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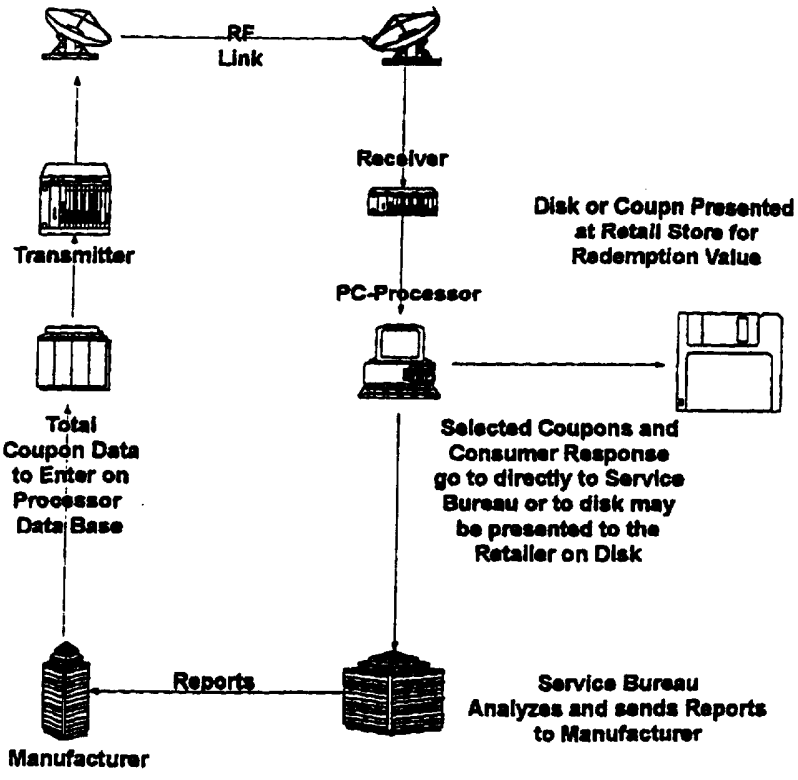
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(57) Abstract

A distribution and acquisiton system is disclosed for providing incentive information via a medium. The system includes a receiver for accessing the incentive information on the medium and a processor for selecting and releasing portions of the incentive information upon the occurrence of the event that determinants, present in the processor, are addressed. The processor selects portions of the incentive information in response to the addressing of determinant. An input device, connected to the processor, is used for inputting response information necessary to address the determinants. The input device is also used for inputting selection information into the processor. An output device is connected to the processor for generating an output corresponding to the portions of the incentive information selected by the processor. In one embodiment a transmitter, such as a radio transmitter, is connected to a network and is used to receive the incentive information. In another embodiment, a second processor is located remote from the first processor but connected in some fashion. In such an embodiment, the second processor receives the response information and generates a structured output reflective of the response information. It is especially preferred for the present invention to provide an output, such as a coupon, which is redeemable for some benefit.



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INCENTIVE BASED INFORMATION GENERATION SYSTEM

FIELD OF THE INVENTION

The present invention relates to the field of consumer research. More particularly, the present invention relates to the generation and acquisition of consumer preference, purchasing, profile and product improvement information.

BACKGROUND OF THE INVENTION

Presently the couponing industry uses as its operating vehicle a standard printed coupon or "chit," typically issued in a local newspaper, magazine, direct mail, and etc. The purpose of the coupon is to market a producers product to consumers. Some innovative coupon methods have included just repeating a slogan at the store for the benefit of a discount price to drawing a coupon freehand and offering it upon purchase. In the past few years, a few companies have been posting coupons on the on-line computer networks. Some examples on the World Wide Web are "TriMark of Hawaii, Inc." and a new service "Coupons Online". Both services offer only a posting of various coupons that can be downloaded and printed for use in stores. The novel invention to be discussed provides a much more encompassing and captures much more, and

more usable marketing information.

Coupons stimulate sales and make possible a simple monitoring of product purchasing in various locals. The data resulting from contemporary couponing efforts is limited to local areas, counties, states, and regions. The amount of specific derived information generated by such efforts is minimal. The major real value of contemporary coupons is the promotion of products.

SUMMARY OF THE INVENTION

The above noted disadvantages are overcome by a distribution and acquisition system which provides incentive information via a medium. The system includes a receiver for accessing the incentive information on the medium and a processor for selecting and releasing portions of the incentive information upon the occurrence of the event that determinants, present in the processor, are addressed. The processor selects portions of the incentive information in response to the addressing of determinants. An input device, connected to the processor, is used for inputting response information necessary to address the determinants. The input device is also used for inputting selection information into the processor. An output device is connected to the processor for generating an output corresponding to the portions of the incentive information selected by the processor. In one embodiment a transmitter, such as a radio transmitter, is connected to a network is used to receive the incentive information. In another embodiment, a second processor is located remote from the first processor but connected in some fashion. In such an embodiment, the second processor receives the response information and generates a structured output reflective of the response information. It is especially preferred for the present

invention to provide an output, such as a coupon, which is redeemable for some benefit.

In one embodiment, the present invention consists of a couponing management and distribution system where the various food producers, for example the Campbell Soup Company, would receive remuneration in the form of completed surveys for the coupons they issue to consumers, these surveys being performed by the same consumers. The consumer will receive remuneration in the form of product discounts for surveys they complete. The product choices and product surveys are presented in a computer having computer software that interacts with the consumer and their family food buying habits. This system is not limited to food products. Any product may and potentially will be addressed by this system.

The system acquires data on discounting of products, automatically organizes and prompts the consumer with survey questions, provides reports, discount sheets, and coded stubs for scanning into store computer systems providing the consumers discounts. The survey questions are processed and analyzed by a CO and provided to manufacturers for consideration and further analysis. The surveys are very valuable to the manufacturer in determining strategies of product marketing and sales.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be better understood, and its numerous objects and advantages will become apparent to those skilled in the art by reference to the following detailed description of the invention when taken in conjunction with the following drawings, in which:

Fig. 1 is a diagrammatic view of a system constructed in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following description of the preferred embodiments is made by way of example to food purchase discounts provided by active radio transmission in the form of text. Such exemplary description is for the purposes of illustrating the invention and is not intended to limit the scope of this application.

A central office of discount coupon management (CO) is designated to organize coupon data acquired from product producers. Contemporary marketing methods would require product producers to print their own coupons or assign this task to a sub-contractor. However, using the present invention, discount data acquired from the producer is processed by the CO and made available to the consumer. This is accomplished through posting the discounts for various products on a network such as the "Internet" requiring a retrieval operation. As will be shown in connection with Fig. 1, the posting of product discount information is achieved by active transmission of the data via radio or any other media available to the consumer. A computer, adapted and connected to receive the radio transmitted data, acquires the data for processing by discount coupon management software.

The software is operative so that, when it is used for the first time, the consumer will enter various products of interest that they regularly purchase at the supermarket or other product stores. The software may already contain a listing of products and the consumer need only select them from a the list. Any product not listed can be entered manually. Once entered the consumer need not enter them again, but may modify the product list at any time.

In one embodiment, the computer is connected to a

hardware board which designed and constructed to receive radio transmissions containing data from producers of supermarket products or any other products. It is envisioned that the system of the present invention can also receive data from other media such as cable T.V., phone, satellite, floppy disk, etc. In one embodiment, the data includes discount information for each product selected in the software by the consumer. As is described below, the data additionally includes inquiries directed to generate consumer feedback.

Upon receiving data, the software automatically correlates (links) the consumers product selections with available discount coupons issued by manufacturers and contained in the radio transmitted data. This correlation is accomplished by standard data base linking or indexing methods, which methods are well known. The discount coupons are organized and tallied for future accounting and printing. When the consumer is ready to shop at a supermarket they may choose to print those coupons that have been issued by the producers and made available by the system.

In one embodiment, when the consumer is alerted to a coupon for any of the products they have selected, they may be required to complete a survey asking specific questions in order to obtain use of the coupon or in order to increase the value of the coupon. When the consumer has completed the survey, the software is prompted (or triggered) to issue the coupons as a reward to the consumer. The consumer can thereafter print the coupon instantly (instant gratification) or wait until later, i.e., just before shopping.

The coupons may be printed in many different formats depending on use. For example, the product discount information may all be contained on one or two printed stubs.

The stubs would include all the bar codes necessary for the discount information, as well as, the information generated by the consumer in response to the survey. The bar coded stubs may be scanned at the market, into the supermarket computer, and used for discounts when the consumer purchases these products. This will speed up the market check-out line and make it easier for the consumer by not having to carry 30 or so coupons that have to be organized. The discounts may also be stored in the supermarket computer until the consumer uses these discounts by surrendering the stub at the door.

The survey envisioned by the present invention may address information such as questions concerning habits, complaints, age, hobbies, etc. All this information is very valuable to the producers. The consumer may elect to participate in an advanced survey, such as answering questions about consumption data. This is data on products purchased and just how much of a product is actually consumed. It can be seen that many other aspects could be addressed by this system.

The system of the present invention is comprised of three major components. They are computers, management software and the computer communications interface, all of which are used at the retailer level, the manufacturers level and the consumer level. In the embodiment being described, the computer communications interface is by radio transmission, however, the invention is not limited to this media. The radio sub-carrier interface is preferably in the form of a board that is connected to the computer. This may be accomplished by plugging the board into an available buss slot, or any other suitable means of connection. The data that is received by the radio sub-carrier board is transferred to the computer system

for the purpose of being acted upon by software specifically designed to manage this data.

The data received by the board emanates from a local radio station. This radio transmission may be achieved by any means of radio frequency communication including TV sub-carrier. The radio station is issued the data to be transmitted to the consumer. This transmission is made using batch or recirculation loop techniques such that the data is either transmitted periodically as a batch or continuously as a recirculating loop.

When the consumer turns on their computer the radio board is enabled to receive the latest data on discounts. Any duplicates are disregarded while the new data updates the software. The consumer's computer and software discussed herein may be in the form of a stand alone unit or a dedicated hardware and firmware device specifically used for this function. The computer need not be limited to a P.C. but may be any device suitable to perform the functions presented herein.

Once the data is received by the radio sub-carrier board, demodulated and converted, if necessary, to an appropriate digital form, it is directed to the computer where it is acted upon by various software routines in order to organize the data. This organization consists of validating new data, adding, sorting and or categorizing data, causing or triggering activities to be performed by the consumer, screen displays, and printing functions.

Upon receipt of new data, the software causes the computer to store the data in an appropriate location in a database. A database is a means by which data may be stored, organized, reorganized, formatted, sorted, and prepared for

display or printing, and is well known. New data is identified by comparing the data received by the radio sub-carrier board to that of the existing data within the database. This comparison may be made by a simple exact match (letter for letter) or any other match method. Such software matching methods are generally known.

Once the new data is accepted and entered into the database, it is structured in an appropriate manner to accommodate the preferred format of the system. The format may vary depending on the market or products being addressed. The consumer can access a report showing all new potential discounts or incentives which will become actual discounts after completing the survey for each discount. After completing a survey, the consumer is immediately rewarded by a running statement of money earned (total discounts). It is also envisioned within the scope of the present invention that a complete accounting of costs for purchased goods is made available at this time. Since consumers may be assigned identifying information, the present invention also makes it possible for the receivers of consumer information to respond directly to a particular consumer or group of consumers with additional incentives or more detailed responses, for example, a response to a consumer complaint. Such a system also would permit consumer notification by retailers or manufacturers of exclusive sale opportunities.

During the completion of the survey, it is envisioned that the consumer may also be able to assess the desirability of purchasing certain products in view of annotated retailer or manufacturer information such as historical analysis, as well as, quality, availability, or health related information.

Once the consumer has accrued discounts and desires

to purchase the corresponding products, the software generates a printout of all coupons or discount information. The printout generated by the software may also include the identification of stores having the products they desire, the last price, and possibly the location of the product within the store.

It is also envisioned that the printed coupon contain bar coding or other coding formats that may be scanned into the laser scanners at the checkout counters. The total discount may then be automatically tallied and subtracted from the total bill. This will greatly speed the process of checkout.

The surveys completed by the consumer in response to the software of the present invention are capable of being printed for mailing to the product producer or can be transmitted by modem to the CO for processing and transferring to the product producer. The survey responses may be sold by the CO as general information to retailers, manufacturers and other marketing information gathering organizations.

A distribution and acquisition system 10 is shown in Fig. 1. Incentive information, i.e., coupon information redeemable at a retailer such as a super market, is made available via a medium. In the preferred embodiment, incentive information is transmitted to a receiver. The receiver accesses the incentive information. Although the preferred embodiment is a radio transmission the medium can be any vehicle for transmitting information, for example the receiver could be a modem and the medium would be a telecommunications system.

A processor is connected to the receiver, for selecting portions of the incentive information and for releasing those portions upon the occurrence of an event. It

is preferred for the event to be the occurrence of determinants, present in the processor, being addressed. The processor also selects portions of the incentive information in response to selection information contained in said processor. Selection information could be the identification of consumer goods, such as groceries, wherein the selected goods are identified and stored in the processor. In such a situation the processor would only select coupon data relating to those particular goods, rather than selecting all available data.

An input device is connected to the processor for inputting response information to the processor necessary to address the determinants and for inputting selection information into the processor. Response information is preferably the consumer responses to various question (determinants) designed to elicit information that manufacturers are seeking about their products.

An output device is connected to the processor for generating an output corresponding to the portions of the incentive information selected by the processor. Such output can take the form of printing coupons or even storing discount or coupon information on a magnetic media for presentation by the consumer at a retail establishment.

It is also envisioned that the present invention would include a transmitter connected to a network. In such a situation, the receiver would receive the incentive information by connecting to the network. The network could be any telecommunications system such as the INTERNET.

In the embodiment utilizing a radio transmitter, the transmitter may be located remote from the receiver. In such an arrangement, it is possible for the radio transmitter to

only transmit certain portions of the incentive information to a given receiver for release by said processor. In other words, rather than the processor making selections from the body of incentive data, such selections could be made at a location remote from the processor and only selected information transmitted.

It is also envisioned that a second processor would be provided remote from the first processor. The second processor, however, would be connected to receive all response information generated in the system and for generating a structured output reflective of such collected information. A structured output could, for example, take the form of a report describing the results of an analysis of the collected information.

It is also preferred for the determinants contained in the processor to be free formed fields adapted to accept any comment. In such a situation, the addressing of the determinants is the provision of a comment via the input device to the free formed field.

While the invention has been described and illustrated with reference to specific embodiments, those familiar with the art will recognize that modification and variations may be made without departing from the principles of the invention as described herein above and set forth in the following claims.

I claim:

1. A distribution and acquisition system, wherein incentive information is made available via a medium, said system, comprising:

a receiver for accessing said incentive information on said medium;

a processor, connected to said receiver, for selecting portions of said incentive information and for releasing said portions of said incentive information upon the occurrence of the event that determinants, present in said processor, are addressed and wherein said processor selects portions of said incentive information in response to selection information contained in said processor;

an input device, connected to said processor, for inputting response information to said processor necessary to address said determinants and for inputting selection information into said processor; and

an output device, connected to said processor, for generating an output corresponding to the portions of said incentive information selected by said processor.

2. The system of claim 1, further comprising a transmitter connected to a network, wherein said receiver receives said incentive information by connecting to said network.

3. The system of claim 1, further comprising a radio transmitter, for transmitting said incentive information, wherein said receiver receives said incentive information as a radio transmission.

4. The system of claim 3, wherein said radio transmitter is located remote from said receiver and wherein said radio transmitter only transmits certain portions of said incentive information to said receiver for release by said processor.

5. The system of claim 1, further comprising a second processor, located remote from said first processor, connected to said processor so that said second processor receives said response information and for generating a structured output reflective of said response information.

6. The system of claim 5, wherein said receiver is assigned identifying information and wherein said identifying information is stored in said second processor so that said second processor is capable of identifying said receiver.

7. The system of claim 1, wherein said determinants contained in said processor are free formed fields adapted to accept any comment and wherein the addressing of said determinants is the provision of a comment via said input device to said free formed field.

8. The system of claim 1, wherein said output is redeemable for some benefit.

9. The system of claim 7, wherein said output comprises coupons.

Coupon System
Fig. 1

