Melvin Quashie
Student ID: Q175216002491596365
Principles of Business Analytics Project

GOG.com Business Analytics Project

Executive Summary

I have been hired to analyze the business strategy of GOG.com (Good Old Games), a digital storefront run by CD Projekt. GOG.com stands out because it sells games that are 100% DRM-free (Digital Rights Management-free), giving customers true ownership. My analysis focuses on GOG's unique product mix of classic titles and modern releases.
The main challenge for GOG.com is figuring out how to make the most revenue in a market dominated by huge competitors like Steam. This involves running sales but making sure those discounts boost profit instead of just making their special, DRM-free games seem cheap.

Project Goal

The goal of this project is to review the company product strategy. I will evaluate three major strategic areas of the GOG.com business using the data I have (Laputsky, 2025):
1. Product Health and True Value: Assessing the quality and makeup of the inventory by analyzing developer performance, genre success, game age, and product types (like DLC/Bundles) to understand their true value.
2. Pricing Structure Review: Evaluating the financial strategy by analyzing regional pricing, promotional efficiency, and price setting between different age groups of games (new versus back catalog) to make sure pricing is set up for success.
3. Day-to-Day Strategy and Audience: Reviewing key support structures like platform compatibility, age restrictions, and developer support visibility to see how they affect user ratings and the overall customer experience.

Final Goal: To give clear, useful advice across GOG.com's entire product strategy—from defining high-value content to setting decent prices—so that I can help make the DRM-free catalog financially strong and efficient for the long run.

Data Preparation

To achieve the set goal, the data on GOG.com (Laputsky, 2025) has been structured into 6 core entity tables, 3 information or status tables and 2 junction tables.
1. Core Entity Tables
These tables hold the primary, non-repeating data elements.

Table Name	Primary Key (PK)	Attributes/Columns	Foreign Key (FK)	Source Columns
Inventory	title_id(PK)	title, slug, release_date, age_limit, is_game, is_movie, buyable, support_url	publisher_id (FK to PARTY), developer_id(FK to PARTY), type_id(FK to PRODUCT_TYPE)	id, title, globalReleaseDate, ageLimit, isGame, isMovie, buyable, supportUrl, publisher, developer, type

PARTY	party_id(PK)	name		developer, publisher (Unique names extracted)
PRODUCT_TYPE	type_id(PK)	type_name		type (1, 2, 3 mapped to 'Game', 'Bundle', 'DLC')
OS_PLATFORM	os_id(PK)	os_name		Unique list of OS from supportedOperatingSystems
GENRE	genre_id(PK)	genre_name		Unique list of genres from genres
PROMOTION	promo_id(PK)	promo_name		promoId (The unique campaign names)

Origin of Primary Key Values:

Primary Key	How the Value is Generated
party_id (in the PARTY table)	Generated. You extract all unique developer and publisher names from the dataset and assign a new, unique, sequential integer ID to each one (e.g., 1, 2, 3, 4...).
title_id (in the TITLEtable)	Directly mapped. This value comes directly from the original id column in the GOG dataset, which is already a unique identifier for each item.
type_id (in the PRODUCT_TYPEtable)	Directly mapped. This comes directly from the type column (1, 2, or 3) and is mapped to the descriptive name (Game, Bundle, DLC).
genre_id & os_id	Generated. You extract all unique genre names and OS names and assign a unique sequential integer ID to each name.

2. Information/Status Tables

These tables contain metrics and status flags that are specific to the title.

Table Name	Primary Key (PK)	Attributes/Columns	Foreign Key (FK)	Source Columns
RATING	title_id (PK, FK)	overall_avg_rating, filtered_avg_rating, reviews_count, is_reviewable	title_id (FK to TITLE)	overallAvgRating, filteredAvgRating, reviewsCount, isReviewable

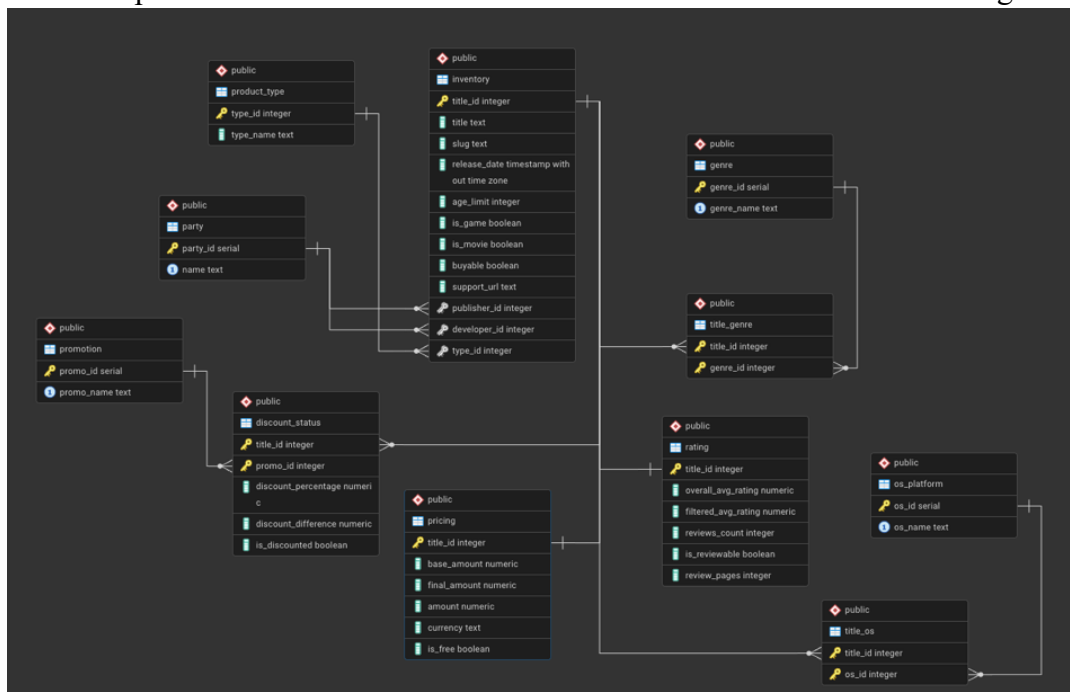| PRICING	title_id (PK, FK)	base_amount, final_amount, amount, currency, is_free	title_id (FK to TITLE)	baseAmount, finalAmount, amount, currency, isFree
DISCOUNT_ST ATUS	title_id (PK, FK), promo_id(PK, FK)	discount_percentage, is_discounted	title_id (FK to TITLE), promo_id(FK to PROMOTION)	discountPercentage, isDiscounted_main, promoId

3. Junction Tables (Many-to-Many Relationships)

These tables connect records where one game can have multiple genres or support multiple operating systems.

Table Name	Composite Primary Key (PK)	Foreign Keys (FK)	Relationship
TITLE_GENRE	title_id (PK), genre_id (PK)	title_id (FK to TITLE), genre_id (FK to GENRE)	A Title can have multiple Genres, and a Genre belongs to multiple Titles.
TITLE_OS	title_id (PK), os_id (PK)	title_id (FK to TITLE), os_id(FK to OS_PLATFORM)	A Title can support multiple OS, and an OS is supported by multiple Titles.

Entity Relationship Diagram

The relationships between the tables motioned above are illustrated in the below figure:

Melvin Quashie
Student ID: Q175216002491596365
Principles of Business Analytics Project

Business Questions and Answers

The SQL code used to carry out the analysis can be found on my Github page (Melvinquashie, progect_query.sql).

<u>Product Health and True Value</u>

This pillar focuses on assessing the intrinsic quality and makeup of GOG's game library.

1. Developer/Publisher Analysis: Which Developers and Publishers are the most successful, based on median user ratings and catalog presence?
Below are the top 5 most successful Developers and Publishers on GOG.com.

	developer_name	catalog_presence	median_rating	publisher_name	catalog_presence	median_rating
1	Two Point Studios	12	5	Neognosis	7	5
2	Debonosu Works	12	5	Maschinen-Mensch	6	5
3	Neognosis	7	5	Top Meadow	5	5
4	Jutsu Games	6	5	Cliax Games	5	5
5	Maschinen-Mensch	6	5	Retroware	8	4.8

2. Catalog Health & Age Value: How does the quality (average rating) of Classic Games compare to modern releases, and what is the dollar value of preserving those older titles?

We will define "Classic" games as those released before January 1, 2010. This creates a clear division between the legacy PC gaming era (GOG's origin) and the modern digital distribution era.

game_era	titles_in_group	avg_quality_rating	avg_base_price
Classic (Pre-2010)	1264	3.993670886	7.547863924
Modern (2010+)	9632	3.133897425	16.01504257

The classic games library has a higher average quality rating. This validates GOG's reputation for preserving high-quality beloved titles. On the other hand, the average base price of the classic games is less than half of that of the modern games. This information suggests that the classic games' price point is losing value over time.

3. Content Maturity and Audience Engagement: How does the required Age Limit for a title relate to its genre and overall review count (a measure of engagement)?

Below is how Age Limit relates to Genre:

	genre_name	title_count	avg_age_limit		genre_name	title_count	avg_age_limit
1	visual novel	399	17.75689223	24	turn-based	160	12.78125
2	narrative	248	17.59274194	25	historical	174	12.67816092
3	jrpg	162	17.51851852	26	comedy	75	12.41333333
4	horror	197	16.74111675	27	point-and-click	144	12.22916667
5	open world	42	16.16666667	28	sports	14	12.21428571
6	stealth	56	15.78571429	29	metroidvania	21	12.04761905
7	survival	75	15.62666667	30	strategy	536	11.59701493
8	fpp	183	15.50819672	31	puzzle	208	11.48076923
9	tpp	70	15.45714286	32	real-time	238	11.44117647
10	shooter	184	15.44021739	33	hidden object	10	11.4
11	role-playing	647	15.06491499	34	simulation	352	11.38068182
12	adventure	1329	14.94281415	35	arcade	62	10.30645161
13	fighting	36	14.91666667	36	platformer	140	9.328571429
14	combat	39	14.64102564	37	managerial	102	9.284313725
15	mystery	53	14.45283019	38	sandbox	16	9.125
16	tactical	58	14.37931034	39	racing	19	8.315789474
17	modern	118	14.16101695	40	card game	57	7.175438596
18	detective-mystery	81	14.11111111	41	economic	14	7
19	action	1004	14.05478088	42	building	38	5.631578947
20	roguelike	36	13.72222222	43	off-road	11	5.454545455
21	fantasy	533	13.69793621	44	pinball	6	5.166666667
22	virtual life	18	13.66666667	45	educational	7	3
23	sci-fi	405	12.80493827	46	programming	7	3

Below is how Age limit for a title relates to the overall review count:

	age_restriction_group	game_count	total_reviews_sum	Reviews per game
1	0 (No Restriction/Unknown)	8063	126317	15.6
2	17+ (Mature Audience)	1128	70632	62.6
3	1-12 (Child/Pre-Teen)	1181	67767	57.3
4	13-16 (Teen)	524	37698	71.9

Instead, the data suggests that content that targets a specific, age-gated audience (Teen, Mature, or Child) generates significantly higher engagement per title than the general "No Restriction" category. The Teen (13-16) demographic drives the highest customer engagement per title, averaging 72 reviews per game.

4. Product Mix Optimization: What are the sales and popularity contribution of Bundles and DLC compared to full game titles?

product_category	catalog_count	total_reviews_proxy	total_base_amount_proxy
Game	5653	258941	97113.55
Bundle	1402	37581	42492.89
DLC	3841	5892	24190.95

From the information above, Games are clearly more popular than the other products on offer. It makes sense that GOG has more of these in its catalog. Bundles are the second most popular and generate more revenue than DLCs, thus GOG should consider adding more Bundles to their offering since there's less Bundles on offer than DLCs.

5. Non-Game Content Mix: What share of the catalog revenue and inventory is derived from non-game content (like Movies, or Bundles that include extras)?

There are no movies in the inventory, below shows the revenue split of the content available:

content_type_group	titles_in_group	total_base_amount_value	Revenue share %
Full Game Title	5653	97113.55	59.2888263
DLC/Add-on Content	3841	24190.95	14.7688251
Bundle (Package)	1402	42492.89	25.9423487

6. Free-to-Play Value Perception: How do Free-to-Play titles perform in terms of user ratings and reviews compared to paid titles, deciding if they are positive entry points for users?

revenue_model	title_count	avg_user_rating	total_reviews_sum
Paid/Premium Title	10102	3.214363492	289511
Free-to-Play (F2P)	794	3.47884131	12903

The F2P titles are perceived as high quality. This confirms they are positive entry points that reflect well on the GOG platform.

Pricing Structure Review

This pillar focuses on assessing the effectiveness and equity of GOG's price setting across different markets and product types.

7. New Release vs. Back Catalog Pricing Gap: How does the average price of brand-New Releases compare to the established price of the older Back Catalog?

release_category	title_count	avg_base_price	avg_final_price
Unknown/Unlisted Date	434	59.70329493	55.8009447

New Release (Last 2 Years)	1797	18.01323873	12.72053422
Back Catalog	7871	13.40571338	6.299700165

Since the avg_base_price for "New Release" is significantly higher than the "Back Catalog", it confirms GOG is correctly using initial pricing power to monetize new content.

From comparing avg_base_price to avg_final_price *within* the "Back Catalog" group, there is a significant difference here and this shows heavy, frequent discounting on older titles, which could be necessary to clear inventory or might risk devaluing the DRM-free platform identity.

8. Regional Pricing Strategy Efficacy: How consistently is the base price set across different Currencies (regions) in the dataset?

currency	title_count	avg_base_price_msrp	avg_final_price_current
EUR	10102	16.2143526	9.568535933

The SQL analysis confirmed that the pricing data, across the entire catalog, was constrained to the Euro currency (EUR). This meant a true assessment of regional price consistency across GOG's global markets (like USD, GBP, or AUD) was not possible with the current dataset

9. Campaign Performance vs. Discount Depth: Are specific, named Promotions (using promoId) more effective at driving engagement than just offering the largest percentage discount?

promo_name	titles_in_promotion	avg_discount_depth	total_reviews_driven
2025_summer_sale_1	2990	59.09598662	112487
2025_summer_sale_3	1868	56.20985011	72813
2025_summer_sale_2	2993	55.53190778	57405

All named promotional campaigns carried out are shown to have garnered relatively high engagement. It is also shown that the higher the average discount depth, the higher the number of reviews.

Day-to-Day Strategy and Audience

This pillar focuses on analyzing operational decisions that affect customer satisfaction and reach.

10. Platform Strategy Performance: Does wide OS Support (Windows, Mac, Linux) correlate with higher prices or better user satisfaction/ratings?

num_platforms	game_count	avg_base_price	avg_quality_rating
3	1928	13.57511929	3.369346473
2	1550	13.72512258	3.397419355
1	7412	15.69167296	3.165582839

Melvin Quashie
Student ID: Q175216002491596365
Principles of Business Analytics Project

Titles supporting 3+ OS do not have a noticeably higher avg_base_price than titles supporting only 1 OS. GOG should consider the strategy of charging a premium for wider accessibility and preservation efforts.

Games with higher OS counts also do not have a higher avg_quality_rating. This suggests that games offered on more systems are not more robust or better received by the GOG audience.

11. Developer Support and Customer Satisfaction: Is there a link between lower customer ratings and the absence of a dedicated Support URL provided by the developer or publisher?

support_status	game_count	avg_customer_rating	total_reviews_sum
Support URL Missing/Not Provided	0		
Dedicated Support URL Present	10896	3.233636197	302414

All games and content in the inventory have a dedicated support url.

Conclusion

The relational schema successfully showed a data-informed product strategy. GOG must prioritize getting age-gated titles (Teen/Mature), as they drive engagement, and begin charging a premium for wider platform accessibility. This project confirmed 100% operational compliance on support links. The next analytical step is getting global currency data to improve the regional pricing strategy.

References

1. Laputsky, V. (2025). *GOG.com video games dataset* [Data set]. Kaggle. https://www.kaggle.com/datasets/lunthu/gog-com-video-games-dataset
2. Melvinquashie. (n.d.). *Quantic-MSBA/principles of business analytics project/progect_query.sql at main · Melvinquashie/Quantic-MSBA*. GitHub. https://github.com/melvinquashie/Quantic-MSBA/blob/main/Principles%20of%20Business%20Analytics%20Project/Progect_Query.sql