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| **Case study I – Group Assignment (10%)**  **Presenting and Interpretation of Business Numerical Data** |

1. **Assignment objectives**

Upon completion of this assignment, students have

* Practised and developed proficiency in preparing tables and/or charts that highlight information.
* Developed advanced proficiency in using Word and Excel software.
* Practised analysing data that can be used to discuss trends and problems.

1. **Instructions/Details: formatting and submission information**
2. Students will work in groups.
3. Students will use Excel software to study and practice statistical formulas.
4. Students will use Word software to practice presentation of information.
5. Using Excel, students will practice on the following statistical formulas/tools: CountIf ; Sum/Average; Forecast or Growth; Pivot table
6. Each group selects only ONE of the following Options for their assignment (select your option and let you instructor know– “first come, first served” basis, no same option should be used by more than one group.

**Option 1:**

Get data form here:

<http://www.agr.gc.ca/eng/industry-markets-and-trade/international-agri-food-market-intelligence/reports/sector-trend-analysis-baked-goods-in-the-united-states-and-canada/?id=1537381272039>

Questions to answer (must include a table and an appropriate chart for each question as well as interpretation and conclusion):

Based on Positioning baked goods in the world by retail sales in US$ billions from 2013 to 2017

1. Calculate market share of top 5 counties for 2017 and 2016
2. Calculate growth rates for Canada for each year and create forecast
3. Calculate total retail sales and yearly growth rates for the following groups: North America, Europe+South America and Other countries group

**Option 2:**

Get data from here:

<https://www150.statcan.gc.ca/n1/pub/21-004-x/2017001/article/14786-eng.htm>

Questions to answer:

Based on Data table for Chart 1

1. Calculate shares of all presented types of milk out of total milk sales in 2015 and 2013
2. Calculate growth rate of All Milk sales for period of 2007-2015

Calculate total retail sales and yearly growth rates for the following groups: skimmed milk+1% milk, 3.25%+2% milk, other milk products.

**Option 3:**

Get data from here:

<http://publications.gc.ca/collections/collection_2013/rncan-nrcan/M141-16-2010-eng.pdf>

Questions to answer:

Based on Data table for Chart 1, page 20

1. Calculate shares of all presented types of clothes washers out of total clothes washers energy consumption in 2010 and 2009 (just for the purpose of this assignment lets assume that the data is for a hypothetical testing center that runs all the presented appliances with the presented energy consumption rates for the purpose of assessing the energy consumption)
2. Calculate growth rate of total refrigerators energy consumption for period of 2000-2010
3. Calculate total energy consumption and yearly growth rates for the following groups: all energy star appliances, all non-energy star appliances and total front-load clothes washers.

**Option 4:**

Get data from here:

<https://www.bankofcanada.ca/rates/banking-and-financial-statistics/chartered-banks-classification-of-non-mortgage-loans-formerly-c7/>

Questions to answer:

Based on Canadian dollar loans table

1. Calculate shares of all presented types of loand out of total “To purchase consumer goods and other personal services” loans in 2018Q3 and 2018Q4
2. Calculate growth rate of To purchase consumer goods and other personal services” loans for all presented quarters
3. Calculate total loans and yearly growth rates for the following groups: Private passenger vehicles+ Mobile homes, Renovations of residential property+ Other and Credit cards group.

**Option 5:**

Get data from here:

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2310019901>

Questions to answer:

Based on Archived - Canadian vehicle survey, fuel consumed, by type of vehicle, type of fuel and type of vehicle body, annual (x 1,000,000)

1. Calculate shares of gasoline consumption for all presented types of vehicles out of total gasoline consumption in 2009 and 2008
2. Calculate growth rate of total gasoline consumption for period of 2005-2009
3. Calculate total gasoline consumption and yearly growth rates for the following groups: car+van+ sport utility vehicle, pickup truck+straight truck, Tractor trailer.

**Option 6:**

Get data form here:

<https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2019007/article/00003-eng.pdf?st=MUxa-Td_>

scroll to Table 2

Questions to answer (must include a table and an appropriate chart for each question as well as interpretation and conclusion):

Based on quantity of drinks consumed by population from 1-18 years old:

1. Calculate consumption rates 5 presented categories of drinks for 2004 and 2015 for Total: Both sexes, 1 to 8 years +Both sexes, 9 to 13 years.
2. Calculate total consumption for each drink category for total: Male, 14 to 18 years + Female, 14 to 18 years for each year
3. Calculate growth rates for each drink category for total: Male, 14 to 18 years + Female, 14 to 18 years for each year and create forecast

**3. Details and submission**

1. Students present the work in a Word document format (i.e.; cover page, headings, page numbering, etc.). The purpose of this assignment is to give students the opportunity to practice some statistical formulas and tools in Excel so that students are prepared to apply the same formulas/tools with data in real working assignments (e.g.; coop, internship, or other job functions).
2. It is imperative that students practise making evidence based conclusions, i.e. they present the evidence (data in the form of tables and chars) and then their conclusion based on these presented data. Example: “Apple is a great successful company” is an unsupported opinion/claim. “Apple’s worldwide annual revenue totaled $265 billion for the 2018 fiscal year. It makes Apple the world's largest technology company by revenue.” is an evidence-supported conclusion/claim with both evidence and conclusion presented clearly.
3. Submit your work into Blackboard by due date.
4. Total number of files for submission: one Excel file (practice work) and one Word file (presenting the work).
5. The assignment must be original and written by the students. Plagiarism and/or cheating offenses will be reported as per policies and procedures in place.

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|  | Rubric |  |
| Rubric | **Detail** | **Weight** |
| Excel functions | The right excel functions used properly | **6** |
| Report format | Correct format and presentation of solution | **2** |
| conclusion | evidence based conclusions made | **2** |