

# Business Analytics Capstone Framework for Strategy

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# Problem Statement

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Describe the Problem Adblockers present to GYF

- *Adblocking softwares(Adblockers) are the ones that thwart the disruptive ads which interfere with the loading of websites and prevents sites from collecting customer's data about user's browsing behaviour and other informations such as demographics.*
- *Adblockers poses significant impact on the loading speeds, memory or RAM hogging. They insert a huge CSS stylesheet that roughly takes 4mb of Ram for every single webpage to load.*
- *They directly impact the revenue of the GYF company.*
- *The end user or the customer remains unaware about the ads and hence have difficulty choosing the best product from the market.*

# Problem Statement— *Application Exercise 1 – Research Methods and Tools (Optional)*

- *Use this space for to answer the questions set out in Application Exercise 1:*
- *1. Given your definition of the problem faced by GYF, what type(s) of research will you employ to learn more about the strategy the DATA Team should pursue?*
- *2. What research tools could you use to conduct that research?*
  
- *Here, the problem faced by the GYF company is known, i.e, the adblockers have a negative impact on the web experience of the user and hence I would employ Causal approach to the problem.*
  
- *The questions here are:*
- *1). Will the web user get a better experience if the company brings about a major change in user interface by handling the adblockers.*
  
- *2). Will the revenue increase ?*
- *To conduct this research I would recommend:*
- *Social media analytics*
- *A/B Testing*
- *Regression analysis*
- *Mobile Data analytics*
- *The above tool have been chosen since GYF company decided to tailor ads via both mobile and web hence social media and mobile analytics would be quite beneficial.*
- *Secondly, in order to reduce negative reaction towards native advertisement, A/B testing and Regression Analysis will be beneficial. These analytical tools will help to gain user trust and help providing better user experience.*

# Strategy

# Strategy

*My strategy would be to opt for Native Advertising.*

- Native advertising provides the ability to switch between video and ads. This content switching does not impact the user experience.*
- This will also give more emphasis on reducing the page loading time and bandwidth consumption for native advertisement.*
- In order to retain the user experience there should also be the option to skip or watch the ad. This ensures that ad is being played at the will of the user rather than being forceful.*
- This separate analytics tool was needed since adblockers usually blocks the cookie and hence tracking by third party becomes difficult.*

# Strategy *Application Exercise 2 – Hiring a Team Leader (Optional)*

*Based on the information provided in Application Exercise 2, describe here why you would hire Carrie Candidate or Peggy Prospect to be the second-in-command of the DATA Team*

- I would hire Peggy Prospect as part of the DATA team.*
- The DATA team for overcoming the problems of the adblocking issue requires an individual who is detailed in their work.*
- As Peggy has already worked on the issue posed by the adblockers and other technologies that disrupt the traditional delivery of the online advertising, so she would be good choice to tackle the current ongoing problem.*
- She exhibited deep knowledge of the digital advertising landscape.*
- Even though she is not focussed on the long term goal, her detail oriented attitude and proper guidance can take her longway in overcoming any hurdles in the project.*

# Effects and Measurement



# Effects

Describe the anticipated effects of your strategy

- Please describe the anticipated effects of your strategy. Make sure you address the effects on customers, revenue, and the internal organization*
- The effects of the strategy of Native Advertising as as below:*
- It will build customer experience. Advertisers should always ensure customer's are happy with the products being shown and should not be unhealthy which forces a customer to use adblocker.*
- This will increase advertiser's trust. They can still sell ads and generate revenue.*
- The most important is keeping the advertisements engaging. This means showing ads dynamically based on the user demographic or the user behaviour.*
- Getting feedbacks from the customer's would also enable the advertiser to build a suitable product . Further, the revenue is generated.*

# Effects

## Application Exercise 3 – Designing a Deterministic Optimization Model

- Provide an explanation of the calculations you performed to build an optimization model using decision variables, constraints, and an objective; this model could use the scenario in Application Exercise 3, or one of your own devising.

- The amount spent on the skills for Internal and External categories are as below (obtained from the Solver in Excel):

\$ amount spent on the Internal Hard Skill	x	18670
\$ amount spent on the Internal Soft Skill	y	13800
\$ amount spent on the External Hard Skill	a	23240
\$ amount spent on the External Soft Skill	b	9290

- Below is the snippet of the Decision variables, constraints and objectives. In order to maximise the NPI (Net Productivity Increase), it is subjected to the constraints as given:

25					
26					
27	Maximize(Net Productivity Increase)	$0.2x + 0.6y + 0.7a + 0.4b$			
28	NPI is subject to the below conditions:		Required Budget		Available Budget
29	Total Spending Budget (in \$ thousands)	$x + y + a + b = 65000$	65000		65000
30					
31	Productivity Increase in Hard	$0.2x + 0.7a \geq \$20000$	20002	$\geq$	20000
32	Productivity Increase in Soft	$0.6y + 0.4b \geq \$12000$	11996	$\geq$	12000
33	Productivity Increase Internal v. External	$0.2x + 0.6y \geq 0.6(0.7a + 0.4b)$	12014	$\geq$	11990.4
34	Constraints for Individual budget	$x > \$0, y > \$0, a > \$0, b > \$0$			
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The Hard Skills training program must achieve at least \$20,000 in the total net productivity increase;

The Soft Skills training program must achieve at least \$12,000 in the total net productivity increase; and

The Internal program should achieve at least 60% of the net productivity increase realized for the External program.

Decide how to best allocate your training budget of \$65,000 among these four training options.

# Measurement

Describe the anticipated effects of your strategy and how you will measure them

- Please outline your plan for measuring these effects using data. Make sure you use techniques you learned about in the courses*
- To measure customer experience on engaging native advertisements, A/B testing is to be used.*
- Hypothesis Testing mode: Correlation and Regression Analysis*
- Hypothesis:***
- Lower the forceful nature of the ads, lower will be possibility to install adblockers by the customers.*
- Providing free analytical tools to advertisers makes an advertising portal favourable.*
- Native Advertising gives customers a pleasant viewing experience*
- Customer experience and increase in revenue are directly proportional.*

# Measurement

## *Application Exercise 4 – Identifying Key Drivers*

- *Apply the “causal business model” performance measurement framework to your strategy*
- **Primary Objective:**
  - *More Revenue*
  - *Good/ Healthy Ads*
  - *To increase web visits*
  - *To sell more ad-space*
- **Strategy:**
  - *Free Analytical Tools*
  - *Native Advertising*
  - *Micro Monitoring Users*
  - *Diverting Standards*
- **Key Drivers:**
  - *Pleasant customer experience*
  - *Engaging Advertisements*
- **Outcomes:**
  - *More ad product sales*
  - *More Buyers*
  - *More customer reach*
  - *More revenue*

# Conclusion

- *Advertisers opting for Native Advertising, will provide good customer experience which in turn leads to increase in revenue.*
- *Advertisers should focus on providing the flexibility of watching or skipping the ads. This decreases the attempt to install adblockers.*
- *Advertisers should steer ads based on demographics. This will lead to happy customers with pleasant web experience.*
- *Providing a free analytical tool will help advertisers in selling more ad space.*