

**“Instant Gratification Terminal and Electronic Payment Network for Carrying  
Financial and Non-financial Data”**

**Field of the Invention**

The present invention relates to an instant gratification terminal and electronic  
5 payment network for carrying financial and non-financial data. .

Throughout the specification, unless the context requires otherwise, the word  
“comprise” or variations such as “comprises” or “comprising”, will be understood to  
imply the inclusion of a stated integer or group of integers but not the exclusion of  
any other integer or group of integers.

**10 Background Art**

The following discussion of the background invention is intended to facilitate an  
understanding of the present invention. However, it should be appreciated that  
the discussion is not an acknowledgment or admission that any of the material  
referred to was published, known or part of the common general knowledge in the  
15 jurisdiction as at the priority date of the application.

Suppliers of goods and services will often establish a loyalty program in an effort  
to encourage repeat business from a client. Such loyalty programs often take the  
form of generic coupons or an accumulation of points.

Generic coupon based loyalty programs offer significant advantages to the  
20 supplier. They are easy to administer as they do not require a central record of  
customer activity to be maintained. Further, the generic nature of the coupons  
means that they can be easily sourced – the coupons being used by a wide  
variety of suppliers.

Such loyalty programs are also of interest to customers as they offer a tangible  
25 benefit that can be redeemed by the customer. However, for the customer to  
make full benefit of the generic coupon, they must remember to have the coupon

- 2 -

with them at the time of making a subsequent purchase from the supplier who provided the coupon. Additionally, if the time between receiving the generic coupons and making the subsequent purchase is a significant period of time, the customer may have lost interest in or forgotten about the coupon thus rendering  
5 such a loyalty system ineffective.

Points-based loyalty programs are generally subject to the same disadvantages as those mentioned above. In particular, the time period between registering for the loyalty program and redemption of the points for specific goods and/or services can be quite long – resulting in a lack of interest in the loyalty program by  
10 the customer. While this interest may be renewed at the time of redemption, this produces a cycle of interest that may not justify the administrative overheads of the points-based loyalty program.

Points-based loyalty programs, however, do offer one significant advantage over generic coupons. Registration for a points-based loyalty system generally  
15 involves the customer being issued a card having the brand of the supplier imprinted thereon. The use of the branded card helps to establish a customer's interest in the supplier as they are then seen as part of an exclusive group of customers.

Once the supplier has established a customer's interest in it, the supplier can then  
20 use that interest to elicit personal information from the customer. This personal information can then be used to introduce the customer to other products or services offered by the customer that they might wish to consider purchasing. Alternatively, such information may be used on an aggregate basis to allow the customer to refine their marketing activities (eg. such as marketing to a specific  
25 age group or geographic location). However, in order to do so this personal information must be captured and stored.

The most common method of capturing personal information is to ask the customer to complete a paper or on-line survey. The main drawback of such surveys is that they are not often presented to the customer at a time when the  
30 customer is actually keen on interacting with the company (and therefore most

- 3 -

likely to volunteer personal information). Additionally, the cost of the survey may be substantial and produce a limited response from customers.

It is an object of the present invention to overcome, or at least ameliorate, some of the aforementioned problems of the prior art.

## 5 Disclosure of the Invention

In accordance with a first aspect of the invention there is an instant gratification terminal. The instant gratification terminal comprises a card reader, a processor and at least one display unit and input means. The card reader reads details of the customer from the customer's loyalty program card and provides such details  
10 to the processor. The processor thereafter executes a series of instructions that cause the customer to interact with the terminal via the display unit and input means, the interaction possibly resulting in a benefit being provided to the customer.

The series of instructions that cause the customer to interact with the terminal  
15 may also be aimed at eliciting personal information from the customer. This personal information then being used to up-sell or promote a cross-sale, or being stored for later marketing purposes.

Ideally, the instant gratification terminal is positioned adjacent the supplier's cash register or point of sale terminal. In this manner, the possible benefit provided to  
20 the customer can be applied to the customer's purchase at that point in time. At this position it is also best suited for capturing personal information about customers.

As an alternative, at least one of the reader/input means/display means may be remotely located relative to the processor. In this manner, larger display units can  
25 be used to announce greeting messages and the success or failure of a customer in obtaining a benefit.

- 4 -

The instant gratification terminal may determine whether a benefit is to be provided to the customer, and the type and amount of benefit to be provided, based on pre-programmed game sequences. The game sequences may be skill-based, random or semi-random in nature. Additionally, the type of benefit  
5 provided may include additional bonus loyalty points, a good or service purchased being provided for free or a discount on the total amount of goods and/or services purchased.

The interaction between the customer and the instant gratification terminal may include both audio and visual interaction. Furthermore, the series of instructions  
10 may generate some form of interaction between the customer and supplier aimed at welcoming the customer. If the supplier operates a points-based loyalty scheme, the series of instructions may also show to the customer, via the display unit, their accumulated loyalty points.

Ideally, the card reader is adapted to read and write information to a smart card.  
15 However, this is not essential, and the card reader could be adapted to read and write information from a magnetic strip or adapted to read information from a physical identifier on the card (such as a bar code) or any wireless communication device such as a mobile phone or PDA or RFID tag or transponder.

The instant gratification terminal may further incorporate removable memory  
20 means for storing personal data entered into the instant gratification terminal. The removable memory means may also store the series of instructions executed by the processor.

To further enhance the experience of the customer, the instant gratification terminal may be connected to devices such as the following:

- 25
- the cash register or point-of-sale terminal;
  - a printer; or
  - an external display.

- 5 -

The method of connection to such devices may be by USB or Firewire connection.

In accordance with a second aspect of the present invention there is an electronic payment network for carrying financial and non-financial data. The electronic  
5 payment network comprises a series of terminals in data communication with a message manager and at least one host computer. The message manager operable to route messages sent by each terminal to the appropriate host computer. In one arrangement this is obtained by tagging the message, the set value of the tag being utilised to appropriately route the message.

10 The message manager optionally seeks to validate that the message has come from a valid terminal prior to routing the message to the appropriate host. In this manner, bogus messages do not take up network resources.

Ideally, the terminals used in the electronic payment network are instant gratification terminals as described above integrated with a point of sale terminal.  
15 However, this is not required.

The electronic payment network may be adapted for use with a smart card. The smart card can then be used to store details of the customer's current credit balance and loyalty points. In this arrangement, terminals can be adapted to include contactless card readers.

20 The electronic payment network is also adapted for use with a second electronic payment network, by utilising the same card. Ideally, the card is one in widespread use amongst the population such as a transit card. In this arrangement, the electronic payment network of the present invention can be operated by a company not being a financial institution appropriately licensed to  
25 acquire and settle financial transactions, provided that the second electronic payment network is operated by a company being a financial institution appropriately licensed to acquire and settle financial transactions.

- 6 -

A loyalty scheme can be built into the electronic payment network. The loyalty scheme is a points-based system where customers can obtain goods and/or services from participating suppliers by redeeming points.

The terminals, message manager and host computers may be connected via the  
5 public-switched telephone network or by data cable or a combination of the two.

Also capable of being built into the electronic payment network are facilities to perform data mining functions on the myriad of financial and non-financial transactions processed and provide these to various parties. The electronic payment network may also be arranged to provide "top-up" of stored balances on  
10 any identifier used in conjunction with it.

### **Brief Description of the Drawings**

The invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a schematic diagram of an instant gratification terminal.

15 Figure 2 is flow-chart of the processing of the instant gratification terminal of Figure 1.

Figure 3 is a schematic of an electronic payment network for carrying financial and non-financial data.

Figure 4 is a block diagram of the components of a concentrator and host  
20 computer used in the electronic payment network of Figure 3.

### **Best Mode(s) for Carrying Out the Invention**

In accordance with a first embodiment of the invention there is an instant gratification terminal 100 comprising:

- first I/O means 102;

- 7 -

- second I/O means 104;
- display means 106; and
- processing means 108.

First I/O means 102 comprises a card reader 110 and a card writer 112. The first:  
5 I/O means 102 is adapted for use with any card 114 having an interface 116 that  
allows for the storage of information. For example, card 114 could be a typical  
cashcard or debit card having a magnetic strip for storage of information in  
magnetic form. Alternatively, card 114 could be a smart card having a memory for  
storing electronic signals.

10 Irrespective of the type of card actually used, card 114 must have a unique  
identification number recorded thereon, the unique identification number also  
being utilised as the customer's membership number. As such, the card 114 to  
be used in conjunction with the system may be of the customer's choosing, rather  
than a card 114 issued specifically to the customer for the purpose of use with the  
15 instant gratification terminal 100. the card 114 may also include details of, or  
balances for, multiple loyalty programs.

The second I/O means 104 comprises a push-button interface 118 and a speaker  
120.

The display means 106 comprises two opposite LED display screens 122a, 122b.  
20 The LED display screens 122a, 122b are arranged such that in normal use, LED  
display screen 122a faces the operator while the other LED display screen 122b  
faces the customer. LED display screen 122b is larger in size in comparison to  
LED display screen 122a.

The processing means 108 comprises a processor 124, memory 126 and a  
25 plurality of USB ports 128. Memory 126 can take the form of a flash ROM 130.  
The plurality of USB ports 128 allow the instant gratification terminal 100 to be  
connected to such other devices as:

- 8 -

- a point-of-sale terminal;
- an external printer; and
- an external display.

In use, the instant gratification terminal 100, adapted to receive a smart card and  
5. connected to a point-of-sale terminal, operates as follows.

Upon insertion of smart card 114 into the first I/O means 102 of instant gratification terminal 100, processor 124 executes a series of pre-programmed sequences 200. The series of pre-programmed sequences 200 commences with a welcoming sequence 210.

10 Welcoming sequence 210 commences by controlling the operation of speaker 118 to produce an audible welcome to the customer. The customer's name and number of loyalty points, as recorded in interface 116 of smart card 114, presently accumulated by the customer are then displayed on display screen 122b. After a period of time sufficient to allow the audible welcome to be completed and the  
15 customer to read the information displayed on display screen 120b, the processor 122 executes instant gratification sequence 220.

The instant gratification sequence 220 actually executed is determined at random.

In a first instant gratification sequence 230, hereafter referred to as the random number sequence, the processor 124 generates a random number (step 240). At  
20 step 250, the random number is subsequently compared to the smart card's unique identification number. If the smart card's unique identification number contains the generated random number, processor 124 sends an appropriate signal to the point-of-sale terminal. The point-of-sale terminal then, at step 260, discounts the total cost of the purchase made by the customer by a  
25 predetermined percentage and processing continues to step 265. If the smart card's unique identification number does not contain the generated random number, processing continues directly to step 265.

- 9 -

Step 260 operates to display the outcome of the random number sequence 230 to both the customer, via display means 122b, and the operator, via display means 122a. The information displayed to both display means 122a, 122b includes the generated random number and the smart card's unique identification number. If  
5 the generated random number forms part of the smart card's unique identification number, also displayed on display means 120a is the amount of discount to be applied to the total cost of the customer's purchases.

In a second gratification sequence 270, hereafter referred to as the jackpot sequence, the processor 124 operates to generate three symbols from a  
10 predetermined set stored in memory 126 (step 280). The three generated symbols are then compared, at step 290, to determine whether three identical symbols have been generated. If so, the processor 124 operates to download the number of loyalty points to be credited to the customer as a result of their latest purchase at step 300. Step 310 then sees the processor 124 double the number  
15 of loyalty points to be credited to the customer and processing continues to step 320. If the three generated symbols are not identical, processing continues automatically to step 330.

Card writer 112 is then operated, at step 320, to overwrite the number of loyalty points stored in interface 116 of smart card 114 with the new total of loyalty points  
20 (ie. the previous number of loyalty points plus any "bonus" loyalty points as a result of a successful outcome of the jackpot sequence.).

Step 330 operates to display the outcome of the jackpot sequence 290 to both the customer, via display means 122b, and the operator, via display means 122a. The information displayed to both display means 122a, 122b includes the three  
25 generated symbols and whether such symbols represent a win or lose scenario. If the generated symbols represent a win scenario, display means 122a and 122b also operate to display the number of bonus loyalty points to be credited to the customer.

In a third gratification sequence 340, hereafter referred to as the random inventory  
30 sequence, the processor 124 operates, at step 350, to load a list of items

- 10 -

available for purchase from the operator from memory 126. A list of items purchased by the customer is also downloaded from the point-of-sale terminal at step 360. An item is then selected at random from the list (step 370). If the item selected corresponds with an item on the list of items purchased by the customer, an appropriate signal is generated at step 380 and sent to the point-of-sale terminal. The point-of-sale terminal then, at step 390, discounts the total cost of the purchase made by the customer by the cost of the selected item (ie. thereby providing the selected item to the purchaser for free), before proceeding to step 400. If the item selected does not correspond with an item of the list of items purchased by the customer, processing continues directly to step 400.

Step 400 operates to display the outcome of the random inventory sequence 340 to both the customer, via display means 122b, and the operator, via display means 122a. The information displayed to both display means 122a, 122b includes the randomly selected item and whether the customer has achieved a win scenario or not.

Upon completion of the appropriate gratification sequence 230, 270, 340, the instant gratification terminal 100 operates to request personal information from the customer. This request appears on display means 122b and the customer answers the request by pressing the appropriate button on push-button interface 118.

If the customer decides to provide personal information, processor 124 operates to display a series of questions to the customer via display means 122b. The customer can then answer each question by pressing the appropriate button on push-button interface 118. Once the customer has answered all of the questions posed the answers provided by the customer are then written to an appropriate area of interface 118 using card writer 112.

It should be appreciated by the person skilled in the art that the above description of each gratification sequence 230, 270, 340 is minimalist. It is anticipated that further features, such as the inclusion of audio responses or real-time video images could be used to increase the level of excitement generated in the

- 11 -

customer by the appropriate gratification sequence 230, 270, 340. Furthermore, push-button interface 118 can be used to increase the level of interactivity between customer and instant gratification terminal 100 during the appropriate gratification sequence 230, 270, 340. For example, by requiring the customer to  
5 press a button on the push-button interface 118 in order to activate the appropriate gratification sequence 230, 270, 340.

It should also be appreciated that any number and type of gratification sequences could be adopted, subject to appropriate resource restraints.

In accordance with a second embodiment of the invention, where like numeral  
10 reference like parts, smart card 114 is replaced with a card 114 that does not have means for storing information thereon. In such cases, the card reader 110 is adapted to read the card's unique identification number:

In this arrangement, card writer 112 is replaced with a connection to a central host (not shown). Central host contains a unique record for each customer, the unique  
15 record being indexed and cross-referenced by the customer's card's unique identification number. Each unique record then takes the place of interface 118 for recording the number of loyalty points accrued by the customer and storing the customer's personal information. Accordingly, the above processing is modified as would be known to the person skilled in the art to utilise the appropriate unique  
20 record stored at central host rather than interface 118.

In accordance with a third embodiment of the invention, where like numerals reference like parts, display means 122a is removed, leaving only a single display means 122b operable to display information to the customer. Further, instant gratification terminal 100 and point-of-sale terminal form a single terminal.

25 In accordance with a fourth aspect of the invention, where like numerals reference like parts, the instant gratification terminal 100 is located at a stand-alone positioned within the supplier's store and at a position not connected to the point-of-sale terminal. In this arrangement, instant gratification terminal 100 is operable to allow the customer to enter personal information, as described above, at their

- 12 -

convenience (ie. the customer is not required to purchase anything from the supplier in order to operate the instant gratification terminal 100).

In accordance with a fifth embodiment of the invention there is an electronic payment network 500 for carrying financial and non-financial data. The electronic  
5 payment network 500 in this embodiment operates in conjunction with a second electronic payment network 510.

Electronic payment network 500 is operated by a company not being a financial institution appropriately licensed to acquire and settle financial transactions. Second electronic payment network 510 is operated by a company being a  
10 financial institution appropriately licensed to acquire and settle financial transactions.

Electronic payment network 500 comprises terminals 520, a concentrator 530 and a host computer 540. Electronic payment network 500 and second electronic payment network 510 are adapted to be operated in conjunction with a single card  
15 114.

In this embodiment, terminals 520 comprise a point of sale terminal 550, having memory means stored therein, integrated with an instant gratification terminal 100 as previously described. Terminals 520 operate to initiate a transaction, be it financial or non-financial in nature. Details of the transaction are recorded in a  
20 tagged message for communication to the concentrator 530.

Terminals 520 connect to the concentrator 530 through the public switched telephone network ("PSTN") 560.

Concentrator 530 comprises a transaction listener 570 and a message manager 580. Transaction listener 570 intercepts tagged data packets sent via the TCP/IP  
25 protocol. Transaction listener 570 also operates to validate that the data packet has been received from a valid terminal 520.

- 13 -

Message manager 580 deconstructs the tagged message into its individual fields for forwarding to host computer 540. Message manager 580 also operates to distinguish ISO 8583 compliant messages (ie. details of a financial transaction) from free-form text messages (ie. details of non-financial transactions).

5 Host computer 540 has software loaded thereon. This software comprises the following modules and databases:

- business application module 590;
- transactions database 600;
- black list management module 610;
- 10 • black list database 620;
- loyalty rules download management module 630;
- loyalty points module 640;
- loyalty points database 650;
- settlement manager module 660;
- 15 • commission calculation module 670;
- remittance management module 680; and
- management and administration module 690.

These modules and databases interact to operate as an online transaction processing database server ("**OLTP**") and an online analytical processing  
20 database server ("**OLAP**").

- 14 -

Business application module 590 receives deconstructed tagged messages from message manager 580. The business application module 580 records details of each transaction, both financial and non-financial transactions, in transactions database 600. If the tag of the deconstructed tagged messages indicates that the message is non-financial in nature (ie. not in ISO 8583 format), the business application module 590 operates to route the deconstructed tagged message to a non-financial transaction host 700 for further processing.

Business application module 590 is also operable to perform pre-processing functions such as bill account validation and user authentication.

10 Black list management module 610 operates to receive a list detailing all black listed cards 114 from second electronic payment network 510 at periodic intervals. Black list management module 610 then operates to store the list in black list database 620 and download a copy of the list to each terminal 520.

Loyalty rules download management module 630 operates to download the set of rules applicable to the loyalty program implemented as part of electronic transaction network 500 to each terminal 520.

Loyalty points module 640 administers the loyalty program implemented as part of electronic transaction network 500. Loyalty points module 640 also operates to calculate the amount of loyalty points to be credited to a customer as a result of a financial transaction. Details of the loyalty points credited to a customer are stored in loyalty points database 650.

Loyalty points module 640 also administers any transaction where payment or part payment is tendered in the form of redemption of loyalty points.

Settlement manager module 660 settles financial transactions with the host computer (not shown) of second electronic payment network 510. It is also operable to settle and reconcile financial transactions between a terminal 520 and host computer 540.

- 15 -

Upon settlement and/or reconciliation of financial transactions, settlement manager module 660 generates a report that is forwarded to remittance manager module 680 for further processing.

Commission calculation module 670 operates to calculate the commission to be applied to each financial transaction. The commission calculation module 670 is also operable to produce reports on the operation cost and calculated commissions of transactions.

Remittance management module 680 receives a report from settlement manager module 660. Using the information contained in this report the remittance management module interfaces with a financial institution 710 and instructs the financial institution 710 to effect an appropriate payment to each merchant identified in the report minus the amount of commission calculated by commission calculation module 670. The remittance manager module 680 also generates a report of all remittances made for sending to the financial institution 710 to facilitate an audit trail.

Management and administration module 690 is operable to produce reports based on information stored in transactions database 600 and loyalty database 650 and provide other data mining functionality to the network operator.

In use, the electronic payment network 500 operates as follows:

Black list management module 610 operates to download from the second electronic payment network 510 a list of black listed cards 114 (the list actually taking the form of a list of each black listed card's unique identification number) at at least one predetermined time of day. A card may be black listed for a number of reasons, including loss by the registered owner or the card number is deemed fraudulent. The list of black listed cards 114 is then stored in the black list database 620.

By storing the list of black listed cards 114 in the black list database 620, if for any reason, such as a problem with the telephone link or network outage, it is not

- 16 -

possible to download the list from the second electronic payment network 510 at a predetermined time, the black list management module 610 operates using the last list downloaded.

After determining the list of black listed cards 114 to be used, host computer 540  
5 establishes a data connection with each terminal 520. This may occur directly after downloading the list from the second electronic payment network 510 or at a different predetermined time of day.

Using each established data connection, black list management module 610  
downloads the list of black listed cards 114 to be used to the memory means of  
10 the terminal 520. At roughly the same time, loyalty rules download management module 630 operates to download to the memory means of the terminal 520 the set of rules applicable to the loyalty program implemented as part of the electronic transaction network 500.

The terminal 520 is then operable to receive and process transactions in the  
15 following manner.

A customer enters into a supplier's premises and decides to purchase at least one good or service from the supplier. The customer then hands over his or her card 114 to the supplier to initiate a payment transaction for the good(s) and/or service(s). As before, the card 114 may be of a type chosen by the customer,  
20 rather than a specific card issued for the purpose of performing transactions with the terminal 520. The card 114 may also be used in conjunction with a number of loyalty programs.

The supplier inserts the card 114 into first I/O means 102 of integrated terminal 520. This triggers the instant gratification terminal 100 component of terminal 520  
25 to operate substantially as described above.

It should be noted, however, that in the embodiment being described, card 114 does not have any associated memory means. Accordingly, first I/O means 102 operates to determine the card's unique identification number.

- 17 -

If the card's unique identification number is not recorded on the list of black listed cards 114, the number of loyalty points accumulated by the customer is obtained by establishing a data communication link with host computer 540 (via concentrator 530) and making an appropriate query of loyalty database 650 using  
5 the card's unique identification number as the search criteria. If the card's unique identification number is recorded on the list of black listed cards 114 appropriate action is taken to end the transaction and inform the supplier.

Upon completion of the appropriate gratification sequence 230, 270, 340, the details of the financial transaction (as may have been modified by the outcome of  
10 the appropriate gratification sequence 230, 270, 340) are then recorded in an ISO 8583 compliant message. The ISO 8583 compliant tagged message is then sent to concentrator 530, the tag being set to indicate that it is a financial transaction.

If for any reason it is not possible to establish the data communications link with the concentrator 530, the terminal 520 switches to off-line mode. In off-line mode,  
15 details of all financial transactions transacted at the terminal 520 are stored in its memory means. At a later stage when it is possible to establish the data communications link with the concentrator 530, these stored transactions are then uploaded to the concentrator 530 for processing in a batch arrangement.

Transaction listener 570 of concentrator 530 receives the tagged message and  
20 validates that the tagged message has come from a valid terminal 520. If the message has come from a valid terminal 520 the tagged message is forwarded to message manager 580 for further processing. Otherwise, the tagged message is disregarded.

Message manager 580 parses the tagged message to obtain the details of the  
25 financial transaction. The message manager 580 then checks the value of the tag to determine the type of message. The details of the financial transaction and the determined type of message are then sent to the business application module 590.

- 18 -

Upon receipt of details of the financial transaction and the determined type of message from the message manager 580, the business application module 590 operates to check that the transaction should not be voided by performing three simultaneous checks. The first check determines whether the card 114 used in  
5 the transaction is recorded on the most current black list stored in black list database 620. The second check determines whether the customer has sufficient credit recorded against the card 114. The third check is a user authentication procedure.

If any of the simultaneous checks performed by business application module 590  
10 indicates that the transaction should be voided, the business application module 590 issues a roll-back command to cancel the other checks. An appropriate signal is then returned to terminal 520 indicating that the transaction has been voided and the reason for voiding the transaction.

If all checks performed by business application module 590 are clear, the details  
15 of the financial transaction are then recorded in transactions database 600. Additionally, an appropriate signal is then returned to terminal 520 indicating that the transaction has been processed.

After processing a financial transaction, the customer's credit, as recorded against the card 114, falls below a pre-determined amount, the business application  
20 module 590 will operate to "top-up" the credit value. This is achieved by increasing the amount of credit recorded against the card 114 by a customer designated amount and debiting that designated amount from a bank facility nominated by the customer.

As details of each financial transaction are recorded in transactions database 600,  
25 loyalty points module 640 operates to calculate the number of loyalty points to be credited to the customer as a result of the transaction. The balance of loyalty points recorded in loyalty points database 650 for the customer (as referenced by the customer's card's unique identification number) is then updated to include the newly accrued loyalty points.

- 19 -

At predetermined periods, settlement manager module 660 attempts to establish a data communication link with each terminal 520. Upon establishing communication, settlement manager module 660 proceeds to settle and reconcile transactions or batches of transactions (in the case of a terminal 520 having been  
5 offline for a period of time) between terminal 520 and host computer 540.

At other times, settlement manager module 660 contacts the host computer (not shown) of second electronic payment network 510. Once in communication with each other, settlement manager module 660 and the host computer interact to settle transactions or batches of transactions. After settling the transactions the  
10 settlement manager module 660 generates a report on the transactions that have been settled and forwards the report to remittance manager 680. In the context of the remainder of this example, it is presumed that the customer's transaction with the supplier has been settled and reconciled and details of the transaction are included in the report to be forwarded to remittance manager 680.

15 Remittance manager 680 interfaces with the network operator of electronic payment network 500's financial institution 710. Upon establishing the interface, remittance manager 680 proceeds to instruct financial institution 710 to effect a payment equal to the cost of the good(s) and/or service(s) purchased by the customer to the supplier minus the amount of commission calculated by  
20 commission calculation module 670. Remittance manager 680 then operates to generate a report on the remittance to the supplier, and any other remittances made, and sends the report to the financial institution 710.

This completes processing of the financial transaction by the electronic payment network 500.

25 If the customer then proceeds to enter personal information into terminal 520 in the manner described above, at the completion of this data entry, the personal information is recorded in a tagged message. The tagged message is tagged to indicate that it is a non-financial transaction recording customer-relationship management ("CRM") data. The tagged message is then forwarded to

- 20 -

transaction listener 570 in the same manner as a financial transaction is forwarded to the transaction listener 570.

The transaction listener 570 performs a check to determine that the tagged message has come from a valid terminal 520 before forwarding to message  
5 manager 580. Message manager 580 then extracts the CRM data from the tagged message and the message type (as determined by the value set for the tag) and forwards the CRM data and details of the message type to business application module 590.

Upon receipt by business application module 590, details of the transaction are  
10 recorded in transactions database 600. Business application module 590 thereafter checks the message type and routes the CRM data to the appropriate non-financial transaction host 700 for further processing. In this example, non-financial transaction host 700 is a CRM system.

This completes processing of the non-financial transaction by the electronic  
15 payment network 500.

If the customer wishes to purchase a good or service using redeemed points the processing of the transaction occurs in the same manner as described above in respect of financial transactions. However, rather than business application module 590 checking the current credit balance of the card 114, the transaction is  
20 processed by loyalty points module 640 where a check is made of the current loyalty points balance of the card 114. If the customer's accrued loyalty points equals or exceeds the loyalty points cost of the good or service to be purchased, the transaction is processed and the customer's accrued loyalty points debited accordingly. Otherwise, the transaction is voided and an appropriate signal sent  
25 to terminal 520.

In situations where the purchaser wants to purchase a good or service by partly redeeming points and partly paying by credit, a process being a hybrid of a financial transaction and point redemption transaction is used, the hybrid incorporating all of the features of the above two transactions.

- 21 -

It should be pointed out that alternative arrangements for initiating a financial transaction between customer and supplier can be used in place of the arrangement described in the above example. For instance, a customer could ring or otherwise communicate with a supplier and pre-orders goods and services using the card's unique identification number as a reference. Details of the goods and services ordered by the customer, such as type, quantity and price, are then recorded with the terminal 520 stored at the supplier's premises along with the unique identification number of the customer's card 114.

When the customer is ready to take delivery of the goods or services, the customer attends the supplier's premises and inserts their card 114 into the terminal 520 stored there. The terminal 520 first ascertains the unique identification number of the inserted card 114. Once ascertained, the terminal 520 cross-references the unique identification number of the inserted card 114 with the details of goods and services ordered by customers. The terminal 520 can then operate to finalise the transaction as per the above example.

Furthermore, alternative arrangements for topping up a customer's credit balance can be put in place, such as allowing for direct payment to authorised suppliers or by phoning a designated telephone number to recharge the card in a manner analogous to those procedures used by mobile phone companies.

In a sixth embodiment of the invention, where like numerals reference like parts, terminals 520 may be adapted for use with a smart card 114. In this arrangement, the first I/O device 102 takes the form of a contactless card reader. Each terminal 520 is also directly connected to the concentrator 530 in a computer network arrangement.

The smart card 114 can be used to store the current credit balance and current loyalty points balance in its internal memory. However, if this is implemented, procedures for reconciling the respective balances with those recorded by transactions database 600 and loyalty points database 650 must also be implemented.

- 22 -

In a seventh embodiment of the invention, where like numerals reference like parts, terminals 520 are operable to provide non-financial data reports to a customer. The non-financial data report is received from one of the non-financial transaction hosts 700. Depending on the set-up of the terminal 520, the terminal  
5 may operate to display the non-financial data report to the customer and/or print the non-financial data report for the customer to take away and peruse at their leisure:

The terminals 520 may also be used to increase the stored value of any card 114. In such an arrangement, the terminal operator receives a request to "top-up" the  
10 stored value and monetary value equal to the amount to increase the stored value. The terminal 520 is then used to increase the stored value of the card 114

It should be appreciated by the person skilled in the art that the above invention is not limited to the embodiments described. In particular, features or alternatives  
15 described in one embodiment may be incorporated into yet further embodiments that fall within the scope of the present invention.

**The Claims defining the invention are as follows:**

1. An instant gratification terminal comprising

a reader;

a processor;

5 an input means; and

a display unit

where, the reader reads a customer's membership details from an identifier, or is able to obtain the customer's membership details from information read from an identifier, and communicates the customer's membership details to the processor, the processor thereafter immediately operable to execute a series of instructions that prompt the customer to interact with the terminal via the display unit and input means, the following interaction potentially resulting in a benefit being provided to the customer.

2. An instant gratification terminal according to claim 1, where the customer receives a benefit based on the outcome of a pre-programmed game sequence.

3. An instant gratification terminal according to claim 2, where the outcome of the pre-programmed game sequence also determined the type and/or amount of benefit to be provided to the customer.

4. An instant gratification terminal according to claim 2 or claim 3, where the nature of the pre-programmed game sequence is one of the following: skill-based; random; semi-random.

5. An instant gratification terminal according to any preceding claim, the processor including removable memory means, the series of instructions to be

- 24 -

executed by the processor on receiving the customer's details being stored on the removable memory means.

6. An instant gratification terminal according to any preceding claim, where the series of instructions elicit additional personal information from the customer.
- 5 7. An instant gratification terminal according to claim 6, where the additional personal information is used to up-sell or cross-sell goods and/or services.
8. An instant gratification terminal according to claim 6, where the additional personal information is stored in a marketing database.
9. An instant gratification terminal according to any preceding claim where the  
10 reader is a card reader and the identifier is one of the following: a magnetic swipe card; a smart card; a contactless smart card; a card having a bar code printed thereon.
10. An instant gratification terminal according to any one of claims 1 to 9 where  
15 the identifier is a wireless communication device and the reader is adapted to receive the customer's details from said wireless communication device.
11. An instant gratification terminal according to claim 10 where the wireless communication device is a mobile phone or personal digital assistant or RFID tag or transponder.
12. An instant gratification terminal according to any preceding claim, where the  
20 benefit provided to the customer takes one of the following forms: bonus loyalty points; a discount on purchased goods and/or services; a purchased good and/or service being provided free of charge; a discount on the total purchased goods and/or services.
13. An instant gratification terminal according to any preceding claim, where the  
25 terminal interacts with the customer using both audio and visual cues.

- 25 -

14. An instant gratification terminal according to any preceding claim including a merchant display unit, the merchant display unit operable to display to a merchant in possession of the instant gratification terminal, or an agent of the merchant, details of any benefit to be provided to the customer.
- 5 15. An instant gratification terminal according to any preceding claim, the instant gratification terminal integrated with a cash register or point of sale terminal.
16. An instant gratification terminal according to any preceding claim, where at least one of the reader, input means and display unit is remotely located in comparison to the processor.
- 10 17. A method of instantly determining whether a benefit is to be provided to a customer, comprising:
- reading the customer's details from an identifier;
- executing a series of instructions immediately on reading of the customer's details, the series of instructions operable to prompt the customer to
- 15 interact with an instant gratification terminal according to any one of claims 1 to 16 via the display unit and input means; and
- determining from the resulting interaction whether the customer is to be provided with a benefit.
18. A method of instantly determining whether a benefit is to be provided to a
- 20 customer according to claim 17, where the step of determining from the resulting interaction whether the customer is to be provided with a benefit includes the sub-step of determining the outcome of a pre-programmed game sequence, the determination of whether the customer is to be provided with a benefit being dependent on the outcome of the pre-programmed game
- 25 sequence.

- 26 -

19. A method of instantly determining whether a benefit is to be provided to a customer according to claim 18, including the step of determining the type and/or amount of benefit to be provided to the customer on the basis of the outcome of the pre-programmed game sequence.
- 5 20. A removable memory means having a series of instructions stored thereon, the removable memory means for use in an instant gratification terminal according to any one of claims 5 to 16 as dependent on claim 5.
- 10 21. A method of instantly determining whether a benefit is to be provided to a customer according to any one of claims 17 to 20, where the step of executing a series of instructions operable to prompt the customer to interact with an instant gratification terminal includes the substep of executing a series of instructions operable to elicit additional personal information from the customer.
- 15 22. A method of instantly determining whether a benefit is to be provided to a customer according to step 21, including the step of up-selling or cross-selling goods and/or services on the basis of the additional person information.
23. A method of instantly determining whether a benefit is to be provided to a customer according to claim 22, including the step of storing the additional personal information in a marketing database.
- 20 24. An instant gratification terminal substantially as described herein with reference to Figures 1 and 2.
- 25 25. A method of instantly determining whether a benefit is to be provided to a customer substantially as described herein with reference to Figures 1 and 2.
26. An electronic payment network for carrying financial and non-financial data comprising:
- a central host computer;

- 27 -

at least one host computer in data communication with the central host computer; and

a series of terminals in data communication with the central host computer,

5 where the electronic payment network interacts with a second electronic payment network operated by a party licensed to acquire and settle financial transactions; and where, upon receipt of a message from a terminal, the central host computer operates to route the message to a financial host computer of the second electronic payment network if the message contains data representing a financial transaction and, if the message does not contain data  
10 representing a financial transaction, the central host computer operates to route the message to the appropriate host computer on the basis of the data contained in the message.

27. An electronic payment network for carrying financial and non-financial data according to claim 26, where at least one of the series of terminals includes a  
15 reader, the terminal operable to obtain predetermined customer details from information stored on an identifier able to be read by the reader, said identifier also being able to be used for transactions involving the second electronic payment network.

28. An electronic payment network for carrying financial and non-financial data  
20 according to claim 27, where the predetermined customer details are stored on the identifier.

29. An electronic payment network for carrying financial and non-financial data according to claim 27 or claim 28, where the predetermined customer details include the customer's current credit balance and/or loyalty points balance.

25 30. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 29, where the central host computer determines the host computer to which the message is to be routed on the basis of a tag value included in the message.

31. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to claim 29, where the central host computer receives messages from the terminal via a concentrator, the concentrator operable to validate that the message has come from a valid terminal prior to  
5 passing the message to the central host computer.

32. An electronic payment network for carrying financial and non-financial data according to any one of claims 27 to 31, where the central host computer periodically downloads a list of identifying components of prohibited identifiers from the financial host computer of the second electronic payment network  
10 and transmits the list to each terminal, where, the terminal operates to terminate a transaction if an identifying component read from the identifier matches an identifying component on the list of identifying components of prohibited identifiers.

33. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 32 where each terminal operates to  
15 determine the amount of loyalty points attributable to a financial transaction with reference to a rule set periodically downloaded to the terminal from the central host computer, the financial transaction thereafter including data specifying the amount of loyalty points accrued by reason of the financial  
20 transaction.

34. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 33, where the central host computer is operable to reconcile and settle financial transactions with the financial host  
computer of the second electronic network and operable to reconcile and  
25 settle financial transactions with each terminal.

35. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 34, where the central host computer is operable to generate a report on all financial transactions and instruct the financial host computer to effect payment in accordance with the report.

36. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 35, the terminal operable to store details of transactions for later communication to the central host computer if a communication link with the central host computer cannot be established at the time of processing of the transaction.

37. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 36, the terminal operable to receive a non-financial data report on transactions performed using the identifier from one of the at least one host computers on request and display, or print out, the non-financial data report to the possessor of the identifier.

38. An electronic payment network for carrying financial and non-financial data according to any one of claims 26 to 37, where, upon effecting a financial transaction, the central host computer checks the balance of funds recorded against the identifier and, if the balance is below an amount preset by the customer associated with the identifier, operates to debit a further amount preset by the customer from a specified account held with a financial institution and credit the same further preset amount to the balance of funds recorded against the identifier.

39. An electronic payment network for carrying financial and non-financial data according to any one of claims 27 to 38, as dependent on claim 27, where the reader is a card reader and the identifier is one of the following: a magnetic swipe card; a contactless smart card; a smart card; a card having a bar code printed thereon.

40. An electronic payment network for carrying financial and non-financial data according to any one of claims 27 to 39, as dependent on claim 27, where the identifier is a wireless communication device and the reader is adapted to receive the predetermined customer details from said wireless communication device.

- 30 -

41. An electronic payment network for carrying financial and non-financial data according to claim 40, where the wireless communication device is a mobile phone or personal digital assistant or RFID tag or transponder.
42. An electronic payment network for carrying financial and non-financial data according to any one of claims 27 to 41, as dependent on claim 27, where the identifier stores a credit value, and the reader is operable to subtract a purchase value amount from the stored credit value when the stored credit value is used to purchase goods and/or services and operable to add a predetermined value amount when a credit top up purchase is requested and monetary value equal to the predetermined value amount is received.
43. An electronic payment network for carrying financial and non-financial data according to any one of claims 31 to 42, as dependent on claim 28, where the concentrator records details of all transactions in a transaction database.
44. A central host computer for use in an electronic payment network for carrying financial and non-financial data, the central host computer operable to route a message received from a terminal to a financial host computer of a second electronic payment network operated by a party licensed to acquire and settle financial transactions if the message contains data representing a financial transaction and, if the message does not contain data representing a financial transaction, operable to route the message to the appropriate host computer on the basis of data contained in the message.
45. A central host computer according to claim 44, operable to determine the host computer to which the message is to be routed on the basis of a tag value included in the message.
46. A central host computer according to claim 44 or claim 45, operable to periodically download a list of identifying components of prohibited identifiers from the financial host computer of the second electronic payment network and transmits the list to the terminal, the terminal thereafter operable to terminate a transaction if an identifying component read from an identifier

matches an identifying component on the list of identifying components of prohibited identifiers.

47. A central host computer according to any one of claims 44 to 46, operable to periodically download to the terminal a rule set, the terminal thereafter operable to determine the amount of loyalty points attributable to a financial transaction with reference to the rule set and including in any financial transaction data specifying the amount of loyalty points accrued by reason of the financial transaction.
48. A central host computer according to any one of claims 44 to 47, operable to reconcile and settle financial transactions with the financial host computer of the second electronic network and operable to reconcile and settle financial transactions with the terminal.
49. A central host computer according to any one of claims 44 to 48, operable to generate a report on all financial transactions and instruct the financial host computer to effect payment in accordance with the report.
50. A central host computer according to any one of claims 44 to 49, operable, after effecting a financial transaction, to check the balance of funds recorded against an identifier initiating the financial transaction and, if the balance is below an amount preset by the customer associated with the identifier, operates to debit a further amount preset by the customer from a specified account held with a financial institution and credit the same further preset amount to the balance of funds recorded against the identifier.
51. A terminal for use in an electronic payment network for carrying financial and non financial data, the terminal being in data communication with a central host computer, where when the terminal sends a message to the central host computer, the central host computer operates to route the message received from the terminal to a financial host computer of a second electronic payment network operated by a party licensed to acquire and settle financial transactions if the message contains data representing a financial transaction

- 32 -

and, if the message does not contain data representing a financial transaction, operable to route the message to an appropriate host computer on the basis of data contained in the message.

52. A terminal according to claim 51, including a reader, the terminal operable to  
5 obtain predetermined customer details from information stored on an identifier  
able to be read by the reader, said identifier also being able to be used for  
transactions involving the second electronic payment network.
53. A terminal according to claim 52 operable to receive a list of identifying  
components of prohibited identifiers from the central host computer, the  
10 terminal operable to terminate a transaction is an identifying component read  
from the identifier matches an identifying component on the list of identifying  
components of prohibited identifiers.
54. A terminal according to any one of claims 51 to 53, operable to determine the  
amount of loyalty points attributable to a financial transaction with reference to  
15 a rule set periodically received from the central host computer, the terminal  
thereafter operable to include in the message representative of the financial  
transaction data specifying the amount of loyalty points accrued by reason of  
the financial transaction.
55. A terminal according to any one of claims 51 to 54, operable to reconcile and  
20 settle financial transactions with the central host computer.
56. A terminal according to any one of claims 51 to 55, operable to store details of  
transactions for later communication to the central host computer if a  
communication link with the central host computer cannot be established at  
the time of processing of the transaction.
- 25 57. A terminal according to any one of claims 52 to 56, as dependent on claim 52,  
where the reader is a card reader and the identifier is one of the following: a  
magnetic swipe card; a contactless smart card; a smart card; a card having a  
bar code printed thereon.

- 33 -

58. A terminal according to any one of claims 52 to 56, as dependent on claim 52, where the identifier is a wireless communication device and the reader is adapted to receive the predetermined customer details from said wireless communication device.

5 59. A terminal according to any one of claims 52 to 58, as dependent on claim 52, where the identifier stores a credit value, and the reader is operable to subtract a purchase value amount from the stored credit value when the stored credit value is used to purchase goods and/or services and operable to add a  
10 predetermined value amount when a credit top up purchase is requested and monetary value equal to the predetermined value amount is received.

60. A terminal according to any one of claims 51 to 59, operable to receive a non-financial data report on transactions performed using the identifier from one of the at least one host computers on request and display, or print out, the non-financial data report to the possessor of the identifier.

15 61. A method of facilitating communication of financial and non-financial data across an electronic payment network comprising the steps of:

receiving a message from a terminal;

20 routing the message to a financial host computer of a second electronic payment network, operated by a party licensed to acquire and settle financial transactions, if the message contains data representing a financial transaction; and

if the message does not contain data representing a financial transaction, routing the message to an appropriate host computer on the basis of the data contained in the message.

25 62. A method of facilitating communication of financial and non-financial data across an electronic payment network according to claim 61, including the step

- 34 -

of obtaining predetermined customer details from information stored on an identifier associated with the customer.

63.A method of facilitating communication of financial and non-financial data across an electronic payment network according to claim 61 or claim 62,  
5 including the step of determining the appropriate host computer to route the message to from a tag value included in the message.

64.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 61 to 63,  
10 including the step of validating that the message has come from a valid transaction source.

65.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 61 to 64,  
as dependent on claim 61, including the steps of

15 periodically downloading a list of identifying components of prohibited identifiers from the financial host computer; and

terminating the transaction if an identifying component read from the identifier matches an identifying component on the list of identifying components of prohibited identifiers.

66.A method of facilitating communication of financial and non-financial data  
20 across an electronic payment network according to any one of claims 61 to 65, including the steps of:

determining the amount of loyalty points attributable to a financial transaction with reference to a rule set; and

25 specifying the amount of loyalty points accrued by reason of the financial transaction in the message.

- 35 -

67.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 61 to 66, including the step of reconciling and settling financial transactions with the financial host computer.

- 5 68.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 61 to 67, including the steps of:

generating a report on all financial transactions;

- 10 instructing the financial host computer to effect payment in accordance with the report.

69.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 62 to 68, as dependent on claim 62, including the steps of:

checking the balance of funds recorded against the identifier;

- 15 if the balance is below an amount preset by the customer associated with the identifier:

debiting a further preset amount from a specified account held with a financial institution; and

- 20 crediting the further present amount to the balance of funds recorded against the identifier.

70.A method of facilitating communication of financial and non-financial data across an electronic payment network according to any one of claims 61 to 69, including the step of recording details of all transactions in a transaction database.

- 36 -

71. An electronic payment network for carrying financial and non-financial data substantially as described herein with reference to Figures 3 and 4.
72. A central host computer for an electronic payment network for carrying financial and non-financial data substantially as described herein with  
5 reference to Figures 3 and 4.
73. A terminal for an electronic payment network for carrying financial and non-financial data substantially as described herein with reference to Figures 3 and 4.
74. A method of facilitating communication of financial and non-financial data  
10 across an electronic payment network substantially as described herein with reference to Figures 3 and 4.