This piece of software, the ADCA (Automated Documentation Creation Application), loads into Microsoft Word as a tab on the Microsoft Word 2007 Ribbon Interface. The primary objectives of the project were:

- Modify the ADCA to accommodate new information elements.
- Allow information retrieval from an "Information Management Repository".
- Integrate support for the Master Proposal Template.

A list of functions was formulated to satisfy the requirements. These functions were designed and developed using Microsoft Visual Studio 2005, and the project was carefully managed in order to ensure a successful outcome. The functions were developed and tested concisely, and the piece of software was able to fulfil the objectives of the project. The tools are now available for the Solutions Sales Specialists to produce high quality documents more efficiently.

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ENG4111 Research Project Part 1 & ENG4112 Research Project Part 2

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Certification

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Cameron Laurence STEVENSON

Student Number: 00112221526

Signature

Date

Acknowledgements

I would like to thank David Ross for his support of the project, as he introduced CEED projects to USQ. He was also a great supervisor throughout the project. In addition, the administrative team in the Faculty of Engineering and Surveying at USQ graciously handled any requests I had.

There are many staff members at Data[#]3 who taught me a lot while I worked on the project there. Scott Gosling and all the others on the team were easy to work with and were happy to lend a hand when I needed it.

I applied to CEED for this project, and the process was very smooth and efficient. They are great people and I would not have succeeded in this project without their hard work.

Finally, I would like to thank my family and friends for their encouragement and kind words while I worked on this project.

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Chapter 1 – INTRODUCTION

1.1 Introduction

When I first started thinking about a topic for the Engineering Research Project, I was considering getting external sponsorship. I came across an organization called CEED (Cooperative Education for Enterprise Development), who advertise industry projects to university students who will be completing a final year project such as the Engineering Research Project. Representatives from CEED came to the USQ Engineering Project Conference in September 2007, where they made a presentation and mentioned that they have a website to register your student details and apply for potential projects. The projects are formulated by companies mostly from the South-East Queensland region, and are advertised by CEED to USQ, UQ, and QUT. After registering to the CEED website, I discovered a project suited to my program – Bachelor of Engineering (Software) & Bachelor of Business (I.T. Management) - was being advertised by a Brisbane-based ICT Solutions company called Data[#]3. They handle software and hardware projects for other companies who require the expertise. Me and several other students applied for the Data[#]3 project, and after some interviews the two positions advertised were filled by me and a student from QUT. CEED provided us with a few project management tips to get us started, and oversaw the whole process, including the provision of scholarship payments to the successful students. The CEED project guidelines required students to spend a minimum of 3 days per week at the host company for the length of the project. I worked 5 days per week for 3 months at Data[#]3 on this project.

My part in this project was to develop additional functionality for a software application called the ADCA (Automated Documentation Creation Application). The student from QUT was assigned the task of developing a better information management system known as an "Information Management Repository". One of the planned functions of the ADCA was to retrieve information from the Information Management Repository. This dissertation will present a literature review of the research performed, and a description of the various methodologies used throughout the project. The results of the analysis, design and development are discussed and analyzed, and conclusions are drawn. The remaining sections of Chapter 1 will introduce the background of the project, and describe the problem being solved.

1.2 Background

Solutions Sales Specialists at Data[#]3 prepared project proposal documents and other sales documents using Microsoft Word 2007. A template was generally used to start a new document, and the vital information required for the document was described in the templates. Various sections of the document required similar pieces of information, including the customer's details, descriptions of computing technology used by Data[#]3, and marketing information. This information was copied into the document from a variety of locations on the Data[#]3 network, and took time to prepare into a suitable format. The Solutions Sales Specialists were looking for something to reduce the time taken in gathering this information together, and provide shortcuts to other common functions performed during the document preparation process.

The idea for this project was then formed, because an existing piece of software, the ADCA, was already performing a similar function for technical staff members at Data[#]3. The ADCA loaded in a tab in Microsoft Word 2007, and provided an interface to various functions including a database with common technical definitions. These definitions could be inserted anywhere into a Word document. For this project, a new database of Sales Definitions would be created, and an improved interface would be needed for the ADCA. Information currently described in templates would be made much more readily available, which would automate a lot of the manual tasks of information retrieval. In turn, the automation of the document creation process would assist the Solutions Sales Specialists in being more productive.

1.3 The Problem

The nature of this problem served to require appropriate project management, in order to control the amount of new functionality added to the ADCA. The CEED contract was only set

to last for 3 months, so the vital functionality would be made first priority. A few key areas were identified during preliminary investigation into the project's feasibility. The Master Proposal Template was going to be transformed into a state usable by the ADCA. It would need to be thoroughly examined, and the information described within the template would be translated into appropriate functionality in the ADCA. The document preparation process performed by Solutions Sales Specialists would need to be researched and analysed, so that shortcuts to useful functions could be listed and given priority. And finally, the information resources that are spread across the network would be placed in a centralized repository, and an appropriate interface would be devised. The Services Catalogue would become a part of this repository in the future. This catalogue defines scope, time, and cost of packaged services provided by Data[#]3. The Services Catalogue, along with other Sales Definitions would become the basis for the Information Management Repository.

Once the various sales documents (including the Project Proposals) have been completed and are ready to go through a review process, they would be saved into a SharePoint portal. Microsoft Office SharePoint Server is a software product that provides businesses with a central document storage solution, along with a variety of other useful functions. (http://www.microsoft.com/sharepoint/default.mspx) The detailed scope of the project is provided in 1.4 Primary Objectives.

1.4 Primary Objectives

The purpose of this project was to automate and streamline the pre-sales process to improve business efficiency and to provide greater consistency with sales proposal generation. This would likely increase the overall productivity of the sales team, resulting in rapid turnaround of proposals so more time can be allocated to customer interactions. The specific project objectives were:

- Provide consistency in proposal creation by extending the ADCA (Automated Documentation Creation Application) functionality and linking this to the future Services Catalogue.
- Modify ADCA information collection form to accommodate additional fields
- Create a search function which retrieves data chunks from the IM (Information Management) repository and Services Catalogue

- Add Master Proposal Template to the list of automated documents
- Modify the Master Proposal Template to a standard similar to existing ADCA engineering templates
- Allow sales documents to be saved to an appropriate SharePoint portal
- Trigger workflows to start the proposal review process

1.5 Conclusions: Chapter 1

This dissertation aims to describe a software development project undertaken at Data[#]3. The project was intended to increase Solutions Sales Specialists' productivity, mostly by extending the functionality of the ADCA software. The project was expected to improve the efficiency of sales document preparation and provide better access to information resources. By examining current processes and identifying important functions, the requirements for this project were described in great detail. The research performed in order to determine requirements is presented in a literature review in Chapter 2.

Chapter 2 – LITERATURE REVIEW

2.1 Introduction

This chapter will review literature to establish the need for expanding the functionality of the ADCA (Automated Documentation Creation Application). This functionality would simplify proposal development and provide more agility, predictable outcomes and rapid turnaround to proposal generation. The solution will automate the development of sales proposals for the Solution Sales Specialist team.

2.2 Research Areas

As this project was more focused on product development rather than research, most of the study was performed on current work practices and then efforts were made to design the appropriate software solution. However the concept behind this project had been implemented before in different forms around the world. The company Microsoft had developed their own Solutions Accelerator for Proposals (*Improving Sales Proposals Using the Microsoft Office System* 2005) which they utilized internally for the creation of sales proposals. As the ADCA software would be loading into Microsoft Office Word 2007, which has a new development framework, some experimentation with ideas was performed.

2.3 Conclusions: Chapter 2

A variety of research was performed to determine the requirements of the ADCA project. Detailed notes of the current document preparation procedures were taken, and best practices for the design of a Microsoft Word 2007 add-in were thoroughly examined.

Chapter 3 – METHODOLOGY

3.1 Introduction

This chapter describes the specific requirements that were undertaken during this project, and the methodologies used to reach the solution.

3.2 Requirements

3.2.1 Scope of Requirements

The development of technical sales proposals requires the Solutions Sales Specialist to draw information from multiple data sources, including the Services Catalogue, the Data[#]3 CRM (Customer Relationship Management) system – which is called Liberate – and the Master Proposal Template.

The project scope is as follows:

- Extend the existing ADCA (Automated Document Creation Application) interface to encompass detailed information gathering, which includes the following fields:
 - Pricing Type Fixed Price or Time & Materials;
 - Relevant vendor awards for proposal (e.g. Citrix, Microsoft, and Cisco);
 - The Services Catalogue, which will allow insertion of services that the proposal is being developed for.
- Generate the proposal using selected inputs so that the Specialist is able to then edit the document, using the ADCA document controls

Provision of Project Management including:

- Writing the Project Management Plan
- Preparing the detailed schedule

- Keeping on schedule by holding fortnightly Project Progress Meetings with Steering Committee where the Project Progress Report will be tabled
- Conducting Sign-Off Meeting

Creation of the Business and Technical Requirements Document including:

- Discovery of current Data[#]3 technologies and processes
- Examining applications and processes used by the Information Management Team and Solutions Sales Specialists in order to develop requirements specifications
- Identifying key personnel, resources and processes directly related to the project design, development and implementation
- Conducting ADCA Research limited to reading ADCA documentation, gaining an understanding of the ADCA program code, identifying code to be altered to suit new functionality.
- Conducting Pre-Sales Process Workshop limited to examining current sales proposal template/s, examining Services Catalogue, determining number of templates required, discovering how to align the Master Sales Template with the ADCA standard, reviewing & validating Pre-Sales process sequencing.
- Conducting Sales Document Storage Workshop limited to determining the categories of sales documents, determining the policies on sales document storage, researching document storage capabilities of SharePoint.
- Conducting SharePoint Research limited to reading SharePoint documentation, discovering functionality that applies to the ADCA requirements.

- Conducting Proposal Review Process Workshop limited to interviewing the appropriate staff to discover typical review schedule, determining the method to implement review workflows in SharePoint.
- Writing and dissemination of workshop minutes on the discussion points, decisions and action items
- Writing the Business and Technical Requirements Document

Creation of the Technical Design Document including:

- Designing the solution architecture, and ensuring all requirements can be satisfied by the chosen solution.
- Designing the functional units that make up the solution, and ensuring consistency between functionality and the desired outcomes.
- Writing the Technical Design Document

Development of the ADCA extended functionality including:

- Performing iterative development limited to designing the low-level functions and coding them, testing the functions using a test plan, reviewing the code and making improvements where required.
- Conducting demonstration meetings where the functionality can be appraised by the appropriate stakeholders.
- Editing the code according to conclusions reached in demonstration meetings
- Performing final testing
- Writing user documentation to describe the new functionality

Prepare Project Finalisation Document including:

- Provision of the Project Closure/Review tasks
- Provision of the Process/Benefits by handing over the finished product
- Writing the Project Finalisation Document
- Conducting Sign-Off Meeting

3.2.2 Deliverables

The milestone deliverables from this project will be:

- Delivery of 'Client Signed-Off' Project Management Plan
- Delivery of the Business and Technical Requirements Document
- Delivery of the Technical Design Document
- Delivery of ADCA (version 2)
- Delivery of ADCA Training Documentation (Training Package & Install/Uninstall Procedure)
- Delivery of 'Client Signed-Off' Project Finalisation Document

The milestone deliverables are the project completion criteria that signify acceptance and final signoff of this project.

3.2.3 Project Solution Summary

Project Justification

The project justification is to automate the development of proposals, remove the scope for error, and provide national consistency to our approach in the proposal development process.

Design Goals

Simplify the experience for Specialists, and remove the 'learning time' required when a new staff member begins when trying to find the various sources of information that exist that are used in the proposal development process.

3.2.4 Requirements Summary

Requirements for the solution to be developed are as follows:

- 1. Update the ADCA code to reflect the changed input field requirements, and correct some identified bugs from the original ADCA project at the same time;
- Lookup customer details from Liberate so that they can be sourced automatically (note that this lookup functionality should be quarantined should our CRM system change in the near future);
- 3. Design a structure in SharePoint for current word documents (e.g. Services Catalogue), so they can be updated and used dynamically;
- 4. Once a proposal is generated, it must then be editable by the Specialists;
- 5. Provide an automated storage of the proposal into a SharePoint site. New proposals will continue to be stored in the existing directory until a SharePoint site is set up;
- 6. Extend the ADCA toolbar to include a sidebar with an auto-generated content hierarchy (based on source data) that can be maintained without code, which allows content to be inserted into a document;
- 7. The system must be able to be accessed remotely so that staff can access the SharePoint site through authentication. Like the ADCA, the system (barring the content library) should be local so that disconnected proposal development can occur.

Required infrastructure for this project is already in a production environment. The source code for this project should be lodged in Source Safe and a project portal so it can be adequately maintained.

The remainder of the ADCA Business and Technical Requirements Document is in Appendix B. The requirements for the ADCA (version 2) were completed in December 2007. A final requirements meeting was held at the end of December to clarify some minor details and have the document approved by the Project Steering Committee, ready for sign-off. The requirements gathering process was vital to the success of the project, as an accurate and complete set of requirements would ensure the software performed exactly as intended.

3.3 Design Overview

In this document (Appendix C) there are designs of many of the smaller functions which work together to perform higher level tasks. These designs will be used during development of the ADCA to ensure the logic of each function is accurate. The designs were formulated by extensive use of the MSDN (Microsoft Developer Network) Library to gain ideas and strategies. The majority of the functions in the Appendix C are associated with the Information Collection Form, which is accessed via the 'Edit Properties' button on the 'Data[#]3 ADCA' ribbon bar in Microsoft Office Word 2007. There are new properties that will be utilized by Solutions Sales Specialists and the Information Management Team when preparing sales proposals and tenders. Some of these properties will be managed centrally in SharePoint lists, while others will be retrieved from the Liberate CRM database system. The following diagram displays the intended overall solution.



Figure 1 - Overall Solution

3.4 Code Listing

All of the code for this program is now legally owned by Data[#]3, so there isn't any listing in the Appendices. However, the ADCA Walkthrough in Appendix D displays the results of development.

3.5 Methodology Summary

The Project Management methodology used was based on Prince2, which was utilized by the project management staff member assigned to this project. For the development phase, a rapid prototyping methodology was utilized in order to provide quick results and uncover any issues early on in the process. Using Microsoft Visual Studio 2005 Add-ins for Microsoft Word 2007, the development process was simplified. A variety of programming techniques were used throughout the project to satisfy the objectives.

3.6 Conclusions: Chapter 3

The Appendices B, C, and D were all prepared by me during the course of the project. It displays the results of the various phases (requirements, design, and development). It contains input from the Project Steering Committee obtained during meetings, and the methodologies described above ensured a smooth and understood procedure in the documents' preparation. Chapter 4 details the results of the main phases of the project and discusses them in some detail.

Chapter 4 – RESULTS & DISCUSSION

4.1 Introduction

The software development lifecycle is emphasized a great deal in university courses, but going through a real software development project has provided me with experience that can't be taught using theory. The planning process is of vital importance to the project, and a project can easily go off the rails without good project management. Then, in order to really understand a client's needs, you must think of every single feature they have asked for, and make sure that your solution will match exactly what they require. This process is not easy, but now that I have reached the end of this project, it was definitely worth all the effort. I can now continue forward in my career with the knowledge of how the pieces of a project fit together, and that each element requires careful deliberation in order to reach the right solution.

4.2 Handover

Data[#]3 have nominated an internal staff member to be trained in the use of the Information Management repository and the ASCA application. Marty Gnanananthan, as the Technical Lead on this project, will undertake this role. He has been involved in the entire project, which will make this process much easier. A final training session will occur once development is completed. This knowledge transfer will allow the nominated staff member to be the first point of contact for users to be guided on its operation. A simple set of training documents will be drawn up during development to describe the major functions.

At the end of development, the intended users will be notified by email that it is ready. They can then ask to be trained in its use by the nominated staff member. Source code and test results will also be handed over to Scott Gosling, for future reference.

4.3 Conclusions: Chapter 4

The staff members of Data[#]3 who prepare documents will find that the ADCA tool will improve the documentation creation process, and make it easier to create consistent, high quality documents.

Chapter 5 – CONCLUSIONS

The following sections describe the follow-on work recommended to be done after this project.

5.1 ADCA Installation

The ADCA has been developed to be a downloadable package, which can be unzipped and installed on any Windows XP / Vista computer. The computer must also have Microsoft Word 2007 installed. When a new user is installing the ADCA (version 2, or ADCAv2), they should be directed to the following website:

http://staffnet/icts/SiteDirectory/adca/ADCA/Forms/AllItems.aspx

The website contains a 'User Manual' (walkthroughs of major functionality), and a more comprehensive document called the 'ADCAv2 Overview'.

Any issues with the ADCA can be directed to the ADCA Issues Database. http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Issues%20Database/AllItems.aspx

5.2 ADCA Maintenance

The issues log will be reviewed regularly and any major faults should be directed to Marty Gnanananthan.

5.3 ADCA Information Collection Form

The Information Management Team and the Solutions Sales Specialists will need to edit the following lists in the near future. Permissions for adding and removing items from these lists will be up to the discretion of the Project Hamilton Steering Committee. **Maintaining the structure of these custom lists is of vital importance.**

Vendors List

http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Customer%20Vendor%20Property/AllIt ems.aspx

Items in the Vendors list are the names of major vendors that deal with Data[#]3, and are commonly referred to in Proposals and Tenders.

Document Status List

http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Document%20Status%20Property/AllIt ems.aspx

Items in the Document Status list are the various stages that a document proceeds through during development. For instance, the default values in the list are 'Draft' and 'Release'.

Document Type List

http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Document%20Type%20Property/AllIte

<u>ms.aspx</u>

Currently the Document Type list consists of the steps in the Customer Solution Lifecycle (pdo^2) .

GITC Classification List

http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Sales%20GITC%20Property/AllItems.a spx

This list will need to be monitored carefully so that the details are kept up to date. The different GITC classifications are 'State-based', 'National', and 'Other'. The states of Australia have been listed as the current options for 'State-based' GITC classification. The definition for each of the GITC classifications is required to make them useful for ADCAv2 deployment.

Pricing Type List

http://staffnet/icts/SiteDirectory/adca/Lists/ADCA%20Sales%20Pricing%20Property/AllItems. aspx

This list has 'Fixed Price', 'Time and Materials', and 'Other'. These are the current three choices for Sales Proposal creation, and the definition for each of them is required to make them useful for ADCAv2 deployment.

5.4 ADCA Templates

To make the most out of using the ADCA, master templates will need to be 'fitted out' with the new document properties available in the Information Collection Form. The new document properties can be inserted from the Data[#]3 ADCA tab.

5.5 ADCA Task Pane

The ADCA (v2) contains an improved Task Pane adapted from version 1. In the Task Pane, a user can view a tree of information (Definitions hierarchy), which displays information resources in a directory structure. The information resources are categorized into text portions known as 'Definitions'. The Definitions can be inserted into documents from the Task Pane. The Task Pane is accessed by clicking the 'Insert Definition' button on the Data[#]3 ADCA tab in Microsoft Word 2007.

Currently, there is only a small set of dummy data contained in the Definitions hierarchy. Once the Information Management Repository interface is ready, the Definitions hierarchy can be fully utilized. The interface is used to add Definitions into the hierarchy (SharePoint lists).

Maintaining the structure of these lists is of vital importance. The transferral of information resources into the Definitions hierarchy needs to be coordinated carefully, to ensure that it doesn't become cluttered and disorganized. Each Definition will go through an approval process to ensure that it is suitable for use in official Data[#]3 documents.

What can be done now:

- The Services Catalogue could be transferred into the Definitions hierarchy, as its structure is well defined.
- Data[#]3 addresses
- Copyright, disclaimers, etc.

5.6 Post Implementation Surveys

A survey was prepared to be completed by the staff members at Data[#]3 who have had the most exposure to the ADCA. As can be seen in Appendix E, 4 surveys were completed and returned. The comments highlight the important features of the ADCA and how it has affected their work habits.

5.7 Final Thoughts

The project succeeding in providing a more automated document preparation process for the Solutions Sales Specialists at Data[#]3. The Information Management Repository, developed by the student from QUT and other Data[#]3 developers, will need to be populated with data to be made useful. Without accurate and complete information, the repository will not serve the intended purpose. Therefore, an important step for Data[#]3 to take is managing and encouraging the use of the Information Management Repository, which in turn will be accessed by the ADCA application.

LIST OF REFERENCES

Improving Sales Proposals Using the Microsoft Office System 2005, viewed 12 December 2008, <u>http://www.microsoft.com/office/showcase/proposals/TDMguide.mspx</u>.

'Microsoft Office SharePoint Server', <u>http://www.microsoft.com/sharepoint/default.mspx</u>, Accessed: 20 October 2008.

APPENDICES

Appendix A, Project Specification Appendix B, ADCA Business and Technical Requirements Document Appendix C, ADCA Technical Design Document Appendix D, ADCA Walkthrough Appendix E, ADCA Post Implementation Surveys **Appendix A, Project Specification**

University of Southern Queensland

FACULTY OF ENGINEERING AND SURVEYING

ENG4111/4112 Research Project PROJECT SPECIFICATION

- FOR: Cameron Laurence STEVENSON
- TOPIC:IMPROVING INFORMATION MANAGEMENT & PROJECT
PROPOSAL AUTOMATION AT DATA#3
- SUPERVISORS: Prof. David Ross Scott Gosling, Data[#]3 Pty Ltd. Graham Willett, CEED Pty Ltd.
- ENROLMENT: ENG4111 S1, EXT, 2008; ENG4112 – S2, EXT, 2008
- PROJECT AIM: The purpose of this project is to design, develop and implement software that will automate and streamline the pre-sales process at Data[#]3, in turn improving business efficiency and providing greater consistency in sales proposal generation.

SPONSORSHIP: CEED in partnership with Data[#]3

PROGRAMME: Issue A, 5 December 2007

- 1. Research the current technology and processes used by Data[#]3 to perform information management tasks and to prepare sales proposals.
- 2. Analyse the research and identify the full set of functions required by Data[#]3.
- 3. Design the software that will provide the functions identified in the analysis.
- 4. Develop the software according to the detailed technical design.
- 5. Test the software and prepare it for handover to Data[#]3, where they will implement and integrate the software into their systems.
- 6. Submit an academic dissertation on the software development process.

AGREED:		(Student)			(Supervisor/s)
	Date: / / 200)8	Date:	/ / 2008	

Examiner/Co-examiner:

Appendix B, ADCA Business and Technical Requirements Document

Current System

Solution Specialists

The Solution Specialist role is engaged by the Managed Account Group (MAG) or other sales teams within Data#3 to provide technical pre-sales assistance to Data#3 customers. The Specialist role defines customer business and technical requirements, and develops an appropriate technical solution to resolve the defined issue. When a Solution Specialist is creating a new proposal document, the following steps are taken:

- 1. The proposal document template is retrieved from the \\toowongdc\shared\qltydoc\template directory.
- 2. The Specialist begins to edit the document, and saves it in the appropriate customer folder.
- 3. A key combination is pressed (Ctrl-A-F9) to start the process of entering document properties.
- 4. The document properties are filled in one after the other in a series of dialog boxes. You can skip individual dialog boxes but the entire series cannot be skipped with one action.
- The document property 'ABN' can be found in the current CRM system (Act), but it is more likely that you will have to search for it on the ASIC website (<u>www.search.asic.gov.au</u>). This property is then manually copied over into the document from the other window.
- 6. The document property 'Data#3 Address' need to be typed in.
- 7. Once the document properties are filled in, there are some sections of the template that require additional information about the document. For example, the author's details need to be typed in.
- 8. The customer's contact details have to be copied from another window (usually Act) into the proposal. When the details are pasted in, the formatting is manually matched to the document's format.
- 9. Throughout the template, there are sections of the document with coloured highlighting over it to denote its context. This highlighting is removed manually, along with the sections that are irrelevant to the proposal.
- 10. There are some sections of the document that require images to be inserted. These images are found within a filesystem and copied over to the document.
- 11. Other sections of the document have clauses inserted that have been copied from a proposal with a similar scope. The customer name in these clauses has to be changed to suit the proposal.

Existing Proposal Template
A master template for pre-sales is currently used that is based on fill-in fields (document properties). The current Microsoft Word template has the following fill-in fields, and the table's right-hand column proposes how each field will be dealt with by the proposed solution.

Proposal Template Field	Treatment		
Exec Name (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Exec Title (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Exec E-Mail Address (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Exec Phone Number (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Project Title (document tab)	To be collected from ADCA form		
Customer Formal Name (customer tab)	To be entered in ADCA tab, with search conducted off this field into LIBERATE, pulling back the additional fields from that customer record selected		
Customer Abbreviated Name (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Customer's ABN (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Customer's Street Address (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Customer's Primary Contact Name (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Customer's Primary Contact Title (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite		
Customer's Secondary/Non-Technical Contact Name (customer tab)	Collected from the customer record in LIBERATE (if applicable), with ability to overwrite		
Customer's Secondary/Non-Technical Contact Title (customer tab)	Collected from the customer record in LIBERATE (if applicable), with ability to overwrite		
Customer's Technical Lead Name (customer tab)	Collected from the customer record in LIBERATE (if applicable), with ability to overwrite		
Customer's Technical Lead Title (customer tab)	Collected from the customer record in LIBERATE (if applicable), with ability to overwrite		
Proposal Version Number (document tab)	To be collected from ADCA form, with default increment set (can be		

Proposal Template Field	Treatment
	overwritten)
Date Proposal Issued/Sent to Customer	Will insert the current date into ADCA form with ability to overwrite
Is Proposal under Umbrella/Head/SOA? If so, put either Head Agreement Number or relevant SOA number? If not, leave blank (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite
What is the HA/SOA/Umbrella Head Agreement Number? (customer tab)	Collected from the customer record in LIBERATE, with ability to overwrite
What is the relevant D3 address (content repository)	Chosen from the content repository shown in the ASCA sidebar
Is this fixed price or T&M? (sales tab)	Chosen from the content repository shown in the ASCA sidebar
D3 Specialist Name (author tab)	To be auto-completed based on person typing and saving name (then just using the My Details button)
D3 Specialist Title (author tab)	To be auto-completed based on person typing and saving name (then just using the My Details button)
D3 Specialist E-Mail Address (author tab)	To be auto-completed based on person typing and saving name (then just using the My Details button)
D3 Specialist Phone Number (author tab)	To be auto-completed based on person typing and saving name (then just using the My Details button)
#2 D3 Specialist Name (sales tab)	To be collected from ADCA form
#2 D3 Specialist Title (sales tab)	To be collected from ADCA form
#2 D3 Specialist E-Mail Address (sales tab)	To be collected from ADCA form
#2 D3 Specialist Phone Number (sales tab)	To be collected from ADCA form

 Table 1: Proposal Template Field Treatment

It is proposed that the fill-in fields will be removed from the sales template, and it will be automated in a similar fashion to the engineering templates within the current ADCA.

It is also proposed that the current master sales template will move into the ADCA document library so the remote auto-update from the SharePoint server can be utilised, ensuring the sales teams always have current versions of the master proposals.

ADCA Document Properties Form

The ASCA interface will primarily encompass the extended ADCA functionality with additional fill-in fields for the Solution Sales Specialists within Data#3. Content will be drawn from various sources, including the pop-up fields which are presented when the master template is first opened. The following figures show an information collection form used by the ADCA tool to set some document properties.

Document Properties	
Document Information Update the general properties of the	e document. Data"3
Document Author Company	
Title:	Project Name:
Document title	Project Name
Subject:	_
Version:	
0.1	
Status: Type:	
Draft Design	
	☑ Update Fields
	Done Cancel

Tab 1 - Document

Figure 2 - ADCA Form - Tab1

Tab 2 - Author

Document Properties	A Ballances Storing	
Author Information Update the author properties. Clic details and Save Details to save c	k on My Details to retrieve your urrent details.	Data'3
Document Author Company		
Name:		
Authors Name		
Title:		
Authors Title		
E-Mail:		
Authorsemail@data3.com.au		
Phone:		
1234567890	My Details	Save Details
		✓ Update Fields
	Done	Cancel

Figure 3: ADCA Form - Tab2

Tab 3 – Company

Document Properties		
Company Information Update the company properties	Data	
Document Author Company		
Company Long:		
Customers Name - Long		
Company Short:		
Customers Name - short		
Technology:		
The majority Technology in this docume	ent	
Footer Title:	Vendor:	
Insert Footer Title Here	Microsoft	
		Vpdate Fields
		Done Cancel

Figure 4: ADCA Form - Tab3

Proposed System

Proposal Template Storage

Home	Insert	Page Layout	References	Mailings	Review	View	Developer	Data#3 A	DCA	
New Data#3 Document	date DCA	→ 10 → → A Quic → Rast	B I U → k Styles → A He e UT Data#3 Styles	A - by - eading -	Paragraph	Insert Insert Table Figure	Insert Caption *	Change Orientation	Edit Properties Sinsert Property Update All Fields Document Property	 Insert Phrase Insert Reference Building Blocks ▼

Figure 5: Template storage area

The master proposal template will be placed into the SharePoint document library along with the existing engineering templates.

🔤 Data#3 Templates 📃 🗖 🔀
Data#3 Document Templates
Active Directory Design Template - W2003.dotx ICT Sales Proposal User Guide.dot ICT Solutions Sales Proposal_Generic 27 sept 200 MOSS Technical Design Template V1.0.dot Operations Manager 2007 Design Template v0.1.d SMS 2003 Infrastructure Review and SP3 Readine Technical Design Template V1.1.dot
Add Remove OK Cancel

Figure 6: Data#3 Document Templates Dialog

Proposal 'Save to Portal'

2	s Mail	ings	Review	View	Develop	er	Data#3 ADCA			۲
	Paragraph	Insert Table	Insert Figure	Insert Caption *	Change Orientation	() () ()	Edit Properties Insert Property * Update All Fields	 Insert Phrase Insert Reference Building Blocks ▼ 	Print to PDF	Localise Finalise
			Fo	rmatting		Doc	ument Prope 🖻	Document Authoring	Saving	Finalise

Figure 7: Save to Portal button

- The 'Save to Portal' button will direct the user to save their document in the nominated directory.
- The URL of the directory will be saved into the local Microsoft Access database (Phrases.mdb). The URL will exist as an item in the SharePoint definitions list.
- The URL will be changed in the future to point to a proposal document library.
- Once the proposal is ready for review, the author will go and manually start the 'proposal review workflow'. The author will be prompted to start the workflow when the 'Finalise' button is pressed (Figure 8).
- Current URL = S:\Services\Customers\



Figure 8: Finalise button

Information Collection Form

The existing ADCA form will be expanded to collect sales template document properties. The following screenshots show the intended layout of the updated information collection form.

Tab 1: Document		
Feature	Value/s	Design
Updated Field: Status		
The completion status of	Draft, Release	Dropdown box with values from
the document, e.g. Draft		'Phrases.mdb'; can enter a different

Feature	Value/s		Design	
status			value. See Figure 9, bottom left	
Updated Field: Type				
The type of information in the document, (PDO ²)	Position, Plan-Initiate, Plan-Discovery, Design- Design, Design-Closed Pilot, Deploy-Open Pilot, Deploy-Deploy, Operate, Optimise		Dropdown box with values from 'Phrases.mdb'; can enter a different value. See Figure 9, bottom middle	
Document Proper Document Info Update the gener Document Author C Title: Document title Subject: XXXX Design Docume Version: D.1 Status: Draft	ties rmation ral properties of the d iompany rt Type: Design	ocument. Project Name: Project Name	Update Fields	
		(Done Cancel	

Figure 9: Document Tab

Tab 3: Customer

Feature	Value/s	Design
New Button: Liberate		

Feature	Value/s	Design
A button that uses the text in the 'Customer Name – Long' field to perform a search in Liberate and retrieve customer details to populate additional fields	Label = Liberate Button Code Heading = btnLookup_Click	Initiates the process of populating customer details. Brings up some forms where the user selects the specific customer details to include in the document. The selected customer details will be displayed in a box like in Figure 10, bottom right
New Form: frmLookupCustomerSea	rchResults	
A form that displays a list of possible matches to the text from the 'Customer Name – Long' field	Label = Customer Search Results	A search in Liberate will return a list of matches, and the user will be asked to select the intended customer. User will click 'Confirm Selection' and populate the 'Customer Abbreviated Name', 'ABN', and 'Street Address' fields.
New Form: frmLookupCustomerExe	cutiveContact	
A form that displays a list of contacts associated with the selected customer record in Liberate	Label = Customer Executive Contact	The user will click a checkbox next to the customer contact who will be the primary contact for the document. The 'Email Address' and 'Phone Number' fields of this contact will be used for the document.
New Form: IrmLookupCustomerPri	naryContact	
A form that displays a list of contacts associated with the selected customer	Label = Customer Primary Contact	The user will click a checkbox next to the customer contact who

Feature	Value/s	Design
record in Liberate		will be the primary contact for the document.
New Form: frmLookupCustomerAdd	MoreContacts	
A form that displays a list of contacts associated with the selected customer record in Liberate	Label = Customer Add More Contacts	The user will click a checkbox next to each of the customer contacts that are required in addition to the first two contacts.
New Field: Umbrella/Head/SOA		
Proposal Option that is retrieved from	Proposal Option that is	Proposal Option that is
Liberate, dependent on customer	retrieved from Liberate, dependent on customer	retrieved from Liberate, dependent on customer
New Field: Umbrella/Head/SOA Nun	ıber	
Proposal Option that is retrieved from	Proposal Option that is	Proposal Option that is
Liberate, unique to customer	retrieved from Liberate, unique to customer	retrieved from Liberate, unique to customer
Updated Field: Vendor		
The major vendors that are referenced in the document	Cisco Systems, IBM, HP, Microsoft, Citrix	Listbox with values from 'Phrases.mdb'. Several may be selected.

ouro Document Properties	Automatica concerna	
Customer Information Update the _{oustomer} properties of t	he document.	Data'3
Document Author Customer		
Company Long: Customers Name - Long		Liberate
Company Short: Customers Name - short Technology: The majority Technology in this document	Contact Details Executive: Primary: Secondary: Technical Lead: Exec. Email: Exec. Phone: ABN:	
Vendor	Street Address: Umbrella/Head/SOA: Umbrella/Head/SOA Number:	>
		Update Fields
	Done	Cancel

Figure 10: Customer Tab

Feature	Value/s	Design
New Field: GITC Classification		
A proposal is classified according to the GITC details that will apply	State-based, National, Other	A group of 3 radio buttons. See Figure 11, top left
New Field: GITC Location		
Different regions have different GITC details that apply	States of Australia, and other relevant regions, retrieved from local Access database	Dropdown box with values from 'Phrases.mdb'; can enter a different value.
New Field: Proposal Pricing Type	·	
A proposal is classified by how	Fixed Price, Time &	A group of 3 radio

Feature	Value/s	Design			
pricing is applied	Materials, Other	buttons.			
		See Figure 11, top middle			
New Fields: #2 D3 Specialist Details	New Fields: #2 D3 Specialist Details				
Second Data#3 staff member	Name, Title, Email Address,	Entered by user on			
involved with proposal	Phone Number	Sales Tab.			
		See Figure 11, bottom right			

Document Properties	for sond fidences more	
Customer Informatio Update the _{oustomer} pro	n perties of the document.	Data'3
Document Author Customer	Sales	
GITC Classification State-based National Other GITC Location Select Location	Proposal Pricing Type Fixed Price Time & Materials Other #2 D3 Specialist Deta	ils
	Done	Update Fields

Figure 11: Sales Tab

Insertion of Document Properties



Figure 12: 'Insert Property' Menu

The new sales template document properties will available for insertion from the existing ADCA 'Insert Property' menu (Figure 12). This menu will be useful when setting up the new master proposal template, so that the insertion points of important document properties can be predefined.

Content Repository

The remaining sales template fields will be available in the content repository, and be accessible via a custom task pane.

- All Data#3 addresses
- An image library
- The Services Catalogue

The custom task pane will reuse the existing ADCA 'Phrases' task pane (Figure 13), with slight modifications.



Figure 13: 'Phrases' custom task pane

Research will be conducted into several areas to determine if it is possible to implement in the content repository:

- Embedding document properties into content chunks;
- Adding/editing content chunks in the SharePoint repository via the MS Word 2007 interface.

Pasting Unformatted Text



Figure 14: 'Paste Unformatted Text' button

The Solution Sales Specialists require a button that is a shortcut to the 'Paste Special: Unformatted Text' function. When pressed, the button pastes the contents of the clipboard as text with no formatting. The button shown in Figure 14 is the implementation of this requirement so far. The position of the button and its 'look and feel' may change.

Appendix C, ADCA Technical Design Document

Proposal Template Storage

There is a document library that currently exists in the ICTS portal on the ADCA SharePoint site. It contains templates that the ICTS division of Data[#]3 use to create new documents. The contents of the library are copied over to the user's computer when they update the templates using the 'Update ADCA' button on the 'Data[#]3 ADCA' ribbon bar in Microsoft Word 2007. The master sales proposal template will be placed into the document library so that the latest version will always be accessible to users of the ADCA. Other templates may be added in as necessary.

Proposal 'Save to Portal'

The requirements for saving a proposal to a portal are described in the 'ASCA Business and Technical Requirements' document. The design solution for this requirement is:

- The 'adca.config' file that is stored locally on an ADCA user's machine contains the URL of the directory used when the 'Save to Portal' button is clicked.
- A description of how to store a URL in the config file will be found in the user manual for the ASCA.
- This method is flexible, as different users of the ADCA will require a different URL to save their files.
- The 'Tender Document Library' URL and the 'Proposal Document Library' URL will both be displayed to the user to choose from.

Information Collection Form (Document Properties)

Changes are being made to the ADCA form that is used to set document properties for the active document. The requirements for these changes are found in the 'ASCA Business and Technical Requirements' document. The following sections describe the technical design details for the changes being made to the Information Collection Form.

Retrieving Field Values

The current code underlying the 'Update ADCA' button (Figure 15) uses a web reference to draw items from the ADCA Definitions list on the ICTS Portal. These items are entered into the 'Phrases.mdb' Access database. A similar method will be used to retrieve field values from a SharePoint list. A new SharePoint list will be created for each new field. Also, a new table for each new field will be added to 'Phrases.mdb'.



Figure 15: 'Update ADCA' button

The following pseudo code describes the process of retrieving data from a SharePoint list and putting the items into the 'Phrases.mdb' table.

Get Items from SharePoint List to Database		
Main Function	Sub Functions	
 Get new items from SharePoint list Get deleted items from SharePoint list Update the database with items 	 Get new/deleted items from SharePoint list Get the URL of the SharePoint list Load the connection settings Get the SharePoint list ID Retrieve the requested items Return the items to the calling method 	

Pseudo code:

Get Items from SharePoint List to Database		
Main Function	Sub Functions	
	• Update the database with items	
	• Set up connection to database	
	• Fill a table with database records	
	• Merge the table with new items	
	 Delete items marked for deletion 	
	• Update database with new table	

 Table 2: Retrieving Field Values

Loading Information Collection Form

The following pseudo code describes the process of loading the database values into the ADCA Information Collection Form.

Pseudo code:

If Field: Name has been initialised, show its current value in textbox.

Populate combo-box lists from 'Phrases.mdb' table.

Setting Document Properties

Once the user has entered all the document properties they require, they press the 'Done' button. The following pseudo code describes the process of entering the choices into document properties.

Pseudo code:

->Add property into active document's properties

- Retrieve value from information collection form
- If this property has already been set, delete it
- Set new property value

Field: GITC Classification

Feature	Design
Radio buttons <u>Pseudo code</u>:	A group of three radio buttons will be displayed to the user. Only one of the (hard-coded) options can be chosen.
• Event: If [State-based] is chosen	1. State-based
box	 National Other
• Event: If [National] or [Other] is chosen	
 Deactivate GITC Location combo box 	
When 'Done' is clicked	
Pseudo code:	
Switch [GITC Classification]	
• Case 1: Get [GITC Location] from combo box	
 GITC Data = Definition for GITC Location [<i>Chosen Value</i>] 	
• Case 2: GITC Data = Definition for [National]	
• Case Default: GITC Data = Definition for [Other]	
End Switch	
• Add Document Property [GITC Data]	

Table 3: Field: GITC Classification

Field: Proposal Pricing Type

Feature	Design
Radio buttons	 A group of three radio buttons will be displayed to the user. Only one of the (hard-coded) options can be chosen. 1. Fixed Price 2. Time & Materials 3. Other
When 'Done' is clicked	
Pseudo code:	
Switch [Proposal Pricing Type]	
• Case 1: Pricing Data = Definition for [Fixed Price]	
 Case 2: Pricing Data = Definition for [Time & Materials] 	
• Case Default: Pricing Data = Definition for [Other]	
End Switch	
Add Document Property [Pricing Data]	

Table 4: Field: Proposal Pricing Type

Query to Liberate

In order to retrieve customer details from Liberate, a read-only table will be returned when the 'Liberate' button is pressed. A query will be created to return the following table. User chooses a row from Table 5. The customer name on that row is used for the second query (Table 6), where users can select up to 4 contacts to add to their document.

Full Name	Abbreviated Name	Street Address	ABN	Umbrella/ Head/ SOA Status	Umbrella/ Head/ SOA Number

Table 5: First query – customer details

Contact Name	Email Address	Phone Number
Table 6: Second query – contacts	1	1

The following pseudo code describes the process of retrieving the customer details required from Liberate.

Pseudo code:

->Get a list of customers

- Send first query to Liberate
- Display 'customer details' table to user

->'Next' button is clicked

- Retrieve row selected by user
- Enter customer details from the row onto the Information Collection Form
- Send second query to Liberate (using customer name)
- Display 'contacts' table to user

->'Finish' button is clicked

- Retrieve contacts chosen for each 'Contact' property (Executive, Primary, Secondary, Technical)
- Enter contacts onto the Information Collection Form

Additional Design Notes

• The SharePoint lists containing field values will be named as follows: ASCA *Field Name*.

Insertion of Document Properties

The xml file 'Ribbon1.xml' will be modified to include the new document properties. When the 'Insert Property' button is clicked (Figure 16), a new menu called 'Sales' will appear.



Figure 16: Insert Property menu

The following properties will be added under the new 'Sales' menu:

Property Names
GITC Classification
Proposal Pricing Type
Author 2 Name
Author 2 Title
Author 2 Email
Author 2 Phone

 Table 7: New 'Sales' document properties

There will also be new document properties in the 'Customer' menu, which are the customer details retrieved from Liberate. These can be found in Section 0.

ASCA Data Storage (Sales Definitions Repository)

The 'Information Management Business and Technical Requirements Document' provides details on the Sales Definitions repository's proposed implementation. The process of displaying the Sales Definitions repository to the user in Word 2007 via a custom task pane is described in this section.

Loading the Custom Task Pane

When the 'Insert Phrase' button is pressed (see Figure 17), the task pane will appear.



Figure 17: Insert Phrase button

The task pane will be displayed on the right hand side of the word document the user is working on. The following pseudo code describes the process of opening the Sales Definitions task pane.

Pseudo code:

- IF the Tree Structure is not populated
 - Populate Tree Structure
- ENDIF

Populating Tree Structure

The tree structure that can be seen in Figure 18 is populated from a Microsoft Access database stored on the user's computer. The database is updated using the 'Update ADCA' button, whereby a connection is made to the Sales Definitions repository on the SharePoint site. The following pseudo code describes the process of retrieving the categories and definitions from the Access database.

Content Library Data#3 Overview Insurance Methodologies Company Information Company Information Company Information Detailed Company Detailed Company ACN Location Enter Text Search Insert This is a preview of the highlighted data that is selected above		
Enter Text Search Insert This is a preview of the highlighted data that is selected above		Content Library Data#3 Overview Insurance Wendors Methodologies Legal Statement Company Information Executive Overview Detailed Company ABN Location
Insert	<	Enter Text Search
This is a preview of the highlighted data that is selected above	Г	
		Insert

Figure 18: Proposed Custom Task Pane

Pseudo code:

->Get Node with parent = x

- Read item from Node table
- DOWHILE items exist in Node table
 - \circ IF item's parent = x THEN
 - Display Node on current branch of tree
 - "Get Sales Definition with Category = Node" (see below)

- "Get Node with parent = x (Displayed Node)"
- o ENDIF
- Read next item from Node table
- ENDDO

Sub Function

- Get Sales Definition with Category = Node
 - Read item from Sales Definitions table
 - DOWHILE items exist in Sales Definitions table
 - IF item's Category = Node THEN
 - Display Sales Definition as leaf on current branch of tree
 - o ENDIF
 - o Read next item from Sales Definitions table
 - ENDDO

Display Search Results

The user can enter a keyword into the 'Search' textbox and click the 'Search' button to perform a search on the Sales Definitions table. The search results are displayed in a list similar to that shown in Figure 19. When a title is selected from the list, it is shown in the preview window. The following pseudo code describes the process of retrieving the Search Results list.

Pseudo code:

- When a user clicks the 'Search' button
- Get the keyword from the 'Search' textbox
- Perform a search on the database using the keyword
- Accept the results from the query
- Enter the results in a list

• Display the Search Results list

S	earch Results			
	Title	Category	Definition	^
	Active Directory ADAM Addresses Buisness Drivers Client Access Point Communicator DFS Client Locati DFW-SX910 DHCP Disaster Recovery Disaster Recovery Distribution Point Goals of the Nam Guiding Infrastruc Managed Operati Management Point Microsoft Office NAP - Network A	General Identity Manage SMS Reece SMS General Active Directory Camera Network Services General General SMS Active Directory Reece General SMS Microsoft Applic Network Services	a structure supported by Windows® 2 Active Directory Application Mode (A Addresses work together with senders • Infrastructure platform to allow enabl The Client Access Point (CAP) role is t A generic name for information centric Windows 2003 clients utilise the site t DFW-SX910 - The new DFW-SX910 The Dynamic Host Configuration Prot Disaster recovery is the process of re A disaster recovery plan (DRP) descri A distribution point is a site system role • Increase reliability. By moving to a st 1. IP01. Changes to technology are m A Managed Operating Environment (The Advanced Client communicates Microsoft Office is a suite of productivi Network Access Protection (NAP) is a	
			Close	

Figure 19: 'Search Results' list

Display Definition in Preview Window

A user can select a Sales Definition from the tree structure on the custom task pane or from the Search Results list. A preview of the selected Sales Definition is displayed in the Preview Window on the bottom part of the task pane. The following pseudo code describes this process.

Pseudo code:

• When a Sales Definition Node is selected from the TreeView OR a Title is selected from the Search Results list



- Retrieve the unique Sales Definition identifier from the Node
- Find the Sales Definition in the table
- Display the Definition in the Preview Window

• Activate the 'Insert' button

Insert Definition into Document

When a preview of a Sales Definition is in the Preview Window, the user is now able to insert the definition into their document. The following pseudo code describes the process of getting the text from the preview window into the document.

Pseudo code:

- Copy the text from the Preview Window
- Paste the text into the document at the cursor position

Pasting Unformatted Text

The following code performs the pasting of unformatted text. The second sentence is an example of using the 'Paste UT' button (Figure 20) to paste some text. The button will be made more prominent so that it is easily visible to users.

Globals.ThisAddIn.Application.Selection.Range.PasteAndFormat(Word.WdRe coveryType.wdFormatPlainText)

Globals.ThisAddIn.Application.Selection.Range.PasteAndFormat(Word.WdRecoveryType.wd FormatPlainText)



Figure 20: 'Paste Unformatted Text' button

Appendix D, ADCA Walkthrough

Automated Documentation Creation Application (ADCA) Walkthrough

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Purpose of the ADCA

The ADCA, or Automated Documentation Creation Application, is a piece of software that loads into Microsoft Word 2007. It appears as an additional tab on the 'Ribbon' or 'Fluent UI'. It is named the Data#3 ADCA, and it contains functionality that allows Data#3 staff members to create documents more efficiently.

This document walks you through the functionality that a typical user will encounter. For more detailed information on the ADCA, go the <u>ADCA site</u> and read the <u>ADCA Overview</u>.

Requirements

Microsoft Word 2007

Installation

- 1) Open this webpage: http://staffnet/icts/SiteDirectory/adca/ADCA/Forms/AllItems.aspx
- 2) Extract the latest ADCA package. (ADCA 2.0)
- 3) Run SaveAsPDFandXPS.exe to enabled saving as PDF.
- 4) Run setup.exe to install the ADCA.

Files

By default the ADCA is installed into C:\Program Files\ADCA with its content files into:

- Windows Vista: C:\Users\User\AppData\Roaming\ADCA\
- Windows XP: C:\Documents And Settings\User\Application Data\ADCA\

ADCA files include *Phrase.mdb* and *adca.config*.

Troubleshooting

Refer to the ADCA Overview for troubleshooting.

Walkthrough

First use of ADCA

You must have access to the Internet or the Data#3 intranet for this walkthrough.

- 1. Follow the installation steps in *Installation* (above).
- 2. Open Microsoft Word 2007.
- 3. Open the 'Data#3 ADCA' tab on the ribbon.



- 4. If the tab does not appear on your ribbon, follow these steps:
 - a. Click on Office Button.
 - b. Click on Word Options then go to Add-Ins.
 - c. Navigate to Manage then go to Disabled Add-Ins.
 - d. Enable ADCA.
- 5. Perform the first update by clicking 'Update ADCA'.



6. If you are not on the Data#3 Domain, activate the 'Use Data#3 Credentials' checkbox, and type in some credentials. You can save them for later using 'Save Details' and retrieve them with 'My Details'.

🔤 Update ADCA 📃 🗖 🔀
Use Data#3 Credentials:
Use or identials when not on Data#3 domain.
Use name:
Pa sword:
Don ain:
My Details Save Details
Use Proxy:
Use proxy when behind firewall.
Proxy Settings
Select All:
Update Templates
Update Definitions
Update Properties
Update Cancel
Last Updated: 29/02/2008

 If you are behind a firewall, activate the 'Use Proxy' checkbox, and open Proxy Settings to type in the relevant details. You can save them for later using 'Save Details' and retrieve them with 'My Details'.

🚟 Update ADCA 📃 🗖 🗙	Pasting S Formatting
Use Data#3 Credentials: Use credentials when not on Data#3 domain.	Prov Settings
Username: Password: Domain:	Username:
My Details Save Details	Proxy Details:
Use proxy when behind firewall. Proxy Settings	Address:
 ✓ Update Templates ✓ Update Definitions ✓ Update Properties 	My Details Save Details OK
Update Cancel	
Last Updated: 29/02/2008	

8. By default, all of the Update options have the checkboxes already selected. For your first update, leave them all selected. In the future, you may prefer to deactivate one or more of the checkboxes when updating.

🔤 Update ADCA 📃 🗖 🔀		
Use Data#3 Credentials:		
Use credentials when not on Data#3 domain.		
Username:		
Password:		
Domain:		
My Details Save Details		
Use Proxy:		
Use proxy when behind firewall.		
Proxy Settings		
Select All:		
Update Templates		
Vpdate Definitions		
Update Properties		
Update Cancel		
Last Updated: 29/02/2008		

9. Click 'Update' when you are ready to connect to SharePoint and receive the updates.

🔤 Update ADCA 💦 🔲 🗖 🔀
Use Data#3 Credentials:
Use credentials when not on Data#3 domain.
Username:
Password:
Domain:
My Details Save Details
Use Proxy:
Use proxy when behind firewall.
Proxy Settings
Select All:
Update Templates
Update Definitions
Update Properties
Jpdate Cancel

10. The update process will usually take up to 1 minute to complete. If there are errors during the update process, the update options will be skipped and any other selected options will be completed. At the end of the update process, a message will tell you the results.

Update Updating ADCA D	Cancel
 ✓ Update Definitions ✓ Update Properties 	Data#3 ADCA
Update Cancel	Templates: Successfully updated Definitions: Successfully updated Properties: Successfully updated OK

11. That completes this walkthrough!
Using a Data#3 ADCA Template

- 1. Open Microsoft Word 2007.
- 2. Open the 'Data#3 ADCA' tab on the ribbon.
- 3. Click on the 'New Data#3 Document' button.



4. Select a Template from the list.

🔤 Data#3 Templates 📃 🗖 🔀
Data#3 Document Templates
MOSS - Technical Design Template V1.1.dot Operations Manager 2007 Design Template v0.1.d Project Finalisation Template v1.0.dot SMS 2003 Design Template 1.1.dot SMS 2003 Infrastructure Review and SP3 Readine Technical Design Template V1.1.dot Technical Design Template V1.2.dotx
Add Remove OK Cancel

- 5. Click 'OK' to open a new document using this template.
- 6. If you want to add your own templates to this list, click 'Add', and navigate to the directory where your template is stored. If you want to remove templates that you don't use, click 'Remove' while a template is highlighted.
- 7. After you click 'OK', the new document will appear, and the 'Edit Properties' form (Information Collection Form) will be displayed.

8. Filling in document properties will be explained in the next walkthrough!

Filling in Data#3 ADCA Properties

1. The 'Edit Properties' form (Information Collection Form) will be displayed when you open a document using a template from the Data#3 ADCA Templates list, or when you click the 'Edit Properties' button on the 'Data#3 ADCA' tab.



2. The form will appear on the screen with four tabs – Document, Author, Customer, and Sales.

www.comment Properties			_ 🗆 🗙
Document Information Update the general properties of the d	ocument	Data'3	
Document Author Customer Sales			
Document Title: Insert Document Title Here	Project Name: Insert Project Name Here		
Subject: Insert Subject Here	Version: Insert Version Here		
Status:	Document Type:		
Insert Status Here 🔽	Insert Document Type Here	*	
	Vpdate Fields	Done Ca	ncel

- 3. Feel free to add your own values to all of the textboxes on each tab. For some of the properties, there are some suggested values provided in dropdown boxes.
- 4. On the Author tab, you can type your details in once, then click 'Save Details' so that when you open any new document in the future, your details can be retrieved using 'My Details'.

weight Document Properties	
Author Information Update the author properties. Click on My Details to retrieve your details and Save Details to save current details. Data'3	
Document Author Customer Sales	
Name: Author_Name	
Title: Author_Title	
E-Mail: Author_Email	
Phone:	
✓ Update Fields Car	icel

5. On the Customer tab, you can retrieve customer details from the Data#3 customer database. Currently that database is Liberate. You type in part of a customer's name, then click the 'Liberate' button to kick off a search. If you are not connected to the Data#3 intranet, this search will not yield results.

Document Properties		
Customer Information Update the customer prop	Data [•] 3	
Document Author Customer	Sales	
Customer Details		^
Company Long:	Insert Company Long Here	
Company Short:	Insert Company Short Here	
Technology:	Insert Technology Here	
Footer Title:	Insert Footer Title Here	
Vendors: <i>Choose vendors</i>	Insert Vendor Here	
Customer Details - Sales		
Customer Name: Insert Cu	stomer Name Here	Liberate
ABN: Insert AB	N Here	Type a cearch keyword
Insert Str	eet Address Here	find matches in Liberate
Street Address:		
	🔽 Update Fields	Done Cancel

anse Libe	erate Customer Det	ails									×
	Customer Name		ABN	^		Address		City	Postcode	Country	T:
F	Data#3		00 000 000 000	=		30 - 88 Jephson	N Street	TOOWONG	4066	Australia	Bu
	Mark Austin - Loan A/(CC/-Data#3	00 000 000 000								
	Data#3 - Toowong		00 000 000 000								
	Data#3 - Melbourne		00 000 000 000								
	Media Technology (A/	C Data#3)			<						>
	Akzo Nobel Coatings F	°ty Ltd (Data#3 RN	MC) 00 000 000 000					v Address v	٦		
		1 (D + #2 DW)						Addiess v			
	v Customer v		V ABN V								
Name			ABN		Address						
						I					
	Name	Phone E	Email	^	Conta	acts	Name		Phone	Email	
	John Janssen	07 3371 7444			Executiv	·e ·>					
	Nick Freeman	07 3371 7444									=
	Steven John	07 3243 6371			Primary -						
	Caroline Sowter	07 3371 7444			Seconda	ary ->					
	David Lavelle-Mangan	07 3371 7444		~	Tashnia	-1.5					۲
<				>							
Dir	ections: Highlight a row,	then click a butto	on to insert it into a te:	xtbox.				Ac	cept	Cancel	

6. From the Customer Details results you can insert a row from one of the lists into a textbox. An example is shown below.



7. When you have finished selecting customer details, click the 'Accept' button to transfer the details onto the Information Collection Form.

🚟 Document Prop					
Customer Inform a Update the custo	Data'3				
Document Author C	Customer Sales	•	_		
Customer Details - Sa	ales				
Customer Name:	Data#3 - Toowong		Liberate		
ABN:	Insert ABN Here		Type a search keyword into 'Customer Name' to		
Street Address:	80 - 88 Jephson St TOOWONG 4066 Australia	find matches in Liberate			
Contract Type:	Umbrella/Head/SOA	Contract Number:	Contract Number		
Contact	Name	Phone	Email	≣	
Executive:	Data#3 Toowong	07 3371 8088	Insert Email Here		
Primary:	Patrick Murphy	07 3371 8088	Insert Email Here		
Secondary:	Terry Powell	07 3371 8088	Insert Email Here		
Technical:	Kim Partridge	07 3371 8088	Insert Email Here		
✓ Update Fields Done Cancel					

8. The Sales tab is used mostly for Sales Proposals, where the GITC details and Pricing details can be set accordingly. A second set of author's details can also be added to this tab.

🔤 Document Properties		
Sales Information Update the sales properties of the docu	ıment	Data*3
Document Author Customer Sales		
GITC Classification	Proposal Pric	ing Type
State-based	۲	Fixed Price
National	0	Time and Materials
O 0ther	C	Other
GITC Location Choose a location Queensland New South Wales Australian Capital Territory Victoria Tasmania South Australia Northern Territory Western Australia	Second Auth Name: Title: Email: Phone:	nor (Optional) Author_Name Author_Title Author_Email Author_Phone
	✓	Update Fields Done Cancel

- If you are happy with the Data#3 ADCA Property values that you have chosen, click 'Done' to save them, and make sure the 'Update Fields' checkbox is activated if you want those values immediately reflected in the document.
- 10. That completes this walkthrough!

Inserting Data#3 ADCA Properties into your Document

- 1. Follow the 'Filling in Data#3 ADCA Properties' walkthrough.
- 2. If your document is an official Data#3 ADCA Template, then some of the properties will already have been inserted into the document, and their values will be reflected after a field update.
- 3. For any document, you can insert Data#3 ADCA Properties at any cursor location using the 'Insert Property' menu.



4. Each sub-menu correlates with a tab on the Information Collection Form. The properties on that tab are available within the sub menu. An example is shown below.



5. To try an example, insert a property of your choice into the document. A warning will be displayed if that document property has not yet been initialized. Open the Information Collection Form and type in a value for the property that you inserted, then click 'Done', making sure that the 'Update Fields' checkbox is activated.



Error! Unknown document property name.

Document Properties	
Document Information Update the general properties of the o	document Data'3
Document Author Customer Sales	
Document Title: Insert Document Title Here	Project Name: Insert Project Name Here
Subject: Insert Subject Here	Version: Insert Version Here
Status Insert Status Here Draft Release	Document Type: Insert Document Type Here
	Update Fields Cancel

Draft

- 6. As you can see above, the Data#3 ADCA Property called 'Document Status' was edited, and by using the Information Collection Form the change was reflected immediately.
- 7. If the 'Update Fields' checkbox on the Information Collection Form wasn't activated, the field can still be updated using the 'Update All Fields' button.



8. That completes this walkthrough!

Inserting content from the Data#3 ADCA Definitions hierarchy

1. Open the task pane which displays the Definitions hierarchy by clicking the 'Insert Definition' button.



- 2. The task pane will appear to the right of your document.
- 3. At the very top of the task pane there is a link to a SharePoint image library. This contains commonly used Data#3 files that do not exist in Word documents. Below the link is the Definitions hierarchy. You can begin navigating through the hierarchy by clicking on one of the 'root nodes'.

Insert Definition 🔹 🔻 🗙
Imate Library
Air Definitions
🖳 🗣 Technical Definitions
Search
Dearch
Insert
<u>⊻</u>

4. If a plus sign appears next to the 'root node', then you can navigate down through the 'node tree'. A node can either be a Category or a Definition. You can insert a Definition into your document using the 'Insert' button.

Insert Definition	•	×
Image Library		
 ■		

5. Click on a Definition to show a preview of it in the bottom half of the task pane.

Insert Definition 🛛 🔹 🔻
Image Library
All Definitions About Data#3 Welcome to Data#3 Our People Industry Awards Comparison All Sales Definitions Technical Definitions
Search
Insert
You are in an exciting and challenging industry and have joined a progressive and innovative company. As one of the Data#3 team, you have many opportunities ahead. Opportunities that you can capitalise on by understanding the way we do business, the emphasis we place on quality customer solutions and by applying yourself diligently to the
task at hand. StaffNET is updated regularly and is available for all employees to read.

6. When you click the 'Insert' button, the contents of the preview window will be placed into your document at the cursor location.

You are in an exciting and challenging industry and have joined a progressive and innovative company.

As one of the Data#3 team, you have many opportunities ahead. Opportunities that you can capitalise on by understanding the way we do business, the emphasis we place on quality customer solutions and by applying yourself diligently to the task at hand.

StaffNET is updated regularly and is available for all employees to read.

- 7. The text above has been inserted using the task pane.
- 8. Instead of navigating through the Definitions hierarchy, you can choose to search for a Definition by typing a keyword and clicking the 'Search' button.
- 9. The results of the search will be listed in another window.



- 10. Click on a Definition in the search results window to see a preview of it, then click the 'Insert' button to have it inserted into your document.
- 11. That completes this walkthrough!

Appendix E, ADCA Post Implementation Surveys

Automated Documentation Creation Application – Version 2 (ADCAv2)

1. How often do you use the ADCA? (on average)

3 or more times	1 or 2 times a	3 or 4 days a	1 or 2 days a	Less than 1 day
a day	day	week	week	a week

2. Which component of the ADCA has been the most useful?

Shortcuts to existing MSAbility and customWord functionscustom	to search ' insert Defini her details	Insert itions' task pane	'Edit Properties' and 'Insert Properties'	Other (describe it below)
---	---	--------------------------------	---	---------------------------

3. How does the new functionality affect your work? Provide an answer for each component.

• Shortcuts to existing MS Word functions

The ability to quickly and easily insert text, tables, figures etc with the correct corporate colours and formatting is time saving and improves the quality, and consistency of the documents I produce.

• Ability to search and insert customer details

If this is the Liberate lookup piece – then N/A to me I'm afraid.

• 'Insert Definitions' task pane

"Chunks" of well written, technically accurate content can be easily shared for re-use by others. This saves a lot of time creating documents, and ensures that certain technical content is presented accurately.

• 'Edit Properties' and 'Insert Properties'

This helps particularly when re-using documents for other engagements.

• Other

Publishing updated document templates and content to a mobile workforce via a central, authoritative source is convenient, and incredibly valuable from a quality and consistency standpoint.

Additional notes

4. Please provide your name and job title below.

Automated Documentation Creation Application – Version 2 (ADCAv2)

5. How often do you use the ADCA? (on average)

3 or more times	1 or 2 times a	3 or 4 days a	1 or 2 days a	Less than 1 day
a day	<mark>day</mark>	week	week	a week

6. Which component of the ADCA has been the most useful?

Shortcuts to	Ability to search	'Insert	'Edit Properties'	Other (describe it below)
existing MS	and insert	Definitions' task	and 'Insert	
Word functions	customer details	pane	Properties'	

- 7. How does the new functionality affect your work? Provide an answer for each component.
 - Shortcuts to existing MS Word functions

I use it all the time

• Ability to search and insert customer details

Not at all, I'm mostly on site were the function in un available

• 'Insert Definitions' task pane

Use it very rarely

• 'Edit Properties' and 'Insert Properties'
• Ear rioperties and insert rioperties
Very helpful
• Other
Additional notes
8. Please provide your name and job title below.

Automated Documentation Creation Application – Version 2 (ADCAv2)

9. How often do you use the ADCA? (on average)

3 or more times	1 or 2 times a	3 or 4 days a	1 or 2 days a	Less than 1 day
a day	day	week	week	a week

10. Which component of the ADCA has been the most useful?

Shortcuts to	Ability to search	'Insert	'Edit Properties'	Other (describe
existing MS	and insert	Definitions' task	and 'Insert	it halow)
Word functions	customer details	pane	Properties '	it below)

The finalise the document functionality

11. How does the new functionality affect your work? Provide an answer for each component.

• Shortcuts to existing MS Word functions

Saves time as the commonly used MS Word functions that I use are on the one page

• Ability to search and insert customer details

I haven't used this feature

• 'Insert Definitions' task pane

Limited use at the moment. This will increase as we get more Definitions defined as it will save time and help with consistency between documents.

• 'Edit Properties' and 'Insert Properties'

Saves time as it is a quicker way to update and insert properties

• Other

The finalise button saves me a lot of time in removing comments turning off track changes, updating all fields correctly and verifying the # in Data[#]3 is superscripted.

• Additional notes

12. Please provide your name and job title below.

Automated Documentation Creation Application – Version 2 (ADCAv2)

13. How often do you use the ADCA? (on average)

3 or more times	1 or 2 times a	3 or 4 days a	1 or 2 days a	Less than 1 day
<mark>a day</mark>	day	week	week	a week

14. Which component of the ADCA has been the most useful?

Shortcuts to	Ability to search	'Insert	'Edit Properties'	Other (describe
existing MS	and insert	Definitions' task	and 'Insert	
Word functions	customer details	pane	Properties'	it below)

15. How does the new functionality affect your work? Provide an answer for each component.

• Shortcuts to existing MS Word functions

Having shortcuts to all the key Word functions on a single ribbon tab simplifies document creation.

Removing the requirement to switch tabs on the ribbon obviously streamlines working with documents.

• Ability to search and insert customer details

The ability to search and insert customer details assists us when we reuse content from existing

documents. Using customer details through a document means that we can simply modify the

Customer properties, then update all fields will replace the customer name where appropriate.

• 'Insert Definitions' task pane

There is a large benefit to using this, however we have not setup enough definitions in sharepoint to

make this usable.

• 'Edit Properties' and 'Insert Properties'

As previously mentioned, this adds the most value when reusing content.

• Other

The ability to choose a heading from a single drop down menu ensures that we are always using the

correct text format throughout the document.

• Additional notes

16. Please provide your name and job title below.