

**A METHOD OF COLLECTING AND PROCESSING DATA TO GENERATE A
PLURALITY OF REAL-TIME RANKINGS OVER A PLURALITY OF TIME INTERVALS**

TECHNICAL FIELD

[0001] The present invention relates to the field of interactive data communication
5 networks. In particular, it relates to a method of collecting and processing data to
generate a plurality of real-time rankings over a plurality of time intervals.

BACKGROUND

[0002] The advent of mobile communication devices heralded the introduction of a new
10 range of data communication services or data gathering services. Service providers
leveraged on the widespread penetration and use of mobile telephones to carry out polls,
gather user information or preferences and/or to conduct quiz games and/or
competitions, for example. Previously, such data gathering services relied predominantly
on Short Message Services ("**SMS**") to send and receive data from a mobile telephone
15 user. The SMS data transmissions would then be processed accordingly. Such a service
is disclosed in PCT application published as WO 02/089506 ("**the '506 Application**").
The '506 Application discloses a telephone exchange system connected to a cellular
mobile telecommunication system. The system includes a computer server for distributing
messages over the cellular network. The computer server also allows for interfacing to
20 the internet in order to send messages to computers as well. Similarly, the '506
Application also discloses that the system is capable of receiving SMS data from users.

[0003] However, with the evolution of mobile devices, such mobile devices are no longer
limited to just communicating via SMS. Mobile devices are now capable of
communicating over various means. Examples of such means include, but are not limited
25 to, social networks established over the Internet, Internet-based messaging services,
cellular mobile telephone networks, or via direct peer-to-peer network connections, for

example. Likewise, the services offered over these new networks have also grown in sophistication.

[0004] In this regard, PCT application published as WO 02/13501 (“**the ‘501 Application**”) discloses a system and method for the provision of interactive data exchange and data communication services such as games and promotional, informational or advertisement messages to a user (page 3, lines 14 – 21 of the ‘501 Application). These services are disclosed as being transmitted over a computer or telecommunication network such as a cellular network or the Internet. In a specific embodiment, the system and method relate to the provision of quiz consisting of multiple choice questions (page 9, lines 3 – 15 of the ‘501 Application).

[0005] In one embodiment disclosed in the ‘501 Application, a user who wishes to participate in a quiz sends an SMS or uses an Internet or other computer network interface to register as a competitor. The user is then provided with questions for him to answer. If the answer is correct, the user receives the next question. However, if the answer is wrong, the same question is posed to the user. If the user gets too many questions wrong, the quiz will terminate. A user who answers all the questions correctly will receive a congratulatory message and a gift or prize. Other similar services provided include voting and the collection of feedback in the form of survey questions, for example (page 9, lines 3 – 15 of the ‘501 Application).

[0006] However, in all the services provided, in particular the quiz service, the system and method disclosed in the ‘501 Application does not cater for the element of time, which is a disadvantage. In particular, in the case of a quiz, a first user who completes the quiz correctly in 1 hour stands to win a prize. However, a second user who completes the same quiz correctly in just 15 minutes appears to be awarded the same prize as the first user. Also, given that the quizzes are run concurrently, there is a real possibility of having multiple winners simultaneously, and may also give rise to participants colluding in order to achieve the effect of having multiple winners at the same time.

[0007] In other words, there is no taking into account of both the time taken and the score attained by participants in an online quiz as factors for differentiating between the participants in order to rank the participants of a quiz. Therefore, it is possible for there to be multiple winners for the same quiz without any distinction as to which participant is really better or more skilful than the other. As mentioned, such a problem would not only limit the thrill and overall participation in the quiz since everybody could potentially be a winner, but more importantly, if indeed there are multiple winners, that could be potentially detrimental to the business operations of the conductor of the quiz.

[0008] Further, the system and method of the invention of the '501 Application is unable to carry out real-time ranking and tabulation of results of participants and convey that information in real-time as well to all participants through multiple distribution channels such as cellular networks, the Internet and television, for example. The information conveyed by the system and method of the '501 Application is not openly communicated in that it is neither provided direct nor made available to the public.

[0009] As such, it is an objective of the present invention to overcome the above-mentioned difficulties. Further, there remains a need for a method of collecting and processing data to generate a plurality of rankings over a plurality of time intervals in real-time to all participants and the public, if necessary, through multiple distribution channels. The method should also be easy to implement with existing telecommunication and data infrastructure networks and be cost-effective. In this respect, the method as described below, and as defined in the claims appended hereto, meets the aforesaid objectives.

DESCRIPTION OF THE INVENTION

[0010] The present invention relates to a method of collecting and processing data to generate a plurality of real-time rankings over a plurality of time intervals. The method includes establishing a communication link between a communication server, an application server and at least one communication network.

[0011] The communication network may have at least one user (a participant), wherein each of the at least one user may have a device for communicating with the communication server via the communication network. The application server typically includes a computer executable application programme installed thereon.

5 **[0012]** After establishment of a communication link between the communication server, application server and at least one communication network, the communication server is open to receiving an initiation request from the at least one user via the communications network. Upon receiving the initiation request the communication server relays said initiation request to the application server that has the application programme residing
10 and running thereon.

[0013] The application programme carries out processing of the initiation request and determines whether to grant the at least one user access to the application programme. The initiation request may be a registration step initiated by the user wherein the user sends information in a specific format to the communication server, which is then relayed
15 to the application server. The processing of the initiation request may be for the purposes of compliance with regulatory requirements or for the purposes of verifying the personal particulars of the user for billing purposes. Alternatively, the initiation request may be a start message indicating to the application programme that the participant wishes to interact with the application programme. The application server may check the format of
20 the data contained in the initiation request as well as the content of the data to ascertain that the data satisfies predetermined prerequisites contained in the application programme. Details regarding the content of the data of the initiation request are described in greater detail below.

[0014] Once processing by the application programme is complete, the application
25 programme will send either a positive determination message or a negative determination message to the user via the communication network. If a negative determination

message is sent, the process terminates and the user is free to re-send an initiation request whose data will be again subject to the processing stated above.

[0015] In the event that the application programme makes a positive determination, the application programme will be sending a first instruction to the at least one user indicating
5 that a response is required from the user. The first instruction may be, but is not limited to, a single quiz question (either open-ended or multiple choice), a bundle or quiz questions, instructions to perform specific actions, such as proceeding to a geographic location, instructions to provide feedback to an event or a survey, for example.

[0016] In one embodiment of the invention, the first instruction may be preceded by a
10 message from the application programme providing confirmation that the initiation request has been accepted and that access to or further interaction with the application programme has been allowed.

[0017] When the first instruction is sent to the participant by the application programme, the application programme also commences tracking concurrently at least one personal
15 time interval. The personal time interval commences at the time the first instruction is dispatched by the application programme. The at least one personal time interval may be unique to each initiation request sent by each user. As such, in an exemplary embodiment, a single user may engage in receiving and responding to multiple first instructions from the application programme. In such an exemplary embodiment, each of
20 the multiple first instructions may have its own unique personal time interval associated with it.

[0018] In another exemplary embodiment, the user, upon receiving the first instruction, responds to the first instruction by sending a response. The response may include a singular communication from the user to the application programme or a plurality of
25 communications from the user to the application programme.

[0019] The application programme receives the response from the at least one user with respect to the first instruction. Upon receiving the response the application programme

carries out a processing of the response (which may be either a singular communication or plurality of communications). The response may typically contain data, which the application programme will process with respect to format and content. The processing of the format and content typically involves the application programme carrying out a
5 comparison step against predetermined format requirements and content requirements. However, this may not necessarily be the case as the first instruction may be of such a form that it may not require comparison against a predetermined format or content.

[0020] If upon completion of the processing step of the response, a negative determination is made, the user is informed of the deficiencies in the response. Or
10 alternatively, the response is simply rejected by the application programme without any indication as to why the rejection has occurred. The user may be able to re-submit the same response or an alternative or modified response.

[0021] If a positive determination of the response of the user is made by the application programme, the application programme terminates tracking of the at least one personal
15 time interval. Concurrently, in the course of processing the response, the application programme would also assign an incrementable value to the at least one user upon the positive determination being made by the application programme. The actual incremental value assigned to the user may be based on the positive determination, the length of the at least one personal time interval and/or a combination of both or any other comparative
20 parameter as des.

[0022] In one exemplary embodiment of the invention, the first instruction may be a bundle of quiz multiple choice questions (MCQs). The response from the user may be a singular communication having a series of alphanumeric values that correspond to choices available in the various MCQs, or alternatively, the user may respond, if the
25 application programme permits, with a plurality of communications, each answering one of the MCQs. In either case, that would constitute the response of the user that is intended for processing by the application programme.

[0023] Once the content of the user's response has been processed, the user scores points either if all the answers to the MCQs are correct, or if some of the MCQs are correct, depending upon the rules of that particular quiz. The points allocated to the user may be based solely on the correct answers to the quiz MCQs (either individually or as a whole), the time taken for the user to submit a response that is capable of being processed, or any combination of the two, i.e., that the number of correct answers as well as the time taken by the participant, as given by the personal time interval, to complete the quiz MCQs. In this exemplary embodiment, any of the above may be taken into account in assigning a score to an individual.

10 **[0024]** As a further illustrative exemplary embodiment, a user who correctly completes 10 MCQs in 10 minutes may be allocated 10 points whereas a user who correctly completes 10 MCQs in 8 minutes or 12 minutes may be allocated 12 points or 8 points, respectively. This is an example of where the personal time interval is used as a basis for the application programme to allocate points. In another illustrative embodiment, a user
15 may complete 8 out of 10 MCQs correctly in 10 minutes whereas another user may complete all 10 MCQs correctly in 20 minutes. In this other illustrative embodiment, where the number of correct answers as well as the time taken to complete the quiz MCQs are taken into account in assigning a score to an individual, the latter user may score the same number of points as the earlier user due to the longer time taken to
20 complete the 10 MCQs. Essentially, the object of the quiz is for a user to complete the quiz in as quick a time as possible with the greatest number of correct answers.

[0025] Based on the scoring, the application programme performs real-time ranking of the participants using multiple, and possibly limitless, comparative parameters to establish parallel rankings of all the participants. This enables the participants to be
25 ranked or assessed on one or more different comparative parameters and in so doing, equalizes the terms of comparison between participants without any element of luck. Instead, the success of the participant in the quiz relies solely on the skill and ability of

the participant. The application programme concurrently also makes the results of participant's efforts, i.e., the results and scoring, available in real-time over multiple distribution channels.

[0026] The method of the invention may also include sending at least one further instruction to the at least one user. This may take place after each response from the at least one user to a prior instruction is received and positively determined. The application programme may also carry out tracking, concurrently, of each at least one further personal time interval. The at least one further time interval commences at the time the at least one further instruction is sent by the application programme until a response is received from the user with respect to that further instruction.

[0027] As above, once the application programme receives a response to the at least one further instruction, the application programme carries out a processing of the response as described above. Upon a positive determination thereof being made, the application terminates tracking of the at least one further personal time interval; and assigns a further incrementable value to the at least one user. Again, the value being assigned may be based on the positive determination, the length of the at least one further personal time interval and/or a combination of both.

[0028] Depending upon the type of quiz being conducted, there may be a further plurality of instructions sent to the participant by the application programme, and a further plurality of responses received from the participant by the application programme for processing.

[0029] A score or assignment of an incremental value based on any one or more of the above-mentioned processing criteria may result in the following:-

- a. The scoring may be based on the number of correct answers/actions;
- b. The scoring may be based on the number of correct answers/actions and personal time interval needed to obtain those correct answers/actions;

- c. The scoring may be based on the number of correct answers/actions and time interval needed to obtain those correct answers/actions and the exact time and date of successful act by user and the sum of scores of the user by that specific time and date.

- 5 **[0030]** Based on the scoring, the application programme performs real-time ranking of the participants using multiple, and possibly limitless, comparative parameters to establish parallel rankings of all the participants. This enables the participants to be ranked or assessed on one or more different comparative parameters and in so doing, equalizes the terms of comparison between participants without any element of luck.
- 10 Instead, the success of the participant in the quiz relies solely on the skill and ability of the participant. The application programme concurrently also makes the results of participant's efforts, i.e., the results and scoring, available in real-time over multiple distribution channels

- [0031]** Taking the exemplary embodiment of the quiz, the user, upon successfully
- 15 completing a response to the first instruction, may then receive a further instruction from the application programme. This may be contingent upon the user's previous successful completion in response to the first instruction. In such a case, the application programme, may send the further instruction which may include MCQs of higher difficulty or complexity or require tasks of greater challenge to be satisfied by the user.

- 20 **[0032]** As mentioned, at each stage, i.e., after processing the user's response to the first instruction or to the at least one further instruction, the application programme may also perform a ranking as described above of the at least one user based on the incrementable value assigned to the user. The ranking may be with respect to the sum total of the score of the user. Alternatively, the ranking may be with respect to the user's
- 25 score as achieved for responding to each instruction within at least one standard time interval, provided the at least one personal time interval and/or the at least one further personal time interval falls within the at least one standard time interval. A standard time

interval may refer to a fixed unit of time such as a minute, an hour, a day or alternate days, odd days (such as Tuesday, Thursday or Saturday), even days (Monday, Wednesday, Friday or Sunday) weekly, biweekly, specific days of different weeks, months, years or any other combination logical or illogical without any limit to formation of
5 time intervals.

[0033] As such, the assigned score and time taken to achieve that score may be ranked by considering more than one comparative parameter. For example, a user's score and personal time interval may be ranked against other users over a standard time interval as set out above, and may for example refer to such intervals such as an hourly interval,
10 daily interval and weekly interval. Essentially, in the exemplary embodiment where the standard intervals are hourly, daily and weekly, a user's single score may be ranked in at least 3 different running events depending on the criteria for ranking. Accordingly, one action by a user, for example a response to a first instruction, results in that user being ranked across multiple events such as in the hourly ranking, daily ranking and weekly
15 ranking.

[0034] Again, turning to the exemplary embodiment of the quiz, a user may respond to the first instruction having 10 MCQs in 45 minutes. Assuming the user gets all 10 MCQs correct, the user may be assigned a specific score for completing the 10 MCQs correctly within 45 minutes. Given that the user completed the response to the first instruction
20 within 1 hour, the user may therefore be ranked against all other users who have also completed their respective responses to the first instruction within 1 hour. In addition, the user's same score may also be used to rank the user over a larger standard time interval as a day. In other words, the user's score may also be ranked against other users' scores over a 24 hour period, i.e., one day. As a further alternative, the user's score may also be
25 ranked against other users' scores over a 7-day period, i.e., one week. The user may be ranked in the above-mentioned time intervals either based on the user's score as attained

by the number of correct answers to the MCQs and/or based on the personal time interval taken to complete the response to the first instruction, for example.

[0035] As a further illustrative example, another user may respond to the first instruction having 10 MCQs in 1 hour 10 minutes. In such a case, this user would be precluded from participation in the hourly ranking. However, it would still be possible for this user to participate in the daily and weekly rankings as his personal time interval does not exceed those other standard time intervals. Again, as mentioned, the standard time interval may refer to a fixed unit of time such as a minute, an hour, a day or alternate days, odd days (such as Tuesday, Thursday or Saturday), even days (Monday, Wednesday, Friday or Sunday) weekly, biweekly, specific days of different weeks, months, years or any other combination logical or illogical without any limit to formation of time intervals.

[0036] In all the embodiments of the method of the invention, the ranking of the user is communicated to the at least one user via the communications network. The user may check his rankings in real-time over various platforms such as the Internet, social networks such as Facebook, platforms such as Android or iOS using applications, or cellular networks, for example. The ranking of the user is available for viewing either individually or simultaneously across any of the above-mentioned platforms. The ranking will be identical and in real-time across all the platforms.

[0037] In another embodiment of the invention, the initiation request, the first instruction, the at least one further instruction, the response to the first instruction and the response to the at least one further instruction may be all stored in a database. The database may typically be accessible by the application programme via electronic communication between the application server and the database.

[0038] In one embodiment of the invention, the first instruction and the at least one further instruction may be predefined within the application programme. In other words, the first instruction and the at least one further instruction may be a set of predetermined, preset or pre-planned quiz questions, or tasks, for example.

- [0039]** In another exemplary embodiment, the initiation request may include data, which may be in the form of at least one specific descriptor. The at least one specific descriptor may include, but is not limited to, content selected from the group consisting of the user's name, any form of personal identification number, age, address, date of birth and/or telecommunication details. The processing of the initiation request thus includes evaluating the content of the specific descriptor against preset criteria of the application programme. When the content of the specific descriptor fails to satisfy the preset criteria of the application programme, the at least one user may be sent a message informing of the same, as mentioned above. Likewise, when the application programme is processing the first and/or any subsequent initiation request, response or further response from the at least one user, the processing includes checking that the data contained therein, which may be distinct from the specific descriptor, is in a pre-determined format and of a required specific content that may be compared against the preset values or content in the application server.
- [0040]** In another embodiment of the method of the invention, the communication server, application server and database may be co-located on a single server on various physical and/or logical partitions within the single server. Also, the at least one communication network may be, but is not limited to, a social network, mobile telephone network, free-to-air television and/or subscription television network, Internet or mobile/desktop application. Accordingly, the at least one user may communicate with the communication server via a device selected from the group consisting of a cellular communication device, any personal computing device, a game console device, a portable, aircraft, ship and/or vehicular entertainment device, a web-enabled television device, and/or any other suitable network communication device.
- [0041]** In another embodiment of the invention, the method may include notifying the at least one user of any incentive awarded or privileges accrued from the application programme based on the at least one user's ranking over any given at least one standard

time interval. Essentially, when the user's ranking entitles the user to an award based on the rankings over an hourly period, a daily period a weekly period or a monthly period, the application programme will send a notification to the user via the communication network to inform the user of the same. The award may also be based on any other standard time
5 interval, which may include a fixed unit of time such as a minute, an hour, a day or alternate days, odd days (such as Tuesday, Thursday or Saturday), even days (Monday, Wednesday, Friday or Sunday) weekly, biweekly, specific days of different weeks, months, years or any other combination logical or illogical without any limit to formation of time intervals.

10 **[0042]** In yet another embodiment of the invention, the at least one user may be provided with access to the database such that all historic initiation requests, first instructions, at least one further instructions, responses and further responses are viewable, along with the correlating historical scoring and ranking achieved by the user for each type of response provided to the application programme. The historical scoring
15 and ranking have been that which was carried out over the various multiple comparative parameters used to establish parallel rankings against all the participants.

[0043] Although various aspects and embodiments of the present invention have been described above, the following illustrations of exemplary embodiments and accompanying description serve to further aid in the understanding and clarity of those
20 various embodiments of the invention. However, it should be noted that the scope of the invention is by no means limited to the exemplary embodiments described and illustrated hereafter, but rather, as set out in the claims that are appended hereto.

BRIEF DESCRIPTION OF THE DRAWINGS

25 **[0044]** **FIGURE 1** is a schematic diagram showing a system upon which an embodiment of the method is carried out; and

[0045] **FIGURE 2** is a process flow diagram showing how messages from a user communicate with various modules of an Application Programme that resides on the Application Server.

5 **DETAILED DESCRIPTION OF THE DRAWINGS**

[0046] **FIGURE 1** is a schematic diagram showing a system upon which an embodiment of the method is carried out. The schematic diagram shows a communication server **6**. The communication server **6** is in wired and/or wireless communication with one or more users **4** via a communication network. The communication network may be cellular in
10 nature, in which case the communication protocols adopted would be those generally suited for the SMS. In addition, the communication server **6** may be in communication with a mobile device of the user **4** via an Internet connection, in which case the communication network would adopt communication protocols suited for WAP, for example.

15 [0047] The communication server **6** is linked electronically to an application server **8**. The application server **8** houses the computer executable programme or application programme that controls the interaction between the user **4** and the application. The application server **8** is in electronic communication with a database server **2**. The database server **2** stores a record of all incoming and outgoing communications between
20 the application and each user.

[0048] In an exemplary embodiment of the method of the invention, a user **4** may either send an SMS via a cellular network or send a WAP message via a device connected to the Internet, to the communication network. In both instances, the SMS and the WAP message ought to contain sufficient particulars relating to the user **4**.

25 [0049] Upon being received by the communication server **6**, the SMS and the WAP message are forwarded to the application server **8**. The application on the application

server **8** checks the contents and format of the SMS and WAP message. In particular the format of the SMS and WAP message is checked against a required predetermined format.

[0050] Upon confirming that the SMS and WAP message are in the correct format, the content of the SMS and WAP message is then checked against a prerequisite set of requirements. The requirements needed to be satisfied may include the user **4** being of a certain age and any other regulatory requirements that may be necessary. Once the initiating SMS and WAP messages are determined to be in conformity with the prerequisite set of requirements, the application on the application server **8** sends an instructional message to the user **4**.

[0051] The instructional message may be in the form of a survey, a quiz or advertorials, for example. When the instructions are sent to the user **4**, the application may also start a timer in order to track the time taken for the user **4** to respond or comply with the instructions sent. The user **4** may then respond to the instructions as most appropriate, which may include responding by sending a further SMS or WAP message to the communication server **6**, which is then relayed to the application in the application server **8**.

[0052] Any SMS or WAP message received after the initiating SMS and WAP message is further processed by the application on the application server **8** on a different set of predetermined criteria. In the example of a quiz, presumably the SMS and WAP message received by the application server **8** after the initiating SMS and WAP message would be answers to the quiz questions sent in the instructional message. The application processes the subsequent SMS and WAP message containing the answers as to format and content. If the format is unrecognizable to the application, or is not in conformity with the prerequisite format, the application may send an appropriate message to the user **4** to alert the user **4** to the deficiency in the SMS or WAP message.

[0053] However, should the format of the subsequent SMS and WAP message be acceptable as determined by the application, the application then proceeds to check the content of the SMS and WAP message against its predetermined requirements. In the case of a quiz, for example, the check would be to see if the answers provided match the predetermined answers to the quiz. If the result is positive, the application notes the time taken for the user **4** to have responded to the instructional message appropriately, as well as the effectiveness of the response of the user **4**. In the case of a quiz, this would refer to the number of correct answers obtained by the user **4**, for example. Thereafter, the application assigns the user **4** a score. The score may be based on the performance of a user **4** in terms of the number of correct answer, the time taken for the user **4** to respond to the instructional message or a combination of both factors.

[0054] Once a score as been ascribed to a user **4** by the application, the application ranks the user **4** against other users within standard time intervals. For example, a user **4** having completed his response to the instructional message within an hour may be ranked against other users **4** for that particular hour. The application may also rank the user **4** based on that single response to the instructional message against other users **4** over the course of other standard time intervals, such as a day, a week or even a month. The user **4** may be ranked not just on the basis of the score achieved but also on the basis of the time taken to achieve that score. Accordingly, under the method of the invention, a single entry or point of participation from the user **4** either from an SMS platform or a WAP message platform enables the user **4** to be ranked a plurality of times in a plurality of events. It should be noted that all the above-mentioned processes may occur in real-time.

[0055] In the event that the instructional message is for a quiz, for example, following the successful response of the user **4**, a further instructional message may be generated and sent by the application to the user **4**. The further instructional message may be a second round of the quiz and may be harder and or increasing difficulty. The same process as

described above takes place again with respect to the subsequent responses given by the user **4** via SMS or WAP message.

[0056] **FIGURE 2** is a process flow diagram of one embodiment of the method of the present invention. This exemplary process flow diagram describes how messages from a user **22** communicate with various modules of an Application Programme that resides on the Application Server **8** and the response of each module to the messages from the user **22**.

[0057] The process starts with the User **22** sending what is referred to as a User Originating (UO) Message. This UO Message may be an initiation request that starts or triggers the whole process. The UO Message is received by the Communication Server **6**. The UO Message is then processed at the Communication Server **8** to identify and to attach any relevant information relating to the 'source channel'. The 'source channel' refers to the channel or platform over which the UO Message was transmitted, such as SMS, WAP or any other suitable channel or platform. During the processing of the UO Message, the UO Message is validated and time-stamped with the exact date and time (up to milliseconds) at which this UO Message arrived at the Communication Server **8**. The verification/validation of the source channel process and time-stamping process takes place during the "Validation of Source /Store Time" step **24**.

[0058] After the UO Message is processed at the Communication Server **8**, the UO Message is sent to the Application Server **8**, at which the "Validation of User Status" step **26** occurs. This includes the determination of what type of message the UO Message is and validation of the type of message. In other words, the UO Message may be an initiation request, registration message, response message or status message, for example, and the application programme assessors the UO Message to ascertain precisely which type of message it is.

[0059] After the type of message has been determined, the 'Validation of User Status' step **26** validates the current status of the user **22**. The validation of the current status of the user **22** may be performed, in an exemplary embodiment, as follows:

- 5 a. A new user may need to register his personal particulars with the application and only thereafter, can that new user receive or request for instructions or content (quiz). As such, until the new user completes registration, for example, the processing of the UO Message will be limited to carrying out the various steps needed to complete any registration process.
- 10 b. Thereafter, as soon as the user has completed registration, the user **22** will be sent, in the case of a quiz game, a set of questions, for example.
- c. Once the application has sent the user **22** the set of questions, the application will be expecting answers from the user **22**. As such, the application will process and treat UO Messages from the user **22** as
15 answers to the quiz questions accordingly.

[0060] The above is one exemplary embodiment by which the application programme on the Application Server processes each UO Message. Once the application programme has processed the UO Message, a copy of the UO Message, or the original message, is sent to the Database Server **2** to reside in a Database Storage step **28**. The UO Message
20 may be stored both for historical, statistical and/or regulatory record-keeping purposes.

[0061] After the UO Message has been processed as described above, the application programme forwards all data is obtained from the processed UO message to a response generator under a "Generate Response – time stored" step **23**. Each response is referred to as a User Terminated (UT) Message. Once the UT Message has been prepared by the
25 application programme, the UT Message is sent to the Database Server **2** in the Database Storage step **28**. The UT Message may be stored both for historical, statistical and/or regulatory record-keeping purposes. The content of the UT Message that is

generated by the application programme is based on all data that has been obtained in the earlier processing of the UO Message and may include or be based on any one or more of the following:-

- a. user status,
- 5 b. time, delay,
- c. communication channel, and
- d. response message and/or instruction to the user **22**.

[0062] The application programme then determines the appropriate channel, source or communication network to utilise in order to send the UT Message that has been
10 generated by the application programme. This is done in a “Determine Communication Network” step **25**. Finally, the UT Message is sent to the Communication Server **6** for onward transmission of the UT Message via the appropriate communication channel and then to the actual user **22** over SMS, WAP or any other platform.

[0063] As mentioned earlier, the above description of the exemplary embodiments of the
15 present invention merely serve to aid in the understanding of the underlying principle behind the invention. The present invention is not to be construed as being limited to the illustrated embodiments but rather, to the extent as defined in the claims that follow.

CLAIMS

What is claimed is:

1. A method of collecting and processing data to generate a plurality of real-time rankings over a plurality of time intervals, said method comprising:-

establishing a communication link between a communication server, an application server and at least one communication network, said communication network having at least one user, wherein the at least one user has a device for communicating with the communication server via the communication network; and said application server having a computer executable application programme thereon;

receiving an initiation request from the at least one user via the communications network, wherein upon receiving the initiation request the communication server relays said initiation request to the application server such that the application programme carries out processing of the initiation request to determine whether to grant the at least one user access to the application;

sending a first instruction from the application programme to the at least one user upon the user being granted access to the application programme; tracking concurrently at least one personal time interval commencing at the time the first instruction is sent by the application programme;

receiving a response from the at least one user with respect to the first instruction, wherein upon receiving the response the application programme carries out a processing of the response to make a determination, and upon a determination thereof being made, the application terminates tracking of the at least one personal time interval; and

assigning an incrementable value to the at least one user upon the determination being made by the application programme, said value being based on the determination, the length of the at least one personal time interval or a combination thereof.

2. The method of claim 1, further comprising:-

sending at least one further instruction to the at least one user after each response from the at least one user to a prior instruction has been determined and the incrementable value assigned to the at least one user by the application programme;

tracking concurrently at least one further personal time interval commencing at the time the at least one further instruction is sent by the application programme;

receiving a response from the at least one user with respect to the at least one further instruction, wherein upon receiving the response the application programme carries out a processing of the response to make a determination, and upon a determination thereof being made, the application terminates tracking of the at least one further personal time interval; and

assigning a further incrementable value to the at least one user upon the determination being made by the application programme in respect of the response to the at least one further instruction, said value being based on the determination, the length of the at least one personal time interval, at least one further personal time interval or a combination thereof.

3. The method according to any of the preceding claims, further comprising:-

ranking the at least one user in real-time based on the incrementable value assigned to the at least one user, the at least one personal time interval and/or the at least one further personal time interval, wherein the real-time ranking is carried out within an at least one standard time interval provided the at least one personal time interval and/or the at least one further personal time interval falls within the at least one standard time interval.

4. The method according to any of the preceding claims, wherein the assigned incrementable value and/or ranking is communicated in real-time to the at least one user via the communications network.
5. The method according to any of claims 2 – 4, wherein the initiation request, the first and the at least one further instructions, and the corresponding responses are stored in a database accessible by the application programme via electronic communication between the application server and the database.

6. The method according to any of claims 2 – 5, wherein the at least one further instruction is of a higher difficulty, complexity or challenge to the at least one user than the preceding instruction from the application programme.
7. The method according to any of claims 2 – 6, wherein the preceding claims wherein the first instruction and the at least one further instruction are predefined, preset or predetermined within the application programme.
8. The method according to any of the preceding claims, wherein the initiation request comprises at least one specific descriptor.
9. The method according to claim 8, wherein the at least one specific descriptor comprises content selected from the group consisting of the user's name, personal identification number, age, address, date of birth, telecommunication device particulars and/or e-mail address.
10. The method according to any of the preceding claims, wherein the processing of the initiation request comprises evaluating the content of the specific descriptor against preset criteria of the application programme such that when the content of the specific descriptor fails to satisfy the preset criteria, the at least one user is sent a message informing of the same.
11. The method according to any of the preceding claims, wherein the communication server, application server and database are co-located either physically or logically in a single server environment.
12. The method according to any of the preceding claims, wherein the at least one communication network is a social network, cellular network, free-to-air television network, subscription television network and/or on-demand television network, Internet or network of mobile/desktop applications.
13. The method according to any of the preceding claims, wherein the at least one user communicates with the communication server via a device selected from the group consisting of a cellular communication device, any personal computing device, a game console device, a portable, aircraft, ship and/or vehicular entertainment device and/or web-enabled television device.

14. The method according to any of the preceding claims, wherein processing of the first and/or any subsequent response from the at least one user comprises checking that the data in the first and/or any subsequent response is in a suitable pre-determined format and of a required preset value.
15. The method according to any of claims 3 – 14, wherein the ranking of the at least one user is carried out in and provided to the at least one the user in real-time.
16. The method according to any of claims 3 – 15, further comprising:-

notifying the at least one user of any incentive awarded or privileges accrued from the application programme based on the at least one user's real-time ranking over any given at least one standard time interval.
17. The method according to any of claims 5 – 16, wherein the at least one user is provided with access to the database such that all historic initiation requests, instructions, at least one further instruction, response and further response is viewable.
18. The method according to any of claims 3 – 17, wherein the standard time interval is selected from the group consisting of a minute, an hour, a day or alternate days, odd days (such as Tuesday, Thursday or Saturday), even days (Monday, Wednesday, Friday or Sunday) weekly, biweekly, specific days of different weeks, months, years.