

Payments 101..201..301 for Online Gaming

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Agenda

- Session Overview
- Speaker Background
- BilltoMobile™ from Danal, Inc. Overview
- Interesting Facts & Figures
- Payments Industry Snapshot
- Payment Issues for Digital Goods/Services e-commerce
- Trends in ePayment/micropayments
- Case Studies; NC Soft (Lineage) & Cyworld
- Resources
- Q&A

Session Overview

- Since the beginning of **commerce online** there has been much confusion around this seemingly simple concept of how to take a payment. This session by a speaker who has been an active participant in this realm since the dawn of ecommerce will provide the attendees with a solid broad framework as well as tangible detailed knowledge and resources to facilitate their companies ability to generate direct revenue from their customers. As advertising revenue as the primary source for many online games reaches its peak, it is imperative that online gaming companies have all the tools necessary to maximize their direct revenue opportunities. In the tangible goods world of ecommerce, there is a rapidly growing segment of Alternative Payment options but they all lack focus and features related to the needs of the online gaming industry.

Speaker Background

- 30 years in epayments, fraud prevention and authentication
- Companies; ...VeriFone, CyberCash, CyberSource, Passmark Security (RSA/EMC), & now BilltoMobile™ from Danal, Inc.
- Industry Participation; NACHA Payments Institute, Board of Directors of Electronic Transactions Association, Advisory Board of Direct Response Forum and Electronic Funds Transfer Association, etc.
- Corporate Participation; Advisory Boards of Vindicia and Debix

- There are no absolutes in the world of payment,
- The devil is in the details....

- How many consumers believe Visa issued their credit card and call them when they have a dispute? LOTS!!
- How many ecommerce merchants are surprised when they first realize credit card payments are not guaranteed? LOTS!!

BilltoMobile™ from Danal, Inc.

- US based start-up with strategic investment from Danal Limited in Korea and Morgenthaler Ventures.
- Alternative payment solution for ecommerce and mcommerce based on model successfully pioneered and deployed by Danal in Korea in 2000, Taiwan in 2003 and China in 2006.
- Today in Korea;
 - 60+% of all digital content is purchased using this approach.
 - 20% of volume is for tangible goods
- Key differentiators from other payment types;
 - No enrollment or maintenance for consumer,
 - Consumer and merchant protected by strong two factor authentication,
 - Consumer does not expose and therefore merchant does not have to spend a lot of time and money protecting any sensitive financial information, and the associated compliance costs.

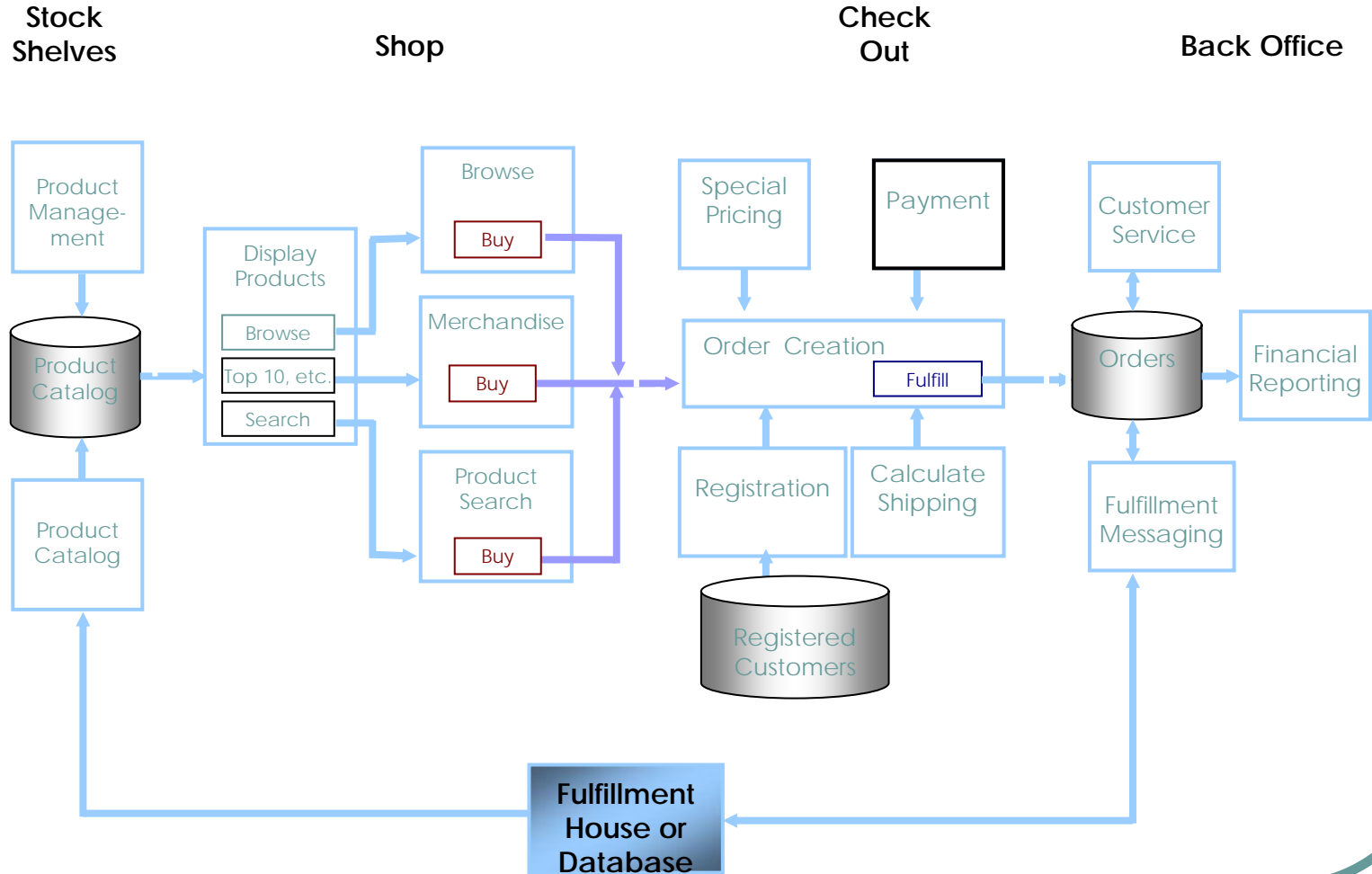
Ecommerce Statistics

- \$155B in 2007 and \$355B predicted by 2012 (Javelin)
- \$50.7% of Internet users will shop online 2007 holiday season vs 37.6% in 2006 (Burst Media)
- Online purchases to grow from 9% of retail commerce to more than 30% in next 10 years (Deloitte)
- Digital Content Market (Tower Group)
 - Will Grow to \$11b market by 2009

Demographic Info

- 77% of children 8-14 years old have completed an online tx (Internet Retailer)
 - **Items = Music, Games, Movies, MP3Players**
 - **Payment methods;**
 - 27% had adult do TX
 - 26% used a gift card
 - 23% used parent's credit card
 - 8% used their own credit card (?)
- "Underbanked Consumers number 56million" (Cyphermint)
- Shift in Consumer Behavior to Debit Cards (Bank of America data)
 - **60% of Gen Y prefer to pay with debit cards**
 - **45% of Gen X** " "
 - **40% of Baby Boomers** " "
- Teens in the US (Packaged Facts)
 - **25.6M in US with 25% spending money online**
 - **Spent \$80B in 2006, Projected to grow to \$91B by 2011**

The Landscape Behind The Buy Button



eCommerce Payments Facts (card based)

- Visa & MC Cards represent 96.2% (Internet Retailer)
- Only 10% of credit card volume comes from online (Javelin)
- Amex, Discover + Private Label combine for 3.8% (Internet Retailer)
- Average Ticket Size (Internet Retailer)
 - <\$25 = 6.7%
 - \$26-50 = 10.4%
 - \$51-75 = 17.2%
 - >\$75 = 65.7%
- Preferred payment method for <\$5 purchases (Synergistics);
 - PayPal/Other = 34%
 - Credit Card = 21%
 - Debit Card = 18%
 - Prepaid Card = 6%

eCommerce Payment Types

- Credit & Signature Debit Cards
- Prepaid Cards
- Various eWallet Based Systems
 - PayPal™, Google Checkout™, etc.
- Direct Mobile Billing (ie; BilltoMobile™)
- Push Payments (ie; SecureVault Payments)
- Landline Billing (ie; Bill2Phone™)
- eChecks
- Instant Credit (ie; BillMeLater™)

Payments Industry Players (Traditional and New)

- **“Associations”/Card Brands**
 - Visa, MasterCard, Discover, American Express
- **Aquirers**
 - ChasePaymentech, Bank of America, Wells Fargo, etc...
- **Issuers**
 - Citibank, Wells Fargo, BofA, AMEX, Discover, etc..
- **Third Party Processors**
 - First Data, Global Payments, Nova (US Bank)
- **ISOs**
 - CardService Intl, Heartland Payments, etc...
- **Gateways**
 - CyberSource/Authorize.net, SkipJack, etc...
- **Software Providers**
 - ICVerify(First Data), eFunds(ClearCommerce), etc...
- **“Alternative” Payment Providers**
 - PayPal, BillMeLater, Google Checkout, BilltoMobile(Danal), PaybyCash, Global Collect, TrialPay, Incomm, etc.

Roles & Responsibilities

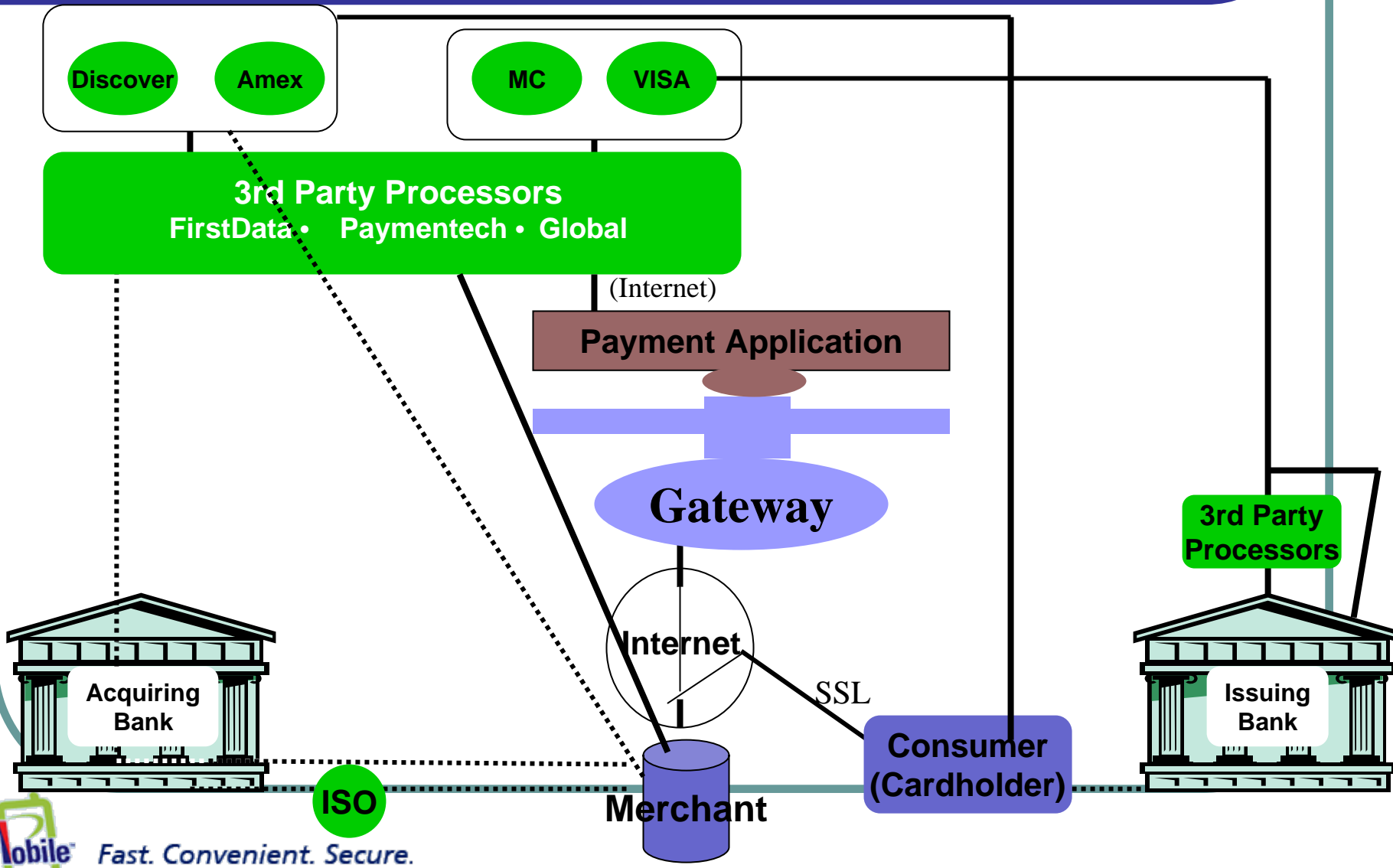
- Associations/Card Brands/Alternative Payment Providers
 - Set Rules & Pricing, Operate Switch for Authorization & Settlement processing, Support the Brand
- Acquirers
 - Underwrite Merchant Accounts, Provide tools &/or services either directly or through partnerships to facilitate transaction processing, Pay Merchants & Provide Reports
- Issuers
 - Underwrite Consumer Accounts, Provide consumers with card & statements, Collect payments from cardholders.
- Third Party Processors
 - Develop and operate data processing services on behalf of banks, ISO's, Alternative Payment providers and sometimes themselves

Roles & Responsibilities (cont'd)

- ISO's (Independent Sales Organizations)
 - Sell merchant services to merchants on behalf of a sponsoring bank or other payment services provider.
- Gateways
 - Develop interfaces to merchant platforms and to third party processors and operate systems to facilitate the flow of transactions.
- Payment Software Manufacturers
 - Develop payment application software for merchants to install and maintain themselves in order to communicate with third party processors.
- Alternative Payment Providers
 - Anybody's guess!!!!



Traditional Payment Industry Snapshot – Credit/Debit Card Model



How does Direct-to-Mobile Billing work? (front-end)

Primary use case:



A consumer goes shopping online through a P.C. and selects BilltoMobile™ as the payment option at check-out: (e.g. a consumer buys a subscription to Blizzard's World of Warcraft online game).

1 Consumer inputs mobile phone number and last 4 digits of SSN into the payment window in the P.C., then presses "Next"

BilltoMobile™

Mobile # (408) 555-1212

Last 4 digits of Social Security # XXX-XX-****

Next

2 A one-time password is immediately sent via SMS to the consumer's mobile phone.



3 Consumer inputs this one-time password back into the payment window on the P.C., and the transaction is completed. Then, an SMS notice of transaction completion is sent to the consumer.

BilltoMobile™

Input One-time Password 123456

Next

How does Direct-to-Mobile Billing work? (back-end)

- Carrier and Processor engage in % revenue-sharing model on transactions that occur at online merchants' sites.
- Role break-outs:

Carrier

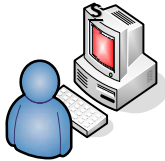
- User authentication
- Send SMS at Processor's request.
- Billing.
- 2nd line customer support.

Processor

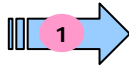
- Overall service operation, maintenance, & development.
- Merchant/reseller marketing, integration, & servicing.
- **1st line customer support.**
- Fraud prevention, mitigation, and dispute resolution & management.

- Payment flow:

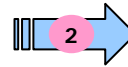
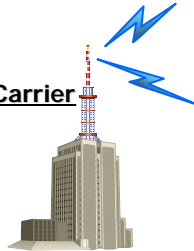
Consumer



Consumer pays Carrier

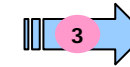


Carrier



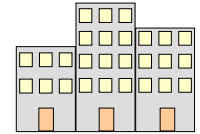
Carrier deducts its commission, only on the amount that it collects, and sends the remainder to Processor.

Processor



- Processor deducts its own commission and sends the net amount to the online merchants.
- Generally, online merchants get paid within 30-60 days after the transaction, only on the amount that is collected.

Online Merchants

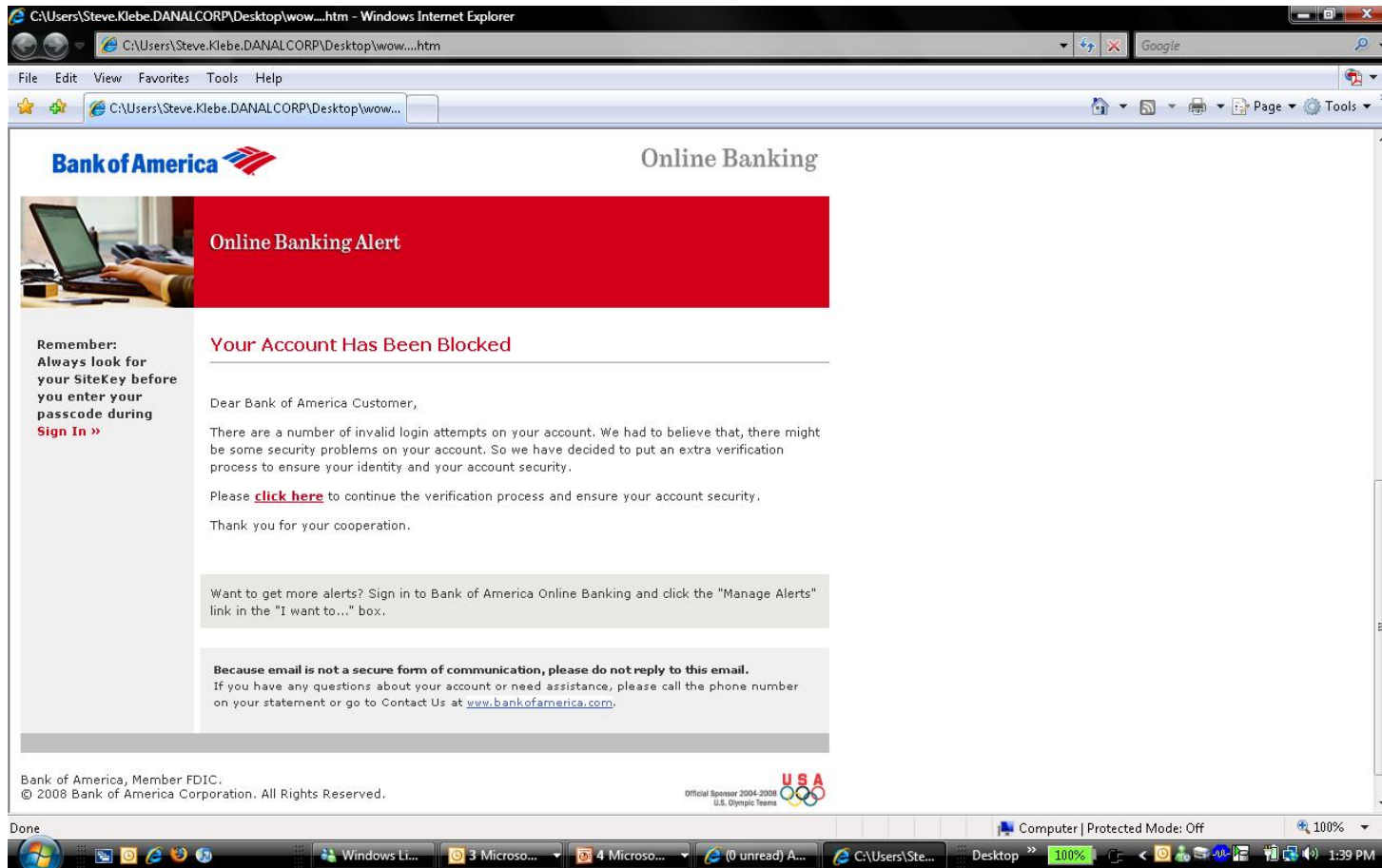


- **Carrier** serves as the conduit for the authentication and transaction via its billing relationship with the consumer.

Trends in epayment

- IPOs by Visa and MasterCard
- Interchange on Hot Seat
- PCI Compliance
 - Data Breaches More Than Doubled in 2008 First Quarter
 - Data breaches disclosed by Hannaford Bros Supermarket Chain, GE Money, and Georgetown University are just some of the 167 breaches reported during the first quarter of 2008, according to the non-profit Identity Theft Resource Center (ITRC). This is more than double the first quarter in 2007 (76 breaches).
- Lots of Choices in Alternative Payments
 - PayPal, eBillMe, Revolution Money, BillMeLater, etc.
- New Business Paradigms
 - Google Checkout
 - Trial Pay
- Lots of chatter about Mobile Payments
 - Definition?
- Fraudsters getting more sophisticated

“click here” = Domain Name: 2rwgest.com = Malveira



Alternative Payments

- **Will represent 30% of online tx volume by 2012 vs 14% in 2007 (Javelin)**
- **70.7% of online shoppers cite credit card security as the biggest impediment to buying online (Burst Media)**
- **Adoption of alternative payments increases 3 years in a row (CyberSource)**
- **Order completion rates increase from 63% to 72% when merchants offer 3+ payment options (CyberSource)**
- **As of June 2006, 26 of Top 200 US online retailers had integrated Google checkout up from 15 in January whereas 52 of Top 200 had PayPal (Cowen & Co)**
- **PayPal users are concentrated in the 25-44 age range & 33% of online shoppers claim to have a PayPal account and 23% say it is their preferred payment method. (Jupiter)**
- **Google Check-out users are concentrated in the 18-34 age group (Jupiter)**
- **Visa is top payment brand online but BillMeLater users spend more having spent \$750 or more online in the past 3 months. (Jupiter)**
- **61% of all etailers accept some form of alternative payment (Internet Retailer)**
 - 41% PayPal, 15.8% electronic check, 11.5% “other”
 - 40% have no plans to offer any alternative payments
 - 7.2% offer BillMeLater
 - 4.3% are using some combination of; eBillme, PaidByCash, PayCashMobileWallet, etc...

Micropayments?

- Definitions vary...
 - ~ <\$5 transactions?
- Why Roadkill? > Peppercoin, DigiCash, CyberCash, Yaga, BitPass, Beenz, Flooz, etc.
 - Chicken & Egg
 - Too early?

top-10-free-to-play-growth-killers/

- Top 10 Free To Play Growth Killers

- Posted by Adrian Crook

- freetoplay.biz/2008/02/01/top-10-free-to-play-growth-killers/

- #9 > Limited Payment Methods

- We have hanging on our wall a user who sent a \$5 bill in a \$15 FedEx package.

- - Craig Sherman, Gaia Online

- While other territories enjoy a plethora of tailored-to-the-consumer payment methods, North America has embraced relatively few.

- SMS would surely be nearly as popular a payment method here as it is in Europe if our carrier surcharges weren't in the range of 50% a transaction. Landlines - an expensive but very secure payment option in China - might also be popular with some services.

- GoPets has 90 different payment systems worldwide, catering excellently to foreign payment preferences. Nonetheless, consumers still have trouble getting money into their favorite North American games.

Issues for Digital Content ecommerce, especially <\$10

● Pricing Models

- % + Flat Fee for Credit & Signature Debit Cards
 - Example of PayPal Fees – 2.9% + \$.30 (\$5 = \$.445 fee or 9%)
- Blended Discount Rate or “Interchange Plus”
- Premium SMS Fees
 - Range from 25 – 50% ...
- Prepaid Card Costs
 - Range from 20 – 50% ...

● Fraud/Chargebacks/Manual Review Costs

- “Across digital merchants ... chargebacks due to fraud account for 1.8% of total online revenue which is 38% higher than for other merchant categories”
- “Since goods are delivered virtually, some fraud detection tools are less effective and it may be difficult to recover funds...and delaying delivery pending order review is not ideal...yet 71% are manually checking orders”
 - “40% of orders are being manually reviewed which is 29% higher than for other merchant categories”
- Chargeback fees range from \$25 to \$10 (which really hurts on a \$10 sale!)
- ...Chargebacks from your acquirer account for less than half of all fraud claims; the rest are related to direct credits merchants issue to consumers who claim that their accounts have been used fraudulently.

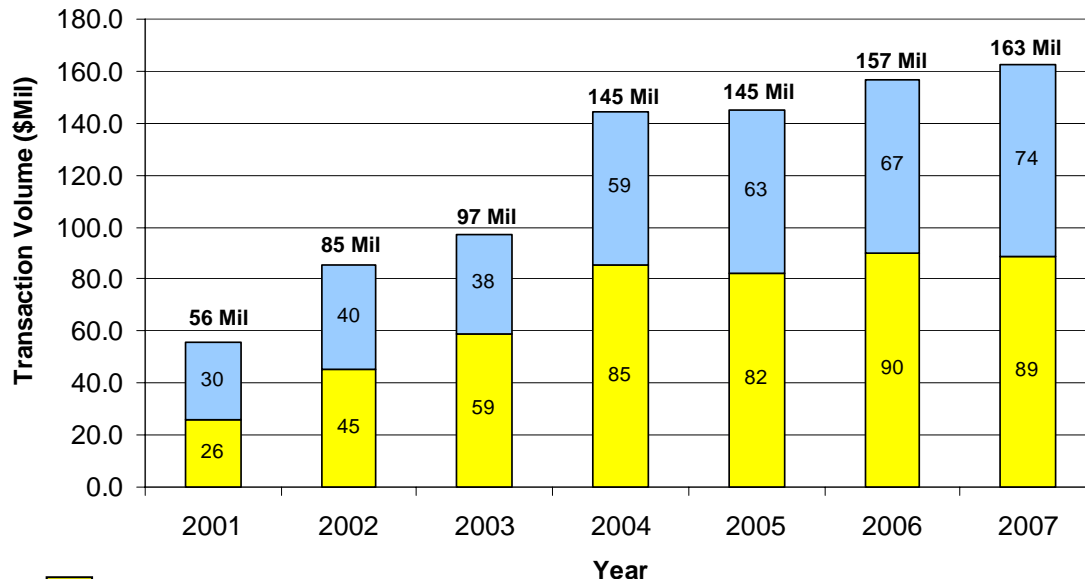
● Underbanked, Unbanked Population Challenge





Case Study - NCSoft attributes its success largely to direct-to-mobile billing

- NCSoft is one of the most successful online gaming companies in the world.
 - Market capitalization: ~US \$1 billion.
 - Games: e.g. **Lineage**, **Lineage II**, Guild Wars, Aion, Dungeon Runners, etc.
- **The majority of NCSoft's online revenues today come from direct-to-mobile billing.**

NCSoft - Online B2C Revenue (\$Mil)



-  Danal's direct-to-mobile billing service (BilltoMobile™).
-  Other payment methods (e.g. credit cards, prepaid cards, bank wire, etc.)

* Data from publicly-released figures from NCSoft (exchange rate assumption: 930 won per US\$)

“A key driver in NCSoft becoming one of the largest online gaming companies globally was direct-to-mobile billing. If it wasn't for this payment method, we wouldn't have been able to reach consumers as effectively as we do today.”

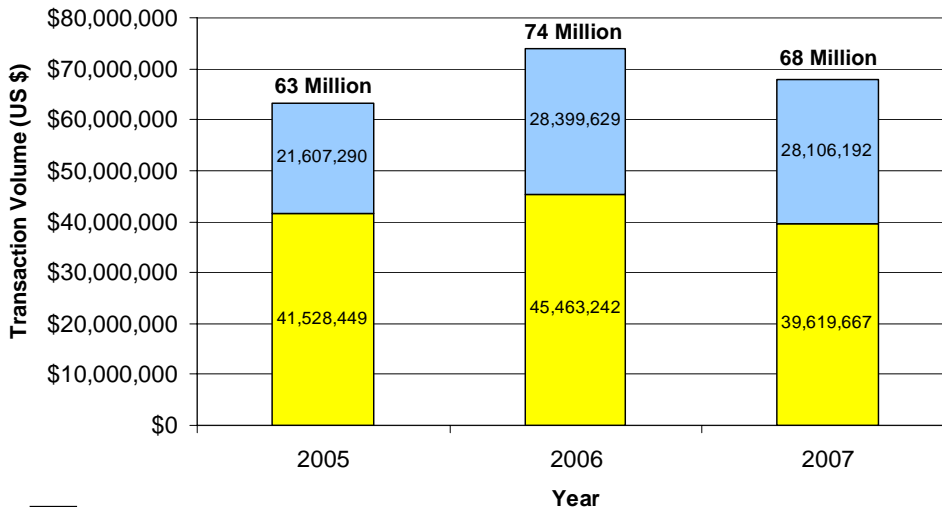
– Business Manager, NCSoft

• **Direct-to-mobile billing is a key success factor for online gaming companies to fully monetize their user base.**

Case Study - Cyworld (Korea's "Facebook") attributes its success largely to direct-to-mobile billing

- Cyworld is Korea's "Facebook" or "MySpace," with ~20 million members out of a population of 48 million.
- **Cyworld is the first social network to successfully monetize consumers:**
 - Advertisement revenue: ~25% of total revenue.
 - B2C revenue: ~75% of total revenue, of which ~60% is from direct-to-mobile billing service

Cyworld B2C Transaction Volume



"From our experience, direct-to-mobile billing is the most effective payment method for social networks on the internet. This service accounts for over half of Cyworld's B2C revenues online, and it's a big reason we have succeeded in monetizing our user base.

The key is to make it easy for consumers to transact. Direct-to-mobile billing is the easiest and most convenient way to pay, since the mobile phone is always available to consumers, and they never need to sign up, recharge an account (like in prepaid cards), or give away any sensitive financial information.

We have also found that direct-to-mobile billing leads to the lowest shopping cart abandonment for consumers because the process is so simple and quick, as opposed to many of our other options which can result in over 20% abandonment."

– Customer Satisfaction Team Leader at Cyworld

- Direct-to-mobile billing service
- Other payment methods (e.g. credit cards, prepaid cards, bank wire, etc.)

* Data from publicly-released figures from SK Communications (Cyworld's parent company)(930 won per US\$)

• **Direct-to-mobile billing is the cornerstone for social networks to successfully monetize consumers because convenience and security matter to consumers.**

Resources

- Payment News
(<http://www.paymentsnews.com/>)
- Direct Response Forum (www.directresponse.org)
- Merchant Risk Council
(<https://www.merchantriskcouncil.org/>)
- Free To Play Forum
(<http://groups.google.com/group/f2pforum>)
- My Blog
(<http://paymenttalk.blogspot.com/>)

● Q&A

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- Later;
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