Claims

1. A computer-implemented method performed by a computer server for product support services, the method comprising:

receiving, ~~via a first application programming interface (API)~~ at a server running on server hardware including a processor and a memory, an electronic receipt from a mobile application running within a mobile device of a user over a network, wherein the electronic receipt includes a transaction identifier (ID) representing a purchase transaction from a purchasing facility, the electronic receipt listing a first product provided by a first vendor and a second product provided by a second vendor ~~as a second client and a third client of the server, respectively~~, wherein the first and second products have been purchased by the user at the purchasing facility, wherein the purchasing facility is a separate entity ~~as a first client~~ of the server;

in response to the electronic receipt, automatically communicating, by a registration module executed by the processor, with a first backend system associated with the first vendor ~~via a second API~~over the network to obtain first product information of the first product based on information extracted from the electronic receipt without receiving detailed information of the first product from the user;

automatically communicating by the registration module with a second backend system associated with the second vendor ~~via a third API~~over the network to obtain second product information of the second product based on the information extracted from the electronic receipt without receiving detailed information of the second product from the user;

registering by the registration module the first product and the second product with the server, including storing the first product information and the second product information in an asset store of a user account of the user maintained by the server;

~~generating, by a case management module executed by the processor, a case ID to identify a support case associated with the first product and the second product;~~

generating, by a touch engine executed by the processor, a touch plan representing a support case context ~~that is identified by the case ID~~, wherein the touch plan includes a list of one or more action items to be performed due to an occurrence of one or more events associated with the first product and the second product;

performing an analysis on the first product information and the second product information to determine a relationship between the first product and the second product;

storing relationship information between the first product and the second product in the touch plan, the first product being associated with a first activity and the second product being associated with a second activity;

receiving a first notification ~~via the second API~~ from the first backend system over the network, the notification indicating an event associated with the first activity occurred that requires a change of the first activity;

in response to the first notification, ~~accessing a user profile of the user maintained by the server to determine a first preferred communications channel that has been configured by the user;~~ transmitting ~~via the first preferred communications channel~~ a first message on behalf of the first vendor to the mobile device, wherein the first message is to be displayed by the mobile application to the user to indicate the change of the first activity;

determining whether a modification of the second activity is needed based on the relationship information of the first product and the second product stored in the touch plan;

in response to determining that the modification of the second activity is needed, transmitting a second message on behalf of the second vendor to the mobile device to be displayed by the mobile application, indicating a possible modification of the second activity and offering a list of one or more options to modify the second activity, ~~wherein the second message is automatically transmitted without initiating from the user,~~ wherein the second message includes a one-touch button displayed therein to allow the user to contact a support agent associated with the server;

receiving a signal from the mobile device representing an activation of the one-touch button displayed within the second message;

in response to the signal, ~~determining a second preferred communications channel preferred by and available to the user;~~establishing ~~using a second preferred communications channel~~ a live communications session between the user and a support agent of the server to allow the user discuss the possible change of the second activity;

transmitting the touch plan to an agent device of the support agent, wherein the touch plan further includes a link referencing the product information of the first product and the second product to allow the support agent to discuss with the user over the live communication session in view of the product information;

receiving a confirmation from the mobile application of the mobile device indicating that the user would like the server to reschedule the second activity;

in response to the confirmation, communicating ~~via the third API~~ with the second vendor to reschedule the second activity on behalf of the user, without having the user to directly contacting the second vendor; and

transmitting a third message having information of rescheduled second activity to the mobile device to be presented to the user by the mobile application.

2. The method of claim 1, further comprising:

~~receiving a login request from the mobile application of the mobile device for logging into the user account of the user;~~

~~in response to the login request, extracting a first device identifier (ID) from the login request that uniquely identifies the mobile device, a first username, and a first password, wherein the first device ID is one of a media access control (MAC) address and an international mobile subscriber identity (IMSI) code;~~

~~retrieving a second device ID, a second username, and a second password from a user profile of the user maintained by the server, wherein the second device ID, the~~

~~second username, and the second password are previously provided by the user and stored in the user profile;~~

~~authenticating the user by matching the first device ID, the first username, and the first password with the second device ID, the second username, and the second password, respectively; and~~

generating and transmitting a personalized page to the mobile device to be presented to the user upon successfully authenticating the user, wherein the personalized page listing a plurality of products that have been registered with the server by the user and stored in the asset store of the user, including the first product and second product.

3. The method of claim 2, wherein generating and transmitting a personalized page to the mobile device comprises:

retrieving the first product information of the first product from the asset store;

determining a first set of communications channels that are available for the user to obtain a live support session with a support agent of the server for supporting the first product;

retrieving the second product information of the second product from the asset store;

determining a second set of communications channels that are available for the user to obtain a live support session with a support agent of the server for supporting the second product; and

transmitting the first and second product information and first and second sets of communications channels as part of the personalized page to the mobile device to be presented to the user, wherein the first set of communications channels is displayed with the first product information and the second set of communications channels is displayed with the second product information.

4. The method of claim 3, wherein determining the first and second sets of communications channels comprises:

accessing the user profile of the user to retrieve a third set of communications channels that are preferred by the user to be used to obtain live support services from the server;

accessing a first client database associated with the first vendor to retrieve a fourth set of communications channels that are preferred by the first vendor;

accessing a second client database associated with the second vendor to retrieve a fifth set of communications channels that are preferred by the second vendor;

generating the first set of communications channels based on the third set of communications channels and the fourth set of communications channels; and

generating the second set of communications channels based on the third set of communications channels and the fifth set of communications channels, wherein a communications channel is one of voice, email, and chat communications mechanisms.

5. The method of claim 4, further comprising:

identifying one or more first common communications channels that exist in both the third set of communications channels and the fourth set of communications channels, wherein the first set of communications channels contains one or more first common communications channels; and

identifying one or more second common communications channels that exist in both the third set of communications channels and the fifth set of communications channels, wherein the second set of communications channels contains one or more second common communications channels,

wherein the first set of communications channels is different than the second set of communications channels.

6. The method of claim 5, wherein the third set of communications channels was configured by the user and stored in the user profile of the user when the user registered the user account, wherein the fourth set of communications channels was configured by a first administrator of the first vendor and stored in the first client database to be used for a support agent of the server to provide live support services for the first product, and wherein the fifth set of communications channels was configured by a second administrator of the second vendor and stored in the second client database to be used for a support agent of the server to provide live support services for the second product.

7. The method of claim 6, wherein the confirmation received from the mobile application of the mobile device indicating that the user would like the server to reschedule the second activity further includes a user selection of a communications channels from the second set of communications channels that is displayed at the mobile device, wherein the method further comprise:

determining a subject matter that is associated with the second activity;

identifying and selecting a support agent having a skill set capable of providing live support services for the subject matter of the second product;

establishing a live communications session between the user and the selected support agent using the selected communications channel to allow the support agent discussing detailed information with the user regarding rescheduling the second activity; and

tracking and storing interaction between the user and the selected support agent in an interaction history store maintained by the server.

8. A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause the computer to perform a method of any of claims 1 to 7.

9. An apparatus comprising means for performing a method of any of claims 1 to 7.

10. A system operating as a server for providing product support services, the system including:

a processor; and

a memory storing executable instructions to be processed by the processor, the executable instructions when executed from the memory, causing the processor to perform operations, the operations comprising:

receiving~~, via a first application programming interface (API),~~ an electronic receipt from a mobile application running within a mobile device of a user over a network, wherein the electronic receipt includes a transaction identifier (ID) representing a purchase transaction from a purchase facility, the electronic receipt listing a first product provided by a first vendor and a second product provided by a second vendor ~~as a second client and a third client of the server, respectively~~, wherein the first and second products have been purchased by the user at the purchasing facility, wherein the purchasing facility is a separate entity ~~as a first client~~ of the server,

in response to the electronic receipt, automatically communicating by a registration module with a first backend system associated with the first vendor ~~via a second API~~over the network to obtain first product information of the first product based on information extracted from the electronic receipt without receiving detailed information of the first product from the user,

automatically communicating by the registration module with a second backend system associated with the second vendor via a third API to obtain second product information of the second product based on the information

extracted from the electronic receipt without receiving detailed information of the second product from the user,

registering by the registration module the first product and the second product with the server, including storing the first product information and the second product information in an asset store of a user account of the user maintained by the server,

~~generating, by a case management module, a case ID to identify a support case associated with the first product and the second product,~~

generating, by a touch engine, a touch plan representing a support case context ~~that is identified by the case ID~~, wherein the touch plan includes a list of one or more action items to be performed due to an occurrence of one or more events associated with the first product and the second product,

performing an analysis on the first product information and the second product information to determine a relationship between the first product and the second product,

storing relationship information between the first product and the second product in the touch plan, the first product being associated with a first activity and the second product being associated with a second activity

receiving a first notification ~~via the second API~~ from the first backend system over the network, the notification indicating an event associated with the first activity occurred that requires a change of the first activity,

in response to the first notification, ~~accessing a user profile of the user maintained by the server to determine a first preferred communications channel that has been configured by the user;~~transmitting ~~via the first preferred communications channel~~ a first message on behalf of the first vendor to the mobile device, wherein the first message is to be displayed by the mobile application to the user to indicate the change of the first activity,

determining whether a modification of the second activity is needed based on the relationship information of the first product and the second product stored in the touch plan,

in response to determining that the modification of the second activity is needed, transmitting a second message on behalf of the second vendor to the mobile device to be displayed by the mobile application, indicating a possible modification of the second activity and offering a list of one or more options to modify the second activity, ~~wherein the second message is automatically transmitted without initiating from the user,~~ wherein the second message includes a one-touch button displayed therein to allow the user to contact a support agent associated with the server,

receiving a signal from the mobile device representing an activation of the one-touch button displayed within the second message,

in response to the signal, ~~determining a second preferred communications channel preferred by and available to the user,~~ establishing ~~using a second preferred communications channel~~ a live communications session between the user and a support agent of the server to allow the user discuss the possible change of the second activity,

transmitting the touch plan to an agent device of the support agent, wherein the touch plan further includes a link referencing the product information of the first product and the second product to allow the support agent to discuss with the user over the live communication session in view of the product information,

receiving a confirmation from the mobile application of the mobile device indicating that the user would like the server to reschedule the second activity,

in response to the confirmation, communicating ~~via the third API~~ with the second vendor to reschedule the second activity on behalf of the user, without having the user to directly contacting the second vendor, and

transmitting a third message having information of rescheduled second activity to the mobile device to be presented to the user by the mobile application.

11. The system of claim 10, wherein the operations further comprise:

~~receiving a login request from the mobile application of the mobile device for logging into the user account of the user;~~

~~in response to the login request, extracting a first device identifier (ID) from the login request that uniquely identifies the mobile device, a first username, and a first password, wherein the first device ID is one of a media access control (MAC) address and an international mobile subscriber identity (IMSI) code;~~

~~retrieving a second device ID, a second username, and a second password from a user profile of the user maintained by the server, wherein the second device ID, the second username, and the second password are previously provided by the user and stored in the user profile;~~

~~authenticating the user by matching the first device ID, the first username, and the first password with the second device ID, the second username, and the second password, respectively; and~~

generating and transmitting a personalized page to the mobile device to be presented to the user upon successfully authenticating the user, wherein the personalized page listing a plurality of products that have been registered with the server by the user and stored in the asset store of the user, including the first product and second product.

12. The system of claim 11, wherein the generating and transmitting a personalized page to the mobile device comprises:

retrieving the first product information of the first product from the asset store;

determining a first set of communications channels that are available for the user to obtain a live support session with a support agent of the server for supporting the first product;

retrieving the second product information of the second product from the asset store;

determining a second set of communications channels that are available for the user to obtain a live support session with a support agent of the server for supporting the second product; and

transmitting the first and second product information and first and second sets of communications channels as part of the personalized page to the mobile device to be presented to the user, wherein the first set of communications channels is displayed with the first product information and the second set of communications channels is displayed with the second product information.

13. The system of claim 12, wherein determining the first and second sets of communications channels comprises:

accessing the user profile of the user to retrieve a third set of communications channels that are preferred by the user to be used to obtain live support services from the server;

accessing a first client database associated with the first vendor to retrieve a fourth set of communications channels that are preferred by the first vendor;

accessing a second client database associated with the second vendor to retrieve a fifth set of communications channels that are preferred by the second vendor;

generating the first set of communications channels based on the third set of communications channels and the fourth set of communications channels; and

generating the second set of communications channels based on the third set of communications channels and the fifth set of communications channels, wherein a communications channel is one of voice, email, and chat communications mechanisms.

14. The system of claim 13, wherein the operations further comprise:

identifying one or more first common communications channels that exist in both the third set of communications channels and the fourth set of communications channels, wherein the first set of communications channels contains one or more first common communications channels; and

identifying one or more second common communications channels that exist in both the third set of communications channels and the fifth set of communications channels, wherein the second set of communications channels contains one or more second common communications channels,

wherein the first set of communications channels is different than the second set of communications channels .

15. The method of claim 7, wherein generating and transmitting a personalized page to the mobile device further comprises :

accessing a product intelligence database to determine a first rebate, a first reward, and a first warranty information associated with the first product;

determining a first link linking with a first storage location storing self-support information of the first product, wherein the first link when activated allows the user to browse the self-support information at the first storage location to find a possible solution concerning the first product without having to contact a support agent of the server;

accessing the product intelligence database to determine a second rebate, a second reward, and a second warranty information associated with the second product;

determining a second link linking with a second storage location storing self-support information of the second product, wherein the second link when activated allows the user to browse the self-support information at the second storage location to find a possible solution concerning the second product without having to contact a support agent of the server;

transmitting the first rebate, first reward, and first warranty information and the first link as part of the personalized page to the mobile device to be displayed with the first product; and

transmitting the second rebate, second reward, and second warranty information and the second link as part of the personalized page to the mobile device to be displayed with the second product.

16. The method of claim 15, further comprising

determining a first retail location of the first vendor to allow the user to find a nearby retail location of the first vendor;

determining a first social network community associated with the first product to allow the user to access an online discussion forum for the first product;

determining a second retail location of the second vendor to allow the user to find a nearby retail location of the second vendor;

determining a second social network community associated with the second product to allow the user to access an online discussion forum for the second product;

transmitting as part of the personalized page information concerning the first retail location and the first social network community to the mobile device, wherein the

information concerning the first retail location and the first social network community is displayed with the first product at the mobile device; and

transmitting as part of the personalized page information concerning the second retail location and the second social network community to the mobile device, wherein the information concerning the second retail location and the second social network community is displayed with the second product at the mobile device.

17. The method of claim 1, wherein the first and second activities are scheduled based on the relationship of the first product and second product, wherein the first activity includes traveling along to a first route to a destination, wherein the first route during the first activity is monitored in real time via a separate vendor, wherein the electronic receipt further includes a third product provided by a third vendor and a fourth product provided by a fourth vendor, wherein the method further comprises:

receiving real-time information on the situation of the route monitored via a fourth API from a traffic service provider as a fourth client of the server;

determining a second route as an alternative route to the destination before the destination is reached for the first activity along the first route based on the real-time information received on the first route, the second route to possibly allow the second activity to occur in time for the schedule without modifying the second activity; and

notifying via the second API the first vendor of the first product in real time during the first activity, the notification indicating the second route to the destination for the first vendor to change from the first route to the second route for the possibility of allowing the second activity to occur in time.

18. The method of claim 17, further comprising:

determining whether the first activity is still late for the schedule after notifying the first vendor of the second route to the destination;

if the first activity is determined to be late for the schedule, transmitting a fourth message to the mobile device of the user on behalf of the second vendor notifying the user

regarding the first activity being late, the fourth message prompting the user whether the user would like the server to reschedule the second activity, without requiring the user to initiate a request for a support service;

communicating with a third backend system of the third vendor via a fifth API on behalf of the user to reschedule a third activity of the third product;

communicating with a fourth backend system of the fourth vendor via a sixth API on behalf of the user to reschedule a fourth activity of the fourth product

wherein the first activity of the first product is a shuttle bus transportation to an airport, wherein the second activity of the second product is an airline flight to a second destination, wherein the third activity of the third product is a rental car reservation at the second destination, and wherein the fourth activity of the fourth product is a hotel reservation at the second destination.

19. A computer-readable storage medium having instructions stored therein, which when executed by a computer, cause the computer to perform a method of claim 17 or 18.

20. An apparatus comprising means for performing a method of claim 17 or 18.