TITLE OF INVENTION:

[0002] Method for accepting payment information on the web using an interactive voice response system - Checkout with SecurePaybyPhone

FIELD OF THE INVENTION:

[0003] The invention relates to ***credit/debit card*** products and to systems and methods where customers use the website to purchase products/services. The invention relates to systems and methods for quickly enabling the users an alternate way of paying through a credit/debit card using an *Interactive voice response (IVR)* system redirected from the web page ***(Checkout with SecurePaybyPhone)*** from payment portion of the checkout page, rather than the conventional way of entering through the web page.

BACKGROUND OF THE INVENTION:

[0004] Today if a customer needs to purchase an item from the website, they need to enter their credit/debit card information on the web. Once the customer enters the card number, expiry date…etc their information is sent to a Credit Card association or a third party system that approves/disapproves the order.

[0005] We believe that there are a considerable number of individuals who are very tentative or skeptical about providing sensitive information over the web. Our software will provide them an alternate way to dial our number and instantly give their personal information, which will be linked to their purchase.

[0006] The way our system will work is when the user selects the option to pay via IVR, they get a window in the website which consists of a number to call and a PASSCODE to enter. The PASSCODE is tied to their shopping cart. Once the user calls the IVR, they are prompted to enter their PASSCODE.

[0007] Once they enter their PASSCODE, the system instantaneously retrieves their name, address, shopping card details and the total amount due. Once they confirm the

purchase order, they will be prompted to enter their credit/debit card information. Since the users are accustomed to using the phone, they feel comfortable and our encrypted system provides all the security that they wanted to collect and transmit their credit/debit card information.

[0008] Once the credit/debit card information is collected, the data will be electronically (Encrypted) passed to the Credit Card association or any third party system to approve/disapprove their order.
After the verification process the user will be notified if they were approved or have been disapproved. They will also get a confirmation as to what they have purchased and paid for.

[0009] A notification email will also be sent to them with the confirmation details.

1. Client web page will display IVR as a Payment option.
2. Users will be able to select IVR as an payment option and get redirected to phone payment gateway webpage. (PPGW)
3. Phone payment gateway webpage should display
    a. The IVR number to call.
    b. PASSCODE for the user to enter once they call the IVR.
    c. PASSCODE receive message
    d. Confirm Shopping Cart Item list & Payment details
    e. Confirm Personal information
    f. Confirm Credit/debit card information
    g. Optional - When call is dropped just before verification step
        i. Your information except Credit/debit card is stored, retry by calling the <800 number> with <PASSCODE>
        ii. This step is common to any data collection prior to verification.
    h. Optional - When call is dropped after verification
        i. Your call was disconnected during verification; we shall send you a confirmation email on the status.
    i. Verification Status bar
    j. Confirm Payment completed/Verification Status failed
        i. If Verification Status failed, two option are displayed

1. Use other payment options in the <Client's> website for purchasing your product.

ii. If Verification Status passed, do nothing.

k. Purchase Completed Status and redirecting to Client web site.

4. Each client will have a separate IVR number to call (ANI).
5. PASSCODE will be a system generated phrase (must be secure), which will be unique and will be tied to the client.
6. PASSCODE
   a. will be 9 digit numbers.
   b. will expire in 3 minutes or depending on Client configuration.
   c. Count down time is started, on elapse, redirect the web page to clients shopping cart.
   d. will be recycled.
   e. If user leaves the page and returns, new PASSCODE will be generated.
7. Once the user enters the PASSCODE in the IVR, the system will update point 3a on PPGW with a Tick mark.
8. On each stage of collecting customer information, appropriate message in step 3 is updated with a Tick mark.
9. Any failure that happens during the call either at customer end or at our end
   a. When a major failure such as a system failure occurs (at Thought Frameworks end), then after specified time, PPGW will redirect to Client's website.
   b. When a minor failure occurs such as a
      i. API failure – API retries the service call twice, if it fails, then update step 3j – "use other payment options in the <Client's> website for purchasing your product."
      ii. Phone call dropped just before verification step
         1. Your information except Credit/debit card is stored, retry by calling the <800 number> with <PASSCODE> is displayed in step 3g
   c. When the user returns, new PASSCODE will be generated.
10. Once the payment has been processed in the IVR, the system will update point 3j & 3k with Tick mark.
11. IVR will play the Summary Information (Confirmation number, Amount, etc)

IVR disconnects

[0010] We strongly believe that there are many potential customers who do not complete their transaction just because they are not comfortable giving their information over the web.

SUMMARY OF THE INVENTION:

[0011] Alternative method of paying through a credit/debit card using an ***Interactive voice response*** system rather than the conventional way of entering in the web portal. A system and method for paying by a ***credit/debit card,*** preferably at a point of sale (Website), is disclosed. The system employs an automated interactive ***voice response*** system preferably sponsored by client (Website owner). The user calls into the system using a standard telephone/mobile phone, and enters ***credit/debit*** payment information about the customer using the key pad of the telephone/mobile phone in ***response*** to verbal questions posed by the system. In one embodiment, only numeric information concerning the customer is entered, such as the customer's credit/debit card number, expiry date…etc. This ***credit/debit*** card payment information is used to approve/decline via Credit Card association or a third party vendor who specializes in credit/debit card payment processing, which is used by the system to electronically decide whether to proceed with the order or not. The system verbally provides information to the user regarding the ***results of credit/debit card validation,*** so that the customer's ***credit/debit*** purchase can be quickly completed. The system requires slight modification to existing point of sales system (Website) where there will be an option for the customers to select IVR as the payment.

BRIEF DESCRIPTION OF THE DRAWINGS:

1. FIG. 1 is a flowchart showing the first message the user will hear when they call the toll free number
2. FIG. 2 – is a flowchart showing the passcode collection from the user
3. FIG. 3 – is a flowchart showing the selection of the type of credit/debit card by the user
4. FIG. 4 - is a flowchart showing the collection of credit/debit card number entered by the user
5. FIG. 5 – is a flowchart showing the collection of credit/debit card expiry date entered by the user

6. FIG. 6 – is a flowchart showing collection of credit/debit card security code entered by the user
7. FIG. 7 – is a flowchart showing the confirmation made by the user with respect to their shopping cart total amount, name, address and credit/debit card details
8. FIG. 8 – is a flowchart showing the system verifying the credit/debit card details through a third party system
9. FIG. 9 – is a flowchart showing the summary information played to the user upon a successful transaction
10. FIG. 10 – is a flowchart showing how a call gets disconnected
11. FIG. 11 – is a wireframe showing “Check out with SecurePayByPhone” as a payment option
12. FIG. 12 – is a wireframe showing the toll free number to call and the passcode to enter during the call
13. FIG. 13 – is a wireframe showing the progress which the user made over the phone
14. FIG. 14 – is a wireframe showing the summary information after a successful transaction
15. FIG. 15 – is a wireframe showing that the user has ended the call while payment verification was in progress
16. FIG. 16 – is a wireframe showing the options available to the user after an unsuccessful transaction
17. FIG. 17 – is a wireframe showing that the user has ended the call before the verification stage
18. FIG. 18 – is a wireframe showing the “Check out with SecurePayByPhone” option that will be displayed on the checkout portion of ecommerce websites
19. FIG. 19 – is a wireframe showing other possible check out options which might be displayed on the checkout portion of ecommerce websites
20. FIG. 20 – is a table showing all the voice prompts that will be played over the phone
21. FIG. 21 – is a flowchart showing the summary of overall system

DETAILED DESCRIPTION OF THE INVENTION:

[0012] Interactive voice response (IVR) ***(Checkout with SecurePaybyPhone)*** as payment option:

1. FIG. 11 – is a wireframe showing “Check out with SecurePayByPhone” as a payment option. Customer selects the items they planned to purchase and adds them into the shopping cart. When they are ready to buy, they fill out their name and address at checkout as shown in Step 2101, in FIG. 21. Now they will be presented with multiple common payment options like Check out with

BillMeLater, Check out with PayPal, Google Checkout, Checkout with eBillme, Checkout with Amazon and Pay by Credit / Debit Card directly from Vendor's website like Visa, MasterCard, American Express Cards, Discover, Dinners Club international, JCB, etc.

2. Once they choose to pay by credit/debit card they will be presented with an option to enter their credit/debit card information through web or ***IVR (Checkout with SecurePaybyPhone) (The one that we are claiming)*** as shown in Step 2102, in FIG. 21
3. FIG. 11 – is a wireframe showing "Check out with SecurePayByPhone" as a payment option. When the user chooses IVR as the payment option on the web user clicks on ***checkout with SecurePaybyPhone*** as shown in Step 2103, in FIG. 21
4. FIG. 12 – is a wireframe showing the toll free number to call and the passcode to enter during the call. A new window will be displayed with the phone number to call and a PASSCODE that they can enter which is tied to their shopping cart.
5. FIG. 13 – is a wireframe showing the progress which the user made over the phone. Once the user enters a valid PASSCODE on the IVR, the window with the phone number and PASSCODE will be closed and a new window will appear with a list of actions that the user has to perform/enter in the IVR. Once the user enters or goes through the steps in the IVR the items in the window will be marked with a check mark. This will give the user an interactive experience through the IVR and the web at the same time as shown in Step 2108, in FIG. 21.
6. As soon as the caller dials the phone number, they will be prompted by the IVR to enter their PASSCODE as in FIG. 2
7. The PASSCODE will be all digits. The caller will be re-prompted to enter the PASSCODE if it does not match the minimum number of digits or if it is not all digits as in FIG. 2.
8. If the user maxed out the limit for entering the PASSCODE (3), they will be prompted with a goodbye message and the system disconnects as in FIG. 2
9. Once a valid PASSCODE is entered the system will call the validation service to validate the PASSCODE as in FIG. 2. In Step 2106, in FIG. 21, If the PASSCODE is valid, it will retrieve the shopping cart details and stores it so that the user can confirm the order towards the end of the process. The system also

retrieves the caller name and address information that they entered on the website and stores it to verify the credit/debit card information towards the end.

10. The system will send a response to the progress window on the website to indicate that the user has successfully entered the PASSCODE as shown in FIG. 2 & in Step 2108, in FIG. 21.
11. FIG. 3 – is a flowchart showing the selection of the type of credit/debit card by the user. Now the user will be prompted to choose from a list of card types (Master card, press 1, Visa, press 2…etc).
12. The entry for choosing card type will be all digits. The caller will be re-prompted to enter the option for card type if it does not match the minimum number of digits or if it is not all digits as shown in FIG. 3
13. If the user maxed out the number of tries to enter the option for card type (3) they will be prompted with a goodbye message and the system disconnects as shown in FIG. 3.
14. The system will send a response to the progress window on the website to indicate that the user has successfully entered the card type as shown in FIG. 3.
15. FIG. 4 - is a flowchart showing the collection of credit/debit card number entered by the user. Now the user will be prompted to enter their credit/debit card number as shown in Step 2107, in FIG. 21
16. The credit/debit card number will be all digits. The caller will be re-prompted to enter the card number if it does not match the minimum number of digits or if it is not all digits as shown in FIG. 4.
17. The system also does the MOD10 check for the card number that the user entered as in FIG. 4.
18. If the user does not enter a valid credit/debit card number and maxed out the total tries (3) the system will send a response to the progress window on the website as shown in Step 2108, in FIG. 21 to indicate that the user was unsuccessful in entering the card number, they will be prompted with a goodbye message and the system disconnects as shown in FIG. 4.
19. Now the system confirms the card number that the user entered by reading it back. It will prompt the user to select 1-Yes or 2-No as in FIG. 4.
20. If the user enters 2-No, then the system gives another attempt to input the card number (Max 3). If the user selects 2-No on the 3rd attempt the system will send a response to the progress window on the website as shown in Step 2108, in FIG.

21 to indicate that the user was unsuccessful in entering the card number. The user will be prompted with a goodbye message and the system disconnects as shown in FIG. 4.

21. If the user entered 1-Yes, the system will send a response to the progress window on the website to indicate that the user has successfully entered the Card number as shown in FIG. 4.
22. FIG. 5 – is a flowchart showing the collection of credit/debit card expiry date entered by the user. Now the system prompts the user for the expiry date. The minimum number of digits will be 3 and the maximum number of digits will be 8 (example: 115, 9212 09015, 9052055…etc). The system will make sure that the date is a future date.
23. The date will be all digits. The caller will be re-prompted to enter the date if it does not match the minimum number of digits or if it is not all digits as shown in FIG. 5.
24. If the user maxed out the number of tries to enter the date (3) the system will send a response to the progress window on the website as shown in Step 2108, in FIG. 21 to indicate that the user was unsuccessful in entering the expiry date, they will be prompted with a goodbye message and the system disconnects as shown in FIG. 5.
25. Now the system confirms the expiry date that the user entered by reading it back as month, day and year. It will prompt the user to select 1-Yes or 2-No as shown in FIG. 5.
26. If the user enters 2-No, then the system gives another attempt to input the expiry date (Max 3). If the user selects 2-No on the 3rd attempt the system will send a response to the progress window on the website as shown in Step 2108, in FIG. 21 to indicate that the user was unsuccessful in entering the expiry date. The user will be prompted with a goodbye message and the system disconnects as shown in FIG. 5.
27. If the user enters 1-Yes, the system will send a response to the progress window on the website to indicate that the user has successfully entered the expiry date as shown in FIG. 5.
28. The caller will be prompted to enter the three digit security code in the back of the card as shown in FIG. 6.

29. The entry for the three digit security code will be all digits. The caller will be re-prompted to enter the three digit security code if it does not match the minimum number of digits or if it is not all digits as shown in FIG. 6.
30. If the user maxed out the number of tries to enter the three digit security code (3) the system will send a response to the progress window on the website as shown in Step 2108, in FIG. 21 to indicate that the user was unsuccessful in entering the 3 digit security code, they will be prompted with a goodbye message and the system disconnects as shown in FIG. 6.
31. Now the system confirms the 3 digit security code that the user entered by reading it back. It will prompt the user to select 1-Yes or 2-No as shown in FIG. 6.
32. If the user enters 2-No, then the system gives another attempt to input the security code (Max 3). If the user selects 2-No on the 3rd attempt the system will send a response to the progress window on the website as shown in Step 2108, in FIG. 21 to indicate that the user was unsuccessful in entering the 3 digit security code. The user will be prompted with a goodbye message and the system disconnects as in FIG. 6.
33. If the user entered 1-Yes, the system will send a response to the progress window on the website to indicate that the user has successfully entered the three digit security code as in FIG. 6.
34. FIG. 7 – is a flowchart showing the confirmation made by the user with respect to their shopping cart total amount, name, address and credit/debit card details. The caller will be played a summary of the shopping card details with the total amount to be charged, the credit/debit card number, name and the billing address. They will be prompted to choose Yes, press 1 or No, press 2 for confirmation
35. The entry for the confirmation will be all digits. The caller will be re-prompted to enter their confirmation if it does not match the minimum number of digits or if it is not all digits as shown in FIG. 7.
36. If the user maxed out the number of confirmation attempts (3) they will be prompted with a goodbye message and the system disconnects as shown in FIG. 7.
    a) If the user presses 2-No, the system will prompt user with the message to update the name and/or address on the website, select IVR as an option and call back, Thank you and good bye. The system will update the progress window and redirect them to the payment details webpage.

b) If the user presses 1-Yes, the system will send a response to the progress window on the website to indicate that the user has confirmed the purchase and the system is currently verifying the credit/debit card information.

37. FIG. 8 – is a flowchart showing the system verifying the credit/debit card details through a third party system. Now the system sends callers name, address, credit/debit card number, expiry date, three digit security code, total amount to be charged to the credit/debit card and card type to a Credit Card association or a third party system to get approval for the purchase.

38. Once the system gets the result from the verification service, the user will be prompted in two different ways depending on the results as shown in FIG. 8.

a) If the result was a SUCCESS, meaning the purchase was approved, they will be played a prompt indicating that their purchase was successful. The users will then hear a confirmation number and summary details.

The system will send a response to the progress window on the website as shown in Step 2110, in FIG. 21 to indicate that the user has been approved for the purchase and the window will display the confirmation number and the summary details as shown in FIG. 14.

b) If the result was a FAILURE, meaning they were declined for the purchase, then they will be prompted that the purchase was unsuccessful. The user will be presented with two option(s)

i. To use a different credit/debit card, press 1

ii. To use a different payment method, press 2

i. If the user selects (In the IVR) to use a 1-different credit/debit card, the user will be prompted with two more option(s)

1) To use a different credit/debit card with the same name and billing address, press 1

2) To use a different credit/debit card with a different name and/or billing address, press 2

- The entry for the option will be all digits. The caller will be re-prompted to enter their option if it does not match the minimum number of digits or if it is not all digits.

- If the user maxed out the number of option attempts (3) they will be prompted with a goodbye message and the system disconnects

1) If the user selects (On the IVR) to choose a 1-different credit/debit card with the same name and billing address then the IVR will prompt them with a message asking them to enter the new credit/debit card number, expiry date, security code…etc and follow the same procedure as the 1st attempt.
2) If the user selects (On the IVR) to choose a 2-different credit/debit card with different name and/or billing address then the system prompts the user to go to the section in the website where they can enter their name and address (The web page would have automatically re-directed to the appropriate section at this point of time). Once completed they can choose to pay through IVR again and they will be presented with the number and PASSCODE.

ii. If the user selects (On the IVR) a 2-different payment method, then the system prompts the user to go to the payment method section on the website to choose their desired payment method (The web page would have automatically re-directed to the appropriate section at this point of time). The users will not have the option to pay by IVR from this point on. The System disconnects.

39. The system will send a response to the progress window on the website to indicate that the user has been declined for the purchase as shown in FIG. 8 & as in Step 2109, in FIG. 21. They will be presented with the option(s) as shown in FIG. 16:
    a) To use a different credit/debit card with the same billing address and name
    b) To use a different credit/debit card with different billing address and/or name
    c) To use a different payment method altogether
40. If the user selects (On the web) to choose a different credit/debit card with the same billing address and name then the user will be presented with a new

window with the phone number to call and a new PASSCODE to enter as shown in FIG. 8.

41. If the user selects (On the web) to choose a different credit/debit card with different billing address and/or name then the user will be taken to the section in the website where they can enter their name and address as shown in FIG. 11. Once completed they can choose to pay through IVR again and they will be presented with the number and PASSCODE.
42. If the user chooses a different payment method, they will be taken to the payment method section on the website to choose their desired payment method. The users will not have the option to pay by IVR from this point on.
43. FIG. 9 – is a flowchart showing the summary information played to the user upon a successful transaction. The summary message comprises of the order summary. Once the order summary has finished playing the user will be notified that they will also be getting a confirmation email with the confirmation number and summary details. Then the system disconnects as shown in FIG. 10.

WHAT IS CLAIMED IS:

1. A method of paying for a shopping cart created at a merchant web site using an automated interactive voice response system, the method comprising:

storing a plurality of items in the shopping cart associated with a user at the merchant web site;

receiving at the merchant web site a request from the user to pay for the plurality of items in the shopping cart using a telephone/mobile phone;

in response to receiving the request, generating a passcode associated with the shopping cart and creating a first web-page which includes a toll-free/local number for the user to call using the telephone/mobile phone or the merchant web site calls the user telephone/mobile phone and further includes the passcode;

during a telephone/mobile phone call initiated by the user to the toll-free/local number or by the merchant web site to the user:

receiving the passcode from the user and verifying, by the automated interactive voice response system, that it is valid;

in response to the verification, retrieving the shopping cart of the user, and a name of the user and a billing address of the user previously entered at the merchant web site (optional) and further transmitting a passcode success message to a second web page;

subsequent to transmitting the passcode success message to the second web page, playing back for the user over the telephone/mobile phone a summary message, wherein the summary messages includes a detailed summary of contents of the shopping cart, a total amount to be charged, a credit/debit card number previously entered by the user through the telephone/mobile phone, the name of the user, and the billing address of the user (optional);

in response to playing back the summary message, receiving a purchase selection from the user over the telephone and transmitting a confirmation success message to the second web page;

subsequent to transmitting the confirmation success message to the second web page, sending information on the user to a Credit Card association or a third party system for an approval of the purchase; and

in response to receiving the approval of the purchase from the Credit Card association or the third party system, transmitting a confirmation number and a list of the plurality of items from the shopping cart to the user at a third web-page and the telephone/mobile phone.