Abstract: The present invention provides a system and method to make payment online as well in retail stores. The transaction request is generated at the merchant's end and is sent to the centralized platform. On receiving the request, centralized platform authenticates it, generates a transaction identifier and sends it to the processor i.e. merchant device. The transaction identifier containing the details such as merchant ID, transaction amount, timestamp of transaction request, location of the merchant is linked with merchant identifier and is encoded in a barcode. The mobile device scans the barcode or manually enters the transaction identifier to retrieve transaction details and make the payment. Since the unique merchant identifier is linked with every transaction identifier, the merchant can provide the same to the users to make payment against their transaction request. In this way the merchant does not require to install an additional hardware system to display different barcodes to the user for transaction.
A SYSTEM AND METHOD FOR FACILITATING CROSS-PLATFORM 
FINANCIAL TRANSACTIONS 

FIELD OF INVENTION 

The present invention relates to a system and method for making a secured payment via online 
or using a mobile device without requiring any additional external hardware such as point of 
sale devices. 

PRIOR ART AND PROBLEM TO BE SOLVED 

Nowadays there are many methods of cashless payments available that allow users to make 
payment for the goods purchased using debit/credit/pre-paid cards or via mobile phone. Though these new payment methods have eliminated the need of carrying money, however, 
users still have to carry their debit/credit/pre-paid cards or mobile phone with them to make 
payment. Carrying cards or mobile phone with oneself is not secure as they can easily be stolen. 

Also card details are exposed while making the payment online or in a retail store. Though, 
there are systems available that allow contactless payment using Near Filed Communication 
(NFC), but they require installation of NFC compatible point of sale (POS) devices. These 
systems are also vulnerable to hacking and the NFC compatible POS devices are very expensive. 

Some solutions are also available that encode card's information on a barcode but they can also be easily hacked as complete information of the card is stored. 

WO 2013144930 discloses a method and system for making payment by scanning barcode 
using mobile device. This method and system requires merchant to either install an additional 
hardware to display the barcode to the user or rotate the computer/mobile screen towards the 
user thereby enabling him to scan the same for making payment. This also requires the user 
to have a camera enabled mobile device for scanning the barcode.
Most of the existing solutions require mobile devices and are not compatible with personal computer or such similar devices. Additionally, there is no such solution available that can be used to make payment for online ecommerce as well in-store mobile payment or peer to peer payment. Further, most of the available solutions require user to carry his mobile device and there is no provision for transactions to occur, in case he does not have the mobile device with him.

Therefore, there clearly exists a need for a cross-platform payment system and method that does not require a camera enabled mobile device or installation of additional hardware device and is capable of processing financial transactions online as well as in retail stores with ease without compromising on the security.

The present invention solves the aforesaid problems and provides a system and method for facilitating user to make payment via online and in retail stores even if he is not carrying debit/credit/pre-paid cards and mobile device. The present invention does not require installation of any additional hardware device.

**Summary of the Invention**

The primary object of the invention is to provide a system and method to make payment online as well in retail stores.

Another object of the invention is to facilitate transactions using transaction identifier as well as merchant identifier and encoding them in a barcode.

Another object of the invention is to allow user to either scan the barcode or manually enter the transaction or merchant identifier to make payment.

A further object of the invention is to make payment even without mobile device and requiring any addition hardware installation.
Yet another object of the invention is to facilitate payment by logging in on a merchant's computer/device/POS with or without prior sign-up.

Other objects and advantages of the present invention will become apparent from the following description taken in connection with the accompanying drawings, wherein, by way of illustration and example, the embodiments of the present invention are disclosed.

**BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 illustrates the system and method of making payment via online.

Figure 2 illustrates the system and method of making payment in a retail store.

Figure 3 illustrates the system and method of making payment when user is initiating transaction.

Figure 4 illustrates the system and method of making payment by fetching latest unpaid transaction.

**DETAILED DESCRIPTION OF THE INVENTION**

In the following description, numerous specific details are set forth in order to provide a thorough understanding of the presented concepts. The presented concepts may be practiced without some or all of these specific details. The well-known process operations have not been described in detail so as to not unnecessarily obscure the described concepts. While some concepts will be described in conjunction with the specific embodiments, it will be understood that these embodiments are not intended to be limiting.

The present invention provides a system and method for facilitating transaction online as well in retail stores through transaction and merchant identifiers. The present invention is compatible with mobile devices as well as computer or other such similar devices.
Definitions

Merchant: The merchant is the entity that receives the payment for providing service/product to a user. The merchant here refers not only to a physical entity but also to websites such as ecommerce/website integrations that receives online payments.

User: The user herein refers to the payee who pays for the product/service that is provided by the merchant.

Mobile device: A mobile device can be any device that allows user to communicate with another entity. Examples of mobile devices include mobile communication devices such as phones (e.g., cellular phones, smart phones, tablets).

Centralized platform: The centralized platform may consist of a central server or multiple servers for secured exchange of information among themselves and/or with other platforms, applications or devices.

Authorization request message: It may include a message, or sequence of messages, that requests the issuer of a payment account to authorize a transaction. Such a request message may comply with ISO (International Organization for Standardization) 8583, which is a standard for systems that exchange electronic transactions made by cardholders using payment cards. Authorization request messages may comprise an account number, a transaction amount, a CVV (card verification value), expiration date, service code, and other information.

Authorization response message: It may refer to a message, or sequence of messages, that responds to a merchant's and/or acquirer's request to authorize a transaction. An authorization response message may comply with ISO 8583. Authorization response messages may comprise authorization codes for authorized transactions.

One embodiment of the invention is a system for facilitating transactions online as well as in retail stores. The system comprises processor, centralized platform and mobile device. The processor is at the merchant's end from where a transaction request is generated. The
transaction request includes transaction details such as transaction amount, transaction type (with respect to products purchased) along with merchant ID, timestamp of request and other such necessary details. The said request is sent to the centralized platform.

On receiving the request, centralized platform authenticates it, generates a transaction identifier and sends it to the processor. The said transaction identifier includes but not limited to the details such as merchant ID, transaction amount, timestamp of transaction request, location of the merchant is linked with merchant identifier. The transaction identifier is then encoded in a barcode or QR code or any other encoding method, when received by the processor. The transaction request may be valid for a certain time period.

The mobile device scans the code (e.g. barcode or QR code) or manually enters the transaction identifier to retrieve transaction details and make the payment. Since the unique merchant identifier is linked with every transaction identifier, the merchant can provide the same to the users to make payment against their transaction request. In this way the merchant does not require to install an additional hardware system to display different barcodes to the user for transaction.

The user scans the transaction or merchant identifier using the camera of mobile device or manually enters the code if mobile device is not camera enabled.

The transaction request generated by the processor may also be stored on a local server before being sent to the centralized platform.

In one embodiment, if user uses transaction identifier, the corresponding transaction details are fetched on his mobile device or computer. The user then checks and confirms transaction details and makes purchase. In another embodiment, if user uses merchant identifier, the centralized platform sends details of latest/recently entered unpaid transaction request on the mobile device or computer for authentication and confirmation. The user is then prompted to proceed and make payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. During payment process, the entered
transaction or merchant identifier along with information identifying the client such as a unique client identification number, email id, mobile number, a geolocation tag for security purposes, CVV code, and any other required information is then sent to centralized platform for processing. The centralized platform forwards payment information to processing bank which then processes the payment and returns the status of the transaction. If the transaction is successful, client and merchant are notified. They are also notified in case of a transaction error.

The user can access the system either through his mobile device or through web so as to enable transaction online (such as pay within another application) or in a retail store using merchant or transaction identifier. The user is required to sign-up or register with system or else uses the system as guest user. The system also hides card details of client from merchant in order to provide security and prevent card fraud. Therefore, the present system allows a user to pay for goods purchased by either entering his card details or inserting the unique transaction or merchant identifier via barcode capture or optical character recognition or manual entry.

The merchant is also required to be registered with the system so as to facilitate user to perform transactions using the present system. To register the merchant is required to sign-up for an account. The merchant is required to provide necessary documents, for example, identity proof, company name if available, bank account details to receive the funds. After verification, the merchant is eligible to generate transaction requests to accept money. The merchant also obtains an API (Application Program Interface) key that is used to process transactions on online ecommerce stores and websites. This API key is different for every merchant and serves as a mean to identify the merchant and validate the requests. If someone generates a transaction request from an invalid API key, it will be declined as that person does not officially have the ability to receive payments.

The merchant can also generate several unique merchant identifiers in order to generate transaction requests for payments inside a store. A single merchant identifier can be used to process different transactions provided that all the transactions are processed one by one. Since the merchant identifier remains same, therefore an additional hardware or screen based
point of sale terminal or device is not required to be installed in order to process payments. The merchant can simply, for example, fix his merchant identifier on his desk which can be scanned or manually entered by the user to process the payment.

In order to sign-up or register, the user is required to go through a one-time sign-up process and setup an account. To create an account, the user is required to provide necessary details such as name, email-id, password, and other such information. On successful sign-up, for example- a confirmation email is sent to the registered email-id. In order to proceed, the user is required to verify email-id by clicking on the link sent in email body. After verification, the user details are sent to centralized platform and an account is created. The said online account is used to manage all the linked devices. In order to log-in through mobile device, user is required to set up a passcode for faster log-in.

Thereafter, the user adds payment information such as credit card or debit card or pre-paid card information. The card information is added by either scanning the card via mobile device's camera or by manually entering the card details. The facility of adding card details via scanning is made available at the user end only. If the card is scanned using the devices' camera, OCR technology (Optical Character Recognition) is used to decode (convert to digital text input) the information on the credit or debit or pre-paid card. On receiving the card details, they are verified. After that, they are transmitted to the centralized platform for secure storage via a secure channel for example HTTPS.

The centralized platform sends card details to the card issuing entity for example- MasterCard or Visa. The card issuing entity secures card details using encryption or any other processes such as tokenization. The card details are then added to centralized platform thereby enabling user to make payment for his purchases.

The user is required to be registered with the system for in-store payments. However, if the user is paying online, he is not required to be pre-registered with the system and can still avail the facility as a guest user.
Another embodiment of the present invention is a system for making peer-to-peer transaction. A unique barcode is assigned to every user encoding the user ID, bank details. The present system comprises of first user device, centralized platform and second user device. The barcode or user ID of the user to whom the transaction is to be made is scanned or manually entered by the second user device who is making the transaction. Then, the scanned or entered barcode or user ID of the first user along with a request for transaction is sent to the centralized platform.

The centralized platform on receiving the request from second user, prompts the user to enter the amount to be paid and choose payment option i.e. to make payment from saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. The centralized platform forwards payment information to processing bank which then processes payment and returns the status of transaction. Both the first user and second user are notified on successful transaction or transaction failure.

The user ID can be for example an email, phone number and the same is encoded within a barcode. The user can access the system either through his mobile device or through web.

Another embodiment of the invention is a system for facilitating transactions initiated by the user. In the system, merchant identifier and custom amount are entered from user device such as mobile device or computer or web by the user and is sent to the centralized platform. The centralized platform sends the merchant details such a merchant name, address, location and any other necessary information and corresponding transaction identifier to the user device. After receiving authentication from user device, the centralized platform processes the transaction and send notification on user device and processor.

The merchant identifier is inserted using the camera of mobile device or manually by entering the code if mobile device is not camera enabled.

The user is prompted to authenticate and make the payment by choosing the saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and
enters any additional authentication information if required such as 3D secure or CVV code. During payment process, the entered transaction or merchant identifier along with information identifying the user such as a unique user identification number, email id, mobile number, and a geolocation tag for security purposes, CVV code, and any other necessary information is then sent to centralized platform for processing. The centralized platform forwards the payment information to the processing bank which then processes the payment and returns the status of the transaction. If the transaction is successful, client and merchant are notified. They are also notified in case of a transaction error.

Another embodiment of the invention is directed to a method of conducting a payment transaction wherein a transaction request is generated form a valid merchant account and is sent to centralized platform, the centralized platform on verifying the merchant issues a unique transaction identifier to the transaction request, the user scans or manually enters the transaction or merchant identifier using the mobile device to retrieve transaction details and make payment. The user can also directly log-in onto the merchant's device and make payment in case he is not carrying mobile device.

The merchant here refers not only to a physical entity but also to ecommerce/website integrations that receives online payments.

In order to use the present method of making secured transaction online as well in retail stores, the merchant is required to sign-up for an account. The merchant is required to provide necessary documents, for example, identity proof, company name if available, bank account details to receive funds. After verification, merchant is eligible to generate transaction requests to accept money. The merchant also obtains an API (Application Program Interface) key that can be used to process transactions on online ecommerce stores and websites. This API key is different for every merchant and serves as a mean to identify the merchant and validate the requests. If someone generates a transaction request from an invalid API key, it will be declined as that person does not officially have the ability to receive payments.

The merchant generates transaction request using his account or an API key on mobile device or computer. The merchant is then required to input some necessary details in order to
generate the transaction request such as user name, payment amount, type of payment, one-time transaction or not. The transaction details are then sent to the centralized platform where a unique transaction identifier is issued with respect to the transaction request after verifying the merchant.

The transaction identifier along with transaction details are stored in payment queue database and is linked to the merchant identifier. The unique transaction identifier is then sent to the merchant device along with any other necessary details encoding in a barcode. The merchant either displays the transaction identifier every time for every transaction request or just displays his merchant identifier to the user which is fixed.

In order to display the transaction identifier, merchant is either required to rotate his screen to the user for every transaction or install an additional screen. However, the merchant identifier being fixed can be pasted for users to use it as input.

Now user either scans or manually enters transaction identifier or merchant identifier to make the transaction.

In one embodiment, if the user uses transaction identifier, the corresponding transaction details are fetched on his mobile device or computer. The user can then check and confirm the transaction and make the purchase. In another embodiment, if the user uses merchant identifier, the centralized platform sends details of latest/recently entered unpaid transaction request on the mobile device or computer for authentication and confirmation. The user then makes payment.

Another embodiment of the invention is directed to a method of payment transaction initiated by user. In the method, user enters merchant identifier and custom amount via user device such as mobile device or computer or web and the same are sent to centralized platform. The merchant details such a merchant name, address, location and any other necessary information and corresponding transaction identifier are sent by the centralized platform to the user device for authentication. The user then authenticates the details and payment
requested. After authentication, the transaction is processed and notification is sent on the user device and processor by the centralized platform.

The merchant identifier is inserted using the camera of the mobile device or manually by entering the code if mobile device is not camera enabled.

The user is prompted to authenticate and make the payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code.

Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including the card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account. The merchant and user are notified on successful completion of transaction.

Another embodiment of the present invention is a method of making peer-to-peer transaction. A unique code (e.g. barcode or QR code) is assigned to every user encoding the user ID, bank details. In the present method, the barcode or user ID of the first user to whom transaction is to be made is scanned or manually entered by the second user who is making the transaction.

Then, the scanned or entered barcode or user ID of the first user along with a request for transaction is sent to the centralized platform.

The centralized platform on receiving the request from the second user, prompts user to enter the amount to be paid and choose payment option i.e. to make payment from saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. The centralized platform forwards the payment information to processing bank which then processes the payment and returns the status of the transaction. Both the first user and second user are notified on successful transaction or transaction failure.
The user ID can be but not limited to an email, phone number and the same is to be encoded within a barcode. The user uses the method for making peer-to-peer transaction either through his mobile device or through web.

As shown in Figure 1, the system and method of the present invention used by user to pay online with mobile device. The user is required to log-in in order to make payment online. After successful authentication, the user is required to enter the transaction identifier generated by the merchant or the website either by capturing the transaction code if it is in the form of barcode or by manually. Once the transaction identifier is entered, transaction details from the database of centralized platform are retrieved on the mobile device. These details include but not limited to merchant name, email address, transaction amount, transaction timestamp, and any other such details that requires the user’s confirmation. The user is then prompted to proceed and make payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including the card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account.

Figure 2 shows the use of present system and method in a retail store using mobile device. The process of an in-store payment is similar to an online transaction through a mobile device using the mobile application. The merchant generates transaction request and sends the same to the centralized platform. The centralized platform returns the transaction identifier to the merchant. The merchant either dictates the transaction identifier, print it on a receipt, or show it directly to users. The user after successful logging-in into the application, the user enters transaction identifier by either capturing transaction code if it is in the form of barcode or by manually. Once the transaction identifier is entered, transaction details from the database of centralized platform are retrieved on the mobile device. These details include merchant name, email address, transaction amount, transaction timestamp, and any other such details that
requires user's confirmation. The user is then prompted to proceed and make the payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account.

Further, the system and method of present invention allows transaction via online or in retail store using merchant identifier. The merchant first generates a transaction request by inserting all the required transaction details and sends it to the centralized platform. The centralized platform registers the request by validating the merchant's API key and stores it in payment queue database. Then the user using his mobile device or computer enters the merchant identifier by either scanning the barcode or manually. Once the merchant identifier is entered by the user, it is sent to the centralized platform. The centralized platform automatically retrieves the unpaid transaction or latest transaction which was generated from the merchant identifier, and sends the details to the user on mobile device or computer for verification as shown in Figure 4. The user is then prompted to proceed and make the payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including the card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account.

While processing payments using the merchant identifier instead of the transaction identifier, the centralized platform automatically returns the latest unpaid transaction generated from that merchant identifier. A single payment is processed at a time especially in a retail store,
therefore, at any given instant, a maximum one transaction is pending or unpaid which makes it easy for the centralized platform to send its details to the user.

However for online payments, transaction identifier is preferred as multiple transactions takes place at a time and transaction identifier encoded in the barcode is displayed on the device (such as mobile phone or computer screen). Therefore additional hardware is not required to be installed. Further, if user scans or enters the merchant identifier before merchant generates a transaction request, the user is automatically notified on generation of new request.

The system and method of present invention processes online transaction even when user does not have a mobile device with him. The merchant first generates a transaction request by inserting all the required transaction details and sends it to the centralized platform. The centralized platform returns the transaction identifier to the merchant with respect to the transaction request. If user already is pre-registered with the system and not carrying the mobile device, he directly logs-in onto the merchant's site using the registration id and password.

The user is then prompted to proceed and make payment by choosing saved cards or to perform transaction with new card. After selecting the card, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code.

Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account.

If the user is not registered, he still avails the facility as a guest user. The user is then prompted to enter card details to make payment. After entering the card details, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the
request. On validating the request, centralized platform processes the transaction by sending
authorization request message including the card details and transaction amount to the issuing
bank. The issuing bank sends the authorization response message and transfers money to the
merchant bank account.

If the information is correct, transaction is processed otherwise client is notified about the failure.

The system and method of present invention processes payment in a retail store when user is
not carrying a mobile device with him. The merchant first generates a transaction request by
inserting all the required transaction details and sends it to the centralized platform. The
centralized platform returns the transaction identifier to the merchant. If user is not carrying
the mobile device with him, he/she logs-in into the merchant's device at the time of payment
if he is pre-registered with the system. The user logs-in using the registration id and password.
The user is then prompted to proceed and make the payment by choosing the saved cards or
to perform transaction with new card. After selecting the card, user clicks on pay button and
enters any additional authentication information if required such as 3D secure or CVV code.
Then the authorization request along with any additional details are automatically sent to the
centralized platform (using a secure information transfer channel) to validate the request. On
validating the request, centralized platform processes the transaction by sending authorization
request message including the card details and transaction amount to the issuing bank. The
issuing bank sends the authorization response message and transfers money to the merchant
bank account.

While making the payment by logging-in on the merchant's device, the card details of the
user are directly sent to the centralized platform and not saved on merchant's device or point-
of-sale system thus assuring data security. The merchant's device can retrieve or view the
allowable details such as the bank account associated with the card, the last 4 digits of the
card, and any other information. Further, the system and method of the present invention is
used to make payment initiated by user wherein the user selects or customizes payment
amount to be sent to the merchant as shown in Figure 3. In this case user initiates the
transaction request against a bill entered by the merchant, via mobile device or computer or
web and enters transaction details such as transaction amount, transaction type (with respect to products to be purchased) along with merchant ID and other such necessary details and sends it to the centralized platform. On receiving said details, the centralized platform verifies them and processes the payment/transaction requested by the user. The merchant and user are notified on successful completion of transaction.

The merchant identifier is inserted using the camera of the mobile device or manually by entering the code if mobile device is not camera enabled.

If the user is not registered, he still avails the facility as a guest user. The user is then prompted to enter card details to make the payment. After entering the card details, user clicks on pay button and enters any additional authentication information if required such as 3D secure or CVV code. Then the authorization request along with any additional details are automatically sent to the centralized platform (using a secure information transfer channel) to validate the request. On validating the request, centralized platform processes the transaction by sending authorization request message including the card details and transaction amount to the issuing bank. The issuing bank sends the authorization response message and transfers money to the merchant bank account.

Once the transaction is processed, user and merchant receives a notification of the transaction status on the platform being used. This notification can be but is not limited to a push notification or an SMS message. If the transaction is failed, the reason for failure is notified and the client can retry to make payment.

The centralized platform stores the details and logs of completed transactions and all the necessary details of the clients/merchants along with payment information such as debit/credit/pre-paid cards in an encrypted form.

While the present invention has been described with reference to one or more preferred embodiments, which embodiments have been set forth in considerable detail for the purposes of making a complete disclosure of the invention, such embodiments are merely exemplary and are not intended to be limiting or represent an exhaustive enumeration of all aspects of
the invention. The scope of the invention, therefore, shall be defined solely by the following claims. Further, it will be apparent to those of skill in the art that numerous changes may be made in such details without departing from the spirit and the principles of the invention.
CLAIM

1) A method for facilitating financial transactions between a user and a merchant, comprising:
   generating a transaction request from a processor and sending it to a centralized platform;
   generating a transaction identifier by the centralized platform on receiving said request and sending it to the processor; and
   encoding the transaction identifier by the processor;

   wherein entering the encoded transaction identifier or merchant identifier from a user device to retrieve transaction details and making payment;

   wherein retrieving transaction details by logging-in on user account on the processor and making payment in absence of the user device.

2) The method for facilitating financial transactions between a user and a merchant as claimed in claim 1, wherein the retrieved transaction details are one of details entered by the merchant corresponding to the transaction request or last un-paid transaction request.

3) The method for facilitating financial transactions between a user and a merchant as claimed in claim 1,

   wherein said processor is a merchant device, and
   merchant device is personal computer, mobile device, tablet, website or any other communication device or medium;

   wherein said centralized platform consists of a central server or multiple servers for secured exchange of information with other platform, application or device; and
wherein said user device is a mobile device such as phones, cellular phones, smart phones, tablets or any other communication device.

4) The method for facilitating financial transactions between a user and a merchant as claimed in claim 1, wherein said transaction request includes transaction details such as transaction amount, transaction type (with respect to products purchased), merchant ID, timestamp of request and other necessary details;

5) The method for facilitating financial transactions between a user and a merchant as claimed in claim 4, wherein said transaction identifier includes merchant ID, transaction amount, timestamp of transaction request, and location of merchant and other necessary details.

6) The method for facilitating financial transactions between a user and a merchant as claimed in claim 5, wherein said encoded transaction identifier is either scanned or manually entered using the user device.

7) The method for facilitating financial transactions between a user and a merchant as claimed in claim 1, is used for payment via online and/or in retail stores.

8) The method for facilitating financial transactions between a user and a merchant as claimed in claim 1, wherein said transaction is initiated by user, comprising:

   entering merchant identifier and custom amount from a user device and sending a transaction request to a centralized platform;
generating a transaction identifier by the centralized platform on receiving said request and
sending a request on user device for authentication;

sending authentication message from the user device to the centralized platform; and
processing payment and sending notification to the user device and to the processor.

9) The method for facilitating financial transactions between a user and a merchant as claimed in claim 8.

wherein said processor is a merchant device, and
merchant device is personal computer, mobile device, tablet, website or any other communication
device or medium;

wherein said centralized platform consists of a central server or multiple servers for secured
exchange of information with other platform, application or device; and

wherein said user device is a mobile device such as phones, cellular phones, smart phones, tablets
or any other communication device.

10) The method for facilitating financial transactions between a user and a merchant as claimed in claim 8,
wherein said transaction request includes transaction details such as transaction amount,
transaction type (with respect to products purchased), merchant ID, timestamp of request and other
necessary details;

wherein said transaction identifier includes merchant ID, transaction amount, timestamp of
transaction request, and location of merchant and other necessary details.

11) The method for facilitating financial transactions between a user and a merchant as claimed in claim 10, wherein said transaction identifier is linked with merchant identifier.
12) The method for facilitating financial transactions between a user and a merchant as claimed in claim 8, wherein said merchant identifier is either scanned or manually entered using the user device.

13) The method for facilitating financial transactions between a user and a merchant as claimed in claim 8, is used for payment via online and/or in retail stores.

14) A system for facilitating transactions between a user and a merchant, the system comprising centralized platform including data storage, the centralized platform generates a unique transaction identifier associated with a transaction to be performed between a merchant and a user, to generate transaction data including payment information, to transmit the transaction data to the user device or another computing device, to receive a transaction confirmation message from the user, and to transmit payment details to a payment gateway or the merchant.
Figure 1
Figure 2
Figure 3
Figure 4
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
G06Q2 0/00, G06Q4 0/00 Version=2.0 017.01

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Keywords: financial, Transaction, Encode, Encrypt.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

☐ Further documents are listed in the continuation of Box C.
☒ See patent family annex.

"A" document defining the general state of the art which is not considered to be of particular relevance
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