Title: A METHOD AND A SYSTEM FOR ENABLING THE SALE OF PRODUCTS AND SERVICES

Abstract: A method and system for enabling the sale of products and services is provided. The method includes the steps of feeding a computerized center with meta data in regard to at least one item of audio information which is broadcast from at least one radio station, and the broadcasting time of the broadcast and said computerized center receiving an inquiry from a listener to said audio information being broadcast and associating said inquiry with said broadcast audio information.
A METHOD AND A SYSTEM FOR ENABLING THE SALE OF PRODUCTS AND SERVICES

FIELD OF THE INVENTION

The invention relates to an interactive method for enabling the sale of products and services based on radio listening. More specifically, the system and method serve as a bridge – for purposes of marketing products and services – between audio information which is broadcast on the radio and existing interactive communications systems, such as telephone and cellular communications networks and the Internet.

BACKGROUND OF THE INVENTION

In the scope of interactive methods for the marketing of products and services based on radio listening, the possibility has long been known of marking a portable device with a unique identifying signal which is broadcast from a radio station. After some time, once the marker is at a computer which is equipped with Internet accessibility, the listener is able to connect the device to the computer, to enter the unique signal and to receive over the Internet additional information relating to such information which he previously listened to earlier on the radio. Such a method and system are demonstrated on the xenote.com website.

An obvious drawback of the method described above, is the necessity of constantly carrying a dedicated device, i.e. a receiver, and the slow setup of a two-directional communications interface (with all the resulting implications in terms of the ability to make spontaneous and rapid purchase decisions). The receiver receives the unique information signal as broadcast on the radio station’s “hidden wavelength”. The
next step is to connect the device to an additional means (computer) and through that means, to connect to the Internet. Only then is connectivity achieved with the additional information source.

Also known is the “digital radio” by means whereof, in the future it will be possible to receive audio information on digital radio devices, and, concurrently additional information which will be broadcast digitally and received on the digital radio device. It will also be possible to display the same on the device.

An obvious drawback to this method is the necessity to replace the radio receivers currently in use, with a new digital radio and the fact that such a digital radio is incompatible with the analog broadcasting method which is presently in use.

At the same time, there is a general awareness of the advantages of cellular communications and the added value of the opportunities which are attainable through it - including services based on the location of the cell-phone bearer at any given time (location at a given point in time, which is known to the communications company), the transfer of information via the cell-phone, and the provision of Internet services over the cell-phone using Wireless Application Protocol (WAP).

At this time, an obvious drawback of cellular communications lies in its being a network which is separate from, and incompatible with the radio network. Large quantities of audio information are transmitted to numerous radio listeners (e.g. – according to the National Association of Broadcasters of America, 96% of the population of the United States listens to the radio at least once a week. 4 out of every 5 adults in the United States listen to the radio in their cars during the week). It is reasonable to assume that these radio listeners carry a cell-phone around with them. Based on existing knowledge, the only possible interaction between a radio listener carrying a cell-phone and the information to
which he is listening, is the option enabling the listener to dial the broadcasting station on
his cell-phone (in the event that he knows the telephone number).

**SUMMARY OF THE INVENTION**

The invention is designed to enable a person listening to the radio, to
spontaneously and rapidly acquire products and services, the nature of which is derived
from audio information broadcast on the radio – without resorting for this purpose to a
dedicated device of the type such as "xenote.com" website, described above,). The
invention is also suitable for application to audio information, which is broadcast using the
analog method.

For example, the invention is designed to enable the radio listener to order a song
during or after the broadcasting of the song on the radio station, and to receive it thereafter,
either directly – in the form of a digital file (e.g. – in MP3 format), by e-mail or in any
other coded format, or by post – imprinted on a CD.

The invention accomplishes this by applying a method which includes the steps of
feeding a computerized center with identifying data relating to at least one item of audio
information which is broadcast from at least one radio station, and its broadcasting time,
reception of an inquiry from a listener regarding the audio information at the computerized
center, and assignment at the computerized center of the inquiry to the broadcast audio
information.

In another preferred configuration, this method also includes the step of offering
at least one product or service to the listener, the product being a natural derivative of the
broadcast audio information.
In another preferred configuration, this method also includes the step of concluding a transaction with the listener - involving the purchase of the product.

In another preferred configuration, this method also includes the distribution step of the product.

The method, in accordance with a preferred embodiment of the invention, is applied by means of a system enabling the sale of products and services which includes a facility, being a computerization center for the reception of identifying data in regard to at least one item of audio information which is broadcast from at least one radio station, and the time of its broadcast, a means for the reception of an inquiry from a listener regarding the audio information at the computerized center, and a means for the assignment of the inquiry to the broadcast audio information at the computerized center.

Thus, based on the above example – a system operating by the method enables a listener to spontaneously and rapidly, purchase products or services which for example, are associated with a song or an advert which was broadcast on the radio.
BRIEF DESCRIPTION OF THE DRAWINGS

These and other features of the invention will become apparent from the following description and claims, when taken with the accompanying drawings, wherein similar references characters refer to similar elements throughout and in which:

Fig. 1 is a schematic illustration of the method and system for enabling the sale of products and services in accordance with a preferred embodiment of the present invention;

Figs 1a and 1b schematically illustrates the method for enabling the sale of products and services in accordance with a preferred embodiment of the present invention, using alternative access means;

Fig. 2 is a schematic illustration of a flow chart of the method of Fig. 1;

Fig. 3 is a schematic flow chart illustration of additional, optional steps of the method of Fig. 1; and

Fig. 4 is a schematic illustration of active databases and interfaces at a computerized center of Fig.1.
DETAILED DESCRIPTION OF THE INVENTION

Fig. 1 is a schematic illustration of the method and system for enabling the sale of products and services in accordance with a preferred embodiment of the present invention.

A radio station 10 transmits analog radio broadcasts whereby it relays audio information 20 (such as a song) which is received by a listener 30. Concurrently, the radio station 10 feeds data 70 regarding the nature of the audio information 20 and its broadcasting time to a computerized center 60.

The listener 30, who heard the audio information on the radio (the song, according to the example) and found it of interest, activates an access means 40 to the center 60 and initiates a service interaction 50 in regard to the specific audio information (for example, possibilities for purchasing the song from our example on a CD, as a digital file to be sent to his email address).

It will be appreciated by persons knowledgeable in the art that the center 60 is able to handle data 70 which are fed to it concurrently from several radio stations 10, and that the service interaction 50 can also include a system of purchase, billing and delivery, including by means of subsidiary suppliers not necessarily being the center 60, and that the service 50 can be offered to numerous listeners 30.

It will be appreciated by persons knowledgeable in the art that the access means 40 can be a connection which the listener 30 sets up - by dialing from a telephone, a cell-phone, an Internet enabled cell-phone or via the Internet. Furthermore, It will be appreciated by persons knowledgeable in the art that will understand that the listener 30 can send the inquiry via an access means 40, such as a transmitter which is possibly
installed as a module (integral or added) in the radio device on which the audio information is received, or a transmitter which is a dedicated component held by the listener.

In addition, as described in Fig. 1a, the access means 40 may be a connection by the listener 30 dialing via a cellular service provider 42. In such a scenario, the listener 30 accesses the center 60 via the cellular service provider 42, possibly using an abbreviated code dialed from his mobile phone or any other cell-phone. In such a scenario, the cellular service provider 42 can furnish the center 60 with additional information regarding the location 45 of the listener 30, as known to the cellular service supplier from the data of the network which is in its possession.

In addition, as described in Fig. 1b, the access means 40, may be via communication over the Internet, where the listener 30 accesses the website 62 of the center 60 on the Internet, via any web browser terminal 32 (e.g. – mobile laptop, mobile phone equipped with WAP capabilities through the web, personal computer, browser terminal).

Access 40 by the listener 30 to the center 60, may be first access by the listener 30 (a listener using the service for the first time), or repeat access by the listener (a listener being a veteran customer wishing to use the service once again).

When the access means 40 is a connection by dialing, then on first access, the listener 30 contacts the center 60 through a manned call center or through another automatic service of the center 60, in order to provide his personal details, thus enabling the service interaction 50.

These details may include: address, preferred payment method (including the credit card number in the case of a credit purchase), pin number for confirmation of the transaction by the listener 30, and the email address of the listener 30.
On repeat access, the center 60 automatically identifies the listener 30 by means of the data which he provided earlier during the first access.

When, as described in Fig. 1a, the access means 40 consists of the listener 30 dialing via the cellular service provider 42, then a part of the data required by the center 60 in order to provide the service 50 will be received from the provider 42. On first access, the caller provides the rest of the data required (if at all) via a manned call center or an automatic service of the center 60. On repeat access, the center 60 automatically identifies the listener 30 by means of the data which it received earlier (from the listener 30 and/or the provider 42) during the first access.

When, as described in Fig. 1b, the means of access is communication over the Internet, then the data required by the center 60 for the service interaction 50 are fed in by the listener 30, by means of a web browser 32 on the website 62 of the center 60 (e.g. – cell-phone web browser terminal). On repeat access, the center 60 automatically identifies the listener 30 by means of the data it received earlier (from the listener 30 via the Internet) during the first access.

It will be appreciated by persons knowledgeable in the art that the listener 30 may perform the first access by one means and the repeat access by another means, (e.g. – first access by the listener 30 by connecting by dialing, as described in Fig. 1, and repeat access via the Internet as described in Fig. 1b).

Essential information required by the center 60 for the service interaction 50 is of course, the identification data of the radio station 10 that broadcast the audio information 20 the subject of the inquiry of the listener 30.

It will be appreciated by persons knowledgeable in the art that this data can be received by the center 60 from the listener 30 in several possible ways – for example, the
listener 30 feeds the identification datum of the radio station 10 (the frequency of the station or another identification datum). Another example – the listener 30 feeds the identification datum of the radio station 10 (the frequency of the station or another identification datum), or, in addition – the center 60 receives the datum of the geographical location 45 (see Fig. 1a) of the cell-phone of the listener 30, in order to determine which radio station 20 the listener 30 is referring to. Another example – the listener 30 identifies the radio station 20 from a relevant list (according to his location) which the center 60 displays to him.

In this aspect of identifying the radio station 20, it will be appreciated by persons knowledgeable in the art that combined and varied information can be communicated to the center 60. Thus, for example, the listener 30 can relay the name of the station as it appears on the display screen of the radio in his car (the name which is broadcast on the hidden wavelength). At the center 60, this datum will be assigned to the broadcasting station 20 in accordance with the station data stored there, with the aid (if required) of the datum of the geographical location 45 (see Fig. 1a) of the cell-phone of the listener 30 from which, the potential of relevant stations is a natural derivative.

The service interaction 50 which the center 60 offers the listener 30 may be diverse and could include information regarding the availability of products or services, possible methods of delivery and prices. The listener 30 on his part, chooses the specific product and the delivery method.

For example, in a scenario where the audio information 20 is music, the listener 30 chooses the media format and the method of delivery for the music which he chose. Thus, for example, as an outcome of the access 40 and the service interaction 50, a song in digital format may be sent to the email address of the listener 30, a CD with the song on it
may be sent to his home or else, the specific song may be stored in memory at the center 60, until the memory assigned to the listener is filled with selected songs up to the full capacity of a CD, which is then produced and sent to his address.

A second example is a scenario wherein the audio information 20 is an advert for a product or service. The listener 30 chooses the specific product or service and the delivery method. In this scenario, the product and the delivery method may differ according to the type of product or service or may even merely comprise additional information about the product or the service referred to in the advert to which the listener 30 listened.

In the aforementioned examples, the center 60 enables the listener 30 to choose a product which he wishes to purchase through the use of a navigation tree which may also allow a brief preliminary exposure to the product (e.g. – repeat listening to a segment of the song heard earlier on the airwaves).

A third example is a scenario wherein the audio information is the information or part of a greater quantity of information, which the listener 30 wishes to receive. In this case the listener 30 then chooses the information, the format and the method by which it will be relayed to him (e.g. – a digital file sent over the Internet to an email address, a CD dispatched by post or by messenger to a physical address, etc.).

In this example, the center 60 enables the listener 30 to select the product from a list or by presenting a query to the information base.

Fig. 2 is a schematic illustration of a flow chart of the method, described hereinabove with respect to Fig. 1. In the first stage 70, the identification data (met data) of the audio information 20 broadcast by the radio station, and its broadcasting time, are fed to the computerized center 60 (see Fig. 1).
The communication interface between the radio station and the computerized center could enable real-time updating in regard to the broadcast on the radio station, real-time updating in regard to the planned time of the broadcast, as well as point-to-point transmission of content – from the radio station to the computerized center – of content (e.g. – songs, musical performances, ads, skits, etc.).

Taking a song as an example, the identification data (meta data) may include the name of the song, the song writer, the composer, the performer, the producer, the time of the commencement of the broadcast, the length of the broadcast, the recording company, etc. Similarly, taking as an example the broadcasting of content or of an advert, the meta data could include the name of a product, the name of a supplier, the time of commencement of broadcast, the duration of the broadcast, etc.

By way of example, feeding of the data could be performed by any of several communication methods, such as direct data line between the radio station and the computerized center, digital transmission from the broadcasting station, and analog transmission by the radio station (listening in on the radio frequency).

It will be appreciated by persons knowledgeable in the art that the database of songs and content of many radio stations is already computerized and automated, and that it is located on an automization server which is located at the broadcasting station enabling immediate access to the data stored therein.

Feeding of the data can include two subsidiary stages – firstly, retrieval of meta data in regard to the broadcast information at the radio station by means of a data extractor (a software program installed on the radio station’s automization server), and secondly, by the driving of the meta data from the radio station to the computerized center.
Feeding of the data can be performed using one or more of the following media — any known data transfer medium, such as a modem connection, a wireless data communication line or a communications network (WAN, LAN, etc.), use of a communications protocol (e.g. — SLDC, IP, X.25, TCP/IP, etc.), reception of an analog transmission RF from the radio station, or reception of a digital transmission from the radio station (wired or wireless).

In the second stage 80, the inquiry from the listener 30 (see Fig. 1) regarding the audio information 20 (name) is received at the computerized center 60 (name).

As aforementioned, reception of the inquiry includes the stage of identification of the listener and his classification as a listener on first access, or as a veteran listener on repeat access.

The inquiry can be received from the listener via the telephone or cell phone using tone dialing, or via voice recognition software or via the Internet using WAP, for example). In respect of a cellular phone message, additional data can be provided by the cellular network’s communications exchange regarding the listener (including the listener’s location, for example).

Returning now to Fig. 2, in the third stage 90, the inquiry is assigned at the computerized center 60 to the broadcast audio information (see Fig. 1).

The assignment means at the computerized center 60 is a software program that cross references the meta data 70 which were fed to the center, with data which was included in the listener’s inquiry. There is also an option for also having the cross referencing include a stage where more information is added regarding the audio information.
Fig. 3 is a schematic flow chart illustration of additional, optional steps of the method described hereinabove.

In step 100, at least one product is offered to the listener, same being a natural derivative of the broadcast audio information.

In step 110, a transaction is concluded with the listener involving the purchase of the product. The computerized center 60 (see Fig. 1) communicates the details and price of the order to the listener, and the listener confirms the transaction.

For example, the listener may confirm the details of the transaction by transmitting the pin number (as received by him when identified as a listener on first accessing the system). In another example – the listener confirms the details of the transaction by transmitting an identification code by cellular telephone (as provided by the cell telephone company). In another example – the listener confirms the transaction as a whole by transmitting a voice password, recognizable by voice recognition software.

In stage 120, the product is distributed. The computerized center 60 (see Fig. 1) handles the transfer of the product to the listener directly or indirectly.

An example of direct distribution can be the sending of a digital file of the song, the subject of the inquiry, directly to an Internet enabled cell-phone for listening or for redistribution of the song.

An example of indirect distribution can be the giving of an instruction to a subcontractor chosen because of his proximity to the listener (for example, based on the location data received from the cellular network provider 42– see Fig. 1a), to produce a CD containing the song the subject of the inquiry and to send it by messenger to the listener’s home. Alternatively, the product (CD) could be picked up by the listener himself.
It will be appreciated by persons knowledgeable in the art that the means of the
computerized center basically comprise a database with several interfaces which can be
planned in a routine and foreseeable manner by any programmer. Thus, for example,
reception and processing of the inquiry can be performed by means of a computerized
center 60, as described in the example in Fig. 4.

In Fig. 4, the computerized center 60 includes a central database 130 which is
divided into three main information bases – radio info 132, product info 134, and user info
138.

The radio info base 132 is fed with data 70 that arrives from the radio station 10
(one or more), and communicates with the listener’s interface 145.

The product info base 134 is fed with data 135 regarding the various products and
services which can be offered to listeners, prices, the availability of the products and the
services, etc. For example, the base can contain a subsidiary base 137 with visual promos –
audio samples – for display to the listener making an inquiry based on audio information
that was broadcast on the radio station, and/or a subsidiary base 136 containing musical
compositions for sending to the inquiring listener who heard a broadcast on a radio station
and wishes to receive a copy of the composition or of works by the same composer
(according to the data known about him and fed into on the radio info base 132).

The user info base 138 is fed with data 140 regarding the listeners. The data are
received from two interfaces – a call center 150 and a cellular interface 160, which we will
discuss below.

The call center interface 150 includes a manned call center 152 or an automatic
call center which receives the first access of a listener using the service for the first time
and records his personal details, which will enable the service interactions (as explained
above). In addition, the call center 150 makes it possible to offer additional services to callers, expands the base of potential customers (initiated customer recruitment), and enables shortening a process or converting a computerized reception process, into a personal process.

The cellular interface 160 enables receiving data 140 from a cellular communications service provider and is connected with the user verification module 170 and the purchase module 180 for identification of the listener and execution of the transactions with him, taking advantage of the listener already being a subscriber of the cellular communications service provider (who in any case, knows his identity, location and billing account).

The listener interface 145 is an interface which receives the inquiry 147 (e.g. – by tone or voice identification) and cross-references the data in the radio info base 132 and thereafter in the product info base 134 with the listener’s inquiry, in order to identify the object of the inquiry (e.g. – where a specific song was broadcast at a specific time on a specific radio station, to check its price and to offer it to the listener).

The user verification module 170 enables identification of the inquiring listener (on repeat access) and verification of the transaction on his part. The module is connected with the user interface 145 and the cellular interface 160.

The purchase module 180 enables the products and the services 134 to be displayed to the listener and for the transaction to be carried out with him. For this purpose, the module is connected to the user interface 145, the billing module 190 and the email packager 200.
The billing module 190 is connected to the purchase module 180 and enables the listener to effect payment directly to the center 60 or by charging the payment to his cell-phone account by means of the cellular interface.

The email packager 200 is connected to the purchase module 180 and the product info base 134 and enables, for example, the sending of digital music files by order over the web.

The invention was described above in the context of a specific embodiment that does not limit the scope of the invention and the protection requested in respect thereof. It will be appreciated by persons knowledgeable in the art that it possible to apply the invention in a variety of options, based mainly on its inherent software features, and these would not be regarded as falling outside the scope of the invention.
CLAIMS

1. A method for enabling the sale of products and services comprising the steps of:
   feeding a computerized center with meta data in regard to at least one
   item of audio information which is broadcast from at least one radio station, and
   the broadcasting time of the broadcast;
   said computerized center receiving an inquiry from a listener to said audio
   information being broadcast and associating said inquiry with said broadcast
   audio information based on the meta data.

2. The method according to Claim 1, further comprising the step of:
   offering at least one product to the listener, said at least one product
   including a natural derivative of said broadcast audio information.

3. The method according to Claim 2, and further comprising the step of:
   said listener purchasing said at least one product.

4. The method according to Claim 3, and further comprising the step of:
   distributing said at least one product.

5. The method according to Claim 1, where said step of feeding includes the steps
   of:
   retrieval of meta data associated with said broadcast data; and
   transmitting said meta data from the radio station to the computerized
   center.
6. The method according to Claim 5 above, wherein said meta data is retrieved from information stored on an automization server located at the radio station.

7. The method according to Claim 5, wherein said meta data is transmitted via a data transmission medium.

8. The method according to Claim 1, wherein said inquiry is sent by the listener via any of a group including a cellular phone, a PSTN and a transmitter.

9. The method according to claim 8, wherein said transmitter is a module in the radio device on which the audio information is received.

10. The method according to Claim 9, wherein said transmitter is a dedicated component.

11. The method according to Claim 1, wherein said step of receiving the inquiry includes the stage of identifying the listener as being a new listener on first access or as a veteran listener on repeat access.

12. The method according to Claim 1, wherein said inquiry is received from the listener as one of a group including a voice message recognizable by voice recognition software, a message via the Internet a message via a PSTN or cellular communications network and via the Internet through Wireless Application Protocol (WAP).

13. The method according to Claim 12, wherein, said computerized center receives data regarding the listener from the exchange of the cellular service supply network.

14. The method according to Claim 13, wherein the data includes a datum regarding the listener's location.
15. The method according to Claim 1, wherein the associating at said computerized center includes a stage of cross-referencing of the meta data with data contained in the inquiry received from the listener.

16. The method according to Claim 15, wherein said cross-referencing further comprising the step of adding additional information regarding said audio information.

17. A system enabling the sale of products and services comprising:

   a computerized center facility for receiving meta data in regard to at least one item of audio information which is broadcast from at least one radio station, and the broadcasting time of the broadcast;

   means for receiving an inquiry from a listener for the audio information at the computerized center; and

   means for associating said inquiry with the broadcast audio information at the computerized center.