



Champion Behavioral Customer Segmentation Analysis



Champion Brand Overview & Marketing Goals



Accelerating Champion's DTC Growth Through Customer Segmentation

BUSINESS SITUATION

- Champion, a leading sportswear brand, has historically relied on major retail partnerships for distribution.
 - Following its acquisition by Authentic Brands Group, the brand is shifting focus toward strengthening its direct-to-consumer (DTC) business to enhance customer relationships and drive online growth.
 - Champion leverages first-party data and customer segmentation to achieve this and personalize its marketing efforts
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MARKETING OBJECTIVES

The primary marketing objectives of this segmentation analysis are to:

- Recognize & reward top customers to strengthen loyalty and retention.
 - Encourage mid-tier buyers to increase purchase frequency and spending.
 - Re-engage inactive customers through targeted incentives and personalized outreach.
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ANALYSIS

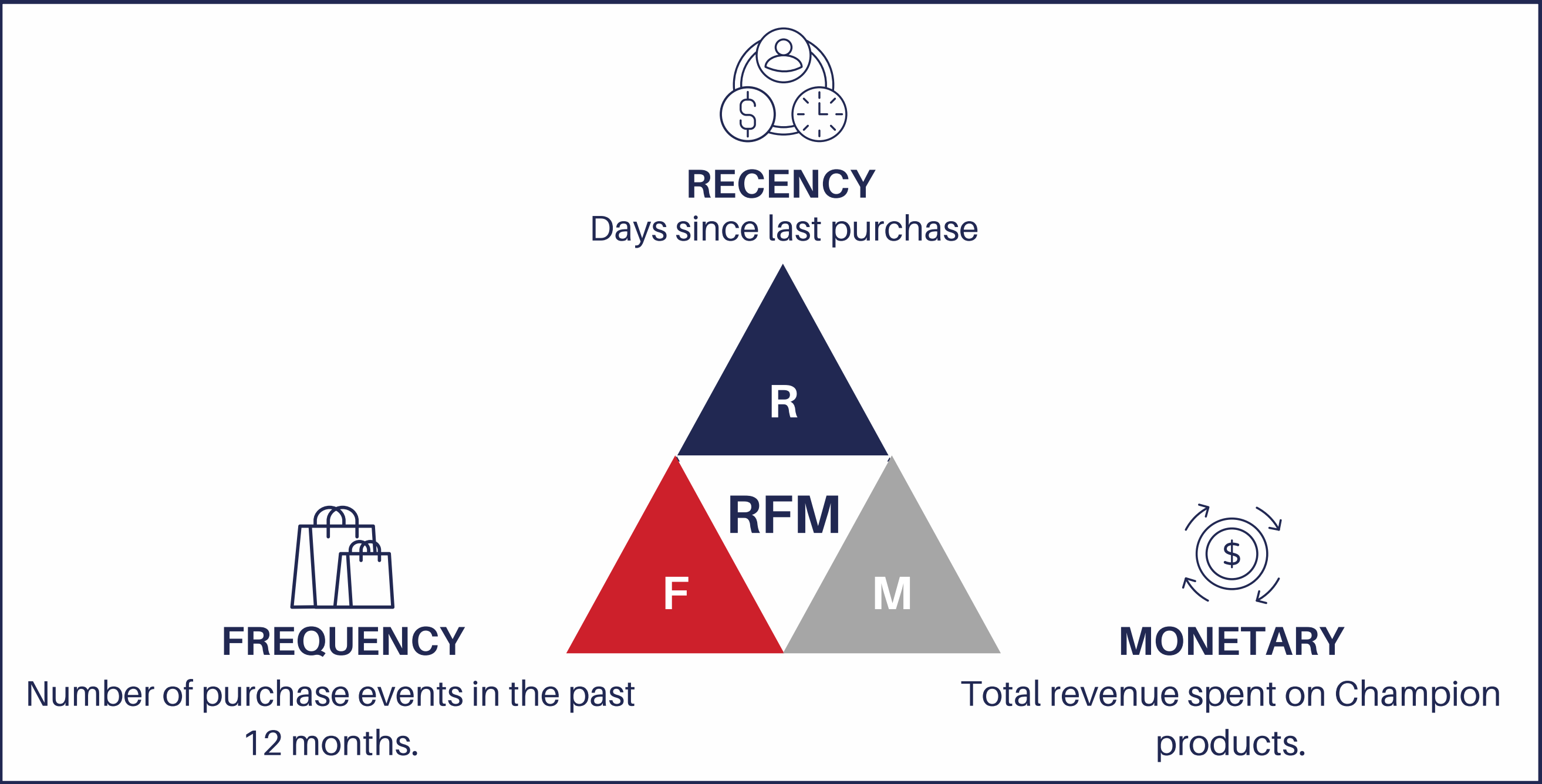
- This data-driven approach will guide strategic marketing decisions, CRM initiatives, and resource allocation, ensuring Champion maximizes its DTC potential while maintaining its retail presence.
 - The analysis focuses on 20,907 U.S. customers who purchased exclusively through Champion's online channel in the past 12 months to optimize customer engagement strategies.
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Segmentation Approach and SAS Techniques



Accelerating Champion’s DTC Growth Through Customer Segmentation

Our analysis employed an RFM segmentation methodology to measure customer engagement & spending patterns:



Specific Segmentation and SAS Techniques



Step-by-Step RFM Segmentation Process in SAS

1. RANKING DATA TASK:

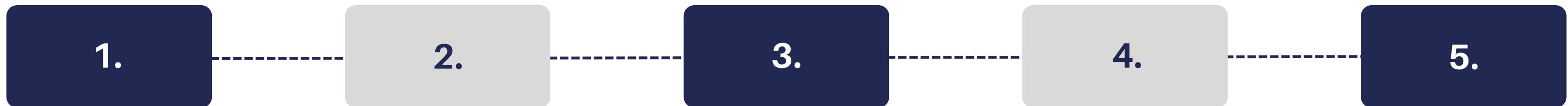
Customers were ranked using the quantile method across RFM variables, generating rank_recency, rank_frequency, and rank_monetary.

2. CREATING COMBINED RFM SCORES:

A combined RFM variable (combined_RFM) was generated by summing the ranked values.

3. INITIAL SUBGROUP ANALYSIS:

The dataset was divided into 8 sub-groups based on combined RFM values, with summary statistics analyzed to identify patterns.



4. FINAL SEGMENTATION ASSIGNMENT:

The sub-groups were consolidated into 5 meaningful segments based on similarities in purchase behaviors.

5. SUMMARY STATISTICS TASK:

Key behavioral characteristics were examined for each segment, helping inform customer targeting strategies.



Champion Customer Segmentation Solution



Five Distinct Customer Behavior Patterns

Segment Name	Segment Description
VIP Champions	On average, customers in this segment generate the highest total revenue and make the most frequent purchases throughout the year.
Growth Opportunity	Customers in this segment have moderate spending and occasional purchases but show strong potential to become top buyers.
Newbies	This group consists of new or infrequent shoppers who have made only a few purchases and spent the least so far.
Win-Back	These customers were once valuable buyers but have reduced their spending and purchase activity over time.
Dormants	On average, customers in this segment have the lowest total revenue and have gone the longest time without making a purchase.

*Segment boundaries were determined using statistical clustering with clear behavioral differentiation.

Champion Customer Segmentation Profiles



Distinct Shopping Behaviors and Opportunities for Growth

Profile Element	VIP Champions	Growth Opportunity	Newbies	Win-Back	Dormants
Recency (in days)	69	90	79	264	262
Frequency (last 12 months)	4.4	1.8	1.2	2.6	1.2
Monetary (last 12 months)	\$ 258.4	\$ 131.5	\$ 38.7	\$ 179.3	\$ 34.5
Avg. Items per Order	2	2	1	2	1
Avg. Revenue per Order	\$ 59.6	\$ 77.6	\$33.7	\$ 74.5	\$ 29.6
% Customers that Used a Promotional Offer	93.0%	52.5%	20.1%	63.9%	26.8%
Estimated Annual Retention Rate	82.0%	65.9%	56.0%	54.9%	35.8%

*Values represent mean (average) figures across all customers in each segment based on 12-month purchase data.

*Percentage values displayed in whole numbers. For example, 51% represents 0.51 in decimal format.

Champion Customer Segmentation Profiles



Distinct Shopping Behaviors and Opportunities for Growth

Profile Element	VIP Champions	Growth Opportunity	Newbies	Win-Back	Dormants
% Customers that only purchased women's products	45.3%	46.6%	48.0%	40.1%	35.1%
% Customers that only purchased men's products	32.6%	43.6%	48.6%	46.1%	61.6%
% Customers that purchased women's and men's products	19.6%	6.6%	0.3%	10.3%	2%
% Customers whose purchases included kids' products	2.4%	3.2%	3.1%	2.7%	1.3%

*Values represent mean (average) figures across all customers in each segment based on 12-month purchase data.

*Percentage values displayed in whole numbers. For example, 51% represents 0.51 in decimal format.

Customer Lifetime Value Analysis



Quantifying Long-Term Customer Value and Investment Priorities by Segment

Segments	VIP Champions	Growth Opportunity	Newbies	Win-Back	Dormants
Segment Proportion %	13.3 %	14.4 %	22.9 %	23.1 %	26.1%
Average Margin %	41 %	41 %	41 %	41 %	41 %
Discount Rate %	8 %	8 %	8 %	8 %	8 %
Estimated Annual Average revenue	\$258	\$131	\$39	\$179	\$34
Estimated Average contribution Margin	\$106	\$54	\$16	\$73	\$14
Estimated Annual Retention Rate (RR)	82 %	66 %	56 %	55 %	36 %
Estimated Customer Lifetime Value (CLV)	\$440	\$139	\$33	\$149	\$21

Sample size: 20,907

Discount Rate: 8%

Average margin: 41%

Acquisition cost : \$0

*Model used: Advanced model from the Marketing Toolkit

Marketing Priorities & Recommendations by Segment



Targeted Engagement Strategies Based on Customer Value and Behavior

Segment Name	Strategic Marketing Priority	Specific Marketing Recommendations
VIP Champions	Premium Retention and Brand Loyalty Maximization (High CLV)	<ul style="list-style-type: none">Launch an exclusive "Champion Circle" loyalty program, granting members 48-hour early product access, free overnight shipping, limited-edition Champion x Pro-Athlete collaborations upon reaching a \$450 annual spend.Create an Instagram/Facebook "VIP Style Challenge" campaign featuring customer-generated content with personalized quarterly digital lookbooks highlighting cross-category styling options.
Growth Opportunity	Increase Purchase Frequency & Basket Size Expansion (Medium CLV)	<ul style="list-style-type: none">Implement a "Complete Your Look" system with progressive discounts when purchasing across multiple product categories (10% for 2 categories, 25% for 3+) at \$50 quarterly spend, with flexible payment options.Launch a web-based tool that allows customers to visualize complete Champion looks across categories and incorporate a "one-click add to cart" feature that seamlessly transfers all configured items to checkout; promote the configurator through Email, SMS, paid social with embedded second-purchase discount code.
Newbies	Purchase Habit Formation & Lifetime Value Acceleration (Low CLV)	<ul style="list-style-type: none">Develop product bundles at accessible price points (\$45-65) that introduce customers to the brand's core styles. Include a sustainability impact card with each order showing the environmental benefits of their purchase.Offer a risk-free trial experience with extended 60-day returns, personalized quality guarantee cards, and a 30-day survey providing 10% discounts on next orders.
Win-Back	High-value Customer Recovery/Re-engagement (Medium CLV)	<ul style="list-style-type: none">Launch a win-back series with personalized SMS/emails containing a time-limited 30% "Welcome Back" offer and free shipping on their next purchase. (About 64% use promotional offers).Implement a "try before you decide" option that allows customers to order up to 3 items with delayed payment.
Dormants	Cost Efficiency Reactivation (Low CLV)	<ul style="list-style-type: none">Create a men's-focused "Last Call" campaign with 45-day limited window offering 40-50% discounts on performance items targeted to previous men's-only purchasers.Offer a 45% discount for completing an exit survey that identifies why they stopped shopping with Champion.

Budget Allocation Across Customer Segments



Strategic Investment Distribution to Maximize Return Across Customer Segments

Segment Name	% of Customers	% of Budget	Average CLV	Budget Allocation Reasoning
VIP Champions	13.3%	40%	\$440	<ul style="list-style-type: none">Maximize Retention and Strengthen Brand AdvocacyHighest revenue generators and the most engaged customers
Growth Opportunity	14.4%	35%	\$139	<ul style="list-style-type: none">Moderate spenders with high growth potentialDrive higher purchase frequencyRespond well to bundling discounts and eco-friendly initiatives
Newbies	22.9%	5%	\$33	<ul style="list-style-type: none">Convert First-Time Buyers into Repeat CustomersLowest spending segment but has potential for long-term growthNeeds education on the brand and product benefits
Win-Back	23.1%	15%	\$149	<ul style="list-style-type: none">Re-engage Former High-Value CustomersOnce spent significantly but have since reduced engagementThe focus is on personalized reactivation offers
Dormants	26.1%	5%	\$21	<ul style="list-style-type: none">Cost-Efficient Reactivation & Clearance SalesLow engagement, low retention rates and lowest ROIMinimized investment with high-discount tactics

Optimization Model for Budget Allocation

Sequential Least Squares Programming (SLSQP) Constrained Nonlinear Optimization Model

Retention Cost

Estimated Retention Costs Based on Industry Trends & Segment Behavior	
Segment	Retention Cost (\$) Estimate
VIP Champions	\$20
Growth Opportunity	\$40
Newbies	\$80
Win-Back	\$60
Dormants	\$100

Formulas

Retention Cost = Marketing Cost per Customer+Incentives/Discounts

Retention Rate = $\frac{\text{Total Customers at Start of Period}}{\text{Active Customers at End of Period}} \times 100$

$$\max \sum_{i=1}^5 ((CLV_i - \text{RetentionCost}_i) \times \text{RetentionRate}_i \times \text{BudgetAlloc}_i)$$

Final Model and Budget Allocation

Segment	CLV (\$)	Retention Rate (%)	Segment Proportion (%)	Annual Revenue (\$)	Contribution Margin (\$)	Retention Cost (\$)	Optimized Budget Allocation (%)
VIP Champions	440	82.00	13.30	258	106	20	40
Growth Opportunity	139	66.00	14.40	131	54	40	35
Newbies	33	56.00	22.90	39	16	80	5
Win-Back	149	55.00	23.10	179	73	60	15
Dormants	21	36.00	26.10	34	14	100	5

Appendix



Code for Segmentation

```
*Program 1 x
CODE LOG RESULTS
Line #
1 data work.RFM2; /*output dataset name for assignment 2*/
2 set work. RFM1; /*input dataset name*/
3
4 /*new variable containing the final RFM segment assignments*/
5 length segment_assignment $30.;
6
7 /*The code below is used to assign each unique combined RFM value into a final segment assignment*/
8 /*each line should include 1 or more mutually exclusive combined_RFM values*/
9
10 if combined_RFM in ('011') then segment_assignment = 'Segment 1 - VIP Champions';
11 if combined_RFM in ('001','010') then segment_assignment = 'Segment 2 - Growth Opportunity' ;
12 if combined_RFM in ('000') then segment_assignment = 'Segment 3 - Newbies' ;
13 if combined_RFM in ('101','111') then segment_assignment = 'Segment 4 - Win-Back' ;
14 if combined_RFM in ('100','110') then segment_assignment = 'Segment 5 - Dormants';
15 run;
```


Appendix

Summary Statistics



segment_assignment	N Obs	Variable	Label	Mean	Std Dev	Minimum	Maximum	Median	N
Segment 1 - VIP Champions	2784	recency	Number of days since last Champion product purchase	69.6422414	47.5299163	1.0000000	176.0000000	64.0000000	2784
		frequency		4.3588362	1.7346962	3.0000000	12.0000000	4.0000000	2784
		monetary	Number of different Champion purchase events in last 12 months	258.4258369	155.4326790	73.3300000	871.1700000	214.3650000	2784
		average_items_per_order		2.0790230	1.2448406	1.0000000	8.0000000	2.0000000	2784
		average_revenue_per_order	Total revenue on Champion products in last 12 months	59.5908764	29.7690295	17.0000000	207.0000000	54.0000000	2784
		product_womens_only		0.4533046	0.4979042	0	1.0000000	0	2784
		product_mens_only	Average # of Champion products purchased per purchase event	0.3261494	0.4688869	0	1.0000000	0	2784
		product_womens_mens		0.1964799	0.3974069	0	1.0000000	0	2784
		product_kids_included	Average \$ revenue on Champion products per purchase event	0.0240661	0.1532819	0	1.0000000	0	2784
		offer_indicator		0.9295977	0.2558698	0	1.0000000	1.0000000	2784
		retention_score	Purchased only 1 or more womens products in the last 12 months	0.8204562	0.0710845	0.7000000	0.9500000	0.8000000	2784
			Purchased only 1 or more mens products in the last 12 months						
			Purchased 1 or more womens and mens products in the last 12 months						
			Purchases included 1 or more kids products in the last 12 months						
			Used a promotional offer to purchase a product in the last year						
			Estimated annual retention of customer						
Segment 2 - Growth Opportuniti	3005	recency	Number of days since last Champion product purchase	90.4439268	50.6141437	1.0000000	176.0000000	92.0000000	3005
		frequency		1.8432612	0.5603333	1.0000000	5.0000000	2.0000000	3005
		monetary	Number of different Champion purchase events in last 12 months	131.5435774	67.4511365	22.5700000	503.3200000	116.5300000	3005
		average_items_per_order		2.5554077	2.2779573	1.0000000	22.0000000	2.0000000	3005
		average_revenue_per_order	Total revenue on Champion products in last 12 months	77.6063228	42.7383396	8.0000000	290.0000000	70.0000000	3005
		product_womens_only		0.4662230	0.4989408	0	1.0000000	0	3005
		product_mens_only	Average # of Champion products purchased per purchase event	0.4359401	0.4959619	0	1.0000000	0	3005
		product_womens_mens		0.0658902	0.2481313	0	1.0000000	0	3005
		product_kids_included	Average \$ revenue on Champion products per purchase event	0.0319468	0.1758876	0	1.0000000	0	3005
		offer_indicator		0.5247920	0.4994681	0	1.0000000	1.0000000	3005
		retention_score	Purchased only 1 or more womens products in the last 12 months	0.6589018	0.0950845	0.4500000	0.9000000	0.7000000	3005
			Purchased only 1 or more mens products in the last 12 months						
			Purchased 1 or more womens and mens products in the last 12 months						
			Purchases included 1 or more kids products in the last 12 months						
			Used a promotional offer to purchase a product in the last year						
			Estimated annual retention of customer						
Segment 3 - NewCommers	4794	recency	Number of days since last Champion product purchase	79.4966625	51.3678707	1.0000000	176.0000000	71.0000000	4794
		frequency		1.1916980	0.3936778	1.0000000	2.0000000	1.0000000	4794
		monetary	Number of different Champion purchase events in last 12 months	38.7128828	17.7618915	5.6500000	70.9500000	39.4600000	4794
		average_items_per_order		1.3135169	0.7239148	1.0000000	5.0000000	1.0000000	4794
		average_revenue_per_order	Total revenue on Champion products in last 12 months	33.6666667	16.1493999	6.0000000	71.0000000	31.0000000	4794
		product_womens_only		0.4799750	0.4996510	0	1.0000000	0	4794
		product_mens_only	Average # of Champion products purchased per purchase event	0.4860242	0.4998568	0	1.0000000	0	4794
		product_womens_mens		0.0031289	0.0558549	0	1.0000000	0	4794
		product_kids_included	Average \$ revenue on Champion products per purchase event	0.0308719	0.1729887	0	1.0000000	0	4794
		offer_indicator		0.2058824	0.4043871	0	1.0000000	0	4794
		retention_score	Purchased only 1 or more womens products in the last 12 months	0.5603671	0.0957034	0.4500000	0.7500000	0.6000000	4794

segment_assignment	N Obs	Variable	Label	Mean	Std Dev	Minimum	Maximum	Median	N
			Purchased only 1 or more mens products in the last 12 months						
			Purchased 1 or more womens and mens products in the last 12 months						
			Purchases included 1 or more kids products in the last 12 months						
			Used a promotional offer to purchase a product in the last year						
			Estimated annual retention of customer						
Segment 4 - Win-Back Prospects	4827	recency	Number of days since last Champion product purchase	264.6289621	50.5128249	183.0000000	365.0000000	253.0000000	4827
		frequency		2.6123886	1.4664206	1.0000000	18.0000000	2.0000000	4827
		monetary	Number of different Champion purchase events in last 12 months	179.3280899	127.0288491	71.0500000	981.4800000	138.3300000	4827
		average_items_per_order		2.3722809	1.5189104	1.0000000	10.0000000	2.0000000	4827
		average_revenue_per_order	Total revenue on Champion products in last 12 months	74.4476901	40.5966727	24.0000000	326.0000000	64.0000000	4827
		product_womens_only		0.4087425	0.4916525	0	1.0000000	0	4827
		product_mens_only	Average # of Champion products purchased per purchase event	0.4611560	0.4985405	0	1.0000000	0	4827
		product_womens_mens		0.1029625	0.3039414	0	1.0000000	0	4827
		product_kids_included	Average \$ revenue on Champion products per purchase event	0.0271390	0.1625052	0	1.0000000	0	4827
		offer_indicator		0.6389062	0.4803674	0	1.0000000	1.0000000	4827
		retention_score	Purchased only 1 or more womens products in the last 12 months	0.5496167	0.1273977	0.2500000	0.8000000	0.5500000	4827
			Purchased only 1 or more mens products in the last 12 months						
			Purchased 1 or more womens and mens products in the last 12 months						
			Purchases included 1 or more kids products in the last 12 months						
			Used a promotional offer to purchase a product in the last year						
			Estimated annual retention of customer						
Segment 5 - Dormant Customers	5497	recency	Number of days since last Champion product purchase	262.1673640	48.4761868	183.0000000	365.0000000	246.0000000	5497
		frequency		1.2263053	0.5004504	1.0000000	5.0000000	1.0000000	5497
		monetary	Number of different Champion purchase events in last 12 months	34.5311679	17.2888673	4.2400000	70.9500000	34.1200000	5497
		average_items_per_order		1.2517737	0.5974146	1.0000000	4.0000000	1.0000000	5497
		average_revenue_per_order	Total revenue on Champion products in last 12 months	29.6005094	15.4128928	4.0000000	71.0000000	26.0000000	5497
		product_womens_only		0.3507368	0.4772441	0	1.0000000	0	5497
		product_mens_only	Average # of Champion products purchased per purchase event	0.6163362	0.4863218	0	1.0000000	1.0000000	5497
		product_womens_mens		0.0198290	0.1394251	0	1.0000000	0	5497
		product_kids_included	Average \$ revenue on Champion products per purchase event	0.0130981	0.1137051	0	1.0000000	0	5497
		offer_indicator		0.2685101	0.4432247	0	1.0000000	0	5497
		retention_score	Purchased only 1 or more womens products in the last 12 months	0.3576314	0.1110829	0.2500000	0.7500000	0.3000000	5497
			Purchased only 1 or more mens products in the last 12 months						
			Purchased 1 or more womens and mens products in the last 12 months						
			Purchases included 1 or more kids products in the last 12 months						
			Used a promotional offer to purchase a product in the last year						
			Estimated annual retention of customer						