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(54) Title: A MOBILE COMMUNICATION PLATFORM DEVELOPED FOR THE SERVICE SECTOR

(57) Abstract: The invention is related to a mobile communication platform (10) between the customers and service providers and comprising following characteristic: The service providers are listing their services lists in sub databases (132) and the sub databases are within a main database (131) functioning on a web server (13). A mobile device interface (11) scanning square bar-code tags provided by the service providers referring the service lists (menus) in the database. Upon scanning the square bar-code using the mobile device interface (11) the customer reaches the service-lists and transmits his/her order to the sub database (131) of the service provider.

## DESCRIPTION

### A MOBILE COMMUNICATION PLATFORM DEVELOPED FOR THE SERVICE SECTOR

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#### TECHNICAL FIELD

The invention is related to a mobile platform for the communication between a service provider and the customer.

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#### PRIOR ART

Customers are getting daily services from a spectrum of service providers according to their needs. In order to be served the customers need to address their requests to the service providers. The service providers serve the customers accordingly.

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The daily service request-service delivery cycle starts with a face to face communication. The customers express their needs to the service provider via face to face communication and most often this is the most time consuming and rate limiting step of the cycle. Particular example is a customer ordering a dish for dinner at a restaurant. The customer first requests the menu, decides his/her dish waits for the waiter and orders via face to face communication. Depending on the work load of the restaurant and the waiter this may take a lot of time. Furthermore, the orders may not be always received in the order they are requested. As a result a classical service-order-delivery service cycle requires extra time and most often it is not possible to serve the customer in certain standards. Similar problems are also common in nearly all of the service sector.

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There are several electronic communication platforms between the customer and the service provider. For example, the patent application TR201201577 describes an electronic system where the customers order their needs electronically. In the particular work, the communication between the customer and the service provider is carried out by an electronic device at the customer-end (ordering device) and a central receiver at the service provider front (order receiver). The customer-end

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device (ordering device, a hand-held device) is supplied by the service provider. The hand-held device displays the order lists (menu) and transmits the orders to the central receiver. Orders taken by the central receiver are then processed to serve the needs of the customer. This exemplar system removed the need of face to face communication between the customer and the service provider. However, the system requires expensive installment of hardware and software. This is a significant financial burden for the service provider. Furthermore the system needs to be installed for every single service provider separately. This is pretty time consuming and bothersome. In other words the system is not a central system and can only be applied to local businesses.

The patent application TR200903223 entitled "Electronic shopping basket" describes an electronic communication system between the customers and service-product providers. However, this system requires installment of magnetic card readers, bar-code readers, displays. This is again a significant financial burden on the business plan and the application of this system is limited to shopping malls only.

In Sum, there is an urgent need for technical advancements to overcome the burdens mentioned above.

## **BRIEF DESCRIPTION OF THE INVENTION**

The invention is related to a mobile communication system aiming to overcome the technical difficulties and improving the daily functioning of the service sector.

The main purpose of the system is to make use of the QR codes (square bar-code) and customer owned mobile hand-held devices for addressing customer needs over the internet to the service providers.

Another purpose of the invention is to give an opportunity to the service providers to display their services/service lists on an internet/intranet based mobile platform and the receive the customer requests-orders on the same mobile platform.

Another purpose of the invention of the interest is to provide a unique database to the service providers which are organized under the central database on the mobile platform.

- 5 Another purpose of the invention is to serve all the service providers on the same mobile web based platform. On that platform every service provider accesses the database unique to the particular account of the service provider and is able to process the data according to his/her business needs. Furthermore, the invention allows the administrator to access all the sub databases of the service providers if a  
10 consent by the service provider is given.

Another purpose of the invention is to allow the customers to order using their own personal hand-held device. That particular aim will make the need for the hand-held devices supplied by the service provider obsolete.

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The invention of interest as described above is a mobile communication platform conveying customers orders/needs to the service providers and will be described further below with the details and characteristics serving towards the following aims:

- 20 - A web server with sub-databases listing and processing the lists of the service providers, wherein the sub databases are organized under a main database.
- Square bar-codes (QR) wherein the service lists of the service providers are indexed under Square bar-code (QR) and wherein the square bar-codes (QR) are displayed to the customers.
- 25 - Mobile hand-held devices (customer owned) wherein the customers use for scanning the square bar-codes provide accessing the lists of the service providers and use for transmitting their orders to the service provider's database based on their decisions

30 Based on the criteria mentioned above the system functions as the following;

- The service providers list their services indexed with square bar-codes (QR) addresses in the sub databases.

- The square bar-codes (QR) referring to the service menu are placed at predetermined locations, wherein the square bar-code (QR) includes positional information as well.
- 5
- The customers scan the bar-codes using their personal hand-held devices and visualize the service menu on the device screen.
  - The customers decide on his/her order and transmits the order to the sub database of the service provider using his/her personal hand-held device.

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These steps performed for the day to day functioning of the system.

Furthermore, the services ordered by the customers in the past are recorded on the mobile devices and can be listed with respect to the date, price and location information, retrospectively. This information can be shared on social media according to the customers' preferences.

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The invention of interest also allows the customers to pay via their mobile devices for the services they purchased.

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In order to communicate the invention of the interest with the necessary technical details and its advantages the drawings as below should be mentioned.

## **BRIEF DESCRIPTIONS OF THE DRAWINGS**

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Figure 1 describes the mobile communication system schematically.

## **REFERENCE NUMBERS**

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- 10 Mobile Communication System
- 11 Mobile Device
- 12 Square Bar-code (QR)
- 13 Web Server
- 131 Main Database

## 132 Sub Database For The Services

### DETAILED DESCRIPTION OF THE INVENTION

5 In the following detailed description the invention of interest is depicted with particular examples without a limitation.

The mobile communication system (10) includes a web server (13) where the service providers organize and display their services (menu) to the customers and receive  
10 and process customer orders. The web server of interest (13) consists of a main database (131) and sub databases (132) unique to each service provider.

The sub databases (132) store the data regarding the service menus of the provider with detailed information such as price, and descriptions. Each service provider can  
15 track and process the orders on his/her sub database (132). Furthermore, the orders can be tracked during processing as "ready", "cooked", "delivered" and "paid". The processed data is stored and relevant statistics are displayed when needed.

Service providers index the service menus in their sub databases (132) using square  
20 codes QR (12). The customers access the service lists-menus and transmit their orders upon scanning the square bar-codes (QR) (12) using smart phone device interfaces (11). Upon scanning the square code (12) the mobile device (11) is directed to web page displaying the service menu. The customer reaching the service menu then chooses the service/product and transmits his/her order using the  
25 mobile interface to the web server (13). Upon reaching the web server (13) the order further transmitted to the sub database unique to the service provider (132) and displayed to the service provider. The service provider processes the order accordingly. The customer can pay for the service he/she purchased using the mobile service interface (11) after being served.

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Due to the structure of the database the services purchased by the customers via their personal mobile devices (11) are stored with information of date, locations, item, as well as information of location where location specific information is obtained by the GPS function of the hand-held mobile device (11). The customer can use this

information as a reference and share the information on the social media if he/she wants to.

In order to describe the daily functioning of the mobile communication system (10) we are depicting the daily functioning of the system (10) in a restaurant as below.

The service provider (restaurant owner) enters and stores his/her service menu under a square bar-code (QR) (12) designated web addressing his/her sub database and places the square bar-codes (QR) (12) on every table. The customer willing to order scans the Square bar-code (QR) (12) on his/her table using his/her personal hand-held mobile device. Upon scanning the square bar-code (QR) (12) the service menu appears on the screen of the hand-held mobile device (11) of the customer. The customer decides on the order among the menu on the screen of his/her hand-held device and transmits the order to the main server (13) using his/her hand-held mobile device interface. The service provider receives the order over the web server (13) and particularly over the sub database (132) and processes the order.

The service provider (The restaurant) receives and processes the requests-orders in the order in which they are received.

The customer willing to pay can pay using his/her mobile device (11).

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## CLAIMS

- 5 1. A mobile communication system (10) providing transmitting of customer requests-orders to the service provider, characterized in comprising
- Service databases (132) comprising service lists of the service provider, a main database (131) comprising said service databases (132) and a web server (13) comprising said main database (132)
  - 10 - Square barcodes (SQ) (12) under which the service lists (menus) of the service provider are listed.
  - Mobile device interfaces (11) Scanning Square Barcodes QR and enabling the customer to reach the service lists (menus) and transmit orders to the database of the service provider.
- 15 2. A mobile platform for the services sector transmitting customer requests-orders to the service provider, characterized in comprising the following process steps:
- The service providers list their services (menu) and these lists are indexed under unique square barcodes QR referring to unique sub-service  
20 database addresses.
  - The square barcode tags are placed at unique positions (i.e. Tables) and include the coordinate-location information.
  - The customers see the interactive lists (menu) of the services on the screen of their mobile hand-held devices upon scanning the square  
25 barcodes (12) via their hand-held mobile devices (11)
  - The customers choose the service/product of interest from service lists (menus) and transmits the order to the service providers sub database (132) under a main database.
- 30 3. A mobile communication method according to claim 2, characterized in that the service providers track and process customers' orders on service lists (menu) on the sub database (132) under the main database (13)



4. A mobile communication method according to claim 2, characterized in that the customers' interactions are stored on the main database (13) and retrieved and listed on the mobile device interface of the customer (11) with respect to date, price and location specific information.

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5. A mobile communication method according to claim 2, characterized in that the customers can pay for the services they purchased using the mobile device interface.

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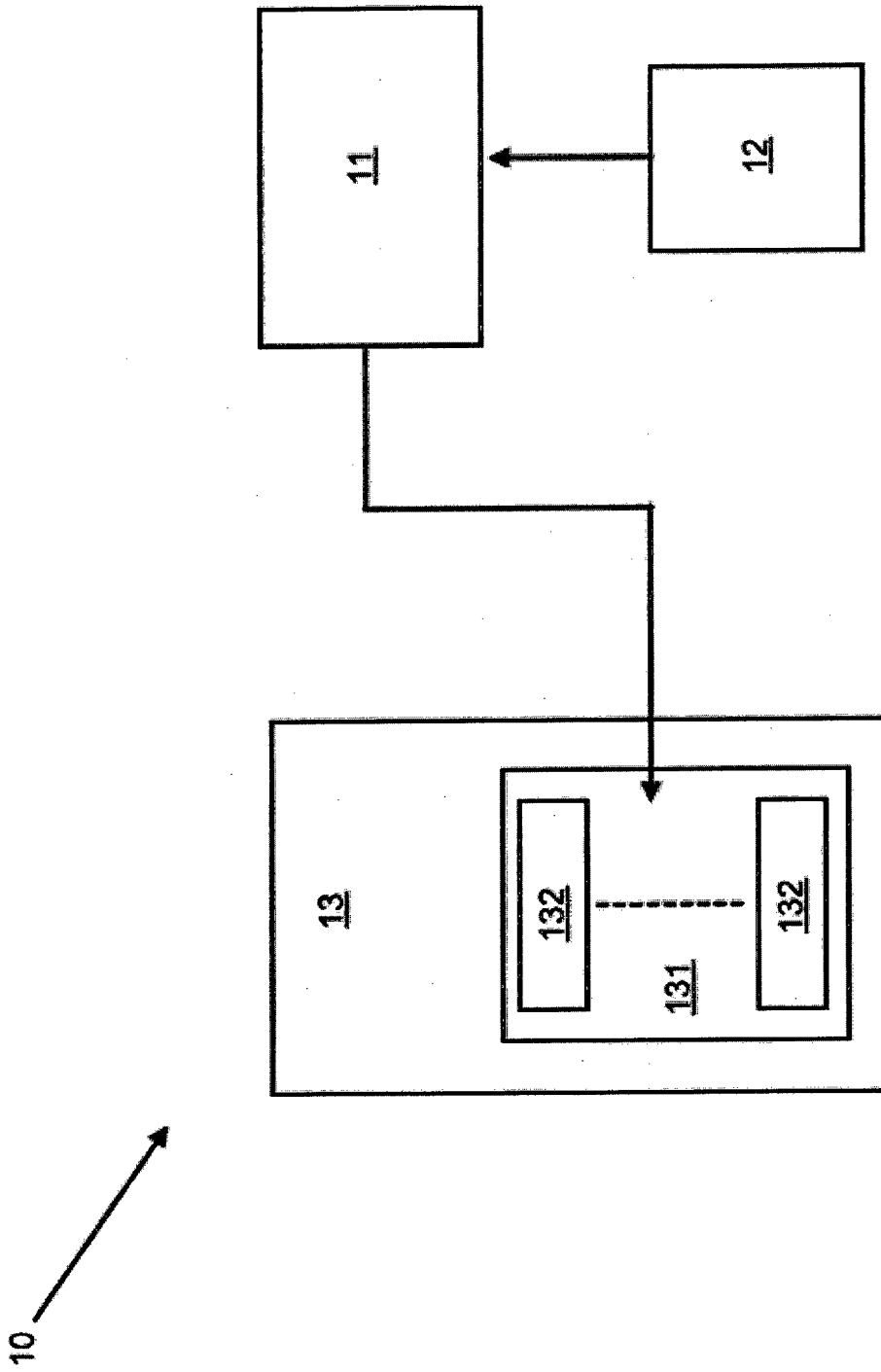


Figure 1

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G06Q  
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EPO-Internal, WPI Data, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2012/083359 A2 (COLLINS NICHOLAS SIMON [AU]) 28 June 2012 (2012-06-28) abstract page 3, line 20 - page 7, line 15 page 10, line 29 - page 20, line 14 page 24, line 15 - page 25, line 30 -----	1-5
X	US 2009/015379 A1 (ROSENBERG EINAR [US]) 15 January 2009 (2009-01-15) abstract paragraph [0019] - paragraph [0053] -----	1-5
X	US 2012/123877 A1 (BUICK JEFF [CA] ET AL) 17 May 2012 (2012-05-17) paragraph [0003] - paragraph [0013] paragraph [0021] - paragraph [0044] ----- -/--	1-5

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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Information on patent family members

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