Method and apparatus for multi-purpose use of a gaming machine includes use of a secondary display area to effectuate delivery of special capabilities such as user interfaces for banking, self-provisioning, Internet browsing, award redemption, player tracking account administration, and on-line shopping. In one embodiment, a touch screen is used to activate menu selections, in another embodiment, a physical keyboard is provided. In other embodiments, interfaces to mobile telephone and personal digital assistant technologies are provided.
FIG. 1
FIG. 4B

BANK ACCOUNT MANAGEMENT

VIEW BALANCES
TRANSFER FUNDS
BILL PAYMENT

FIG. 4C

PLAYER TRACKING
ACCOUNT MANAGEMENT

VIEW CURRENT BALANCE
VIEW AWARD BALANCE
AWARDS
FIG. 4D

MANAGE CREDITS

TRANSFER CREDITS TO AN ACCOUNT
SPEND CREDITS ON MERCHANDISE
APPLY CREDITS TO A BONUS ROUND
TRANSFER CREDITS TO CARD

FIG. 4E

ON-LINE STORE

SHOP STORES
SHOP CATEGORIES
SHOP SOUVENIRS
SELF-PROVISIONING/CONFIGURABLE MACHINE

CUSTOMIZE PARAMETERS
SET PREFERENCES

MOBILE PHONE INTERFACE
PLACE CALL TO MOBIL OR OTHER PHONES
CAPTURE PICTURE/SCREEN SHOTS
SEND IMAGES
TEXT MESSAGING

FIG. 4F

FIG. 4G
PERSONAL DIGITAL ASSISTANCE INTERFACE

SEND/VIEW E-MAIL
ADD/VIEW CALENDAR

FIG. 4H

GAME RESERVATION INTERFACE

FIND GAME
RESERVE GAME
REQUEST NOTIFICATION OF OPEN GAME

FIG. 4I
FIG. 5A

SECONDARY GAME
WAGERING GAME

KENO
SPORTS BETTING

230

FIG. 5B

SECONDARY GAME
NON-WAGERING GAME

VIDEO GAME

230
FIG. 6C
SYSTEMS AND METHODS FOR MULTIPURPOSE USE OF A GAMING MACHINE

RELATED APPLICATIONS

[0001] This application claims priority under 35 U.S.C. 119(e) from U.S. Provisional Application Ser. No. 60/697, 197 filed Jul. 7, 2005, which application is incorporated herein by reference.

TECHNICAL FIELD

[0002] This inventive subject matter relates generally to the gaming industry, and more particularly to methods and systems for using gaming machines for purposes other than gaming.

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IN THE DRAWINGS

[0004] FIG. 1 illustrates an example embodiment of a computer system or network used in connection with gaming machines.

[0005] FIG. 2 illustrates an example embodiment of a gaming machine.

[0006] FIG. 3 illustrates an example embodiment of a secondary display in a gaming machine including, for example, a user interface.

[0007] FIGS. 4A, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I illustrate a number of example embodiments of user interfaces or other content in a secondary display area.

[0008] FIGS. 5A and 5B illustrate additional example embodiments of uses of a secondary display area.

[0009] FIGS. 6A, 6B and 6C illustrate additional alternate embodiments including browser capabilities and keyboard entry capabilities.

DETAILED DESCRIPTION

[0010] In the following detailed description, reference is made to the accompanying drawings which form a part hereof, and in which are shown by way of illustration specific embodiments in which the inventive subject matter can be practiced. It is understood that other embodiments may be utilized and structural changes may be made without departing from the scope of the present invention. The leading digit(s) of reference numbers appearing in the Figures generally corresponds to the Figure number in which that component is first introduced, such that the same reference number is used throughout to refer to an identical component which appears in multiple Figures. Signals and connections may be referred to by the same reference number or label, and the actual meaning will be clear from its use in the context of the description.

[0011] Referring now to FIG. 1, there is illustrated in block diagram form a system 100 deployed at least in part in a gaming establishment 110. System 100 includes a plurality of gaming machines 120 communicating with one or more fulfillment systems 130, one or more gaming control systems 140, one or more player tracking systems 150, and a public or private wide area network 160, such as the public Internet. Gaming machines 120 may communicate with systems 130 and 140 through one or more wireless links or connections, or line connections, for example fiber optic, copper or other physical carrier media.

[0012] Referring now to FIG. 2, there is illustrated one example embodiment of a gaming machine 120. FIG. 2 is a perspective view of a wagering game machine, according to exemplary embodiments of the inventive subject matter disclosed herein. As shown in FIG. 2, the wagering game machine 120 can be a computerized slot machine having the controls, displays, and features of a conventional slot machine. The wagering game machine 120 can be operated while players are standing or seated. Additionally, the wagering game machine 120 is preferably mounted on a stand (not shown). However, it should be appreciated that the wagering game machine 120 can be constructed as a pub-style tabletop game (not shown), which a player can operate while sitting. Furthermore, the wagering game machine 120 can be constructed with varying cabinet and display designs. The wagering game machine 120 can incorporate any primary game such as slots, poker, or keno, and additional bonus round games. The symbols and indicia used on and in the wagering game machine 120 can take a mechanical, electrical, or video form.

[0013] As illustrated in FIG. 2, the wagering game machine 120 includes a coin slot 202 and bill acceptor 224. Players can place coins in the coin slot 202 and paper money or ticket vouchers in the bill acceptor 224. Other devices can be used for accepting payment. For example, credit/debit card readers/validators can be used for accepting payment. Additionally, the wagering game machine 120 can perform electronic funds transfers and financial transfers to procure monies from financial accounts. When a player inserts money in the wagering game machine 120, a number of credits corresponding to the amount deposited are shown in a credit display 206. After depositing the appropriate amount of money, a player can begin playing the game by pushing the play button 208. The play button 208 can be any play activator used for starting a wagering game or sequence of events in the wagering game machine 120.

[0014] As shown in FIG. 2, the wagering game machine 120 also includes a bet display 212 and a “bet one” button 216. The player places a bet by pushing the bet one button 216. The player can increase the bet by one credit each time the player pushes the bet one button 216. When the player pushes the bet one button 216, the number of credits shown in the credit display 206 decreases by one credit, while the number of credits shown in the bet display 212 increases by one credit.

[0015] A player may “cash out” by pressing a cash out button 218. When a player cashes out, the wagering game machine 120 dispenses a voucher or currency corresponding to the number of remaining credits. The wagering game machine 120 may employ other payout mechanisms such as
credit slips (which are redeemable by a cashier) or electronically recordable cards (which track player credits), or electronic funds transfer.

[0016] The wagering game machine may also include a primary display unit 204 and a secondary display unit 210 (also known as a “top box”). The wagering game machine may also include an auxiliary video display 230. In one embodiment, the primary display unit 204 displays a plurality of video reels 220. According to embodiments of the invention, the display units 204 and 210 can include any visual representation or exhibition, including moving physical objects (e.g., mechanical reels and wheels), dynamic lighting, and video images. In one embodiment, each reel 220 includes a plurality of symbols such as bells, hearts, fruits, numbers, letters, bars or other images, which correspond to a theme associated with the wagering 10 game machine 120. Furthermore, as shown in FIG. 2, the wagering game machine 120 includes an audio presentation unit 128. The audio presentation unit 128 can include audio speakers or other suitable sound projection devices.

[0017] Referring now to FIG. 3, there is illustrated an embodiment 300 of the machine of FIG. 2, wherein the display 230 may include a touch screen activation feature, and is used to provide a visual user interface 310 to offer merchandise or services to players in the gaming establishment in which the machine 120 is placed.

[0018] For example, as illustrated in FIG. 4A, the interface 310 may provide automated teller machine interface 410, including viewing current balance(s), transfers, or cash withdrawals.

[0019] As shown in FIG. 4B, the interface 310 may be adapted for bank account management 420, including viewing current balance(s) or to make electronic payment on the bill from another source of funds.

[0020] As shown in FIG. 4C, the interface may be used for player tracking account management 430, such as viewing awards balances, redeeming awards on perks, merchandise or services.

[0021] And as shown in FIG. 4D this is illustrated as interface 440 for credit management. For example, directing payouts or credits on the machine to an account, such as an account maintained for the player at the gaming establishment, or the player’s bank or credit card accounts, or spending the payout credits on 30 merchandise or services offered by the gaming establishment, its partners or other vendors, or choosing to spend payout credits in a bonus round played on the machine, or placing the credits on a player’s card or other cash card. In another example embodiment, the interface may allow a player to transfer credits on the machine 120 to a player tracking card.

[0022] As shown in FIG. 4E, the interface 310 may provide an on-line store interface 450, for example implemented as a web interface, where the player can spend credits won on the machine or otherwise available to them, on services or merchandise offered by the gaming establishment, or others. In one exemplary embodiment, the player may be offered special merchandise from the gaming establishment, such as souvenirs. In another example embodiment, the interface offers the player an opportunity to obtain benefits from the hotel in which the player is staying, such as tickets, hotel spa services such as a message or facial, dining options, shows, special promotions, room upgrades. According to still another example embodiment, credits may be used to upgrade a flight reservation, for example to business or first class. Further, any merchandise ordered can be delivered to a player in his or her room, or care of the hotel they are staying in. Alternatively, any merchandise that is ordered may be delivered to any specified location, such as the player’s home address.

[0023] According to still another embodiment shown in FIG. 4F, there is provided an interface 460 allowing self-provisioning capability for use of a gaming machine, for example to set customizable parameters, wherein the provisioning is accomplished, for instance in one embodiment, using a web interface available through the world-wide-web, or through an intranet within a hotel, with the web provisioning interface available on a hotel television or monitor.

[0024] According to still another embodiment illustrated in FIG. 4G, there is illustrated an interface 470, wherein the interface provides for interacting with one or more mobile telephone or personal digital assistant features, such as placing calls to other telephones or mobile telephones, text messaging with mobile phone users, for example friends also in or near the gaming establishment, capturing video images of the player, or of the gaming machine, for example to show a winning combination, and sending those images to other mobile phone users or to e-mail addresses, or to generate alarms or reminders. According to still another embodiment, there is provided an earpiece or headset that includes a wireless interface such as a Blue Tooth interface, with the gaming machine 120, to effectuate telephone calls or receive telephone calls.

[0025] According to one embodiment illustrated in FIG. 4H, an interface 480 provides for display of data from a personal digital assistant (PDA) device, such as e-mail from the PDA. Such e-mail may be sent to the gaming machine interface using, for example, a wireless or infrared connection, for example using a Blue Tooth interface. According to another embodiment, the gaming machine may be configured to require a user to keep playing the machine at a designated pace in order to keep using the secondary display.

[0026] According to still another example embodiment shown in FIG. 4I, an interface 490 allows a user to reserve another gaming machine. For example, the interface may display a map of the gaming establishment floor and the types of machines available, and allow a user to reserve a particular machine. Such reservation may have a time limit, such as for five minutes, or a longer period for more preferred patrons. Alternatively, the interface 490 may allow that a user can identify a gaming machine and obtain an alert directed to their mobile phone or a PDA, for example in the form of a phone call, a text message, or an e-mail, or other form of electronic notice.

[0027] According to still further example embodiments, the interface may be used to enable a player to send any credits on the machine to any third party vendor, for example through a web interface, or spend promotional credits awarded to the player (on the machine or held in an account or on a player card) at participating Internet vendors, using the credits as a form of electronic payment. Alternatively, in another embodiment, the player may use the interface to direct his credits to be deposited in a bank and gain interest overnight, or for some other specified period of time. In
another example embodiment, the player is offered an opportunity to donate his or her winnings or credits to a non-profit or charitable organization. In another embodiment, the services offered the player through the interface include transferring credits or balances to relatives, or paying bills, trading stocks or obtaining medical services.

[0028] According to another example embodiment, some of the offerings and capabilities described above (or below) may be based, for example, according to the time of day, player, location, season, amount of time the player has spent playing on the machine, the size of wager, or time on device and total wagers on the machine.

[0029] Referring now to FIG. 5A, there is illustrated an alternative embodiment wherein a secondary wagering game is offered on display 230 in conjunction with the primary game, in this case a reel slot machine. Using the secondary game, players may make wagers on side games, such as Keno or sports bets that may be monitored by ticker tape display. According to still another embodiment shown in FIG. 5B, the secondary display 230 offers the opportunity to play non-wagering games, such as video games, for instance, the Mario™ video games or sports games available from Electronic Arts™.

[0030] Referring now to FIGS. 6A to 6C, there is shown a number of different interface configurations that may be used according to the inventive subject matter disclosed herein. As shown in embodiment 600 in FIG. 6A, the primary gaming display unit 204 may be a flat panel display or monitor, and a small portion or window in the display 204 may be used as a browser 610 to display web pages and allow players to surf the Internet while playing the gaming machine. The game display, such a display simulating spinning reels, may be reduced (shrunken) in size 20 manually or dynamically. According to another embodiment the browser may be provided in the display 230 of the machine.

[0031] Referring to FIG. 6B, there is illustrated a first example embodiment of a keyboard (or keypad) 630 that is in the form of a touch screen at, for example, the bottom of the display area 204, underneath the browser. Or, the touch screen keyboard may be implemented in display area 230. In another embodiment shown in FIG. 6C, a mechanical keyboard (including a roller ball for cursor control) 640 is provided, and may, for example, be mounted to slide or fold out of the gaming machine, or otherwise be stowed when not in use. Alternatively, the roller ball or other cursor control device is mounted permanently on the gaming machine and is not part of the keyboard. According to still another example embodiment, there is provided a fold out monitor to provide the secondary display, or there is provided a fold out keyboard, wherein each may be adapted to fold out or around from the side of the gaming machine on which it is mounted. The keyboards described above, in one example embodiment, are QWERTY keyboards or substantially the same type of keyboard layout.

[0032] According to yet another example embodiment, the player may configure the gaming machine to display or not display an interface used to surf the web or obtain services or merchandise.

[0033] According to another example embodiment, the secondary displays may be liquid crystal displays (such as a transmissive display), cathode ray tube displays, plasma displays, or any other type of display. The secondary display may be smaller than the primary display, or larger. If the secondary interface is displayed on the primary display used for the gaming experience, then the interface may be displayed in a small window on the primary gaming display, or the interface may be configured to “pop-up” upon demand by the player, or in response to an event, such as a message sent to the player or a phone call coming in to the player on the machine. The pop-up interface could be implemented as a portion of the display area, leaving the gaming display and operation in progress but reduced to a smaller area of the display than normal. In one embodiment, the interface may be disabled by a player. In another embodiment, the interface may provide a touch screen activated menu or keyboard to enable player interaction. In still another example embodiment, there are provided dynamic menus based on favorite choices made by the player in the past, or the menu arrangement is customized according to a player profile. In another embodiment, there is provided a cascaded menu button arrangement. In another embodiment, the menu is provided with interactive questions that target the player’s needs through a question and answer format.

[0034] For some embodiments, an interface configuration includes a pop-up image, displaying a game such as, in one embodiment, a slot game. If a player wins the slot game, the player is eligible to receive a free drink, a food coupon, comp points or other good or service. For some embodiments, the game is a player to player game.

[0035] According to still another embodiment, the reel symbol display area may be used to display information to a user, such as a message. In another embodiment, the interface is voice enabled, so as to be able to make voice requests to a player and respond to voice commands from a player to enable interaction with auxiliary services such as those noted above. In another embodiment, the secondary display or yet another display, there may be shown a live video attendant such that the player can interact with the live attendant using an audio communication interface, such as a telephone connection. In an embodiment with voice recognition, the voice recognition may be customized per information obtained from a player’s PDA, which may save the player’s voice signature and transfer it to the gaming machine for use in recognizing the player.

[0036] According to still another example embodiment, the interface may provide a help menu including frequently asked questions (FAQ’s). Such information or other information may also be physically bound in printed form and attached to a gaming machine. According to another embodiment, a PDA may obtain a software or information download from a gaming machine. Such software may include help/FAQ for the gaming machine, or may include a gaming program operable on the PDA to simulate the play of the gaming machine, allowing the user to enjoy a simulated gaming experience. Alternately, the downloaded software may allow the user to continue gaming on the PDA, using credits transferred from the gaming machine to the PDA or other portable computing device. In such a use, there may be provided a PDA holster or place to stow the PDA on the gaming machine, such that the PDA can then be interfaced by cable, connector or Blue Tooth.

[0037] Thus there has been described above method and apparatus for multipurpose use of a gaming machine.
1. A method comprising:
   playing a wagering game on a gaming machine using a
gaming display area; and
   using a secondary display area on the gaming machine to
perform one or more activities selected from the group:
   browsing the Internet, placing telephone calls, receiving
   telephone calls, displaying e-mail, sending e-mail,
   performing financial transactions, arranging hospitality
   services, and arranging travel services.

2. A method according to claim 1 further including
   interacting with the secondary display area using a touch
   screen.

3. A method according to claim 1 further including
   interacting with the secondary display using a physical
   keyboard.

4. Apparatus comprising:
   a wagering game executed on a gaming machine including
   a gaming display area; and
   a secondary display area on the gaming machine adapted
   to enable a user to perform one or more activities
   selected from the group: browsing the Internet, placing
   telephone calls, receiving telephone calls, displaying
   e-mail, sending e-mail, performing financial transac-
   tions, arranging hospitality services, and arranging
   travel services.

5. Apparatus according to claim 4 further including
   the secondary display area adapted with a touch screen.

6. Apparatus according to claim 4 further including a
   physical keyboard.

7. The method of claim 1, further comprising:
   using a secondary display area on the gaming machine to
   play a non-wagering video game.

8. The method of claim 1, further comprising:
   performing financial transactions on a secondary display
   area on the gaming machine including one or more
   transactions selected from the group: directing payoffs
   or credits on the machine to an account, spending
   payouts or credits on merchandise or services, and
   transferring credits to a player card.

9. The apparatus of claim 4, further comprising:
   a keyboard adapted to permit a user to interact with or
   enter information into the user interface.

10. The apparatus according to claim 9 wherein the
    keyboard is a touch screen activated video display keyboard.

11. The apparatus according to claim 10 wherein the
    keyboard is a physical keyboard.

12. Apparatus comprising:
   a wagering gaming device including a computing device;
   a wireless interface adapted to communicate with the
   computing device; and
   one or more software components executable on the
   computing device and adapted to receive information
   from an external device and to cause the display of all
   or part of the information received.

13. Apparatus according to claim 12 further including
    receiving e-mail information through the wireless interface.

14. Apparatus according to claim 12 further including
    receiving telephone call information through the wireless
    interface.

15. A method comprising:
   playing a wagering game on a gaming machine;
   downloading software from the wagering game to a
   portable computing device, wherein the software is
   adapted to enable the play of a wagering game on the
   portable computing device.

16. The method according to claim 15 wherein the wager-
    ing game enabled by the downloaded software is similar to
    the wagering game on the gaming machine.

17. The method according to claim 15 further including
    transferring credits from the gaming machine to the portable
    computing device.

18. The method according to claim 15, further comprising:
    a player interacting with the gaming machine using a voice
    activated interface with voice recognition.

19. The method according to claim 18 further including
    downloading a voice signature to the wagering game to
    enable the wagering game to recognize a player's voice.

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