Business Analytics Capstone Framework for Strategy

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Problem Statement

Problem Statement–
Adblockers would significantly reduce GYF's revenue

Online Advertising

- Online Advertising is a form of marketing and advertising that uses internet to deliver promotional marketing messages to the consumers
- Online advertising is preferred over offline because
  - Online interactive medium allows better targeting of individual customers based on their browsing behaviour
  - With increasing use of mobile phones for browsing internet, shopping, banking and other activities, online advertisements offer better coverage
  - Cost effective
- Online content providers generate revenue through online advertisements

Revenue Model

- GYF's significant revenue is through online advertisements

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Adblocker

- Adblocker is a software that can remove or alter advertising content from a webpage, website or a mobile app
- Adblockers are primarily on web browsers, however mobile adblocking is also gaining prominence

End User (Customer) Preference

- Consumers believe advertisements intrude and spoil their browsing experience
- Misuse of personal information
- Costumers want faster web i.e. it is believed that online advertisements slows down the performance by increasing the content loading time

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Effect of Adblockers on Online advertising

- Adblockers block their main revenue generators i.e. advertisements
- Adblock Plus, a popular ad blocker claims that its been installed on people's browsers more than 400 million times and it counts 50-60 million active users
- Pagefair and Adobe 2015 Adblocking Report
  - $21.8 Billion is the estimated loss of global revenue
  - 198 million monthly active users (6% of global internet population) and the number is growing
  - Apple's support for adblocking in its iOS 9 role out will make adblocking mainstream in the mobile platform

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Effect of Adblockers

- On GYF
  - Reduction in Advertising Revenue
  - Strain on the organization
    - Cut cost to remain profitable
    - Reduction in product development budget
    - Inability to attract and retain top talent
    - Could have adverse impact of user experience both in terms of the quality of the content, new offerings, loading time etc.
- On Customers
  - Adverse User experience due to quality issues resulting from cutting back on development spending
  - Customers may be forced to pay for the content which is available for free due to advertising revenue
  - Customers may move away from GYF to other platforms/websites that offer content for free and good user experience

Problem Statement–

Application 1 – Research Methods and Tools (Optional)

- Descriptive Research as we are aware of the problem i.e. adblockers
  - End users/Customers (both web and mobile)
    - Geography and age group of customers who have installed adblockers
    - Usage of various services search, mail/chat, content
    - Browsing preference
    - Response to advertisements including sponsored contents
  - Passive Data Collection
    - Web and Mobile data
    - Social Media
- Causal Research
  - Response to targeted advertisements based on online behaviour
  - A/B Testing

Strategy

Strategy
Better user experience & alternative advertising models

Response to Adblockers

- Current Approach
  - Yahoo and other companies like Washington Post either block content or encouraging the visitors to disable adblockers
  - The approach doesn't consider customer preference (advertisements are intrusive)
  - Could drive the customers away from Yahoo
- Recommended Approach
  - Explore alternative models like sponsored content, advertorials, branded content etc. which are rich in content and also non-intrusive
  - Reduction of Loading time by creating lighter version (for example Google's Accelerated Mobile Page)
  - Invest in ad recovery solutions which could counter the blocking
  - Whitelisting i.e. adblocker would allow certain advertisements which is also a revenue stream for adblockers

Strategy
Better user experience & alternative advertising models

- Data Collection and Analysis
  - Analyse the visitor behavior
    - Number of visitors with adblockers
    - The browsing behavior of visitors with adblockers and without adblockers
    - Targeted advertisements based on visitior behaviour
    - Response to targeted advertisements

Strategy
Hire Peggy Prospect

- Metrics for Peggy
  - Performed very well in Structured Interview
  - Excelled in Job Knowledge side
  - Detail oriented, open minded and ability to work as part of the team
  - Relevant Experience
- Metrics against Peggy
  - Relative lower test score in Cognitive Ability test
  - Work samples and Educational qualifications were good but not excellent as in the case of Carrie
  - Reference Check – too focused on short term than on long term

Effects and Measurement

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Effects
Increase in advertising revenue & better user experience

- Continuous data driven analysis of customer behaviour for timely and appropriate response.
- Alternative advertisements model could increase advertising revenue
  - More revenue per advertisement due to specialized content
- Reduction in loading time and non intrusive advertisements (targeted advertisements)
- Ad recovery solutions and Whiltelisting would avoid advertisements getting blocked
  - Revenue neutral as they help to maintain advertising volumes
  - Potential to monitise by charging for advertisements recovered or allowed to go through (whitelisting)

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Effects

Application Exercise 3 – Desiging a Determinstic Optimization Model

- Net Productivity Increase (in $ per $ spent on training)

	Hard	Soft
Internal	0.20	0.60
External	0.70	0.40

- Spending Amounts (in $ thousands)

	Hard	Soft
Internal	X	Y
External	Z	A

- Total Spending Budget (in $ thousands) 65
- Productivity Increase ((in $ thousands)

	Hard	Soft
Minimum Productivity Increase ($ in 000s)	20.00	12.00

- Productivity Increase Internal v. External 60%

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Effects

Application Exercise 3 – Desiging a Determinstic Optimization Model

- Algebric Equation

Total Spending Budget	**X+Y+Z+A<=65**
Productivity Increase Hard	**0.2X+0.7Z>=20**
Productivity Increase Soft	**0.6Y+0.4A>=12**
Productivity Increase Internal v External	**(0.2X+0.6Y)/(0.7Z+0.4A)>=0.6**

- Solution
  - Total Net Productivity Increase (in $ thousands) 42.82
  - Spending Amounts (in $ thousands)

	Hard	Soft
Internal	0	26.76
External	38.24	0

Measurement

Increase in advertising revenue & better user experience

- Alternative advertisements model
  - Effect can be measured by click through rate and visitor behaviour
- Reduction in loading time and Targeted (non intrusive) advertisements
  - Enhanced user experience which would result in increased traffic and also measure user experience through surveys
  - Increase in revenue potential which can be measured through change in revenue before and after implementation
- Ad recovery solutions and Whiltelisting
  - Advertisements recovered through Ad recovery solutions
  - Advertisements that are allowed through whitelisting

Measurement

Application Exercise 4 – Identifying Key Drivers

- Hypothesis: Targeted Advertisements would increase advertising revenue
  - Advertising revenue is the main business driver for the company
  - Adblocking software is used by users to block advertisements
    - One reason is that the advertisements are intrusive
    - Slow loading of websites due to advertisements
  - Advertisements based on their online behaviour increases the likelihood of responding to the advertisements not only see but also action

Measurement

Application Exercise 4 – Identifying Key Drivers

- Key Driver: Advertisement based on user's online behaviour
  - Users are more likely to see the advertisement and also could respond by buying the product or services
- Measurement: User response
  - How the user responds to the advertisements that pop up that are likely to be relevant? – Close the advertisement or click to see?
  - If the user clicks then is most likely to see the advertisement
  - Continue to collect data on user behaviour

Conclusion

Problem

- The effect of advertisers and websites pushing advertisements to customers has resulted in users blocking advertisements
- The adblocking software threaten the advertisement based business model

Strategy

- The strategy is to explore alternative models where customers and visitors are seen as collaborators in our business
- Customers play an active part in fine tuning our strategy
- Data driven approach is the way to go
- Analyse visitor behaviour and place advertisements accordingly
- Explore alternative forms of advertisements like sponsored content, advertorials, branded content etc.

Conclusion

- Invest in technology that reduces loading time of the webpage as one of the main reasons for adblockers is the visitors think due to advertisements the loading takes time.
- Invest in ad recovery solutions and also explore whitelisting which will ensure advertisements are not blocked

Effects

- Each of the above has the potential either to retain or increase revenue and enhance user experience
- Advertisements based on user behaviour increases the likelihood of response
- Continuous data driven analysis on consumer behaviour for timely and appropriate response

Measurement

- Measure the effect of each alternative using methods and tools like surveys (enhanced user experience), revenue before and after implementation, measure the benefits due to whitelisting and ad recovery through its effect on sales.