



Rollpay Solution and Market

Revision 3

EVERYTHING...

1. The Problem and its Solution

By now, a very tight and desperate competition has formed between banks, financial institutions and mobile carriers for customers (who opens and manages mobile payment accounts), and there is a huge market niche, which requires an answer and a solution to be offered and delivered.

The bank, financial institution would prefer a solution that not necessarily includes a mobile network operator. Similarly, the carriers would like to exclude banks, financial institution from their business and settlement model.

Due to its open architecture, Rollpay can be connected in a country, a region, or worldwide. During its design we made sure that participants can join it at anytime, and on any level.

How is it possible to ensure that the customer remains free of charge for all mobile payment transactions, and mobile communication? (Mobile carriers charge a call fee or an sms fee during transactions.)

Paying with Rollpay is completely free for the customer. He pays neither transaction fee nor communication fee (the link between the mobile device and the Rollpay Terminal is Bluetooth, which has no costs for the customer).

How is it possible to offer a quick and easy way for the customer of the bank, financial institution, or mobile operator to open a new account for free, or to connect mobile payment to an existing credit, debit, or bank card account?

In case of a bank or financial institution, all the customer needs to have is a new or existing open account. His payments will be settled against this newly opened or already existing credit, debit, or bank card account (virtual card). In case of a mobile network operator, the customer needs to have a new or existing pre-paid, invoiced, or m-commerce account. His purchases are settled against their pre-paid account, monthly invoice, m-commerce or bank card account (virtual card number).

How would it be possible to make mobile payments on all kinds of mobile phones (Nokia, Samsung, Motorola, and all the others.) and PDA (HP, Mio, Palm, etc.), at points of sale, vending machines, online, and the car's on-board computer as well? This is a software, which is pre-installed or can be downloaded for free from Rollpay Terminals to every maker's – suitable – device, mobile phone (Nokia, Samsung, Motorola and so on), PDA (HP, HTC, I-Mate, Mitac and so on), with which payment, financial, loyalty and other transactions can be started and executed.

http://www.rollcomm.com/downloads/Rollpay_How_does_it_work_rev2.pdf

How is it possible to drastically reduce the amount to be invested into mobile payment infrastructure?

The terminals are capable of uploading the Rollpay Client software to any producer's Bluetooth enabled mobile phone or PDA with in an approximate 100 meter radius (final/ true distance depend on the user equipment).

With a Bluetooth compatible mobile phone or PDA connected to the Rollpay Terminal simultaneously 1-19 clients can pay at cashiers. Considering a potential a supermarket which may have 38 cashiers (Tesco, Wal-Mart, etc.) only 2 terminals are necessary, which represents a significant infrastructure savings against the current POS terminal cost. <http://www.rollcomm.com/terminal19.html>

At retail shops and automated vending machines (for example food, drinks, parking, ticketing), where only one cashier and one AVM is operating we recommend installing the 1-6 connection terminal (<http://www.rollcomm.com/terminal6.html>), with which 6 clients can pay simultaneously, and to use services provided by other Rollcomm proximity marketing products. <http://www.rollcomm.com/solutions.html>

The Terminal receives the payment or other transaction requests and sends them to the cashier at the merchant (at other acceptors, for example at vending machines, it is integrated in the machine)

The transaction requests are accepted or refused by the Rollpay Center which sends back information to the Rollpay Client software (to the client's mobile device) and to the cashier.

<http://www.rollcomm.com/hardwares.html>

The Terminal uses IP to communicate with the authorization host, so the lowest, 33.6 kbps internet connection is enough. With an Internet connection of 512Kpbs, it can serve more than 60 cash desks without a glitch.

How is it possible to minimize investments and maximize profit at the same time for the stakeholders of mobile payments?

Customer: paying with Rollpay is completely free for the customer. He pays neither a transaction fee nor communication fee (the link between the mobile device and the Rollpay Terminal is a Bluetooth connection, which has no costs).

Merchant: can pay a smaller transaction fee to the bank, because the card company can be excluded from the business model, therefore there is no interchange fee.

Bank, financial institution, mobile network operator, and so on:

- Can charge the same transaction fee as after the card transactions, and can decide whether to pay the interchange fee to the card company, or keep it.
- Gives an answer to the challenge of mobile network operators with mobile payment transactions.

The solution is to avoid transmitting payment data through the mobile network. The challenge is, to the analogy of the ISP's 'last mile', the 'last inch': the connection between the mobile phone and the POS terminal. This link is a Bluetooth link in Rollpay, therefore it is free, and the mobile network is entirely missing from the chain.

Our product involves three points of the chain:

- the customer's mobile device (not necessarily a phone)
- the merchant's POS terminal
- the bank's accounting system

Rollpay's primary use case consists of the following steps:

- The customer is about to pay \$100.
- He starts Rollpay on his mobile phone or PDA, and starts a transaction.
- His device connects to the Rollpay Terminal (replacement for POS Terminal), and gets a Customer Number.
- He tells or shows the Customer Number to the cashier, who enters it into the cash register.
- The mobile phone or PDA prompts the customer with the amount, and asks for confirmation.
- The customer confirms the amount. The Rollpay Terminal asks for authorization from the Rollpay Center in the bank.
- The cash register and the customer's device get the receipt of the transaction, and the amount is settled against the credit, debit, or bank card (virtual card) account of the customer, in case of a financial institution's customer. As a customer of a Mobile Network Operator, the pre-paid account, or the subscription account, or the m-commerce account is charged.

<http://www.rollcomm.com/pay.html>

2. Why now?

Mobile phones and PDAs have reached the level of maturity to perform such a transaction. With Java or .NET, and Bluetooth being ubiquitous, the technical obstacles are removed. Psychologically, people are more and more connected to their handheld devices, listening to music on them, registering their appointments in them, making pictures with them, and so on. The missing component was a versatile yet safe embedded microcomputer that can handle Bluetooth connections. However, with the appearance of cheap ARM processors, and with the mass production of Bluetooth modules, this microcomputer became reality 4 years ago.

3. Market Size

TAM = Total Available Market = USD 36 billion till 2011.

Source: <http://www.pte.at/pte.mc?pte=061007002>

4. Products

- Rollpay©: an end-to-end mobile payment solution, which includes an authorization host, and can be used in all payment situations (point of sale, vending machines, internet, car's on-board computer, etc.) by the customer. Rollpay© can be attached to a new or existing credit, debit, or card account (as a virtual card), or a mobile plan (pre-paid or post-paid), and m-commerce account.
- Rollpay© car: a version of Rollpay© developed specifically for car's on-board computers, which lets customers buy and pay, and perform bank, financial, loyalty and other transactions.
- Rollchat©: lets users chat and get to know each other using their mobile phone or PDA.
- Rollpop©: marketing solution that sends and shows multimedia messages (MP3, text, photo, and other media file) when customers approach a POS within 100 meters
- Rollshow©: marketing solution that lets customers download complete multimedia catalogs locally, and browse them with their mobile device (mobile phone, PDA, or laptop)
- Rollnavi©: local marketing solution that navigates customers in eg. malls or other sale areas, from the entrance to the aisle, and meanwhile showing targeted ads on their mobile device
- Rollnet©: lets customer browse web pages locally with their mobile phones, PDAs, or laptops for free, and meanwhile showing targeted ads
- Rollcontroll©: remote management tool for content and other providers, using it they can manage and control their aforementioned Rollcomm products
<http://www.rollcomm.com/solutions.html>
- Terminal and Node: embedded microcomputer that is able to manage for example 1-19 Bluetooth and up to 7 WiFi connections simultaneously. The connection point for the aforementioned products (issuer and authorizer), from which the client software can be downloaded for free, and with which the mobile devices communicate, during transactions.
<http://www.rollcomm.com/hardwares.html>

BLUETOOTH SIG - A New Way to Pay

<http://www.nxtbook.com/nxtbooks/bluetooth/signatureq108/index.php?startpage=20>



EVERYWHERE

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