Business Analytics Capstone Framework for Strategy

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Problem Statement

Problem Statement–
Describe the Problem Adblockers present to GYF

Based on the article and offered information, the company GYF is facing a significant challenge due to the widespread adoption of ad-blocking software, which has started to affect the dynamics of online advertising. The text states that the issue has emerged as a critical threat to GYF's advertising sales, generating a wedge in the relationship between advertisers and consumers, and posing a potential risk to GYF's revenue streams. The rise of ad-blocking technologies, Shine's aggressive stance being the paradigmatic case, has led to a backlash from major advertisers and content providers like Google and Yahoo, who rely heavily on advertising revenues.

In a shell, GYF must think on how to navigate this change in its landscape, maintain the value exchange between advertisers and consumers, and develop a strategy that mitigates the impact of ad-blockers on its business model. GYF, as many other companies dependent on this type of revenue, must face the dual challenge of preserving consumer trust while ensuring that advertisers continue to find value in their investments. The situation gets worse by the blunt nature of ad-blocking software, which indiscriminately block all types of ads. This could sever the delicate balance between content providers and their audience.

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

Based on the Research Methods and Tools, descriptive research should be the primary mode of inquiry to understand the current state of ad-blocking and its effects on GYF's advertising ecosystem. The main advantage of this approach is that it has the potential of providing detailed insights into how different segments of GYF's audience interact with ads and the extent to which ad-blocking influences their behavior.

To conduct this research, I would propose focusing on Surveys, Social Media Analytics and Focus Groups. The reasons for this decision are as follow:

a) Surveys: These could gather data from both advertisers and end users, focusing on their attitudes toward ad-blocking and perceived effectiveness of current ad formats.

b) Social Media Analytics: By getting data on conversations and sentiment on platforms like Twitter and Facebook, GYF could gain a deeper understanding of public perceptions surrounding ad-blocking and digital advertising by quantifying the magnitude and type of attitudes users have.

c) Focus Groups: Performing small group ethnographic-style studies for users in discussions about their experiences with online ads would likely offer more extensive qualitative insights that the aforementioned quantitative approaches could miss. These should be employed for both the advertisers who purchase mobile and internet ads, as well as the end users who consume GYF's services. That way, the study obtains feedback and perceptions of the two most involved populations on the issue.

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Strategy

Strategy
Describe your proposed strategy

- *Make sure your strategy is clear, well-defined, and feasible*

I propose a strategy that aims to directly confront the rising challenge of ad-blocking software that has significantly disrupted the conventional advertising ecosystem. This strategy involves a comprehensive overhaul of how advertisers engage with consumers; its pillar is respect for consumer privacy, while also maintaining the value exchange that underpins online content. The strategy can be summarized as 1) implementing Accelerated Mobile Pages (AMP) to enhance ad performance, b) exploring new advertising formats (ads under requested content, instead of in-front of it), and by establishing a series of parameters of engagement to protect consumer interests, while ensuring sustainable revenue streams for publishers.

This strategy has been developed with careful consideration given to the multifaceted needs of both advertisers and consumers. The core components of the strategy are as follows:

1. Consumer-Centric Approach: Ads will be redesigned into peripheral formats (away from the center of the webpage content) to minimize intrusiveness and maximize relevance, addressing the primary consumer grievances that have driven the adoption of ad-blocking software.

2. Optimization of Ad Performance: The strategy will leverage AMP technologies to get feedback to ensure that ads do not severely compromise the user experience. The hope is that this will reduce customer incentives for using ad-blockers.

3. New Engagement Guidelines: the proposal is to create a definition of comprehensive guidelines that will be developed for advertisers, prioritizing legal transparency (the nature of the advertisement and the product or service it is selling) consumer consent (i.e. how much advertisement consumers are willing to tolerate), and respect for privacy.

4. Strategic Partnerships: Given the nature of some of the major players involved, the strategy involves collaboration with key industry players, specifically Google and Yahoo, to ensure more relevant stakeholders are involved in agreeing on reasonable practices for ad-blockers.

The strategy considers a series of potential challenges: consumer skepticism, resistance from advertisers accustomed to using currently accepted methods, and the technical hurdles associated with implementing new technologies. To ensure the viability of the strategy, there would be efforts to educate both consumers and advertisers on the benefits of this new approach, via public declarations, news publications and a modest digital campaign, with the hopes of fostering a more informed, cooperative and sustainable ecosystem. With regards to advertisers, a temporary reduced rate for advertising (i.e. "early adopter" model) would be offered to those who align with the strategy's principles new guidelines.

Finally, the strategy takes an incrementalist approach: it assumes that the approach is perfectible, so it should be tested continuously (i.e. based on consumer feedback, revenue trends, technological capabilities) to verify its effectiveness and fine tune to a viable approach.

- *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.*

Based on the information from the exercise, there are indices that make it reasonable to select one candidate over another. After a detailed analysis of both candidates, Peggy Prospect emerges as the most suitable choice for the role of Senior Associate Director for Digital Advertising Strategy. The main reason this is so is that Peggy possess an extensive experience in digital content management, particularly in environments facing similar pressures as those at GYF, as well as her strong performance on the job knowledge test suggest that she possesses the desired expertise that will be critical to handle the current and future challenges of ad-blocking. Although Carrie Candidate demonstrates strong creative and cognitive abilities, Peggy's specific experience with ad-blocking and her collaborative mindset –clearly invaluable for the outlined strategy involving the numerous stakeholders influencing and being affected by online advertising– make her a better choice for implementing the proposed strategy.

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 anticipated effects of the proposed strategy for Google, Yahoo, and other advertising-dependent platforms is a gradual reversal of the recent declining trend in ad-revenue. This objective is expected as a direct result of replacing the currently pervasive ad-blockers, as the current panorama shows the potential for severe financial impact if the trend, which saw a 41% growth of adblocking software as of 2015, continues. Additionally, the impact with regards to consumer behavior would be seeing a reduction in users use of ad-free content to circumvent adds. In other words, if companies like Google and Yahoo adopt a strategy as that outlined beforehand, which performs research on their users' experience with ad-block, adopting Accelerated Mobile Pages (AMP) to optimize ad delivery, it would be possible to change the dynamics of the current trends.

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 you own devising.*

Based on the information, Application Exercise 3 proposes a 4 variables optimization process. Since the equations at hand are linear, the optimization process would require maximizing the amount of resources of the larger variables of both second-degree systems: Internal Hard Skills (x1) vs External Hard skills (x2) and Internal Soft Skills (x3) vs External Soft Skills (x4). Since the objective function and two of the three variable constraints are linear in nature (e.g. the total output does not depend on multiplying variables, as in a Cobb-Douglass Function), we would get a corner solution: investing most of the the funds in hard external skills and non internal soft skills would be best; as each of the outputs from these productivities are independent of each other. As can be seen below, the Expected Total Net Productivity Increase in Investing in only these two skills would be 43,500.0.

Objective Function:

Maximize $Z = 0.2x_1 + 0.7x_2 + 0.6x_3 + 0.4x_4$

Constraints:

1. Budget Constraint:

$$x_1 + x_2 + x_3 + x_4 \leq 65,000$$

2. Hard Skills Productivity Constraint:

$$0.2x_1 + 0.7x_2 \geq 20,000$$

3. Soft Skills Productivity Constraint:

$$0.6x_3 + 0.4x_4 \geq 12,000$$

4. Internal-External Balance Constraint:

$$0.2x_1 + 0.6x_3 \geq 0.6(0.7x_2 + 0.4x_4)$$

5. Non-negativity Constraints:

$$x_1, x_2, x_3, x_4 \geq 0$$

Business Analytics Capstone
Application Exercise 3

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

Training	Hard Skills	Soft Skills
Internal	0.2	0.6
External	0.7	0.4

Total Net Productivity Increase (in $ thousands)

43500.00

Spending Amounts (in $ thousands)

Trainging	Hard Skills	Soft Skills
Internal		20000.00
External	45000.00	

Total Spending Budget (in $ thousands)	65
Productivity Increase in Hard	20
Productivity Increase in Soft	12
Productivity Increase Internal v. External	12000/31,500 = 38.00%

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*

Having proposed a strategy and performed a linear optimization, I would use the following 4 metrics as the main metrics to measure and evaluate decision making:

1. Revenue Tracking. Perhaps the primary and most important metric would be monitoring revenue from online ads before and after implementing any counter-strategy. This can be tracked monthly and compared against the percentage of users employing ad-blockers (e.g. purported casual variable).

2. Consumer Surveys: to gather constant feedback, periodic surveys could be used to assess consumer satisfaction and behavior changes, particularly regarding their use of ad-blockers and willingness to pay for ad-free content.

3. Engagement Metrics: tracking user engagement and satisfaction on content sites (e.g. via the time spent and bounce rate they display) would be a reasonable metric to gauge the impact of ad-blocking on user experience and site loyalty.

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Measurement

- *Apply the "causal business model" performance measurement framework to your strategy*

Based on the Causal Business Model, I propose the following hypothesis:

H1: If Google and Yahoo implement a strategy that reduces the negative impact of ad-blockers on user experience, then user engagement on their platforms will improve, leading to a recovery or stabilization in ad revenue. The key driver for this statement would be user engagement: the likelihood of users changing their behaviors towards adblockers. This would be measured by metrics that are both quantifiable and conducive to this objective, like data on ad-blocker usage, user engagement metrics, revenue figures, average session duration, bounce rate, and user satisfaction scores before and after the strategy implementation. This will involve deploying some analytics tools, like conducting user surveys, and reviewing financial reports.

If it is possible to detect changes in user behavior and ad revenue over time (since the implementation of the new strategy), it could be possible to determine if the hypothesized causal relationship holds true. To validate the hypothesis, therefore, data on ad-blocker usage, user engagement metrics, and revenue figures will be collected and analyzed.

Conclusion

The document has proposed a strategic plan for GYF to address the significant challenges posed by the incremental and widespread adoption of ad-blocking software that has disrupted the online advertising ecosystem.

GYF's proposed strategy focuses on maintaining the delicate balance between advertiser interests and consumer satisfaction. Through the implementation of Accelerated Mobile Pages (AMP), the exploration of new ad formats, and the establishment of comprehensive, yet reasonable engagement guidelines, GYF could create a more consumer-centric advertising experience, while also retaining its revenue stream. This strategy also emphasizes the importance of collaboration with key industry players like Google and Yahoo, ensuring a generalized (industry standard) approach to the challenges of ad-blocking.

Furthermore, the selection the exercise showed that experience and expertise in addressing challenges of a similar nature tend to be preferred when creating viable strategies. Additionally, an issue of this nature, which involves some level of collaboration between numerous stakeholders, seems to indicate that team leadership would likely benefit more by prioritizing individuals skilled in collaborating.

All in all, the proposed strategy, backed by market analysis, research and an optimization process, has the potential to position GYF to reverse the declining trend in ad revenue and lays the foundation for the organization to be able to adapt to the changing dynamics of online advertising.

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