Assignment 5

DATA MODEL FOR PETS-WE-BE

OPMT7750 Data Modelling & Business Intelligence

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STUDENT NAME A########

Company Overview & Background (abridged)

Pets-We-Be is a regional chain of pet stores operating in British Columbia Canada. The firm has been in operation for 15 years and is owned by the Smith family. The company has experienced slow growth over the last five years but ownership believes there is an opportunity to expand as Canada has experienced an increase in pet ownership of 3 percent since the start of the COVID-19 pandemic (Coletto, 2021). This report analyzes trends in pet ownership and the pet store market across Canada to to determine a growth plan for Pets-We-Be.

Problem Statement

How can Pets-We-Be understand pet ownership trends and the pet supply market in Canada to determine how to grow profitably?

Analytic Questions

Analysis of data will enable us to answer the following questions:

Analytic Question(s)	Why is the answer to this question important? Think, "so what?"
What areas in Canada have the largest domestic pet population?	Pets-We-Be needs to understand where to expand operations.
What are the trends in domestic pet ownership? • Families with pets • Pets per family	Understanding trends in pet ownership will help Pets-We-Be determine which markets provide growth opportunities.
What is the most profitable domestic pet to supply?	Pets-We-Be needs to know which pets provide the greatest profit potential.
What is the size of the competition?	Pets-We-Be needs to understand how the market is already being served to determine if an opportunity exists.
What are the profit margins on different supplies?	Pets-We-Be wants to understand the expected profit given the revenue and market opportunity?

Process & Limitations (abridged)

To build the data model, open source data was downloaded from two different web sites and a conversion table was created manually. Information about the data sources is found in the following tables.

Data Source 1 – Pet Population

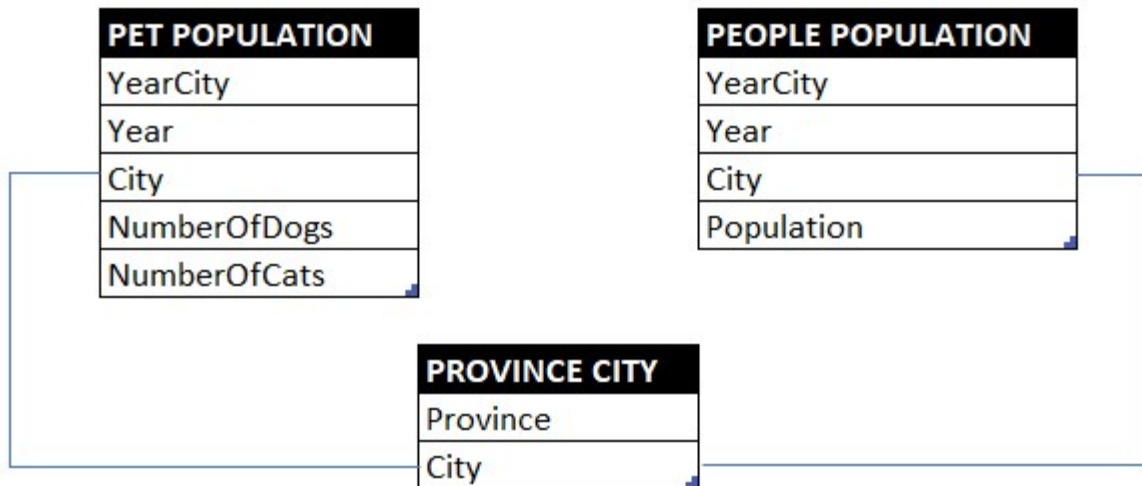|	
Reference	*Number of cats and dogs in households in Canada*, 2020, statista. https://www.statista.com/statistics/1015882/number-of-pet-cats-and-dogs-canada/
Source Format	Excel
Data Fields	City (text) Year (year) NumberOfDogs (number) NumberOfCats (number)
Primary Key	Merged column > Year|City
Relationship	Linked to People Population via Primary Key

Data Source 2 – People Population

Reference	*Census Profile,* 2016, Statistics Canada. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=01&Geo2=&Code2=&SearchText=Canada&SearchType=Begins&SearchPR=01&B1=All&TABID=1&type=0
Source Format	CSV
Data Fields	City (text) Year (year) Population (number)
Primary Key	Merged column > Year|City
Relationship	Linked to People Population via Primary Key

Data Source 3 – Province City Table

Reference	None (Created)
Source Format	Table
Data Fields	Province (text) City (text)
Relationship	Linked to City of Pet Population

The data sources will be formatted and shaped using Excel power query and will be merged to create a one-table model. The relationship between the data sources is illustrated below.

PET POPULATION
YearCity
Year
City
NumberOfDogs
NumberOfCats

PEOPLE POPULATION
YearCity
Year
City
Population

PROVINCE CITY
Province
City

References

Coletto, D. (2021, June 10). Pandemic pets: Did Canada see a pandemic pet boom? AbacusData. https://abacusdata.ca/pets-pandemic-canada/