Re-vitalizing Petco's Vital Care Wellness Program

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Executive Summary

Key Contribution

Our key contribution focuses on connecting Petco's two service verticals: PetCoach and the Vital Care Wellness Program. Our goal is to drive demand for the Vital Care program from our existing retail customer base. To reach our goal, we identified two highly engaged and profitable customer segments with the highest chance of enrolling and benefiting from the Plan. Although our campaign mainly focuses on the two groups mentioned above, we identified another category of customers that we believe will support Petco's retail stores expansion in key markets; these customers have the potential to increase sales online or at Petco's stores. Lastly, we noticed opportunities to cross-sell the Vital Care plan on the PetCoach digital platform which we address later in the report.

Methodology & Data Analysis

Our analysis was conducted using a customer dataset of Petco's transactional data from December 2004 to September 2012, aggregated at the customer number level. Using the RFM Model, we focus on high levels of frequency and recency of customer orders and overall profitability. The underlying assumption is that the ideal marketing targets of Vital Care are customers who have high recency and frequency purchasing patterns. Furthermore, applying a hybrid approach of HCA and K-Means analysis, we identified four distinct customer segments for a targeted marketing campaign to drive business to the Vital Care program.

Key Findings

We applied specific filters to our data analysis in which we looked at customers who have profitability >=$500, recency within 5-years, and frequency at least three orders. This enabled us to create four distinct customer segments and profiles described below.

Customer Segment 1 & 2: A large customer base of potentially 90,444 customers with limited purchasing power, which is only 12% of that of Segments 3 & 4. Their low frequency and recency indicated that they are not repeat or engaged customers. We will conduct outreach to these customers at a later date, as part of a planned expansion of Petco locations.

Customer Segment 3: Our higher-end customers. Their large amounts of disposable income and loyalty to our brand make them the most profitable segment with frequent and recent orders.

Customer Segment 4: Our mass customer base. This segment ranks 2nd in terms of profitability; however, their frequency of orders lags behind Segment 3.

It is important to note that an overwhelming majority of customers within all the segments (81% in Seg.3 and 69% in Seg.4) preferred the mail and phone channels over the web.

Conclusion

Our immediate marketing campaign focuses on targeting our most highly engaged and profitable customers in Segments 3 & 4 in order to drive sales to the Vital Care Plan. However, by incorporating the lower-end customers in Segments 1 & 2 in the near future, we create an ecosystem for both existing and new customers that organically connects our retail business, online educational platform - PetCoach, and insurance offering - Vital Care. As a result, in the long-term we anticipate stronger brand loyalty amongst our customers.

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Introduction

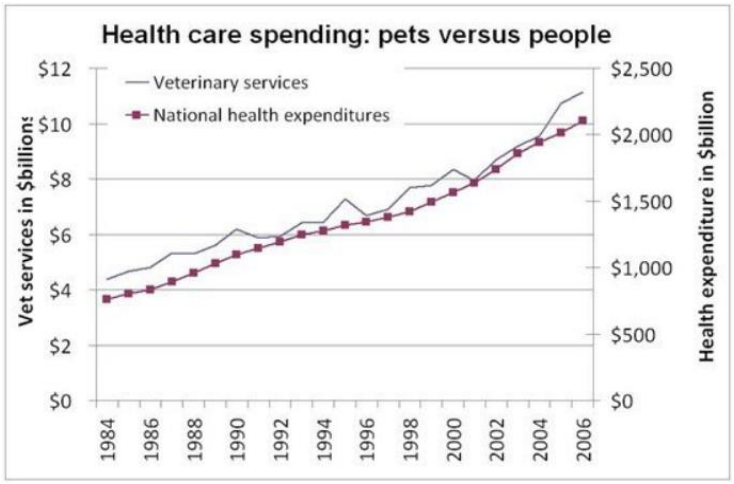
Growth Drivers in Petcare Market Trends

The global pet care market has been on a growth trajectory since the past decade and is expected to reach USD 202.6 billion by 2025, according to a new report by Grand View Research, Inc. A rise in the adoption of pets and growing demand for premium care products are a few of the factors expected to drive market growth.[1] Other factors that fuel this accelerated market growth include: higher disposable incomes per capita, and declining birth rates, all of which have created a greater demand for pet insurance. In addition to this, as Millennial and Generation Z consumers have come into adulthood, they have embraced the pet-owning and pet-loving lifestyles to a far greater extent than preceding generations. While baby boomers account for 32% of pets owned, households headed by younger cohorts account for 62% of pet ownership.[2]

Growth in Pet Healthcare Expenses

The growing expenditure on veterinary care remains one of the highest sources of spending in the pet care community. Total spending on vet care in America in 2020, excluding OTC pet medication, is estimated to reach $16.62 billion[3]. Skyrocketing expenditures in pet healthcare are further supported by the fact that pets are increasingly seen as a member of the family. Figure 1. illustrates how spending on pet healthcare has even outpaced national healthcare expenditures, making it a lucrative segment of the industry. Moreover, the frequency of vet visits has increased due to lower prices that further make pet care more accessible to a larger audience.

Figure 1 - Pet Healthcare Spending Trends



Furthermore, growing awareness about pet health has fueled demand for grooming products, insurance, and veterinary care. In fact, Google trends show a steady rise in interest in Pet insurance over the past decade[4] . For this reason, it is imperative that Pet Care companies diversify their offerings beyond retail products to include overall pet health and wellness services. In this way these companies can build an ecosystem of services and products that will attract a more loyal customer base and increase their market share.

Petco's Diversified Product Offerings

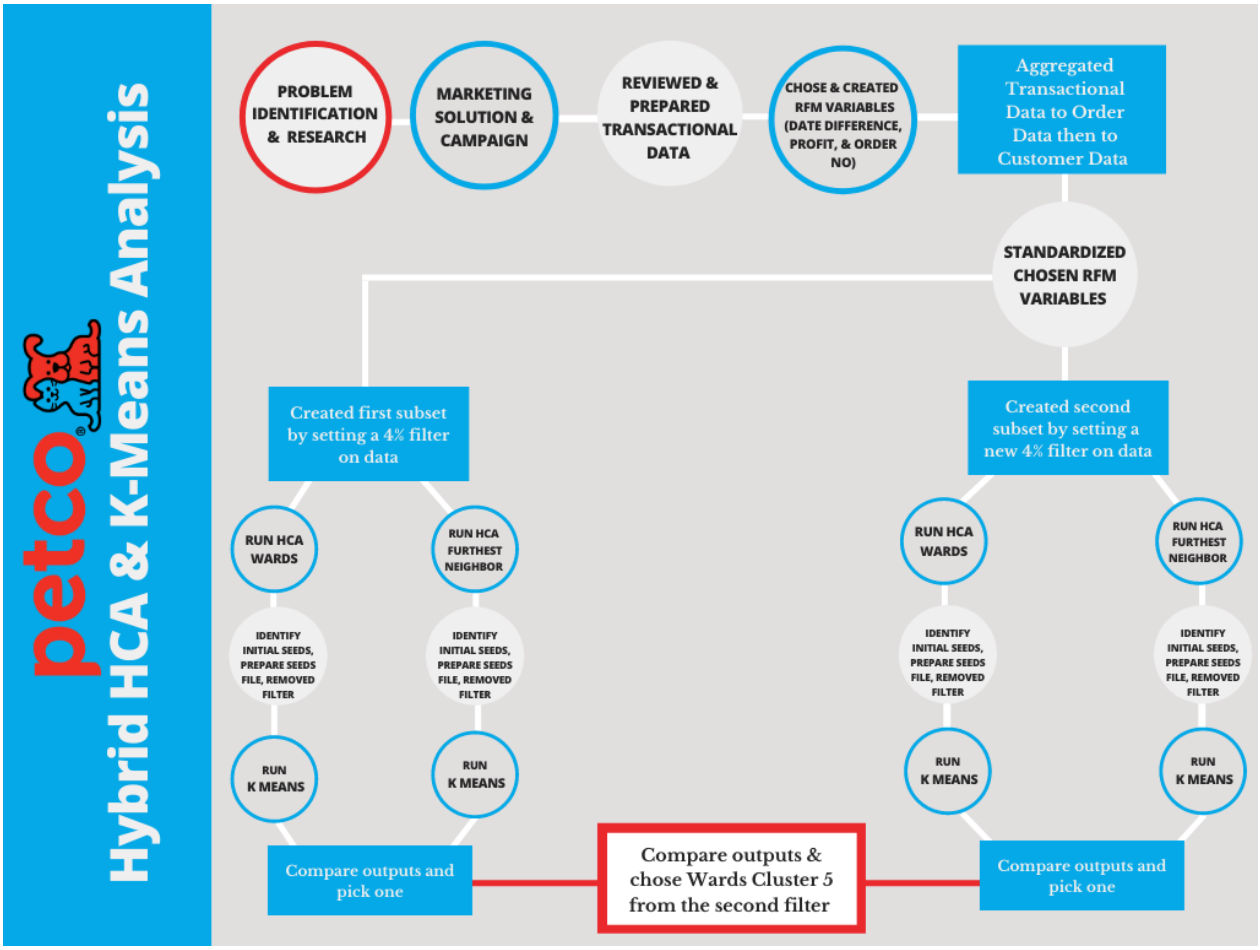
Petco has capitalized on the growing trends in pet health and wellness through its multi-service verticals. One of these verticals is PetCoach, a veterinary service offering that is on a digital platform. It was designed to engage pet parents at the most critical and significant entry point in their pet's life - healthcare. PetCoach offers not only online educational content, but also basic consultations, after hours' care, chronic conditions monitoring, follow-ups, prescription, and refill requests. Users can also book online consultations, set wellness reminders, or even schedule appointments.

On the other hand, Petco's Vital Care Wellness Plan is the latest offering. It is a paid annual insurance plan that addresses pets' overall health and well-being through routine

grooming and affordable veterinary care. With this plan, subscribers can use the wellness plan to manage their pets' preventative care needs at an affordable monthly rate of $19.

Methodology & Data Analysis

Figure 1: Flowchart of Data Analysis Process



As stated in the executive summary, our ultimate goal was to find customer segments that were: profitable for Petco, and/or had ordered multiple times in the past five years. With regards to future growth, we also wanted to find customers whom we could ‘train up’ to spend more, and in some cases, spend more often. We reviewed customers according to their purchasing channel: as in, those who ordered through the website, or by mail, and over the phone. We created two

separate immediate campaigns designed to reach the web purchasers (digital marketing), and one for the mail/phone purchasers (sending of a physical mail-in offer with an online redemption process).

We received the database of transactional client data for the years 2004-2012, from the company of Nejad and Friends. We ran a total of four hybrid combinations of (Ward & Furthest) Hierarchical Cluster (with Squared Euclidean as a measurement) and K-Means Analysis, with two different sets of filters. After comparing the two final clusters from each filter, we chose Ward Filter 2 Cluster 5, specifically Segments 3 & 4 because of all of the customers who had:

- Produced profits above or equal to $500 per month (*necessary to make it worth advertising to them*)
- Ordered within the last five years
- Ordered at least three times

Additionally, we selected customers from segments 1 & 2 to be targeted for later outreach as Petco expands locations. Due to their low recency, frequency, and profit, we felt it would be better to bring them along slowly, at a low cost to the marketing budget.

Creating Variables

Our first step in changing the client transactional data into one we could use for SPSS analysis was to choose the RFM (Recency, Frequency, Monetary) variables that we needed in order to judge customers by the criteria mentioned above. We created the Recency variable by changing the OrderDate variable into an actual "Date" mm/dd/yyyy in variable view. Then, we changed its measure to Scale. Afterward, we created a new variable called OrdersEnd. This date (09/17/2012) is the last day a transaction was placed during the time period the data set offered.

That date was included in the clients' variable description sheet. Similarly, we changed OrdersEnd into a "Date" mm/dd/yyyy and also made it Scale. Next, we populated EndDate by going to the data view, and Finding and Replacing the empty EndDate rows with the 09/17/2012 date. We then used the Date Wizard under the Transform Tab in SPSS to calculate the difference in time (in months) between the EndDate and the OrderDate, this created a new variable that we titled DateDifference. Finally, we created the Profit variable by going to the Transform tab in SPSS, choosing the compute variable drop-down, and bringing the Revenue and Cost variables into the Numeric Expression. We subtracted the Cost variable from Revenue and named our target variable Profit.

Conversion of the Client's Transactional Data into Useable Data

After creating the variables, we aggregated some of them, while choosing specific functions that were necessary for the HCA process. We also chose variables that we could possibly use for Post Doc Analysis.

We aggregated the data using the Break Variable Order No, first, in order to condense the number of transactions to only the number of orders placed, not the number of items purchased. We checked our newly created Order NO database's information against the original database's information and found that all was correct. Therefore, we were able to move forward and aggregate the data using the Break Variable Customer NO (See Table 1.)

Table 1. Variables that were Aggregated

	Break Variable: ORDER_NO	Break Variable: Customer NO
Variables Names	**Function Applied**	**Function Applied**
CUSTNO	First	
ZIP	Last	Last
ORDER_LINE	Unweighted	Unweighted
PRODUCT_NO	Unweighted	Unweighted
CHANNEL	Last	Last
DIVISION_ID	Unweighted	Unweighted
OFFER_ID	Unweighted	Unweighted
ORDER_DATE	Last	Last
REVENUE	Sum	Sum
PROFIT	Sum	Sum
PAY_METHOD	Last	Last
QUANTITY	Sum	Sum
SHIP_QUANTITY	Sum	Sum
DATE_DIFFERENCE	Mean	Mean
ORDER_NO		Unweighted

This placed all of the multiple transactions for one customer into one row. We confirmed that this dataset's information matched the original data. It did, so we were able to continue. Next, we standardized the variables we wanted to use for HCA which were: Order NO, Profit, and DateDifference.

Following, we created a 4% subset of the data in order to be able to run Hierarchical Cluster Analysis on it. We needed this step in order to create our Initial Seeds for the Key-Means

Analysis that we would need to perform next on the entirety of the database. The 4% filter was the first of two subsets to be run.

Once chosen, we ran the Ward Method using the Squared Euclidean measurement. After reviewing the difference of coefficients graph, created from our Agglomeration Schedule, we believed that the best clusters for the initial seeds would be found in the three to eight cluster range.

We reran HCA using the same method and measurement with 3 to 8 as the range used. We copied the resultant eight tables, made up of Z scores and their Means, into an excel spreadsheet. After comparing each table, we felt that the best cluster to use for our initial seeds was Ward Squared Euclidean Cluster 4. We copied that cluster into an excel spreadsheet, deleted the Means, and transposed the remaining data. (See Table 2.)

Table 2. Ward Squared Euclidean Initials Seeds1 Run 1

Ward Squared Euclidean Cluster 4								
	1		2		3		4	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count
Zscore(ORDER_NO_nu)	-0.0513	2698	-0.36093	1140	3.64609	156	23.16416	2
Zscore(PROFIT_sum_sum)	-0.03782	2698	-0.15368	1140	2.01201	156	23.69841	2
Zscore(DATE_DIFFERENCE_mean_mean)	0.48236	2698	-1.10732	1140	-0.04161	156	-0.01053	2

Ward's 4				
	1	2	3	4
	Mean	Mean	Mean	Mean
Zscore(ORDER_NO_nu)	-0.0513	-0.36093	3.64609	23.16416
Zscore(PROFIT_sum_sum)	-0.03782	-0.15368	2.01201	23.69841
Zscore(DATE_DIFFERENCE_mean_mean)	0.48236	-1.10732	-0.04161	-0.01053

Transposed

-0.0513	-0.03782	0.48236
-0.36093	-0.15368	-1.10732
3.64609	2.01201	-0.04161
23.16416	23.69841	-0.01053

Next, we put the transposed data into our waiting empty Initial Seeds sav file. Before entering the data from our chosen Ward Cluster into the Initial Seeds, we prepped the Initial Seeds database by adding the number of rows that were needed into the Data View (four rows were added including the Cluster_row). Then, we copy/pasted the standardized variables' Z-Score information from the Customer NO database into rows in the Variable View of the Initial Seeds. (See Table 3.)

Table 3. Prepping of Initials Seeds File for Ward and Furthest K-Means Analysis

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
1	Cluster_	Numeric	8	2		None	None	8	Right	Scale	Input
2	ZORDER_NO_nu	Numeric	11	5	Zscore(ORDER_...	None	None	14	Right	Scale	Input
3	ZPROFIT_sum_sum	Numeric	11	5	Zscore(PROFIT_...	None	None	17	Right	Scale	Input
4	ZDATE_DIFFERENCE_...	Numeric	11	5	Zscore(DATE_D...	None	None	28	Right	Scale	Input

Now that we had our first set of initial seeds (we will need another set for our Furthest Cluster K-Means process), and had taken off the filter, we were prepared to run the K-Means Analysis. When running our K-Means Analysis, we made sure that SPSS knew to run using four clusters and that it pulled data from the Initial Seeds file that we had titled Ward Squared Euclidean Initials Seeds1 Run 1. Our Ward's K-Means Clusters converged after 22 iterations, which was lower than our 100-iteration threshold, so we did not need to run it again. Therefore, we accepted this final cluster. Next, we created tables using the non-standardized variables of Order NO, Profit, and DateDifference with the Cluster 4 variable created by the Key Means process. We will compare this output with the Furthest K-Mean's Final Cluster Run 1 at the end of this first set of K-Means Processes. (See Table 4.)

Table 4. Ward K-Means Final Cluster Run 1

Ward K-Mean's Final Cluster Run 1								
	1		2		3		4	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count
Zscore(ORDER_NO_nu)	-0.18489	50220	-0.1704	44127	2.96911	5506	10.39776	44
Zscore(PROFIT_sum_sum)	-0.14295	50220	-0.10834	44127	2.01517	5506	22.82216	44
Zscore(DATE_DIFFERENCE_mean_mean)	0.82212	50220	-0.92941	44127	-0.05036	5506	0.06122	44

We repeated the entire process, using the same filter that was used for Ward, but this time using Furthest Neighbor as our method, and Squared Euclidean as our measurement. Our best Furthest Neighbor Cluster for the initial seeds was Cluster 4 of Clusters 3-8 (See Table 5.)

Table 5. Furthest Squared Euclidean Initial Seeds Run 1

Furthest Squared Euclidean Initial Seeds Run 1								
	1		2		3		4	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count
Zscore(ORDER_NO_nu)	0.00357	3991	22.68405	1	1.55949	3	23.64426	1
Zscore(PROFIT_sum_sum)	-0.00095	3991	14.97744	1	13.47335	3	32.41938	1
Zscore(DATE_DIFFERENCE_mean_mean)	0.0079	3991	-0.0303	1	0.34752	3	0.00924	1

We ran the K-Means process using Cluster 4 (the convergence happened after iteration number 35), producing this Cluster (See Table 6.)

Table 6. K-Means Furthest Filter 1 Final Cluster Choice

K-Means Furthest Filter 1 Final Cluster Choice								
	1		2		3		4	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count
ORDER_NO_nu	1	89687	8	957	3	9251	4	2
PROFIT_sum_sum	71.45	89687	984.64	957	303.03	9251	20278.65	2
DATE_DIFFERENCE_mean_mean	43.06	89687	42.21	957	41.3	9251	50.92	2

We compared the Ward Final Cluster with our Furthest Cluster from our first run and decided that Ward K-Means Filter 1 Cluster 4 would best suit our immediate Managerial implications. (See Table 7.)

Table 7. Ward K-Means Filter 1 Chosen Cluster and Segments

Wards K-Means Filter 1 Chosen Cluster's and Segments								
	1		2		3		4	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count
ORDER_NO_nu	1	50220	1	44127	4	5506	12	44
PROFIT_sum_sum	76.41	50220	82.55	44127	459.75	5506	4155.68	44
DATE_DIFFERENCE_mean_mean	62.76	50220	20.44	44127	41.68	5506	44.37	44

However, we were not prepared to make a final decision until we ran the entire process again, using a newly created 4% subset filter, and comparing final results. As stated, our dataset had already been cleaned up and was ready for the second filtering process. Therefore, we filtered and named the new variable Fliter2_4prct. We used the same HCA process using Ward Squared Euclidean and then Furthest Squared Euclidean. After comparing both the Final Clusters for Ward and for Furthest in this second run, we chose the K-Means Process using the Ward

Initial Seeds. We did this because segments 3 & 4 had high yet manageable counts for us to target, with motherless profitable segments (1 & 2) for later campaigns. Also, there were multiple Order numbers for us to choose from if we wanted to deepen our campaign and make offers to our two markets using not only their profit status, but also how many products that they ordered. (See Table 8.)

Table 8. Ward K-Means Filter 2 Chosen Cluster and Segments

Wards K Means Filter 2 Final Choice										
	1		2		3		4		5	
	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count
ORDER_NO_nu	1	42121	1	48323	7	1109	3	8333	18	11
PROFIT_sum_sum	76.1	42121	70.79	48323	896.83	1109	298.58	8333	7752.8	11
DATE_DIFFERENCE_mean	20.18	42121	62.92	48323	42.34	1109	41.63	8333	42.23	11

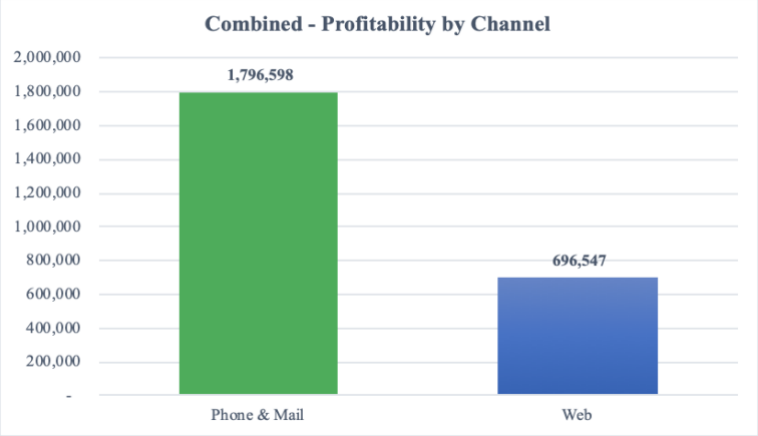
We completed the analysis by renaming two of our variables, leaving us with Order NO, Profit, and DateDifference.

Key Findings

Characteristics of Chosen Segments

When choosing groups to market to, we compared profitability amongst channels. (See Chart 1.)

Chart 1. Comparison of Profitability of Channels

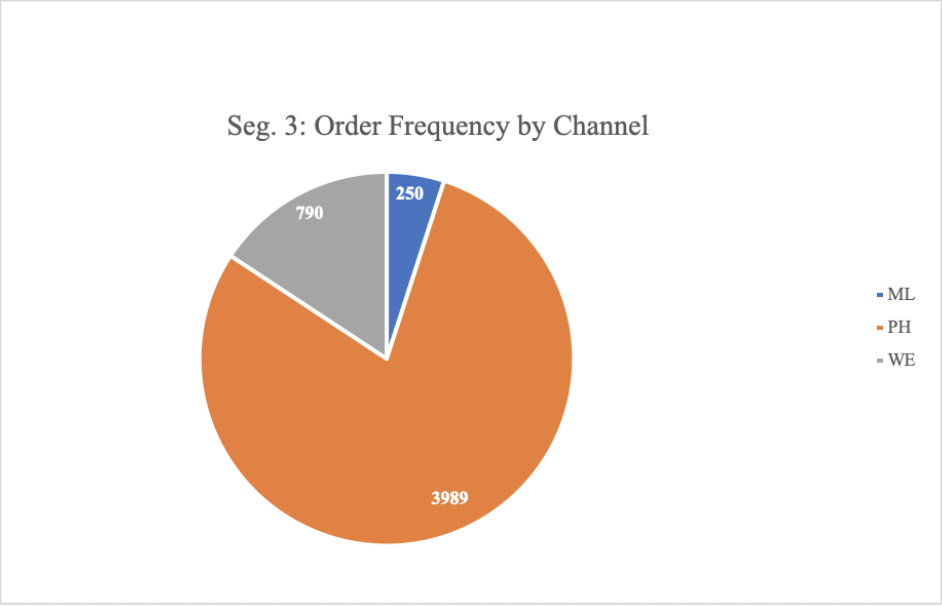


We separated the customer groups, who are to be used in our **immediate campaigns, based on their purchase channel preferences (mail, phone, and internet), combining the mail and phone into one group, leaving the web based customers as their own stand-alone group.

Final Cluster Insights

After selecting only customers that brought Petco at least $500 in monthly profit, and had ordered at least three times between 2007-2012, we were left with a total of 727 customers in the mail and phone ordering group. Most of these customers were from Segment 3, rather than Segment 4. They were our highest profit and highest frequency group (Group A).. Since this set of customers didn't shop online, that indicated that they were not as comfortable purchasing through a website. Therefore, they became part of our hybrid outreach group (sending physical coupons coupled with online redemption through the PetCoach site). (See Chart 2.)

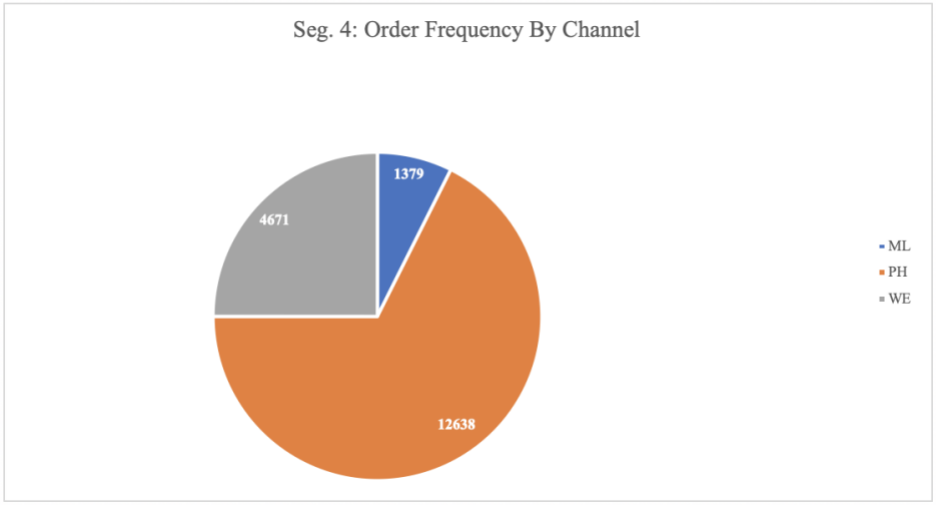
Chart 2. Order Frequency by Channel for Segment 3



Before filtering for best Recency, Frequency, and Monetary that fit our needs, Segment 4 had our largest number of customers. They do not shop as often as Segment 3, but they are a

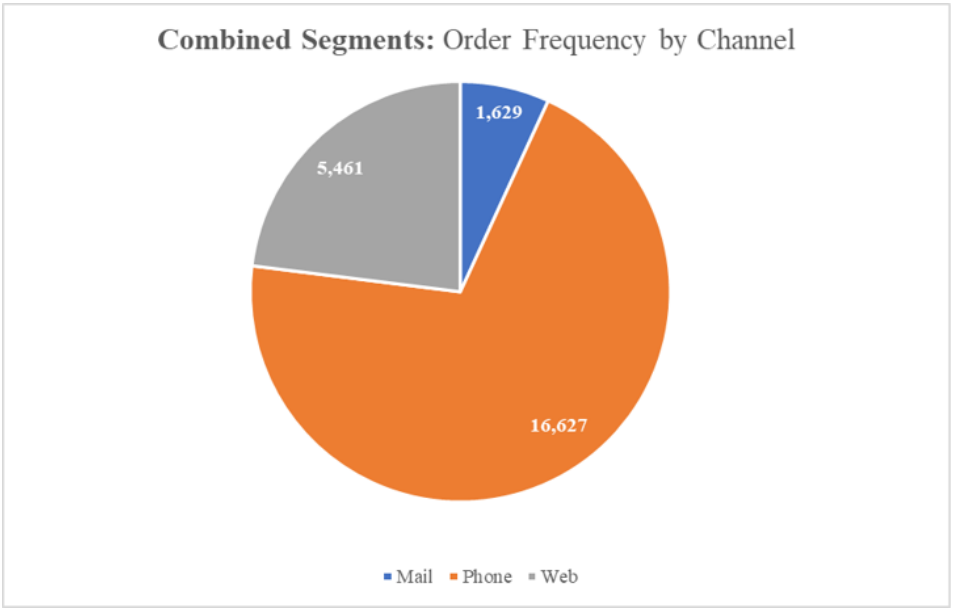
reliable group who can be encouraged to be more active with Petco. Most of our online shoppers (a total of 189 customers after filtering) are from this group (Group B). Therefore, we will use an all-digital marketing strategy to encourage their participation to join the Vital Care Wellness plan. (See Chart 3.)

Chart 3. Order Frequency by Channel for Segment 4



And since each group was made up of a combination of customers from Segment 3 and 4, we compared the frequency of Channels when we combined the two groups together.

Chart 4. Order Frequency by Channel for Segment 3 & 4



Discussion & Recommendations

As stated above, our findings revealed that both customer segments displayed a strong propensity to shop by mail and phone channels. As a result, our recommendations for marketing campaigns to reach these two segments is two-pronged and outlined below:

1. Two different campaigns that focus on two different customer groups

    a) marketing campaign that combines customers who prefer mail-in & phone channels will be implemented by offering them coupons. Customers are required to have an online account to use these coupons. The intention of this campaign is to transition these customers to an online platform via PetCoach. By design the PetCoach site promotes pet health and wellness, thus it is a more relevant and efficient way to promote the Vital Care Wellness Plan.

    b) Another campaign will be launched toward customers who prefer online shopping. This digital marketing campaign will create awareness around PetCoach, direct traffic through PetCoach to Vital Care, encourage customers to sign up for both, and give a first month Vital Care free trial for those who signed up for both.

2. Develop and advertise a reward program where customers can earn points by purchasing and redeem points for direct vet services in the Vital Care Plan. The average monthly expenditure for Petco customers is ~$37, therefore, any customer who spends $50 or more per month will be rewarded.

Further Considerations

We believe that the content on the PetCoach site should be used solely to generate demand for customers to sign up for more customized premium services through a Vital Care Plan subscription. To achieve this, the content on PetCoach should be limited to educational information only. For example, access to the 24/7 Ask vet questions, currently offered for free, should be moved over to the Vital Care program as an exclusive feature.

Lastly, PetCoach is a value-add for customers who utilize the educational platform to research their pet's health needs; however, there is no clear call to action to encourage customers to sign up for the Vital Care wellness program. Our marketing campaign corrects this by including language, registration links, and callout buttons guiding customers to the Vital Care program. All this should be prominently available on the landing pages of the PetCoach site.

The new vision for the Vital Care program is helping pets' parents to track and manage their pets' health online. To reinforce this, Vital Care could include an annual Vet recommended nutrition plan, direct linkages to customers' retail accounts to facilitate online shopping, use of AI to track recent purchases as well as recommend similar products based on a pet's medical history or even Vet recommendations.

Limitations and Future Research

While this report addresses the managerial issue of increasing sales in the Vital Care Insurance business, our research does not go into verifying that there are enough nearby Petco locations that would service the targeted customer segments as they sign-up for the Vital Care Plan. The top 10 states with the most active customer segments reside in CA, NY, FL, TX, NJ, PA, IL, VA, MA, and OH. While Petco has a presence in these states there may be a need for

additional stores to open up in certain suburban areas. Fortunately, establishing more store locations would be in line with Petco's long-term growth strategy. We think that the customers in Segment **1 & 2 would be desirable targets for the Vital Care Wellness Program as new locations are opened since this would increase new store foot traffic. Additionally, we can offer these customers incentives to get them to spend more, and more often, in the year(s) leading up to the opening of a location near them. Please see Appendices for graphs of states with top profitability.

References

1. “Pet Care Market Size Worth $202.6 Billion By 2025 | CAGR: 4.9%” Grand View Research, March 2018, https://www.grandviewresearch.com/press-release/global-pet-care-market

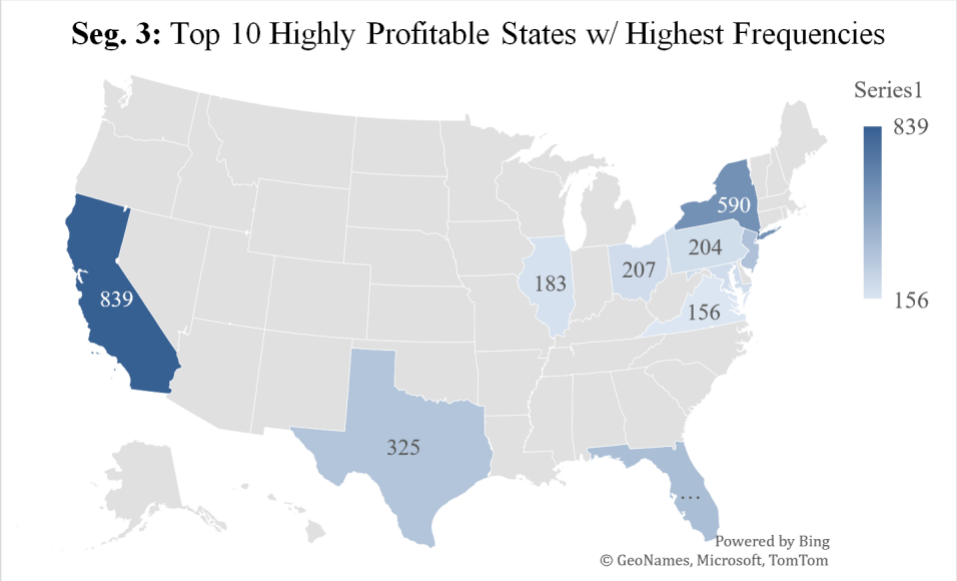
2. Richard Kestenbaum, “The Biggest Trends In The Pet Industry” Forbes.com, Nov 27, 2018, https://www.forbes.com/sites/richardkestenbaum/2018/11/27/the-biggest-trends-in-the-pet-industry/?sh=69b43856f099

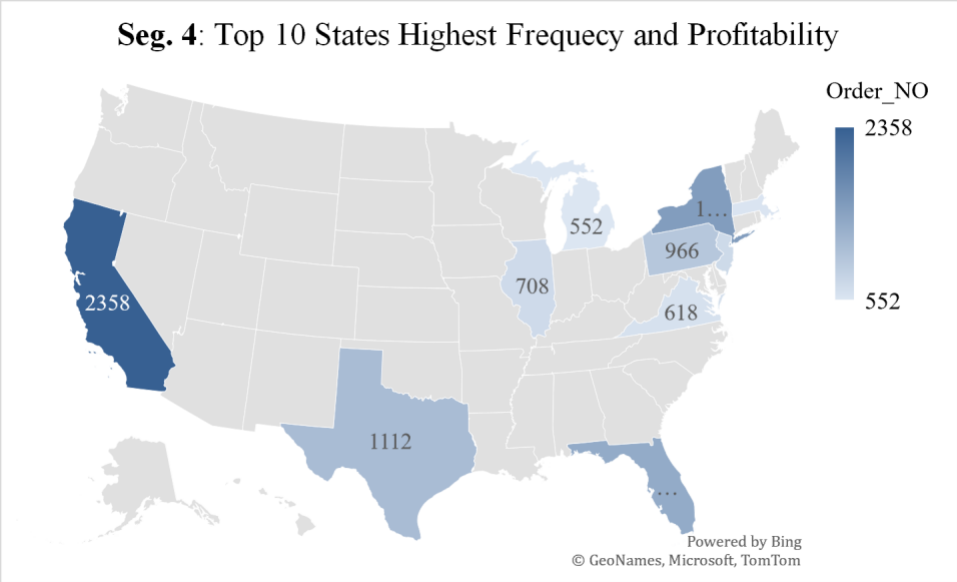
3. Sumant Ugalmugle, Rupali Swain. “Pet Care Market” Global Market Insights, August 2020, https://www.gminsights.com/industry-analysis/pet-care-market

4. Data source: Google Trends (https://trends.google.com/trends/explore?date=2015-11-10%202020-11-10&geo=US&q=%2Fm%2F09f43b)

Appendices

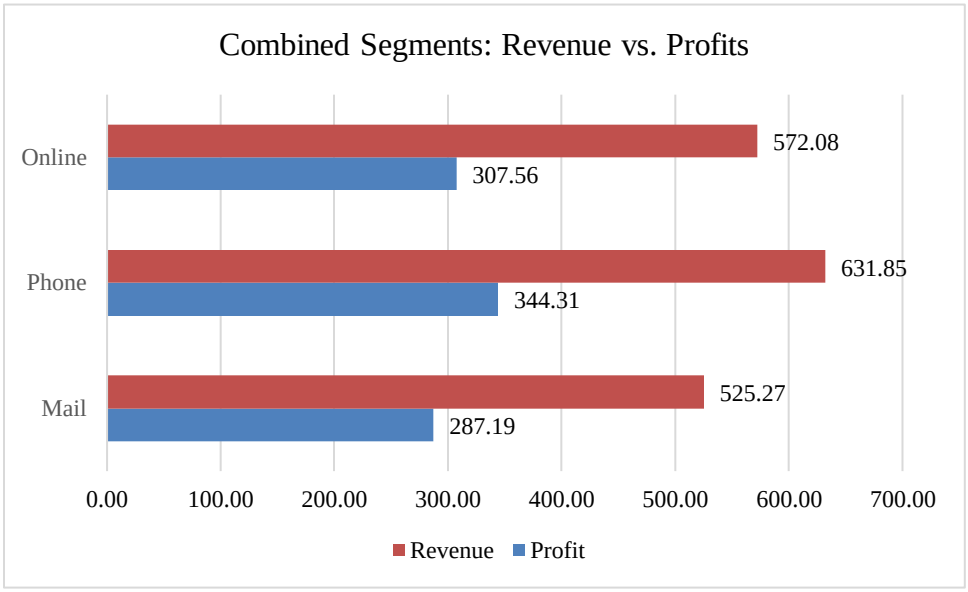
1. Geography map: Top 10 states per segment or combined segments



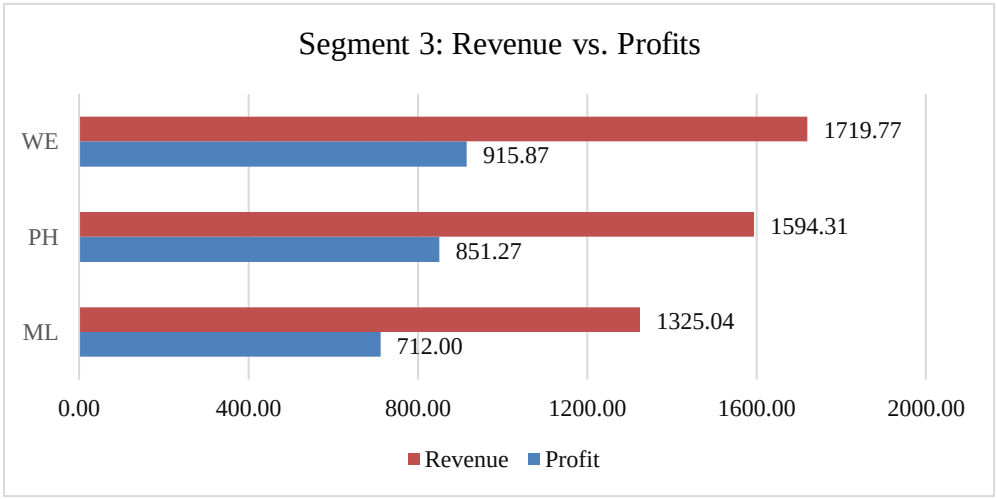


2. Profitability graphs comparing Segments 3 & 4

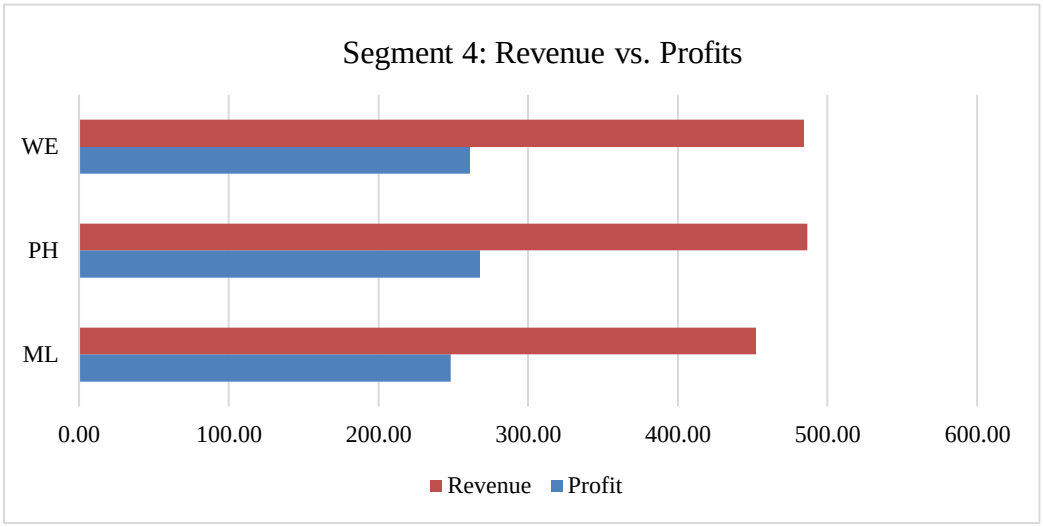
a. Averages of Combined Segments



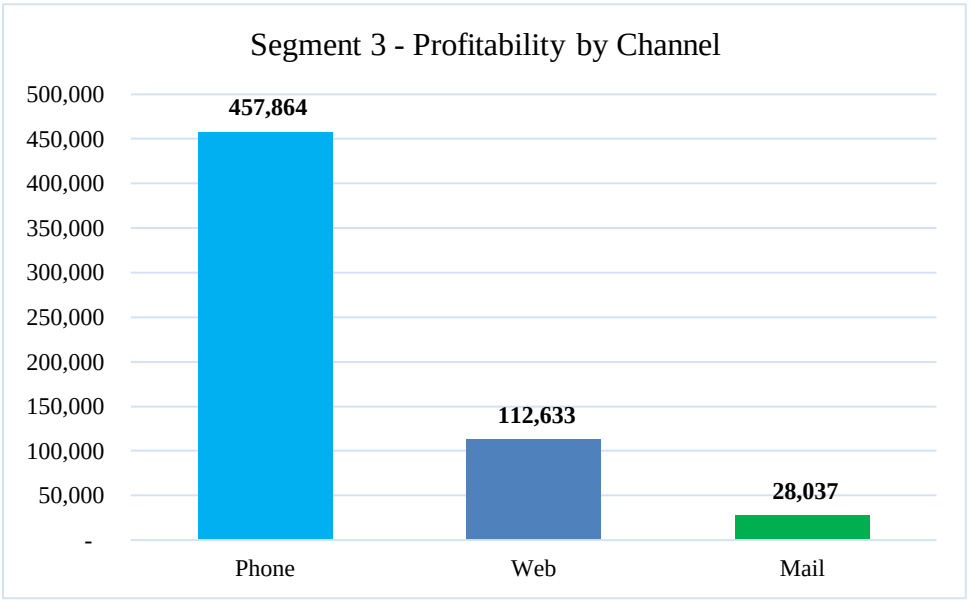
b. Segment 3 Averages



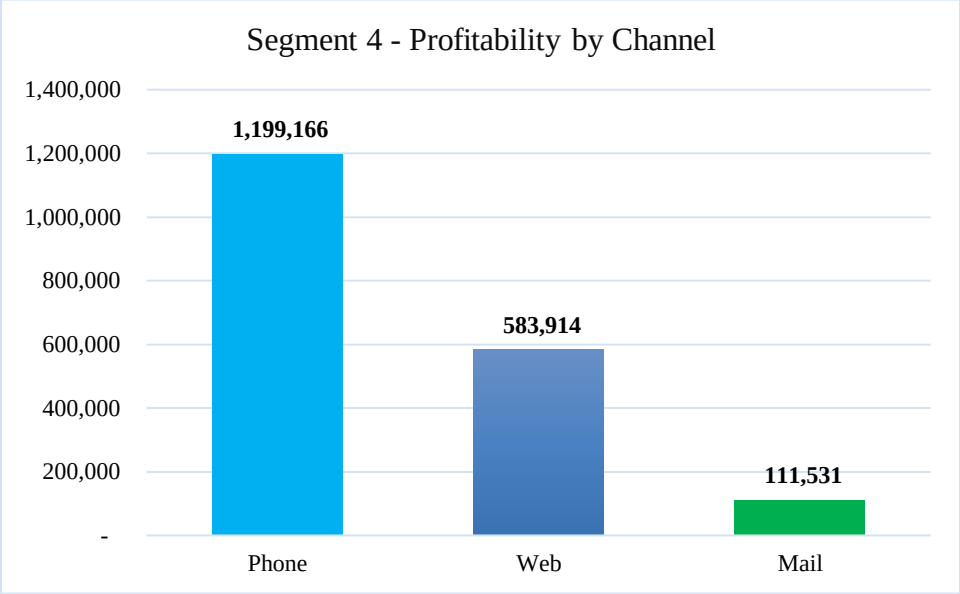
c. Segment 4 Averages Combined Segments



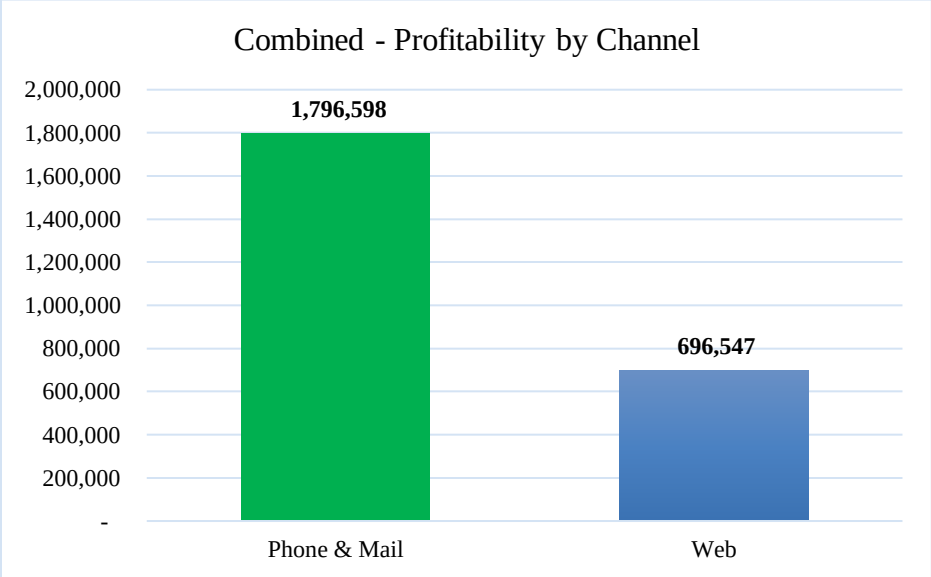
3. Segment 3 Profitability by Channel



a. Segment 4 Profitability by Channel

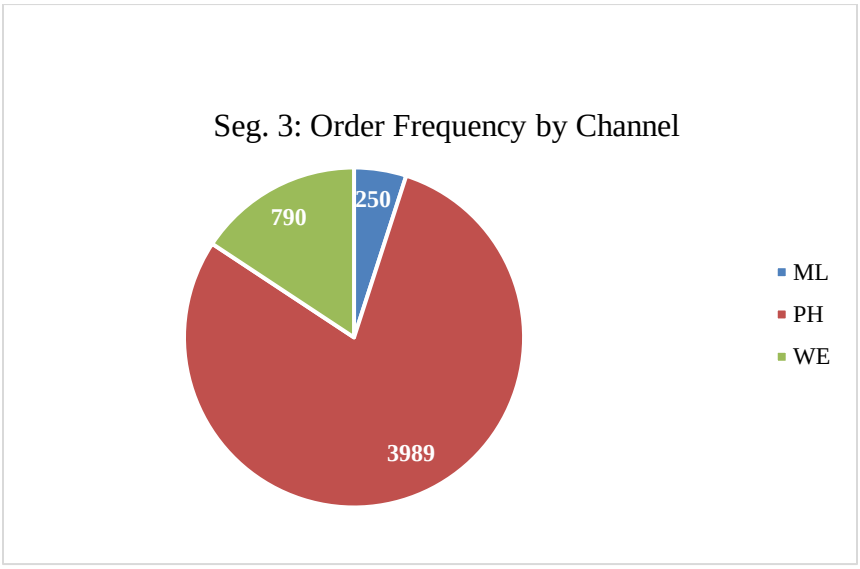


b. Combined Profitability by Channel

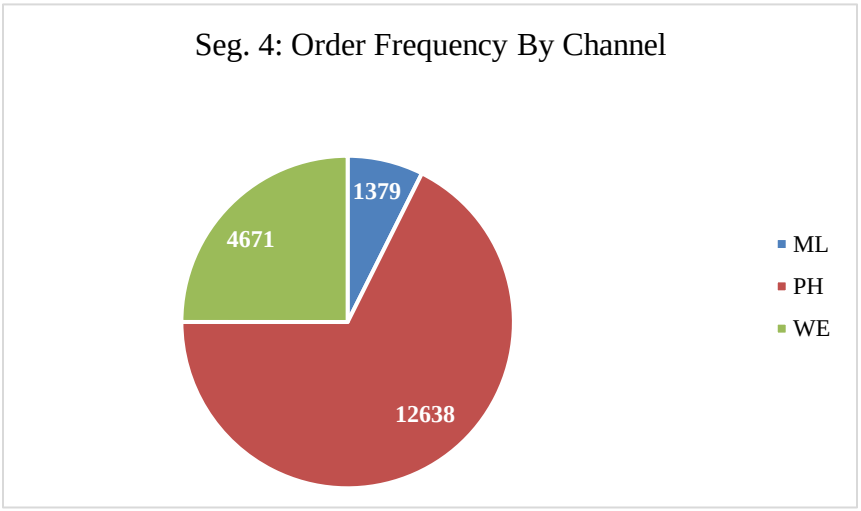


4. Order Frequency by Channel

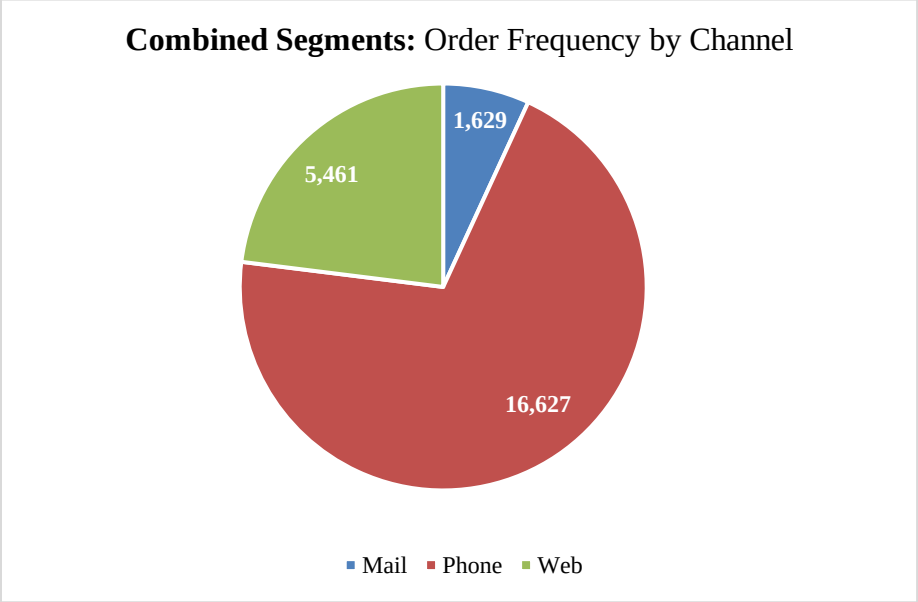
    a. Segment 3 Order Frequency by Channel



    b. Segment 4 Order Frequency by Channel



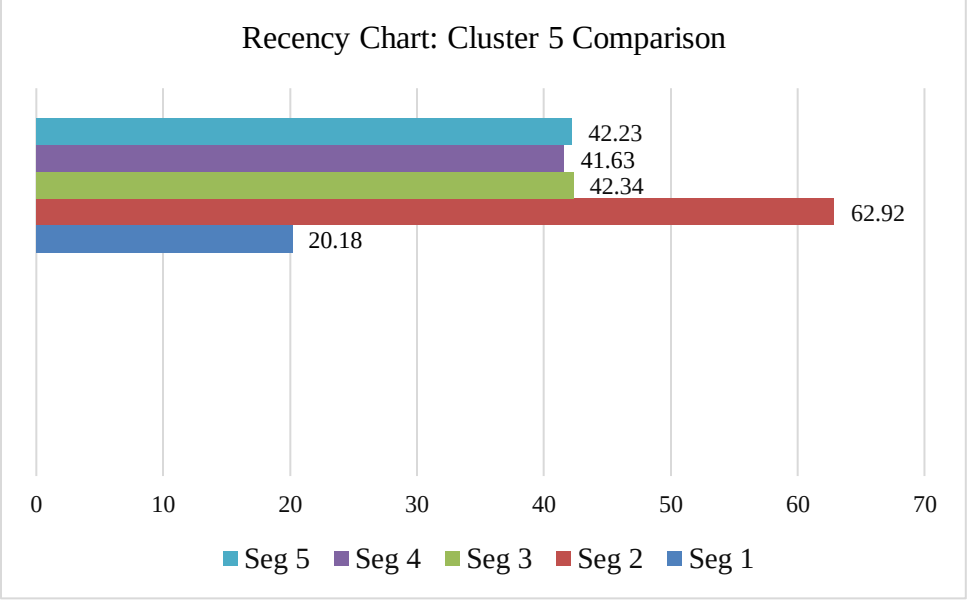
c. Combined Segments: Order Frequency by Channel



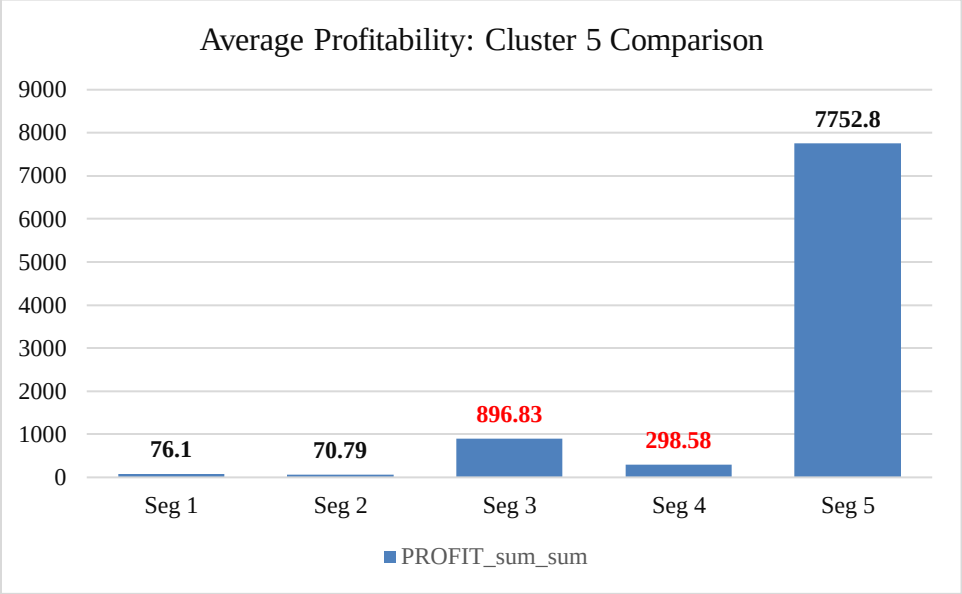
5. SPSS Outputs

a. SPSS Chosen Cluster: Compares the recency levels between segments in Cluster

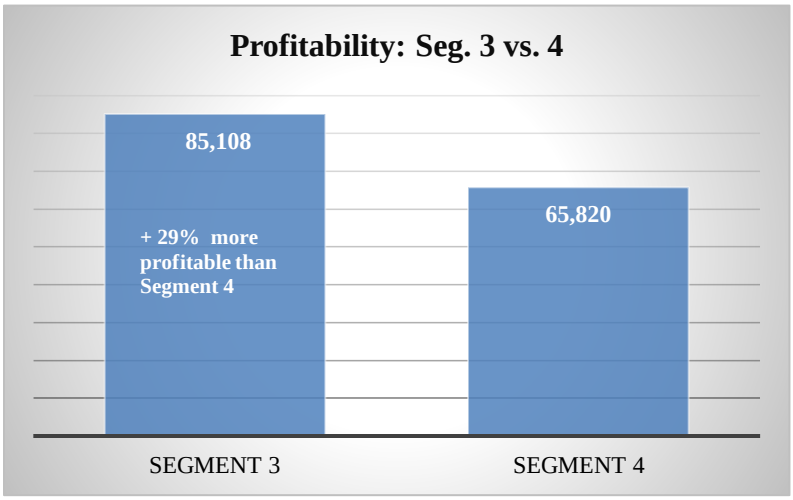
5. Segments 3,4,5 have relatively flat and low recency period



b. Segments 3 & 4 choose for highest average profits and sizeable counts



c. Compares Profitability Levels

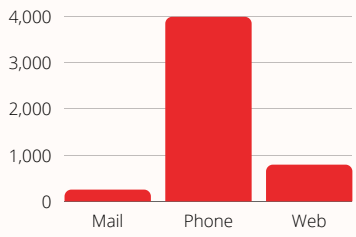


Revitalizing VitalCare for petco

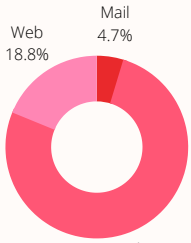
Pet Store Vetinary Care Online Shopping

1	2	3	4	5
Profit $76.10	Profit $70.79	Profit $896.83	Profit $298.58	Profit $7752.80
Count 42,121	Count 48,323	Count 42,121	Count 8,333	Count 11
Frequency 1	Frequency 1	Frequency 7	Frequency 3	Frequency 18

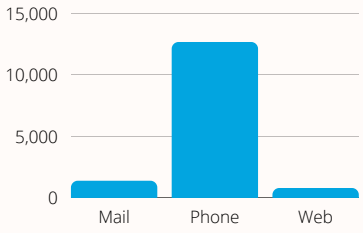
Segment 3 Order Frequency by Channel



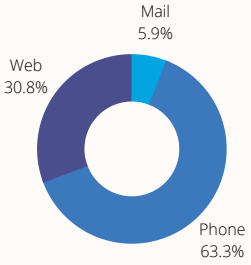
Segment 3 Profit by Channel



Segment 4 Order Frequency by Channel



Segment 4 Profit by Channel



Mail & Phone

Currently mail & phone are our customers most preferred order method

Online

Create a marketing campaign to encourage mail & phone customers to shop online

PetCoach

Use digital marketing to increase awareness of PetCoach along with linking it on the PetCo Website

Vital Care

Direct online customers through PetCoach to sign up for the Vital Care program