Custom Report Development Methodology

Requirements Scoping and Project Planning Process
Symmetrics’ Custom Report Development Methodology
A process to ensure maximum insight is gained from your data.

All custom report development projects must be carefully and thoroughly planned to provide the greatest opportunity for success. This document illustrates a high-level look at the process Symmetrics uses to define requirements for custom report development projects. The fundamentals of this process are based on widely used software development industry practices. The objective of this document is to introduce and include our customers to our project plan and methodology. This will allow you to know what’s next, to prepare for the following steps, and ultimately provide the foundation for a successful and efficient project lifecycle.

There are four steps to the Symmetrics custom report development process:

1. **Discover** goals and needs
2. **Plan** specifications and report details
3. **Develop** the required reports
4. **Deploy** the reports to the appropriate consumers
5. **Evolve** the solution to meet growing needs
Discovering Goals and Needs:
What are you trying to achieve?

The discovery phase begins when you initially make contact with Symmetrics. We want to get to know you, your business objectives and your successes and challenges. Leveraging our past business intelligence successes, we aspire to identify potential solutions that relate to you. In general, we will want to know the following high level information:

- What systems do you have in place?
- Do you manually combine data from multiple systems that “don’t talk to each other”?
- What data sources do you need more robust data reporting from?
- Do you have multiple sites where data is stored independently and you would like to aggregate or consolidate it?
- How many people work in your center or centers?
- How many people need to view reports? Who are they? Where are they?
- How would you like your people to view the reports?
- How often is reporting required in your center?

Symmetrics understands requirements identification and gathering can sometimes be too much work for an already overworked staff. To assist in this task, we have assembled a questionnaire to capture all pertinent information for each custom report during the discovery phase (see the Discovery Phase Questionnaire at the end of if this document). Symmetrics will help you identify, gather and specify your requirements by reverse engineering your desired output and asking the right questions. A sample mock-up of the report output provides an accurate communication tool to ensure we deliver to your needs. You can create your mock-up in an Excel spreadsheet, Word document or simply handwrite your changes to an existing report and fax them to us. For a sample mock-up, refer to the Agent by Skillset Mock-up screenshot (a Microsoft Excel spreadsheet), also included at the end of this document.

The discovery phase concludes when Symmetrics delivers a solution proposal to you.
Planning the Details:
How will the needs be met?

The planning phase begins when the proposal is approved and the project is approved to proceed. The objective of the planning phase is to obtain all remaining details in order to begin the report development. This may require answers to additional and more detailed questions regarding your data, business processes, desired report formatting and any other needs unique to you. We will also request access to your data, either directly through a VPN connection or by using a backup file of your database. We have a standard non-disclosure agreement we can provide in order to release access to your data. Symmetrics will coordinate internal resources and schedule targets and estimates will be provided. When all information is obtained, the development phase will begin.

Developing the Reports:
Build the deliverables based on defined specifications.

To limit project costs, most – if not all – of the development is developed off site. Symmetrics houses numerous lab systems and data sources that make this possible. If a data mart or other data consolidation initiative is to be delivered in your project, it will be developed first. Your reports will be created and tested using your data to eliminate schedule overruns in the next step. Occasionally, the developer or consultant may ask a few questions during this phase, otherwise this is a quiet step in the project lifecycle.
Deploying the Reports:

Ensure the information is available to those who need it.

The development phase ends and deployment begins when Symmetrics delivers your solution to you. Sometimes the project deliverables are implemented directly for you in your environment. Alternately, we can email the reports so you can use and implement them if you have the internal resources. Once you have your new reports running in your environment, you may have follow-up questions or fine tuning requests. This is understood and accounted for in both the project plan and proposal.

The deployment phase and the project officially ends when you fax us the Symmetrics project sign off sheet. The sign off sheet will indicate only the actual hours spent on your project. Symmetrics will submit an invoice after the project is signed off and mutually agreed to be concluded.

Evolve the Solution:

Look for new opportunities to better leverage your information.

Symmetrics aims to improve processes, services and products and to always remain intimate with our customers. As business intelligence advocates, we want you to succeed. As you become more data rich, you will find more uses and opportunities with your new reporting tools. Symmetrics will follow up with you periodically after your project to see how you are doing and to inquire about the business impact our project together made. We are equally content whether we enable you to be self sufficient, or we discover additional solutions to provide, just as long as you are meeting your business intelligence requirements. Your success is our success.

Other solution areas that can be looked at and analyzed to establish a business case for you include:

- **Reporting Data Marts** (data aggregation/archiving)
- **Digital Dashboards** (key metrics summaries/displays)
- **Web Reporting solutions** (information access, management, interaction)
### Discovery Phase Questionnaire:
A tool to help gather and organize your reporting requirements

1. **REPORT PURPOSE**
   1.1. What is the overall purpose of the report? Define a clear vision or objective for the report as a whole.

2. **POTENTIAL READERS**
   2.1. Who is going to read the report?
   2.2. What are all the possible views of the report (i.e. detail, summary, TopN)?
   2.3. What formats will users want to see the report in (i.e. Excel, Word, PDF, HTML)?

3. **TITLE**
   3.1. What is the report title going to be?

4. **DECIDING ON THE REPORT CONTENT**
   4.1. Where are all of the potential datasources? Write down the exact database servers and database names where your data resides.
   4.2. What information do you want to put in your Report Header?
   4.4. What information do you want to put in your Report Footer?
   4.6. What information do you want to put in your Report Body(Detail Data)?
   4.8. What information do you want to put in your Report Footer?
   4.10. What information do you want to put in your Report Body(Detail Data)?

5. **DETERMINE CALCULATED REPORT CONTENT**
   5.1. Describe all data that must be calculated. This may include sub-strings, numeric calculations, conditional flags or calculations etc. List as many as you can.
   5.2. Describe calculated fields that must have user input.

6. **DETERMINE REPORT GROUPING, SUMMARIZING AND SORTING**
   6.2. Do you want group subtotals, averages, maximums, minimums, counts etc. displayed in your report? Specify them below. Remember, you need a field that you can summarize (i.e. subtotal of calls answered).
   6.3. Do you want to place grand totals in your report? What fields will they be based upon?
   6.4. How do you want to sort your detail data within your grouped data? You can sort multiple levels of detail so you must specify your primary sort order, then secondary, then tertiary.

7. **REPORT DATA SET**
   7.1. Determine which detail data you want displayed in your report. List the “rows” that you want your database server to send back to Crystal Reports. Write down this “selection criteria” or “filter.”
   7.2. When your report runs do you want the user to input values (parameters) in order to determine which records (rows) will be sent back by your query?

8. **ESTABLISH REPORT FORMATTING**
   8.1. What information in your report do you want to “absolutely format?” Which text and database fields need to be highlighted with colors and borders?
   8.2. What information in your report do you want to “conditionally format?” Which text and database fields need to be highlighted with specified formatting under a user-defined condition?
9. **SET-UP A MOCK-UP**

9.1. Get a few sheets of paper the same size as you will be using for your finished report

9.2. Position your title and other descriptive header information using boxes or lines to represent your report elements

9.3. Position your footer information

9.4. Review the page for balance

9.5. Look at the information you intend to include in the body of your report

9.5.1. Count the number of fields you will be using and estimate the appropriate spacing between fields

9.5.2. Use rectangles to pencil in the fields. Try to draw to scale to get an idea of the spacing.

9.5.3. Decide on a logical sequence for presenting the data in the body of the report

9.5.4. Label the fields to indicate that sequence

9.6. Use small boxes to indicate group values and totals

9.7. Place flags where you would like them to appear

9.8. Darken any elements you want highlighted so they stand out

9.9. Review your finished product for “look and balance,” and make changes as needed

9.10. To view a finished example, refer to the Agent by Skillset Mock-up.xls (below).
To find out how Symmetrics can help your company better leverage information for improved performance management, please contact us:

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ABOUT SYMMETRICS
Symmetrics Business Intelligence Solutions Inc. - a Business Objects (formerly Crystal Decisions), Nortel Networks and Microsoft business partner - develops best of breed performance management software applications and provides a range of Business Intelligence services and solutions. Symmetrics helps customers realize their visions by providing solutions that turns data into useable information, ensuring they can make mission critical decisions in a timely manner. With particular expertise in the contact center marketplace, Symmetrics is uniquely positioned to help customers improve contact center efficiency through effective analysis of performance trends and the optimization of their workforce. Symmetrics has work with some of the worlds leading corporations, including Nike, Microsoft, Sprint, Air Canada, Xerox, Royal Bank of Canada and many others.