



Group 2

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Introduction

When it comes to ice cream, Ben & Jerry's is arguably one of-- if not the most-- recognized companies in the world. Their products are distributed nationwide and around the globe in supermarkets, grocery stores, convenience stores, restaurants, cinemas and of course their very own scoop shops. With production facilities in Vermont, Nevada, Netherlands, and Israel, and such a vast array of demand for their product, keeping track of supply and demand is paramount.

The Problem

Ben & Jerry's products are distributed nationwide and around-the-globe in supermarkets, grocery stores, convenience stores, restaurants, cinemas and other ice-cream-friendly venues. Therefore, keeping track of orders outside of their licensed ice cream stores is vital for the efficiency of the delivery and distribution of Ben and Jerry's products. With a variety of buyers in different areas and different types of businesses it can be hard to keep track of orders and their distribution. The scope of our database will be limited to the Southern CA distribution of Ben and Jerry products. Common problems that can arise in instances where a inefficient database is used to manage a distribution of ice cream would could be:

- Incorrect order delivery of products
- Excess Inventory
- Loss of inventory

Problems arising from incorrect deliveries leave Ben and Jerry vulnerable to financial losses such as the refund of canceled orders as well as discounts offered in order to maintain distribution contracts. Excess inventory in distribution centers pose a great threat to all large scale distributors such as Ben and Jerry's. The lack of organization in the structure of a delivery and distribution network could lead to negative consequences for Ben and Jerry's. Keeping too much inventory in distribution centers could reduce available cash flow to the organization. Excess inventory would also create storage issues by taking up floor space which reduces company profits. Excess products in distribution centers would restrict the flow of new products to stores also creating a negative effect on profits. Excess inventory could also lead to the expiration of the shelf life of certain products which would also create a loss for the company affecting revenues.

Therefore, tackling problems such as the

1. Organization of orders
2. Organization of distribution & arrival dates

Are key to the success of Ben and Jerry's.

The Outcomes: Accessing the Data

Queries *[Summer]*

OrderID	StoreID	Name	Address	Ship Date	Arrival Date	ProductID	Quantity
101	WG1	Walgreens	600 Long Beach Blvd.	4/3/2021	4/5/2021	CG	107
101	WG1	Walgreens	600 Long Beach Blvd.	4/3/2021	4/5/2021	JR	67
101	WG1	Walgreens	600 Long Beach Blvd.	4/3/2021	4/5/2021	CPBS	34
101	WG1	Walgreens	600 Long Beach Blvd.	4/3/2021	4/5/2021	CTBC	56
102	WG2	Walgreens	E Anaheim St	4/15/2021	4/16/2021	GTM	74
102	WG2	Walgreens	E Anaheim St	4/15/2021	4/16/2021	CPBS	32
102	WG2	Walgreens	E Anaheim St	4/15/2021	4/16/2021	Sm	17
102	WG2	Walgreens	E Anaheim St	4/15/2021	4/16/2021	RWB	98
102	WG2	Walgreens	E Anaheim St	4/15/2021	4/16/2021	Sm	56
103	VN1	Vons	600 E Broadway	4/12/2021	4/14/2021	NC	3
103	VN1	Vons	600 E Broadway	4/12/2021	4/14/2021	PBC	67
103	VN1	Vons	600 E Broadway	4/12/2021	4/14/2021	C	12
103	VN1	Vons	600 E Broadway	4/12/2021	4/14/2021	CT	11
104	TGT2	Target	2270 N Bellflower Blvd	4/12/2021	4/13/2021	CS	55
104	TGT2	Target	2270 N Bellflower Blvd	4/12/2021	4/13/2021	CH	21

The “Upcoming Customer Orders” query gives us a listing of each customer along with the amount and which type of ice cream pints that need to be shipped to the respective stores. The ship date and arrival date are also included.

StoreID	Name	Address	OrderID	Ship Date	Arrival Date	Quantity	ProductID
WG1	Walgreens	600 Long Beach Blvd.	101	4/3/2021	4/5/2021	56	CTBC
WG2	Walgreens	E Anaheim St	102	4/15/2021	4/16/2021	74	GTM
WG2	Walgreens	E Anaheim St	102	4/15/2021	4/16/2021	32	CPBS
WG2	Walgreens	E Anaheim St	102	4/15/2021	4/16/2021	17	SM
WG2	Walgreens	E Anaheim St	102	4/15/2021	4/16/2021	98	RWB
WG2	Walgreens	E Anaheim St	102	4/15/2021	4/16/2021	56	Sm
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	22	CCBBB
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	20	MCC
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	20	MW
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	20	EBT
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	15	C
WG2	Walgreens	E Anaheim St	108	4/18/2021	4/22/2021	10	Sm
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	15	NC
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	20	C
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	20	GTM
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	20	OTS
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	22	PP
WG1	Walgreens	600 Long Beach Blvd.	109	4/25/2021	4/26/2021	12	BP
Total						757	21

The “Upcoming Orders for Walgreens” digs down into what amount and which type of ice cream needs to go to specific southern California Walgreens locations. The ship date and arrival date are included as well.

CenterID ▼	CountOfProd ▼	SumOfQuant ▼
NV	32	925
VT1	27	878
VT2	29	844
Total		

The “Production Center Quantity“ query provides a total of number of products and total quantities being shipped from the 3 Ben & Jerry’s production facilities to specific southern California locations.

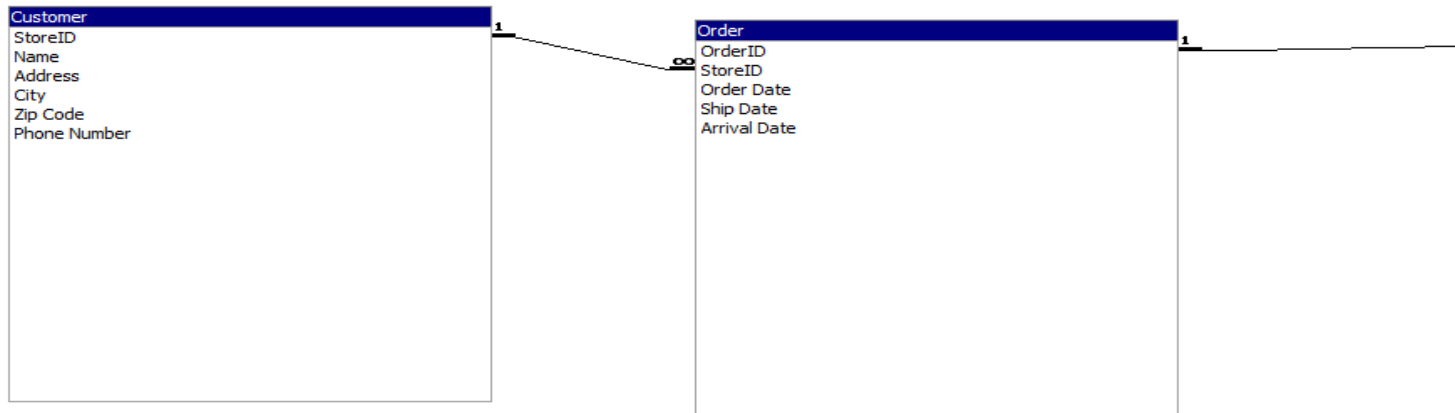
Reports

Production Center Quantity Report X Upcoing Order Query Report X						
Upcoing Order Query Report						
Name	StoreID	Address	Ship Date	Arrival Date	OrderID	ProductID
Ben & Jerry's	B&J1	2441 Main St	4/25/2021	4/27/2021		111 HB
						111 GS
						111 MCC
	B&J2	7559 Carson Blvd	4/25/2021	4/28/2021		112 GTM
						112 PBHB
						112 MC
	B&J3	6081 Center Dr Space 208	4/25/2021	4/29/2021		112 OTS
						113 PP
						113 CPBS
	B&J4	800 N Alameda St	4/25/2021	4/26/2021		113 C
						114 OTS
						114 PBHB
	B&J5	1307 Ocean Front Walk	4/26/2021	4/27/2021		114 C
						115 HB
						115 AD
	B&J6	6801 Hollywood Blvd Suite 157	4/27/2021	4/28/2021		115 GS
						115 CF
						116 CG
						116 CH
						116 BSM

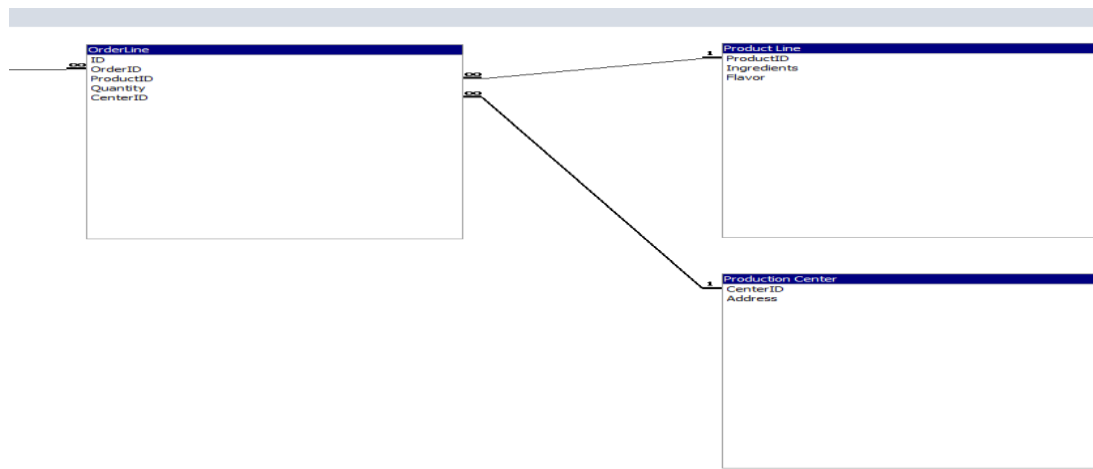
This query report shows the upcoming orders that are coming from the customers(stores) and picking up what the product is and when it should be scheduled to be delivered and arrive. With the report and query we can keep track of upcoming orders in an efficient manner.

Relationship Report

Relationships for Ben Jerry's Project (2)
Tuesday, April 27, 2021



The first part of the relationship report shows how the relationship starts with the customers information and then the order information that the customer made. There is a match in storeID in order to reference where the order came from.



The second part of the relationship shows how that order goes to an order line, organized with other orders, relating with its ID followed by the product line and the production carrier. The order connect to the product line to know what product is being ordered and connected with the production center to then know where it will produced.

Forms [Daniel]

Order

OrderID

StoreID

Order Date

Ship Date

Arrival Date

101

WG1

4/1/2021

4/3/2021

4/5/2021

We decided to create 4 forms for this project. The form above gives the user a look at all orders that have been entered into the database. This would be the easiest way to look up any order number, where it's going to, when does it ship, and when does it arrive.

These forms are created to give the user an expedited and simplified view on many things within the database. Below you can see a form for all the distribution centers as well as all our customer locations. The last form we created was one that lists all of the flavors of ice cream we offer.

Forms are the simplest and best way to get basic information out of the database without having to look through multiple lines and rows within the tables.

The screenshot displays a web application interface. On the left, a 'Customers' table is shown with the following data:

StoreID	Name	Address	City	Zip Code	Phone Number
1001	Ben & Jerry's	2441 Main St	Santa Monica	90405	(310) 597-5335

On the right, a 'Production Center' form is visible, containing the following information:

CenterID: 1001

Address: 2125 Village Walk Drive, Henderson, NV 89052

The bottom of the image shows a browser status bar with the text 'Report: 14 - 1 of 18' and a search bar.

What Challenges Did We Face?

Throughout the duration of our project our team overcame several hurdles by balancing and aligning our schedules and good old-fashioned teamwork. When it comes to group projects with larger groups, a prominent obstacle we often faced was finding a certain time in which all of our schedules aligned with each other, in which we could meet and plan. Although this was a huge challenge, we made sure to combat this by having open and transparent communication. All members were verbal of their schedules, which allowed us to better assist the situation of scheduling.

Because this project focused on Access, we took turns on who had the file and editing power. We decided it was best that not everyone be on the file at once for organization purposes. The team also had difficulties sharing the file, since some of our members were able to access the latest version of the file while others didn't. Because some members use Mac and others use Microsoft, Access was not accessible to every member. Luckily, those using Mac were able to log onto MyVirtualLab via CSULB online platform that is available to all students. Even on MyVirtualLab however, it was not updated with the latest version of Access, and so those editing on the MyVirtualLab version of Access could not open the file. In order to keep the flow of our project running smoothly, our team members instantly communicated this issue, and we were able to find a solution. Our solution was to join together on Discord or Google Meet, and have those who have access to the latest version edit through verbal instructions. Although this was not our most ideal plan, all team members were more than willing to cooperate in order to get things done!