



Pre-Sales Certification Scenario

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1. Introduction

1.1. About the Pre-Sales Certification

The QlikView Pre-Sales Certification is designed to evaluate a QlikView pre-sales consultant's knowledge of QlikView and sales concepts.

The certification is made up of the following components:

- A written test to judge consultant knowledge of QlikView and sales process concepts.
- Delivery of a working QlikView application based on a provided dataset and SIB requirements.
- An interview with a QlikTech consultant to discuss the developed application.

1.2. Certification files

The following files are included in this certification:

Pre-Sales Certification Scenario.doc	-	this document
QVPreSalesData.mdb	-	certification dataset
Accounts.txt	-	corporate account data
ProductCrossReference.xls	-	product data
DateAdjustment.xls	-	date data to make dates current
Reports.xls	-	data verification reports

2. SIB Scenario

2.1. Company XYZ

Company XYZ is a medical clinic servicing patients in the United States. The clinic has two types of business; servicing patients and servicing corporate accounts. Corporate accounts are companies that send people overseas to work. The corporate account will send the patient to Company XYZ for treatments prior to the overseas deployment. Company XYZ bills corporate accounts on a monthly basis. Regular patients are billed when services are delivered. Patients may have services provided as part of a corporate account or on an as-needed (regular) basis.

2.2. D.A.R.

Users of the same QlikView document often have different information needs. Management might only need or wish to have access to high level Key Performance Indicators. Another group of users have the need to perform more detailed analysis to find the reasons for the KPIs being the way they are. A third group of users may depend on fairly static reports to get the information their jobs demand.

To make QlikView a viable solution for all types of users, QlikTech has created the D.A.R (Dashboard, Analysis, Reporting) concept. An example of D.A.R is in the DAR DEMO.qvw document included in the certification material.

The KPI Dashboard tab in DAR DEMO.qvw shows an example of a dashboard. Six gauge charts show high level KPIs, and by pushing one of the Volume Details, Sales Details and GM Details buttons the user gets access to a somewhat more detailed view. The user also has access to a limited number of selection options. The information in this tab is, as already mentioned, a general view of the state of affairs.

The task of finding out the reasons for the state of affairs being the way they are usually falls on the group of QlikView users in the Analysis group. The tabs KPI Analysis, Trend Analysis and GM PLAN Analysis contain many different charts, list boxes and multi boxes. The users of these tabs go into the details to find the information they need. They make full use of the associative way of making selections and of the different chart types to gain knowledge.

The Standard Reports tab contains a number of reports. The user chooses a period, what KPI the report should show and which report pack to show.

The D.A.R concept is meant to show that QlikView is a solution that satisfies the information needs for all kinds of users, and DAR DEMO.qvw is an example of one application of the D.A.R concept. The student is not expected to duplicate the layout

of DAR DEMO.qvw, but the submitted application should contain tabs that present the key measurements in ways that are aimed towards different groups of users.

2.3. SIB Requirements

Company XYZ is looking for a business intelligence tool to provide analysis for their treatments (sales) and receivables. The business intelligence tool should provide summary to detail level analysis through an easy-to-use, yet robust and flexible interface capable of handling multiple levels of user expertise and requirements. The business requirements are listed below.

Trending

Company XYZ is interested in analyzing their data over time. There should be trending capabilities as well as the ability to a time frame compared to the same time frame the previous year(s). The company has ten years of data. They want to see four years of data in the SIB.

Training

The final application should have a “How-To” section to explain to the end user how QlikView works.

Dashboard

A dashboard showing the current period information compared to the same period last year must exist. The periods to display are year-to-date, quarter-to-date and month-to-date.

The dashboard should also show the high-level open receivables aging brackets.

Analysis and Reporting

The completed SIB application must make use of the D.A.R. concept to tell a story about the data. There should be tabs / sheets within the completed SIB application for analysis and reporting. The student should make use of best practices to design these objects.

Screen Resolution

The standard screen resolution for Company XYZ is 1024 x 768. The UI of the finished application must fit within the viewing area without the use of scroll bars.

Today

All date related metrics should be calculated based as if the current date is 31-MAR-2008.

2.4. Key Measurements

Company XYZ list the following to be included in the SIB application. Ideally these measurements will indicate compliance with business goals through an overall “dashboard” view, as well as detailed comparisons between corporate accounts, patients and treatments (products). These comparisons should have the ability to be trended over time.

Sales

Sales is defined as the treatment price * the treatment quantity. The QUANTITY and U_PRICE fields should be used for this metric. These fields can be found in the Treat table.

Costs

Cost is defined as the treatment cost * the treatment quantity. This is also known as cost of goods sold. The QUANTITY field from Treat and Price field from the ProductCrossReference.xls spreadsheet should be used for this metric.

Margin

Margin is defined as Sales – Cost for any given treatment. This is also known as gross margin.

Margin %

Margin % is defined as Margin / Sales for any given treatment. This is also known as gross margin %

Open Receivables

Open Receivables is defined as invoiced Sales less any payments. Open receivables does not trend over time as it is a point in time metric and only exists at the moment it is calculated. Open receivables should be displayed in 30-brackets depending upon how old the receivable is. Any receivable less than one day old is considered current and current is a bucket that must be displayed. The BILL and AMTPAID field should be used for this metric. These fields can be found in the txBilling table.

Receivables Age

Receivables Age (an amount) is defined as the number of days an invoice has been open. It is number of days between a given date (usually today) and the invoice (billing) date. This measure is only valid for invoices that have Open Receivables. It is possible to have invoice dates in the future and it is possible for Company XYZ to owe a patient or corporate account money.

When displayed on the screen the buckets (aging brackets) must be in this order:

1. Current
2. 1 – 30
3. 31 – 60
4. 61 – 90
5. 91 – 120
6. 121 – 150
7. Over 150

Company XYZ wants to see the Open Payable amounts presented in the brackets listed above. All aging calculations should be based on today (31-MAR-2008).

The DATE field from txBilling should be used for this metric.

3. Data Sources

3.1. QVSampleData.mdb

This is the primary data source for this application. The tables are described below.

Patients

This table contains dimension data related to patients. It is directly related to Treat via MEDNO.

Treat

This contains transaction data for all treatments provided to all patients. It is directly related to txBilling via INVOICE. Treat is directly related to the Product Reference spreadsheet via TX.

This table contains most of the data necessary to provide sales information such as treatment quantity and treatment price.

txBilling

This table is generated during Company XYZ's weekly billing process and contains the billing transactions for the most recent billing cycle. This table contains the most of the data necessary to calculate receivables information. The table contains the invoice number, invoice date, amount invoiced and amount paid.

3.2. Accounts.txt

This CSV file contains dimension data related to corporate accounts. There is a foreign key relationship to many of the other tables in the database. There is a direct relationship to the txBilling table. There are no fieldname (header information) in this file. Below is the file layout:

Field 1 – Account Number

Field 2 – Company

Field 3 – City

Field 4 – State

Field 5 – Postal Code

3.3. ProductCrossReference.xls

This spreadsheet contains dimension data regarding the treatments. The spreadsheet contains product name, product family and product cost.

3.4. DateAdjustment.xls

This spreadsheet contains date data. The dates in Treat and txBilling tables are not current. This spreadsheet should be used to make the dates current. The dates in the left column can be found in the data set. Those dates should be replaced with the dates in the right column.

3.5. Reports.xls

This workbook contains three spreadsheets to be used to verify the data in the final application. This file is found in the Documentation folder, not in the Data folder. The data should not be loaded into the final application.

3.6. Company XYZ website.

Company XYZ has a website that can be found here http://www.company_xyz.com. This site can be utilized for font, color and navigation concepts for the submitted application.

Note: The Company XZY website does not actually exist. The link above should open the website found in the Company XYZ folder that was distributed with the certification materials. If the link does not work please open the **index.html** file located in the Company XZY folder to view the website.

4. Application Requirements

Here is a list of items that must be included within the application

- The dates are old. Make them current using the DateAdjustment.xls workbook.
- All date calculations (year-to-date, quarter-to-date, month-to-date, etc.) should be based on 31-MAR-2008 as the current date.
- No circular references.
- Synthetic keys should be eliminated.
- No loosely coupled tables.
- A properly linked or concatenated data model.
- Clean, consistent layout.
- Use of as many of the QlikView screen objects as possible.
- The application must be submitted with 4 years loaded.
- The numbers must match the reports in the Reports.xls workbook.

Clarifications

These are some things to consider as the application is being developed.

- There can be multiple treatments per invoice.
- A patient can belong to a corporate account and still have treatments not belonging to the corporate account.
- There is bad fact data in the database such as invoices that exist in treatments but not in billings. All fact data (treatments and billings) must be included within calculations. It is possible that dimension data does not exist for this bad data.
- There is bad data in the dimensional data, e.g. patients without treatments. This bad data should not be included in the finished application.

5. Evaluation Criteria

The following is a description of the criteria that the censor will use in evaluating the criteria. Please note this list is not complete. The student will be evaluated on these criteria, at a minimum. It is possible for the censor to apply additional criteria.

5.1. General

It is expected that the student will meet these general criteria:

- Results correspond to the reports provided.
- Satisfy the business requirements. Provide the information specified in the within this document.
- The application must be submitted within three working days from when the material has been downloaded from QlikAcademy Online.

5.2. Data Model and Script

- No synthetic keys
- No circular references
- One table containing the master calendar
- Group the script into different tabs
- Good use of variables in the script
- Perform as many calculations as possible in the script instead of in the objects

The way to solve the first three criteria is to use either the link table or concatenated table data models described in the QlikView Data Modeling Best Practices document included in the certification material. The file is named:

`The_QlikView_Data_Model_Best_Practices.pdf.`

If the application contains any circular references it will be failed.

The criterion about having one master calendar means that Company XYZ wants to choose a single date in a list box and see the treatment and billing data associated with that date.

Perform as many calculations as possible in the script means that Sales, Costs, Open Receivables and Receivables Age should be calculated in the script and not in the charts.

5.3. Layout and Presentation

- Good layout conforming to the QlikTech best practices document included with the certification materials. This file is named:
`Design_and_Functionality_Best_Practices.pdf`.
- The layout must conform to the company XYZ's online presence (use the colors and fonts from the web page)
- Calculation speed in objects. When a tab is clicked on, all the objects on the tab should finish calculating within two seconds
- Design the application for users with 1024x768 screen resolution
- A demonstration of the application given by the student

A good layout is one that is consistent with the Aesthetics and Usability & Design Pointers chapters in the Design and Functionality Best Practices .

In the demonstration the student will show how the application works and how the data should be interpreted. The censor will look for a story in the presentation; this story should convey the unique benefits of using QlikView for displaying the company XYZ's sales data.

5.4. Grading

The submitted application will start with 100 points. For each criterion which is not met a set amount of points will be deducted. If the application does not satisfying the business requirement Costs five points will be deducted. If the application does not satisfying the business requirement Margin another five points will be deducted.

The passing grade is 70.