# Chapter 6 – Business Intelligence

INFO401

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#### Outline

- I. What is Business Intelligence
- II. Characteristics of BI
- III. Components of BI tools



### I - What is Business Intelligence

 Business Intelligence is a set of methods, processes, architectures, applications, and technologies that gather and transform raw data into meaningful and useful information used to enable more effective strategic, tactical, and operational insights and decision-making (to drive business performance).



#### **II- Characteristics of BI**

- Timely answers to Business questions
- Using BI in all Departments of an organization
- BI applications and technologies can help companies analyse:
  - changing trends in market share
  - changes in customer behaviour and spending patterns
  - customers' preferences
  - company capabilities



## **III - Components of BI tools**

- Graphical OLAP
- Dashboards
- Reports
- Forecasting



## **Graphical OLAP**

• Graphical Business Intelligence (BI) OLAP technology makes it easy for your users to find, filter and analyse 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



#### **Dashboards**

- 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.
- A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

### Reports

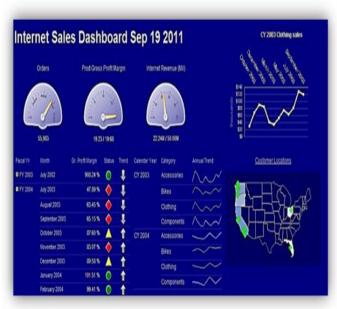
- BI Reports delivers web-based BI reports to anyone (or everyone) in the organization within minutes!
- A report is the presentation of detailed data arranged in defined layouts and formats Based on simple and direct queries: usually involves simple analysis and transformation of data (sorting, calculating, filtering, filtering, grouping, formatting, etc.)
- Traditional reports contain detailed data in a tabular format and typically display numbers and text only, with limited interactivity.
- Modern reports can be interactive and visual but the focus is still on detailed data.



# Reports Vs DashBoard

Cat/SubCat/Product	Product#	Color	Std Cost	List Price
Accessories				
Bike Racks				
Hitch Rack - 4-Bike	RA-H123		\$44.88	\$120.00
Bike Stands				
All-Purpose Bike Stand	ST-1401		\$59.47	\$159.00
Bottles and Cages				
Mountain Bottle Cage	BC-M005		\$3.74	\$9.99
Road Bottle Cage	BC-R205		\$3.36	\$8.99
Water Bottle - 30 oz.	WB-H098		\$1.87	\$4.99
Cleaners				
Bike Wash - Dissolver	CL-9009		\$2.97	\$7.95
Fenders				
Fender Set - Mountain	FE-6654		\$8.22	\$21.98
Helmets				
Sport-100 Helmet, Black	HL-U509	Black	\$13.09	\$34.99
Sport-100 Helmet, Blue	HL-U509-B	Blue	\$13.09	\$34.99
Sport-100 Helmet, Red	HL-U509-R	Red	\$13.09	\$34.99
Hydration Packs				
Hydration Pack - 70 ez.	HY-1023-70	Silver	\$20.57	\$54.99







# Forecast and predictive analysis

 Predictive analysis 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

