Business Analytics Capstone Framework for Strategy

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Problem Statement

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Describe the Problem Adblockers present to GYF

- GYF is an organization which heavily depends on its income through advertising on its free content. Usage of Ad blocking software by GYF's end users effects the company

- Users generally want a clean and easy interface to work with, free of unnecessary ads and responsive user interface while browsing on web or on mobile applications, so naturally they will have an inclination towards getting an ad blocking software to enhance their experience.

- As the popularity of these ad blocking softwares will increase, company will start to lose its ad-buying customers who pay them for displaying their advertisements, which will hit GYF's revenue heavily.

- Thus, company have to look for other sources for generating revenue, for example ,the content they were giving users for free, can be made paid for ad free version. This in turn can result the company to lose its end users rapidly, as it's USP is to provide various content free of cost.

Problem Statement–

- According to the problem, I suggest that Descriptive Research should be used as we are aware what the problem is i.e. loss of revenue due to ad blocking software. So, we must first of all find out who are our customers and users who contribute to our revenue.

- Use of A/B attesting as well as rating on scale of 1-10 to find net promoter score will also be helpful.

- I would suggest also conducting Mobile Surveys as people are more active on mobiles now a days. Also, mobile surveys provide in-situ response of the questions like - was this ad helpful? Would you like to see similar ads in future? Etc. In this way we can figure out what kind of ads user actually like and whether they are willing to pay for an ad-free version of the site. In this way we can information about who are our potential customers.

- The company should also focus on mobile ad-blocking as it is growing rapidly.

- Later, we can switch our focus to ad buying customers. What are they willing to pay?, for how long they will be our customers? What are the business that will profit from displaying ads on our website and how ad blocking effects them ,etc.

Strategy

Strategy
Describe your proposed strategy

• I would suggest the results we got regarding A/B testing and the ads that users find relevant , must be kept on high priority and core of the strategy must be to seek providing a friendly user interface ,where the content is placed properly and users see the ads which are relevant to them as unnecessary ads can breach security of user as well as slow the content loading.

• Improving Quality of advertisements should be our main motive, which leads to customer satisfaction. Not forcing user to watch ads which are of no use to them.

• Then, shifting to our advertisement companies, we must convey them that your ads must be free of spam and must be fast loading else they will be automatically blocked. It is necessary that advertising companies provide engaging and positive advertisements which are relevant to the users. Users don't want to be flooded with meaningless ads. If you display ads which user might like and which requires involvement of user, they will certainly welcome such ads and won't use ad blockers.

• We can hire a digital content manager ,employees who are good at building UI so that we can implement changes to the website according to the feedback we received from surveys and A/B Testing.

• Also, we can introduce an ad-free paid version of the site which will be free for a month so that user can see how they feel using it. Later, we can charge them based on monthly, semi-annual or annual basis.

• We can tie up with some ad blocking firms to whitelist our ads and display them. Those ads will also be fast loading ,secured and relevant. This can help us reducing our loss for a short term.

• We will consult our analytics team ,specially financial analytics department regarding above improvements, how will they effect our revenue .Also we will consult with our Customer relationship department whether above changes improve our relationship with ad buying customers and end users.

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

- Both of the candidates have excellent academics qualification and have done well in almost every area.

- Carrie has studied from top 20 undergraduate schools, has excellent GPA, cognitive ability and is certainly very creative and goal oriented.

- Peggy is some what behind regarding above mentioned skills, although she is very good too.

- But the area where Peggy has certainly surpassed Carrie is Job knowledge and experience for this post. Peggy , in her previous company, was Digital Content Manager and as part of her role she specifically focused on the issues posed by adblockers and other technologies that disrupt the traditional delivery of online advertising.

- Also, she had a very good interview and was very informative about digital advertising and the new position she will be assigned.

- This position certainly requires someone with experience of the job and here Carrie is struggling. I would prefer Peggy Prospect because Senior Associate Director for Digital Advertising Strategy and second-in-command is a very important position. Although Carrie is very impressive, but I would prefer her for a less experienced position or the position she has work experience in

Effects and Measurement

Effects

Describe the anticipated effects of your strategy

- I am going to focus on the following two strategies:

- **Effects of Tying up with ad-blocking firm-**

  - ➤ Tying up with an ad –blocking firm so as to whitelist our advertisements is very important for a short period as to cut the loss in revenue.

  - ➤ It will buy us more time to focus properly on our long term goal, that is, to improve content for end user.

- **Effects of improving the content and better UI-**

  - ➤ This is our long term goal and will result in ,what has been the focus of our problem, "Customer satisfaction".

  - ➤ Better UI and relevant ads will result in good browsing speed, safe surfing without any malware or pop-ups.

  - ➤ Engaging, positive advertisements will attract more users.

  - ➤ This will result in increasing User base and retention of lost users.

  - ➤ Thus, more click through rate, more customers for our paid services and more advertisements from advertisement companies.

  - ➤ Company will address better relationship with customers and profit will increase.

Effects

Application Exercise 3 – Designing a Deterministic Optimization Model

- As per the question, I infer money spent on internal hard skills, external hard skills, internal soft skills and external soft skills are decision variables
- As we have to maximize the net productivity increase, it is the objective
- Constraints are described below with the solution:

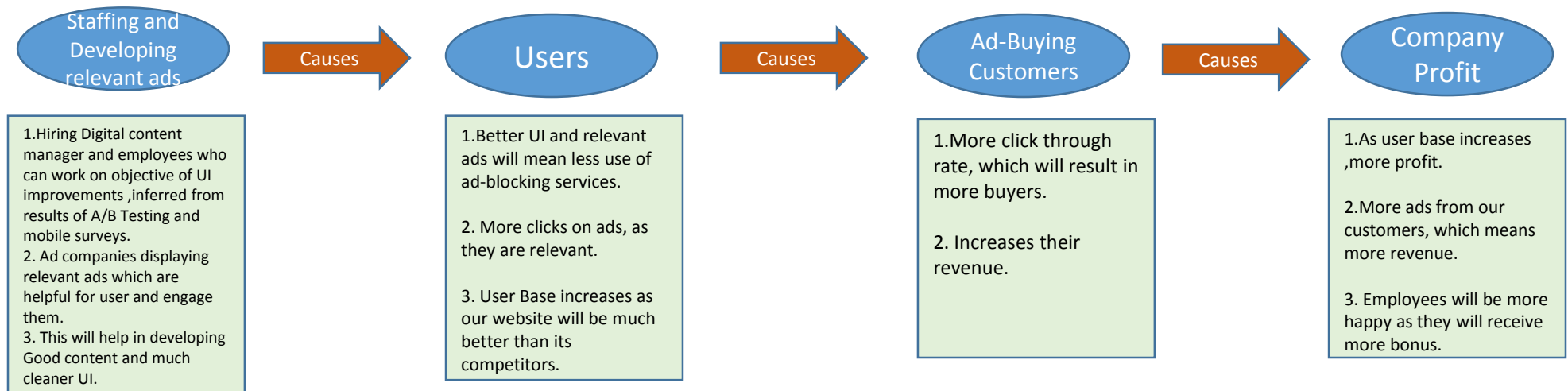| Business Analytics Capstone						
Application Exercise 3						
Net Productivity Increase (in $ per $ spent on training)				Total Net Productivity Increase		
Training	Hard Skills	Soft Skills		(in $ thousands)		
Internal	0.2	0.6		**42.82**		
External	0.7	0.4			Constraints:	
					0.2 * IH + 0.7 *EH >= 20	
Spending Amounts (in $ thousands)					0.6 * IS + 0.4 * ES >= 12	
Trainging	Hard Skills	Soft Skills		Total		
Internal	**0.00**	**26.76**		26.76	(0.2 * IH + 0.6 * IS) + (0.7 * EH + 0.4 * ES) <= 65	
External	**38.24**	**0.00**		38.24		
Total	38.24	26.76		65	(0.2 * IH + 0.6 * IS) >= 0.6(0.7 * EH + 0.4 * ES)	
Total Spending Budget (in $ thousands)	**65.00**	<=	65		IH= money spent in internal hard skills training (in thousand dollars)	
Productivity Increase in Hard	**26.76**	>=	20		EH= money spent in external hard skills training (in thousand dollars)	
Productivity Increase in Soft	**16.06**	>=	12		IS= money spent in internal soft skills training (in thousand dollars)	
Productivity Increase Internal v. External	**0.60**	>=	0.60		ES= money spent in External soft skills training (in thousand dollars)	

Measurement

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

- **To measure the effects of our proposed strategies, we can do the following:**

  - Click through rate can be easily measured and will determine how many users are clicking the ads they are seeing. Generally 4%-12% is a good rate.

  - We can compare the amount of users who were using ad-blockers before and now.

  - We can ask our end users to rate the website 1-10 ,and on basis of this, we can calculate Net Promoter Score and compare it with our previous scores.

  - Increase in user base will be the big indicator that our strategy has a positive response.

  - Change in the use of paid services offered by GYF will also indicate user base is increasing.

  - Most importantly, revenue generated via ads will increase. We can compare revenue before and after implementing our new strategy by comparing company's performance quarter-wise.

  - As, more users will use GYF, advertisement companies will also be using our services more. These all will indicate the positive result from our strategy.

Measurement

Application Exercise 4 – Identifying Key Drivers

- Our objective is a win-win situation for our users and our ad-buying customers
- Users want Better UI, relevant ads, no pop-ups, fast and safe browsing.
- Ad-buying customers want more ads to be displayed and more click through rate on their ads.
- We can implement this by using following model:

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┌──────────────┐         ┌──────────┐         ┌──────────────┐         ┌──────────────┐
│ Staffing and │ Causes  │          │ Causes  │  Ad-Buying   │ Causes  │   Company    │
│ Developing   │ ──────▶ │  Users   │ ──────▶ │  Customers   │ ──────▶ │    Profit    │
│ relevant ads │         │          │         │              │         │              │
└──────────────┘         └──────────┘         └──────────────┘         └──────────────┘
```

Staffing and Developing relevant ads
1. Hiring Digital content manager and employees who can work on objective of UI improvements ,inferred from results of A/B Testing and mobile surveys.
2. Ad companies displaying relevant ads which are helpful for user and engage them.
3. This will help in developing Good content and much cleaner UI.

Users
1. Better UI and relevant ads will mean less use of ad-blocking services.
2. More clicks on ads, as they are relevant.
3. User Base increases as our website will be much better than its competitors.

Ad-Buying Customers
1. More click through rate, which will result in more buyers.
2. Increases their revenue.

Company Profit
1. As user base increases ,more profit.
2. More ads from our customers, which means more revenue.
3. Employees will be more happy as they will receive more bonus.

- From above we can infer that our key drivers will be : click- through rate and user base. Improvements in both of these will increase profits and thus we will have a correlation among these. If this correlation is persistent for a long time, we can say it is causal model.

- We can determine key drivers by collecting following data:
  - Change in click through rate
  - Change in User Base
  - Amount of users using ad-blockers now.
  - Change in revenue.

Conclusion

- GYF was losing it's customer base because of increasing use of ad-blockers . This was resulting in loss of company's revenue.

- After conducting surveys the core problem is determined that users have a much better experience using ad- blockers. They can browse fast, free of pop-ups, irrelevant ads and any malware that hinders the security of their machine. Also, the users who were on bundled data pack were losing valuable data because of the unwanted ads and videos being played.

- We also focused on mobile experience as market of mobile users is increasing rapidly.

- So, instead of forcing users to not use ad- blocking softwares , we emphasize on improving our content and informing the advertisements companies to improve quality of their ads and making ads which are fast, free of malware, and which are positive, engaging and involving users . In this way users will feel much connected and will positively respond to their advertisements.

- We saw the effects of implementing our strategy by increase in user base and improvement in click through rates, which in turn increased our ad- buying customers and more users were using our paid services.

- The use of ad-blocking softwares went down, user experience was enhanced ,which was our objective.