TITLE OF INVENTION:

[0002] Accepting Payment Information on the web using Interactive Voice response (IVR) System - Checkout with PaybyPhone

FIELD OF THE INVENTION:

[0003] The invention relates to ***credit 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 card using an *Interactive voice response (IVR)* system redirected from the web page ***(Checkout with PaybyPhone)*** 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 card information on the web. Once the customer enters the card number, expiry date…etc their information is sent to a credit bureau (*as EQUIFAX, TRANSUNION, or EXPERIAN, or other ***credit*** clearing houses) *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 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 card information.

[0008] Once the credit card information is collected, the data will be electronically (Encrypted) passed to the credit bureau 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 card information
    g. Optional - When call is dropped just before verification step
        i. Your information except Credit 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 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 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 card,*** preferably at a point of sale, 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, and enters ***credit*** payment information about the customer using the key pad of the telephone 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 card number, expiry date…etc. This ***credit*** card payment information is used to approve/decline via ***credit*** bureau database or a third party vendor who specializes in credit 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 card validation,*** so that the customer's ***credit*** 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. ***Call Flow*** – The call flow diagrams describes how the caller enters the application, the options and inputs (key presses) that are provided to the caller, and the application's response to these inputs, see document "Checkout_with_PaybyPhone_Drawings.pdf"
2. ***Webpage Wireframes*** – These wireframes are visual illustration of Web pages. It is meant to show all of the items that are included on a particular page, without defining the look and feel (or graphic design). It's simply meant to illustrate the

features, content and links that need to appear on a page so that everyone can mock up a visual interface and understand the page features and how they are supposed to work, see document "Checkout_with_PaybyPhone_Drawings.pdf"

3. ***Payment Options*** – common payment options available in current eCommerce and online shopping websites, see document "Checkout_with_PaybyPhone_Drawings.pdf"
4. ***Voice Prompts*** – The prompt names which are mentioned in the call flow are included in this document, see document "Checkout_with_PaybyPhone_Drawings.pdf"

DETAILED DESCRIPTION OF THE INVENTION:

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

1. 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. 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 Card directly from Vendor's website like Visa, MasterCard, American Express Cards, Discover, Dinners Club international, JCB, etc. (see Diagram Payment 2 – Common Payment Options)
2. Once they choose to pay by credit card they will be presented with an option to enter their credit card information through web or ***IVR (Checkout with PaybyPhone) (The one that we are claiming)***
3. When the user chooses IVR as the payment option on the web (See webpage 1– Personal Info), user clicks on ***checkout with PaybyPhone*** (see Diagram Payment 1 – Checkout with PaybyPhone)

   Note: Image design is not finalized
4. 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 (See webpage 2 – Call IVR)
5. 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 (See webpage 3 – Call

Update). 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.

6. As soon as the caller dials the phone number, they will be prompted by the IVR to enter their PASSCODE (See Call Flow Diagram 2 - Main Menu)
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 (See Call Flow Diagram 2 - Main Menu).
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 (See Call Flow Diagram 2 - Main Menu).
9. Once a valid PASSCODE is entered the system will call the validation service to validate the PASSCODE (See Call Flow Diagram 2 - Main Menu). 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 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 (See Call Flow Diagram 2 - Main Menu).
11. Now the user will be prompted to choose from a list of card types (Master card, press 1, Visa, press 2…etc) (See Call Flow Diagram 3 - Get Card Type).
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 (See Call Flow Diagram 3 - Get Card Type).
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 (See Call Flow Diagram 3 - Get Card Type).
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 (See Call Flow Diagram 3 - Get Card Type).
15. Now the user will be prompted to enter their credit card number (See Call Flow Diagram 4 - Get Card Number)

16. The credit 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 (See Call Flow Diagram 4 - Get Card Number).
17. The system also does the MOD10 check for the card number that the user entered (See Call Flow Diagram 4 - Get Card Number).
18. If the user does not enter a valid credit card number and maxed out the total tries (3) the system will send a response to the progress window on the website to indicate that the user was unsuccessful in entering the card number, they will be prompted with a goodbye message and the system disconnects (See Call Flow Diagram 4 - Get Card Number)
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 (See Call Flow Diagram 4 - Get Card Number)
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 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 (See Call Flow Diagram 4 - Get Card Number).
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 (See Call Flow Diagram 4 - Get Card Number).
22. Now the system prompts the user for the expiry date (See Call Flow Diagram 5 - Get 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 (See Call Flow Diagram 5 - Get Expiry Date).
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 to indicate that the user was unsuccessful in entering the expiry date, they will be prompted with a goodbye message and the system disconnects (See Call Flow Diagram 5 - Get Expiry Date).

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 (See Call Flow Diagram 5 - Get Expiry Date).
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 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 (See Call Flow Diagram 5 - Get Expiry Date).
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 (See call Call Flow Diagram 5 - Get Expiry Date).
28. The caller will be prompted to enter the three digit security code in the back of the card (See Call Flow Diagram 6 - Get Security Code).
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 (See Call Flow Diagram 6 - Get Security Code).
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 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 (See Call Flow Diagram 6 - Get Security Code).
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 (See Call Flow Diagram 6 - Get Security Code)
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 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 (See Call Flow Diagram 6 - Get Security Code).

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 (See Call Flow Diagram 6 - Get Security Code).
34. The caller will be played a summary of the shopping card details with the total amount to be charged, the credit card number, name and the billing address. They will be prompted to choose Yes, press 1 or No, press 2 for confirmation (See Call Flow Diagram 7 - Confirm Purchase).
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 (See Call Flow Diagram 7 - Confirm Purchase).
36. If the user maxed out the number of confirmation attempts (3) they will be prompted with a goodbye message and the system disconnects (See Call Flow Diagram 7 - Confirm Purchase).
    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 card information.
37. Now the system sends callers name, address, credit card number, expiry date, three digit security code, total amount to be charged to the credit card and card type to a credit bureau or a third party system to get approval for the purchase (See Call Flow Diagram 8 - Verify).
38. Once the system gets the result from the verification service, the user will be prompted in two different ways depending on the results (See Call Flow Diagram 8 - Verify).
    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 will be played a confirmation number and summary details. The system will send a response to the progress window on the website to indicate that the user has been approved for the purchase and the window will display the confirmation number and the summary details (See Webpage 4 - Caller Verified (No Hang ups)).

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 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 card, the user will be prompted with two more option(s)
      1) To use a different credit card with the same name and billing address, press 1
      2) To use a different credit 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 card with the same name and billing address then the IVR will prompt them with a message asking them to enter the new credit 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 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 (See Call Flow Diagram 8 - Verify). They will be presented with the option(s) (See Webpage 6 – Call Update - Verification failed):
    a) To use a different credit card with the same billing address and name
    b) To use a different credit 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 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 (See Webpage 2 – Call IVR).
41. If the user selects (On the web) to choose a different credit 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 (See Webpage 1 – Personal Info). 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. The summary message comprises of the order summary (See Call Flow Diagram 9 - 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 (See Call Flow Diagram 10 - Caller Disconnect).

WHAT IS CLAIMED IS:

1. When the user starts their purchase steps on the web, User gets to the payment portion of the checkout page. Option to pay via IVR ***(Checkout with PaybyPhone)*** will be enabled – This is in addition to existing method of payment (Such as Paypal, Google Checkout, BillMeLater, eBillme, Gift card, Debit and Credit Cards like VISA, MASTERCARD, American Express, Discover, JCB, Diners Club International...etc)
2. When the user selects the IVR payment ***(Checkout with PaybyPhone)***, the user webpage is directed to Phone Payment Gateway Webpage (PPGW - Thought Frameworks Server) with client's transaction information. Client's transaction information is different for each client. User is provided with an 800-xxx-xxxx number to call with the transaction pass code.
3. As for payment option verification, common payment methods like Debit and Credit card – VISA, MASTERCARD, American Express, Discover, JCB, Diners Club International will be validated.
4. User will call the IVR to give their payment information such as card number, expiry date, security code...etc
5. Our Verification methods will be Out-bound Verification & In-bound Verification.
6. During Out-bound Verification - the system will verify their payment information using Clients existing payment verification service. Call existing payment verification service of client, pass the success/failure information to the client by web service call, client will return the confirmation number & other summary details. IVR receive the confirmation details and then redirect backs to the client's summary page.
7. During In-bound Verification - the system will verify their payment information using Thought Frameworks payment verification service. Call Thought Frameworks payment verification service, pass the success/failure information to the client by web service call, client will return the confirmation number & other summary details. IVR receive the confirmation details and then redirect backs to the client's summary page.

8. Once IVR receives the confirmation details, Summary information is played back to the user. The format of summary info will be different for each client. Once the summary is played, the user will be redirected back to the client's summary page.