

Purchasing Facebook Application Installs

Everything you need to know



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Introduction

As Facebook continues to cut off viral channels, mature application developers realize that a strong marketing plan is essential in order to gain user traction. Gone are the days where bringing on one new user to your application would result in five of his friends joining him due to virality. In the best of situations, the viral factor is pegged at around 0.5, meaning that you would need to pay for two new users before virality would do you a favour and bring you one free user.

With over 700,000 applications currently on the platform, only around 200 have been able to cross and sustain the 100,000 Daily Active User (DAU) mark. Most developers in this category have invested a significant amount of money into growing their applications. Recently, at the Social Gaming Summit, it was estimated that a \$3 million budget would be required to launch a successful game to 1 million DAU's.

So – what is the best way to buy ‘application installs’ on Facebook? What options are out there? Are there best practices to follow? How much should you pay for a user from the United States versus a user from Thailand? This comprehensive white paper will attempt to answer these questions and guide your marketing budget to ensure your money is spent wisely – increasing the probability for your application to enter the very small tier of leading applications on the Facebook platform.

“As Facebook continues to remove viral channels, it is essential to allocate significant marketing dollars to purchasing application installs.”

The AdParlor Team

Defining the three categories of application installs



1 Banner installs

As publishers look to monetize their Facebook applications, many have turned to displaying banner ads to generate revenue. In fact, you will see banner ads on most applications – as this is the easiest and quickest way for a developer to monetize. These developers typically sign up with an ad network and then place a simple 728x90 or 300x250 banner within their canvas page. The ad network then rotates advertisements in this position – the majority of which are ads for other Facebook applications. The flow here is quite simple – a user is interacting with a Facebook application and sees an advertisement for your app. The user clicks on the ad, and then proceeds to install your application. You are charged by the ad network only for new users which they drive to your application regardless of the number of impressions or clicks received.

2 Incentivized installs

Many applications have a built-in virtual currency which they use to monetize. The application developer – through offer wall partners – will award their users virtual currency in exchange for installing your application. In the example above, the user will earn 360 Barn Buddy Credits for installing the Ameba Pico Facebook application.

3 Facebook installs

The final way to purchase application installs is by advertising your application directly with Facebook Ads in the right-hand column. In this case, you are unable to bid a fixed rate per user, but rather you are paying on a CPM (rate for every 1,000 impressions shown) or on a CPC (rate for every click received).

Comparing and contrasting the three types (Banner installs, Incentivized installs, and Facebook installs)

Retention, Engagement, and Monetization

At the most fundamental level, the goal when purchasing application installs is to receive a positive ROI on those users. Will these users spend more money on my application than it cost me to acquire them? As a very rough metric you can expect 1% of your users to monetize within the first week and 2% of your users to monetize at some point in their lifetime. However, a very early indication of monetization is engagement and retention. Do users create their avatar, or complete level 1? Do users come back to your application the next day? Of course the metrics vary widely across applications, however there is some relative consistency based on the type of application install purchased. Data on engagement, retention and monetization suggest the following:

1 Facebook Ads Install =
3 Banner Ads Installs =
30 Incentivized Ads Installs

in terms of user retention,
engagement and monetization

The easy part of this equation to explain is the poor performance of incentivized installs. Users are installing your application strictly to receive their virtual currency – and they quickly jump back to the source application to spend the virtual currency they have just earned. To combat this, offer wall providers are starting to award

virtual currency after a certain level of engagement as opposed to simply the application install. However, even with this model, most users still perform the bare minimum to earn their virtual currency and then jump straight back to the source application. It becomes trickier when explaining why one Facebook Ads user is equivalent to three install users. There are numerous factors involved – here are a few:

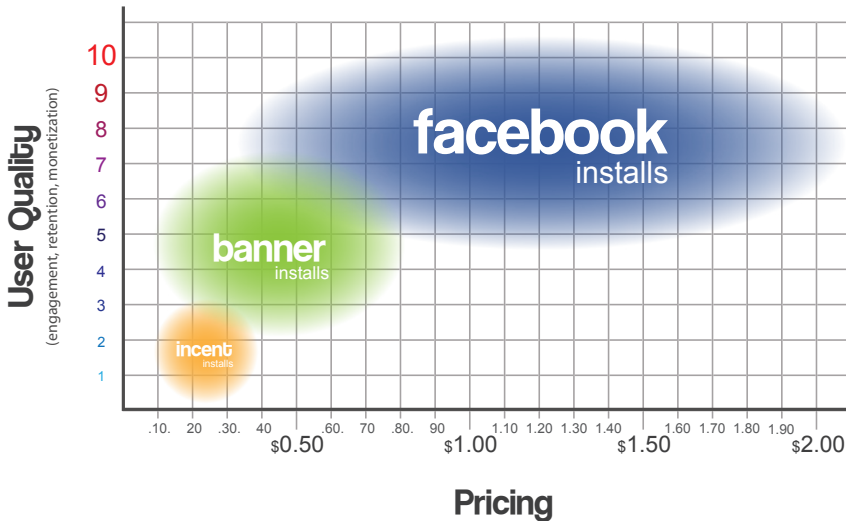
Creative: A Facebook Ad, with its limited image and text size, has less capability to ‘deceive’ the user compared to a banner ad. With banner advertising, users may get attracted by a very creative flash banner however, after installing the application it turns out they are not interested in the app after all. As an example, a basketball application can be advertised by using a flash banner where the user can shoot the ball. After ‘scoring a basket’ they are taken to the application which may not be nearly as fun and interactive.

Placement: With Facebook Ads the user must drag their mouse all the way to the right of the screen, and make a very intentional effort to click on the advertisement. With banner advertising, some application developers will place the ad in a tricky position – resulting in a higher percentage of unintentional clicks and installs. Ad networks work hard to ensure that the advertisement is placed appropriately within the canvas page, however it is almost impossible to police the thousands of applications these networks cater to.

Targeting: Facebook has placed a restriction on application developers which prohibits them from passing information about its users to ad networks. Due to this restriction, you are unable to target by age, gender, keywords, and other profile information. On the contrary, advertising directly with Facebook provides you with deep targeting capabilities, meaning that you can advertise directly to the users who appeal most to your application.

User Quality vs. Pricing

As discussed, user quality increases when moving from Incentivized to Banner to Facebook installs. Pricing is also reflected based on user quality. Facebook Ads has the greatest level of variability in terms of pricing.



- Incentivized:
~\$0.10 - \$0.30/user
- Banner:
~\$0.20 - \$0.60/user
- Facebook Ads:
~\$0.50 - \$2.00/user

Comparison Summary

Install Type	Advantages	Disadvantages
Incentivized Installs	<ul style="list-style-type: none"> - Fixed CPI price - Very cheap installs available 	<ul style="list-style-type: none"> - Extremely poor traffic quality - No user profile targeting
Banner Installs	<ul style="list-style-type: none"> - Fixed CPI price - Attract users who interact with applications - Fair pricing relative to value 	<ul style="list-style-type: none"> - Traffic quality inconsistent across publishers - No user profile targeting
Facebook Ads	<ul style="list-style-type: none"> - High user retention, engagement and monetization - Virtually endless volume available at the right price 	<ul style="list-style-type: none"> - Difficult to master complex bidding system - Must bid on a CPM or CPC - Potentially expensive installs

Focusing on Facebook ads

As mentioned previously, there are many factors that can influence the pricing in all three types of installs. The highest degree of variability and complexity surrounds Facebook Ads. However, this is also where the largest volume and the highest user quality is available. For these reasons, the remainder of this white paper will focus on Facebook Ads, and the factors that affect volume and pricing.

The Cost Model

There are typically two cost models when purchasing advertisements from Facebook – on a CPM (paying for every 1,000 impressions) or on a CPC (paying for every click received). Recent changes by Facebook have made the CPM model almost impossible to find value¹, so we will focus on CPC. When bidding on a CPC, you set the maximum bid price you are willing to pay for a click and Facebook will deliver clicks at that rate, or at a lower rate.

Clicks purchased on a CPC model do not have much value to the application developer, unless they result in an install. Most application developers will have the appropriate tracking platform in place, and can then determine the effective Cost per Install (eCPI) of each ad that they have created, and adjust the bid accordingly. This can become quite cumbersome to constantly monitor and compare the cost and bid prices from Facebook with install numbers from an external platform. The complexity of this task is escalated when dealing with hundreds or thousands of ads created in an attempt to test multiple variations of creatives and targeting.

Fortunately, there are a small number of companies who have access to the Facebook Ads API and have built the tools and technology that will allow you to bid on a fixed CPI rate. They are taking the 'risk' by purchasing from Facebook on a CPC basis while charging you on

a CPI. Not only will the company be able to adjust bids dynamically, but they will also be able to learn which specific creative and targeting variations work best amongst thousands of combinations. This will focus the advertisers' spend on these specific ads. The result is that Facebook ads are bought more efficiently, and considerably more installs can be purchased at a lower cost per install!

Relation between volume and pricing

One important point to note before we discuss the factors that affect pricing of Facebook application installs, is that the desired volume is a critical component. All other factors being equal, application installs from Canada could be priced at \$0.40 or at \$0.90. You will still get installs at \$0.40 but probably not more than a handful, whereas at \$0.90 you will get considerably more. The analysis below is based on the goals of a mature application developer looking to achieve thousands of installs per day.

“ Fortunately, there are a few companies with access to the Facebook Ads API who will take the risk and charge you on a fixed CPI ”

The CPI equation

CTR and CVR are king!

Click Through Rate (CTR)

is the number of clicks an ad receives, divided by the number of impressions, expressed in percent form. If your ad received 10,000 impressions and got 4 clicks, your CTR would be 0.04%.

$$4 \text{ Clicks} / 10,000 \text{ Impressions} = \mathbf{0.04\% \text{ CTR}}$$

$$2 \text{ Installs} / 4 \text{ Clicks} = \mathbf{50\% \text{ CVR}}$$

$$4 \text{ Clicks} * \$0.30 \text{ CPC} = \mathbf{\$1.20 \text{ Cost}}$$

$$\$1.20 \text{ Cost} / 2 \text{ Installs} = \mathbf{\$0.60 \text{ CPI}}$$

Conversion Rate (CVR)

is defined as the number of users who proceed to install your application after making the initial click. If 2 users of those 4 clickers end up installing your application, then your ad would have a 50% CVR.

Cost per Install (CPI)

is calculated by taking your total cost and dividing it by the number of installs you received. To continue with the example above, if each of those 4 clicks cost you \$0.30 each, your total cost would be \$1.20 and your CPI would be \$0.60.

Achieving a high CTR and CVR is the recipe for a successful campaign so we must look into these crucial metrics further.

CTR

The primary driver for any ad server when deciding which advertisement to display - is to choose the one that will make the most money. Although the following example is a gross over simplification, let's say Facebook has two ads to choose from:

Advertisement A - \$0.40 CPC Bid | 0.02% CTR

Advertisement B - \$0.40 CPC Bid | 0.08% CTR

Despite the CPC bids being the same, Advertisement B would theoretically produce 4 times the revenue if it were shown instead of Advertisement A. In order for A to get the same volume as B, that CPC bid price would need to be increased to \$1.60! Generally, an advertisement for a Facebook application will have a CTR between 0.04% and 0.14%.

CVR

In theory, every user that clicks on your advertisement should proceed to install the application. Why else would they click on your ad? However, in reality, an advertisement for a Facebook application has a CVR between 40% and 60%.

Generally, Ads for
Facebook applications have:

A CTR between 0.04% and 0.14%

A CVR between 40% and 60%.

Now that we understand clearly what CTR and CVR are, along with their effects – we can analyze the top 6 factors which influence CPI prices on Facebook. You will see that most of these factors have a strong relationship with the CTR and CVR metrics.

Top 6 factors which influence CPI pricing

Pricing Factor #1: Country Targeting

By far the biggest factor when it comes to application install pricing is the countries which you are looking to target. For the same application – where you may be paying \$1.00 for a user from the United States, you could be paying \$0.10 for a user from Indonesia. It is primarily a question of supply and demand. In Indonesia, there are far less marketing dollars chasing after those users. If this is the case, then why not load your application with users from Indonesia? The reason being, that a user from Indonesia is far less monetizable than a user from the United States. Keeping the monetization objective in mind, it may make sense to pay 10x more for a United States user.

In addition to the supply/demand factor, certain countries simply have a higher CTR and CVR than others. Countries like Brazil and Philippines have naturally high CTRs and CVRs, whereas achieving similar metrics in countries like Switzerland and Japan would be considerably harder.

To see the relative pricing differences between countries, please refer to the table in the Appendix A.

Pricing Factor #2: Creative

The title, text and image of the advertisement have a significant impact on the CTR and CVR you achieve. A well-known best practice is to include a strong call to action in the text. As your ad creation techniques mature in relation to your campaign objectives, you will begin to discover some very interesting findings. For example,

it may prove that different creative combinations work more effectively amongst different age groups in different regions. A red image may work well for 18 year-old males in California, while the blue image may work better for 18 year-old males in Texas. You may have found a top performing title from one advertisement and a top performing image from another, but the combination of the two is ineffective. Sometimes simply changing one word, or adding one exclamation mark, can have a profound effect on CTR.

When looking at the effect of creatives on the CVR metric, relevancy is the key. Creating an advertisement with an attractive woman and deceiving text will surely increase your CTR, but many of these users will not proceed to install the application. In contrast, using an accurate image with a long and precise definition of your application in the advertisement may bore your users and drop the CTR of that ad – however those who do click, are very likely to proceed with installing the application. This concept is illustrated in the example below.

Low CTR, High CVR

Expedition Egypt!




Uncover secret ruins, defeat the Egyptian underworld and amass a fortune! Complete quests in this RPG adventure game!

Ali Merali likes this ad.

Like

High CTR, Low CVR

Have Fun!



Play the most exciting game!

Ali Merali likes this ad.

Like

Pricing Factor #3: Target Market

When it comes to your target market – the more specific you can get, the lower CPI you will likely achieve. For example, if you are advertising the ‘World Bingo’ game, and you choose ‘bingo’ to be your only keyword – your CTR and CVR is going to be quite high. Of course, that limits the pool of users that you could potentially acquire.

There are also some generic rules that you could follow - females click more than males, younger ages click more than older ages, and southern states click more than northern states!

In identifying your target market, it is important to keep in mind the user base that would be interested in your application. The appeal

of the app is extremely important to your success. A unique application will have a significantly higher CTR than a theme that has been seen many times before. There are tons of fish, farm, and mafia games that exist and coming up with something new and innovative is sure to increase your campaign’s success.

Pricing Factor #4: Flow from Click to Conversion

Let’s assume now that you have created a relevant ad, and a user proceeds to click on it. There are not many variables from the click to the conversion – but there are some improvements that can be made. After the user clicks on the advertisement, they are brought to the allow page. It is surprising how many application developers

use a description that is sub-optimal and an image that is difficult to decipher. Here lies an opportunity to convince your users to click on ‘Allow’ and get into your application. As a best practice, you should find an image and text that perform well for you in your advertisements, and use this same optimal combination on your allow page.

The one remaining factor before a true install occurs is the application’s first screen loading. Application developers should be testing load time from all the countries in which they are advertising, and there are many third-party tools available which can help.

“ In general -
females click more than males,
younger ages click more than
older ages, and southern
states click more than
northern states ”

A completely separate topic of discussion is the user experience once the application is installed. We will not discuss this in detail as this is not the focus of the paper, however, there are countless applications, whereby the user is prompted to ‘post on their wall’, ‘invite a friend’, or

‘you have passed level 1 and earned a badge’, right off the start! A user who has not yet interacted with your game will not invite a friend or post on their wall, and they certainly won’t be excited that they have passed a level and earned a badge. It is important to let the user interact significantly with your application before prompting them with any forced action.

Pricing Factor #5 Application Saturation

As you continue your successful advertising efforts and your application begins to grow, saturation becomes a factor in pricing. The first thing you should be aware of is that Facebook provides you with the ability to set ‘exclusion targeting’ for your advertisements. This feature will ensure that your ad is not shown to users who already have your application installed.

As a best practice, you should find an image and text that perform well for you in your advertisements, and use this same optimal combination on your allow page.

Now, let's assume we are using this exclusion targeting. How does application saturation affect pricing? Let's go back to the 'World Bingo' example. Let's say there are 500,000 hard-core bingo players out there, 250,000 semi-interested bingo players out there, and 5,000,000 users who are not really interested in Bingo at all. As soon as you launch your advertising efforts, you are going to see a great CTR and CVR as you are primarily attracting the hard-core bingo players. Those 500,000 are so excited to see an advertisement for a new bingo application, they cannot click on it fast enough! After you exhaust most of these users, you are now trying to attract the semi-interested bingo players. Being semi-interested, they are less likely to click on your ad. This will result in a lower CTR and hence force you to increase your bid price. This adjustment happens again when the semi-interested bingo players run out and you try to attract the 5 million users who are not really interested in Bingo at all.

"Once you've acquired the majority of the early adopters, CPIs in a particular market can increase by 3-5x from your Day 1 CPI! Fortunately, this change doesn't happen overnight. Refreshing creative, creating a compelling message, and refining your target audience are the best ways to combat application saturation"



**– John Marsland,
Acquisition Manager**

In reality, users' interest in an application is not as neatly defined as the three tiers in the example above. Rather, it is a sliding scale where your CTR will gradually drop as the users you are attracting go from highly interested to less interested.

Pricing Factor #6 Market Conditions

When it comes to Facebook advertising the 'demand' is the users on Facebook who are clicking on ads and interacting with applications, whereas the 'supply' is the thousands of advertisements controlled by Facebook on the platform.

On the demand side, the Facebook user base is consistently growing. With half a billion users, and an impressive growth curve, the number of users on the platform is not a concern. There is a question to be raised on application fatigue, and whether or not users will become bored of playing applications altogether. In our opinion, this is not the case, as more innovative games continue to enter the market.

The supply side is where the topic of market conditions becomes a lot more interesting. Your advertisement is competing for clicks from thousands of other advertisers - brands, small businesses, and of course other application developers. It is no secret that when the larger application developers launch a new game, they pour in millions of dollars into advertising in an attempt to attract hundreds of thousands of users within a very short time period. This has a significant effect on the economy as they are bidding well above market rates. The result in most cases is that they will be out-bidding you for available ad impressions. This will force you to increase your bids in order to receive the same volume of traffic. All other factors held equal, changing market conditions can cause your CPI rate to fluctuate up to 40%!

Conclusion / Highlights

- As Facebook continues to remove viral channels, it is essential to allocate significant marketing dollars to purchasing application installs
- In terms of user retention, engagement, and monetization:
 - 1 Facebook Ads install =
 - 3 Banner Ads Installs =
 - 30 Incentivized Ads Installs
- Efficiently managing a Facebook Ads campaign is extremely time consuming and difficult. It is recommended that you work with a partner that has access to the Ads API and can use advanced multi-variant testing to optimize your campaign.
- CTR and CVR are the two golden metrics that contribute to the CPI equation. Your Cost Per Install can vary up to 400% based on how well you can control them.
- The top 6 factors which influence CPI pricing on Facebook Ads are:
 - Country Targeting
 - Creative
 - Target Market
 - Flow from Click to Conversion
 - Application Saturation
 - Market Conditions

Appendix A

CPI Pricing for Facebook Ads by Country

Must Read Disclaimer before looking at table below:

As discussed in this white paper, CPI rates can vary drastically between applications. We have seen CPI rates range from \$0.40 to \$1.20 while targeting the exact same market. This table can be used to determine rough CPI pricing for an application. More importantly, this table should be used to determine the relative pricing differences between different countries.

Tier	Country	Code	CPI	Market Size
Tier 1 Countries	Norway	NO	\$0.80	2,199,360
	Germany	GE	\$0.80	6,674,740
	Denmark	DK	\$0.72	2,270,540
	United States	US	\$0.70	108,062,900
	United Kingdom	UK	\$0.63	24,342,820
	Australia	AU	\$0.62	8,037,020
	Canada	CA	\$0.58	14,121,100
Tier 2 Countries	South Africa	ZA	\$0.49	2,405,200
	New Zealand	NZ	\$0.45	1,376,240
	Austria	AT	\$0.43	1,611,000
	Nigeria	NG	\$0.43	1,005,560
	Ireland	IE	\$0.43	1,304,060
	Sweden	SE	\$0.43	3,298,140
	Estonia	EE	\$0.42	135,240
	Finland	FI	\$0.41	1,520,160
	Spain	ES	\$0.40	8,147,280
	Russia	RU	\$0.40	762,440
	Switzerland	CH	\$0.40	1,928,960
	Iceland	IS	\$0.38	169,760
	Austria	AT	\$0.36	1,611,000
	Israel	IL	\$0.36	2,390,220
	Kuwait	KW	\$0.35	383,260
	United Arab Emirates	AE	\$0.35	1,237,080
	Puerto Rico	PR	\$0.35	1,029,620
	Netherlands	NL	\$0.33	2,021,180
	France	FR	\$0.32	15,498,220
	Poland	PL	\$0.31	1,811,220
	El Salvador	SV	\$0.30	245,040
Hungary	HU	\$0.30	750,840	
Singapore	SG	\$0.29	1,928,960	
Japan	JP	\$0.28	891,520	
Hong Kong	HK	\$0.26	891,520	

Tier	Country	Code	CPI	Market Size
Tier 3 Countries	India	IN	\$0.26	6,342,800
	Oman	OM	\$0.26	106,520
	Guatemala	GT	\$0.25	391,540
	Qatar	QA	\$0.25	270,340
	Romania	RO	\$0.25	643,580
	Bahrain	BH	\$0.25	171,800
	Belgium	BE	\$0.25	3,018,520
	Lebanon	LB	\$0.25	754,660
	Malta	MT	\$0.25	132,140
	Saudi Arabia	SA	\$0.25	1,610,420
	Brazil	BR	\$0.24	2,869,920
	Greece	GR	\$0.24	2,344,640
	Luxembourg	LU	\$0.24	139,640
	Portugal	PT	\$0.23	1,443,680
	Slovenia	SI	\$0.23	494,940
	Taiwan	TW	\$0.23	5,652,660
	Ukraine	UA	\$0.23	258,980
	Italy	IT	\$0.22	13,741,440
	Slovakia	SK	\$0.22	1,165,700
	Czech Republic	CZ	\$0.21	2,110,420
	China	CN	\$0.21	64,700
	Cyprus	CY	\$0.21	249,480
	Dominican Republic	DO	\$0.21	507,600
	Paraguay	PY	\$0.21	146,980
	Chile	CL	\$0.20	5,962,960
	Costa Rica	CR	\$0.20	458,320
	Thailand	TH	\$0.20	2,298,920
	The Bahamas	BS	\$0.20	101,000
	Peru	PE	\$0.19	1,644,620
	Jordan	JO	\$0.19	662,060
	Kenya	KE	\$0.19	565,920
	Colombia	CO	\$0.18	7,794,000
	South Korea	KR	\$0.18	471,520
	Venezuela	VE	\$0.17	5,281,600
	Ecuador	EC	\$0.17	691,060
Vietnam	VN	\$0.17	790,200	
Iraq	IQ	\$0.17	125,220	
Jamaica	JM	\$0.17	238,020	
Latvia	LV	\$0.17	70,180	
Lithuania	LT	\$0.17	461,560	
Nicaragua	NI	\$0.17	112,220	
Argentina	AR	\$0.16	7,729,720	
Philippines	PH	\$0.16	9,317,180	
Ghana	GH	\$0.16	341,200	
Malaysia	MY	\$0.16	4,667,700	
Mexico	MX	\$0.16	7,624,120	
Egypt	EG	\$0.15	2,505,480	
Pakistan	PK	\$0.15	1,600,300	
Serbia	RS	\$0.15	1,594,160	
Bolivia	BO	\$0.15	496,700	

Tier	Country	Code	CPI	Market Size
Tier 3 Countries	Honduras	HN	\$0.15	191,440
	Panama	PA	\$0.15	424,900
	Uruguay	UY	\$0.15	644,820
	Maldives	MV	\$0.14	63,180
	Tunisia	TN	\$0.14	1,122,720
	Bulgaria	BG	\$0.14	1,085,620
	Croatia	HR	\$0.14	1,005,320
	Morocco	MA	\$0.14	1,286,820
	Sri Lanka	LK	\$0.14	462,300
	Trinidad and Tobago	TT	\$0.14	274,460
	Turkey	TR	\$0.14	18,556,840
	Mauritius	MU	\$0.13	160,920
	Palestine	PS	\$0.13	227,080
	Bangladesh	BD	\$0.12	710,780
	Indonesia	ID	\$0.12	17,301,760
	Bosnia	BA	\$0.12	618,960
	Macedonia	MK	\$0.10	555,000