

Developing an environment to facilitate Enterprise Risk Management & Sarbanes Oxley Compliance



Acknowledgement

We would like to acknowledge our gratitude for the opportunity of working with Chris Woodfin, Vice President & Chief Risk Officer - BCBSNC and his excellent organization.

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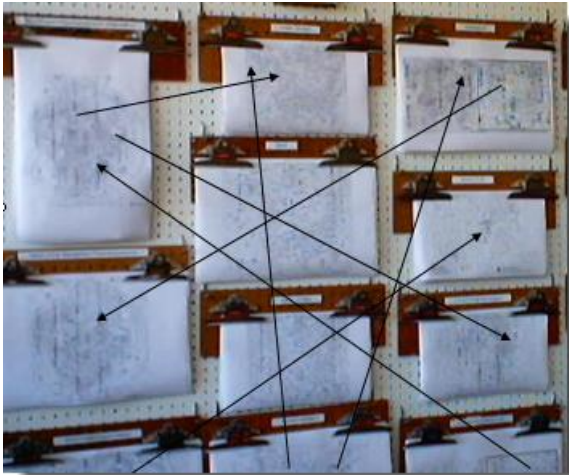
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Enterprise Risk Management - Sarbanes Oxley Compliance

Problem

To meet the Sarbanes Oxley legislation, BCBSNC required a solution that could house and manage information from all relevant stakeholders along with the ability to report on that information. Additionally, BCBSNC desired a solution that could also illustrate business processes and the corresponding risks and controls.

Before



After



Background

In anticipation of Blue Cross Blue Shield of North Carolina (BCBSNC) converting from a non-profit entity to a publicly traded for-profit organization, the Sarbanes Oxley Assistance Project was started in February of 2003 with two major objectives:

- To document the company's internal control structure

- To develop a monitoring process to test the operating effectiveness of the controls documented

The Sarbanes Oxley legislation applies to public companies beginning December 2004. The legislation requires documentation of an entity's internal control structure and attestation by management and external auditor that the necessary controls over financial reporting are in place and operating effectively.

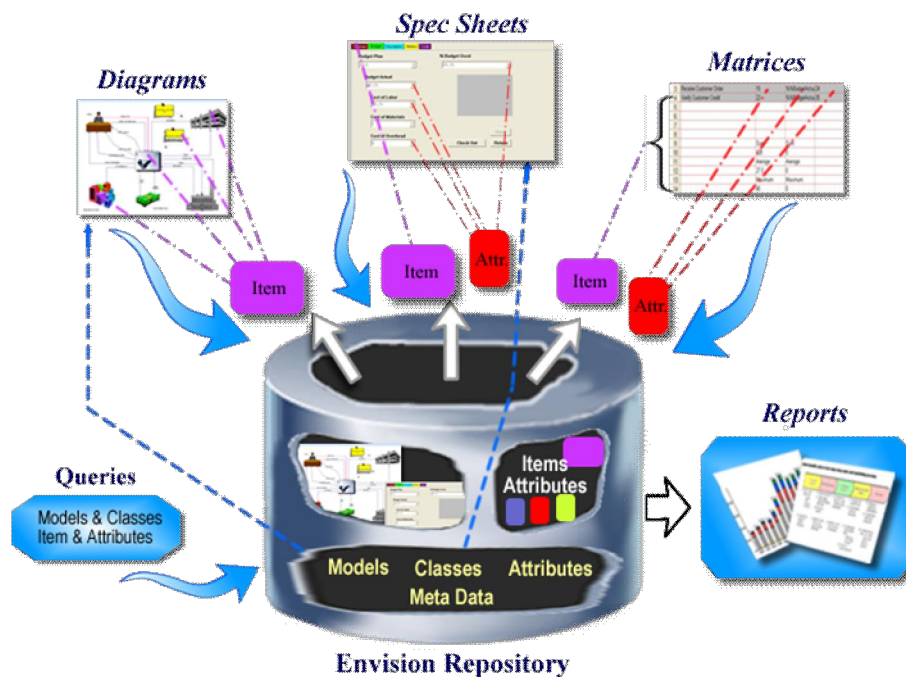
Although the BCBSNC conversion request has been withdrawn, the Sarbanes Oxley Assistance Project was continued at the request of senior management. Senior management recognized the value of internal controls as well as the possibility that the regulations may (in the future) be extended to not-for-profit companies. The project has also provided momentum for creating a formal Enterprise Risk Management (ERM) function at BCBSNC.

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Solution

ENVISION® VIP was chosen and purchased to address the need for a shared multi-user repository to manage the ERM data. Additionally, BCBSNC required the ability to report on the data. ENVISION® VIP was used on several pilot projects and found to meet the requirements. The powerful and adaptable repository can be used to organize, analyze, and manage any number of business models and data. Smart import capabilities allow existing data to be easily added to the repository via such techniques as Copy/Paste, Drag & Drop, XML import/export capabilities, and other smart import filters e.g. for easily importing Visio diagrams, Excel/Word/Access data tables, and other data.



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Over the course of several months, ENVISION® VIP was used to identify the various stakeholder organizations & interests and design a comprehensive solution for the ERM group as it works to comply with the Sarbanes Oxley legislation for documentation of internal controls and attestation. Resources from both BCBSNC and Future-Tech Systems worked in tandem to create a solution that satisfied the needs and requirements of BCBSNC.

The solution includes the ability to graphically illustrate the business processes, the associated risks & controls, and allows a user to extract & project any data housed and managed within the solution into usable reports. The reports can be delivered in multiple formats including Word documents, spreadsheets, and web pages.

Simulated examples of some of the solution reports generated in ENVISION® VIP follow :
[Note some data has been altered to avoid disclosing possibly proprietary information.]

Risk and Control Matrices

The Risk & Control Matrices are designed to identify risks throughout the process and the controls in place to mitigate the identified risks. The document is organized by Risk/Control ID. Each Risk/Control ID item corresponds to the same Risk/Control ID item on the process flows illustrated in ENVISION® VIP. Two sample matrix documents are included below:

Risk ID	Risk Name	Ranking Before Control	Ranking After Control	Date Updated	Description
047-R-03	Working Capital Acct w inadequate funds	7R	1G	Tuesday, March 14, 2006	The working capital account may not be adequately funded resulting in overdraft of available funds.
047-R-02	Claim expense not apporprty recorded	8R	1G	Wednesday, May 03, 2006	Claims expense may not be appropriately recorded each month based upon the approved amount provided by the Director's Office.
046-R-08	Unpd claims liability not correct in GL	9R	1G	Tuesday, March 14, 2006	The unpaid claims liability may not be appropriately reflected in the general ledger upon the estimate provided by CARA.
046-R-06	SVC not properly accrued	2Y	1G	Monday, April 10, 2006	The service charge amount may not be appropriately accrued each month based upon the estimated amount provided by the Director's Office.
046-R-05	Admin Exp Recovry not properly accrued	8R	1G	Wednesday, May 10, 2006	Admin expense recovery may not be appropriately accrued each month based upon the approved amount provided by the Director's Office.

Figure 1.1 Risk Matrix Document

Control ID	Control Name	Control Description	Key Control?	Update in Progress?	In Need of Update?	Monitored Date	Target Date
047.05.02	Maintain Daily Drawdown log	The treasury department completes a drawdown log on a daily basis.	Y	N	N	Monday, April 10, 2006	Sunday, December 31, 2006
047.04.05	Reconcile Acord Amt & Actual Clm Expens	Finance personnel perform a monthly reconciliation of the accrued amount and the actual amount of claims expense incurred. Reconcilements are formally signed off by the Finance reconciler and reviewed by a Finance manager.	Y	Y	Y	Wednesday, April 12, 2006	Sunday, December 31, 2006
047.04.06	Review monthly AR reconciliation	The receivable account reconciliation is reviewed by the Accounts manager on a monthly basis.	N	Y	N	Friday, March 10, 2006	Sunday, December 31, 2006
047.04.03	Prepare & Review AR JE	The accounts receivable JE is prepared by the Finance Analyst each month and reviewed and approved by the Finance Manager.	Y	N	N	Thursday, April 20, 2006	Sunday, December 31, 2006
047.05.04	Maintain Working Capital Acct Quarterly	The Financial Analyst maintains the quarterly Working Capital Account.	N	Y	N	Friday, March 10, 2006	Sunday, December 31, 2006

Figure 1.2 Control Matrix Document

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Gap Analysis Document

The Gap Analysis document is designed to further describe gaps identified in various Risk & Control Matrices and to provide tactical remediation plans to address the identified gaps. Gaps were identified in the Risk & Control Matrix when the control relationship was assessed as anything less than strong. An example table from the Gap Analysis document is shown below:

ID	Control Activity	Deficiencies (Gaps)	Status	Control Remediation Plan	Target Date (Rev.)
047.05.02	Maintain Daily Drawdown log	Deficiencies for maintain daily DD log	In-process	Control remediation plan for Maintaining daily draw-down log	Sunday, December 31, 2006
047.04.05	Reconcile Accrd Amt & Actual Clm Expens	Deficiencies for reconciling accrued amount and actual claim expense.	In-process	Control remediation plan for reconciling accrued amounts and actual claim expense.	Sunday, December 31, 2006
047.04.06	Review monthly AR reconciliation	Deficiencies for reviewing monthly AR reconciliation.	Pending	Control remediation plan for reviewing monthly AR reconciliation.	Sunday, December 31, 2006
047.04.03	Prepare & Review AR JE	Deficiencies for preparing and reviewing AR JE.	Pending	Control remediation plan for preparing and reviewing AR JE.	Sunday, December 31, 2006
047.05.04	Maintain Working Capital Acct Quarterly	Deficiencies for maintaining quarterly capital account.	In-process	Control remediation plan for maintaining quarterly capital account.	Sunday, December 31, 2006
047.05.03	Monitor Working Capital Acct Daily	Deficiencies for monitoring working capital acct	In-process	Control Remediation Plan to monitor working capital	Sunday, April 30, 2006
047.04.04	Reconcile O/S Claims to AR Amt	Deficiencies for reconciling O/S claims to AR amount.	Pending	Control remediation plan for reconciling O/S claims to AR amount.	Sunday, December 31, 2006
046-02.03	Record Unpaid Claims Liability	Deficiencies for recording unpaid claims liability.	Completed	Control remediation plan for recording unpaid claims liability.	Tuesday, April 11, 2006
046.02.07	Create Mnthly Recon of Accrd v Actual	Deficiencies for creating monthly reconciliations of accruals versus actuals .	Completed	Control remediation plan for creating monthly reconciliations of accruals versus actuals .	Monday, April 10, 2006
046-01.07	Create Quartly Reimbrsmt Remit Rpt	Deficiencies for creating quarterly reimbursement remittance reports.	Completed	Control remediation plan for creating quarterly reimbursement remittance reports.	Friday, March 10, 2006

Figure 2.1 Gap Analysis Document

Some of the reports come in the form of spreadsheets:

Pre and Post-Controls Risk Scoring Tables

The Risk Scoring Tables are designed to standardize the scoring of process risks across the organization. Values are assessed based on pre and post-Controls. They are measured by Financial Impact and Likelihood Before Controls with values ranging from Low (L), Medium (M), to High (H). The values then determine the placement of the Risk within the graphical matrix illustration, also maintained within ENVISION® VIP. An example of the Risk Scoring Table is as follows:

	Risk Name	Financial Impact BC	Likelihood BC	Before Control	Description
4	Admin Exp Recvry & SVC inadeq for cost	M	M	5Y	The service charge amount may not be appropriately accrued each month based upon the estimated amount provided by the Director's Office. Admin expense recovery amounts and allocated service charge amounts may be inadequate to cover the costs of administering and complying with the program.
5	Admin Exp Recvry budgt not covering cost	H	H	8R	Administrative expense recovery budget submitted to the may not adequately cover the actual costs associated with administering the program.
6	Admin Exp Recvry not accurately costed	H	H	8R	Administrative expense recovery may not be costed accurately according to regulations.
7	Admin Exp Recvry not properly accrued	H	H	8R	Admin expense recovery may not be appropriately accrued each month based upon the approved amount provided by the Director's Office.
8	Calculation may be incorrect	H	H	7R	Calculation of the Group Delinquency Ratio may be incorrect.
9	Can Process CM-Cannot process Claim Adj	M	M	4Y	#14. A Credit memo may be processed, but claim adjustment in claim system may not.
10	Claim expense not approptrly recorded	H	M	8R	Claims expense may not be appropriately recorded each month based upon the approved amount provided by the Director's Office.
11	Claims & other Exp not correct in GL	H	H	9R	Claims and other allocable expenses associated with BCBSNC may not be appropriately reflected in the general ledger based upon amount provided by the Director's Office and the cash registers.
12	Drawdown Amt Inaccurately Adjusted	H	H	9R	The draw down amount may not be accurately adjusted for cleared refunds and adjustments.

Figure 3.1 Pre-Control Risk Scoring Table

	Risk Name	Financial Impact AC	Likelihood AC	After Control	Description
4	Admin Exp Recvry & SVC inadeq for cost	L	L	1G	The service charge amount may not be appropriately accrued each month based upon the estimated amount provided by the Director's Office. Admin expense recovery amounts and allocated service charge amounts may be inadequate to cover the costs of administering and complying with the program.
5	Admin Exp Recvry budgt not covering cost	L	L	1G	Administrative expense recovery budget submitted to the may not adequately cover the actual costs associated with administering the program.
6	Admin Exp Recvry not accurately costed	L	L	1G	Administrative expense recovery may not be costed accurately according to regulations.
7	Admin Exp Recvry not properly accrued	L	L	1G	Admin expense recovery may not be appropriately accrued each month based upon the approved amount provided by the Director's Office.
8	Calculation may be incorrect	L	L	1G	Calculation of the Group Delinquency Ratio may be incorrect.
9	Can Process CM-Cannot process Claim Adj	L	L	1G	#14. A Credit memo may be processed, but claim adjustment in claim system may not.
10	Claim expense not approptrly recorded	L	L	1G	Claims expense may not be appropriately recorded each month based upon the approved amount provided by the Director's Office.
11	Claims & other Exp not correct in GL	M	M	6Y	Claims and other allocable expenses associated with BCBSNC may not be appropriately reflected in the general ledger based upon amount provided by the Director's Office and the cash registers.
12	Drawdown Amt Inaccurately Adjusted	L	L	1G	The draw down amount may not be accurately adjusted for cleared refunds and adjustments.

Figure 3.2 Post-Control Risk Scoring Table

Process Flows

In addition to the reports, Process Flows are created and graphically represented within the ENVISION[®] repository. These process flows represent the business process by business area within BCBSNC. Additionally, the Risks and Controls identified in the report documentation can also be graphically represented and associated with an appropriate business process. An example of a process flow and its associated Risks and/or Controls appears below:

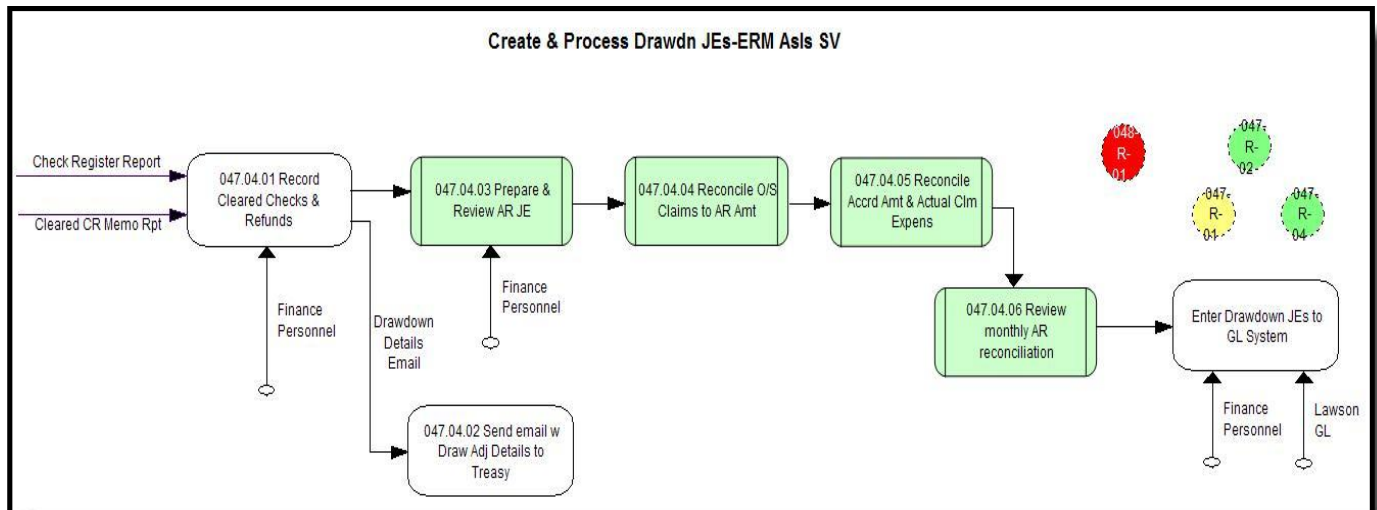
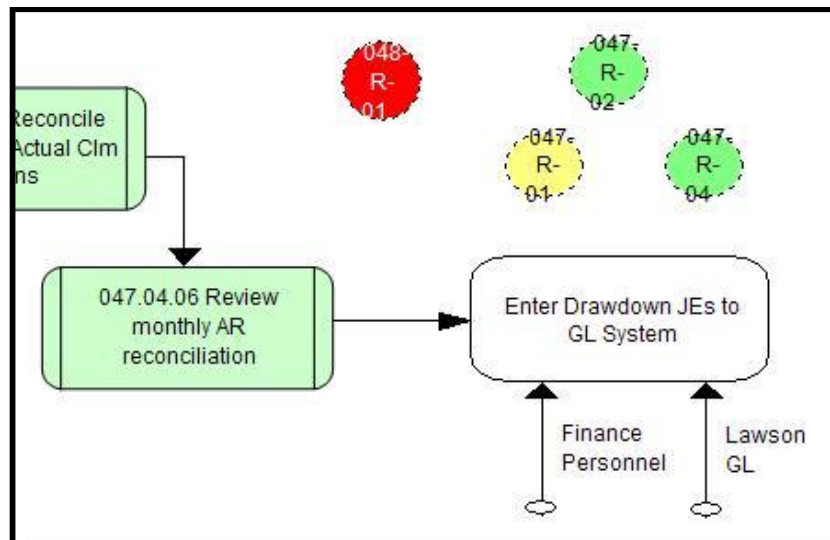


Figure 4.1 Example of a process flow and its associated Risks and/or Controls

Within this process flow, the associated risks are illustrated by the yellow and green circles. The colors of the risks are directly related to the level the risks have been identified. For example, yellow is representative of a medium-level risk and green is associated with a low-level risk.



Additionally, the process flow is further defined to highlight which of the processes within the flow are identified as a Control process. These are differentiated by their color. The processes that are colored green have been identified as Control processes.

Traceability/Decomposition

One of the primary benefits of using ENVISION® VIP is the ability to decompose BCBSNC's Core Business Processes down to their desktop procedures. The tool provides the ability to not only graphically represent the decomposition of business processes to an unlimited number of levels, but to also illustrate the Risks and Controls that are identified and associated with them.

To illustrate this, below is an example of the decomposition of the Enterprise Core Business Process, *Enroll and Bill Customers*, down to the desktop procedure, *Setting up a Bank Draft*.

Clicking on the object illustrating *Enroll and Bill Customers* takes you to another process diagram that is a first-level decomposition of that Core Business Process.....

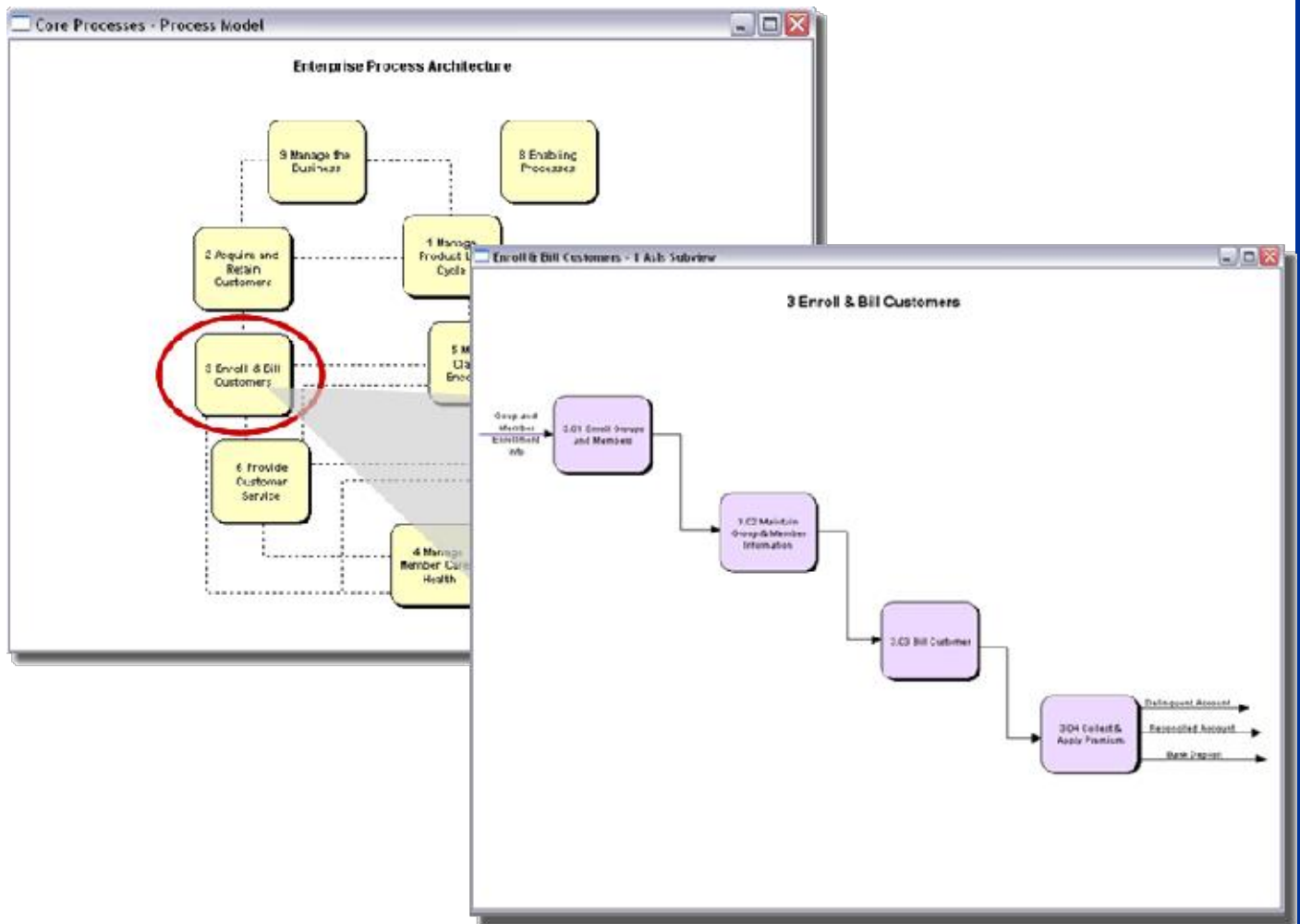
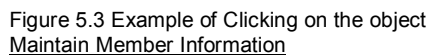
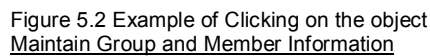


Figure 5.1 Example of Clicking on the object Enroll and Bill Customers

....clicking on *Maintain Group and Member Information* takes you to another level of decomposition.....



Traceability/Decomposition Cont..

....clicking on the object that represents Bank Drafts on a process diagram, ICA, takes you to yet another level of decomposition....

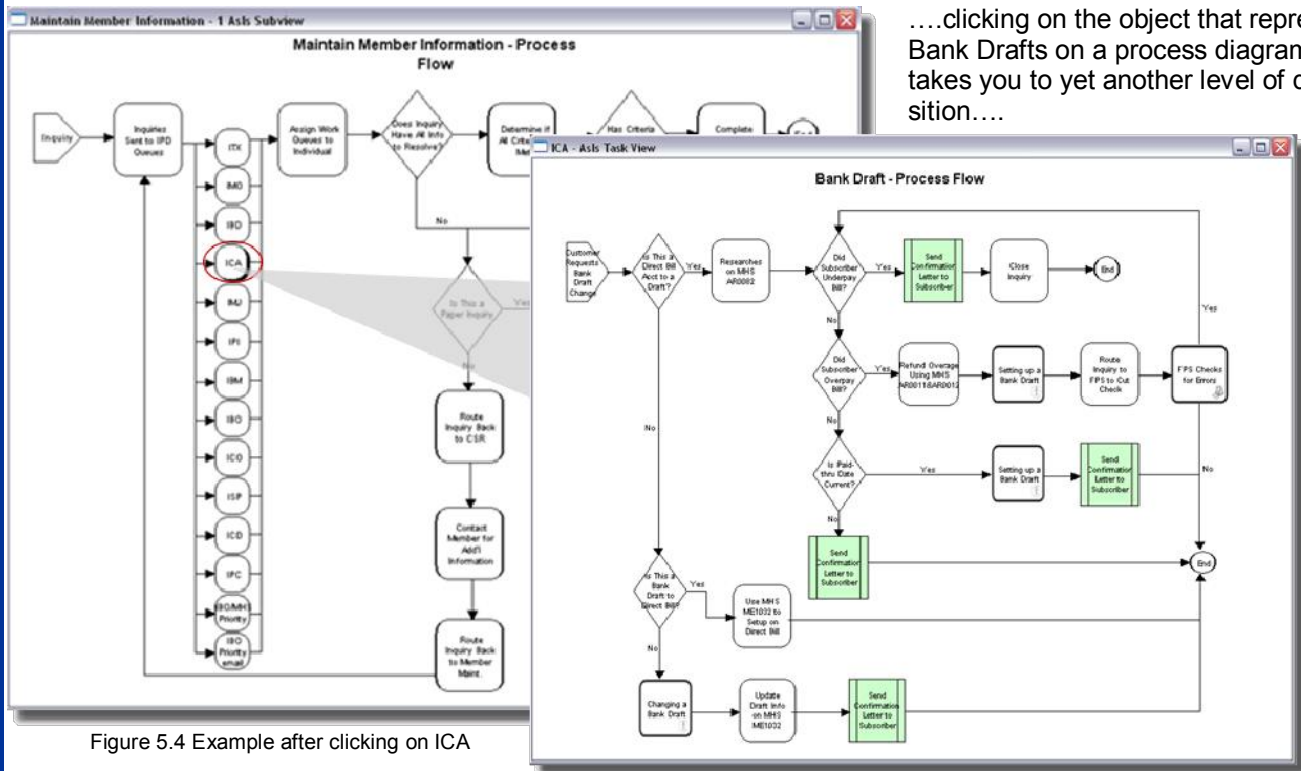


Figure 5.4 Example after clicking on ICA

....finally, on this process diagram for Bank Drafts, there is an object representing *Setting up a Bank Draft*. Clicking on this object takes you to a graphical illustration of the desktop procedure for *Setting up a Bank Draft*.

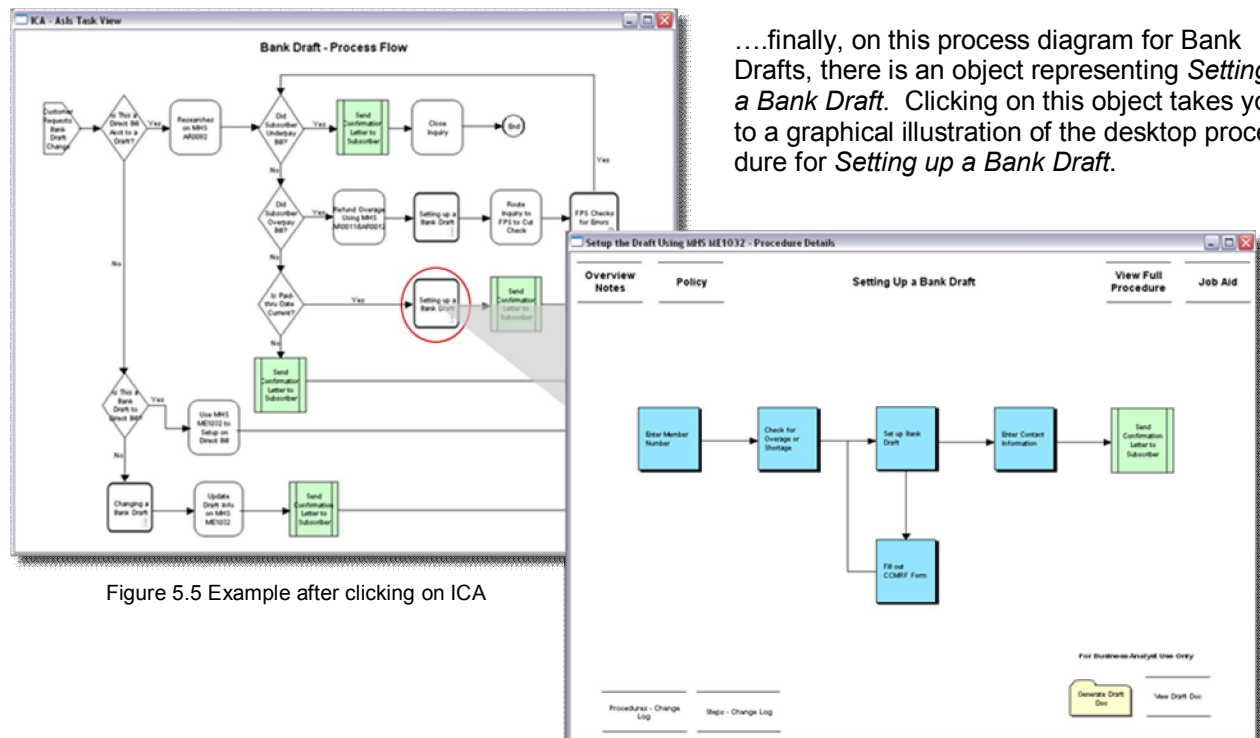
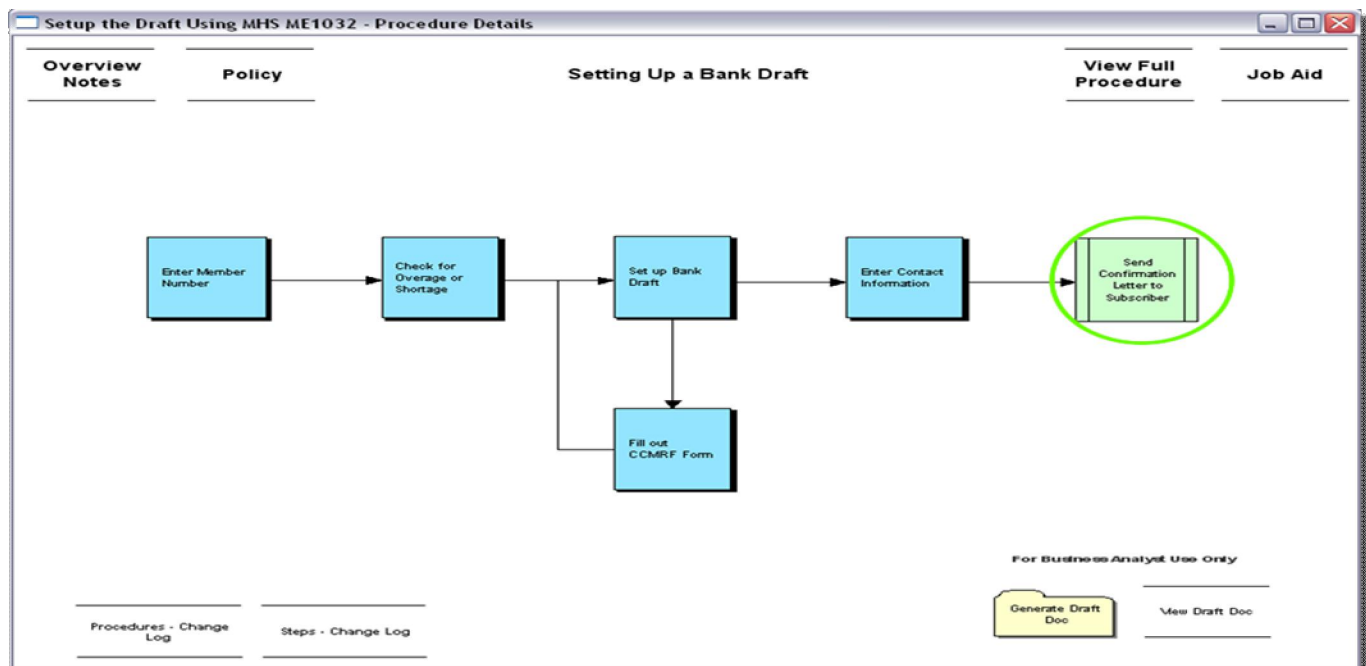
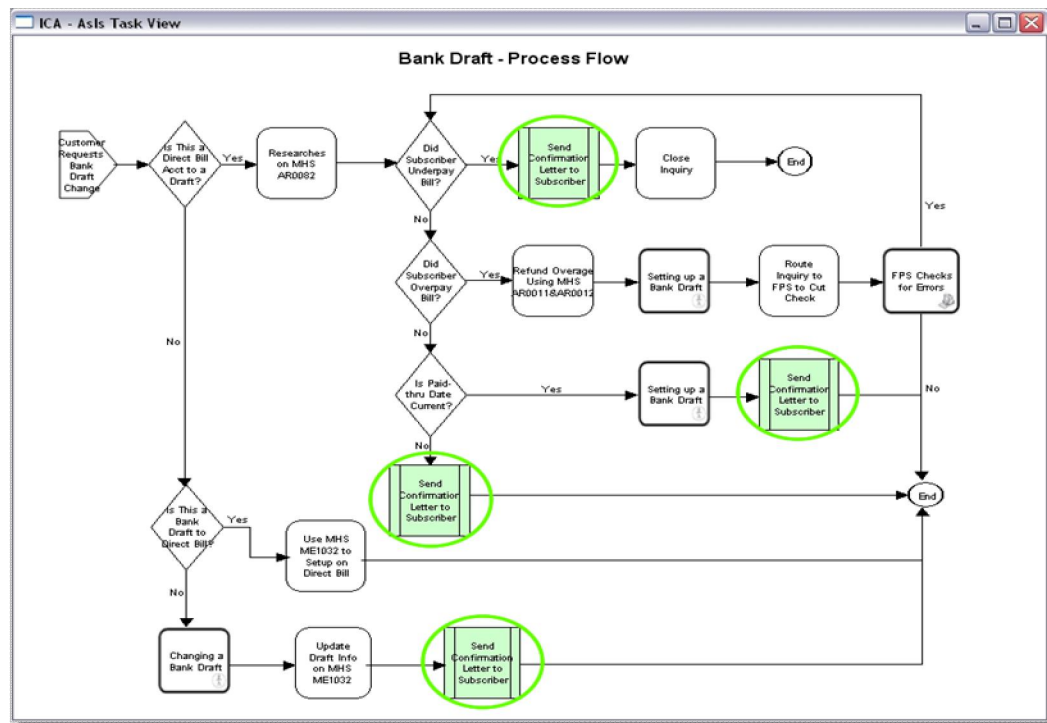


Figure 5.5 Example after clicking on ICA

Traceability/Decomposition Cont..

Additionally, Risk Management Controls can be included in the process diagrams where appropriate. In the example above, the control (*Send Confirmation Letter to Subscriber*) is evident in both the process diagram for Bank Drafts and the desktop procedure *Setting up a Bank Draft*.



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Common Procedure Reference Library

Desktop procedures can now be managed and controlled in a common repository to ensure ALL help desk analysts are providing current & consistent information. The example shows an actual sample for *Setting up a Bank Draft*.

Generate Draft
Doc

View Draft Doc

Figure 5.8 Generated Report After Clicking View Draft Doc

Procedure Steps

Step	Action
1	Enter Member Number Go to ME1014 (Enrollment Entry Screen) <ul style="list-style-type: none">• Enter "R" (review) in the action code box• Enter the Member Number• Depress <Enter> Copy the Account Number
2	Check for Overage or Shortage Go to AR0082 to check for an overage or shortage. Also, check to see how old the outstanding invoice is. Bank draft cannot be set up if the oldest invoice is 36 days past due . <ul style="list-style-type: none">• Enter "R" (Review) in the action code box• Type in the account Number• Depress <enter>• Click the Change Mode until the Display Mode says "Summary"• Check to see if sub has an invoice that is 36 days past due. Please note that you have the check the due date, not how old the bill is. If invoice is 36 days past due, please use the above letter to notify the sub.• Check for an overage or shortage. If sub has a or shortage due to sending in the wrong fees, bank draft cannot be set up and you will need to notify sub via letter. 2005 Draft Buck Ltr New.doc If the sub has an overage, please follow the process for manually refunding and continue with this process. Manual Refunds.doc
3	Fill out CCMRF Form For invalid bank #, a CCMRF will have to be filled out and emailed to get the bank added to the MHS system. Once this is complete, please continue on with the steps.

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“Envision Your Enterprise!”



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