

# BUS 237 - Assignment 2: Product Selection

Due Date/Time: Check Canvas Assignments for the due date/time for your section!

### **Objective and Background**

The purpose of this assignment is to give you experience using a range of software productivity tools to address a realistic business task. The task is to create information for your company. You will use Microsoft Access and Excel to get sales information. Finally, you will use Microsoft Word to bring all the elements of your analysis together into a coherent and professional report.

Profitability is a function of the total profit earned on the sale of each item and the number sold. Thus, high-price, high-margin products may be profitable even if they do not account for the largest number of items sold. Conversely, low-price, low-margin products may be profitable if the products achieve high sales volumes. An effective retail manager must balance both.

### Scenario

You are an associate manager at *Seger*, a larger Scandinavian retail store specializing in furniture. Seger is going to put all of the items in the store on sale. You have been given the job of choosing a collection of items for the sale. Your have to choose which items provided in the inventory you want to sell by analytical methods.

### **Directions**

Your job is to analyze profitability of a collection of goods to maximize potential contribution. There is a limited space to display the goods, so not all of the goods available can (or should) be chosen. See the area for display in Diagram 1. Profit contribution is measured as sales **quantity \* price \* gross margin** (where gross margin is measured as a percentage of sales price). There must be **exactly 11** different products (from several categories) displayed in order to draw the interest of consumers. You are also responsible for developing a theme of your choice that ties the various goods together into a coherent marking theme.



## **Determining the Historical Sales of Each Product**

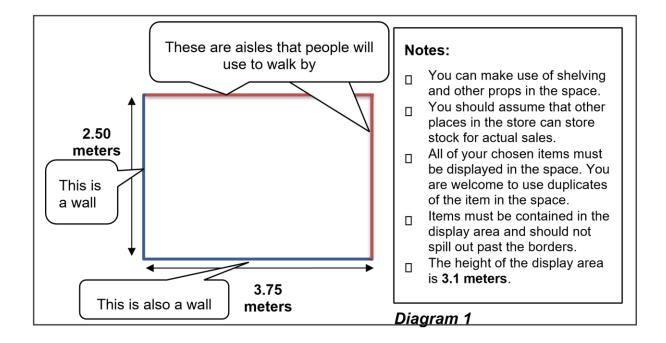
The collection of items is provided in the **Access** inventory database (**Seger\_Inventory**) containing two tables: **Products** and **Sales**. The **Products** table contains information about the small subset of Seger products considered to be top candidates for the sale, such as physical dimensions (in centimeters), selling price, and margin. The **Product\_ID** code reflects the <u>category</u> of the inventory item (100 = desks & tables, 200 = chairs, 300 = storage & shelves, 400 = boxes, 500 = lamps, 600 = vases, 700 = decoration, 800 = rugs, 900 = beds). The **Sales** table provides sales (in number of units sold) by date and retail outlet — you should estimate sales volume using this data.

• <u>Use the query feature in Microsoft Access to join the tables and calculate aggregate sales for each product.</u> Consider only sales from May 1,2021 to August 31, 2021

Calculating the Retailing Contribution of Each Product:

The boss has asked you to select the products for the retail display based on their potential profit contribution. For this purpose, you must create an **Excel** spreadsheet showing your method for analyzing the contribution of each product.

- Import the results of your historical sales query into Excel and use Excel's arithmetic capabilities to calculate the necessary measures and ratios.
- Use Excel's sort feature to rank the list of products in terms of contribution (highest profit at the top).
   Only keep the products you want to display in the store remove the rest of the inventory products from the sheet.
- Create an appropriate chart in Excel that shows the amount of profit generated by each product. Use
  data labels to highlight the markers on the chart so you know which marker belongs to which product.





## **Submission Instructions:**

## Submit via Canvas Assignments tool the following four files:

### 1. The Report (4 pages)

Create a Word document (in a professional **memo** format) addressed to your boss (in this case, your TA) outlining your analysis and design for the retail display area. Your document should contain:

- A cover page with your name, student number, and the name of your TA.
- Your 4 pages MS Word Report with the following sections appropriately labeled and formatted:
  - 1) **Introduction** A brief introduction that outlines the task and your methodological approach to product selection. You also need to identify your selected theme and justify it as well as describe the contribution rationale you used for your selection.
  - 2) **Table** (copy/paste from Excel) A list of the products you have selected for display. This list should show the critical elements of your contribution calculations and include only the products you selected for display. Your design of the spreadsheet is an important part of the assignment.
  - 3) **Chart** (copy/paste from Excel) A chart that compares the contribution from each item in your display.

#### 2. Your Access Database

Your database file should contain a single saved query named "*Profit2023*" plus the original two tables provided. The query should join the necessary tables and apply criteria to limit the results to those required for subsequent contribution analysis. **Hint**: Create the required relationships first.

### 3. Your Excel Spreadsheet

Your spreadsheet file should contain one sheet showing your contribution calculations and a second sheet showing your contribution chart. Each sheet should be named appropriately. All other sheets should be removed. The spreadsheet should be well laid out and well documented.

Marking Criteria:

- Students are expected to work independently on this assignment, therefore, TAs have been instructed to award a maximum grade of negative 15 (i.e., -150% cheating penalty) to students whose submissions suggest that they collaborated with others on their assignments (report and supporting files). This applies to the original author of the work, as well as to those whose submissions resemble it!
- You can get help from your TA and other reasonable means. Please kindly write it in the Acknowledgment section and put it at the end of the cover page.
- Late submissions will NOT be accepted. A grade of zero will be awarded for missed deadlines.

Contact your TA immediately if you are having any problems with the Canvas submission process!