



Product Cannibalization Analysis

Cosmetics Manufacturer

Developed an in-depth analysis to estimate the Halo/Cannibalization effect and Net Extra value, providing a comprehensive evaluation of the impact of newly launched products on existing products or categories, thereby enabling strategic decision-making

Cosmetics manufacturer company needs product cannibalization analysis

Picture this...

You're looking for the halo/cannibalization effect of these new products and estimate the net extra impact at various levels, such as the replaced product line, sub-category, application and overall brand

You turn to Accordion.

We partner with your team to develop an in-depth analysis **to estimate the Halo/Cannibalization effect and Net Extra value**, providing a comprehensive evaluation of the **impact of newly launched products** on existing products or categories, thereby enabling strategic decision-making, including:

- 1) Developing an automated reporting suite that consolidates and provides visibility into product level Retail Sales information at a weekly granularity
- 2) Leveraging the data model to develop an analysis that would help monitor the Retail Sales performance of the new products each week
- 3) Estimating the halo/cannibalization impact in dollars, by comparing the actual Sales against the projections.
- 4) Performing the Net Extra analysis to evaluate the overall impact on the performance of the product line and the respective product hierarchy
- 5) Carrying out Trend Analysis to analyze the shift in Year-on-Year growth, between the pre and post launch periods, for various product categories with the brand

Your value is enhanced.

You have the analysis provided visibility into the cannibalization effect of newly launched products and helped the client identify the products or product categories that were negatively impacted by the launch, allowing the client to course correct the campaigns if required. You also have the analysis helped client estimate that ~40% of the Sales from one of their new products, during the first quarter of the launch, was effective in driving the overall growth of the corresponding Sub-Category during that period.

PRODUCT CANNIBALIZATION ANALYSIS

KEY RESULT

- ~40% of the Sales from one of their new products

VALUE LEVERS PULLED

- Performance Tracking
- Net Extra Analysis
- Trend & Lift Analysis

Product cannibalization analysis for a cosmetics manufacturer

Situation

- Client had launched a new line of products that partially replaced some of the existing products within the same product category and was looking to estimate the impact of these new products on Sales performance of the brand.
- Merilytics partnered with the client to analyze the halo/cannibalization effect of these new products and estimate the net extra impact at various levels, such as the replaced product line, sub-category, application and overall brand

Accordion Value Add

- Developed an automated reporting suite that consolidates and provides visibility into product level Retail Sales information at a weekly granularity
- Leveraged the data model to develop an analysis that would help monitor the Retail Sales performance of the new products each week.
- Estimated the halo/cannibalization impact in dollars, by comparing the actual Sales against the projections.
- Performed the Net Extra analysis to evaluate the overall impact on the performance of the product line and the respective product hierarchy.
- Carried out Trend Analysis to analyze the shift in Year-on-Year growth, between the pre and post launch periods, for various product categories with the brand.

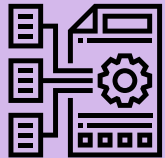
Impact

- The analysis provided visibility into the cannibalization effect of newly launched products and helped the client identify the products or product categories that were negatively impacted by the launch, allowing the client to course correct the campaigns if required.
- The analysis helped client estimate that ~40% of the Sales from one of their new products, during the first quarter of the launch, was effective in driving the overall growth of the corresponding Sub-Category during that period.

Methodology/ Approach

1. Data Consolidation

- **Consolidate** the Retail Sales (\$) and Units (#) data of the new product (A) and the corresponding product category (B) upon which the Net Extra effect is to be estimated.
- **Partition the Sales data** into two segments i.e.,
(i) Pre-launch (B^{pre}), and
(ii) Post-launch periods (A^{post} , B^{post})



3. Halo/Cannibalization effect

- **Calculate Halo/Cannibalization effect** on the corresponding product category ($B^{h/c-eff}$) by comparing the projected Sales against the actual Sales during the post launch period.
 - $B^{h/c-eff} = B^{post} - B^{proj}$
- $B^{h/c-eff}$: Positive value indicates a Halo effect, and a negative value indicates a cannibalization effect

2. Sales Projection

- **Project Sales of the product category for the post launch period** (B^{proj}) during which the impact is to be estimated.
- Sales can be projected based on historical performance (YoY Gr%¹) or the estimated growth during this period.
- The Sales can also be projected as a range of values, to account for margin of variation.

4. Net Extra Calculation

- **Net Extra Sales (\$)** resulting from the launch of new product ($A^{net\$}$) is calculated by offsetting the estimated effect against the actuals Sales of the new product.
 - $A^{net\$} = A^{post} + B^{h/c-eff}$
- **Net Extra%** ($A^{net\%}$) helps estimate the lift in revenue obtained due to the launch of the new product
 - $A^{net\%} = A^{net\$} / A^{post}$

Notes: 1. **YoY Gr%**: Year-on-Year growth rate. Comparison of Sales recorded in the current year against the comparable period in the previous year. 2. **Halo effect**: Consumer's favoritism towards a line of products due to positive experiences with other products by the company. 3. **Cannibalization effect**: Sales loss caused by a company's introduction of a new product that displaces one of its own older products.

Performance tracking and net extra analysis

Post launch period provided as input to the analysis

Selection of historical time-period, whose YoY Gr% can be used as reference to project Sales during the Post-launch period

YoY Gr% to be considered for Sales projection can also be directly provided as a user input

Input Launch-to-date period (LTD)			Input Time Period for YoY Growth (%) Calculation *Selection: Min PY Wkt; Max CY one week before of latest week				Input range of YoY Gr % to be considered>>												
Channel Selection >>	Launch	End	Start Week		End Week		Region	Comparison Product/ Category Sales (\$K)	Comparison Product/ Category Units (#K)	New Product Sales (\$K)	New Product Units (#K)	Min%	Max%	Range of YoY Gr% in selected Time Period	Projected Sales (\$K)	Holo/ Cannibalization (\$K)	Net Extra (\$K)	Net Extra%	YoY Gr% of New Product in the selected period
	Fiscal Week	Fiscal Week	Fiscal Year	Fiscal Week	Fiscal Year	Fiscal Week													
(Multiple Items) >>	29	34	2024	1	2024	13	Region 1	\$255K	16 K	\$1,042K	45 K	5.0%	6.7%	5.0% : 6.7%	\$ 665 K :\$ 675 K	\$ (-420) K :\$ (-409) K	\$ 622 K :\$ 633 K	60% : 61%	6.7%
(Multiple Items) >>	34	34	2024	1	2024	13	Region 2	\$76K	4 K	\$7K	0 K	-10.2%	-10.0%	-10.2% : -10.0%	\$ 141 K :\$ 141 K	\$ (-65) K :\$ (-64) K	\$ 0 K :\$ 0 K	0% : 0%	-10.2%
(Multiple Items) >>	30	34	2024	1	2024	13	Region 3	\$152K	6 K	\$5,568K	206 K	-27.3%	-25.0%	-27.3% : -25.0%	\$ 503 K :\$ 519 K	\$ (-367) K :\$ (-351) K	\$ 5,201 K :\$ 5,217 K	93% : 94%	-27.3%
(Multiple Items) >>	33	34	2024	1	2024	13	Region 4	\$134K	6 K	\$262K	9 K	0.0%	2.4%	0.0% : 2.4%	\$ 208 K :\$ 213 K	\$ (-79) K :\$ (-74) K	\$ 183 K :\$ 188 K	70% : 72%	2.4%
(Multiple Items) >>	34	34	2024	1	2024	13	Region 5	\$15K	1 K	\$25K	1 K	-1.9%	0.0%	-1.9% : 0.0%	\$ 36 K :\$ 37 K	\$ (-22) K :\$ (-21) K	\$ 3 K :\$ 3 K	10% : 13%	-1.9%
(Multiple Items) >>	32	34	2024	1	2024	13	Region 6	\$63K	2 K	\$96K	3 K	-1.3%	-1.3%	-1.3% : -1.3%	\$ 306 K :\$ 306 K	\$ (-244) K :\$ (-244) K	\$ 0 K :\$ 0 K	0% : 0%	-1.3%
(Multiple Items) >>	31	34	2024	1	2024	13	Region 7	\$930K	43 K	\$14K	1 K	-60.0%	-60.0%	-60.0% : -60.0%	\$ 676 K :\$ 676 K	\$ 253 K :\$ 253 K	\$ 267 K :\$ 267 K	999% : 999%	-60.0%
Total values are sum of all Regions, based on the above inputs							Total	\$1,625K	77 K	\$7,013K	265 K	-32.0%	-31.1%		\$ 2,535 K :\$ 2,568 K	\$ (-943) K :\$ (-910) K	\$ 6,275 K :\$ 6,308 K	89% : 90%	

Actual Sales recorded during the Post-launch period

Estimation of the Halo/Cannibalization effect and Net Extra% based on Projected Sales

Notes: 1. YoY Gr%: Year-on-Year growth rate. 2. Sections marked in yellow are user inputs for the analysis.

3. In the analysis illustrated above, Sales projections and subsequent calculations are performed at a weekly level, and then aggregated to represent the values for the Launch to date (LTD) period.

Trend and lift analysis

Absolute change in Sales (\$)
over the previous year

Rate of change in Sales (%) over the previous year.
Post Launch period is segmented into buckets to
analyse evolution of the new product line

Sales of the
Brand in the
previous year

Sales of the
Brand in the
current year/
analysis period

Contribution of
each of the
elements within
the product
hierarchy
towards the
overall change
in Brand Sales
from previous
year to current
year

	\$ Retail				Retail Sales YoY %					% Pre to Post Shift LTD					
	Pre Launch 3 Months	Post Launch 0-3 Months	Post Launch 4-6 Months	Post Launch to Date	Pre Launch 3 Months	Post Launch 0-3 Months	Post Launch 4-6 Months	Pre/ Post Lift (LTD)		Region 1	Region 2	Region 3	Region 4	Region 5	Region 6
								Post Launch to Date	% Pre to Post Shift LTD						
Previous Year - Total Brand	\$ 180.1	\$ 140.5	\$ 33.1	\$ 173.6											
New Product Line>>	(2.2)	+5.4	+0.8	+6.2	-29.2%	113.1%	68.8%	104.3%	133.5%	90.1%	91.6%	159.6%	451.4%	45.3%	165.2%
Product Line 1	+2.9	+0.6	+0.2	+0.8	86.4%	20.9%	29.8%	22.8%	-63.6%	-56.6%	-55.2%	-74.0%	-90.2%	-4.3%	-111.8%
Product Line 2	+2.2	(0.2)	+0.0	(0.2)	96.4%	-12.1%	2.3%	-9.2%	-105.6%	-158.6%	-172.4%	-59.9%	-57.0%	-49.4%	-124.3%
Product Line 3	+1.9	+0.8	+0.2	+1.0											
Product Line 4	(0.4)	(0.7)	(0.2)	(0.9)	-16.1%	-40.0%	-49.7%	-41.9%	-25.8%	-9.7%	15.8%	9.4%	-14.1%	-92.8%	-24.7%
Product Line 5	(0.3)	(0.4)	(0.1)	(0.5)	-15.9%	-40.8%	-35.8%	-39.8%	-23.9%	-16.0%	-36.5%	-39.2%	-115.1%	-27.6%	-24.4%
Product Line 6	(0.1)	(0.8)	(0.2)	(1.0)	-3.7%	-44.1%	-41.2%	-43.5%	-39.9%	-18.4%	-91.2%	-20.0%	-73.3%	-42.8%	-65.9%
Product Line 7	(5.2)	(0.9)	+0.1	(0.8)	-53.1%	-18.8%	7.7%	-13.9%	39.2%	55.2%	32.4%	28.4%	-25.7%	24.8%	21.2%
Sub-Category 1	(1.2)	+3.8	+0.9	+4.7	-4.1%	20.2%	19.1%	20.0%	24.1%	24.3%	17.4%	47.6%	-13.9%	-3.7%	15.7%
Product Line 8	+2.0	(3.2)	(0.4)	(3.6)	304.3%	-61.7%	-44.3%	-59.1%	-363.4%		-66.1%	-1088.8%	-161.2%	-60.9%	0.0%
Product Line 9	(1.1)	(0.8)	(0.1)	(1.0)	-37.2%	-42.1%	-29.6%	-39.9%	-2.7%	-4.9%	-1.9%	23.5%	-35.9%	-22.3%	-1.6%
Product Line 10	(0.6)	(0.3)	(0.0)	(0.3)	-37.0%	-31.7%	-9.4%	-27.8%	9.2%	3.8%	12.5%	18.7%	-9.6%	6.5%	-9.7%
Product Line 11	(0.9)	(0.3)	(0.1)	(0.5)	-92.0%	-95.7%	-98.3%	-96.4%	-4.4%	-5.4%	2.2%	-2.8%	0.9%	-5.1%	-1.0%
Sub-Category 2	(0.6)	(4.7)	(0.7)	(5.3)	-9.0%	-55.1%	-40.4%	-52.7%	-43.7%	-44.4%	-6.6%	-52.1%	-61.9%	-48.1%	-24.8%
Other Sub-Categories	+2.9	+1.2	+0.3	+1.5	21.2%	11.4%	11.6%	11.4%	-9.8%	-10.0%	4.8%	-13.1%	-4.6%	-22.2%	-10.9%
Application 1	+1.1	+0.3	+0.5	+0.9	2.3%	0.9%	5.9%	1.9%	-0.5%	0.4%	9.4%	5.7%	-31.5%	-18.6%	-0.3%
Application 2	(1.6)	(4.4)	+0.8	(3.6)	-2.9%	-9.3%	7.4%	-6.2%	-3.3%	6.2%	-4.5%	-4.5%	-50.1%	-11.0%	-19.4%
Application 3	(1.4)	(0.7)	+0.1	(0.7)	-10.2%	-7.1%	2.5%	-5.4%	4.8%	13.9%	5.9%	11.3%	-10.0%	-22.9%	-11.9%
Application 4	(5.4)	(4.7)	+0.2	(4.5)	-13.7%	-16.3%	2.6%	-12.6%	1.1%	-0.7%	6.6%	8.3%	-34.5%	-4.0%	-17.6%
Application 5	(2.8)	(2.4)	(0.4)	(2.8)	-17.6%	-25.1%	-16.3%	-23.4%	-5.8%	-4.8%	25.7%	-11.2%	7.0%	-20.5%	-42.6%
Application 6	+3.0	(0.1)	+0.0	(0.1)	47.7%	-1.1%	1.0%	-0.7%	-48.4%	-41.7%	-39.0%	-46.3%	-82.0%	-14.8%	-101.5%
Current Year - Total Brand	\$ 173.0	\$ 128.6	\$ 34.2	\$ 162.8	-3.9%	-8.5%	3.6%	-6.2%	-2.3%	1.7%	4.0%	0.9%	-32.4%	-13.6%	-16.1%

*YoY% greater than 999% is capped at 999%.

Notes: 1. New Product Line in the above illustration is the scenario where an enhanced version of the product was launched to replace an existing product. Thus, Sales is present in the Pre-launch period as well.

Learnings

- 1) Concept of Halo and Cannibalization effect due to launch of new products and methodology to quantitatively estimate this effect.
- 2) Net Extra analysis to estimate the lift in revenue caused by the launch of new products.
- 3) Trend Analysis to compare the Retail Sales trend of the new product against the other products/product categories of the Brand.