

A SYSTEM AND METHOD FOR ONLINE TO OFFLINE (O2O) PURCHASE TRACKING FOR ADVERTISING AND PROMOTION

FIELD OF THE INVENTION

[1] The present application relates to systems and methods related to omnichannel
5 marketing. More particularly, the present application relates to a system and a method for
Online to Offline (O2O) purchase tracking for advertising and promotion. The present
invention allows Consumer-Packaged Goods (CPG) brands to engage with consumer directly
to acquire data, and create powerful campaigns along with lasting consumer behaviour. From
10 consumers point of view, the present invention is designed to connect offline purchases with
online advertisements and provide exciting rewards online to the users for their offline
purchases, which are otherwise not incentivized.

BACKGROUND OF THE INVENTION

[2] These days, ecommerce platforms have changed the way people shop around the world.
According to a report, about 2.14 billion shoppers now buy items online, which is a significant
15 increase from just a few years ago. With the current world population of 7.9 billion, it means
that 27% of all people that are alive are digital buyers. This is mainly because of the ease of
shopping as well as the amazing rewards/discounts which ecommerce platforms offer.
However, this does not mean that in-store shopping has gone out of trend. There is a certain
class of products and a certain class of consumers that still prefer in-store or physical shopping.
20 Despite the convenience of online shopping, a big segment of customers still prefers the overall
experience of shopping in-store. In-store shopping gives consumers the opportunity to discover
new products, finding what they need and even making impulse purchases.

[3] When analysed properly, it can be observed that there is a certain disconnect between
online and offline shopping, even the products bought by the customers are same or from a
25 same brand. Many a times, the customers find the product selling at a lower price than the
selling of the product in a retail store. Most of the times, the customers are provided with
rewards and incentives in the forms of reward points, coins, coupons, or online cash etc. for
the purchases made online. Nowadays, in this age of social media, brands to use different
modes advertisement for pushing advertisements to the users to boost their online sales. Some

of these modes include influencer marketing, pushing ads on home feed or messenger/chat box of social media accounts of the user, pushing ads on the different applications/websites. But the problem again remains the same that the offers are mostly available for online shopping, whereas shopping the same products from the retail store does not offer any incentives. There have been some efforts to connect different channels of marketing but they not been able to track the offline purchase to online advertisement, and/or reward the customers for purchases made physically in-store.

[4] From the point of view of brands (advertisers), the major concern is the that Consumer-Packaged Goods (CPG) brands want to engage with consumers directly, but they are not able to do the same without using third-party cookies or the like. There are no solutions available for that. At the moment, the advertisers are highly dependent on third-party cookies to gather user data that can further be used to create ad campaigns. It is well known now that the companies like Apple and Google have removed or are planning to remove third party cookie tracking from their phones and browsers, so there would be no way to capture first party consumer data, and use it to create custom audiences. Since, the brands do not own their consumer data or will have any data to work with, to create targeted ad campaigns, so the ad responses from Facebook, Instagram etc. will continue to decline.

[5] Therefore, the subject application proposes a system and a method for Online to Offline (O2O) purchase tracking for advertising and promotion. Such a solution should allow CPG brands to engage with consumer directly to acquire data, and create powerful campaigns and lasting consumer behaviour. From consumers point of view, such a solution should be designed to connect offline purchases with online advertisements and provide exciting rewards online to the users for their offline purchases, which, otherwise, do not offer any incentives to the users.

[6] The present application is described hereinafter by various embodiments. This application may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein.

SUMMARY OF THE INVENTION

[7] According to a first aspect of the present application, there is provided a system for Online to Offline (O2O) purchase tracking for advertising and promotion. The system comprises, but not limited to, one or more user devices associated with respective social media

accounts of the user; a processing module connected with the one or more user devices. The processing module comprises, but not limited to, a memory unit configured to store machine-readable instructions; and a processor operably connected with the memory unit. The processor obtains the machine-readable instructions from the memory unit, and is configured by the

5 machine-readable instructions to receive a click on an advertisement (ad) enabled by the system (cognitive AI), having an associated Ad ID, from a user device of the one or more user devices on the respective social media accounts, thereby triggering a call-to-action, wherein the Ad is published by a Cognitive AI according to an Ad campaign created for a brand; direct the user to a messenger such as a chatbot or chatbox associated with the social media account of the

10 user using the Ad ID; onboard the user by receiving one or more answers and approvals from the user; receive a store receipt in a form of an upload by the user for any previously made offline purchase of a particular product or brand; extract and capture information of the user, retailer as well as the details of the purchase from the uploaded store receipt and store the captured data in a data repository; create actions for available rewards for the user based on

15 the captured details from the store receipt; and provide the selected reward, from all the available rewards to the user and restart a process of receiving more store receipts; analyze the current Ad campaign and/or create new or modify the current Ad campaigns based on the analysis and the captured data in the data repository.

[8] In accordance with an embodiment of the present invention, the social media accounts

20 are selected from one of Facebook, Instagram, WhatsApp, TikTok, LinkedIn, Twitter, Telegram, Snapchat, WeChat and Line.

[9] In accordance with an embodiment of the present invention, upon receiving the click on the ad, the processing module is further configured to acquire the Ad ID from the Ad, determine the social media messenger associated with the Ad ID, and direct the user to the

25 associated social media messenger.

[10] In accordance with an embodiment of the present invention, the details of the purchase extracted by the processing module comprises retailer data selected from name, address, time of purchase and address of specific retailer branch, product name, size, quantity, specific SKU amount and total receipt amount.

[11] In accordance with an embodiment of the present invention, the processing module is further configured to filter or cleanse low confidence data to improve data extraction and also identify previously used receipts for fraud detection.

5 [12] In accordance with an embodiment of the present invention, the actions for available rewards include provisions for rewards points, coupons, digital e-wallet credits, cashback credits, purchase incentives to earn points, and digital raffles; wherein the user is asked to select a preferred option in the messenger or chatbot conversation after analyzing the uploaded store receipt.

10 [13] In accordance with an embodiment of the present invention, the the processing module further comprises an incentive module configured to create reward campaigns, loyalty campaigns and disburse rewards.

15 [14] In accordance with an embodiment of the present invention, the processing module further comprises a data analysis module configured to analyze user's data, uploads, purchase history and activity to create unique, anonymized user profiles and provide analytical information to user and the advertisers.

20 [15] In accordance with an embodiment of the present invention, the processing module is configured to create a dashboard using the data analysis module to be displayed on a user device, the dashboard adapted to display: ad clicks from each ad triggering call-to-action; purchase data of every store receipt sent by the user from the specific chatbot linked to the online ad, wherein the purchase data includes name & address of retailer, time of purchase, address of specific retailer branch, all Stock Keeping Unit (SKUs) purchased by user related to the brand campaign selected from product name, size, quantity, specific SKU amount and total receipt amount; total purchase amount, total number of clicks and total spend per Ad campaign; and consumer data including chat ID, mobile number, email, SKUs purchased, retailer data and
25 products purchased by consumers that clicked on the Ads.

[16] In accordance with an embodiment of the present invention, the module further comprises a notification module configured to send notifications to the users via email, SMS or social media messengers regarding for new product announcements, new promos & campaigns, reward campaigns, loyalty campaigns and reminders to upload receipts for rewards.

[17] According to a second aspect of the present invention, there is provided a method for Online to Offline (O2O) purchase tracking for advertising and promotion. The method comprises receiving a click on an advertisement (ad) having an associated Ad ID, from a user on the respective social media accounts, thereby triggering a call-to-action, wherein the Ad is published by a Cognitive AI according to an Ad campaign created for a brand; directing the user to a messenger such as a chatbot or chatbox associated with the social media account of the user using the Ad ID; onboarding the user by receiving one or more answers and approvals from the user; receiving a store receipt in a form of an upload by the user for any previously made offline purchase of a particular product or brand; extracting and capturing information of the user, retailer as well as the details of the purchase from the uploaded store receipt and storing the captured data in a data repository; creating actions for available rewards for the user based on the captured details from the store receipt; providing the selected reward, from all the available reward to the user and restarting a process of uploading more store receipts; and analyzing the current Ad campaign and/or creating new or modify the current Ad campaigns based on the analysis and the captured data in the database repository.

[18] In accordance with an embodiment of the present invention, the social media accounts are selected from one of Facebook, Instagram, WhatsApp, LinkedIn, Twitter, Telegram, Snapchat, WeChat and Line.

[19] In accordance with an embodiment of the present invention, the step of receiving the click on the ad, further comprises steps of acquiring the Ad ID, determining the social media messenger associated with the Ad ID, and directing the user to the associated social media messenger.

[20] In accordance with an embodiment of the present invention, the details of the purchase extracted by the processing module comprises, but not limited to, retailer data selected from name, address, time of purchase and address of specific retailer branch, product name, size, quantity, specific SKU amount and total receipt amount.

[21] In accordance with an embodiment of the present invention, the step of extracting and capturing information from the store receipt, further includes filtering or cleansing low confidence data to improve data extraction and also identifying previously used receipts for fraud detection.

[22] In accordance with an embodiment of the present invention, the actions for available rewards include, but not limited to, provisions for rewards points, coupons, digital e-wallet credits, cashback credits, purchase incentives to earn points, and digital raffles. Herein, the user is asked to select a preferred option in the messenger or chatbot conversation after analyzing the uploaded store receipt.

[23] In accordance with an embodiment of the present invention, the method further comprises a step of analyzing user's data, uploads, purchase history and activity to create unique, anonymized user profiles and provide analytical information to user and the advertisers.

[24] In accordance with an embodiment of the present invention, the method further comprises a step of creating reward campaigns, loyalty campaigns and disbursing rewards.

[25] In accordance with an embodiment of the present invention, the method further comprises a step of creating a dashboard using the data analysis module to be displayed on a user device, wherein the dashboard is adapted to display: ad clicks from each ad triggering call-to-action; purchase data of every store receipt sent by the user from the specific chatbot linked to the online ad, wherein the purchase data includes name & address of retailer, time of purchase, address of specific retailer branch, all Stock Keeping Unit (SKUs) purchased by user related to the brand campaign selected from product name, size, quantity, specific SKU amount and total receipt amount; total purchase amount, total number of clicks and total spend per Ad campaign; and consumer data including chat ID, mobile number, email, SKUs purchased, retailer data and products purchased by consumers that clicked on the Ads.

[26] In accordance with an embodiment of the present invention, the method further comprises a step of sending notifications to the users via email, SMS or social media messengers regarding for new product announcements, new promos & campaigns, reward campaigns, loyalty campaigns and reminders to upload receipts for rewards.

BRIEF DESCRIPTION OF THE DRAWINGS

[27] The accompanying Figures (Figs.) illustrate embodiments and serve to explain principles of the disclosed embodiments. It is to be understood, however, that these Figures are presented for purposes of illustration only, and not for defining limits of relevant applications.

It is to be noted, however, that the appended drawings illustrate only typical embodiments of this application and are therefore not to be considered limiting of its scope, for the application may admit to other equally effective embodiments.

[28] These and other features, benefits, and advantages of the present application will become apparent by reference to the following text Figure, with like reference numbers referring to like structures across the views, wherein:

Figure 1 illustrates a system for Online to Offline (O2O) purchase tracking for advertising and promotion, in accordance with an embodiment of the present invention;

Figure 2 illustrates a method for Online to Offline (O2O) purchase tracking for advertising and promotion, in accordance with an embodiment of the present invention;

Figures 3A-3J illustrate an exemplary implementation of the system and method of the Figures 1 and 2, in accordance with an embodiment of the present invention; and

Figures 4A-4B illustrate an exemplary layout of dashboard presenting the analytical information related to ad campaigns, in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION OF THE DRAWINGS

[29] While the present invention is described herein by way of example using embodiments and illustrative drawings, those skilled in the art will recognize that the invention is not limited to the embodiments of drawing or drawings described and are not intended to represent the scale of the various components. Further, some components that may form a part of the invention may not be illustrated in certain figures, for ease of illustration, and such omissions do not limit the embodiments outlined in any way. It should be understood that the drawings and detailed description thereto are not intended to limit the invention to the particular form disclosed, but on the contrary, the invention is to cover all modifications, equivalents, and alternatives falling within the scope of the present invention as defined by the appended claims. As used throughout this description, the word "may" is used in a permissive sense (i.e. meaning having the potential to), rather than the mandatory sense, (i.e. meaning must). Further, the words "a" or "an" mean "at least one" and the word "plurality" means "one or more" unless otherwise mentioned. Furthermore, the terminology and phraseology used herein is solely used

for descriptive purposes and should not be construed as limiting in scope. Language such as "including," "comprising," "having," "containing," or "involving," and variations thereof, is intended to be broad and encompass the subject matter listed thereafter, equivalents, and additional subject matter not recited, and is not intended to exclude other additives, components, integers or steps. Likewise, the term "comprising" is considered synonymous with the terms "including" or "containing" for applicable legal purposes. Any discussion of documents, acts, materials, devices, articles, and the like are included in the specification solely for the purpose of providing a context for the present invention. It is not suggested or represented that any or all of these matters form part of the prior art base or were common general knowledge in the field relevant to the present invention.

[30] In this disclosure, whenever a composition or an element or a group of elements is preceded with the transitional phrase "comprising", it is understood that we also contemplate the same composition, element or group of elements with transitional phrases "consisting of", "consisting", "selected from the group of consisting of", "including", or "is" preceding the recitation of the composition, element or group of elements and vice versa.

[31] The present invention is described hereinafter by various embodiments with reference to the accompanying drawings, wherein reference numerals used in the accompanying drawing correspond to the like elements throughout the description. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein. Rather, the embodiment is provided so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those skilled in the art.

[32] In a brief explanation, the present invention may be understood as an Online to Offline (O2O) Model for advertising and promotion. For brands and advertisers, the present invention allows Consumer-Packaged Goods (CPG) brands to engage with consumer directly to acquire data, and create powerful campaigns along with lasting consumer behaviour. From consumers point of view, the present invention is designed to connect offline purchases with online advertisements and provide exciting rewards online to the users for their offline purchases, which are otherwise not incentivized. It aims to bridge the gap between the online and offline purchases made by the user to provide rewards/offers to the customer, and using it as a means for advertisement and promotion. To achieve the above objective, the present invention discloses a system and a method thereof.

[33] The present invention requires a client (brand/advertiser) to define campaign mechanics and goals. According to that define campaign mechanics and goals, the Ads enabled by the system (Cognitive AI) may be published on social media platforms. The present invention begins when a user (consumer) clicks on an advertisement on their social media accounts such as FB, Instagram, WhatsApp, TikTok etc. Clicking on the ad takes the user to the messenger (such as a cognitive bot/chatbot). User is then onboarded after agreeing to privacy policy and enters the required data. The chatbot then enables the user to opt for a brand to redeem the store receipt from an offline purchase, in the form of online cash, coupons, rewards etc. Accordingly, the user is asked to upload a store receipt for any previously made offline purchases. The AI engine reads the receipt using machine vision to extract the details of purchase and decides the rewards available for the user against the store receipt, which are then offered to the users. In this manner, the present invention is able to bridge the gap and connect offline purchases with online advertisements and provide exciting rewards online to the users for their offline purchases, which, otherwise, do not offer any incentives to the users. Additionally, it gives opportunity to the brands to engage with consumer directly to acquire first party data, without requiring third party cookies, which may then be used to create powerful campaigns (or modify) along with lasting consumer behaviour.

[34] For better understanding of different aspects of the invention, the present invention will now be described in detail with reference to accompanying drawings.

[35] Figure 1 illustrates a system 100 for Online to Offline (O2O) purchase tracking for advertising and promotion, in accordance with an embodiment of the present application.

[36] As shown in figure 1, the system 100 comprises one or more user devices 102 associated with respective social media accounts of the users (customers); and a processing module 104 connected with the one or more user devices 102 via, say, a communication network 110. The social media accounts may be selected from one of, but not limited to, Facebook, Instagram, WhatsApp, LinkedIn, Twitter, Telegram, Snapchat, WeChat and Line. The one or more user devices 102 may be selected from, but not limited to, a smartphone, tablet, Personal Desktop Assistant (PDA), laptop, desktop PC etc. In that sense, the plurality of user devices 102 is envisaged to include at least microprocessor, a connection means (ports for wired connections and Wi-Fi/Bluetooth modules for wireless connections) and input/output means such as display screen, keyboard/keypad or a touch input-based display.

[37] In accordance with an embodiment of the present invention, the communication network 110 is used in the system 100 to connect the plurality of user devices 102 and the processing module 104. The communication network 110 can be a short-range communication network and/or a long-range communication network, wire or wireless communication network. The communication interface includes, but not limited to, a serial communication interface, a parallel communication interface or a combination thereof. The communication network 110 may be implemented using a number of protocols, such as but not limited to, TCP/IP, 3GPP, 3GPP2, LTE, IEEE 802.x etc. Preferably, the communication network 110 is internet.

[38] Further, the processing module 104 is envisaged to include computing capabilities such as a memory unit configured to store machine readable instructions. The machine-readable instructions may be loaded into the memory unit from a non-transitory machine-readable medium, such as, but not limited to, CD-ROMs, DVD-ROMs, Flash drives, clouds or servers. Alternatively, the machine-readable instructions may be loaded in the form of a computer software program into the memory unit. The memory unit in that manner may be selected from a group comprising EPROM, EEPROM and Flash memory. Furthermore, the processing module 104 includes a processor operably connected with the memory unit. In various embodiments, the processor is one of, but not limited to, microprocessor, a general-purpose processor, an application specific integrated circuit (ASIC) and a field-programmable gate array (FPGA). In one embodiment, the processing module 104 may be part of a server.

[39] In accordance with an embodiment of the present invention, the processing module 104 may further include one or more modules selected from, but not limited to, a data analysis module, an incentive module and a notification module. In general, the word “module,” as used herein, refers to logic embodied in hardware or firmware, or to a collection of software instructions, written in a programming language, such as, for example, JavaScript, Python R, C, C#, Java, or Assembly. The modules described herein may be implemented as either software and/or hardware modules and may be stored in any type of computer-readable medium or other computer storage device.

[40] Moreover, the processing module 104 may implement artificial intelligence and machine learning based technologies for, but not limited to, data analysis, collating data & presentation of data in real-time.

[41] In accordance with an embodiment of the present invention, the system 100 may further include one or more advertiser devices associated with one or more brands etc. whose Ads have been placed on the social media of the users. The Ads are created based on Ad campaigns created for a particular brand by the system (may be referred to as Cognitive AI). The Ads are enabled by the Cognitive AI and may have an associated unique Ad ID that triggers a specific chatbot (related to a particular social media platform). This enables the brands (advertisers) to use the present invention to attribute physical, in-store purchases verified by shopper receipts directly to the online campaigns and ad spend of the advertisers. All this can be monitored in advertisers' profile.

[42] In accordance with an embodiment of the present invention, the system 100 may also include a data repository 106. The data repository 106 may be a local storage, a cloud-based storage (centralised network storage) or blockchain storage (decentralised infrastructure). In any manner, the data repository 106 is envisaged to be capable of providing the data to the processing module 104, when the data is queried appropriately using applicable processing, security and other data transfer protocols. The data repository 106 may be configured to store information related to users such as, but not limited to, user profiles, advertiser profiles, respective purchase history, logs, reward details etc.

[43] Figure 2 illustrates a method 200 for Online to Offline (O2O) purchase tracking for advertising and promotion, in accordance with an embodiment of the present application. The method 200 will be better understood with the help of exemplary implementation shown in Figures 3A-3J. Kindly note that figure 2 and any one of 3A-3J will be simultaneously referred during the below explanation.

[44] As previously mentioned, the present invention is meant for advertisements and promotional content designed according to specifically created Ad campaign, marketing mechanism and goals. Accordingly, these Ads enabled by the system (Cognitive AI) are placed on social media accounts of the users (customers). The present invention comes in when a user clicks on an advertisement enabled by cognitive AI on their social media accounts such as FB, Instagram etc., as shown in figure 3A. The user may be operating the respective account from the respective user device 102 such as a smartphone or a laptop. An example of the same has been shown in figure 3A. Now, referring to figure 2, the method 200 begins at step 202, by receiving a click on the published advertisement (ad) 304 from a user device 102 from the

respective social media accounts. Referring back to figure 3A, it can be seen that Ads are being displayed on a user's Facebook feed encouraging him/her to earn rewards in the form GCash by uploading receipts. The user may click (or touch) the Ad or the "send message" tab 306, which is a call-to-action trigger.

- 5 [45] Then step 204, once the click is received, the processing module 104 is configured to direct the user to a messenger 308 (such as, but not limited to, a chatbot, chat box etc.) associated with the social media account of the user. For example: Refer to figure 3B, after receiving the click (or a touch), the user is directed to Facebook messenger 308. Alternately, in Fig. 3C, the user is directed to a WhatsApp messenger 302. Similarly, it will be appreciated
- 10 by a skilled addressee that any other social media messenger may also be used in the present invention without departing from the scope of the present invention. The type of messenger to be triggered by the Ad-click may be predetermined and embedded in the Ad ID. Upon receiving the ad-click, the processing module acquires the ad-ID, determines the social media messenger associated with the Ad ID and the directs the user to the associated social media messenger.
- 15 [46] After that, at step 206, the present invention is configured to facilitate the onboarding of the user by receiving his/her approvals and user information on prerequisites. This includes, but not limited to, receiving, but not limited to, user's agreement for privacy policy, and contact information of the user etc. Herein the user willing shares the information to the chatbot via his/her answers. Accordingly, as shown in figures 3D and 3E, the user is onboarded once he/she
- 20 agrees to the terms privacy policy, terms and conditions as well as registers his/her mobile number on the chatbot. The user receives the message saying "OTP verified" to confirm the onboarding.
- [47] Additionally, a message asking the user to select the particular brand for which the use wants upload the store receipts in the messenger 308. It can be seen is figure 3F. Accordingly,
- 25 at next step 208, a store receipt is received in a form of an upload by the user for any previously made offline purchase of the same product or brand. The user may click a new photo of the receipt there and then, or may upload a previously saved receipt as shown in figure 3G. Accordingly, at step 210, the processing module 104 is configured to extract and capture information of the user, retailer as well as the details of the purchase from the uploaded store
- 30 receipt 312. Herein, the retailer data may include, but not limited to, name, address, time of purchase and address of specific retailer branch, and the purchase information may include, but

not limited to, product name, size, quantity, specific SKU amount and total receipt amount. Similarly, the user data may include, but not limited to, Name, contact info (phone, email), transaction ID, transaction amount etc.

[48] Herein, the processing module 104 may implement different prevalent data extraction techniques (may also involve OCR, AI, machine vision, machine learning etc.) to extract the user data, retailer data and the purchase information mentioned in the store receipt. These techniques are capable of reading both structured or unstructured store receipts with accuracy. In case, the uploaded image is unreadable, the user may be asked to upload the image of the store receipt again. Also, it should be noted that the present invention does not require a specific template of the different receipt formats. Data read by the processing module is identified to correspond to different fields automatically. For example, different date formats like MM/DD/YYYY or DD/MM/YYYY are read and interpreted as dates correctly. Also, the processing module also interprets product descriptions correctly even with a fixed text format across different receipt formats. For example, NSTLE, NESTLE, NSTL are all read and interpreted as NESTLE correctly.

[49] Furthermore, the data processing module 104 is further configured to filter or cleanse low confidence data to improve data extraction. The extracted data is then processed to determine meaningful information which may then be stored in a user's profile, and also in a database made of first party data. This data is highly important for brands as it has been shared by the first party (consumer) themselves to the brand. This eliminates the requirement of getting access to third-party cookies or web browsers to observe consumer behaviour, shopping habits etc.

[50] Additionally, the processing module 104 may further utilise the data analysis module to identify if the uploaded receipt has ever been previously used for receiving rewards. This helps in fraud detection and prevention. Such receipts are then rejected and the user is asked to upload a valid store receipt. For this purpose, in one embodiment, the processing module 104 may utilise the data stored in the data repository 106 to analyse user's data, uploads, purchase history and activity to create unique, anonymized user profiles and provide analytical information to user and the advertisers. The Data analysis module can further enhance the extracted information by providing insights on the market basket, repeat purchase tracking and competitor analytics. All this information and profiles are stored in the data repository 106.

[51] Next, at step 212, the processing module 104 is configured create actions for available rewards for the user based on the captured details from the store receipt 312. If the captured data is found to be correct after analysis by the data analysis module, then the incentive module may provide a list of rewards available for the purchases made on the uploaded store receipt.

5 wherein the actions for available rewards include provisions for rewards points, coupons, digital e-wallet credits, cashback credits, purchase incentives to earn points, and digital raffles. For this, the processing module 104 may utilise the incentive module configured to create reward campaigns, as well as loyalty campaigns and disburse rewards based on a positive match. For example: as shown in figure 3H, the user is rewarded 455 points for his/her
10 purchases shown on the store receipt 312. Then, as shown in figure 3I, it can be seen that the user is asked to select a preferred option in the messenger or chatbot 308 regarding what would he/she like to do with the points, i.e., “Redeem Now” or “Redeem Later”. Accordingly, the user has to select one option. Continuing from the same example, in this case the user opts the “Redeem Now” option and user is provided with further options whether to redeem the points
15 as GCash etc. After the selection is complete, the user is required to go through verification before facilitating any redemption, to prevent any fraudulent activity within.

[52] Then, at step 214, the user is provided with the selected reward. In the above example as shown in figure 3J, the user is rewarded with 50.00 GCash against the points. The user is also informed about his/her total GCash balance as well as the remaining reward points.

20 [53] After this, the process restarts and the user is encouraged to upload more receipts for further rewards or check his/her collected rewards. In this manner, the present invention is able to bridge the gap and connect offline purchases with online advertisements and provide exciting rewards online to the users for their offline purchases, which, otherwise, do not offer any incentives to the users. In accordance with embodiment of the present invention, the processing
25 module 104 may further comprise a notification module. The notification module may be configured to send, from time to time, one or more notifications to the users via email, SMS or social media messenger 308s regarding for new product announcements, new promos & campaigns, reward campaigns, loyalty campaigns and reminders to upload receipts for rewards. The present invention logs every step of consumer journey for recurring notifications.

30 [54] Next, at step 216, after the receipt uploads and rewards have been facilitated for a number of users (consumers), the processing module is configured to analyse the current Ad-

campaign, whether it was successful or not, or how successful or unsuccessful it was. For this, the system 100 may further provide an insight to the users as well as brands (advertisers) regarding their activity, transactions, redemption details, Ad spends etc. It can be provided in a form of an analytics window 314 of a dashboard 400 shown in figure 4A. Herein, the detailed reports regarding campaign name, reach, no. impressions, frequency, results, money spent, cost per result, offline purchases, conversion values etc. can be provided for the Brands to see how their campaigns performed. Therefore, the present invention assists both the users (consumers) and the advertisers (brands) to keep track of their activity and spends.

[55] Additionally, figure 4B illustrates more such analytical data in the form of graphs and numbers to help the brands understand the value of their campaigns. In accordance with an embodiment of the present invention, the dashboard is adapted to display, but not limited to:

- ad clicks from each ad triggering call-to-action;
- purchase data of every store receipt sent by the user from the specific chatbot linked to the online ad, wherein the purchase data includes name & address of retailer, time of purchase, address of specific retailer branch, all Stock Keeping Unit (SKUs) purchased by user related to the brand campaign selected from product name, size, quantity, specific SKU amount and total receipt amount;
- total purchase amount, total number of clicks and total spend per Ad campaign; and
- consumer data including chat ID, mobile number, email, SKUs purchased, retailer data and products purchased by consumers that clicked on the Ads.

[56] Furthermore, the availability of the data collected above enables the brands to create new campaigns based on the information received directly from the consumers. Alternately, analytical data and the captured data in the database repository can also help to decide if the current Ad campaigns need modification, or the target market needs to be changed or like.

[57] The present invention offers a number of advantages. Firstly, from a consumer's point of view, the present invention is designed to connect offline purchases with online advertisements and provide exciting rewards online to users for their offline purchases, which are otherwise not incentivized. Additionally, from the perspective of brands (advertisers), the present invention allows Consumer-Packaged Goods (CPG) brands to engage directly with consumers to acquire data and create powerful campaigns that influence lasting consumer behaviour. This completely eliminates the need for third-party cookies used in web browsers.

Third-party cookies are the primary source for observing a user's habits across multiple websites. They accumulate data gathered between browsing sessions and paint a clear picture of the user. As mentioned in the background, since these cookies are expected to be eliminated in the near future, advertisers would be left with no available solution for targeted
5 advertisements. The present invention precisely solves this problem by gathering data directly from the customers themselves. In other words, with the present invention, brands can re-market and re-target a new set of consumers based on first-party consumer data, without depending on third-party cookies. The present invention does not require a backend, integration, unique package code, or a CPG or reward app. All it needs is a social media
10 Messenger platform (such as Facebook Messenger, WhatsApp, etc.) and a printed receipt.

[58] Furthermore, while one or more operations have been described as being performed by or related to certain modules, devices, or entities, these operations can be performed by or related to any module, device, or entity. Therefore, any function or operation that has been described as being performed by a module could alternatively be performed by a different
15 server, the cloud computing platform, or a combination thereof.

[59] Various modifications to these embodiments are apparent to those skilled in the art from the description and the accompanying drawings. The principles associated with the various embodiments described herein may be applied to other embodiments. Therefore, the description is not intended to be limited to the embodiments shown along with the
20 accompanying drawings but is to be providing broadest scope consistent with the principles and the novel and inventive features disclosed or suggested herein. Accordingly, the application is anticipated to hold on to all other such alternatives, modifications, and variations that fall within the scope of the present application and the appended claims.

CLAIMS

1. A system for Online to Offline (O2O) purchase tracking for advertising and promotion, the system comprising:

one or more user devices associated with respective social media accounts of the user;

a processing module connected with the one or more user devices, the processing module comprising:

a memory unit configured to store machine-readable instructions; and

a processor operably connected with the memory unit, the processor obtaining the machine-readable instructions from the memory unit, and being configured by the machine-readable instructions to:

receive a click on an advertisement (ad) enabled by the system (cognitive AI), having an associated Ad ID, from a user device of the one or more user devices on the respective social media accounts, thereby triggering a call-to-action, wherein the Ad is published by a Cognitive AI according to an Ad campaign created for a brand;

direct the user to a messenger such as a chatbot or chatbox associated with the social media account of the user using the Ad ID;

onboard the user by receiving one or more answers and approvals from the user;

receive a store receipt in a form of an upload by the user for any previously made offline purchase of a particular product or brand;

extract and capture information of the user, retailer as well as the details of the purchase from the uploaded store receipt and store the captured data in a data repository;

create actions for available rewards for the user based on the captured details from the store receipt; and

provide the selected reward, from all the available rewards to the user and restart a process of receiving more store receipts;

analyze the current Ad campaign and/or create new or modify the current Ad campaigns based on the analysis and the captured data in the data repository.

2. The system as claimed in claim 1, wherein the social media accounts are selected from one of Facebook, Instagram, WhatsApp, Tiktok, LinkedIn, Twitter, Telegram, Snapchat, WeChat and Line.
- 5 3. The system as claimed in claim 1, wherein upon receiving the click on the ad, the processing module is further configured to acquire the Ad ID from the Ad, determine the social media messenger associated with the Ad ID, and direct the user to the associated social media messenger.
- 10 4. The system as claimed in claim 1, wherein the details of the purchase extracted by the processing module comprises retailer data selected from name, address, time of purchase and address of specific retailer branch, product name, size, quantity, specific SKU amount and total receipt amount.
- 5 15 5. The system as claimed in claim 4, wherein the processing module is further configured to filter or cleanse low confidence data to improve data extraction and also identify previously used receipts for fraud detection.
- 15 6. The system as claimed in claim 1, wherein the actions for available rewards include provisions for rewards points, coupons, digital e-wallet credits, cashback credits, purchase incentives to earn points, and digital raffles;
 wherein the user is asked to select a preferred option in the messenger or chatbot conversation after analyzing the uploaded store receipt.
- 20 7. The system as claimed in claim 6, wherein the processing module further comprises an incentive module configured to create reward campaigns, loyalty campaigns and disburse rewards.
- 25 8. The system as claimed in claim 1, wherein the processing module further comprises a data analysis module configured to analyze user's data, uploads, purchase history and activity to create unique, anonymized user profiles and provide analytical information to user and the advertisers.
9. The system as claimed in claim 1, wherein the processing module is configured to create a dashboard using the data analysis module to be displayed on a user device, the dashboard adapted to display:

ad clicks from each ad triggering call-to-action;

purchase data of every store receipt sent by the user from the specific chatbot linked to the online ad, wherein the purchase data includes name & address of retailer, time of purchase, address of specific retailer branch, all Stock Keeping Unit (SKUs) purchased by user related to the brand campaign selected from product name, size, quantity, specific SKU amount and total receipt amount;

total purchase amount, total number of clicks and total spend per Ad campaign; and

consumer data including chat ID, mobile number, email, SKUs purchased, retailer data and products purchased by consumers that clicked on the Ads.

10. The system as claimed in claim 1, wherein the processing module further comprises a notification module configured to send notifications to the users via email, SMS or social media messengers regarding for new product announcements, new promos & campaigns, reward campaigns, loyalty campaigns and reminders to upload receipts for rewards.

11. A method for Online to Offline (O2O) purchase tracking for advertising and promotion, the method comprising:

receiving a click on an advertisement (ad) having an associated Ad ID, from a user on the respective social media accounts, thereby triggering a call-to-action, wherein the Ad is published by a Cognitive AI according to an Ad campaign created for a brand;

directing the user to a messenger such as a chatbot or chatbox associated with the social media account of the user using the Ad ID;

onboarding the user by receiving one or more answers and approvals from the user;

receiving a store receipt in a form of an upload by the user for any previously made offline purchase of a particular product or brand;

extracting and capturing information of the user, retailer as well as the details of the purchase from the uploaded store receipt and storing the captured data in a data repository;

creating actions for available rewards for the user based on the captured details from the store receipt; and

providing the selected reward, from all the available reward to the user and restarting a process of uploading more store receipts;

5 analyzing the current Ad campaign and/or creating new or modify the current Ad campaigns based on the analysis and the captured data in the database repository.

12. The method as claimed in claim 11, wherein the social media accounts are selected from one of Facebook, Instagram, WhatsApp, LinkedIn, Twitter, Telegram, Snapchat, WeChat and Line.

10 13. The method as claimed in claim 11, wherein the step of receiving the click on the ad, further comprises steps of acquiring the Ad ID, determining the social media messenger associated with the Ad ID, and directing the user to the associated social media messenger.

15 14. The method as claimed in claim 11, wherein the details of the purchase extracted by the processing module comprises retailer data selected from name, address, time of purchase and address of specific retailer branch, product name, size, quantity, specific SKU amount and total receipt amount.

20 15. The method as claimed in claim 11, wherein the step of extracting and capturing information from the store receipt, further includes filtering or cleansing low confidence data to improve data extraction and also identifying previously used receipts for fraud detection.

 16. The method as claimed in claim 11, wherein the actions for available rewards include provisions for rewards points, coupons, digital e-wallet credits, cashback credits, purchase incentives to earn points, and digital raffles;

25 wherein the user is asked to select a preferred option in the messenger or chatbot conversation after analyzing the uploaded store receipt.

17. The method as claimed in claim 11, further comprising a step of analyzing user's data, uploads, purchase history and activity to create unique, anonymized user profiles and provide analytical information to user and the advertisers.

18. The method as claimed in claim 17, further comprising a step of creating reward campaigns, loyalty campaigns and disbursing rewards.

19. The method as claimed in claim 11, further comprising a step of creating a dashboard using the data analysis module to be displayed on a user device, wherein the dashboard is adapted to display:

ad clicks from each ad triggering call-to-action;

purchase data of every store receipt sent by the user from the specific chatbot linked to the online ad, wherein the purchase data includes name & address of retailer, time of purchase, address of specific retailer branch, all Stock Keeping Unit (SKUs) purchased by user related to the brand campaign selected from product name, size, quantity, specific SKU amount and total receipt amount;

total purchase amount, total number of clicks and total spend per Ad campaign;

and

consumer data including chat ID, mobile number, email, SKUs purchased, retailer data and products purchased by consumers that clicked on the Ads.

20. The method as claimed in claim 11, further comprising a step of sending notifications to the users via email, SMS or social media messengers regarding for new product announcements, new promos & campaigns, reward campaigns, loyalty campaigns and reminders to upload receipts for rewards.