

Apogee Consulting Group

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Choose 2022

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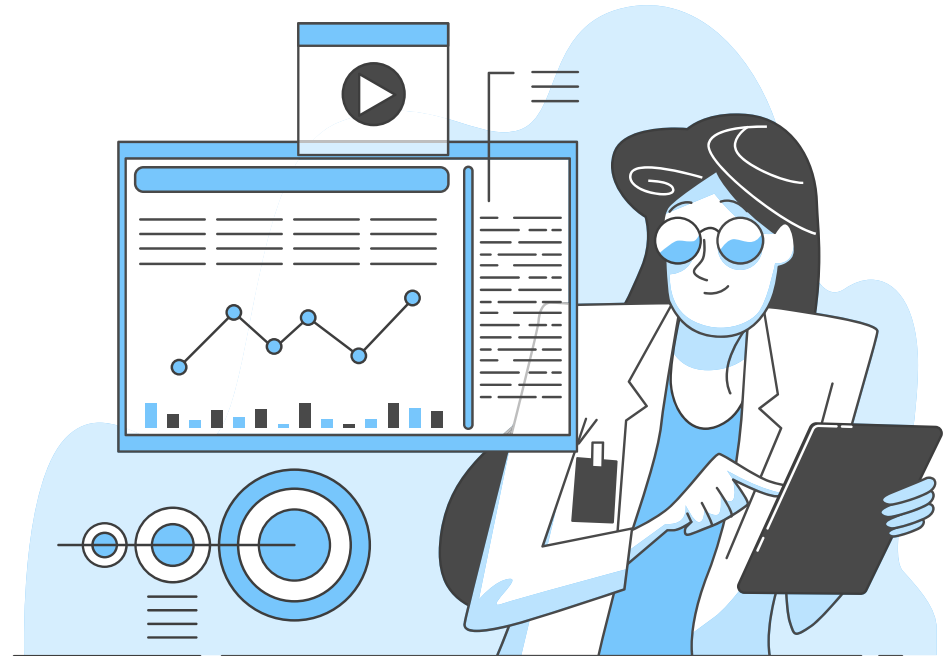
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01

What is Apogee
Consulting Group?





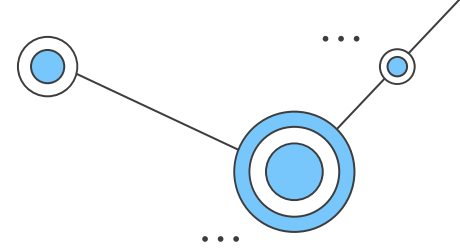
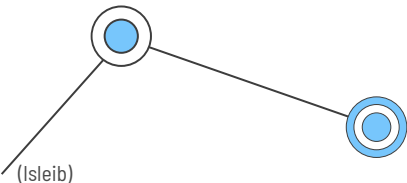
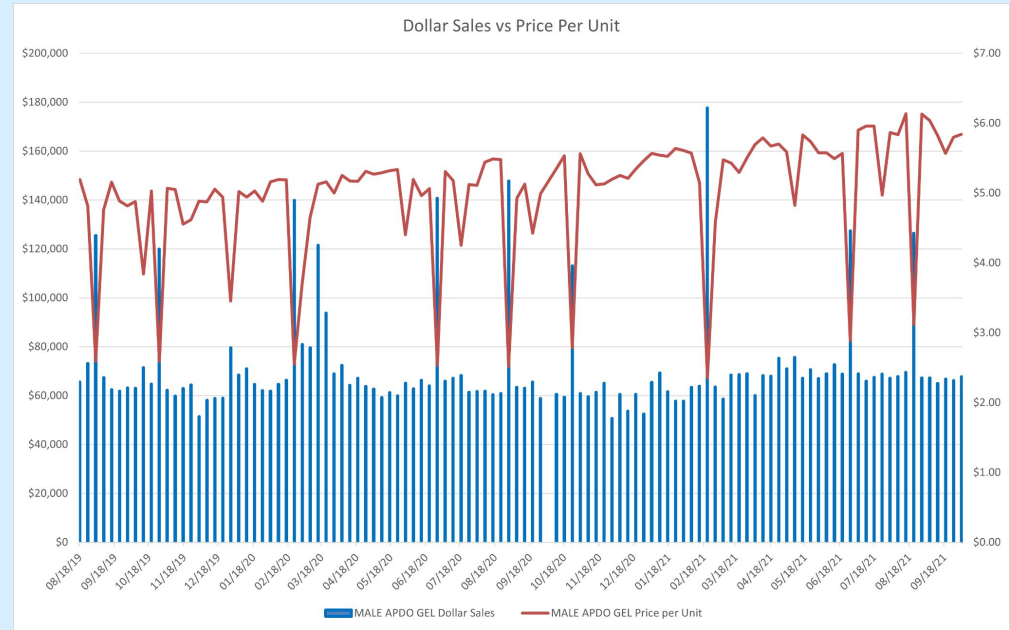
Apogee Consulting Group

- Apogee Consulting Group is a local business that specializes in revenue and category management
- Helps brands and retailers increase revenue through targeted promotions and “strategic storytelling”

...

What is “Strategic Storytelling?”

- ➔ “Aligning an organization on a path forward based upon data and insights”
- ➔ Chart shows revenue vs product price that week
- ➔ Notice: lower price correlates with a jump in revenue



Example

Deal:
Buy 3 bottles for \$9



Deal:
Buy 2 bottles for \$9 get
one **free**

Notice the price for one bottle does not change



+74%

Increase in profits

What Do They Look At?

Elasticity

A products
responsiveness to a
change in its price

Volume Price Mix

How much of a brand's revenue
is created through a change in
volume (number of products
sold), change in price, or
change in the ratio of products
sold

Velocity

Revenue per store
vs items sold per
store



Why Apogee Consulting Group?

01

Experience and Applied Knowledge

- Existing knowledge in CS
- Pursuing career in CS

02

Learn about Data and Predictions

- Types of data
- Using data for predictions

03

Existing Connection

- Sponsor was my neighbor
- Offered internship position

04

Flexibility

- Ability to work from home
- Flexible schedule



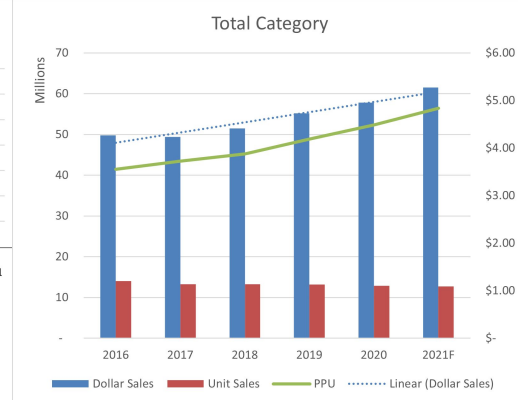
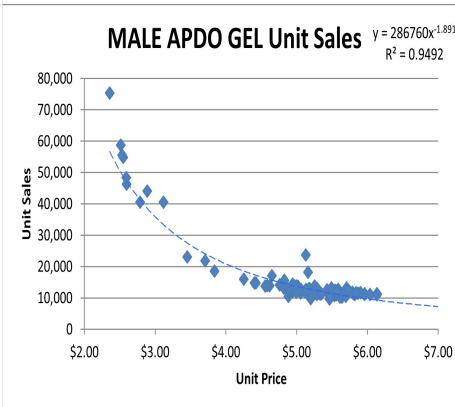
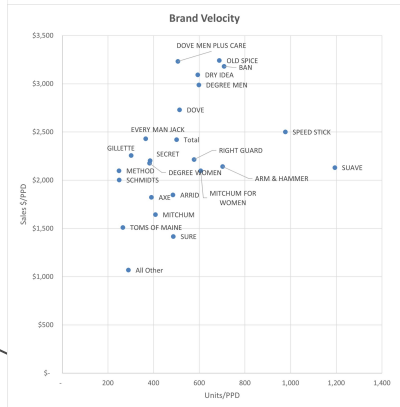
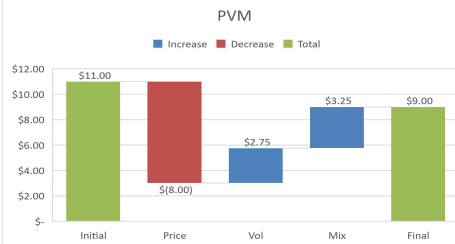
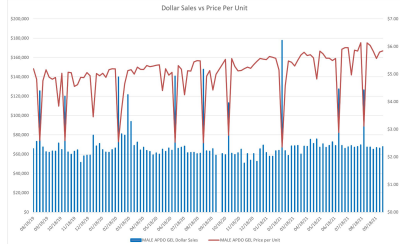
02

What Did I Do?



Date	Total	Incrementality									
		CAFE	CHIA	JUICE	KOMBUCHA	OTHER	PROBIOTIC	PROTEIN	SMOOTHIE		
3/15/2020	\$	12.1	\$ 0.2	\$ (0.1)	\$ 2.2	\$ 4.8	\$ 0.7	\$ 0.6	\$ 0.2	\$ 3.6	
3/22/2020	\$	7.1	\$ 0.1	\$ (0.1)	\$ 1.4	\$ 3.5	\$ 0.5	\$ 0.3	\$ (0.3)	\$ 1.7	
4/15/2018	\$	4.6	\$ 0.0	\$ (0.0)	\$ 0.7	\$ 1.7	\$ (0.0)	\$ 0.4	\$ 0.4	\$ 1.4	
3/8/2020	\$	4.4	\$ 0.0	\$ (0.1)	\$ 0.5	\$ 2.8	\$ 0.4	\$ 0.3	\$ (0.0)	\$ 0.5	
7/19/2020	\$	4.4	\$ 0.2	\$ (0.1)	\$ 0.4	\$ 2.8	\$ 0.3	\$ 0.2	\$ (0.1)	\$ 0.8	
3/11/2018	\$	4.2	\$ 0.0	\$ (0.0)	\$ 0.7	\$ 1.4	\$ (0.0)	\$ 0.5	\$ 0.2	\$ 1.4	
1/14/2018	\$	4.1	\$ 0.0	\$ (0.0)	\$ 1.3	\$ 1.0	\$ (0.0)	\$ 0.4	\$ 0.1	\$ 1.4	
5/13/2018	\$	3.9	\$ 0.1	\$ (0.0)	\$ 0.3	\$ 1.8	\$ 0.1	\$ 0.4	\$ 0.3	\$ 0.9	
3/4/2018	\$	3.7	\$ 0.1	\$ (0.0)	\$ 0.6	\$ 1.4	\$ (0.0)	\$ 0.5	\$ 0.1	\$ 1.1	
3/18/2018	\$	3.7	\$ 0.0	\$ (0.0)	\$ 0.6	\$ 1.2	\$ (0.0)	\$ 0.5	\$ 0.2	\$ 1.1	
3/19/2017	\$	3.6	\$ 0.1	\$ 0.1	\$ 1.0	\$ (0.5)	\$ (0.1)	\$ 0.2	\$ 0.4	\$ 2.4	
4/14/2019	\$	3.6	\$ 0.1	\$ (0.1)	\$ 0.1	\$ 2.3	\$ 0.0	\$ 0.3	\$ 0.3	\$ 0.6	
5/6/2018	\$	3.6	\$ 0.0	\$ (0.0)	\$ 0.4	\$ 1.7	\$ 0.1	\$ 0.5	\$ 0.3	\$ 0.7	

Ratio of Incremental dollar share to dollar share										
CAFE	CHIA	JUICE	KOMBUCHA	OTHER	PROBIOTIC	PROTEIN	SMOOTHIE			
0.16	(0.35)	0.23	0.40	0.54	0.32	0.08	0.21			
0.11	(0.94)	0.25	0.50	0.71	0.32	(0.16)	0.17			
0.04	(0.11)	0.17	0.37	(0.06)	0.51	0.23	0.18			
0.03	(1.10)	0.16	0.63	0.93	0.45	(0.00)	0.08			
0.28	(2.12)	0.12	0.64	0.84	0.37	(0.11)	0.13			
0.06	(0.05)	0.18	0.34	(0.15)	0.59	0.13	0.19			
0.06	(0.15)	0.29	0.25	(0.18)	0.47	0.07	0.18			
0.21	(0.11)	0.09	0.47	0.31	0.54	0.23	0.15			
0.13	(0.18)	0.17	0.38	(0.19)	0.65	0.08	0.18			
0.08	(0.06)	0.18	0.33	(0.03)	0.63	0.15	0.17			
0.09	0.38	0.22	(0.13)	(0.20)	0.26	0.20	0.26			
0.15	(0.72)	0.03	0.65	0.06	0.58	0.21	0.11			
0.09	(0.07)	0.12	0.47	0.23	0.69	0.23	0.12			





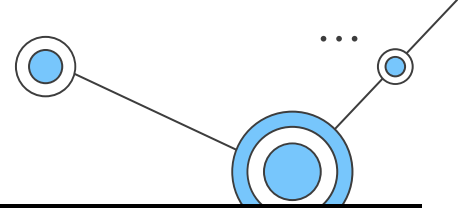
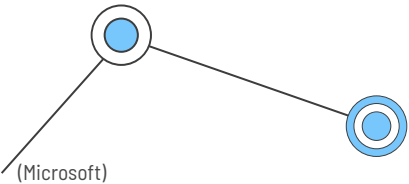
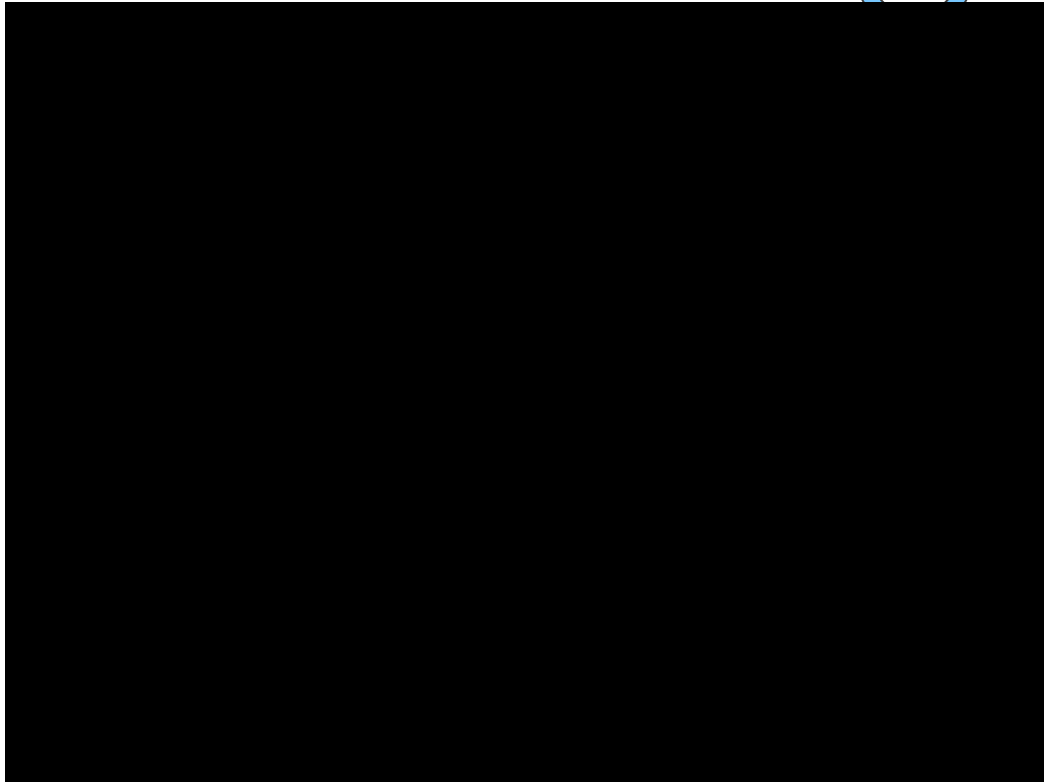
I wrote

1,700+

Lines of VBA Code

What Did I Do?

- Visual Basic for Applications (VBA)
 - The programming languages used in Microsoft Office Products
- Created “Macros” to automatically manipulate data and create tables and graphs

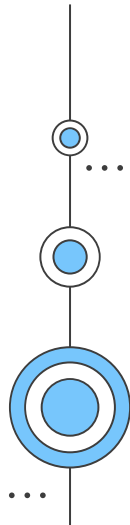
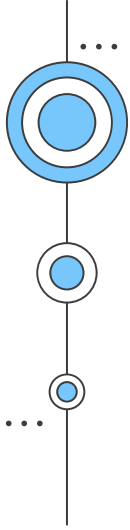


What Did I Do?

```
481 Private Sub InsertIntoElasticitySheet(ByVal title, ByVal elasticity, elasticitySheet, currentSheet)
482     ' Inserts {title} and {elasticity} into {elasticitySheet}
483
484     ' Go down the column until there is a free space
485     ' Insert {title} and {elasticity} into free space
486     elasticitySheet.Activate
487     Dim cell As Range
488     For Each cell In Range("A:A")
489         If IsEmpty(cell) Then
490             cell.Value = title
491             cell.Offset(0, 1).Range("A1").Value = elasticity
492             cell.Offset(0, 1).Range("A1").Style = "Comma"
493             Columns("A:A").EntireColumn.AutoFit
494             Exit For
495         End If
496     Next cell
497
498     ' Go back to current sheet
499     currentSheet.Activate
500 End Sub
```

03

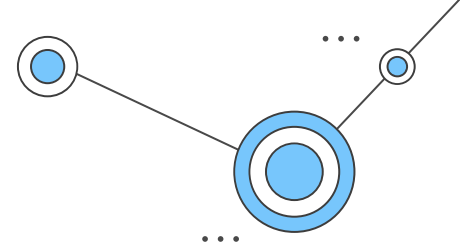
Types of Data



Business Data



Business Data



Data from Business

- ➔ Revenue
- ➔ Operational Costs
- ➔ Prices
- ➔ Product Volume

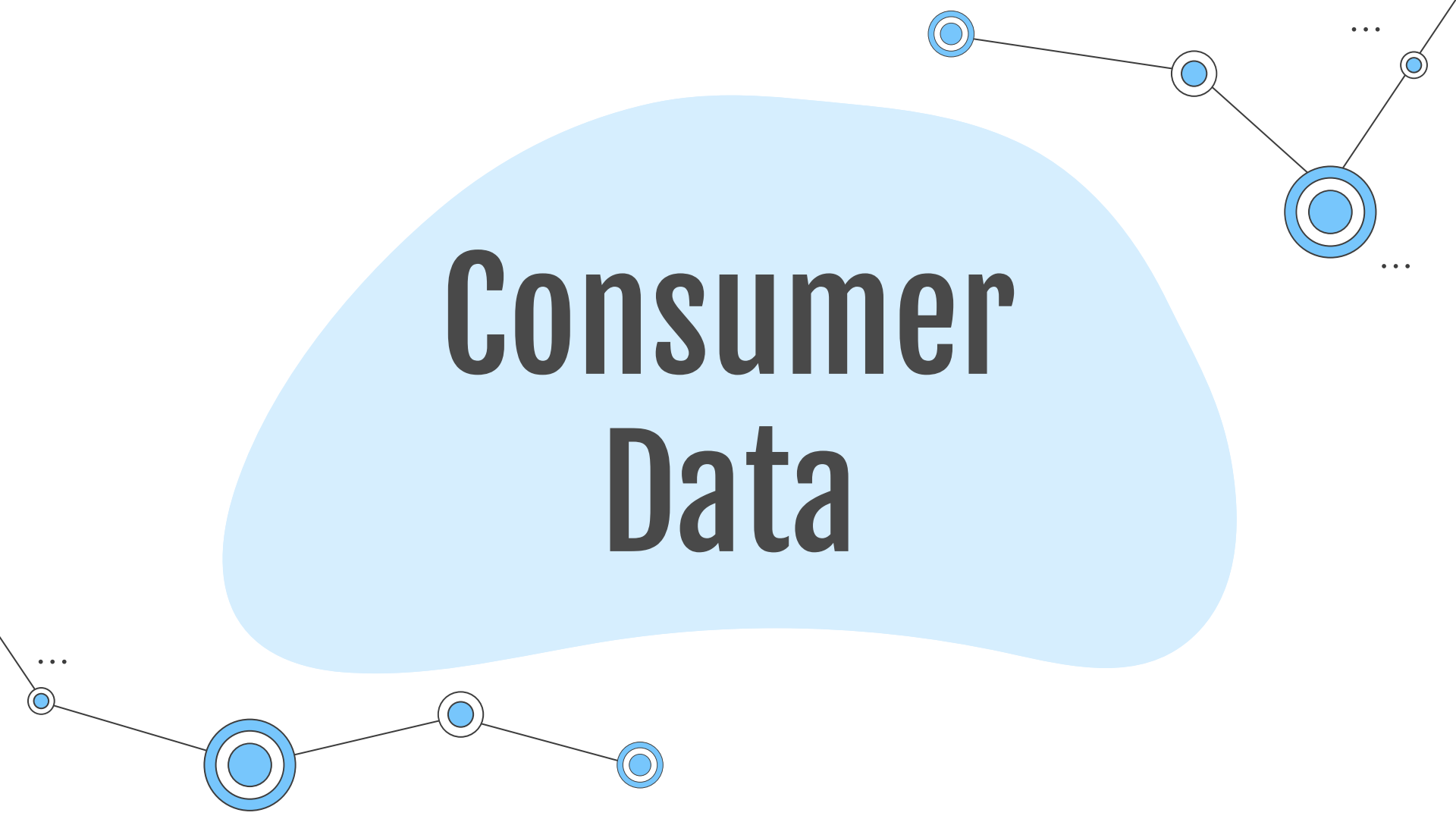


Syndicated Data

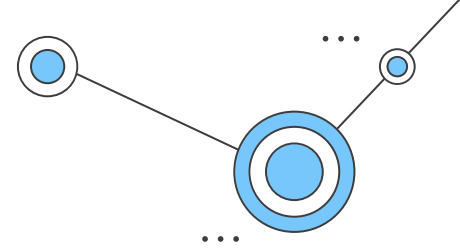
- ➔ From companies like Nielsen or IRI
- ➔ Standardized and structured
- ➔ Contains data for category



Consumer Data



Consumer Data



Engagement Data

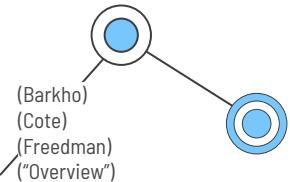
How consumers
interact with
business presence:
Websites, Social
Media, Apps

Personal Data

Any identifying data:
SSN, Name, Gender,
Device IDs

Behavioral Data

Details about
consumer behavior:
Transaction History,
Mouse movement,
CTR (Click Through
Rate)

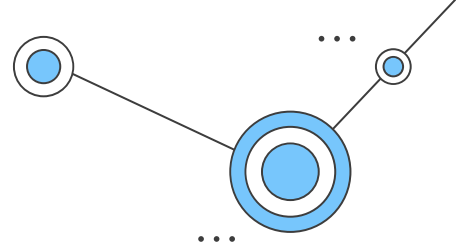


(Barkho)
(Cote)
(Freedman)
("Overview")

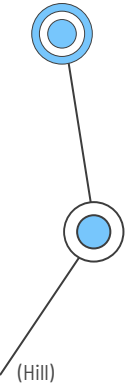
04

Making Predictions

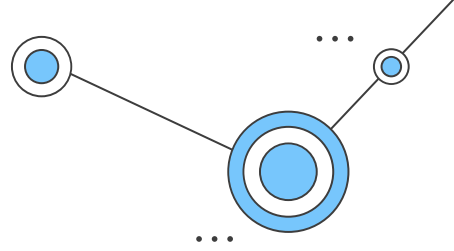
Target



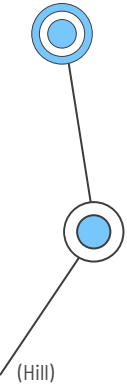
- A father came into Target asking why his teenage daughter was receiving maternity advertisements
- The manager did not know why and apologized to the man
- Later the manager called to apologize again but the man said that his daughter was actually pregnant



Target

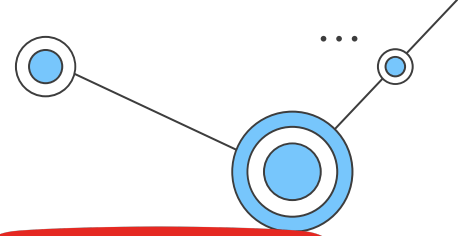
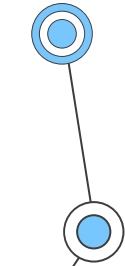


- Target assigns every guest an ID tied to their credit card, name, or email
- They track every purchase you make as well as buy information from other sources
- They use historical data to predict what you want to buy



Recommendation Systems

- Used by Netflix, Amazon, Youtube, etc.
- Machine Learning algorithms designed to take customer interests and recommend products





05

Takeaways



What did I learn?

- ➔ Visual Basic for Applications
- ➔ Marketing terms and uses
 - Velocity, PVM, Elasticity, etc.
- ➔ Types of data
- ➔ Data collection methods
- ➔ Making predictions with data



Thanks

Dan Isleib

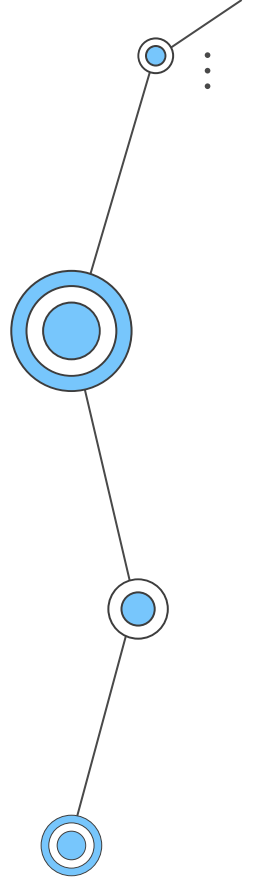
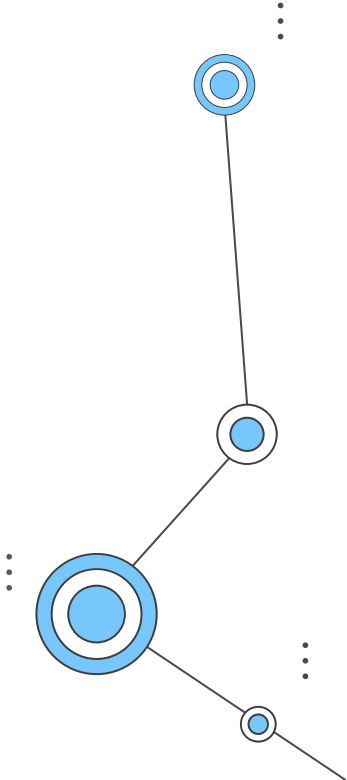
My Sponsor

Mr. Maxam

My Mentor

Ms. Ardolino

My Coordinator



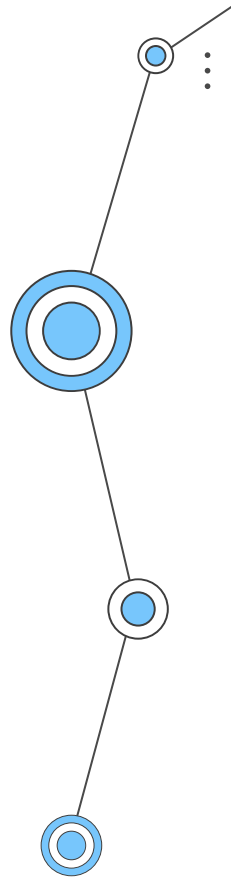
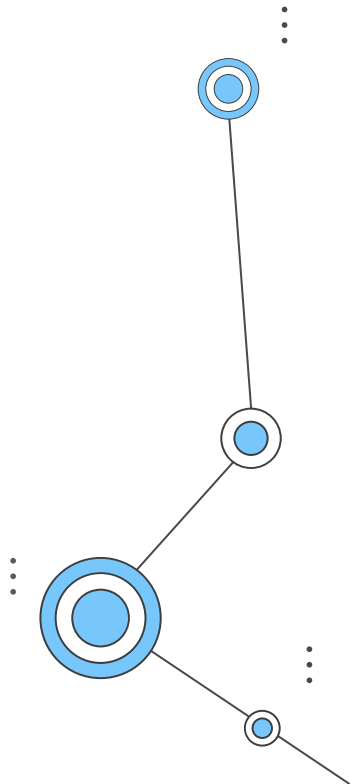
Thanks

Do you have any questions?

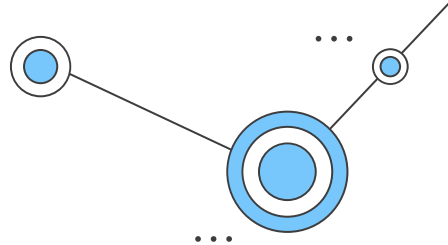
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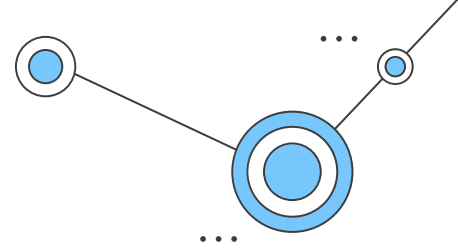
Works Cited



- Barkho, Gabriela. "How brands are designing loyalty programs with data in mind." *Modern Retail*, Digiday Media, 31 March 2021, <https://www.modernretail.co/retailers/how-brands-are-designing-loyalty-programs-with-data-in-mind/>. Accessed 10 June 2022.
- Catsambas, Aris. "Financial Management: Volume/Price/Mix | by Aris Catsambas | Medium." *Aris Catsambas*, 12 July 2020, <https://arisc.medium.com/financial-management-volume-price-mix-7540dce6c497>. Accessed 24 May 2022.
- Cote, Catherine. "7 Data Collection Methods in Business Analytics." *Harvard Business School Online*, 2 December 2021, <https://online.hbs.edu/blog/post/data-collection-methods>. Accessed 6 June 2022.
- Freedman, Max. "How and Why Businesses Collect Your Personal Data - businessnewsdaily.com." *Business News Daily*, 3 December 2021, <https://www.businessnewsdaily.com/10625-businesses-collecting-data.html>. Accessed 10 June 2022.
- Guennewig, Boris. "Business Data And Consumer Data: What's The Difference?" *Smrtr*, 19 March 2022, <https://www.smrtr.com.au/news-views/business-data-and-consumer-data-whats-the-difference/>. Accessed 10 June 2022.
- Hill, Kashmir. "How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did." *Forbes*, Forbes, 16 February 2012, <https://www.forbes.com/sites/kashmirhill/2012/02/16/how-target-figured-out-a-teen-girl-was-pregnant-before-her-father-did/?sh=2cd796746668>. Accessed 10 June 2022.
- Investment Guide. "Price Volume & Price Volume Mix Revenue Bridges." *Investment Guide*, <https://www.investmentguide.co.uk/price-volume-price-volume-mix-revenue-bridges/>. Accessed 10 June 2022.
- Isleib, Dan. *Personal Interview*. 9 June 2022.



Works Cited Cont.



- Kulutbanis, Manoli. "Distribution and Velocity - Back to Basics." *LinkedIn*, 1 October 2020, <https://www.linkedin.com/pulse/distribution-velocity-back-basics-manoli-kulutbanis>. Accessed 10 June 2022.
- Microsoft. "Getting started with VBA in Office." *Microsoft Docs*, 21 January 2022, <https://docs.microsoft.com/en-us/office/vba/library-reference/concepts/getting-started-with-vba-in-office>. Accessed 10 June 2022.
- Neilsen. "Nielsen Data-As-A-Service." *Nielsen*, <https://www.nielsen.com/eu/en/solutions/capabilities/nielsenmarketingcloud-daas/>. Accessed 10 June 2022.
- Ng, Andrew, and Stanford Online. *Machine Learning. Coursera*, Coursera, https://d18ky98rnyall9.cloudfront.net/_49836d3df9f40f803323ac9d614fcb94_Lecture16.pdf?Expires=1654992000&Signature=PJOgC9WW~fA0evIGxjAQ~SLM1P5vji3Cmus7f3CrqmS5nbIW3UzoWJrDX0hsq~odrxooLGR50onnho~QMRf~ivy4iJ~JieGk6EA08iEOLb9enKXtMkwdn~BDYFEizPf62g4LMbFzNRdI7. Accessed 6 June 2022.
- "Overview." *Data Axle Platform*, <https://platform.data-axle.com/people/docs>. Accessed 10 June 2022.
- Steck, Herald, et al. "Deep Learning for Recommender Systems: A Netflix Case Study." *AI Magazine*, vol. 42, no. 3, 2021, pp. 7-18. *Netflix Research*, <https://research.netflix.com/publication/%20Deep%20Learning%20for%20Recommender%20Systems%3A%20A%20Netflix%20Case%20Study>. Accessed 10 June 2022.
- "What Is Business Data And Why Is It Important For Companies?" *Rock Content*, 14 July 2021, <https://rockcontent.com/blog/business-data/>. Accessed 10 June 2022.

