A METHOD OF COMPLETING A TASK CONTAINING INPUT INFORMATION

FIELD OF THE INVENTION

[0001] The present invention relates generally to a method of completing a task involving input information by a plurality of persons.

BACKGROUND

[0002] Despite advances in computer imaging technologies, many tasks still rely on humans and human intelligence to complete these tasks. Some examples of these tasks include handwriting recognition, converting handwriting to type text, translations, transcription and others. For these tasks, relying on current imaging or automated technologies will not deliver the accuracy and detail of a human performing the same tasks. As such, these tasks are typically outsourced with some form of monetary compensation to humans for their completion. In recent years, with the expansive reach of the internet and easy access to the internet by people, business process outsourcing (BPO), a commonly used term for companies outsourcing these tasks and jobs to online labour across diverse geographical locations and countries, is utilized to complete a large amount of tasks in a time efficient manner.

[0003] In the area of Business Process Outsourcing, when a company outsources tasks such as data transcription to online labor, the ability of the online labor to transcript the data and to re-assemble the transcripted data within a certain timeframe is critical. Large financial institutions, for example, may implement time-sensitive marketing campaigns to customers in order to establish a longer term relationship with them. For example, financial institutions may offer customers a 30 minute loan approval marketing campaign so that the customer may secure his dream asset quickly with the knowledge that he has full financial backing from the financial institution to secure the asset. Due to the complexity and amount of information contained in application forms for a financial institution, challenges exist in converting a handwritten application form into text, transmitting the data to the back end offices for review and approval, and transmitting the status back to the front end personnel within a short timeframe.

[0004] Business Process Outsourcing, with all its benefits of providing cost and data efficiency and organizational flexibility, however, does come with risks. A major risk that comes with outsourcing these tasks across diverse locations and countries is data privacy issues stemming from tasks involving personal data or confidential information. Personal data refers to data about an individual who can be identified from that data, or from that data and other information to which an organization has or is likely to access. In many countries, the collection, use, storage or transmission and security of personal data by companies have increasingly come under public scrutiny due to the prevalence of mobile platforms and location based technologies. Personal data and confidential information is protected in many countries under the data protection framework and governments around the world are currently reviewing reforms to the existing data protection legal framework to address data privacy issues.

[0005] Although the Internet has made it easier for transmission of data through internet-based or networked technologies, there exist significant challenges in the realm of business process outsourcing in protecting personal data or confidential information to comply with the differing data regulation practices around the world.

[0006] Accordingly, it is desirable to provide a method for completing a task involving confidential information that addresses the issues of data misuse, privacy breaches and legal violations. Additionally, it is desirable to provide a solution that overcomes the above disadvantages or at least provide a method that addresses the above problems.

SUMMARY OF INVENTION

[0007] According to a first aspect of the invention, the invention provides for a method of completing a task containing input information by a plurality of persons comprising the following steps of: integrating a task activity platform with a customer process platform; receiving a first document from a document receiver operatively connected to the customer process platform, the first document containing input information associated with confidential information; separating the input information in the first document into a plurality of fields, each of the plurality of fields including a portion of the input information; disassociating each of the plurality of fields such that each of the plurality of fields is a disassociated field, wherein the disassociated field is context-free and non-

discernable from the confidential information; selectively distributing the plurality of disassociated fields to any one of a service provider network platform, the customer process platform or a third party network platform, or to a combination thereof, the task including one or more disassociated fields to be performed by the plurality of persons distributed thereto; receiving responses for the performance of the task by the task activity platform over the network from the respective platforms distributed thereto; compiling the responses for the tasks into a compilation document within the customer network platform, the compilation document being similar to the first document containing input information.

[0008] Preferably, the task activity platform includes a server integrator operatively connected to the customer process platform, the customer process platform and the task activity platform being located within the customer network platform.

[0009] Preferably, the method further includes a step of sending non-performed assigned tasks to internal workers within the service provider network platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

[0010] Preferably, the method further includes a step of sending non-performed assigned tasks to internal workers within the customer process platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

[0011] Preferably, the method further includes a step of sending non-performed assigned tasks to internal workers within a third party network platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

[0012] Preferably, the method further includes the steps of: receiving input information from a second document; dividing the input information from the second document into a plurality of fields; disassociating the input information from the second document into the plurality of fields; and mixing the disassociated fields of the first document and the second document such that upon distributing the disassociated fields to

one of a plurality of persons, the one of the plurality of persons receives disassociated fields from the first and second documents.

[0013] Preferably, the method further includes the steps of selecting at least a predetermined number of sub-fields for sending to internal workers within the customer process platform.

[0014] Preferably, the method further includes the steps of selecting at least a predetermined number of sub-fields, sending the at least predetermined number of sub-fields to a third party network platform for sending to internal workers within the third party network platform.

[0015] Preferably, the service provider network platform includes a randomizer for mixing the plurality of sub-fields received from the task activity platform such that the each of the plurality of sub-fields are removed from context and non-discernable from the confidential information.

[0016] Preferably, the step of disassociating each of the plurality of fields includes dividing the plurality of fields into at least two disassociated fields, each of the at least two disassociated fields including a sub-set of the plurality of fields such that the information in the sub-set of the plurality of fields cannot be discerned from each sub-set alone.

[0017] Preferably, the step of distributing the task from the distribution platform includes the step of delegating the performance of the tasks with respect to at least one of the disassociated fields with one of the plurality of persons.

[0018] Preferably, the distribution platform includes a job distributor to perform the step of distributing tasks to the plurality of people.

[0019] Preferably, the step of compiling the responses for the performance of the tasks includes a compiler operative to receive the results of the performance of each task, and the compiler assembles the responses into a compiled document.

[0020] Preferably, the step of integrating a task activity platform with a customer process platform includes replicating the step of integrating a second task activity platform with a second customer process platform.

[0021] Preferably, a common data factory is operatively connected over the network to each of the first and second customer process platforms, the common data factory being located within a third party network platform.

[0022] The invention will now be described in detail with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] The accompanying figures illustrate disclosed embodiment(s) and serve to explain principles of the disclosed embodiment(s). It is to be understood, however, that these drawings are presented for purposes of illustration only, and not for defining limits of the application.

[0024] Fig. 1 is a process flow diagram of the method of completing a task in accordance with an embodiment of the invention;

[0025] Fig. 2 illustrates the separation of the input information by a separator module contained in multiple documents in accordance with an embodiment of the invention;

[0026] Figure 3 illustrates the disassociation of a field into sub-fields to remove context;

[0027] Figure 4 is a block diagram showing a configuration of a task activity platform integrated with a customer process platform, and a service provider network platform in accordance with an embodiment of the invention;

[0028] Figure 5 is a block diagram showing a configuration of a task activity platform integrated with a customer process platform and a service provider network

platform with business continuity support from a data factory in accordance with an embodiment of the invention;

[0029] Figure 6 is a block diagram showing a configuration of a task activity platform integrated with a customer process platform, a service provider network platform and a third party network platform in accordance with an embodiment of the invention;

[0030] Figure 7 is a block diagram showing another configuration of a multiple customer network platform and a common data capture factory for all customers created within a third party network platform in accordance with an embodiment of the invention;

[0031] Figure 8 is a block diagram of a configuration of a task activity platform located outside of a customer network platform and within a service provider network platform in accordance with an embodiment of the invention;

[0032] Figure 9 is a block diagram of a configuration of a task activity platform located outside of a customer network platform with business continuity support from the data factory and within a service provider network platform in accordance with an embodiment of the invention;

[0033] Figure 10 is a block diagram of a system architecture in accordance with an embodiment of the invention;

[0034] Exemplary, non-limiting embodiments of the present application will now be described with references to the above-mentioned figures.

DETAILED DESCRIPTION

[0035] In the following description, the detailed embodiments of the present invention are described herein. It shall be apparent to those skilled in the art, however, that the embodiments are not intended to be limiting to the embodiments described but merely as the basis for the claims and for teaching one skilled in the art how to make and/use the invention. Some details of the embodiments are not described at length so as not to obscure the present invention.

[0036] A method of completing a task associated with confidential information by a plurality of persons is disclosed. The method can be deployed organizationally, locally, regionally, globally in a combination of restricted access network and publicly accessible network. The method allows a front-end user or customer to submit a completed document associated with secure, sensitive or confidential information and to have the completed document transcripted in either a secure or non-secure environment without compromising the security or privacy of the secure, sensitive or confidential information.

[0037] Figure 1 shows an embodiment of a method for completing a task associated with confidential information or input information by a plurality of persons. The tasks include those tasks which a human being is capable of performing and which a computer may be incapable of performing at all or in an effective and/or efficient way, such as data entry of handwritten or otherwise machine unintelligible information conversion, translation, comparison, verification, transcription, analysis, or combinations thereof. The method includes step 100 which integrates a task activity platform with a customer process platform, details of which will be provided. The customer process platform is located in a secure environment or within the customer network platform or environment. The customer in this case, can be a government, an organization or business that utilizes or wishes to utilize business process outsourcing in order to complete tasks associated with confidential information. A secure environment refers to the use of any system that implements the controlled storage or use of information. The organization or business or government entities have substantial control over the information, and access thereto, that is being processed and stored therein as a result of suitable physical, electronic and legal safeguards, such as tamper detection mechanisms, security protocols, confidentiality agreements. A non-secure environment therefore includes any environment located outside of a secure environment and may include a secure environment coupled to a non-secure environment. Some types of non-secure environment include personal computers connected to the Internet via publicly accessible communications link not controlled by an entity operating a secure environment or mobile phones accessing data over internet. A secure environment includes a company operating an Intranet to which only employees have access from secure communications links. The details of the working of the task activity platform will be further described hereinafter. In the context of this invention, the terms “network platform” and “networked platform” can be used interchangeably and is described as a platform having an underlying

computer system on which both hardware and software coexists for the purpose of running application programs for users to access via a network environment.

[0038] The task activity platform is integrated with the customer process platform physically by a server integrator on the task activity platform, as described in further details later. This can be done through connecting the server integrator with a bus that is operatively connected to the customer process platform. The customer process platform operates in a customer network platform. The task activity platform is hosted by a service provider. The service provider can be a business process outsourcing (BPO) unit or a third party organization for delivery of business support requirements of the customer. By integrating the task activity platform with the customer process platform, this provides significant advantages in the form of data privacy protection and circumventing the dynamic, differing and complex data protection laws of countries. The task activity platform is separate and distinct from the customer process platform with each of them having its own host server, processors and storage memory so that each platform can run independently on its own without each other. It would be understood that a person skilled in the art would have knowledge hosting a server and for the purposes of this invention, it would not be described in detail. When both the task activity platform and the customer process platform are integrated with each other, additional extensive customization or modification of the customer process platform is not required. At the same time, secure, confidential information in documents is protected because the confidential information in its entirety remains within the secure customer network environment. The task activity platform is physically located on the customer premises or on the data center that the customer process platform is hosted.

[0039] The task activity platform is operated by a service provider to provide data transcription services or other services as described above for the customer. The service provider charges the customer for the use of its services or other forms of compensation thereof. The service provider, in turns, distributes the tasks to a plurality of persons for performing the tasks, receives the results and compiles the results and sends the assembled task to the customer. The service provider also provides some form of compensation, in monetary or other means, to the plurality of persons performing the tasks.

[0040] Referring again to Figure 1, an embodiment of the invention further includes the step 110 of separating input information contained in a document into fields. The document is received by a document receiver within the customer process platform. The document contains input information containing at least a portion thereof which has confidential information or information considered sensitive by the customer. A person skilled in the art will appreciate that the document receiver can also be located outside the customer network platform and some form of communication means is provided to enable transmission of the digital images to the customer process platform. Once the document receiver receives the filled document, the image of the filled document with input information is captured. The filled document includes one or more digitally scanned images of handwritten documents, hand-filled-in forms, forms with preprinted or typed information or any other means of representing information on documents, such as a document having pre-printed or defined regions for the entry of information. The image of the filled document is compared to a predetermined template of the document. The predetermined document template is created by a template creator. The template creator allows a user to define and to execute rules for marking activities in an empty form. The activities include at least marking out the defined regions for entry of information within the document.

[0041] Referring to Figure 2, when the activities have been marked out and predefined in the template creator, and when an image of the form with input information is compared with the predetermined template of the document, a separator module will separate portions of the input information in each document and divide the input information into a plurality of fields for each of the documents received. Each of the fields includes data which has a context attributed to it. The context may have a characteristic of the data which allows identification of the source or destination of the data, a relationship with other data or a combination thereof. For example and as shown in Figure 2, the field can include a name, address, age, social security number, identity card number, credit card number, etc.. It will be appreciated that documents containing input information which do not contain secure or confidential information can also be utilized. Such documents can be processed in the same manner as documents containing input information of a secure, confidential nature. Such documents may contain input information related to entity's customer; its internal data or third party data.

[0042] Once the fields have been created, and as shown in Figure 3, a disassociator will next disassociate the fields at step 120 into one or more sub-fields such that the context cannot be discerned from the data within the sub-field alone. For example, when the disassociator further breaks up a name such as John Allen Smith into one or more sub-fields, such as John in a sub-field, Allen in another sub-field and Smith in a third sub-field, each of the sub-field on its own, will not allow a user to identify the person. In a further embodiment of the invention, Figure 3 shows a single name "FIRSTNAME". When the disassociator is applied, FIRSTNAME is further broken into three sub-fields, the first sub-field containing SAR, the second sub-field containing FEN, and the third sub-field containing ITM. The disassociator therefore divides the fields into sub-fields such that the individual sub-fields do not include enough information for a person to discern the confidential information. The disassociation of the fields into sub-fields by the disassociator is predetermined at the template creation stage. The level of disassociation required for the field is dependent on the sensitivity of the field and is predetermined by the customer. It would be inherent that a field of greater sensitivity to data privacy would be disassociated into a relatively greater number of sub-fields.

[0043] Referring again to Figure 1, the method further includes a step 130 of mixing sub-fields from at least two documents so as to remove context from the sub-fields. This can be done through a mixer module which mixes input information from more than one document. The mixer mixes the sub-fields contained in a first document with the sub-fields contained in a second document such that a person receiving the task receives sub-fields derived from multiple documents. In this way, the person working on the task will not be able to determine or discern the input information in a logical or constructive manner that will reveal the confidential information.

[0044] Once the sub-fields have been mixed, the sub-fields are selectively distributed to any one of a service provider network platform, a customer network platform or to a third party network platform, or a combination thereof. The sub-fields are distributed to a plurality of electronic devices via each of the respective platforms, where each electronic device is associated with a person. The persons include mobile workers or workforce participants and may include independent contractors, students, employees of the service provider or customer or the third party provider, or combinations thereof. In the case where the sub-fields are distributed via the distribution platform on a service provider

network platform, the workforce participants may participate by accessing the distribution platform via the network such as the Internet. The tasks may also be pushed by the distribution platform to the workforce participants. The electronic devices used by the workforce participants include computing devices such as laptops, personal computers, handheld mobile devices such as a mobile phone, a smart phone or tablets. The electronic devices also include basic cell phones with text messaging capabilities. The electronic device can be any type of device that enables a workforce participant to communicate with the distribution platform for receiving or engaging tasks. The workforce participants may have varying skill sets or other attributes, such as educational qualifications, availability, cost, quality of work product which differentiates them. Such attributes may be tracked and evaluated and utilized to selectively match the tasks with the mobile workers. The distribution platform includes a job distributor (not shown) for sending the fields and sub-fields to pre-selected persons for performance of the particular tasks.

[0045] Alternatively, a portion of the sub-fields may be selected and transmitted to the customer process platform for sending to internal workers or employees within the customer network platform. Alternatively, a portion of the sub-fields may be selectively distributed to the third party network platform for sending to internal workers or employees of the third party network platform. In the context of the description, the third party network platform is a network platform that is managed by an external party engaged by the service provider or the customer. The results of the performance of the particular tasks are received by the respective platforms at step 150 and sent to a compiler at step 160. The results of the performance of the tasks may include non-performance of the task or other information, such as whether the person is unable to perform the tasks, for example, due to incomplete or unintelligible data, refuses, forgets or otherwise fails to perform the task within a prescribed time period. The compiler receives all of the results from the persons, and compiles and reassembles, reassociating the context where necessary, and generates the overall task results.

[0046] Figure 4 shows an illustration of an embodiment of a process flow for completing a task containing input information by a plurality of persons. The embodiment described hereinafter describes a first level of selective distribution of tasks between a customer network platform 10 and a service provider network platform 20. The task activity platform 30 is integrated with the customer process platform 11 which operates within a

customer network platform 10. A customer process platform is a platform within a customer network platform which allows business units of the company to process data and information via various applications employed on the customer process platform. The task activity platform 30 is operatively connected to the customer process platform 10 via a server integrator 33. The server integrator 33 provides a means for communication of data between two physically separate platforms. Some examples of server integrators include an open source integration framework like CAMEL or proprietary framework like MQ series or simply a web service call. As mentioned previously, the task activity platform 30 is managed and hosted by a service provider. The task activity platform 30 is operatively connected over the network to a service provider network platform 20. The service provider network platform 20 is managed by the service provider and includes a randomizer 22 and a distribution platform 24. The service provider network platform 20 is located outside the customer network platform 10. Within the customer process platform 11, a document 12 is received by a document receiver 14. The task activity platform 30 includes the activities of creating a task and includes various modules for performing the steps of creating the task as described above, for example in steps 110, 120 and 130 of Figure 1. For example, the task activity platform 30 has a verification module 32 which processes the scanned images of the document to determine if the input information contained therein is unintelligible or incomplete. The verification module 32 can also be located on the customer process platform 11. The task activity platform 30 includes the separator, disassociator and the mixer 34, all of which have been described in detail above in steps 110, 120 and 130 of Figure 1. Each of the respective modules are run on the task activity platform 30 as separate applications, with each module operatively connected to a respective storage repository or memory for storage of data. Once the sub-fields have been created, they are selectively distributed to any one of the service provider network platform 20 or the customer process platform 10, or to a combination of both. For example, the sub-fields may be sent to the service provider network platform 20 or selected to be bypassed. The bypass module 36 distributes sub-fields to one or more persons within the customer process platform 11 or customer network platform 10. The selective criteria for sending to the service provider network platform 20 or to the customer process platform 11 is dependent on the nature of the task or service level agreement agreed with the customer. For example, the bypass module 36 allows tasks required to be completed on a time-sensitive or urgent basis to be distributed to a person within the customer process platform 11 so that the task can be completed quickly within the turnaround time required by the customer. In another example, at least

one or more of the tasks comprising sub-fields of input information contained in at least one document can be distributed to persons within the customer process platform 11 while the remaining tasks can be distributed via the distribution platform 24 to electronic devices 40. The bypass module 36 also bypasses sub-fields which are deemed unsuitable for the distribution platform 24. An example of such a sub-field includes a signature. The randomizer module 22 within the service provider network platform 20 further mixes the sub-fields from a plurality of documents from the task activity platform 30 to remove context from the sub-fields such that a person who receives the task which includes the sub-fields will not be able to discern the attribute of the input information contained therein. This provides a second level of protection against breach of data privacy from the mixer within the task activity platform 30. On further randomizing, the sub-fields are distributed via the distribution platform 24 to the selected plurality of persons through the various electronic devices 40 connected to the network.

[0047] Referring again to Figure 4, in instances of non-performance of the assigned tasks to persons within a prescribed time period, the timeout module 37 is immediately activated to send the non-performed assigned tasks back to the task activity platform 30 within the customer network platform 10. The task activity platform 30 then sends the non-performed assigned tasks to the internal workers 16 of the customer network platform 10 to perform the non-performed assigned tasks. By doing so, the service provider will be able to meet the service level requirements of the customer such as performing or returning the tasks within a specific time period. Once the compiler 38 assembles the document from the results obtained from the service provider network platform 20 and the internal workers 16 of the customer, the compiled document is sent to the relevant business units within the customer network platform 10 for approval 18. Approval 18 may include further processing of the compiled document. These activities may include analyzing the details of the compiled document, retrieving additional information from other sources, third party checks, etc.. The document is then submitted for posting 19. Approval and posting 19 are existing processes in the customer process platform 11 that continue as-is.

[0048] Figure 5 illustrates another embodiment of a process flow which shows a second level of selective distribution of tasks between a customer network platform 10 and a service provider network platform 20 which further includes a data factory 50. The process flow and configuration of the customer network platform 10 and the service provider

network platform 20 is similar to that shown in Figure 4. The operations of the verification, separator, disassociator, mixer, bypass and timeout modules are the same as that described in the preceding paragraph. The task activity platform 30 is integrated with the customer process platform 11 by a server integrator 33. When one or more documents 12 are received by the document receiver 14 and processed by the task activity platform 30, the disassociated fields are distributed to either the service provider network platform 20 or to internal workers 16 within the customer process platform 11 or the customer network platform 10. The difference in the embodiment of Figure 4 is that the disassociated fields are further selectively distributed to the data factory 50 located within the service provider network platform 20. The service provider network platform 20 can be located within the same network environment or operatively connected over the network in different geographical locations. The data factory 50 includes a bypass module 36 and a time out module 37 which operates in the same manner as the bypass module 36 and timeout module within the task activity platform 30. In instances of non-performance of the assigned tasks to the electronic devices 40 within a prescribed time period, the timeout module 37 operatively connected to the data factory 50 and the distribution platform 24 is immediately activated to send the non-performed assigned tasks back to the distribution platform 24. The distribution platform 24 then selectively distributes the non-performed assigned tasks to the task activity platform 30 or to the data factory 50 for performance of the aforesaid tasks by internal workers 16 within the customer network platform 10 and the internal workers 58 within the data factory 50. Within the task activity platform 30, once the plurality of fields have been verified, separated, diassociated into sub-fields and mixed as described previously, the sub-fields are selectively distributed to any one of the randomizer module 22 or the data factory 50 within the service provider network platform 20 or to the customer network platform 10 via the bypass module 36. The criteria in determining the distribution to each of the various channels is dependent on the nature of the task or service level agreement established by the customer. The advantage of providing a selective distribution of the sub-fields to various channels provides cost advantages and efficiencies for the customer, which translates to improved and better customer service. A further advantage is that it allows the customer to customize its organizational and process requirements to suit its business processes and at the same time without breach of data privacy in outsourcing documents containing confidential information.

[0049] Figure 6 illustrates another embodiment of a process flow which shows a third level of selective distribution of tasks between a customer network platform 10, a service provider network platform 20 and a third party network platform 60. The process flow and configuration of the customer network platform 10 and the service provider network platform 20 is similar to that shown in Figure 5. The operations of the verification, separator, disassociator, mixer, bypass and timeout modules are the same as that described in the preceding paragraph. The task activity platform 30 is integrated with the customer process platform 11 by a server integrator 33. When one or more documents 12 are received by the document receiver 14 and processed by the task activity platform 30, the disassociated fields are distributed to either the service provider network platform 20 or to internal workers 16 within the customer process platform 11 or the customer network platform 10 or to the internal workers within the third party network platform 60. The difference between the process flow and configuration in the embodiment of Figure 5 and that of Figure 6 is having another level of selective distribution of the tasks via a third party network platform 60. As previously described, the third party network platform is a network platform that is managed by an external party engaged by the service provider or the customer. By adding another level of selective distribution of tasks, this provides customers with a minimum standard of service level agreement and business continuity planning. Within the task activity platform 30, once the plurality of fields have been verified, separated, diassociated into sub-fields and mixed as described previously, the sub-fields are selectively distributed to any one of the randomizer module 22 or the data factory 50 within the service provider network platform 20 or to the customer network platform 10 via the bypass module 36. A portion of the sub-fields distributed via the bypass module 36 can be selectively distributed to internal workers 16 within the customer network platform 10 or to the third party network platform 60. The sub-fields will then be subsequently distributed to the internal workers within the third party network platform 60 or to workforce participants engaged by the third party provider. The criteria in determining the distribution to each of the various modules or platforms is dependent on the nature of the task or the service level agreement established by the customer. Once all the results of the performance of the assigned tasks have been received by the task activity platform 30, they are compiled by the compiler and sent to the customer process platform 11 for approval 18 and posting 19.

[0050] Figure 7 illustrates another embodiment of a process flow for multiple customers where each of the customers share a common data capture factory 65 within a

third party network platform 60. The individual customer network platforms 10 are operatively connected to a service provider network platform 20 and a third party network platform 60. Each of the customer network platforms 10 includes a task activity platform 30 integrated with the respective customer process platforms 11 by a server integrator 33 (not shown). When one or more documents are received by the document receiver and processed by the individual task activity platforms 30, the disassociated fields are distributed to the randomizer module 22 on the service provider network platform 20. As previously described, the disassociated fields are selectively distributed to the internal workers within the service provider network platform 20 or to a plurality of electronic devices 40 via the distribution platform 24. For example, in instances of non-performance of the assigned tasks by the electronic devices within a prescribed time period, the timeout module will be activated and send the non-performed assigned tasks to the data factory within the service provider network platform 20. Once the results of the performance of the assigned tasks have been received by the individual task activity platforms 30, they are sent to the common data capture factory 65 within the third party network platform 60. The task activity platform does the first level of randomization. It can then send the tasks to either of the three platforms. Since the data factory within the third party provider receives at least a portion of the disassociated fields and randomized fields, the workforce participants performing the tasks are unable to derive any meaningful information from the tasks they are assigned to. By having a common data factory for multiple customer network platforms 10, the third party provider is able to achieve economies of scale and efficiencies leading to cost advantages in business processing activities. The results of the performed tasks are sent to each of the individual customer process platforms.

[0051] Figure 8 illustrates an embodiment of the process flow where the task activity platform 30 is located outside of the customer network platform 10. The scanned digital images are transmitted directly to the service provider network platform 20. The task activity platform 30 can be integrated with the service provider network platform 20. Alternatively, the modules such as the verification, separator, disassociator, mixer and compiler modules are applications running on the service provider network platform 20 or a combination of the modules can be running separately on the service provider network platform 20 or the task activity platform 30. The advantage of this configuration allows a customer to outsource part of its business processing to the service provider such that the customer only receives the assembled or compiled document. The assembled or compiled document may include

instances of bypassed sub-fields and non-performed or incomplete assigned sub-fields for sending to internal workers 16 of the customer process platform 11. Upon receipt of the assembled document, the assembled document undergoes the approval 18 and posting 19 by the customer. It will be appreciated that although only one customer network platform 10 is shown in Figure 8, more than one customer network platform whether from the same customer or a different customer may be operatively connected to the service provider network platform 20 for completion of tasks.

[0052] Figure 9 illustrates another example embodiment of a system for completing a task containing input information by a plurality of persons. In this embodiment, the customer outsources its entire business processing functions to the service provider. The service provider network platform 20 is capable of receiving documents from more than one customer process platform 10. The customer process platform 10 can be from the same or a different customer. The setup of the distribution platform 22 and the task activity platform 30 is similar to that shown in Figure 6 and as described above in the preceding paragraph. However, instead of sending bypassed sub-fields and non-performed or incomplete assigned sub-fields for sending to internal workers of the customer process platform via the bypass module 36 and the timeout module 37 respectively, the aforesaid sub-fields are sent to the employees 28 or sub-contracted workforce participants of the service provider.

[0053] Figure 10 is an illustration of a system configuration setup of performing the method according to an embodiment of the invention. The system configuration includes a customer network platform 10, a service provider network platform 20 located in a different geographical location and operatively connected over the network to the customer network platform 10, and a task activity platform 30 integrated with a customer process platform 11 within the customer network platform. The service provider network platform 20 includes the distribution platform 24 which further includes a processing server and a communication server. The processing server receives sub-fields from the task activity platform 30 over the network and a randomizer module 22 further mixes the sub-fields from numerous documents received from multiple customers to further remove context from the sub-fields. The communication server includes a network interface and a job distributor for sending tasks to the workforce participants through electronic devices connected to the service provider network platform over the network. In this embodiment, the task activity platform 30 is integrated with the customer process platform 11 within the customer network platform 10.

The task activity platform 30 includes an application server, database server or file server depending on the volume of tasks for performing the functions of the separator, disassociator, mixer and compiler modules. As described previously, the functions of the task activity platform 30 can be combined with functions of the customer network platform 10 or the functions of the distribution platform 24 depending on the business support requirements of the customer and vice versa. For example, the compiler module may be run on the customer network platform 10 and the timeout and bypass module on the customer network platform 10 may similarly be run on the service provider network platform 20. The quality manager module manages the quality of the performance of the tasks provided by the workforce participants. The queue manager feeds tasks into the job distributor.

[0054] It will be apparent that various other modifications and adaptations of the application will be apparent to the person skilled in the art after reading the foregoing disclosure without departing from the spirit and scope of the application and it is intended that all such modifications and adaptations come within the scope of the appended claims.

CLAIMS

1. A method of completing a task containing input information by a plurality of persons comprising the following steps of:

integrating a task activity platform with a customer process platform;

receiving a first document from a document receiver operatively connected to the customer process platform, the first document containing input information associated with confidential information;

separating the input information in the first document into a plurality of fields, each of the plurality of fields including a portion of the input information;

disassociating each of the plurality of fields such that each of the plurality of fields is a disassociated field, wherein the disassociated field is context-free and non-discernable from the confidential information;

selectively distributing the plurality of disassociated fields to any one of a service provider network platform, the customer network platform or a third party network platform, or to a combination thereof, the task including one or more disassociated fields to be performed by the plurality of persons distributed thereto;

transmitting the tasks from the respective network platforms to a plurality of electronic devices associated with the plurality of persons for performance of the tasks;

receiving responses for the performance of the task via the plurality of electronic devices by the task activity platform over the network from the respective platforms distributed thereto;

compiling the responses for the tasks into a compilation document within the customer network platform, the compilation document being similar to the first document containing input information.

2. The method according to claim 1, wherein the task activity platform includes a server integrator operatively connected to the customer process platform, the customer process platform and the task activity platform being located within the customer network platform.

3. The method according to claims 1 or 2, further comprising a step of sending non-performed assigned tasks to internal workers within the service provider network

platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

4. The method according to claims 1 or 2, further comprising a step of sending non-performed assigned tasks to internal workers within the customer process platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

5. The method according to claims 1 or 2, further comprising a step of sending non-performed assigned tasks to internal workers within a third party network platform, the non-performed assigned tasks being tasks for which no response is received from the plurality of persons distributed thereto within a prescribed time period.

6. The method according to any of the above claims, further comprising the steps of:

receiving input information from a second document;

dividing the input information from the second document into a plurality of fields;

disassociating the input information from the second document into the plurality of fields; and

mixing the disassociated fields of the first document and the second document such that upon distributing the disassociated fields to one of a plurality of persons, the one of the plurality of persons receives disassociated fields from the first and second documents.

7. The method according to any of the above claims, further including the steps of selecting at least a predetermined number of sub-fields for sending to internal workers within the customer process platform.

8. The method according to any of claims 1 to 7, further including the steps of selecting at least a predetermined number of sub-fields, sending the at least predetermined number of sub-fields to a third party network platform for sending to internal workers within the third party network platform.

9. The method according to any of the above claims, wherein the service provider network platform includes a randomizer for mixing the plurality of sub-fields

received from the task activity platform such that the each of the plurality of sub-fields are removed from context and non-discernable from the confidential information.

10. The method according to any of the above claims, wherein the step of disassociating each of the plurality of fields includes dividing the plurality of fields into at least two disassociated fields, each of the at least two disassociated fields including a sub-set of the plurality of fields such that the information in the sub-set of the plurality of fields cannot be discerned from each sub-set alone.

11. The method according to any of the above claims, wherein the step of distributing the task from the distribution platform includes the step of delegating the performance of the tasks with respect to at least one of the disassociated fields with one of the plurality of persons.

12. The method according to any of the above claims, wherein the distribution platform includes a job distributor to perform the step of distributing tasks to the plurality of people.

13. The method according to any of the above claims, wherein the step of compiling the responses for the performance of the tasks include a compiler operative to receive the results of the performance of each task, and the compiler assembles the responses into a compiled document.

14. The method according to any of the above claims, wherein the step of integrating a task activity platform with a customer process platform includes replicating the step of integrating a second task activity platform with a second customer process platform.

15. The method according to claim 14, wherein a common data factory is operatively connected over the network to each of the first and second customer process platforms, the common data factory being located within a third party network platform.