IMPROVEMENTS RELATING TO MULTIFUNCTION COUPON PROCESSING SYSTEMS

FIELD OF THE INVENTION

The present invention relates to an improved multifunction coupon processing system. More specifically, though not exclusively, the present invention relates to an improved multi-function coupon processing system, which is able to be used in Fast Moving Consumer Goods (FMCG) unregulated environments and yet still provide access to functionality which requires a regulated environment.

BACKGROUND OF THE INVENTION

The present invention arises out of a long felt need to provide attraction to long-term financial investment products to the mass public within the constraints of an acceptable instrument under a country's restrictive financial laws. Many people are put off from purchasing such products due to the complicated nature of the purchase and the time it takes to complete the transaction, despite the fact that they can provide beneficial long-term savings. Furthermore, there is a general lack of financial literacy within certain groups in society, so there is a need for an incentive for them to buy financial investment products.

A further barrier to the purchase of financial investment products is that the customer is required to complete a "know your client" (KYC) process, due to anti-money laundering regulations. Such processes need to be carried out by a qualified person who has been trained to distinguish between genuine and false identify documents such as passports and driving licences, and are therefore normally done in regulated, secure locations such as banks or post offices. A further complication is that KYC processes take several minutes to complete which makes them relatively slow when compared to a standard transaction at a point of sale (POS) terminal.

It is desirable to make financial investment products available via POS terminals, such as Fast Moving Consumer Goods (FMCG) stores e.g. supermarket checkouts or convenience stores. However, workers in Fast Moving Consumer Goods (FMCG) stores do not have the required qualifications/training to perform the KYC process, and FMCG stores are generally not regulated. Furthermore, due to the inherent incompatibility of FMCG stores and the necessary requirements for financial investment product sales mentioned above, most financial authorities do not allow the sale of investment products in a non-regulated location and even if they did, the process would take too long to be commercially viable. As a result, investment products are not available for sale at a POS terminal in a FMCG store.

Furthermore, if one were to try to perform a regulated action in unregulated location, certain practical problems would arise. For example, with the time pressure to complete a transaction at the POS terminal, any keying in errors or issues with KYC processes would be disastrous in terms of efficiency of the POS terminal, namely it would take a disproportionate time to resolve these issues as compared to conventional POS terminal problems. Also there may be an issue with a customer giving their personal details (name, date of birth, address) verbally for example in a non-secure environment and data entry could become very complicated. If written documentation was required, it may not be with the customer at the time of the purchase. Furthermore, customers may not feel comfortable giving their personal details to a person who is operating in a retail environment which appears to be insecure.

In our co-pending application published as WO 2009/019602, the entirety of which is incorporated by reference herein, a multifunction ticket is described which aims to provide a system for addressing this incompatibility by providing a two-stage process in which the option to purchase an investment product (long-term function) is purchased together with a short-term function at a POS terminal. This prior art document also aims to provide financial investment products that comply with various restrictive financial laws. The KYC aspect is addressed in the second stage, which is carried out offline in a regulated location at a later date. However, it is common using this prior art system for the investment product never to be realised as the options are not always exercised. Also, if and when the option is finally exercised (possibly months or years later), investment conditions can have substantially changed. Furthermore, as the financial investment product is only purchased a substantial time after the purchase of the multifunction ticket and this leads to a loss in value of the investment that is sought.

It is desired to provide an improved system and method to that described in WO 2009/019602, which addresses at least some of the above-described problems.

SUMMARY OF THE INVENTION

In a first aspect, the present invention relates to a multi-function coupon processing system for issuing and processing a plurality of multi-function coupons, the system comprising: a plurality of multi-function coupon-issuing terminals provided at unregulated locations; a unique identifier generator for generating on demand a unique identifier which is to be provided with an issued multi-function coupon; and a central coupon processing server located remotely from but in data communication with the plurality of terminals; the central coupon server comprising: a master function processor for processing redemption of the multi-function coupon in relation to a first function of the coupon; a proxy function processor

being responsive to the issuance of the coupon to conduct a purchase of a long-term investment product on a proxy basis; a personal information module for receiving and storing personal information about a purchaser from a secure regulated location; wherein the master function processor is arranged to accept rights to use the personal information of the customer and in exchange to assign the rights in the purchased long-term investment product to the customer.

An advantage of the present invention is that a 'coupon' is sold, on which there are 'codes' that give access to various commercial user benefits. These codes allow the customer to access these benefits via terminals or smartphones or any other suitable platform. The term multi-function requires there to be at least three different functions provided by the coupon.

In an embodiment of the present invention, part of the revenue from the sale of the coupon is used by the 'operator' to purchase an investment product in the name of the operator, who has already satisfied the KYC requirement. The investment product is technically bought in a regulated location or with a regulated entity. At this stage of the process (assuming that the client hasn't completed the KYC process), the customer has bought a retail product and the operator has purchased an investment product.

After the initial sale of the coupon, the customer can complete the KYC process in a regulated location. At the same time, the customer agrees to allow the operator to have access to his personal details / information (e.g., his mobile phone number). The customer can also get a personal identifier (personal ID no.) back from the operator, which he/she can subsequently use instead of having to provide their KYC details all over again. The investment technically resides with the operator, but is transferred (assigned) to the customer once the KYC process has been completed.

Having completed the KYC process, the next time that customer purchases a coupon (and gives his personal ID no.), an investment product is bought again in the operator's name and then the investment product is automatically transferred to the customer. It is a so-called 'theoretically-free' investment. It is a 'free' investment because the customer has paid for certain goods and has provided some personal data.

The present invention has certain advantages over that described in WO 2009/019602. For example, the KYC and anti-money laundering registration process difficulties are satisfied in a more efficient manner in the present invention. Specifically, a way has to be found to provide a financial investment product to the customer in a manner which is quick, easy and attractive to the customer, not onerous on the retailer in terms of time or technically difficult

to achieve without expensive training and technology and does not break regulatory rules which act against FMCG outlets being used for sale of investments.

By contrast with the processes described in WO 2009/019602, the investment product is purchased by an operator as soon as the coupon is generated and the KYC process need only be carried out once per customer in the present invention. In WO 2009/019602, typically the KYC process had to be carried out once per coupon / investment product.

BRIEF DESCRIPTION OF THE DRAWINGS

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

Figure 1 is a schematic diagram showing a multi-function coupon for use with a system according to an embodiment of the present invention;

Figure 2 is a schematic block diagram showing a system for generating and validating the multi-function coupon of **Figure 1** according to an embodiment of the present invention;

Figure 3 is a schematic block diagram of a multi-function coupon server shown in **Figure 2**;

Figure 4 is a schematic block diagram of the data structures provided within a master coupon database shown in **Figure 2**;

Figure 5 is a schematic block diagram of a 'Point of Sale' (POS) terminal shown in **Figure 2** for generating the multi-function coupon shown in **Figure 1**;

Figure 6 shows an overview of the steps carried out at the POS terminal of **Figure 5** for implementing an embodiment of the present invention;

Figure 7 shows an overview of the steps carried out at the coupon server of **Figure 3** for implementing an embodiment of the present invention;

Figure 8 shows an overview of the steps carried out in the 'know your client' (KYC) process implemented by the system of **Figure 2**;

Figure 9 shows an overview of the steps carried out in the 3rd function incentive process implemented by the system of **Figure 2**; and

Figure 10 shows an overview of the steps carried out at the coupon server for implementing an embodiment of the present invention is shown.

DETAILED DESCRIPTION OF THE EMBODIMENTS

An embodiment of the present invention is now described. Referring to **Figures 1** and **2**, the present embodiment is directed to a system 1, which is arranged to generate and redeem a multi-function coupon 10. The coupon 10 has provided on it (typically by printing) a unique identifier (also referred to as a unique coupon identifier number) 12, which is generated on demand when the coupon 10 is created. Whilst in this embodiment a physical coupon 10 is described, it is to be appreciated that in another embodiment the coupon 10 can be generated in electronic form and can be given to the customer via an electronic transmission for example to reside on a mobile device (such as a smart phone) of the customer.

Returning to the physical printed coupon 10, the coupon 10 also comprises a section 14 providing information on a first function of the coupon 10, for example a monetary reduction for (money off) a subsequent purchase of specified goods or a service. The coupon 10 in this regard can be purchased for this first function alone to seek the benefit of the first function. However, the multi-function coupon 10 also has further utility due to its further functionality. Another function of the coupon 10 is to provide a proxy function for the customer simultaneously with the first function. In order for the customer to benefit from the proxy function, a more rigorous interaction with the customer is required which is not suitable for a FMCG store environment. An example of a proxy function can be a financial investment function for example which requires a KYC interaction with the customer.

The proxy function is not described in detail on the coupon 10 but rather is something, which is triggered by the generation of the coupon 10. The proxy function is carried out by the operator of the system without requiring the customer to undergo the more rigorous interaction, for example a KYC process, and accordingly, the procedure of purchasing the coupon 10 can be completed relatively quickly making it suitable for a POS terminal transaction in an unsecured location.

The coupon 10 also has a second function information section 16 that sets out information about how a customer can carry out a second function of the coupon 10. In one non-limiting embodiment, the second function can be a prize draw which the customer can take part in by selecting numbers which will be entered into the prize draw. In this case, the user-selected numbers for the prize draw are also printed on the coupon 10 as the user-selected options 18. Other second functions that also provide an incentive for the customer can be employed in different embodiments of the present invention.

Finally, the coupon 10 has a section 20 to provide information on a third function of the multi-function coupon 10. An example of the third function can be another incentive function, which can be utilised if the customer takes part in the more rigorous interaction which is required for the proxy function at a later stage. For example when a customer is utilising a financial investment function a required KYC process linked to the financial investment function is required. In this non-limiting example, the customer has to provide their personal details in return for assignment or novation of the associated financial investment product which was previously purchased by the operator under proxy at the time of generating the multi-function coupon 10.

Figure 2 shows the system 1 of the present embodiment in greater detail. The system comprises a plurality of different POS terminals 22 provided in non-secure non-regulated locations 24. A first type of POS terminal 22a is capable of implementing the first and second functionality on the single terminal. A second type of POS terminal 22b is only capable of implementing the first type of functionality and has provided within the non-secure non-regulated location 24 a second function terminal 26. However, even though the functionality at the POS terminal 22 can be carried out in different ways (As is described in detail later) the result for the customer and the system operator is the same.

Each of the POS terminals 22 and the second function terminal 26 is connected via a telecommunications network 28 to a multi-function coupon server 30 which controls the functionality of the multiple functions associated with the coupon 10. The coupon server 30 can not only be involved in the generation of the multi-function coupon 10, but also the coupon's authentication when its functionality is being used subsequently. The operation of the coupon server 30 is described in greater detail later. However, in order to carry out its authentication of the multiple functions of the multi-function coupon 10, three different databases are provided: a master coupon database 32, a purchased investment product database 34 and a personal information database 36. The master coupon database 32 stores each multi-function coupon's unique identifier 12 which is generated on creation of the coupon 10. It also stores further information pertaining to the functions which are associated with the coupon 10 which enables the coupon server 30 to administer and control the different functions associated with the multi-function coupon 10.

The coupon server 30 is also arranged to co-operate via the communications network 28 with different dedicated servers which are configured to provide a single primary function. In terms of the proxy function, a proxy server 38 (in this embodiment an investment server 38) is provided which is accessible via the communication network 28. The proxy server 38 also has a local proxy database 40 of products or services which are the subject of the proxy

function. In this embodiment, the local database 40 comprises an investment product database 40 having within it a plurality of different investment products each with their own unique investment product numbers 42. Preferably the investments which are purchased are micro investments as the coupon price can be kept fairly low for example a dollar and the investment amount can be determined as being less than a dollar.

The multi-function coupon server 30 also communicates with a second function server 44 via the communications network 28. The second function server 44 also has a corresponding second function database 46 provided which stores in it the multi-function unique coupon IDs and the second function user selections 18. In a non-limiting example, the second function can be a weekly prize draw and the second function server 44 acts to select random winning numbers each week and publish the numbers. Ultimately the second function server 44 will have stored in its second function database the unique ID number 12 of any winning coupon and the numbers that were selected by the customer at the time of purchase of the coupon 10. Accordingly the second function server 44 can also be used to verify genuine claims on any prize. However, the interfacing with any claim from a customer is carried out via the multi-function coupon server 30 as is described in detail later.

A third function server 48 operates similarly to the second function server 44, in that it also communicates with the coupon server 30 via the communications network 28 to provide a third function provided on the coupon 10 to a coupon owning customer. The third function server 48 also has a corresponding third function database 50 provided which stores the multi-function unique coupon IDs and the third function user selections (which are described later). In a non-limiting example, the third function can be a monthly prize draw and the third function server 48 acts to select random winning numbers each month and publish the numbers. As with the second function server 44, the third function server 48 will have stored in its third function database 50 the unique ID number 12 of any winning coupon and the numbers 52 that were selected by the customer at the time of carrying out the more rigorous interaction with the customer at a time after the purchase of the multi-function coupon 10 and in a different location to the POS terminal 22. As a result, the third function server 48 can be used to verify genuine claims on any prize related to the third function. However, the interfacing with any claim from a customer is carried out via the multi-function coupon server 30 as is described in detail later.

Figure 2 also shows a rigorous interaction terminal 54 and a third function terminal 56 which are both provided at a secure/regulated location 58. The secure/regulated location 58 is a place where the operator of the rigorous interaction terminal 54 will be an operator who is trained to assess and determine the genuineness of the more rigorous interaction with the

customer which is necessary for the customer to realise the proxy function of the coupon. In the non-limiting embodiment, the secure location can be a bank or a postal office and the more rigorous interaction can be a customer proving their identity using legally acceptable documentation.

The third function terminal 56 can simply be a prize draw terminal which once the customer has completed the more rigorous interaction required for the proxy function, they can interact with to select their prize draw numbers for example and have these entered into the system 1 for the monthly draw. In order to qualify to use the third function, it is necessary to get a positive result from the more rigorous interaction which is carried out by the trained operator using terminal 54. It is not necessary for the third function terminal 56 to be provided in a secure/regulated location 58, but in this embodiment the proximity is advantageous as it enables the customer to complete the more rigorous interaction and then more immediately onto the incentive provided via the third function terminal 56 without having to travel to another location.

Having described the overall system 1, the multi-function coupon server 30 is now described in greater detail with reference to **Figure 3**. The coupon server 30 comprises a communications module 60, a proxy product module 62, a more rigorous interaction information module 64 and a master coupon processing module 66. The communications module 60 is configured for communication with all terminals 22, 54, 56, and all servers 38, 44, 48, in order to carry out the multiple functions of the coupon 10. The proxy product module 62 is configured to purchase proxy products by interaction with the proxy server 38 and the proxy dB 40. In this embodiment, the proxy product module 62 is configured to purchase investment products from the investment product server 38 and the investment product database 40. The purchase of an investment product simply returning the investment product number 42 to the purchased investment product database 34 for title of that product to be held by the operator of the system initially. Subsequently this title is transferred to the customer once they have completed the detailed interaction required on the secure/regulated location terminal 54.

The more rigorous interaction information module (also known as KYC personal information module) 64 is simply a module arranged to cooperate with the personal information database 36 to record a customer's personal details in a KYC procedure carried out via the secure location terminal 54. The KYC personal information module generates a unique personal identifier (shown in **Figure 4** - discussed later) which is assigned to the customer if they complete the more rigorous interaction at the secure location terminal 54. The KYC personal information module includes a personal identifier generation module (not shown).

However subsequently, this unique personal identifier can advantageously be used as a reference to look up previously stored personal information instead of having to re-enter in all of the customer's personal details once again.

The master coupon processing module 66 is arranged to control the overall function of the coupon server 30 and to manage all of the different functions associated with the multi-function coupon 10. More specifically, the master coupon processing module 66 keeps details records of each unique coupon identifier that is generated and the associated information related to that coupon in the master coupon database 32. Preferably, a unique coupon identifier generator 68 is located in the master coupon processing module 66 as this is the most secure implementation and manner to generate coupon identifiers. Also it requires less communications in the long run as updating of the master database with previously generated coupon identifiers. However the alternative of there being a plurality of local unique coupon identifier generators being provided in each POS terminal 22 is possible in an alternative embodiment which has been mentioned previously.

The master coupon processing module 66 keeps a record of all coupons 10 that have been issued in the master coupon database 32 and when a coupon 10 is sought to be redeemed, the master coupon processing module 66 checks to determine whether that coupon 10 is being used validly (namely within the expiry date of the coupon 10, only for the permitted goods/services and also only for the permitted number of time (usually once only) before authorising the provision of the benefits of the coupon 10 to the customer. In this regard, the master coupon processing module 66 is able via the communications module 60 to receive a coupon redemption request from any POS terminal 22. The master coupon processing module 66 also controls the instructions to each of the second and third function servers 44, 48 as well as the proxy server 38 to implement the functionality of the multi-function coupon 10.

Referring now to **Figure 4**, a schematic diagram of information stored within the master database 32 is shown. For each unique ID (coupon ID) 10a, 10b which is generated, a list of linked information is provided in the master database 32. This information includes the second function selected variables 18a, 18b, a used field 70a, 70b indicating whether the coupon 10a, 10b has been used (redeemed) already or not, and a proxy product identifier field 42a, 42b (which in this embodiment is a purchased investment product identifier field) which links together the proxy products/services acquired on behalf of the customer to the coupon 10 from which the acquisition was triggered. The list of linked information also can include the details of the third function selected variables 74a, 74b and also some validation information regarding the redemption of the coupons, for example coupon dates 76a, 76b

which can be used to check that redemption is occurring during a valid time period. Finally the master database 32 also stores the results 78 of the second function and the results 80 of the third function which are received from the second and third function servers 44, 48 respectively. The master coupon processing module 66 can use these results to confirm that the prizes which may be associated with the second and third functions are paid out and that this receipt of the results is stored to prevent further fraudulent claims.

Referring now to **Figure 5**, the POS terminal 22 comprises several modules for performing the process of generating a multi-function coupon relatively quickly in the FMCG store environment. A display/data entry keypad 82 is provided for allowing the customer to see what next steps are required to purchase the coupon 10 from the POS terminal operator (or if it is a fully automated POS, to enable full user interaction). The display can be a touch screen to make user interaction easier. A scanner 84 is also provided to enable not only goods to be scanned and identified for purchase, but also for coupons 10 to be scanned and their unique ID numbers 12 to be read by the terminal 22 when the terminal 22 is being used to redeem a coupon 10 for example. A printer 86 is also provided to enable the multi-function coupon 10 to be printed out on demand at the POS terminal 22 for the customer once they have either paid for it or have purchased some goods/services where sale of the coupon 10 is included in the price. All of these elements interface with a POS processor module 88 which functions to collect information from the keypad 82, scanner 84 and send data to the printer 86. Each type of product which is sold has a unique product number stored in a product/coupon database 90 which is also coupled to the POS processor module 88. The database 90 also stores information about whether the sale of a certain type of product generates the creation of a multi-function coupon 10. This enables the automatic generation of a coupon 10 if it is associated with that type of product to be carried out.

Each terminal 22 also has a communications module 92 for communication with the coupon server 30 via the communications network 28. This is important not only for generating coupons where the unique ID generator 68 in the master coupon processing module 66 of the coupon server 30 generates the unique ID number 12, but also when the coupon 10 is being redeemed or any of its functions are being sought to be used. In an alternative embodiment a local unique ID generator 94 can be provided in the POS processor module 88 instead of at the master coupon processing module 66. The benefits and shortcomings of this approach have been discussed elsewhere.

Referring to **Figure 6**, an overview of a process 200 carried out at a 'Point of Sale' (POS) terminal 22 for implementing an embodiment of the present invention is shown. This process 200 is described in terms of user interaction, although it is to be appreciated that the process

incorporates technical procedures and functions that would be necessary to implement the process. The skilled addressee will be aware of specific implementation procedures that can be used to put the user interaction into practice and so these are not described in any great detail hereinafter.

There are two different routes to a customer activating the multi-function coupon 10 generation process 200. A first route comprises a customer positively deciding at Step 202 to purchase a multi-function coupon 10. This may be realised at the POS terminal 22, for example, at a supermarket checkout by the customer simply requesting a multi-function coupon 10 from the operator of the POS terminal 22. The second route comprises the customer purchasing a product or service at the POS terminal that has a multi-function coupon 10 associated with it, as determined at Step 204 by checking the product/multi-function coupon database 90 accessible to the POS terminal 22. If the product/service code (typically in the form of a scanable barcode in the product) does not have a corresponding multi-function coupon 10 (as determined by checking the product/multi-function coupon database 90) then the process ends at Step 206.

Once the customer has decided to purchase a multi-function coupon 10 or there is a multi-function associated with their goods/service purchase, then the generation of the multi-function coupon 10 is activated at Step 208.

The customer is presented at Step 210 with an option by the POS terminal 22 of whether or not to use a personal identification number (personal ID no.) associated with the customer, the generation of which is described in greater detail with reference to **Figure 8**. This option can be presented to the customer either at this stage of the multi-function coupon 10 purchasing process or at an earlier or later stage. If the customer does not have a personal ID no. or does have one, but does not wish to use it (at that time), they do not enter a personal ID no. at that time as determined at Step 212. If the customer does wish to use their personal ID no., as determined at Step 214, they can provide it in several different ways at Step 214. For example, the customer can enter it manually onto the keypad at the POS terminal 22, or activate an app on the customer mobile phone, which will transmit the personal ID no. to the POS terminal 22, or present the personal ID no. on a screen of the mobile device which can be scanned by the scanner of the POS terminal 22. These methods are advantageously low-cost and do not impinge of the scalability of the present embodiment. An alternative which has a higher equipment cost associated with it is for the personal ID no. to also be tied to a stored biometric representation of the customer's fingerprint or iris and the POS terminal 22 could simply require the user to be biometrically scanned to obtain that personal ID no. which proves their identity.

Preferably, after the customer has been presented at Step 210 with the option of whether to use a personal ID no., the customer is presented at Step 216 with the option of whether or not they would like to provide their 2nd function details at this time, i.e., at the POS terminal 22.

If the customer does want to enter their 2nd function details at this time as determined at Step 216, the system can accept the 2nd function details entered in several different ways as indicated at Step 218. For example, the customer can enter the details manually into the keypad at the POS terminal 22, or the customer can activate an app on the customer mobile phone, which will transmit the second function details to the POS terminal 22, or present the second function details on a screen of the mobile device which can be scanned by the scanner of the POS terminal 22. A non-limiting example of the 2nd function details may be numbers selected by the customer for a first prize draw (a first short-term multiple-entry event). In another embodiment, there is even the option for the POS terminal 22 to randomly select this second function data for the customer.

Once the customer's 2nd function details have been entered at Step 218, these details are sent at Step 220 to the coupon server 30, where they are stored in the master coupon database 32 and a unique coupon identifier number (unique ID no). 12 is generated at Step 220. The unique ID no. 12 can be generated locally, i.e., at the POS terminal 22 by the local unique ID no. generator, in which case it is sent to the coupon server 30 at a later time, where it is stored in the master coupon database 32. An advantage of this is that it allows coupon 10 generation with the unique ID no. 12 to be carried out very quickly. However, local unique ID no. generation may be more vulnerable in terms of security. Alternatively, the unique ID no. 12 can be generated remotely by the unique ID no. generator in the master coupon processing module 66, i.e., at the coupon server 30 itself and stored in the master coupon database 32. An advantage of this is that it allows this step to be carried out very securely. However, remote unique ID no. generation as compared to local unique ID no. generation may be slower and may make the process of coupon 10 generation longer.

The process continues with the unique ID no. 12 being linked at Step 220 to the 2nd function details and optionally also to the personal ID no. if entered. The linking of these details can be carried out either locally before transmission of the details to the coupon server 30, or remotely at the coupon server 30 once all the details have been received.

A multi-function coupon 10 is then generated at Step 224 at the POS terminal 22. The multi-function coupon 10 preferably includes details of the unique ID no. 12 and 2nd function details (and optionally also the personal ID no. if entered). The multi-function coupon 10 is then provided at Step 226 to the customer, who may use any of its multiple functionalities.

If the customer did not want to enter their 2nd function details as determined at Step 216, a unique coupon identifier number (unique ID no.) 12 is generated at Step 228. The unique ID no. 12 can be generated locally, i.e., at the POS terminal 22 by the local unique ID generator, in which case it is sent to the coupon server 30 at a later time, where it is stored in the master coupon database 32. An advantage of this is that it allows coupon 10 generation with the unique ID no. 12 to be carried out very quickly. However, local unique ID no. generation may be more vulnerable in terms of security. Alternatively, the unique ID no. 12 can be generated remotely by the unique ID no. generator in the Master coupon processing module, i.e., at the coupon server 30 itself and stored in the master coupon database 32. An advantage of this is that it allows this step to be carried out very securely. However, remote unique ID no. generation as compared to local unique ID no. generation may be slower and may make the process of coupon 10 generation longer.

A multi-function coupon 10 is then generated at Step 230 at the POS terminal 22. The multi-function coupon 10 preferably includes details of the unique ID no. 12 (and optionally also the personal ID no. if entered). The multi-function coupon 10 is then provided at Step 232 to the customer, who may use any of its multiple functionalities, apart from the 2nd function, which can only be accessed by the customer once 2nd function details have been entered and associated with that multi-function coupon's unique ID no 12.

The customer is presented at Step 234 with the option of whether or not they would like to provide their 2nd function details at this time, i.e., at any time after receiving the multi-function coupon 10.

If the customer does not want to enter 2nd function details at this time as determined at Step 236, then they do not have to and can still access the other functionalities of the multi-function coupon 10.

If the customer does want to enter their 2nd function details at this time as determined at Step 234, the customer's coupon 10 should then be scanned / read as determined at Step 238 in any suitable manner in order to obtain the unique ID no. 12 of the customer's multi-function coupon 10. Once the unique ID no. 12 of the customer's multi-function coupon 10 has been obtained, it can be communicated to the coupon server 30, where the details of the multi-function coupon 10 can be accessed and communicated.

The system can accept the customer's 2nd function details entered in several different ways. For example, the customer can enter the details manually into the keypad at the POS terminal 22, or the customer can activate an app on the customer mobile phone, which will transmit the second function details to the POS terminal 22, or present the second function

details on a screen of the mobile device which can be scanned by the scanner of the POS terminal 22. A non-limiting example of the 2nd function details may be numbers selected by the customer for a first prize draw (a first short-term multiple-entry event). In another embodiment, there is even the option for the POS terminal 22 to randomly select this second function data for the customer. Once the customer's 2nd function details have been entered at Step 240, these details are sent at Step 242 to the coupon server 30, where they are stored in the master coupon database 32.

The process continues with the unique ID no. 12 and 2nd function details being linked at Step 242 to each other and the personal ID no. if entered. The linking of these details can be carried out either locally before transmission of the details to the coupon server 30, or remotely at the coupon server 30 once all the details have been received.

A receipt is then generated at Step 244, preferably at the POS terminal 22, and the receipt preferably includes details of the 2nd function details and optionally also the unique ID no. 12 (and possibly also the personal ID no. if entered). The receipt is then provided at Step 244 to the customer, who may now access the 2nd function of the multi-function coupon 10.

Referring to **Figure 7**, an overview of process 246 carried out at a 'Server' for implementing an embodiment of the present invention is shown.

As described above, during the multi-function coupon 10 generation process at the POS terminal 22, a unique ID no. 12 is generated either at the POS terminal 22 or at the coupon server 30 and the unique ID no. 12 is associated with that particular multi-function coupon 10. This unique ID no. 12 is optionally sent to the coupon server 30, which receives at Step 248 a notification of the generation of a new unique ID no. 12. The unique ID no. 12 can also be generated remotely by the unique ID no. 12 generator in the master coupon processing module, i.e., at the coupon server 30 itself, in which case the coupon server 30 already has the details of the unique ID no. 12 for the specific multi-function coupon 10. The coupon server 30 stores at Step 250 the unique ID no. in a new record in the master coupon database 32.

The operator then purchases at Step 252 a proxy product or service on a proxy basis from the proxy server 38. In this embodiment the proxy product is an investment product. This investment product is then linked at Step 252 to the stored unique ID no. 12 at the coupon server 30 in the master coupon database 32. The operator has completed the 'know your client' (KYC) process and is therefore eligible to purchase investment products. At this stage of the process, the investment product is owned completely by the operator. The transfer of ownership of the investment product from the operator to the customer can only occur once

the third functionality of the multi-function coupon (KYC) has been completed by the customer.

A check is then carried out at Step 254 at the coupon server 30 to see whether 2nd function details have been received associated with that unique ID no. 12. If 2nd function details have not been received, the process is not continued until they are received, as indicated at Step 256. If 2nd function details have been received for the customer's multi-function coupon, they are stored at step 2558 at the coupon server 30 in the master coupon database 32 and, either at this point in the process, or at an earlier or later stage, the unique ID no. 12 is linked at Step 258 to the 2nd function details (and also to the personal ID no. if entered).

A check is then carried out at Step 260 at the coupon server 30 to see whether a personal ID no. has been entered associated with that unique ID no. 12. If a personal ID no. associated with that unique ID no. 12 has not been entered, the customer is presented at Step 262 with an option of entering a personal ID no. and going through the steps of completing KYC (see **Figure 8**).

If the customer does not want to complete KYC, the process is terminated as indicated at Step 264. If the customer does want to complete KYC, then they need to visit a regulated location 58 in order to do so, as indicated at Step 266 (see **Figure 8**).

If a personal ID no. has been entered by the customer, the coupon server 30 retrieves at Step 268 the customer's details using their personal ID no.. The investment product is then linked at Step 270 to the customer's personal ID no. and this may be carried out at the coupon server 30 or in any suitable manner.

Once these details have been linked, the investment product can be assigned at Step 272 to the customer with that personal ID no. Ownership of the investment product has therefore been assigned from the operator to the customer at this stage of the process. The investment product details are stored at Step 274 at the coupon server 30 in an account related to the personal ID no. of the customer in the master coupon database 32. The customer is then notified at Step 276 of the investment product details.

Referring to **Figure 8**, an overview of a more involved process 278 (a 'know your client' (KYC) process in this embodiment) for implementing an embodiment of the present invention is shown. This process 278 is described in terms of user interaction, although it is to be appreciated that the process incorporates technical procedures and functions that would be necessary to implement the process. The skilled addressee will be aware of specific

implementation procedures that can be used to put the user interaction into practice and so these are not described in any great detail hereinafter.

Figure 8 carries on from the stage in **Figure 7** where the customer has the option of going through the steps of completing KYC (i.e., Step 266). The KYC process can only be carried out by someone qualified or trained in the relevant field. Therefore, the KYC process is usually carried out at a regulated/secure location, but can be done elsewhere. The customer would therefore typically enter a regulated location 58 in order to complete the KYC process, as indicated at Step 280.

The customer is presented with an option at Step 282 of using the 3rd function of the multi-function coupon 10, i.e., gaining ownership of an investment product (by completing the KYC process). If the customer does not wish to use the 3rd function now then they exit as in Step 284. If the customer does wish to use the 3rd function now, but already has a personal ID no. as in Step 286, they cannot go any further in the process, as the KYC process should only be carried out once and they should end the process, as indicated at Step 286. An exception to this is where the customer has forgotten / lost their personal ID no., in which case they can be informed of it when presenting their personal details. However, in that circumstance, they would not be eligible for the 3rd function incentive as they would already have had the opportunity to use this.

If the customer does wish to use the 3rd function now (at Step 282), and does not already have a personal ID no. as per the check in Step 288, the customer should present their multi-function coupon 10 so that it can be read / scanned at Step 290 in any suitable manner in order to obtain the customer's multi-function coupon's unique ID no. 12. Once the unique ID no. 12 of the customer's multi-function coupon 10 has been obtained, it can be communicated to the coupon server 30, where the details of the multi-function coupon 10 can be accessed and communicated.

The customer then provides at Step 292 their personal details to the qualified person, who checks at Step 294 the customer's details to see if the customer is eligible for the investment product. An example of a customer who would not be eligible is someone who is shown on an official register of some kind as being in serious debt. If the customer's personal details are insufficient and/or the customer fails the requirements of the KYC process, the process is terminated at Step 296.

If the customer's personal details are sufficient to pass the requirements of the KYC process, the customer's unique ID no. 12 and approved KYC details sent at Step 298 to the coupon server 30 and are linked at Step 298 to each other. Once the KYC process has been

passed by the customer, a personal ID no. can be generated at Step 300 and associated with that customer. This personal ID no. is preferably generated at the coupon server 30 and is then linked at Step 300 to the unique ID no. 12 associated with the customer's multi-function coupon 10 and can also be linked at Step 300 to the investment product associated with that unique ID no. 12.

Once these details have been linked, the investment product can be assigned at Step 302 to the customer with that personal ID no. Ownership of the investment product has therefore been assigned from the operator to the customer at this stage of the process. The investment product details are stored at Step 304 at the coupon server 30 in an account related to the customer's personal ID no. in the master coupon database 32. The customer is then notified at Step 306 of the details of their investment product.

Referring now to **Figure 9**, an overview of a process 310 (the 3rd function incentive process) for implementing an embodiment of the present invention is shown. This process 310 is described in terms of user interaction, although it is to be appreciated that the process incorporates technical procedures and functions that would be necessary to implement the process. The skilled addressee will be aware of specific implementation procedures that can be used to put the user interaction into practice and so these are not described in any great detail hereinafter.

Figure 9 carries on from Step 308 at the end of **Figure 8** where the customer has completed the KYC process and is therefore eligible for the 3rd function of the multi-function coupon 10. As an incentive for completing the KYC process, a second prize draw (a second short-term multiple-entry event) is offered at Step 312 to the customer as an additional benefit of the multi-function coupon 10, i.e., the customer is presented at Step 312 with an option of using the 3rd function incentive. If the customer does not want to use the 3rd function incentive then the process is terminated, as indicated at Step 314.

If the customer does want to use the 3rd function incentive then the customer enters at Step 316 their 3rd function incentive details. The 3rd function incentive details can be provided in a number of different ways. For example, the customer can enter the details manually into a keypad at the regulated location 58, or the customer can activate an app on the customer mobile phone, which will transmit the second function details to the regulated location 58, or present the 3rd function incentive details on a screen of the mobile device which can be scanned by the scanner of the regulated location 58. A non-limiting example of the 3rd function incentive details may be numbers selected by the customer for a second prize draw (a second short-term multiple-entry event). In another embodiment, there is even the option for the regulated location 58 to randomly select this second function data for the customer.

Once the customer's 3rd function incentive details have been entered at Step 316, these details are sent to the coupon server 30, where they are stored at Step 318 in the master coupon database 32 and linked at Step 318 with the customer's unique ID no. 12 and personal ID no. The linking at Step 318 of these details can be carried out in different locations, i.e., at the regulated location 58 or at the coupon server 30.

Confirmation is received at Step 320 that the 3rd function incentive details have been uploaded to the coupon server 30. A receipt is then generated at Step 322, preferably at the regulated location 58, and the receipt preferably includes details of the 3rd function incentive details and optionally also the unique ID no. 12 (and possibly also the personal ID no.). The receipt is then provided at Step 322 to the customer, who may now access the 3rd function incentive of the multi-function coupon.

Referring to **Figure 10**, an overview of a process 324 at a 'Server' for implementing an embodiment of the present invention is shown.

As described above, the customer is presented at Step 326 with an option of using the 3rd function incentive and, in this circumstance, the customer decides at Step 326 to use the 3rd function incentive. As described above, during the multi-function coupon 10 generation process at the POS terminal 22, a unique ID no. 12 is generated either at the POS terminal 22 or at the coupon server 30 and the unique ID no. 12 is associated with that particular multi-function coupon 10.

A check is then carried out at Step 328 at the coupon server 30 to see whether 3rd function incentive details have been received associated with that customer. If 3rd function incentive details have not been received as at Step 330, the process does not progress until they have been received.

Once 3rd function incentive details have been received as at Step 332, they are stored at Step 332 at the coupon server 30 in the master coupon database 32 and, either at this point in the process, or at an earlier or later stage, the unique ID no. 12 is linked at Step 332 to the 3rd function incentive details and preferably also to the personal ID no. Confirmation is then received at Step 334 from the coupon server 30 that the 3rd function incentive details have been uploaded to the coupon server 30.

A receipt is then generated at Step 336, preferably at the regulated location 58, and the receipt preferably includes details of the 3rd function incentive details and optionally also the unique ID no. 12 (and possibly also the personal ID no.). The receipt is then provided at

Step 336 to the customer, who may now access the 3rd function incentive of the multi-function coupon 10.

A further embodiment which is based on use of the system 1 described above is now described. A customer purchases a commercial coupon/ticket at a point of purchase (using a system terminal 22) that it is not an investment product. This enables the coupon to be purchased at a huge variety of non-regulated locations 24. The coupon has at least one commercial user benefit associated with it, for example discounts on goods and services. The purchase involves user selection of a set of numbers in a similar manner to that of a raffle or prize draw, and the coupon is an active entry into that prize draw. The coupon also includes the right to have title in an investment transferred to the coupon holder in a non-monetary exchange for rights to personal data belonging to the customer subject to the customer completion of a one-time only KYC (know your client) process.

The system terminal is one of many such terminals which are all linked with a coupon server 30 and a database provided at the coupon server 30. These components make up the system.

The operator of the system (herein after referred to as the 'Operator') immediately uses a proportion of the proceeds (which belong 100% to the Operator) from the sale of the commercial coupon, to buy an investment/financial product of some description from a third party or other designated Bank. The investment/financial product purchased (which can be of many different types) belongs 100% to the Operator at this stage of the process.

The coupon holder (customer) who purchased the coupon - whose self-selected numbers (which he selected when or after he bought the coupon) are automatically entered into a prize draw associated with the coupon (and which may occur at a regular frequency for example weekly). The customer then has the opportunity to choose to enter into a second (technically separate) transaction which provides further entry into a prize draw providing further opportunities to win prizes. He can also choose not to enter into this second transaction, forego any further prizes or investment, and to use the coupon purely for commercial purposes e.g. the multiple inherent benefits offered by the coupon.

The second transaction involves the coupon holder giving the Operator rights to access and use his valuable personal data, in return for the Operator giving him an investment/financial product and entry of his selected numbers into the associated prize draw, namely the right to claim a draw prize. This second, data-swap transaction requires the coupon holder, for the first time only, to present himself at a bank or other regulated premises to complete the KYC process. As a result of this process, the coupon holder receives a unique Identifier (unique

ID) from the system which enables him to be subsequently recognised by the system. This registration process for the investment/financial product, can take place any time up to a predetermined number of months after the coupon has been sold or the initial prize draw has taken place that relates to that specific coupon. This can take place irrespective of whether the holder's coupon is a winning coupon. If the coupon holder's coupon is a winning coupon, he gets the prize from the initial draw as well.

Whenever and wherever this customer purchases new coupons in the future, to get the investment/financial product and receive further prizes (if they are indeed won) by taking part in the second transaction he need not repeat this KYC process at a bank. Rather he must only use the unique ID (the Operator gives him this when he successfully completes the KYC process) when he makes a purchase. This allows the Operator to automatically effect the second transaction of exchanging title a "free" investment for the right to use the customer's data for targeted marketing purposes.

The Operator of the system is, in effect, swapping the investment which they already own (and any rights to prizes linked to those investments) for access to personal data about the customer now and in the future of anyone who turns up and completes the KYC process.

Using the unique ID when buying the coupon, allows progression quickly to the investment stage with a "technically" short elapsed time that allows the Operator to buy the investment on its own behalf and then transfer it to the customer.

If the KYC'd customer forgets his unique ID at the next purchase, he can retrospectively provide his ID and the second transaction will take place later – i.e. he still only has to take part in the KYC process once in all his life unless his circumstances change and he needs to advise of changes to his KYC details.

In effect at the one-time only occasion of completing the KYC process and at every occasion thereafter, the Operator is an existing customer of a bank transferring title in an investment/ financial product of some description (that belongs to the Operator) to another customer of the bank that is the provider of the investment. This is carried out in return for that customer giving the Operator a non-monetary right that is nonetheless highly valuable for data access and usage rights.

The first benefit is free and part of the Coupon itself, which carries the brand of the retailer or retailers or manufacturers and is the opportunity for a discount at certain named retailers upon presentation of the Coupon and tearing off a voucher (Money-off (discount) voucher).

The second benefit is free in the sense no further monetary exchange is required, but has a valuable exchange in the form of the right to exchange data for a “free” investment for those customers who go and complete KYC for the first time at a partner bank or regulated premises using this Coupon and any other information etc. which is normally required for KYC (an Investment product).

The third free benefit is the eligibility for entry of the customer's random selected numbers into the immediate next prize draw following the sale. However the customer cannot claim a prize unless he has performed the required behaviour to receive the second bonus benefit of the ‘free’ investment. He can perform this required behaviour to receive the investment after the prize draw for which his random selected numbers are eligible to be part of the prize selection process (a first prize draw).

The fourth bonus benefit is a second opportunity at a later date to enter a second prize draw, but this opportunity will only be available for those customers who have fulfilled KYC and received their free investment. Whilst the third bonus benefit (above) is a one-time opportunity per Coupon entry into a prize draw, the fourth bonus (the 2nd Prize Draw) will involve all the Coupons sold in the given period (e.g. every 3,6 or 12 months) belonging to customers who have completed full KYC before that 2nd Prize Draw (a second prize draw).

The above embodiments of the invention are described for the purposes of illustrating the invention only and are not to be read as limiting the scope of the invention, which is defined by the appended claims.

CLAIMS:

1. A multi-function coupon processing system for issuing and processing a plurality of multi-function coupons, the system comprising:

a plurality of multi-function coupon-issuing terminals provided at unregulated locations;

a unique identifier generator for generating on demand a unique identifier which is to be provided with an issued multi-function coupon; and

a central coupon processing server located remotely from but in data communication with the plurality of terminals; the central coupon server comprising:

a master function processor for processing redemption of the multi-function coupon in relation to a first function of the coupon;

a proxy function processor being responsive to the issuance of the coupon to conduct a purchase of a long-term investment product on a proxy basis;

a personal information module for receiving and storing personal information about a purchaser from a secure regulated location;

wherein the master function processor is arranged to accept rights to use the personal information of the customer and in exchange to assign the rights in the purchased long-term investment product to the customer.

2. A system according to Claim 1, further comprising a master database for storing the unique identifier of the coupon that triggered the purchase of the long-term investment product and details of the long-term investment product, the master database being arranged to link the unique identifier and the investment product details together.

3. A system according to Claim 1, wherein the unique identifier generator is provided at the central coupon processing server and each coupon issuing terminal is arranged to communicate with the central coupon processing server in order to issue a multi-function coupon.

4. A system according to Claim 1, further comprising a plurality of unique identifier generators, each generator being provided at a coupon-issuing terminal which is arranged to transmit the details of the generated unique identifier to the central coupon processing server after issuance of a multi-function coupon.

5. A system according to Claim 1, wherein the personal information module comprises a personal identifier generation module for generating a unique personal identifier for each different person for whom a multi-function coupon has been generated.

6. A system according to Claim 1, wherein the master coupon function processor is configured to receive request for a second function of the multi-function coupon and to manage implementation of the second function request.

7. A system according to Claim 6, wherein the implementation of the second function is carried out using a dedicated second function server which is operably connectable to the central coupon processing server via a communications network.

8. A system according to Claim 6, wherein the master coupon function processor is configured to receive request for a third function of the multi-function coupon and to manage implementation of the third function request.

9. A system according to Claim 8, wherein the implementation of the third function is carried out in response to provision of the personal information.

10. A system according to Claim 8, wherein the implementation of the third function is carried out using a dedicated third function server which is operably connectable to the central coupon processing server via a communications network.

11. A system according to Claim 1, wherein the proxy function processor is arranged to purchase the long-term investment from a dedicated proxy server which is operably connectable to the central coupon processing server via a communications network.

12. A system according to Claim 1, wherein the long-term investment comprises a micro-investment product having a purchase value of less than a dollar.

13. A system according to Claim 1, wherein the plurality of coupon-issuing terminals are arranged to implement the plurality of functions via the same terminal.

14. A system according to Claim 1, wherein the multi-function coupon issuing terminal comprises a Point of Sale (POS) terminal.

15. A system according to Claim 14, further comprising a second function terminal provided at the non-secure unregulated location, the second function terminal being used for capturing user selections for the second function and transmitting these to the central server, without causing a delay in the POS function at the coupon issuing terminal.

16. A system according to Claim 1, further comprising a secure terminal provided at a secure regulated location, the secure terminal being used for capturing personal information about the purchaser from evidential information presented to the secure terminal and for transmitting the same to the central coupon processing server.

17. A method of issuing and processing a plurality of multi-function coupons, the method comprising:

generating on demand a unique identifier which is to be provided with an issued multi-function coupon;

issuing a plurality of multi-function coupons at a plurality of unregulated locations; and

processing the multi-function coupons at a central location remote from the plurality of unregulated locations; the processing comprising:

processing redemption of the multi-function coupon in relation to a first function of the coupon;

conducting a purchase of a long-term investment product on a proxy basis in response to the issuing of the coupon;

receiving and storing personal information about a purchaser from a secure regulated location; and

accepting rights to use the personal information of the customer and in exchange assigning the rights in the purchased long-term investment product to the customer.