Training Topics

1. Introduction
   1.1. About QlikView
   1.2. Architecture

2. Starting QlikView
   2.1 Wizard and Connection
   2.2. Menu Command
   2.3. QlikView Document

3. Extraction, Transformation and Loading (ETL)
   3.1 Data Loading
   3.2 Joining
   3.3. Renaming Field

4. Building Interfaces
   4.1. Creating Basic Sheet Objects
   4.2. Chart
   4.3 Report

5. Qlikview Security

6. Case Study & Discussion
1. Introduction

About QlikView
About QlikView Corporation

- U.S.-based company, founded in 1993 in Sweden
- Highest customer success rate
- 15,000 customers in 100 countries
- 1,100 global partners
- 650 employees across 22 offices in 24 countries
- NASDAQ: QLIK

Broad Base of 15,000 Customers

- 3M
- Shell
- VOLVO
- Campbells
- RIM
- Gatorade
- SANDVIK
- NHS
- ZURICH
- HEIDELBERG
- SI
- IBERIA
- GEN-PROBE
- sonofon
- SCHENKER
- e-on
- SEB
- VELLINGE
- DeLuca Homes
- LANDSTINGET
- AMCOR
- thiememeulenhoff
- BD
- teckcominco
**Associative Search** Puts Users in Control

**Traditional**

- **Region**
  - **State**
    - **Product**
      - **Sales Person**

**Associative**

- **Region**
  - **State**
    - **Sales Person**
  - **Product**

**IT Driven**

- Linear, pre-defined thinking
- Insights missed in hidden data
- Months to change
- Data-centric

**User Driven**

- Follows the user
- All data, always visible
- Minutes to change
- Insight driven
1. Introduction

Architecture
Tahapan Desain BP dan BI

1. Penentuan BI

2. Mapping
   (penentuan pengambilan data dan parameter)

3. Infrastruktur
   (table, view, procedure, automatic)

4. Business Intelligent
   (data, desain)
Business intelligence

- Business intelligence (BI) is a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data to help enterprise users make better business decisions.
Business Intelligence

- **Business intelligence (BI)** refers to computer-based techniques used in spotting, digging-out, and analyzing business data, such as sales revenue by products and/or departments, or by associated costs and incomes.

- In a 1958 article, IBM researcher Hans Peter Luhn used the term business intelligence. He defined intelligence as: "the ability to apprehend the interrelationships of presented facts in such a way as to guide action towards a desired goal.

- Business intelligence as it is understood today is said to have evolved from the decision support systems which began in the 1960s and developed throughout the mid-80s’

- In 1989 Howard Dresner (later a Gartner Group analyst) proposed "business intelligence" as an umbrella term to describe "concepts and methods to improve business decision making by using fact-based support systems." It was not until the late 1990s that this usage was widespread.
The Traditional BI Data Approach

1. Data sources pre-determined by IT
2. Data goes through ETL (Extract, Transform, Load) process
3. Data loaded into data warehouse
4. Data loaded into BI app
5. Every time data changes, it goes back and forth through this process
The Traditional BI Data Approach

- **Scorecard**
- **Reporting**
- **Analysis**

**INFORMATION WAREHOUSE**

**EXTRACT**
- Customer
- Part
- Salesman
- Invoice

**LOAD**
- Customer
- Part
- Salesman
- Invoice
- Time

**AGGREGATE**
- Sales And Forecasting

**OLAP Cube**

**Table**
QlikView’s Unique, In-Memory, Associative Technology

1. Easily consolidates multiple data sources
2. Loads all data into memory
3. Enables real-time associative search and analysis
Architecture,
Architecture,
Architecture,

QVP: Encrypted, binary, communicates directly with the QVS on port 4747
QVPX: Not encrypted, xml, communicates with the QVS using http/https through a web server.

The default installation settings for QlikView Server will use the QlikView Web Server and not the IIS.

The QlikView Web Server will share port 80 with IIS on Vista, 2003 Server and 2008 Server.

On Windows XP, only one of the two web servers (IIS and QVWS) can be used on port 80. If both are configured to run, they must be assigned different ports.
2. Start QlikView

2.1 Wizard and Connection
2.2. Menu Command
2.3. QlikView Document
Qlikview

- Qlikview merupakan Solusi akses data yang memungkinkan kita untuk menganalisa data
- Pada tampilan Qlikview terdiri dari 3 bagian yaitu dimensi waktu, dimensi pengukuran dan chart.
  - Dalam menggunakan Qlikview, kita harus mengkombinasikan antara dimensi waktu dan dimensi pengukuran. Sehingga menghasilkan chart yang digunakan sebagai bahan analisa.
  - Dimensi waktu bisa terdisi dari tahun, bulan dan hari
  - Dimensi pengukuran sales terdiri dari brand, sub brand atau SKU
  - Dimensi pengukuran manufacturing terdiri dari mesin, team
Workshop Target
Start QlikView from the **Start menu, Programs or double-clicking on a QlikView document.**
Tool & Command

The menus are found in the menu bar at the top of the screen. Most commands can also be configured as buttons in the toolbars. Please see on QlikView Reference Manual - Configuration of the Toolbars” on page 88 for more information.
.qvw and .qvd

A QVD (QlikView Data) file is a file containing a table of data exported from QlikView. QVD is a native QlikView format. It can only be written to and read from QlikView. The file format is optimized for speed when reading data from a QLlkView script but it is also very compact. Reading data from a QVD file is typically 10-100 times faster than reading from other data sources.
LOAD BUY_QTY_DUE, CATALOG_DESC, CATALOG_NO, DATE_ENTERED, ORDER_NO, CONTRACT, PLANNED_DELIVERY_DATE

FROM CO_LINE.qvd (qvd);

account:
select t.ACCOUNT, t.company, t.acct_group from ACCOUNT t;

store account into E:\Qlikview KBT/account.qvd
3. Extraction, Transformation and Loading (ETL)

3.1 Data Loading
3.2 Joining
3.3. Renaming Field
Extraction

• Mengambil beberapa kolom saja dari table atau view di database

```sql
SELECT company,
voucher_no,
row_no,
accounting_year,
accounting_period,
voucher_date,
account,
account_desc,
amount
FROM gen_led_voucher_row_union_qry;
```
Transformation & Data Loading

Note: Before we start, we need to prepare the source files and folders
Joining
Renaming Field

```sql
[\D:\Training Qlikview\Customer.xls]
(biff, embedded labels, table is [SQL Results$]);

ORDER:

LOAD CONTRACT,
ORDER_NO,
LINE_NO,
CATALOG_NO,
CATALOG_DESC,
CUSTOMER_NO,
QTY_INVOICED,
SALE_UNIT_PRICE,
DISCOUNT,
SALES,
DISTRICT_CODE,
REGION_CODE,
REAL_SHIP_DATE,
YEAR(REAL_SHIP_DATE) as YEAR,
MONTH(REAL_SHIP_DATE) as MONTH
FROM
[D:\Training Qlikview\Order.xlsx]
(ooxml, embedded labels, table is [SQL Results$]);
```
The Traditional BI Data Approach

1. Data sources pre-determined by IT
2. Data goes through ETL (Extract, Transform, Load) process
3. Data loaded into data warehouse and modeled into cubes
4. Data loaded into BI app
5. Every time data changes, it goes back and forth through this process
4. Building Interfaces

4.1. Creating Basic Sheet Objects

4.2. Chart

4.3. Report

QlikView
Basic Sheet Object

- Document
- Sheet
- Basic Sheet Object

Please see on QlikView Reference Manual
OVERVIEW BOOK II
Please see on QlikView Reference Manual
BOOK III: Chart
Chart

**Bar chart**

**Pie chart**

**Combo chart**

**Scatter chart**
Chart

Line chart

Radar chart

Grid chart

Gauge chart

Block chart

Funnel chart
**Report**

**Adding Sheet Objects to the Report**

Simply drag or double-click on any sheet object in the layout to put them in the report page preview. The print objects will appear in the preview as they currently look in the QlikView layout.
Workshop Target

Sales Statistic

YEAR
2010
MONTH
Jan Feb Mar Apr May Jun Jul

Total Sales
MONTH Total Sales
Jan
Feb
Mar
Apr

Search

Current Selections

Product
Baby Diaper for Garuda L 250 x 1'
BS Happy Nappy Diaper L 240'
BS Happy Nappy Diaper M 250'
BS Happy Nappy Diaper XL 230'
BS Softlove NIC L 260'
BS Softlove NIC C M 260'
BS Softlove NIC C XL 210'
BS Sweety Baby Diapers L 1X225'
BS Sweety Baby Diapers M 1X250'
BS Sweety Baby Diapers XL 1X230'
BS Sweety Fit Pants XL 100'
BS Sweety Fit Pants L 180'

Customer/Distributor
GS-001
GS-002
LA-001
LA-002
LA-003
LA-004
LA-005
LA-006
LA-007
LA-014
LA-015
LA-016
LA-018
LA-020

Sales Performance
IDR

0 50,000,000,000,000 100,000,000,000,000
Jan Feb Mar Apr May Jun Jul Month

Top 10 Sales
Pivot Sales
Top Ten Region
Top Ten Distributor
Discussion

1. Design Rule
2. Web or Browser Access
3. Database Connection (ODBC)
4. Common Errors in Table Design
Avoiding Circular References

- Loosely coupled tables can be useful for avoiding circular references in the data structure.
5. Qlikview Security
Data protection and security in QlikView

QlikView has taken data retrieval and analysis to a higher level. However, with such an ease of gathering data from disparate sources it is of great importance to provide excellent protection of data.

This document provides information on how data protection and security is handled in QlikView. It also provides some examples of how to apply different security settings when providing BI data to your work force.
Authentication and Authorization

QlikView can either let the Windows operating system do the authentication, or prompt for a User ID and Password (different from the Windows User ID and Password) or use the QlikView license key as a simple authentication method.
Section Access

Load * Inline

[ ACCESS, USERID, PASSWORD
ADMIN, BOB, AAA
USER, BILL, BBB ];
[Invoice Number],
[Item Class],
[Item Number],
[Line]
[Line]
[Order]
[Promis]
[Sales]
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Latihan

- Buatkan data penjualan yang diambil dari Invoice
- Dimensi yang digunakan adalah product code, product family dan region
- Dimensi waktu yang digunakan adalah bulan dan tahun
Thank you!