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"HOW CAN I PRICE MY GAMES TO GET MORE REVENUE?"

A Pricing Study of Brew® Games From Qualcomm® Internet Services





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SUMMARY

"How Can I Price My Games to Get More Revenue?" Every game developer, regardless of platform or application store, wants to know the answer to this question.

The essence of pricing is elasticity of demand: If you make a change in the price of an app, will the likely change in number of apps you sell actually result in greater revenue? How will customers respond to changes in your pricing?

Qualcomm conducted a study of Brew applications in the Brew Managed Services (BMS) catalog in conjunction with a major developer and publisher of mobile games to address these questions. The study, based on 15 titles from several different genres, was an effort to measure price elasticity of demand and maximize revenue. Mobile game developers may choose to apply many of these same conclusions to their own pricing.

This paper describes a methodical approach to testing different price points and collecting data. While we do not identify specific price points used during this study, we discuss findings which suggest that developers may in many cases actually increase revenues by lowering prices, and we provide a methodology which may assist developers to determine optimal pricing for their own products.

MAIN MESSAGE

LOWERING THE PRICE OF CASUAL GAMES BY 36% RESULTED IN 49% GREATER REVENUE FROM PREPAID CUSTOMERS

Note: This study describes the effects of pricing changes on a sample of one Brew game developer's applications in the Brew Managed Services catalog. Within this sample, results varied between individual products, and may vary for the different applications marketed by other developers.



BACKGROUND AND SETUP

As a developer, or vendor of any kind, you know intuitively that by lowering prices you will generate more downloads or purchases. The question is, will you actually generate more revenue? That is what this study set out to determine.

For this study, Qualcomm and the developer's hypothesis was that mobile game buyers are very price-sensitive and respond to lower prices by purchasing more games, such that the increases in sales volume would result in higher revenue.

> For purposes of this study, games were divided into two categories, based strictly on existing retail price points used by this developer:

Casual - The lower price tier, "Casual" games tend to involve low to average development costs, relatively simpler game-play and/or a "lite" version of a premium title.

Premium - The higher price tier, "Premium" games tend to involve high development costs, complex game-play and/or licensing costs associated with a brand name.

From its catalog, the developer chose a test group of seven premium games and eight casual games that:

- > were middle-of-the-road titles with average sales results
- > had begun to decrease in sales in recent weeks
- > represented several genres (action, adventure, puzzle, simulation, etc.)

HOW QUALCOMM CONDUCTED THE STUDY

Qualcomm conducted the tests in the application store by creating four scenarios, or cases. Each game passed through all four cases, and each case lasted one week to allow for larger sample sizes.

Case 1: "Placement" – All 15 games were moved from standard store placement to a special folder labeled "Value Games," equivalent to stocking cereal or soft drinks on an end display in a grocery store. This helped to ensure that a relatively large number of end users would discover the games. The study used this case as its baseline, thereby eliminating the normal revenue boost that results from placement.

Case 2: Prices on all Premium games were lowered approximately 30% (both purchase and subscription), while prices on all Casual games were lowered approximately 15%.

Case 3: Prices on Premium games were lowered approximately 45%, while prices on Casual games were lowered approximately 35%.

Case 4: Prices on Premium games were lowered approximately 65%, while prices on Casual games were lowered approximately 55%.

Changes in price were the only differences from one case to the other, and except for the price, there was nothing in the catalog to call users' attention to the change. There were no other changes to the games themselves or the manner in which the developer promoted them during the study.

Qualcomm measured results based on the number of downloads and overall revenue. It was also able to segment purchases by customers on contract wireless plans ("post-paid users") from customers on prepaid plans ("prepaid users"). It should be noted that subscriptions are not available to prepaid users on this platform.



RESULTS FROM THE STUDY

As expected, mobile gaming enthusiasts respond to lower prices by purchasing more. Following are the most salient results from the study.

Lower prices on casual games for prepaid users

Figure 1 shows the highest revenue boost achieved in the study. Prepaid users were particularly responsive to lowered prices on casual games. Lowering the price of casual games by one third (Case 3) for prepaid users increased revenues by 49%.

While this was the strongest increase achieved with this sample, strong revenue increases were also obtained from both smaller (Case 2) and larger (Case 4) price reductions.

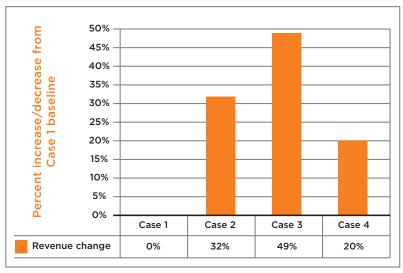


Figure 1 - Casual Games, Prepaid Users: Revenue change by price point

Lower prices on all games for prepaid users

Lowering the price of all casual games by approximately one third and premium by approximately one half (Case 3) for prepaid users increased revenues by 8%, as shown in *Figure 2*.

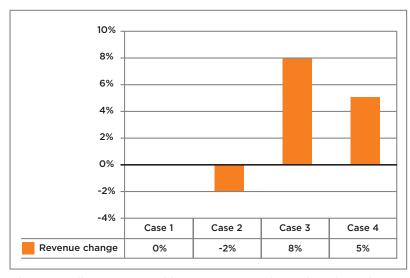


Figure 2 - All Games, Prepaid Users: Revenue change by price point



Mixed results

In several pricing scenarios the outcome was mixed, making it difficult to draw any strong conclusions from the data. Following are the results from three such price cuts.

Price cuts on premium games for all users

In three of seven premium games, lower prices resulted in greater revenue; in the other four, they resulted in lower revenue:

Figure 3 shows the best results at the optimal price-points for the seven premium games studied, representing a mixed bag. While in some cases revenue was up, results varied across this sample, and average revenue improvement was substantially lower than that observed for casual games to all users in Figure 4.

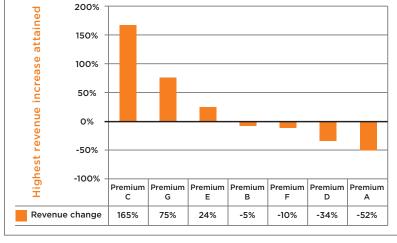


Figure 3 - Premium Games, All Users: Revenue change by price point

Lower prices on casual games

In six of eight casual games, revenue increased as a result of lower prices:

Figure 4 shows the results at the optimal price-points for the eight casual games studied. On average, revenues from these games benefited from lower prices, with one title, Casual A, increasing revenue nearly fivefold over the baseline figure.

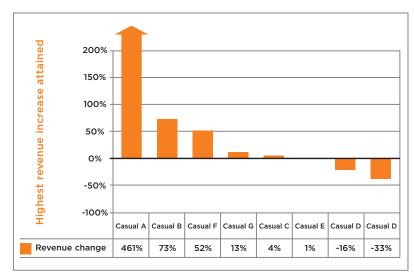


Figure 4 - Casual Games, All Users: Best result of lowering price



Across-the-board price cuts

Lowering prices for all users (prepaid and post-paid) on both premium and casual games increased transactions sharply in response to larger price reductions. In this sample, the increases were not large enough to result in an increase in revenue on average, as shown in *Figure 5*, with total revenues increasing for some games, and decreasing for others.¹

Even for games for which across-theboard cuts do not increase revenue from sales and/or subscriptions, a radical increase in transactions such as

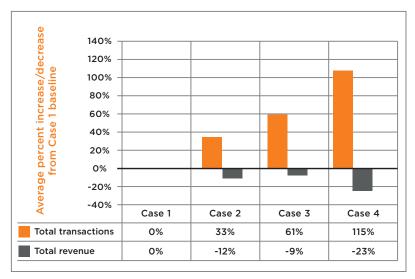


Figure 5 - All Games, All Users: Transactions vs. Revenue

that observed in Case 4 may be of interest for developers who see additional financial or strategic value potential driven by volume, such as advertising revenue, increased market share, competitive advantage, use of in-app purchases, or establishment of a brand.

For a developer augmenting revenue with in-app purchases, for example, the more important question might be, "If I reduce the price, how many more transactions (and, therefore, opportunities for in-app purchases) will I get?" The decision for such a developer might be between a "full-price" game with no in-app purchases and a "half-price" game with revenue augmented by in-app purchases, in which case the boost in transaction volume from across-the-board price cuts would serve that goal effectively.

¹Compared to the normal placement of these games in the catalog before the study, all four price-points resulted in higher revenues. The decreases shown are relative to Case 1.



CONCLUSIONS AND RECOMMENDATIONS

The results of the study include lessons about both games and users.

Casual games - The biggest increase in revenue (49%) came from lowering the price of casual games for prepaid users. Therefore, when targeting prepaid users, developers may find it particularly beneficial to reduce pricing of casual games.

Games in general - Developers may generate overall revenue increases by lowering the price of all mobile games for prepaid users.

Premium games - Selective lowering of prices on individual premium titles may result in revenue boosts, but variance in the results emphasizes the importance of monitoring the response of individual titles to price reductions.

Users in general - Within the category of one-time purchases, prepaid users are more price-sensitive than post-paid users; therefore, developers may see overall revenue increases from strategically targeting these market segments.

Prepaid users - Since many prepaid users do not have the option of subscribing to an app, developers may find that pricing their games lower in the application stores of prepaid operators provides particularly strong revenue increases.

This study demonstrates that price reductions can have the effect of boosting revenue, most strikingly for casual games marketed to prepaid users. We note that this study experimented with a modest sample of games, and that within many of our experiments the results obtained varied significantly between individual games. Accordingly, game developers on all platforms may find these results to be a useful starting point from which to determine what opportunities they have, given their own titles and pricing structures, to increase revenues by reducing prices. Our results also suggest that careful per-title monitoring of revenue responses to price changes may enable developers to maximize revenues to an extent that would otherwise not be possible.



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Tell us what you think about this pricing study:

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