

Use of Business Intelligence Banking

استخدام ذكاء الاعمال في المصارف

By:

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Objectives

❑ Introduction

- What Can a BI and Analytics Solution Do for your Bank

❑ Areas Encompassed By BI in Banking

- Relationship marketing
- Performance management (PM)
- Risk management (RM)
- Assets & Liability management (ALM)
- Compliance

❑ BI System Architecture

❑ Conclusion

❑ Q&A

What Can a BI and Analytics Solution Do for your Bank

- Business Intelligence (BI) is about getting the right information, to the right decision makers, at the right time.
- BI is a technology for gathering, storing, analyzing and providing access to data to help organization users make better business decisions
- Business intelligence solutions for banks should provide the decision makers from all business segments of a bank with the ability to manage and exploit information resources, in order to solve the problems and make timely and high-quality decisions.
- Business intelligence systems in banks must be comprehensive and yet simple for the end user.
- Business intelligence covers many areas of the bank, and among the most important are:
 - Relationship Management (CRM)
 - Performance Management (PM)
 - Risk Management (RM)
 - Asset and Liability Management (ALM) and
 - Compliance.

Banking/Financial Institutions

- In order to drive revenue and profitability, banks/financial institutions must deliver great customer experience, while also managing risk and complying with regulatory requirements. In order to achieve these goals, banks/financial institutions must understand performance by region, state, branch and customer segment, which is challenging given many different data sources.
- BI empowers banks with the ability to access relevant financial information across data sources, identify key insights, and easily share findings.
- With BI, banking can:
 - Drive financial performance by understanding profitability across regions, states, branches and customers, and gaining visibility into transactions and assets
 - Manage risk by analyzing credit quality, counterparty risk, operational risk, and exposures in loan portfolios
 - Improve customer experience through smart targeting, segmentation, and cross-selling / up-selling analysis that empowers your customer-facing teams

Areas Encompassed By BI in Banking

- BI solutions for banks should provide the decision makers from all business segments of the bank with the ability to manage and exploit the information potential of a multitude internal and external data resources.
- BI should consider and analyze the total client relationship which is a vital for successful bank operations in the conditions of growing competition.
- BI focus on market segmentation, defining a clear picture of the clients and their relationships with banks, and market potential

Relationship Marketing

It cover and provide:

- Customer interaction analysis
- Customer investment profile
- Individual customer profile
- Wallet share analysis
- Customer complaints
- Delinquency analysis
- Market analysis

Performance Management

- Within their performance management tasks, managers monitor key business performance indicators through scorecard reports.
- Continuously monitoring of the current balance with defined objectives.
- Scorecarding support solutions should provide users with rapid and efficient access to scorecards showing the key performance indicator (KPI) values.
- Alert them when these values exceed the allowed limits, and facilitate drill-down.

Risk Management

- RM is a process in which a bank methodologically manages all the risk processing phases posing a threat to the achievement of its goals and individual business activities
- Some of the risks faced by banks include credit risks, market risks, interest rate risks, foreign change risks, liquidity risks, operational risks, reputational risks, etc.
- The purpose of banking risk analysis solutions is to enable analysing credit risk analysis depending on how loan losses affect variations in the bank's profit.

Asset and Liability Management (ALM)

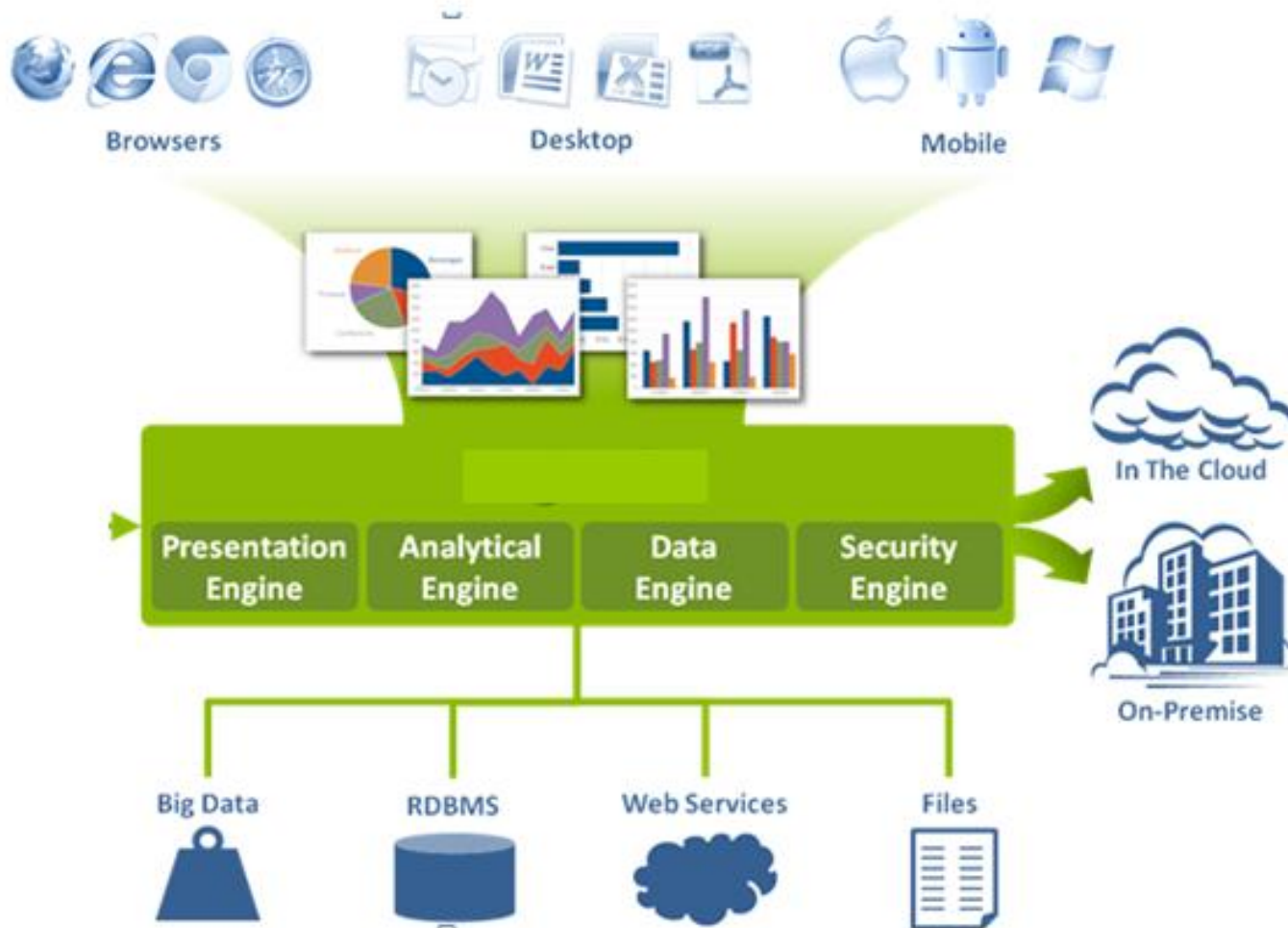
- Bank asset and liability management (ALM) is a process of managing a bank's liabilities and receivables, aimed at establishing profit and risk balance
- Establishing a relation between the liabilities and receivables, and controlling the impact of risk on the bank's operations and financial results.
- Business intelligence solutions for ALM should enable generating a complete set of internal reports.

Compliance

This cover the following areas:

- Central bank reporting
- Structure of regulatory capital
- Foreign financial account analysis
- Suspicious activity analysis
- Transaction activity analysis

BI System Architecture





Questions That BI Should Answer



- What happened?
- What is happening?
- Why did it happen?
- What will happen?
- What do I want to happen?

Past

Present

Future



Data



BI Characteristics

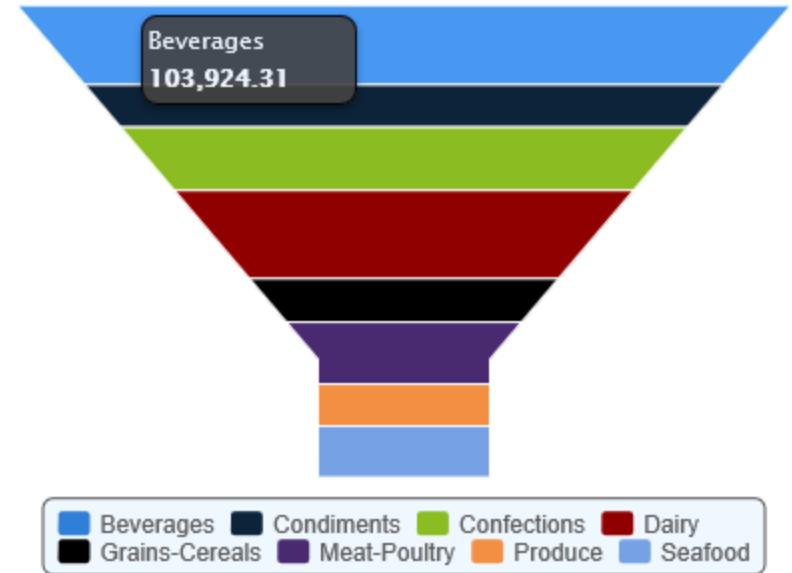
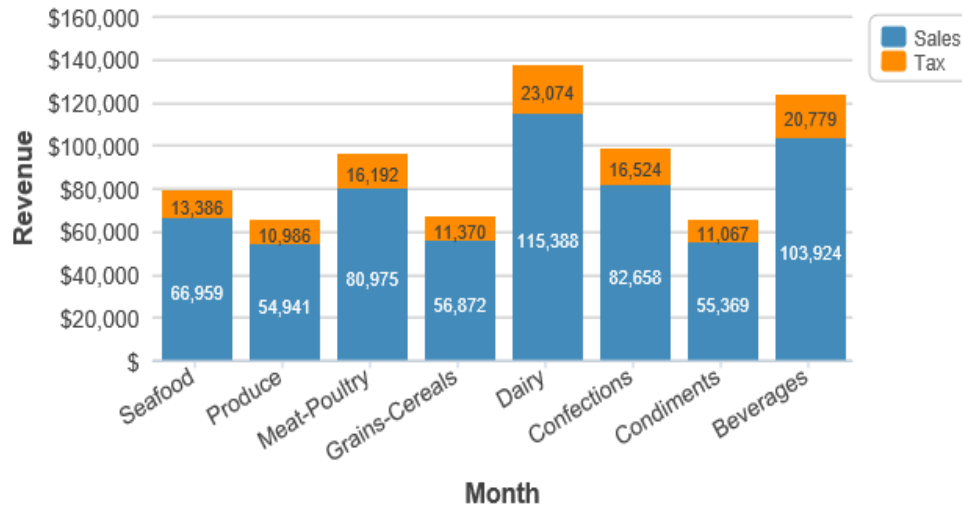
- Single point of access to information
- Timely answers to Business questions
- Using BI in all departments of an organization
- A system that collects, integrates, analyses and presents business information to support better business decision making.
- Business Intelligence is an environment in which business users receive information that is reliable, secure, consistent, understandable, easily manipulated and timely...facilitating more informed decision making

What BI Can Do - Modules

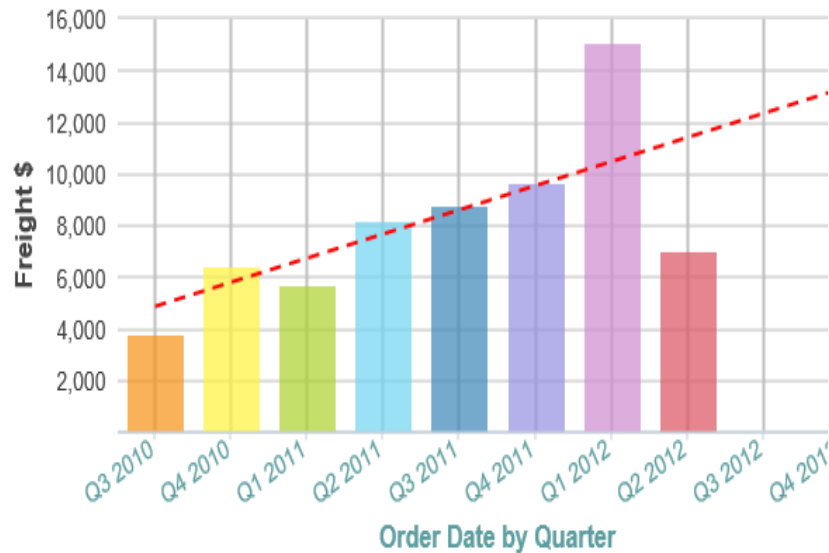
- Charts
- Dashboards
- Analysis Grid
- Key Performance Indicators
- Graphical OLAP
- Forecasting
- Graphical Reporting

...with Legend Filtering, Quicktips

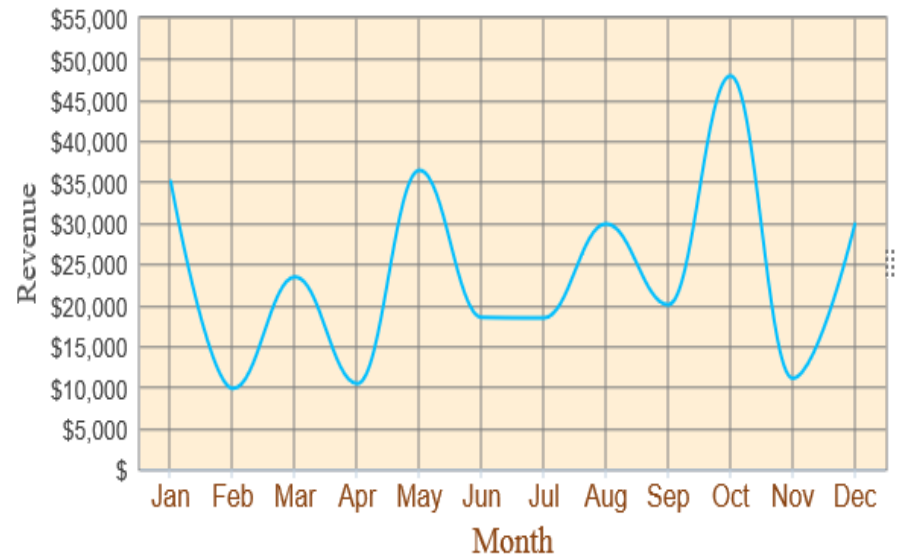
...with Stacked Bars and DrillDown



...with Forecasting and DrillDown

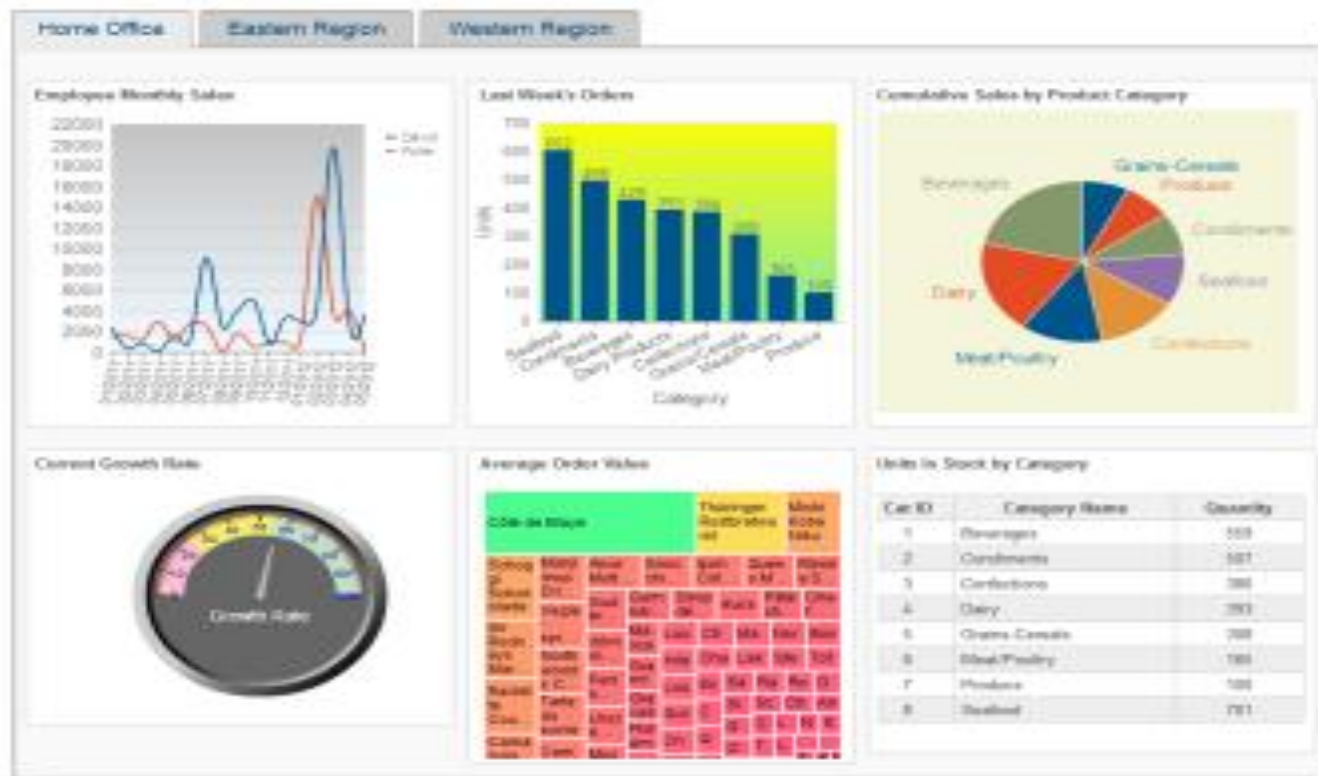


Spline Chart with Resizer

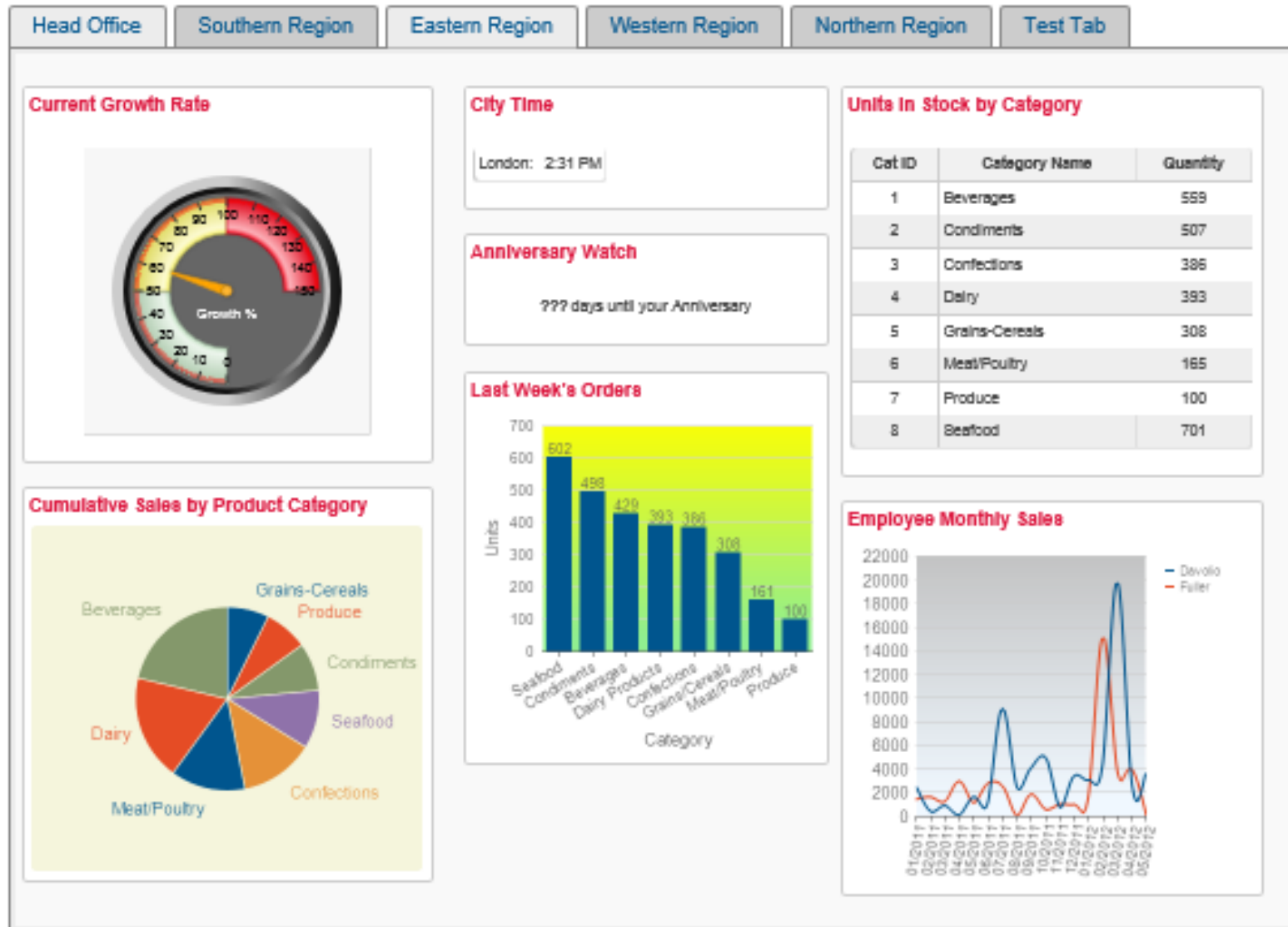


Dashboard

- BI dashboards can provide a customized snapshot of daily operations, and assist the user in identifying problems and the source of those problems, as well as providing valuable, up-to-date information about financial results, sales and other critical information – all in one place



Dashboard



Dashboard



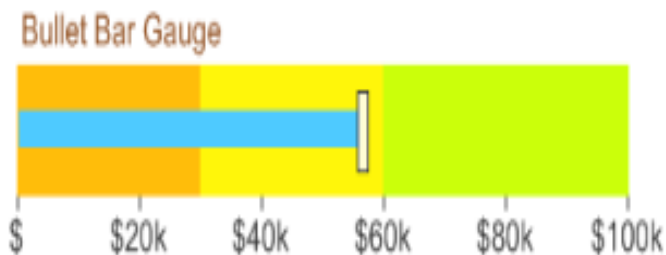
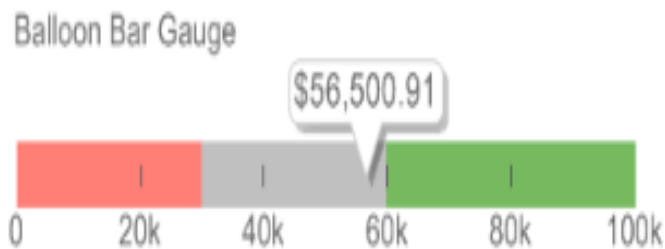
Analysis Grid

Northwind Orders

Columns	Formula	Sort	Filter	Group	Aggregate	Chart	Crosstab	Paging
Table								Export: Excel CSV PDF
1 2 3 4 5 6 7 8 9 10								
Order ID	Customer	Ordered On	Required By	Freight	Shipped On	Country	Post Code	
10248	VINET	07/04/2010	08/01/2010	\$32.38	07/16/2010	France	51100	
10249	TOMSP	07/05/2010	08/16/2010	\$11.61	07/10/2010	Germany	44087	
10250	HANAR	07/08/2010	08/05/2010	\$65.83	07/12/2010	Brazil	05454-876	
10251	VICTE	07/08/2010	08/05/2010	\$41.34	07/15/2010	France	69004	






Key Performance Indicators

- BI provides simplified KPI management and tracking with powerful features, formulae and expressions, and flexible frequency, and threshold levels. This module enables clear, concise definition and tracking of performance indicators for a period, and measures performance as compared to a previous period.
- Intuitive, color highlighters ensure that users can see these indicators in a clear manner and accurately present information to management and team members.
- Users can further analyze performance with easy-to-use features like drill down, drill through, slice and dice and graphical data mining



Key Performance Indicators

Indicator Gauge within a Table

Product Name	Units in Stock	Indicator
Chai	39	
Chang	17	
Aniseed Syrup	13	
Chef Antons Cajun Seasoning	53	
Chef Antons Gumbo Mix	0	
Grandmas Boysenberry Spread	120	
Uncle Bobs Organic Dried Pears	15	
Northwoods Cranberry Sauce	6	
Mishi Kobe Niku	29	



Graphical OLAP

- Graphical Business Intelligence (BI) OLAP technology makes it easy for your users to find, filter and analyze data, going beyond numbers, and allowing users to visualize the information with eye-catching, stunning displays, and valuable indicators and gauges, charts, and a variety of graph types from which to choose

Dimensions

Measures

Calculated Measures












Filter

Chart

Heatmap

Table

☐ Show empty members. Swap AxesExport: Excel

 Fiscal	 Product Categories All Products	 Accessories	 Bikes	 Clothing	 Components
	Sales Amount	Sales Amount	Sales Amount	Sales Amount	Sales Amount
 All Periods	\$109,809,274.20	\$1,272,057.89	\$94,620,526.21	\$2,117,613.45	\$11,799,076.66
 FY 2006	\$23,360,526.01	\$36,814.85	\$22,090,618.31	\$66,327.53	\$1,166,765.32
 H1 FY 2006	\$11,331,808.96	\$20,235.36	\$10,661,722.28	\$34,376.34	\$615,474.98
 H2 FY 2006	\$12,028,717.05	\$16,579.48	\$11,428,896.03	\$31,951.20	\$551,290.34
  Q3 FY 2006	\$5,860,884.49	\$4,945.69	\$5,669,191.70	\$11,703.33	\$175,043.77
  Q4 FY 2006	\$6,167,832.56	\$11,633.79	\$5,759,704.33	\$20,247.87	\$376,246.57
 FY 2007	\$33,683,804.82	\$124,433.35	\$28,179,553.99	\$750,716.33	\$4,629,101.14
 FY 2008	\$52,714,102.75	\$1,077,065.05	\$44,350,353.90	\$1,283,473.60	\$6,003,210.20
 FY 2009	\$50,840.63	\$33,744.64		\$17,095.99	

Forecasting and Predictive Analysis

- BI uses historical product, sales, pricing, financial, budget and other data, and forecasts the measures with numerous time series options, e.g., year, quarter, month, week, day, hour or even second to improve your planning process

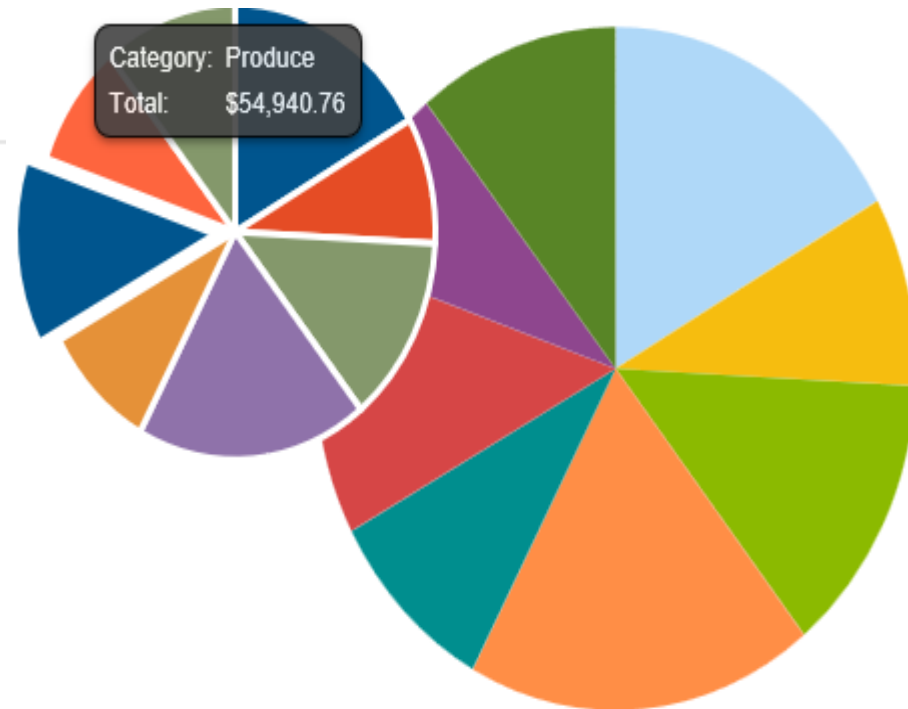
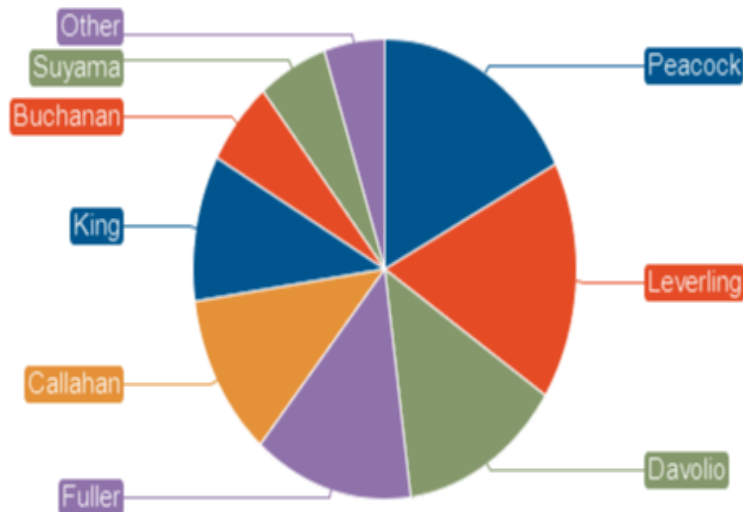


Label Column Name ▼

Data Column Freight ▼

Data Aggregation Sum ▼

Sum of Freight by Name

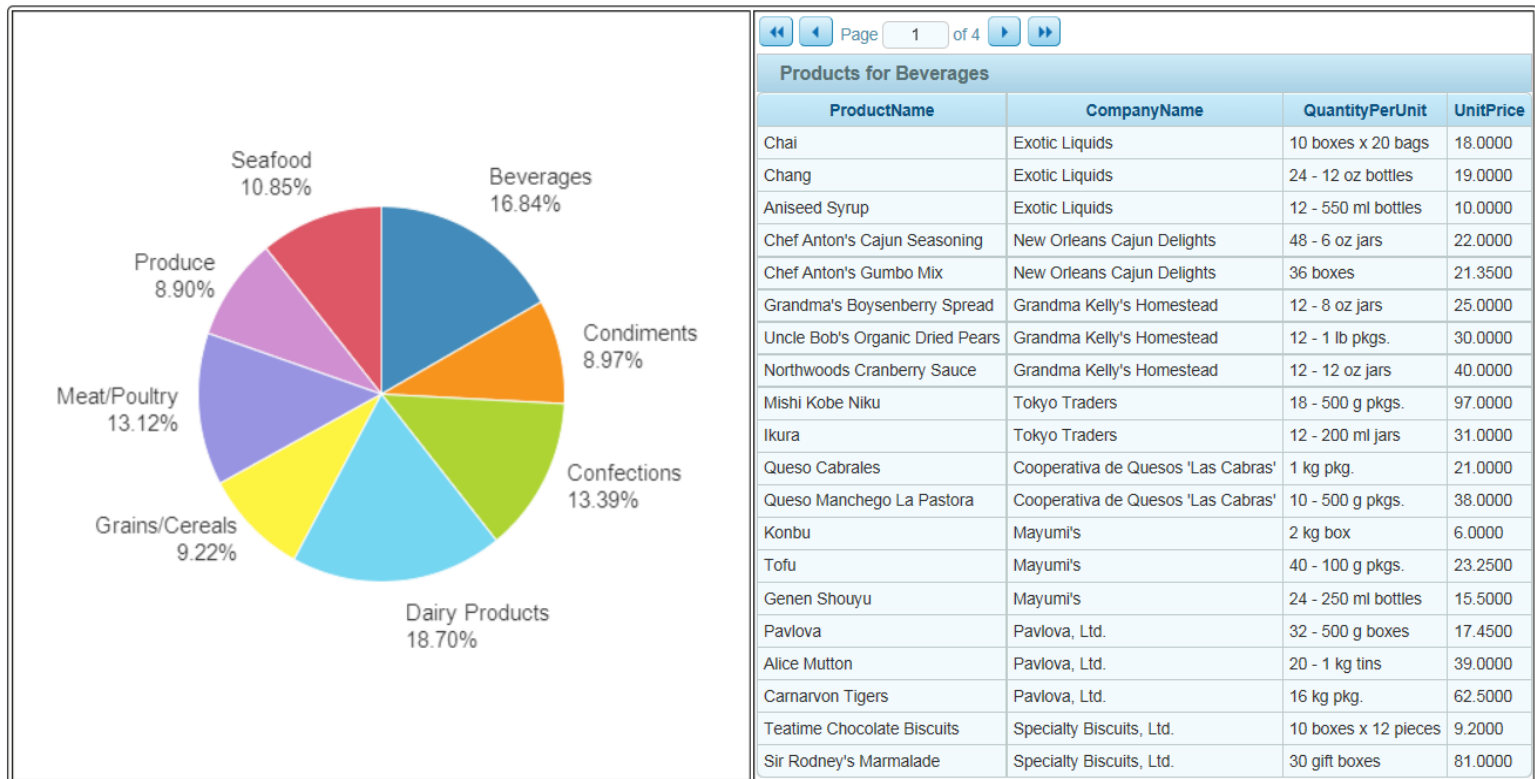


Item Quantity by Quarter



Graphical Reports

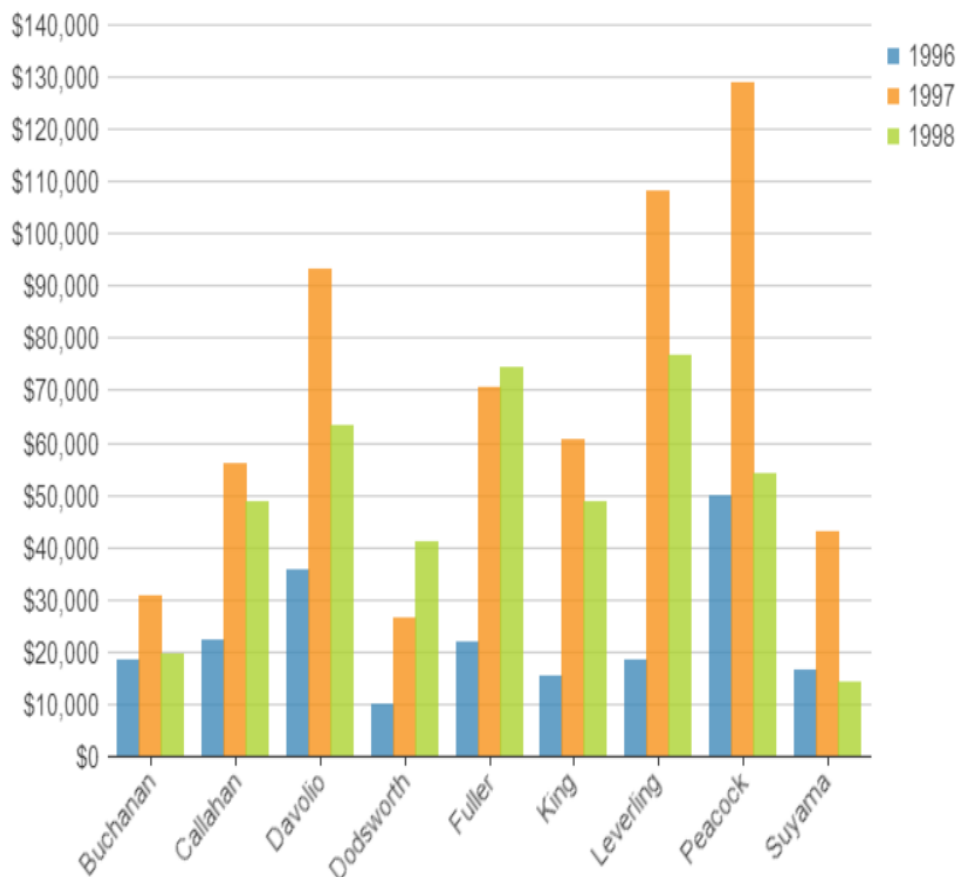
- BI reports deliver web-based BI reports to anyone (or everyone) in the organization within minutes! The BI suite is simple to use, practical to implement and affordable for every organization. With our BI reporting and performance reporting module, you just point-and-click and drag-and-drop and you can instantly create a report to summarize your performance metrics, or operational data



Country Sales by Year

Employee	1996	1997	1998
Buchanan	\$18,384	\$30,716	\$19,692
Callahan	\$22,240	\$56,033	\$48,590
Davolio	\$35,765	\$93,148	\$63,195
Dodsworth	\$9,895	\$26,310	\$41,103
Fuller	\$21,757	\$70,444	\$74,337
King	\$15,232	\$60,471	\$48,865
Leverling	\$18,224	\$108,026	\$76,563
Peacock	\$49,945	\$128,810	\$54,136
Suyama	\$16,643	\$43,126	\$14,144

Sales by Employee



Conclusion

- Business Intelligence solutions make it possible for groups within organizations to gain actionable insight from business data, and to leverage these insights to meet critical goals.
- Business intelligence solutions offer business-focused analysis at a scale, complexity, and speed that is not achievable with basic operational systems reporting or spreadsheet analysis, thereby delivering significant value.

QUESTIONS

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