



# Whitepaper: Paying for Digital Music with Advertiser-funded Micropayments

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## ABSTRACT

This short whitepaper discusses the use of the Pico-Pay® Micropayments gateway as a method for music publishers, distributors and musicians to provide a cost-effective and viable revenue generator.

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## INTRODUCTION

There has been a great deal of discussion these past few years about the efficacy of using the Internet to distribute digital content such as music (in the form of MP3 or Ogg Vorbis files, for example) and video (such as DivX ;-). On the one hand, copyright holders are concerned that they will not be able to generate any revenues from the distribution of infinitely copyable digital content, and on the other hand, individuals who want unfettered access to the music balk at the overly-constrictive mechanisms that the (mostly larger) publisher and distribution organisations are attempting to introduce.

There are substantial problems with both the technologies and philosophies that are often touted as a mechanism to curb unauthorised copying of digital content by consumers. While Pico-Pay does not provide such Digital Rights Management (DRM), it proffers a mechanism which obviates much of the need for such restrictive technology. Some of the more glaring problems associated with today's DRM systems are that they are:

- \* Complex and expensive;
- \* Likely to foster a feeling of resentment among users;
- \* A challenge (and thus inviting) to crackers to break into the technology;
- \* Self-defeating for lesser-known content producers and performers (who would want to give away as much as they can to increase profile).



To re-iterate, the core motivator behind the Pico-Pay model is to provide a vehicle which allows consumers to acquire digital media for so little effort and at no personal cost, that this path becomes the preferred path for acquiring such media, rather than by abusing producers' and publishers' copyrights through swapping practices. It aims to do this while still making material available in open and malleable formats, rather than in crippled proprietary ones.

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## **ASSUMPTIONS**

What we propose in this document is a simple and hopefully viable solution to this problem. We posit that:

- 1) if digital content (music, video etc.) can be made downloadable from the Internet by the producers of this content in a relatively friction-free manner, and
- 2) if consumers are able to acquire this content by undertaking a simple and zero-cost process, and
- 3) if the content can be acquired in a totally anonymous manner, and
- 4) if the infrastructure for all this can increase the number and heterogeneity of the publishers of digital content, and
- 5) if this new process can enable the actual musicians world-wide to increase their control over their material within this content distribution environment, and also increase the likelihood of revenue generation,

then there are advantages for all parties.

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## **THE PROPOSED SYSTEM**

The system we propose to provide these capabilities is called Pico-Pay. It's a technology we have constructed which performs the following functions:

It allows publishers of digital content to introduce a payment system for very small payments, which would not otherwise be feasible within current banking or credit card



frameworks.

It allows consumers of digital content the ability to acquire said content by recompensing the digital content publisher, but without having to actually pay anything themselves. It also does this in a totally anonymous manner.

Pico-Pay achieves these functions by providing a web-hosted gateway, operated from a web-browser, which facilitates digital content purchases. It co-ordinates the funding of the purchases of digital content through advertising revenues.

Consumers, upon electing to purchase, for example, a digital music track for a specified purchase price, are re-directed to a Pico-Pay gateway form, whereupon they are shown links to funding advertiser sites. These links will be arranged and shown through a category-match system, so that the consumers are shown links of much higher interest-correlation, and advertisers are afforded consumers who are far more likely to be interested in the advertiser's wares. The micropayment gateway will offer the list of links to the users in an equitably random manner, favouring no one advertiser over another.

Beside each advertiser link is displayed an offer-price as well as a stay-duration. The consumer needs to select and click on enough advertiser sites to accumulate enough credits to cover the purchase price, as required by the publisher of the digital content.

The advertisers gain in this model, as they get to specify both the payment they will contribute towards the purchase of the digital content, as well as minimum amount of time that the consumer needs to stay at their site.



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## USING PICO-PAY

We relate the following process by which publishers or producers of music or other digital content, can begin to use the Pico-Pay technology.

- 1) Firstly, you need to have actual digital content which you want to make available to consumers to download.
- 2) You need to have this digital content placed on a web-site or download site, publicly available, but without making the actual location known generally.
- 3) You need to sign up for an account with Pico-Pay. Accounts are easy to create, and are totally free. Visit <http://www.pico-pay.com/> for more information.
- 4) You will need to add information about your content into Pico-Pay. You must provide the following information: the name of your content (for example, the music track name), the web-site location (i.e. URL) of where your content is actually located, the category in which your digital content falls under, and finally, the asking price (how much you want to get paid prior to the consumer being re-directed to the URL you have supplied to download the content.)
- 5) The Pico-Pay system will then produce a link which you will need to paste back into your own web pages. You can indicate to consumers visiting your web-site that if they click on the link, and follow the instructions, they will be able to generate the revenue you need to acquire your digital content object.
- 6) You will need to provide Pico-Pay with enough banking information so that once a month, pending a minimum of US\$50 transaction account balance, we can pay you for your content purchases.



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## **A BOON FOR INDEPENDENT MUSIC AND MEDIA PUBLISHERS**

While the large publishing firms have all the necessary distribution and marketing vehicles in place to assist in disseminating their wares, smaller, boutique or independent online creators and publishers of media, as well as independent artists, are less likely to have this infrastructure available. With Pico-Pay, these people can now target a global audience, generate real revenues and also increase awareness of their labels, musicians or tracks. This can all be achieved without having to assign rights or portions of royalties to other organisations.

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## **ADVANTAGES**

The immediate advantages with this model are as follows:

From the digital content publishers perspective, there is now a way in which small but useful payments can be asked for, and received for their online music or video properties.

As the consumer does not have to actually pay for anything per-se, the likelihood of them acquiring the content publisher's digital material is greatly increased.

As the consumer does not have to provide any personal or identifying information whatsoever during this transaction (they remain totally anonymous as individuals) the likelihood of them acquiring the content publisher's digital material is further increased.

As the viability of click-through advertising is substantially enhanced through the Pico-Pay minimum-stay model, it is envisaged that this will legitimise online advertising, and attract an increase in overall spend within this space over the coming years. This is good for the health of the Internet, helping usher more money into the online world.



By allowing very low cost items (for example digital music tracks down-loadable for US50c to US\$1.00 each) to be merchantable online, Pico-Pay ushers in an era whereby consumers can quickly, simply and ultimately at no cost to themselves, acquire this material in a friction-free manner. This will hopefully create an environment where the consumers are happy to help the content publishers or music-track producers make enough revenue to keep on providing the material and proffer enough incentive to fund new content development.

Another advantage of having this friction-free and cost-effective method by which consumers can acquire your material, is that they are probably less likely to want to pass on the content that they have acquired from a publisher, to others. This is merely a simple psychological process by which one initiate who acquires your music through some effort on their part, will more likely suggest to colleagues and friends that they too go through the process of acquiring your music through the same process: it's a simple matter of 'If I had to look at a few ads to get this song, so should you! Here's the URL with instructions on how to begin'.

Finally, by contrast to any Digital Rights Management technology, Pico-Pay is very cheap (in fact, free to publishers and producers of digital works) and easy to implement. It also has the attributes of not causing resentment in reasonable users (except perhaps a tiny minority who object to any and all advertising in principle) and finally it doesn't offer crackers any challenge because the rewards are so slim (why spend hours or days cracking a system for a digital music file that you could get for free anyway in 30 seconds?).



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## CONCLUSION

We hope that through the adoption of this style of micropayments technology throughout the Internet, the publishing and acquisition of premium digital content (music, clips, videos) can become a viable and economically sustainable marketplace with advantages for consumers, revenue for the producers of the content, and more effective advertising for the marketing community.

We also hope that through the ability to substantially lower the cost of any single content purchase-transaction to mere cents, it becomes feasible and preferable for both publishers and consumers to sell and acquire content in a more trusting and understanding manner, without the need for onerous and malodorous copyright protection schemes. We believe that the majority of consumers, if offered the right vehicle (i.e. Pico-Pay) will comply, and help generate appropriate recompense for the efforts of digital media creators and publishers.

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## REFERENCE

The Pico-Pay project is located here:  
<http://www.pico-pay.com/>