Business Analytics
Capstone Framework for Strategy

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Problem Statement

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Describe the Problem Adblockers present to GYF

Adblocking software is a direct threat to GYF's relationship with its ad-buying customers as it reduces the number of ad impressions advertisers actually pay for and receive. When ads are blocked, advertisers get less value from their spending, which creates pressure on GYF to lower its ad prices and risks advertisers shifting their budget to platforms or formats seen as less affected by adblocking.

This could also **undermine advertisers' trust** that their campaigns on GYF are being reliably delivered and measured. This is especially important for GYF because 70% of its digital advertising revenue comes from mobile which has a growing number of adblockers after Apple's decision in 2015 to allow native adblocking support in iOS 9. This will mean that the segment GYF depends on most is becoming more exposed over time. If this continues, advertiser concern about unreliable ad delivery could reduce GYF's pricing power and revenue per impression over time, directly affecting the company's financial performance.

The challenge lies in user behavior: The end users of GYF install adblockers for reasons such as ad fatigue, delays in web pages loading, higher consumption of mobile data and battery from ad content, and privacy concerns relating to ad tracking. With regards to operation, GYF currently lacks data on the number of users using adblockers and why, which creates difficulties in measuring the true scope of the lost impressions and to create a response. Additionally, GYF still does not have a dedicated team focused on the issue of adblocking, meaning that operational capacity will have to be developed. Overall, adblocking is a business threat affecting GYF's main revenue-generating activity and its credibility with customers who fund the free platforms.

Problem Statement–

Application Exercise 1 – Research Methods and Tools (Optional)

To tackle the problem defined in the previous slide, the DATA Team should use all three types of research in a specific order.

1. **Exploratory research** to figure out why GYF's users specifically are implementing adblockers, since that motivation isn't well understood yet and will shape everything else. Focus groups and online communities would help to get honest and open-ended feedback about what's frustrating users about GYF's ads. They could also carry out social media listening to pick up on public complaints in real time.

2. **Descriptive research** to actually quantify the problem on the advertiser side. Specifically, they should research what percentage of impressions are being blocked and the split between mobile and desktop so they can have an honest, data-backed conversation with the businesses buying ad space. GYF's own ad-serving data and mobile analytics could help to identify blocked vs. delivered impressions by device and segment, while surveying advertisers directly would reveal their actual thoughts and whether they are affecting their spending decisions.

3. Once there is a solution discussed, **Causal research** to test whether it actually works before rolling it out broadly. For the causal research, A/B testing can be used to compare ad block rates and advertiser-side engagement between groups exposed to the old vs. new experience.

Strategy

1. Improving ad quality
2. Value exchange

Strategy

Application Exercise 2 – Hiring a Team Leader (Optional)

Using a **People analytics approach**, I would hire Peggy Prospect for the role. This is because Peggy outperforms Carrie on the job knowledge test and the structured interview. Also, her background is specifically in adblocking which makes her a better fit. People analytics research suggests that Job-specific knowledge and relevant experience are the strongest predictors of success in specialist roles which is what makes Peggy the better choice.

Selection factors	Carrie	Peggy	
Job knowledge	—	✓	Better fit for the role
Structured interview	—	✓	
Adblocking background	—	✓	

Effects and Measurement

1. Customers
2. Revenue
3. Internal organization

Effects

Describe the anticipated effects of your strategy

The two-part strategy is expected to have positive effects across customers, revenue and on GYF's internal organization.

CUSTOMERS | REVENUE | INTERNAL

1. **For customers:** Advertisers will benefit from higher quality placements that are less likely to be blocked, leading to an improvement in the ROI of the campaigns. End users experience a less intrusive ad experience which reduces their motivation to use adblockers while the value exchange gives them a genuine choice rather than forcing them which protects GYF's reputation.

2. **For revenue:** Recovering blocked impressions through better ad formats and whitelisting will increase the amount of ads actually delivered to users, leading to an improvement in revenue per impression. The ad-free subscription tier also creates a new revenue stream from users who would otherwise generate nothing.

3. **Internally**, this strategy requires building a dedicated team and new processes across engineering, marketing and data analytics. While this has short term costs, it builds long lasting capability to respond to future disruptions beyond adblocking.

Effects

Application Exercise 3 – Designing a Deterministic Optimization Model

To decide how to best spend the $65,000 training budget across four training options, I built an optimization model using three components:

1 **Decision variables** — 2 **Objective** — 3 **Constraints**

Decision variables- How much money to allocate to each of the four training types

Objective- maximize the total productivity return from the training budget

Constraints- four limits: total spending cannot exceed $65,000; Hard Skills training must generate at least $20,000 in productivity gains; Soft Skills must generate at least 12,000; and Internal training must deliver at least 60% of the productivity gains from External training.

Using Solver to run the model, the optimal solution is to spend $38,240 on Hard Skill External and $26,760 on Soft Skills Internal, with nothing allocated to the other two options. This produces a maximum total productivity return of $42,820. The model naturally prioritizes these two options as they have the highest return rates while still satisfying all the constraints.

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	16.06
External	0.7	0.4	26.768

Spending Amounts (in $ thousands)			Total Return ($thousands)
Trainging	**Hard Skills**	**Soft Skills**	42.824
Internal	0.00	26.76	
External	38.24	0.00	

Total Spending Budget (in $ thousands)	65
Productivity Increase in Hard	20
Productivity Increase in Soft	12
Productivity Increase Internal v. External	

Constraint Checks	
Total Budget Used	65
Hard Skills Return	26.77
Soft Skills Return	16.056
Internal Return	16.06
External Return	26.768
Internal >= 60% of External?	NO

$42,820 return

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Measurement

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

To measure the success of the strategy. I will track the following metrics:

Ad block rate | **Whitelist / subscription** | **Advertiser retention & spend**

1. **For ad quality**, A/B testing will **compare ad block rates and user engagement** between users exposed to the new ad formats versus the old ones, directly measuring whether better ads reduce adblocking behavior.

2. **For the value exchange**, GYF will **track what percentage of users** shown the prompt choose to whitelist GYF's ads or subscribe to the ad-free tier, alongside revenue per impression before and after the implementation.

3. **At the advertiser level, changes in advertiser retention and average spend** will be monitored over time, using regression analysis to isolate the impact of the strategy from other market factors.

Together, these metrics will give GYF a clear picture of whether the strategy is working.

Measurement

Application Exercise 4 – Identifying Key Drivers

Step 1: Hypothesis

Better ads and a value exchange will reduce adblocking rates, which will increase ads successfully delivered, which will improve revenue per impression.

Step 2: Key Driver and Measurement

The key driver is the ad block rate among GYF's users. This will be measured by tracking the percentage of users with adblockers active before and after the strategy, split by device and platform. A secondary driver is the whitelist conversion rate, measured directly through GYF's ad-serving data.

Step 3: Verifying the Linkage

GYF would use regression analysis to test whether lower ad block rates actually lead to more impressions and higher revenue. A/B testing would provide the cleanest verification by comparing results between users exposed to the new strategy versus those who are not.

Conclusion

Adblocking poses a direct threat to GYF's advertising revenue and its relationships with ad-buying customers.

My proposed strategy addresses this through two parts:

1	Improving ad quality

2	Value exchange

1. **Improving ad quality** using the R.A.V.E.S. framework so fewer users feel the need to block ads **AND**

2. **Introducing a value exchange** giving users the choice to whitelist GYF's ads or subscribe to an ad-free tier.

Together these tackle both the root cause of adblocking and its financial impact. The effects include better advertiser ROI, a new subscription revenue stream, and stronger internal capability to handle future disruptions. Success will be measured through A/B testing, ad block rate tracking, whitelist conversion rates, and regression analysis to verify that the strategy is actually delivering results.

A/B testing • Ad block rate • Whitelist conversion • Regression

Thank you