

Simulation: Digital Marketing Simulation: Media Attribution at ExerciseMinder

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Which campaigns are effective for customer acquisition?

- In years 1-2: "New member price discount" campaign was the most effective in A/B testing and was used. To determine channel distribution, use the initial completed year campaign's linear regression r-square value.
- The word discount tends to attract more attention, which help "New member price discount" campaign to get customer. As well bellow test results show the significant elements of its effectiveness.

A/B test campaign	New Customers	Retained Customers	Revenue - New Customer	Revenue - Recurring	Revenue - Total
New member price discount	46,915	7187	14,07,450	4,44,571	18,52,021
Remarketing to website visitors	24,513	1563	7,35,390	96,684	8,32,074

- In years 4-5: "Sign up a friend" was the most effective campaign. Main focused channels were Facebook and Branded Search. Previous year's social media results help to make an intuitive decision on channel distribution percentage.

- Experimented with the outcome using "It's easy to get started" added reasonably good numbers of customers.

Year 1 Calculation			Year 2 Calculation		
Impressions	Linear regression value	Channels distribution percentage base on r-square value	Impressions	Linear regression value	Channels distribution percentage base on r-square value
Email	0.05	15%	Email	0.08	31%
Facebook	0.08	24%	Facebook	0.05	20%
Television	0.07	20%	Television	0.05	19%
Branded Search	0.07	21%	Branded Search	0.04	15%
Unbranded Search	0.07	20%	Unbranded Search	0.04	15%
Total	0.34	100%	Total	0.26	100%
Campaign Results			Campaign Results		
New Customers:584,304			New Customers:628,624		
Exiting Customers:108,777			Exiting Customers:130,592		
Customers (total):2,846,686			Customers (total):3,344,719		

Campaign year : 4			Campaign year : 5		
Impressions	Channels distribution percentage: Sign up a friend. Spend:\$8,000,000	Channels distribution percentage: It's easy to get started. Spend:\$2,000,000	Impressions	Channels distribution percentage: Sign up a friend. Spend:\$8,000,000	Channels distribution percentage: It's easy to get started. Spend:\$2,000,000
Email	30%	30%	Email	35%	40%
Facebook	20%	20%	Facebook	15%	15%
Television	10%	10%	Television	5%	5%
Branded Search	30%	30%	Branded Search	40%	35%
Unbranded Search	10%	10%	Unbranded Search	5%	5%
Total	100%	100%	Total	100%	100%
Campaign Results			Campaign Results		
New Customers:637,996			New Customers:675,830		
Exiting Customers:134,420			Exiting Customers:152,347		
Customers (total):4,279,409			Customers (total):4,802,892		

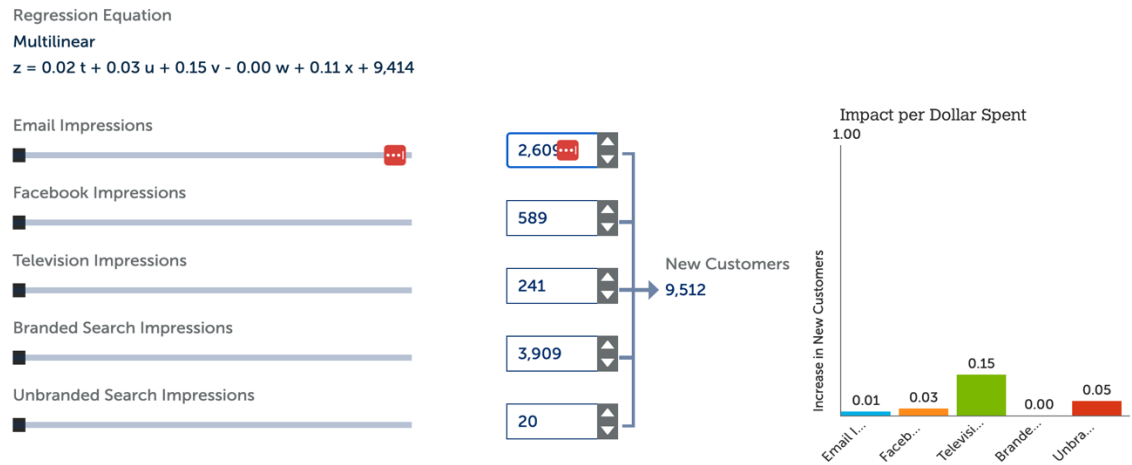
Which campaigns are effective for customer retention?

- "Message customers with tips and ideas" is the best-performing campaign for retention. In year 3: used the retention focus campaign, where the main marketing channels were email and Facebook.
- The lowest, 3.12%, customer exit during the "Message customers with tips and ideas" campaign.
- "It's easy to get started" is also effective for customer retention weighing more on email marketing.

Campaign outcomes	Year : 1	Year: 2	Year: 3	Year: 4	Year: 5
New Customers	584,304	628,624	535,636	637,996	675,830
Exiting Customers	108,777	130,592	104,522	134,420	152,347
Year end Customers (total)	2,846,686	3,344,719	3,775,833	4,279,409	4,802,892
Exit customer percentage	4.58%	4.58%	3.12%	3.56%	3.56%
		Initial Campaign results			
		New Customers:454,534			
		Exiting Customers:83,375			
		Customers (total):2,371,159			

How did intuition, analytics, and A/B testing guide your decision?

A/B testing enables you to base choices on evidence rather than speculation. So, you can be sure whether a specific marketing strategy or campaign is effective. When it comes to marketing, you want your results to be statistically significant since it ensures you will save money on successful efforts. Before beginning campaigns, marketers frequently do statistical significance tests to see if some factors are more effective at generating outcomes than others. Without a hypothesis, testing anything is just a waste of time. Throughout the simulation, learn how hypothesis helps to predict and identify the goal, what should be tested, and what changes will result from any changes in tests. The yearly r-square value (0.5792) of different channels' impression helps effectively distribute market focus. After running the first two years, campaign base regression results and analytical info learned that more customers were acquired from two channels. Even though the previous data set gave a lower percentage CTR, still, based on intuition, added more volume on email and Facebook marketing channels, which gave a better outcome both in acquisition and retention, and improved revenue.



What did simulation teach you about the effective process of data-driven decision making?

Working in the business simulation helped to a great extent in understanding that the role of the marketing chief is not limited to overseeing the planning, development, and execution of an organization's marketing and advertising initiatives. Nevertheless, businesses can provide real-time insights and forecasts using data-based decision-making, which helps them improve performance. By doing this, businesses may evaluate the efficacy of various tactics and make wise business judgments for long-term expansion.

Effective processes learned from the simulation are listed below:

- Run a quantitative analysis: The focus of quantitative analysis is on data and statistics. The median, standard deviation, and other descriptive statistics are crucial. Instead of being seen, this kind of study is measured. For better business decisions, both qualitative and quantitative data should be studied.
- Identify Goals, Target Data, and Impact of the data and strategize according to business needs.
- Decide your data sources, run an analysis on the target audience, and plan further testing using statistics.