

The Red Button

Getting paid is at the heart of the online future

by

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Just Suppose

Suppose that every PC, PDA, mobile phone, interactive television and other information appliance came with a red button on it marked “pay the guy”. No signatures, no PINs, no thumbprints, no comeback: if you press the button, the guy at the other end gets the money and you don’t have it anymore. Want to download the new Madonna track to your MP3 player? Browse over to her web site and press the red button. Want to see the goals from Spurs 3–2 defeat of Bolton? Choose it from the TV menu and press the red button. Want to search the New York Times online archive? Go to the search page and press the red button.

Say, for sake of argument, that the red button triggered a similar size of payment as an interpersonal GSM SMS message (a “g–mail”). This particular example is chosen because of consumers’ apparent willingness to pay for g–mail and services delivered by g–mail. In 2001, more than 260 billion g–mails were sent worldwide: at (say) 10 cents each that’s \$25 billion for mobile operators. So the red button would cause 10p, or 0.1 euro, or 10 cents or whatever, to be transferred from the consumers pre–paid account or added to their bill. At the end of the month, recipients of these payments would get a single bank transfer from some kind of central clearing and settlement house for all the payments they had received.

This apparently simple addition to the keyboard, keypad and remote control would have interesting ramifications.

If You Bill It, They Will Come

Online content providers would seem to get an obvious boost, yet many observers remain negative about the prospects for paid content. Publishers, for example, have already tried and given up on both subscription–based and per–access payment models and therefore view the current push for paid online music with scepticism (to say the least [1]). But would this scepticism be justified in the presence of the red button? I can see why people (eg, me) can’t be bothered to pay for a subscription for a site that may turn out to be of only occasional interest (and will require yet another username and password that will be instantly forgotten). I can also see why people (eg, me again) can’t be bothered to type in a credit card number, billing address, mothers’ maiden name and inside leg measurement to pay someone 20p to read their web page.

In other words, the current web and WAP worlds exhibit a paradoxical behaviour: in cases where you can pay for something because you have a credit card (subscription) you either don’t

want to or can't be bothered to use it, and in cases where you do want to (spontaneous and per-access) there's no suitable payment mechanism. This is not exactly original thinking: the observation dates back to the earliest days of the Internet, yet the first wave of micropayment technologies, aimed at solving this problem, just didn't work. Perhaps they were ahead of their time, perhaps they required consumers to download and understand software, perhaps they caused service providers and merchants too much grief, perhaps they'd forgotten about dispute resolution. Who knows?

Perhaps one of the reasons that the "first wave" failed was that much of the time and effort associated with the micropayment technologies wasn't about specific transactions: it was about relationships. The amount of effort that customers were prepared to invest in creating new payment relationships (perhaps opening an account at a new bank or pre-paying with a new organisation) was limited. Customers seem to want to use the same micropayments for web, WAP and everything else: they don't want to have to invest in new relationships for each channel.

Rather than the specific technologies, there may have been a more fundamental flaw, rooted in human nature. A transaction can't be worth so much as to require a decision but worth so little that that decision is automatic [2]. In other words, if payments fall below certain threshold, transaction costs (in the economic sense) go up to the point where they may even exceed the value of the transaction because you have to expend time and effort on making decisions about whether to purchase or not and how to pay. This may be true, but on the other hand it may simply be the case that having been conditioned into thinking of the web as free, consumers are reluctant to pay for anything at all [3].

Cash is King

The theoretical online transaction costs argument, however, needs to contend with the non-theoretical offline argument: that people use micropayments all the time. I make micropayment buying decisions all day long: I'm at Waterloo, I pop to a kiosk and buy a pack of chewing gum. At no point did I have to establish an account with the kiosk owner, or their bank, and I didn't have to give them a password or type in a PIN. On the way to the train, I noticed the headline on the evening newspaper and decided to buy a copy: I didn't have to show my passport to the newspaper guy, nor did I have to fill out a form to buy the newspaper every night for the next month. In both cases I used my physical world red button: I gave them some cash.

How far away is the cyberspace version of that cash: the online red button? Well, developments in mobile sector might point the way. Vodafone is going to start billing for third-party service providers, and the other mobile operators will be sure to follow with their own micropayment and microbilling solutions. The evidence from the marketplace is very positive. In Norway, the operators agreed a cross-operator charging mechanism for both pre-paid and open account customers (based on 8 SMS tariff classes) and then opened it up to service providers. This proved a huge success, with a wide variety of providers (who have to pay something in region of £10,000 to set up on the system) offering a range of g-mail services [4]. What's more, as in Japan [5], micropayment and microbilling solutions built around the handset (largely because

of the tamper-resistant smart card, the SIM, that sits inside every GSM handset) will quickly extend beyond purely wireless content and services, meaning that mobile operators have a real chance of taking over some part of the retail payments franchise.

On the Internet, the appearance of the red button could have major ramifications. The demand for micropayments is already evident (and that is without considering the latent demand that might surface once the use of the red button begins to spread). Gartner claim that already some 40% of US online retailers say that they would like to sell items for under\$10 if customers had some way of paying for them and (despite the apparent lack of current activity) Ovum put the world's total micropayment marketplace at some \$200 billion by 2005 [6].

Even this might be an underestimate. Remember that the overwhelming majority of all transactions in an economy are cash: hence there are literally billions of transactions that could be shifted to micropayments. When the red button enables straightforward and simple person-to-person (P2P) micropayments as well, "here's the £5 I owe you" in the office or down the pub might give way to "I'll text it to you", "I'll beam in to you" or "I'll e-mail it you".

The Cheque is in the Exchange Server

This last example is worth studying. When *Paypal* started its e-mail payment system some time ago, it was seen as being an exemplary P2P business (with a wonderful viral marketing scheme built in). Yet when Jack Selby of Paypal spoke at Consult Hyperion's 4th Annual Digital Money Forum in April 2000, he pointed out that more than two-thirds of all Paypal transactions were already C2B and by autumn that figure had risen to 80%. With some 8 million users already, it is now heading IPO. A billion dollars in payments (see Figure 1) have already been made through the service, despite an average transaction amount of only \$50 [7].

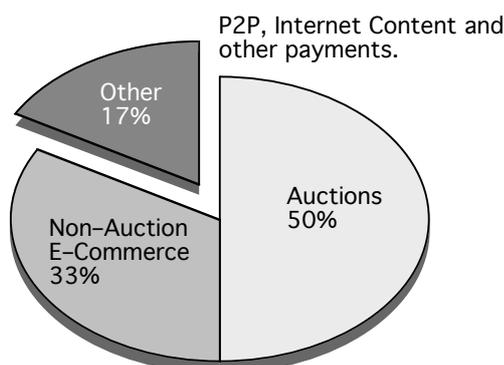


Figure 1. Paypal Transactions by Volume (Source: Paypal 6/01).

The Paypal example illustrates another point: the relationship between payment mechanism and marketplace. Because Paypal provided an easy way for sellers in eBay auctions to get paid (not Paypal's original function, remember) it was rapidly adopted by that vigorous sector. This created a virtuous circle: once there was an easy way to get paid, more sellers joined in. Many of these were "power sellers", individuals equivalent in turnover to a small business but who would never get a cost-effective credit card acquiring deal. The success of Paypal means banks

(and others) around the world are introducing similar schemes, ranging from the HSBC and Yahoo *PayDirect* joint venture to Citibank *c2it* in the US and *MinutePay* in France.

The symbiosis between the red button and other emerging online marketspaces could generate a similar vortex. Just one example: P2P micropayments are well-suited to the specific demand of certain interactive sectors: an online sports betting service, that you might use via your remote control while watching a big game on TV, could exploit a convenient way to pay out £5 wins as well as take in 20p bets.

Competition

There are candidates for the red button already visible (mobile phones, smart cards, online wallets). Others, I'm sure, are just around the corner. Which of them succeed, and which fail, is obviously dependent on a range of factors: but the fact that some of them will succeed ought to be of strategic interest to potential providers and potential retailers alike. Those that do succeed will do so not by replacing existing payment schemes but by supplementing them. Visa has already said that it sees the new digital money systems as a way to provide electronic payment services to merchant segments that were not well-served by the credit card infrastructure (rather than as a competitor to it) [8].

It's possible to imagine, for example, telecommunication operators offering microbilling services through the .NET platform in competition with financial services providers offering micropayment services. Then, wherever consumers go on the Net, they will have not only a convenient way to buy a fan's first hand match report of a soccer game for 20p, but a real choice in who they have a micropayments relationship with. It could be that as retail banks (eg, Egg and Bank One [9]) begin to integrate .NET and Passport into their service offerings then low-value P2P micropayments could become one of the first compelling applications for that platform.

Yet the micropayment relationships that customers form may not necessarily be with traditional payment scheme providers such as retail banks. New kinds of intermediaries, such as Clickshare, are emerging to sit between the people with billing relationships (banks, retailers, telecommunications operators) and the people with audiences for content (newspapers, publishers), aggregating in both directions to keep costs down [10]. These new intermediaries are quite likely to evolve into multi-party clearing and settlement schemes, so that retailers and consumers alike can have relationships with whoever they choose.

However the red button comes into existence, and whether it is controlled by retail banks or telecommunications operators (or entirely new intermediaries), it will mean a major boost to economic life online and a side effect of that will be that millions of content and service providers (currently excluded from that life) will thrive.

Finance on Windows is one of the official www.digitalmoneyforum.com publications for Consult Hyperion's Annual Digital Money Forum. The next forum will take place in London in April 2001.

References

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