**Week 7: Business Intelligence; Cube of Information**

**Intended Learning Outcomes**

ILO2: Explain the impact of Business intelligence for Multidimensional Analysis.

ILO4: Apply Microsoft Excel PivotTable and PivotChart to analyze and present designated data and information.

**Activity 1. Week 7 Bi-Weekly Lecture Quiz Reminder**

Please feel free to let me know if you have any problems in answering the MC questions.

Reminder:

(a) Max 3 attempts allowed

(b) Deadline: This Sunday, 11:59 pm

**Activity 2. Interim Group Report 2 Reminder**

*Challenge 2: How do the general public, customers, prospective customers, and/or stakeholders of your selected company perceive about the products and businesses? Identify any challenges or opportunities.*

Each team should draft a 1 to 2-page report identifying major comments of the general public, customers, prospective customers, and/or key stakeholders of your selected company and commenting on the challenges and opportunities faced by the company. You should use FacePager to download posts from a related Facebook community. Then use SAS Enterprise Miner to conduct text topic analysis and interpret the findings. You may also complement text topic analysis by qualitatively interpreting other materials such as news articles and industry reports. To identify challenges and corresponding opportunities, you may conduct Internet search for ideas. Please cite references explicitly.

Reminder: a) No plagiarism!

b) No late submission!

c) Deadline: this Sunday, 11:59pm

**Activity 3. Tutorial Discussion [10 mins]**

Log on to Canvas and complete Tutorial 7 Discussion. It carries a bonus participation of 0.5% for correct answer.

“Are companies ready for business intelligence and analytics?”

Suggested Readings:

1. Roth, E. (13th December 2017), Sisense.com, “What’s the Difference between Business Intelligence and Business Analytics?” <https://www.sisense.com/blog/whats-the-difference-between-business-intelligence-and-business-analytics/>
2. Shore, J. (8th February 2016), TechTarget, “Analytics as a Service Offers Hindsight, Insight and Foresight” <https://searchcloudapplications.techtarget.com/news/4500272691/Analytics-as-a-service-offers-hindsight-insight-and-foresight>

**Activity 4. Overview**

In this tutorial, we will use the **pivot** techniques in MS Excel to perform Multidimensional Analysis on a given set of data. Multidimensional Analysis is to represent information using a cube, from which data from be extracted to solve specific business problems. It is a common yet important method in BI.

**Using MS Excel PivotTable and PivotChart [40 mins]**

* **Demo time [10 mins]**

Example data: Product sales of different colors ([***T7\_Demo.xlsx***](https://canvas.cityu.edu.hk/files/7997926/download?download_frd=1))

The four columns are:

* Color of the product
* Region of customers
* The number of products purchased in that color to that region
* Sales amount in HK dollars

Goal: examine the differences of customer preferences on color across different regions.

A screenshot of a computer

Description automatically generated

* **It’s your turn! [30 mins]**

Assume that you are the general manager of three stores. One of your duties is to monitor the sales figures on various products so that you can better adjust the inventory levels and to study not only the performance of the store but also the performance of a particular product. (Download data from [***T7\_Data.xlsx***](https://canvas.cityu.edu.hk/files/7997928/download?download_frd=1)).

This is a group assignment where you will collaborate with your group members to complete the following questions. The steps to answer these questions are similar to the demo.

1. What are the total sales of products P001, P003, and P005 sold in store A and store B?
2. What are the total sales of product P004 sold in all the stores A, B, and C?
3. What are the total profits made from selling products P002, P004, and P005 in stores A and B?
4. What are the most popular and the least popular products (in sales) among all the stores? Can you visualize it, in addition to using table?

**Activity 5. Preview of Next Tutorial Readings**

Topic for next tutorial discussion:

“Social commerce: a fad or a trend? Will social commerce become a money generating machine?”

Suggested Readings:

Bertram, A. (30th July 2015), The Guardian, “The Imminent Invasion of Social Commerce”, <http://www.theguardian.com/small-business-network/2015/jul/30/invasion-social-commerce-amazon-facebook-twitter>

Everett, E. (11th August 2015), Business 2 Community, “The Rise of Social Commerce in 2015: The Year of Shopping Socially” <http://www.business2community.com/brandviews/omi/the-rise-of-social-commerce-in-2015-the-year-of-shopping-socially-01299080>