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(54) **RECOMMENDATION UNIT FOR GENERATING MEETING** RECOMMENDATIONS

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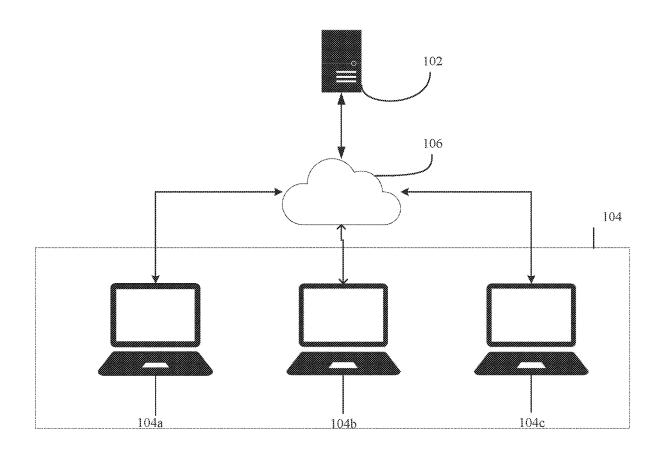
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(57)ABSTRACT

Provided is a method that includes receiving, by a processor, an input pertaining to scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant. The method further includes generating, by the processor, one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants. Additionally, the method includes receiving, by the processor, an input to select a meeting recommendation from the one or more meeting recommendations. Further, the method includes updating, by the processor, the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.



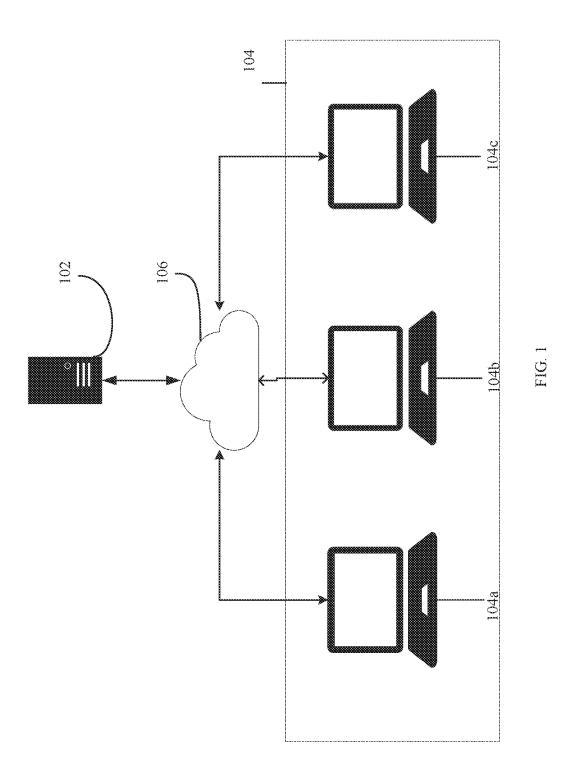
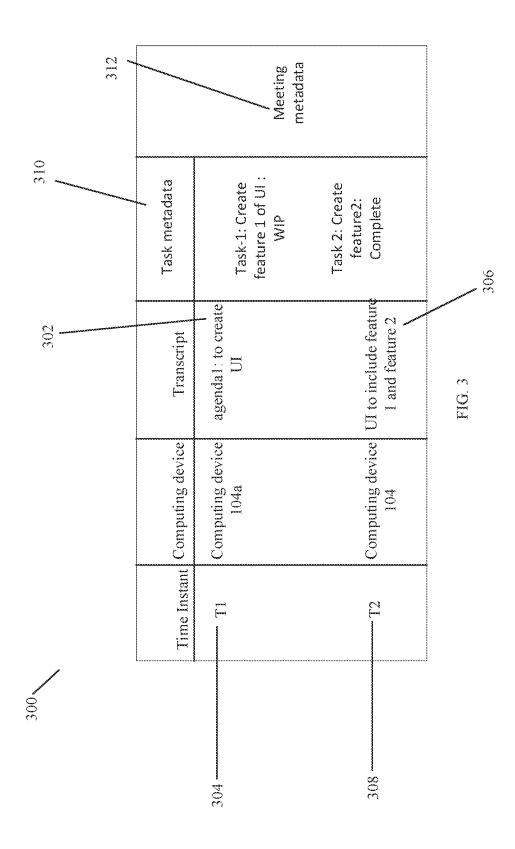
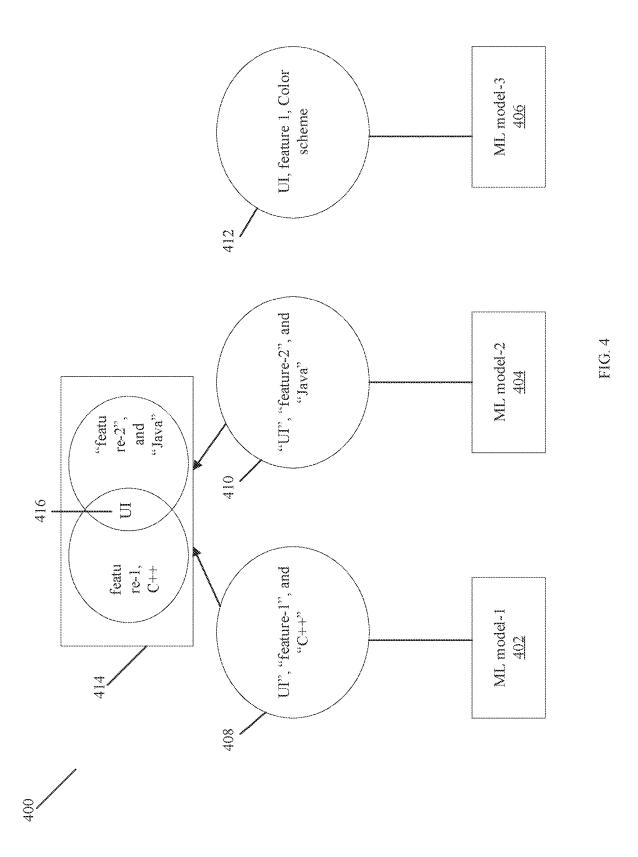
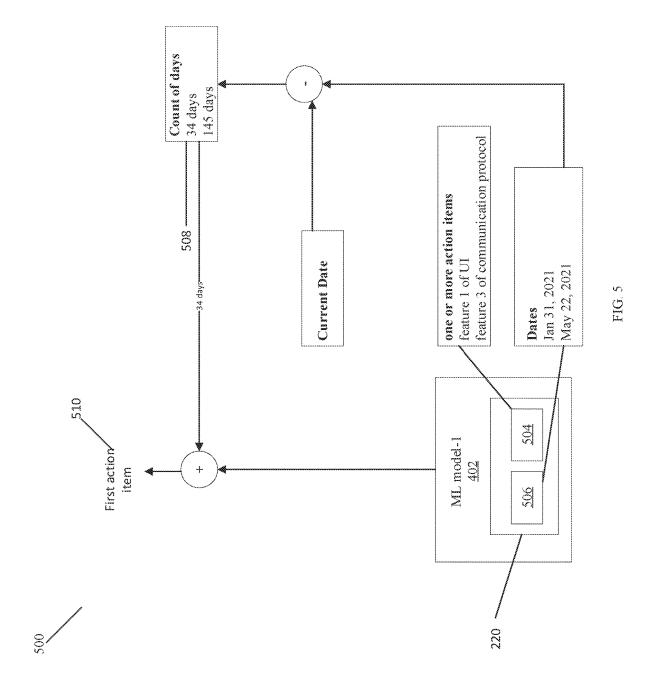
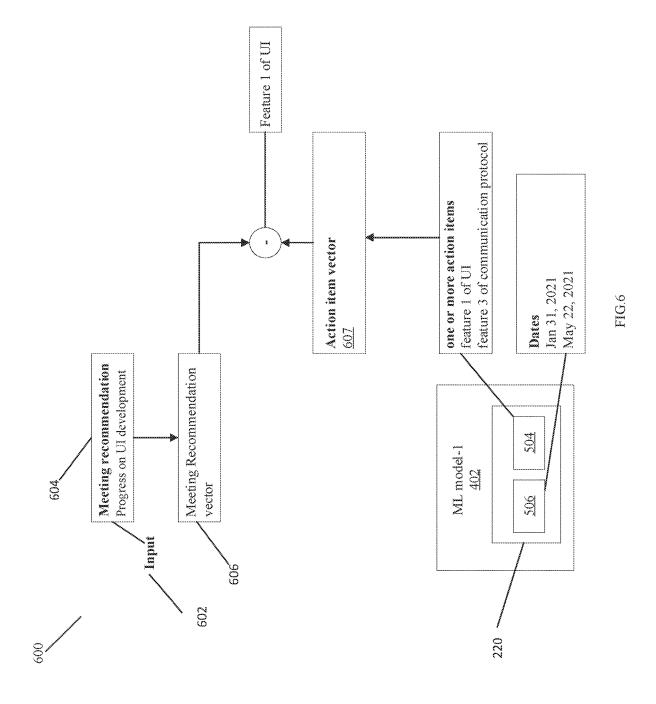


FIG. 2

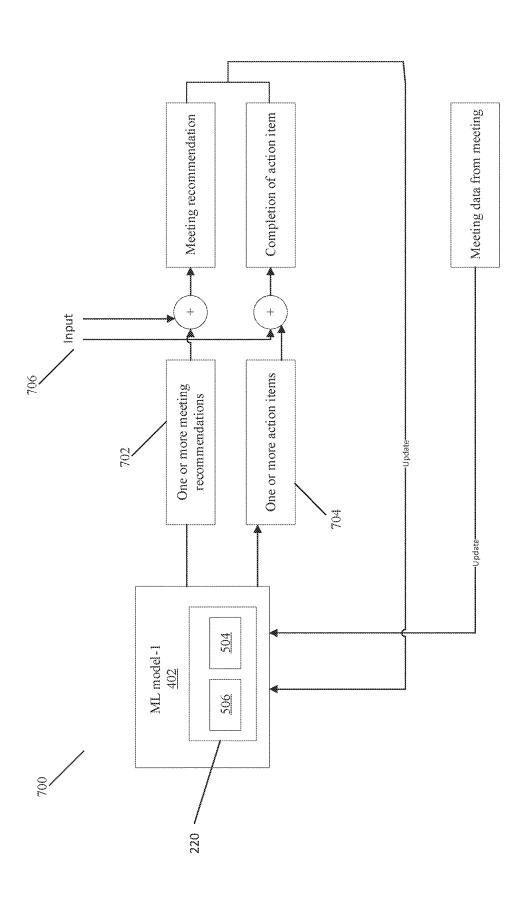


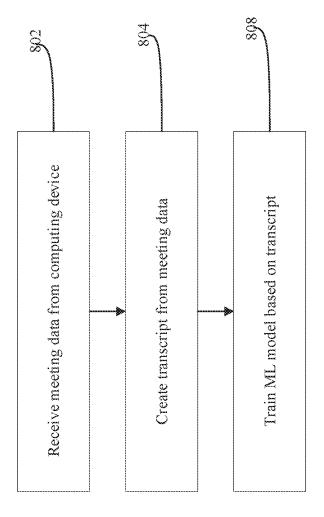














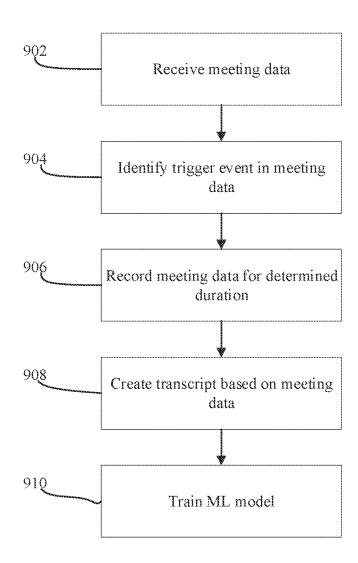


FIG. 9



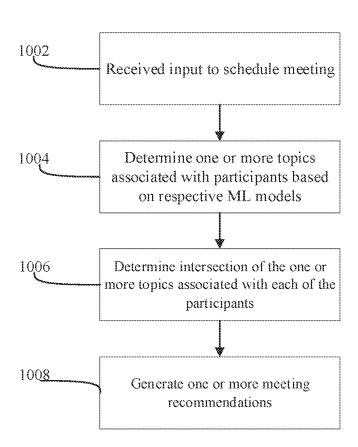


FIG. 10



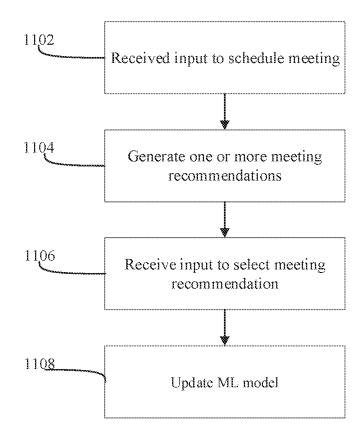


FIG. 11

RECOMMENDATION UNIT FOR GENERATING MEETING RECOMMENDATIONS

CROSS-REFERENCE TO RELATED APPLICATIONS/INCORPORATION BY REFERENCE

[0001] This application makes reference to, claims priority to, and claims benefit from U.S. Provisional Application Ser. No. 63/028,123, which was filed on May 21, 2020.

[0002] The above referenced application is hereby incorporated herein by reference in its entirety.

TECHNICAL FIELD

[0003] The presently disclosed embodiments are related, in general, to a meeting. More particularly, the presently disclosed embodiments are related to a recommendation unit for generating meeting recommendations.

BACKGROUND

[0004] Meetings, conducted over a communication network, involve a plurality of participants joining the meeting through computing devices connected to the communication network. In some examples, the plurality of participants of the meeting may generate meeting data during a course of the meeting. Some examples of the meeting data may include, but are not limited to, audio content which may include a participant's voice/audio, video content which may include participant's video and/or other videos, meeting notes input by the plurality of participants, presentation content, and/or the like. In some examples, the meeting data may be utilized to predict one or more meeting recommendations for the plurality of the participants.

[0005] Further limitations and disadvantages of conventional and traditional approaches will become apparent to one of skill in the art, through comparison of described systems with some aspects of the present disclosure, as set forth in the remainder of the present application and with reference to the drawings.

SUMMARY

[0006] A recommendation unit for generating meeting recommendations is provided substantially as shown in, and/or described in connection with, at least one of the figures, as set forth more completely in the claims.

[0007] These and other features and advantages of the present disclosure may be appreciated from a review of the following detailed description of the present disclosure, along with the accompanying figures in which like reference numerals refer to like parts throughout.

BRIEF DESCRIPTION OF DRAWINGS

[0008] FIG. 1 is a block diagram that illustrates a system environment for training a ML model, in accordance with an embodiment of the disclosure;

[0009] FIG. 2 is a block diagram of a central server, in accordance with an embodiment of the disclosure;

[0010] FIG. 3 is a diagram that illustrates an example meeting transcript, in accordance with an embodiment of the disclosure;

[0011] FIG. 4 is a diagram that illustrates an exemplary scenario for the meeting, in accordance with an embodiment of the disclosure;

[0012] FIG. 5 is a diagram of another exemplary scenario illustrating generation of the one or more meeting recommendations, in accordance with an embodiment of the disclosure:

[0013] FIG. 6 is a diagram illustrating another exemplary scenario for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure; [0014] FIG. 7 is a diagram illustrating updating of the ML model, in accordance with an embodiment of the disclosure; [0015] FIG. 8 is a flowchart illustrating a method for training the ML model, in accordance with an embodiment of the disclosure;

[0016] FIG. 9 is a flowchart illustrating another method for training the ML model, in accordance with an embodiment of the disclosure;

[0017] FIG. 10 is a flowchart illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure; and

[0018] FIG. 11 is a flowchart illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure.

DETAILED DESCRIPTION

[0019] The illustrated embodiments describe a method that includes receiving, by a processor, an input pertaining to scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant. The method further includes generating, by the processor, one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants. Additionally, the method includes receiving, by the processor, an input to select a meeting recommendation from the one or more meeting recommendations. Further, the method includes updating, by the processor, the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.

[0020] The various embodiments provide a central server that includes a memory device comprising a set of instructions. Further, the central server includes a processor communicatively coupled with the memory device. The processor is configured to receive an input that pertains to a scheduling operation. The scheduling operation includes scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant. The processor is configured to generate one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants. Further, the processor is configured to receive an input to select a meeting recommendation from the one or more meeting recommendations. Additionally, the processor is further configured to update the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.

[0021] The various embodiments describe a non-transitory computer-readable medium having stored thereon, computer-readable instructions, which when executed by a com-

puter, causes a processor in the computer to execute operations, the operations comprising receiving, by a processor, an input pertaining to scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant. The operation comprises generating, by the processor, one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants. The operations comprise receiving, by the processor, an input to select a meeting recommendation from the one or more meeting recommendations. The operations comprise updating, by the processor, the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.

[0022] FIG. 1 is a block diagram that illustrates a system environment for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 1, there is shown a system environment 100, which includes a central server 102, one or more computing devices 104a, 104b, and 104c collectively referenced as computing devices 104, and a communication network 106. The central server 102 and the computing devices 104 may be communicatively coupled with each other through the communication network 106.

[0023] The central server 102 may comprise suitable logic, circuitry, interfaces, and/or code that may be configured to create a meeting session through which the computing devices 104 may communicate with each other. For example, the computing devices 104, may share content (referred to as meeting data) amongst each other via the meeting session. For example, the central server 102 may receive the meeting data from each of the computing devices 104. Thereafter, the central server 102 may be configured to monitor the meeting data received from each of the computing devices 104. The monitoring of the meeting data may comprise identifying a trigger event during the meeting. The central server 102 may be configured to capture a plurality of meeting snippets for each of the plurality of participants based on the identification of the trigger event. Additionally, or alternatively, the central server 102 may be configured to train a Machine Learning (ML) model for each of the plurality of participants based on the plurality of meeting snippets. In an alternative embodiment, the central server 102 may be configured to train the ML model for each of the plurality of participants, directly, based on the meeting data received from the each of the computing devices 104. Further, the central server 102 may be configured to utilize the ML model to generate one or more meeting recommendations for each of the plurality of participants. Examples of the central server 102 may include, but are not limited to, a personal computer, a laptop, a personal digital assistant (PDA), a mobile device, a tablet, a computing device coupled to the computing devices 104 over a local network, an edge computing device, a cloud server, or any other computing device. Notwithstanding, the disclosure may not be so limited and other embodiments may be included without limiting the scope of the disclosure.

[0024] The computing devices 104 may comprise suitable logic, circuitry, interfaces, and/or code that may be configured to connect to the meeting session, created by the central server 102. In an exemplary embodiment, the computing devices 104 may be associated with the plurality of partici-

pants of the meeting. The plurality of participants may provide one or more inputs during the meeting that may cause the computing devices 104 to generate the meeting data during the meeting. In an exemplary embodiment, the meeting data may correspond to the content shared amongst the computing devices 104 during the meeting. In some examples, the meeting data may comprise, but are not limited to, audio content that is generated by the plurality of participants as the plurality of participants speak during the meeting, video content that may include video feed of the plurality of participants, meeting notes input by the plurality of participants during the meeting, presentation content, screen sharing content, file sharing content and/or any other content shared during the meeting. In some examples, the computing devices 104 may be configured to transmit the meeting data to the central server 102. Additionally, or alternatively, the computing devices 104 may be configured to receive a trigger input, indicative of the trigger event, from the plurality of participants. Upon receiving the input, the computing devices 104 may be configured to transmit the trigger input to the central server 102. Additionally or alternatively, the computing devices 104 may receive the one or more meeting recommendations from the central server 102. To this end, the computing devices 104 may receive recommendation selection input from the plurality of participants to select a meeting recommendation of the one or more meeting recommendations. Further, the computing devices 104 may be configured to transmit the selected meeting recommendation to the central server 102. Examples of the computing devices 104 may include, but are not limited to, a personal computer, a laptop, a personal digital assistant (PDA), a mobile device, a tablet, or any other computing device.

[0025] In an embodiment, the communication network 106 may include a communication medium through which each of the computing devices 104 associated with the plurality of participants may communicate with each other and/or with the central server 102. Such a communication may be performed, in accordance with various wired and wireless communication protocols. Examples of such wired and wireless communication protocols include, but are not limited to, Transmission Control Protocol and Internet Protocol (TCP/IP), User Datagram Protocol (UDP), Hypertext Transfer Protocol (HTTP), File Transfer Protocol (FTP), ZigBee, EDGE, infrared (IR), IEEE 802.11, 802.16, 2G, 3G, 4G, 5G, 6G cellular communication protocols, and/or Bluetooth (BT) communication protocols. The communication network 106 may include, but is not limited to, the Internet, a cloud network, a Wireless Fidelity (Wi-Fi) network, a Wireless Local Area Network (WLAN), a Local Area Network (LAN), a telephone line (POTS), and/or a Metropolitan Area Network (MAN).

[0026] In operation, the central server 102 may receive a request, from a computing device 104a, to generate the meeting session for a meeting. In an exemplary embodiment, the request may include meeting metadata associated with the meeting that is to be scheduled. In an exemplary embodiment, the meeting metadata may include, but is not limited to, an agenda of the meeting, one or more topics to be discussed during the meeting, a time duration of the meeting, a schedule of the meeting, meeting notes carried forward from previous meetings, a plurality of participants to attend the meeting, and/or the like. Upon receiving the request, the central server 102 may create the meeting

session. In an exemplary embodiment, the meeting session may correspond to a communication session that allows the computing devices 104 to communicate with each other. The meeting session may share unique keys (public and private keys) with the computing devices 104, which allows the computing devices 104 to communicate with each other. In some examples, the unique keys corresponding to the meeting session may ensure that any other computing devices (other than the computing devices 104) are not allowed to join the meeting session. Additionally, or alternatively, the central server 102 may send a notification to the computing devices 104 pertaining to the scheduled meeting. The notification may include the details of the meeting session. For example, the central server 102 may transmit the unique keys and/or the meeting metadata to the computing devices 104.

[0027] The computing devices 104 may join the meeting through the meeting session. In an exemplary embodiment, the plurality of participants associated with the computing devices 104 may cause the computing devices 104 to join the meeting session. In an exemplary embodiment, joining the meeting session has been interchangeably referred to as joining the meeting. Thereafter, the plurality of participants associated with the computing devices 104 may cause the computing devices 104 to share content amongst each other. For instance, the plurality of participants may provide the one or more inputs to the computing devices 104 to cause the computing devices 104 to share the content amongst each other. For example, the plurality of participants may speak during the meeting. The computing devices 104 may capture voice of the plurality of participants through one or more microphones to generate audio content. Further, the computing devices 104 may transmit the audio content over the communication network 106 (i.e., meeting session). Additionally, or alternatively, the plurality of participants may share respective video feeds amongst each other by utilizing image capturing device (e.g., camera) associated with the computing devices 104. Additionally, or alternatively, a participant-1 of the plurality of participants may present content saved on the computing device (for example, the computing device 104a) through screen sharing capability. For example, the participant-1 may present content to other participants (of the plurality of participants) through the power point presentation application installed on the computing device 104a. In some examples, the participant-1 may share content through other applications installed on the computing device 104a. For example, the participant-1 may share content through the word processor application installed on the computing device 104a. Additionally, or alternatively, the participant-1 may take meeting notes during the meeting. In an exemplary embodiment, the audio content, the video content, the meeting notes, and/or the screen sharing content (e.g., through applications installed on the computing device 104a) may constitute the meeting data. Therefore, in some examples, the computing device 104a may generate the meeting data during the meeting. Similarly, other computing devices 104b and 104c may also generate the meeting data during the meeting. Additionally, or alternatively, the computing devices 104 may transmit the meeting data to the central server 102 over the meeting session. In an exemplary embodiment, the computing devices 104 may transmit the meeting data in near real time of respective generation of the meeting data. To this end, the computing devices 104 may be configured to transmit the meeting data as and when the computing devices 104 generate the meeting data.

[0028] In an exemplary embodiment, the central server 102 may receive the meeting data from each of the computing devices 104. Thereafter, the central server 102 may be configured to utilize the meeting data, received from each of the computing devices 104, to train a ML model for each of the plurality of participants. For example, the central server 102 receives the meeting data from the computing device 104a, associated with the participant-1. Further, the central server 102 receives the meeting data from the computing device 104b, associated with the participant-2. Accordingly, the central server 102 may train a ML model for the participant-1 based on the meeting data received from the computing device 104a. Additionally, the central server 102 may train another ML model for the participant-2 based on the meeting data received from the computing device 104b. Accordingly, the central server 102 may be configured to train the ML model for each of the plurality of participants.

[0029] In some examples, the scope of the disclosure is not limited to the central server 102 utilizing the complete meeting data to train the ML model for each of the plurality of participants. In some examples, the central server 102 may be configured to train the ML model based on a portion of the meeting data received from each of the computing devices 104. For example, the central server 102 may be configured to train the ML model based on a portion of the meeting data received from each of the computing device 104a. In such an embodiment, prior to training the ML model, the central server 102 may compare the meeting data (received from each of the computing devices 104) with the meeting metadata to identify a trigger event in the meeting data. For example, the central server 102 may compare the meeting data received from the computing device 104a with the meeting metadata to identify the trigger event initiated by the participant-1 associated with the computing device 104a. In an exemplary embodiment, the trigger event may be indicative of a timestamp at which the participant-1 discussed or referred to a topic corresponding to the meeting metadata. For example, the participant-1 discussed a topic mentioned in the agenda of the meeting.

[0030] Based on the identification of the trigger event, the central server 102 may generate a meeting snippet by recording the meeting data, received from a computing device (e.g., computing device 104a) for a determined duration. In an example embodiment, the central server 102 may be configured to associate the meeting snippet with the participant-1 associated with the computing device (e.g., computing device 104a). Similarly, during the meeting, the central server 102 may be configured generate a plurality of meeting snippets associated with each of the plurality of participants. Thereafter, the central server 102 may be configured to train the ML model for each of the plurality of participants based on the plurality of meeting snippets associated with each of the plurality of participants.

[0031] In exemplary embodiment, the central server 102 may be configured to utilize the ML model to generate one or more meeting recommendations for each of the plurality of participants. In an example embodiment, the one or more meeting recommendations may include, but are not limited to, suggesting meeting metadata for another meeting to be scheduled with the plurality of participants. For example, the

central server 102 may be configured to generate the one or more meeting recommendations for the participant-1 associated with the computing device 104a based on the ML model associated with the participant. Thereafter, the central server 102 may be configured to transmit the one or more meeting recommendations to the computing device 104a. At the computing device 104a, the participant-1 may provide recommendation selection input to select a meeting recommendation. Based on the selected meeting recommendation, the central server 102 may be configured to retrain the ML model associated with the participant-1 using the computing device 104a.

[0032] FIG. 2 is a block diagram of the central server, in accordance with an embodiment of the disclosure. Referring to FIG. 2, there is shown a central server 102 comprises a processor 202, a non-transitory computer readable medium 203, a memory device 204, a transceiver 206, a meeting data monitoring unit 208, a trigger event identification unit 210, a recording unit 212, and a training unit 214, and a recommendation unit 216.

[0033] The processor 202 may be embodied as one or more microprocessors with accompanying digital signal processor(s), one or more processor(s) without an accompanying digital signal processor, one or more coprocessors, one or more multi-core processors, one or more controllers, processing circuitry, one or more computers, various other processing elements including integrated circuits such as, for example, an application specific integrated circuit (ASIC) or field programmable gate array (FPGA), or some combination thereof.

[0034] Accordingly, although illustrated in FIG. 2 as a single controller, in an exemplary embodiment, the processor 202 may include a plurality of processors and signal processing modules. The plurality of processors may be embodied on a single electronic device or may be distributed across a plurality of electronic devices collectively configured to function as the circuitry of the central server 102. The plurality of processors may be in communication with each other and may be collectively configured to perform one or more functionalities of the circuitry of the central server 102, as described herein. In an exemplary embodiment, the processor 202 may be configured to execute instructions stored in the memory device 204 or otherwise accessible to the processor 202. These instructions, when executed by the processor 202, may cause the circuitry of the central server 102 to perform one or more of the functionalities, as described herein.

[0035] Whether configured by hardware, firmware/software methods, or by a combination thereof, the processor 202 may include an entity capable of performing operations according to embodiments of the present disclosure while configured accordingly. Thus, for example, when the processor 202 is embodied as an ASIC, FPGA or the like, the processor 202 may include specifically configured hardware for conducting one or more operations described herein. Alternatively, as another example, when the processor 202 is embodied as an executor of instructions, such as may be stored in the memory device 204, the instructions may specifically configure the processor 202 to perform one or more algorithms and operations described herein.

[0036] The processor 202 used herein may refer to a programmable microprocessor, microcomputer or multiple processor chip or chips that may be configured by software

instructions (applications) to perform a variety of functions, including the functions of the various embodiments described above. In some devices, multiple processors may be provided that may be dedicated to wireless communication functions and one processor may be dedicated to running other applications. Software applications may be stored in the internal memory before they are accessed and loaded into the processors. The processors may include internal memory sufficient to store the application software instructions. In many devices, the internal memory may be a volatile or non-volatile memory, such as flash memory, or a mixture of both. The memory can also be located internal to another computing resource (e.g., enabling computer readable instructions to be downloaded over the Internet or another wired or wireless connection).

[0037] The non-transitory computer readable medium 203 may include any tangible or non-transitory storage media or memory media such as electronic, magnetic, or optical media e.g., disk or CD/DVD-ROM coupled to processor 202.

[0038] The memory device 204 may include suitable logic, circuitry, and/or interfaces that are adapted to store a set of instructions that is executable by the processor 202 to perform predetermined operations. Some of the commonly known memory implementations include, but are not limited to, a hard disk, random access memory, cache memory, read only memory (ROM), erasable programmable read-only memory (EPROM) & electrically erasable programmable read-only memory (EEPROM), flash memory, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, a compact disc read only memory (CD-ROM), digital versatile disc read only memory (DVD-ROM), an optical disc, circuitry configured to store information, or some combination thereof. In an exemplary embodiment, the memory device 204 may be integrated with the processor 202 on a single chip, without departing from the scope of the disclosure.

[0039] The transceiver 206 may correspond to a communication interface that may facilitate transmission and reception of messages and data to and from various devices (e.g., computing devices 104). Examples of the transceiver 206 may include, but are not limited to, an antenna, an Ethernet port, a USB port, a serial port, or any other port that can be adapted to receive and transmit data. The transceiver 206 transmits and receives data and/or messages in accordance with the various communication protocols, such as, Bluetooth®, Infra-Red, I2C, TCP/IP, UDP, and 2G, 3G, 4G or 5G communication protocols.

[0040] The meeting data monitoring unit 208 may comprise suitable logic, circuitry, interfaces, and/or code that may configure the central server 102 to receive the meeting data from each of the computing devices 104. In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to generate a transcript from the meeting data using one or more known techniques. Some examples of the one or more known techniques may include Speech to Text (STT), Optical character Recognition (OCR), and/or the like. In an example embodiment, the meeting data monitoring unit 208 may be configured to individually generate a transcript for the meeting data received from each of the computing devices 104. Additionally, or alternatively, the meeting data monitoring unit 208 may be configured to timestamp the transcript, received from each of the computing devices 104, in accordance with a time instant at which

the central server 102 received the meeting data (from which the transcript was generated). Additionally or alternatively, the meeting data monitoring unit 208 may be configured to categorize the transcript of the meeting data in one or more categories. In some examples, the one or more categories may include, but are not limited to, an action category, a schedule category, work status category, and or the like. The meeting data monitoring unit 208 may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

[0041] The trigger event identification unit 210 may comprise suitable logic, circuitry, interfaces, and/or code that may configure the central server 102 to compare the transcript of the meeting data with the meeting metadata. Based on the comparison between the meeting metadata and the transcript of the meeting data, the trigger identification unit 210 may be configured to identify the trigger event. In an example embodiment, the trigger event identification unit 210 may be configured to individually identify the trigger event in the meeting data received from each of the computing devices 104. The trigger event identification unit 210 may be configured to associate the trigger event with a timestamp. In an example embodiment, the timestamp may correspond to a time instant at which the at least one participant mentioned or referred to the meeting metadata. In an exemplary embodiment, the trigger event identification unit 210 may be configured to receive an input from a computing device (e.g., the computing device 104a) of the computing devices 104. The trigger identification unit 210 may identify the received input as the trigger event. In an exemplary embodiment, the trigger event identification unit 210 may be configured to consider the categorization of the transcript of the meeting data in the one or more categories as the trigger event. The trigger event identification unit 210 may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

[0042] The recording unit 212 may comprise suitable logic, circuitry, interfaces, and/or code that may configure the central server 102 to generate a meeting snippet based on the identification of the trigger event. In an exemplary embodiment, the recording unit 212 may be configured to record the meeting data (in which the trigger event is identified) for a determined duration in order to generate the meeting snippet. For example, the recording unit 212 may be configured to record the meeting data for the determined duration, received from the computing device 104a, to generate meeting snippet. In an exemplary embodiment, the recording unit 212 may be configured to generate a plurality of meeting snippets by recording the meeting data received from a computing device (e.g., 104a). The recording unit 212 may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit

[0043] The training unit 214 may comprise suitable logic, circuitry, interfaces, and/or code that may configure the central server 102 to train the ML model for each of the plurality of participants based on the meeting data received from the respective computing devices 104. For example,

the training unit 214 may be configured to train the ML model for the participant-1 based on the meeting data received from the computing device 104a (being used by the participant-1). Similarly, the training unit 214 may be configured to train another ML model for the participant-2 based on the meeting data received from the computing device 104b (being used by the participant-2). In another example, the training unit 214 may be configured to train the ML model for each of the plurality of participants based on the plurality of meeting snippets. Additionally, or alternatively, the training unit 214 may be configured to train the ML model based on other information obtained from other sources such as, but are not limited to, one or more project tracking tools, and/or meeting metadata. In an exemplary embodiment, the ML model trained for each of the plurality of participants may constitute the recommendation unit 216. Additionally or alternatively, the training unit 214 may be configured to train one or more category models for each of the plurality of participants based on the transcripts categorized in the one or more categories. Further, the one or more category models may constitute the recommendation unit 216. In some examples, the scope of the disclosure is not limited to having a separate ML model and the one or more category models for each of the plurality of participants. In an exemplary embodiment, the training unit 214 may be configured to include the one or more category models in the ML model. Additionally or alternatively, the training unit 214 may be configured to update the ML model based on meeting data generated during future meetings. The training unit 214 may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

[0044] The recommendation unit 216 may comprise suitable logic, circuitry, interfaces, and/or code that may configure the central server 102 to generate the one or more meeting recommendations for each of the plurality of participants. In some examples, the recommendation unit 216 may comprise the ML model 218 trained for each of the plurality of participants, and one or more category models 220 trained for each of the plurality of participants. The recommendation unit 216 may be configured to generate the one or more meeting recommendations based on the ML model 218 and the one or more category models 220. In an alternative embodiment, the ML model 218 may include the one or more category models 220. The recommendation unit 216 may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

[0045] In operation, the processor 202 may receive the request to schedule the meeting from at least one computing device 104a of the computing devices 104. In an exemplary embodiment, the request to schedule the meeting includes meeting metadata. As discussed, the meeting metadata includes the agenda of the meeting, the one or more topics to be discussed during the meeting, the time duration of the meeting, the schedule of the meeting, the meeting notes carried from previous meetings, the plurality of participants to attend the meeting, and/or the like. The following table, Table 1, illustrates an example meeting metadata:

TABLE 1

Example meeting metadata					
Agenda	One or more topics		Schedule of the meeting	Meeting notes from previous meetings	
To discuss design of the User interface (UI)	Layout Eiglds to be displayed in UI Current status of project	1 hour	15 th Nov. 2020; 9 PM to 10 PM	1. UI to include feature 1, feature 2 2. Feature 1 defined as a portion depicting participants 3. Feature 2 depicting chat box	

[0046] In an exemplary embodiment, the processor 202 may be configured to store the meeting metadata in the memory device 204, as historical meeting metadata. Additionally, based on reception of the request to schedule the meeting, the processor 202 may be configured to create the meeting session. As discussed, the meeting session corresponds to a communication session that allows the computing devices 104 to connect to the central server 102. Further, the meeting session allows the computing devices 104 to communicate amongst each other. For example, over the meeting session, the computing devices 104 may share content (e.g., audio content and/or video content) amongst each other. In an exemplary embodiment, the processor 202 may be configured to transmit a message to each of the computing devices 104 comprising the details of the meeting session. For example, the message may include a link to the connect to the meeting session.

[0047] At the scheduled time, the plurality of participants may cause the respective computing devices 104 to join the meeting session. For example, the participant may click on the link (received in the message from the central server 102) to cause the computing devices 104 to join the meeting session. Based on the computing devices 104 joining the meeting session, the central server 102 may transmit a User Interface (UI) to each of the computing devices 104. In an exemplary embodiment, the UI may allow the plurality of participants to access one or more features. For example, the UI may allow the plurality of participants to share audio content and/or video content. To this end, the UI may provide control to the plurality of participants to enable/ disable an image capturing device and/or an audio capturing device in the computing devices 104. Additionally, or alternatively, the UI may enable the plurality of participants to share other content. For example, the UI may provide a feature to the plurality of participants that would allow the plurality of participants to cause the computing devices 104 to share content/applications being displayed on a display device associated with the computing devices 104. For instance, through the UI, the plurality of participants may cause the computing devices 104 to share a power point presentation being displayed on the computing devices 104. Additionally, or alternatively, the UI may present a note feature to the plurality of participants on respective computing devices 104. The notes feature may enable the plurality of participants to input meeting notes or keep track of important points discussed during the meeting. For example, the notes feature of the UI may correspond to a space on the UI in which the plurality of participants may input text for his/her reference. Further, the text input by the plurality of participants may correspond to the meeting notes taken by the plurality of participants during the meeting. Additionally, or alternatively, the computing devices 104 may be configured to transmit the meeting notes to the central server 102. Further, in one embodiment, the central server 102 may be configured to share the meeting notes input by the plurality of participants amongst each of the computing devices 104. In an alternative embodiment, the central server 102 may not share the meeting notes input by the plurality of participants amongst each of the computing devices 104. In such an embodiment, the meeting notes are available locally to a participant who inputs the text corresponding to the meeting notes.

[0048] The plurality of participants may utilize the one or more features presented on the UI to interact and/or share content with amongst each other. Accordingly, each of the computing devices 104 may generate meeting data during the meeting. As discussed, the meeting data may include, but is not limited to, the audio content generated by the plurality of participants as the plurality of participants speak during the meeting, the video content include video feed of the plurality of participants, the meeting notes input by the plurality of participants during the meeting, the presentation content, the screen sharing content, the file sharing content and/or any other content shared during the meeting. To this end, in an exemplary embodiment, the processor 202 may receive the meeting data from each of the computing devices 104 in real time

[0049] In some examples, since the computing devices 104 generate the meeting data based on the input provided by the plurality of participants. Accordingly, the meeting data received from each of the computing devices 104 are associated with the respective participants using the computing devices 104. For example, the meeting data received from the computing device 104a is associated with the participant-1 using the computing device 104a. For the purpose of brevity, the foregoing description has been described in conjunction with the meeting data received from the computing device 104a. However, those skilled in the art would appreciate that the foregoing description is also applicable on the meeting data received from the other computing devices 104.

[0050] In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to generate, in real time, a transcript of the meeting data received from the computing device 104a. For example, the meeting data monitoring unit 208 may be configured to convert the audio content (received from computing devices 104) to text using known Speech to Text (STT) techniques. The text (obtained from the audio content) may constitute the transcript. In another example, the meeting data monitoring unit 208 may be configured to generate the transcript from the video content. For instance, the meeting data monitoring unit 208 may perform optical character recognition (OCR) on the video content to generate the transcript. In yet another example, the meeting data monitoring unit 208 may be configured to consider the meeting notes (input by the participant associated with the computing device 104a) as the transcript. In yet another example, the meeting data monitoring unit 208 may be configured to perform OCR on the content shared via the screen sharing feature to generate the transcript. Additionally, or alternatively, the meeting data monitoring unit 208 may be configured to timestamp the transcript in accordance with a time instant of the reception of the meeting data from the computing device 104a. For example, the processor 202 receives the meeting data at time instant T₁. To this end, the meeting data monitoring unit 208 may generate the transcript from the meeting data received at the time instant T_1 , and may timestamp the transcript with time instant T₁. An example of the transcript is further illustrated and described in FIG. 3. Similarly, during the meeting, the meeting data monitoring unit 208 may be configured to generate multiple transcripts from the meeting data received from the computing device 104a based on the time instant at which the central server 102 receives the corresponding meeting data. For example, the meeting data monitoring unit 208 may generate another transcript at the time instant T2 based on the meeting data received at the time instant T₂. To this end, the meeting data monitoring unit 208 may be configured to generate the multiple transcripts as and when the central server 102 receives the meeting data from the computing device 104a.

[0051] Additionally, or alternatively, the meeting data monitoring unit 208 may be configured to include the meeting metadata (generated during scheduling the meeting) in the transcript. For example, the meeting data monitoring unit 208 may be configured to include the agenda of the meeting, the meeting notes carried forward from the previous meetings, and/or the like, in the transcript. Additionally, or alternatively, the meeting data monitoring unit 208 may be configured to retrieve task metadata associated with one or more tasks assigned to the participant-1 from the one or more project tracking tools. Some examples, of the project tracking tools may include, but are not limited to, Salesforce®, Jira®, and/or the like. In an exemplary embodiment, the task metadata may include, but is not limited to, tasks description, task outcome, tools to be used to complete the task, planned completion date associated with the task, and/or a current status of the task. In some examples, the participant-1 may be working on more than one project in parallel. Accordingly, the participant-1 may be assigned with multiple tasks. The task metadata associated with such multiple tasks is usually stored on the one or more project tracking tools. The meeting data monitoring unit 208 may be configured to retrieve the task metadata associated with the one or more tasks, assigned to the participant 1, from the project tracking tools. In an alternative embodiment, the meeting data monitoring unit 208 may be configured to retrieve the task metadata associated with a set of tasks, of the one or more tasks assigned to the participant 1, that are relevant to the meeting. For example, the meeting data monitoring unit 208 may be configured to retrieve the task metadata associated with the set of tasks based on the meeting metadata. To this end, the meeting data monitoring unit 208 may be configured to query the Application Interface (API) of the one or more project tracking tools using the meeting metadata (e.g., the agenda of the meeting included in the meeting metadata) to retrieve the task metadata associated with the set of tasks. For example, the meeting metadata includes the agenda UI design. Accordingly, the meeting data monitoring unit 208 may be configured to retrieve the task metadata associated with the set of tasks assigned to the participant-1 pertaining to the UI design. In an alternative embodiment, the meeting data monitoring unit 208 may be configured to retrieve the task metadata associated with the one or more tasks assigned to the participant-1 from the one or more project tracking tools based on the query generated from the transcript. For example, the meeting data monitoring unit 208 may be configured to determine one or more parts of speech of the transcript. For example, the meeting data monitoring unit 208 may be configured to determine one or more nouns in the transcript. Thereafter, the meeting data monitoring unit 208 may be configured to utilize the nouns in the transcript to query the one or more project tracking tools to retrieve the task metadata associated with the one or more tasks assigned to the participant-1. In an alternative embodiment, the meeting data monitoring unit 208 may be configured to utilize other parts of speech of the transcript to retrieve the task metadata (associated with the one or more tasks assigned to the participant-1) from the one or more project tracking tools. In another embodiment, the meeting data monitoring unit 208 may be configured to utilize the complete transcript to query the one or more project tracking tools to retrieve the task metadata. Further, the meeting data monitoring unit 208 may be configured to add the task metadata in the transcript.

[0052] FIG. 3 is a diagram that illustrates an example meeting transcript, in accordance with an embodiment of the disclosure. Referring to FIG. 3, there is shown a meeting transcript 300 that includes a transcript "agenda1: to create UI" (depicted by 302) received at the time instant T_1 (depicted by 304) from the computing device 104a. Similarly, the meeting transcript 300 includes another transcript "UI to include feature 1 and feature 2" (depicted by 306) received at the time instant T_2 (depicted by 308) from the computing device 104a. Additionally, the meeting transcript 300 includes the task metadata 310 associated the set of tasks assigned to the participant-1 associated with the computing device 104a. Additionally, or alternatively, the meeting transcript 300 includes the meeting metadata 312.

[0053] Referring back to FIG. 2, additionally or alternatively, the meeting data monitoring unit 208 may be configured to categorize the transcript of the meeting data, received from the computing device 104a, in the one or more categories. As discussed, the one or more categories may include, but is not limited to, an action category, a schedule category, work status category, and or the like. Additionally, or alternatively, the meeting data monitoring unit 208 may be configured to categorize the transcript at each timestamp in one or more categories. In an exemplary embodiment, the action category may correspond to a category that may comprise transcripts which are indicative of an action item for the plurality of participants. In an exemplary embodiment, the schedule category may correspond to a category that may comprise transcripts indicative of a schedule of a subsequent meeting. In yet another embodiment, the work status category may correspond to a category that may include transcripts indicative of a status of a task or a work. For example, the participant-1 may input text "work on feature-1 of the UI design" in the meeting notes. Accordingly, the meeting data monitoring unit 208 may be configured to categorize the transcript that includes the text "work on feature-1 of the UI design" in the action item category.

[0054] In an exemplary embodiment, the processor 202 may be configured to utilize a classifier to categorize the transcript at each timestamp in the one or more categories. In some examples, the classifier may correspond to a machine learning (ML) model that is capable of categorizing the transcript at each timestamp based on the semantics of the transcripts. For example, the classifier may be capable of

transforming the transcript into the transcript vector. Thereafter, the classifier may be configured to utilize the known classification techniques to classify the transcript at each timestamp in the one or more categories. Some examples of the classification techniques may include, but are not limited to, naïve bayes classification technique, logistic regression, hierarchal classifier, random forest classifier, and/or the like. In some examples, prior to utilizing the classifier to classify the transcripts in the one or more categories, the processor 202 may be configured to train the classifier based on a training data. The training data may include one or more features and one or more labels. The one or more features may include training transcripts, while the one or more labels may include the one or more categories. In the training data, each of the transcripts is associated with a category of the one or more categories. Training the classifier may include the processor 202 defining a mathematical relationship between the transcript vectors and the one or more categories. Thereafter, the processor 202 utilizes the classifier to classify the transcript to the one or more categories.

[0055] In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to associate the transcript in each of the one or more categories with a participant of the plurality of participants of the meeting. In some examples, the meeting data monitoring unit 208 may be configured to determine the participant associated with the transcript based on the information included in the transcript. For example, meeting data monitoring unit 208 may be configured to determine whether the participant is explicitly mentioned in the transcript of the meeting. If the meeting data monitoring unit 208 determines that the participant is explicitly mentioned in the transcript, the meeting data monitoring unit 208 may be configured to associate the participant mentioned in the transcript with the transcript itself. For example, during the meeting, the participant-1 may state that "participant-2 has to work on feature 2 of the UI". Accordingly, the meeting data monitoring unit 208 may be configured to associate the transcript with the participant-

[0056] However, if the meeting data monitoring unit 208 determines that no participant is explicitly mentioned in the transcript of the meeting, the meeting data monitoring unit 208 may be configured to associate the participant, who generated the transcript, with the transcript. For example, during the meeting, the participant-1 may state that "work on feature 2 of the UI". Accordingly, the meeting data monitoring unit 208 may be configured to associate the transcript with the participant-1.

[0057] In another example, if the meeting data monitoring unit 208 determines that no participant is explicitly mentioned in the transcript of the meeting, the meeting data monitoring unit 208 may be configured to associate the participant based on, the task metadata associated with one or more tasks assigned to a plurality of participants. For example, the meeting data monitoring unit 208 may be configured to query the one or more project tracking tools using the transcript to determine participant associated with a task mentioned in the transcript. For example, during the meeting the participant-1 may state that "work on feature 2 of the UI". Based on the transcript, the meeting data monitoring unit 208 may be configured to determine the participant, of the plurality of participants, working on the feature

2 of the UI. Accordingly, the meeting data monitoring unit 208 may be configured to associate the transcript with the determined participant.

[0058] The following table, Table 2, illustrates the association between the transcripts categorized in the one or more categories and the plurality of participants:

TABLE 2

Categorization of the transcripts and the associated participants.				
Transcript	One or more categories	Associated participant		
"participant-1 to work on feature 1 of the UI"	Action category	Participant-1		
"feature 1 to be completed by May 22, 2021"	Schedule category	Participant-1		

Additionally, as discussed, the task metadata (retrieved from the one or more project tracking tools) are included in the transcript. To this end, in an exemplary embodiment, the meeting data monitoring unit 208 may be configured to categorize the task metadata in the one or more categories. For example, the meeting data monitoring unit 208 may categorize the task metadata (included in the transcript) in the status category since the task metadata includes the status of the one or more tasks assigned to a participant of the plurality of participants. In another example, the meeting data monitoring unit 208 may be configured to categorize the task metadata based on a correlation between the task metadata and the transcripts categorized in the one or more categories. For example, referring to table 2, based on the transcript "feature 1 to be completed by May 22, 2021", the meeting data monitoring unit 208 may be configured to categorize the task metadata associated with the task, corresponding to the feature 1, to the task status category.

[0059] In an exemplary embodiment, the training unit 214 may be configured to train the ML model 218 for the participant-1 associated with the computing device 104a based on the transcript (generated from the meeting data received from the computing device 104a, the task metadata associated with the set of tasks assigned to the participant-1, and meeting metadata). In some examples, the ML model 218 may be indicative of a profile of the participant 1. In an exemplary embodiment, the profile of a participant may be deterministic of one or more topics which are relevant and/or of interest to the participant. Additionally, or alternatively, the profile may be indicative of one or more skills of the participant 1. In some examples, the ML model 218 may be deterministic of a set of topics of the one or more topics, associated with participant-1, which are of more importance to the participant-1 in comparison to other topics in the one or more topics. For example, the ML model 218 may define weights to the one or more topics based on the importance of the one or more topics to the participant. The importance of a topic may be determined, for example, based on a count of times the participant-1 mentioned the topic in the transcript. However, the scope of the disclosure is not limited to determining the importance of the topic based on a count of times the participant-1 mentioned the topic in the transcript. In some examples, the importance of the topic may be determined based on other features that can be retrieved from the transcript. The following table, Table 3, illustrates one or more topics associated with the partici-

TABLE 3

Weights assigned to the one or more topics associated with the participant-1				
One or more topics	Weights			
UI	5			
Feature-1	2			
C++	2			
Java	1			

[0060] To train the ML model 218, the training unit 214 may be configured to remove unwanted words and/or phrases, from the transcript to generate a clean transcript. Such unwanted words and/or phrases may be referred to as stop words. In some examples, the stop words may include words that are insignificant and do not add meaning to the transcript. Some examples of the stop words may include, but are not limited to, "is", "are", "and" "at least", and/or the like. Thereafter, in some examples, the training unit 214 may be configured to identify n-grams in the clean transcript. n-gram corresponds to combination of two or more words in the clean transcript that are used in conjunction, in the transcript. For example, the term "user" and "interface" are often used together. Accordingly, the training unit 214 may be configured to identify the term "user interface" as an n-gram. In an exemplary embodiment, the training unit 214 may be configured to add the identified n-gram to the clean transcript to create a training corpus.

[0061] Thereafter, the training unit 214 may be configured to train the ML model 218 using the training corpus. In some examples, training the ML model 218 using the training corpus may include converting the words in training corpus in one or more vectors. Thereafter, the training unit 214 may be configured to train a neural network using the one or more vectors. The trained neural network corresponds to the ML model 218. Those skilled in the art would appreciate that scope of the disclosure is not limited to using the neural network as the ML model 218. In an exemplary embodiment, the ML model 218 may be realized using other techniques such as, but is not limited to, logistic regression, Bayesian regression, random forest regression, and/or the like. As discussed, the trained ML model 218 may be indicative of the one or more topics assigned to the participant-1, along with the information pertaining to the importance of the one or more topics to the participant-1.

[0062] In an exemplary embodiment, as discussed, the ML model 218 is associated with the participant 1. Similarly, the training unit 214 may be configured to train other ML models for other participants.

[0063] Additionally or alternatively, the training unit 214 may be configured to train the one or more category models 220. In some examples, the one or more category models 220 include the action item model, the schedule model, and the task status model. In an exemplary embodiment, the action model may be configured to predict one or more action items for a participant of the plurality of participants. In an exemplary embodiment, the schedule model may be configured to predict a schedule for the one or more action items predicted by the action item model. In an exemplary embodiment, the task status mode may be configured to predict status of the action items predicted by the action item model. In some examples, the status of the task may include, a "work in progress (WIP)" status, a "completed" status, and an "assigned" status.

[0064] In an exemplary embodiment, the training unit 214 may be configured to train the action item model for the participant-1. In an exemplary embodiment, the training unit 214 may be configured to retrieve the transcript, from the action item category, associated with the participant-1. Thereafter, training unit 214 may be configured to train the action item model based on the transcripts retrieved from the action item category. In an exemplary embodiment, the training unit 214 may be configured to utilize the methodology above to train the action item model. In an alternative embodiment, the training unit 214 may be configured to generate an action item database that includes a plurality of action items associated with the participant-1, based on the transcripts retrieved from the action item category. The action item database may correspond to the action item model. For the purpose of ongoing description, the action item model is considered to be the database that includes the plurality of action items for the participant-1. Similarly, the training unit 214 may be configured to train the schedule model for the participant-1 based on transcripts (associated with the participant-1) included in the schedule category. As discussed, the schedule category includes transcripts that define the planned completion dates for the plurality of action items included in the action category. For example, the training unit 214 may be configured to retrieve the transcript, from the schedule category, associated with the participant-1. Thereafter, training unit 214 may be configured to train the schedule model based on the transcripts retrieved from the schedule category. In an exemplary embodiment, the training unit 214 may be configured to utilize the methodology above to train the schedule model. In an alternative embodiment, the training unit 214 may be configured to generate a schedule database that includes the schedule for a plurality of action items associated with the participant-1, based on the transcripts retrieved from the schedule category. The schedule database may correspond to the schedule model. For the purpose of ongoing description, the action item model is considered to be the database that includes the plurality of action items for the participant-1. Similarly, the training unit 214 may be configured to be the train work status model.

[0065] Additionally or alternatively, the training unit 214 may be configured to define one or more relationships between the schedule model, the action item model, and the work status model. For example, the training unit 214 may be configured to determine a transcript similarity score amongst the transcripts categorized in the one or more categories. In an exemplary embodiment, the transcript similarity score may be indicative of a measure of similarity between two transcripts categorized in two categories of the one or more categories. In an exemplary embodiment, the training unit 214 may be configured to compare the transcript similarity score with a predetermined transcript similarity threshold to determine whether two transcripts are similar. If the training unit 214 determines that the transcript similarity score between the two transcripts is greater than the transcript similarity threshold, the training unit 214 may be configured to determine that the two transcripts are similar. However, if the training unit **214** determines that the transcript similarity score is less than the predetermined similarity threshold, the two transcripts are dissimilar. For example, referring to table 2, the training unit 214 may determine that the transcript "participant-1 to work on feature 1 of the UI" and the transcript "feature 1 to be completed by May 22, 2021" are similar. Accordingly, the training unit 214 may be configured to define a relationship between the schedule model and the action item model. More particularly, the training unit 214 may be configured to define the relationship between the transcript "participant-1 to work on feature 1 of the UI" (categorized in the action item category) and the transcript "feature 1 to be completed by May 22, 2021" (categorized in the schedule category). For example, the training unit 214 may be configured to define the relationship that associates the date May 22, 2021 with the action item "participant-1 to work on feature 1 of the UI". To this end, in some examples, the training unit 214 may be configured to associate date (included in the schedule model) with each of the plurality of action items included in the action item model by defining relationships between the action item model and the schedule model.

[0066] In some examples, the training unit 214 may be configured to include the one or more category models 220 in the ML model 218 trained for the participant-1. Similarly, the training unit 214 may be configured to train the ML model 218 for other participants of the plurality of participants.

[0067] Referring back to training the ML model 218, in some examples, the scope of the disclosure is not limited to the training the ML model 218 using the training corpus generated from the meeting data. In an exemplary embodiment, the training unit 214 may be configured to generate training corpus based on an identification of a trigger event in the meeting data. To this end, in an exemplary embodiment, the trigger event identification unit 210 may be configured to compare the meeting metadata and the transcript. In an exemplary embodiment, the trigger event identification unit 210 may compare the transcript at each timestamp (in the meeting transcript) with the meeting metadata using one or more known text comparison techniques. Some examples of the text comparison techniques may include, but are not limited to, Cosine Similarity, Euclidean distance, Pearson coefficient and/or the like. In order to utilize the text comparison techniques, the trigger event identification unit 210 may be configured to convert the transcript at each timestamp into a transcript vector using one or more known transformation techniques such as, but is not limited to, term frequency-inverse document frequency (TF-IDF), Wor2Vec, and/or the like. In an exemplary embodiment, the transcript vector may correspond to an array of integers, in which each integer corresponds to a term in the transcript. Further, the value of the integer may be deterministic of the characteristic of the term within the transcript. For example, the integer may be deterministic of a count of times a term has appeared in the transcript. Similarly, the trigger event identification unit 210 may be configured to convert the meeting metadata to metadata vector. Thereafter, the trigger event identification unit 210 may utilize the one or more text comparison techniques to compare the metadata vector and the transcript vector and determine a metadata similarity score between the metadata vector and the transcript vector. For example, the trigger event identification unit 210 may determine a Cosine similarity score between the metadata vector and the transcript

[0068] In some embodiments, the trigger event identification unit 210 may be configured to determine whether the metadata similarity score is greater than or equal to a metadata similarity score threshold. If the trigger event

identification unit 210 determines that the metadata similarity score is less than the metadata similarity score threshold, the trigger event identification unit 210 may be configured to determine that the transcript is dissimilar from the meeting metadata. However, if the trigger event identification unit 210 determines that the metadata similarity score is greater than or equal to the metadata similarity score threshold, the trigger event identification unit 210 may be configured to determine that the transcript is similar to the meeting metadata. Accordingly, the trigger event identification unit 210 may determine that the participant-1 mentioned or presented content related to the meeting metadata. To this end, the trigger event identification unit 210 may identify the trigger event

[0069] In some embodiments, the scope of the disclosure is not limited to the trigger event identification unit 210 identifying the trigger event based on the comparison between the meeting data and the meeting metadata. In an exemplary embodiment, the trigger event identification unit 210 may be configured to receive the trigger input from a computing device (e.g., 104a) of the computing devices 104. The trigger input may indicate that a participant may want to record a portion of the meeting for later reference. For example, during the meeting, the participant may find the discussion and/or the content being presented, interesting. Accordingly, in some examples, the participant may provide the trigger input on the UI to record the portion of the meeting that includes the discussion that the participant found interesting. In such an embodiment, the computing device 104a may transmit the trigger input (received from the participant through UI) to the central server 102. Upon receiving the trigger input from the computing device 104a, the trigger event identification unit 210 may identify the trigger input as the trigger event.

[0070] Additionally, or alternatively, the processor 202 may be configured to categorize the transcript at each timestamp in one or more categories. As discussed, in an exemplary embodiment, the one or more categories may include the action category, the schedule category, the work status category, and or the like. Further, as discussed, in an exemplary embodiment, the processor 202 may be configured to utilize the classifier to categorize the transcript at each timestamp in the one or more categories. In some examples, the trigger event identification unit 210 may be configured to identify the trigger event based on the categorization of the transcript in the one or more categories. Additionally, or alternatively, the trigger event identification unit 210 may be configured to identify the trigger event based on the categorization of the transcript in the one or more categories and the reception of the trigger input from the computing device (e.g., 104a). Additionally, or alternatively, the trigger event identification unit 210 may be configured to identify the trigger event based on the categorization of the transcript in the one or more categories and the metadata similarity score. Additionally, or alternatively, the trigger event identification unit 210 may be configured to identify the trigger event based on the metadata similarity score and the reception of the trigger input from the computing device (e.g., 104a). Additionally, or alternatively, the trigger event identification unit 210 may be configured to identify the trigger event based on the categorization of the transcript in the one or more categories, the reception of the trigger input from the computing device (e.g., 104a), and the metadata similarity score.

[0071] In an exemplary embodiment, based on the identification of the trigger event, the recording unit 212 may be configured to record the meeting data, received from the computing device 104a, for the determined duration. In an exemplary embodiment, a length of the determined duration may be defined during configuration of the central server 102. Further, the determined duration may be defined based on the timestamp associated with the transcript corresponding to the trigger event (i.e., the transcript that is similar to the meeting metadata). In alternate embodiment, the determined duration may be defined based on the timestamp of the reception of the input from the computing device 104a. In an exemplary embodiment, the determined duration is defined to include a first determined duration chronologically prior to the timestamp and a second determined duration chronologically after the timestamp. In some examples, a length of the first determined duration is same as a length of the second determined duration. In another example, the length of the first determined duration is different from the length of the second determined duration. For instance, the length of the first determined duration is greater than the length of the second determined duration. In another instance, the length of the second determined duration is greater than the length of the first determined dura-

[0072] In view of the foregoing, the recording unit 212 may be configured to contiguously record the meeting data for first determined duration prior to the timestamp and for the second determined duration after the timestamp. Accordingly, the recording of the meeting data includes, the recording of the audio content, the video content, the screen sharing content, the meeting notes, the presentation content and/or the like, received during the determined duration. In some examples, the recorded meeting data may correspond to the meeting snippet.

[0073] In some examples, the recording unit 212 may be configured to record the meeting data for the determined duration after the timestamp. In another example, the recording unit 212 may be configured to record the meeting data for the determined duration prior to the timestamp. In an exemplary embodiment, using the methodology described herein, the recording unit 212 may be configured to record a plurality of meeting snippets from the meeting data received from the computing device 104a. Thereafter, the meeting data monitoring unit 208 may be configured to generate a plurality of transcripts for each of the plurality of meeting snippets. Further, the meeting data monitoring unit 208 may be configured to aggregate the plurality of transcripts to generate a summary transcript. In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to aggregate the plurality of transcripts based on the chronological order of the timestamp associated with each of the respective meeting snippets to generate a summary transcript. In some examples, the summary transcript may capture moments in the meeting in which the participant-1 caused the identification of the trigger event.

[0074] Additionally, or alternatively, the recording unit 212 may be configured to record the meeting data received from the other computing devices 104 for the determined duration based on the identification of the trigger event to generate a plurality of additional meeting snippet. The meeting data monitoring unit 208 may be configured to generate an additional meeting transcript based on the plurality of additional meeting snippets.

[0075] In some examples, a computing device 104c of the computing devices 104 may not generate the meeting data. For example, in such an embodiment, the participant associated with the computing device may only be listening to the meeting and may be providing inputs to record meeting snippets. In such an embodiment, the central server 102 may be configured to record the meeting data received from other computing devices 104 for a determined duration to generate the meeting snippet, based on the reception of the input from the computing device 104c. Further, the central server 102 may be configured to convert the meeting snippet to a transcript, where the transcript is associated with the computing device 104c. Furthermore, the central server 102 may be configured to train the ML model 218 for the participant associated with the computing device 104c based on the transcript obtained from the meeting snippet.

[0076] In an exemplary embodiment, the training unit 214 may be configured to generate a training corpus from the summary transcript using the methodology described above. Further, the training unit may be configured to train the ML model 218 using the training corpus generated from the summary transcript. Similarly, the training unit 214 may be configured to train other ML models 218 for the other participants. Further, the training unit 214 may be configured to store the ML models, trained for each of the plurality of participants, in the memory device 204. In some example, where the ML model 218 for a participant in the meeting is already stored on the memory device 204, the training unit 214 may be configured to update the existing ML model 218. In such an embodiment, the training unit 214 may be configured to update the existing ML model 218 based on the training corpus generated from the transcript of the meeting data associated with the participant.

[0077] In an exemplary embodiment, the processor 202 may be configured to receive another input from the computing device 104a (associated with the participant 1) to schedule another meeting. In some examples, the input may further include details pertaining to other participants that the participant-1 intends to be part of the meeting. In such an embodiment, the recommendation unit 216 may be configured to retrieve the ML model 218 associated with the participant-1 and the other participants from the memory device 204. Thereafter, the recommendation unit 216 may be configured to generate one or more meeting recommendations for the other meeting based on the ML model 218 associated with the participant-1 and the other participants. For example, the recommendation unit 216 may be configured to determine one or more topics that are common to the participant-1 and the other participants based on the respective ML models. The recommendation unit 216 may be configured to utilize the one or more topics as the one or more meeting recommendations. In another example, the recommendation unit 216 may be configured modify the one or more meeting recommendations based on another input received for adding and/or deleting a participant of the other participants. In some examples, the recommendation unit 216 may be configured to transmit the one or more meeting recommendations to the computing device 104a. The participant-1 may provide the recommendation selection input to the computing device 104a select a meeting recommendation of the one or more meeting recommendations.

[0078] In some examples, the recommendation unit 216 may be configured to receive a partial input from the computing device 104a (associated with the participant-1).

In an exemplary embodiment, the partial input may correspond to the participant-1 inputting details of the other meeting on the UI. For example, the participant-1 may be providing input to fill the subject line and/or define the agenda of the other meeting. The recommendation unit 216 may be configured to receive the partial input from the computing device 104a as and when the participant-1 provides the input to the computing device 104a. To this end, the partial input may include one or more characters that in conjunction may define a portion of the agenda. For example, the participant-1 intends to input "discussing progress of UI" as the agenda for the other meeting and the participant-1 inputs "discuss". To this end "discuss" corresponds to the partial input. Based on the one or more characters and the ML model 218 associated with the participant-1, the recommendation unit 216 may be configured to generate the one or more meeting recommendations. For example, the recommendation unit 216 may be configured to determine the one or more topics associated with the participant-1 by utilizing the ML model 218 associated with the participant-1. Thereafter, the recommendation unit 216 may be configured to determine a topic similarity score between the one or more characters and each of the one or more topics. Thereafter, the recommendation unit 216 may be configured to select a set of topics of the one or more topics based on the topic similarity score between the one or more characters and the one or more topics. For example, the recommendation unit 216 may be configured to select topics (of the one or more topics) having top five similarity scores. Thereafter, the recommendation unit 216 may be configured to transmit the set of topics to the computing device 104a. The computing device 104a may be configured to present the set of topics as one or more autofill options. The participant-1 may be configured to provide the recommendation selection input to select an autofill option of the one or more autofill options. Selecting the autofill option corresponds to selecting the meeting recommendation of the one or more meeting recommendations.

[0079] The recommendation unit 216 may be configured to predict, based on the reception of the recommendation selection input corresponding to the selection of the meeting recommendation, a list of other participants that may be interested to join the meeting. In such an embodiment, the recommendation unit 216 may be configured to determine the topic, associated with the participant-1, corresponding to the selected meeting recommendation. As discussed, in some examples, the meeting recommendation corresponds to the topic associated with the participant-1. Accordingly, in some examples, the recommendation unit 216 may be configured to consider the selected meeting recommendation as the topic, itself. Thereafter, the recommendation unit 216 may be configured to identify the other participants that are also associated with the determined topic. To this end, in an exemplary embodiment, the recommendation unit 216 may be configured to utilize the ML model 218 associated with the plurality of participants to determine whether the one or more topics associated with each of the plurality of participants include the topic. For example, if the recommendation unit 216 determines that the one or more topics associated with a participant (e.g., the participant-2) include the determined topic, the recommendation unit 216 may be configured to include the participant in the list of other participants. However, if the recommendation unit 216 determines that the one or more topics associated with the participant does not include the determined topic, the recommendation unit 216 may be configured to ignore the participant.

[0080] After prediction of the other participants of the plurality of participants, the recommendation unit 216 may be configured to transmit the list of the other participants to the computing device 104a. The participant-1 may provide an input to select one or more participants from the list of participants that are to attend the meeting. In some examples, the list of the other participants and the one or more meeting recommendations may together constitute meeting metadata recommended to the participant-1.

[0081] In some examples, the scope of the disclosure is not limited to the recommendation unit 216 predicting the list of the other participants based on the reception of the input to select the meeting recommendation of the one or more meeting recommendations. In such an embodiment, the recommendation unit 216 may be configured to predict the list of the other participants based on the historical meeting metadata. As discussed above, the historical meeting metadata may include list of the other participants that the participant-1 attended meeting with previously. Accordingly, the recommendation unit 216 may be configured to utilize the historical meeting metadata to determine the list of the other participants.

[0082] Additionally or alternatively, the recommendation unit 216 may be configured to utilize the ML model 218, associated with the participant-1, to predict the one or more action items for the participant-1. In an exemplary embodiment, the recommendation unit 216 may be configured to utilize the one or more category models 220 (e.g., the action item model) to predict the one or more action items. As discussed, since the action item model corresponds to a database, the recommendation unit 216 may be configured to query the action item model to retrieve the one or more action items associated with the participant-1.

[0083] In an exemplary embodiment, the recommendation unit 216 may be configured to predict the one or more action items based on the date associated with each of the plurality of action items associated with the participant-1. In some examples, the recommendation unit 216 may be configured to utilize the schedule model to determine the dates for each of the plurality of action items associated with the participant-1. As discussed, there exists the relationship between the schedule model and the action item model (e.g., the date associated with the plurality of action items). Accordingly, the recommendation unit 216 may utilize the relationship between the action item model and the schedule model to determine the date for each of the plurality of action items associated with the participant-1. For example, since the schedule model corresponds to a database, the recommendation unit 216 may be configured to query the schedule model to retrieve the schedule for each of the plurality of action items.

[0084] Thereafter, the recommendation unit 216 may be configured to compare the date associated with each of the plurality of action items with a current date to determine a count of days until the plurality of action items are due. Further, the recommendation unit 216 may be configured to compare the count of the days with a predetermined days threshold. If the recommendation unit 216 may determine that the count of days for an action item is greater than the predetermined days threshold, the recommendation unit 216 may be configured to ignore the action item. However, if the recommendation unit 216 may determine that the count of

days associated with the action item is less than the predetermined days threshold, the recommendation unit 216 may be configured to consider the action item as the one or more action items. In an exemplary embodiment, the recommendation unit 216 may be configured to transmit the one or more action items to the computing device 104a as a reminder for the participant-1.

[0085] In an alternative embodiment, the recommendation unit 216 may be configured to predict the one or more action items for the participant-1 based on the reception of the input pertaining to selection of the meeting recommendation of the one or more meeting recommendations. In such an embodiment, the recommendation unit 216 may be configured to predict the one or more action items based on a similarity between the selected meeting recommendations and the plurality of action items associated with the participant-1. For example, of the plurality of action items associated with the participant-1, the recommendation unit 216 may be configured to utilize the ML model 218 to predict the one or more action items based on a similarity between the meeting recommendation and the plurality of action items. [0086] Additionally or alternatively, the recommendation unit 216 may be configured to receive the recommendation selection input indicating the meeting recommendation selected by the participant-1. In response to reception of the recommendation selection input, training unit 214 may be configured to consider the recommendation selection input, as a feedback. Accordingly, the training unit 214 may be configured to update the ML model 218 associated with the participant-1 based on the selected meeting recommendation. For example, the training unit 216 may be configured to convert the selected meeting recommendation to a meeting recommendation vector. Thereafter the training unit 216 may be configured to update the ML model 218 based on the meeting recommendation vector. For example, the training unit 216 may be configured to update weights assigned to the one or more topics associated with the participant-1. To this end, the training unit 216 may be configured to increase the weight assigned to the topic, corresponding to the meeting recommendation, of the one or more topics.

[0087] In some examples, during the other meeting, the ML model 218 associated with the plurality of participants may enable the central server 102 to capture a plurality of meeting snippets that may be of interest to the plurality of participants. For example, based on the one or more topics associated with each of the plurality of participants (determined from the ML model 218 associated with each of the plurality of participants), the central server 102 may be configured to identify trigger events during the other meeting. For example, in such an embodiment, the central server 102 may be configured to identify (during the other meeting) time instants at which the plurality of participants referred to the one or more topics, as the trigger events. Accordingly, based on the identification of the trigger events, the central server 102 may be configured to record the meeting for the determined duration to generate a plurality of meeting snippets.

[0088] The scope of the disclosure is not limited to capturing the plurality of snippets during the meeting. In an exemplary embodiment, the first processor 202 may be configured to capture the plurality of meeting snippets of one or more non-real time meeting data shared amongst the plurality of participants. The one or more non-real time meeting data may include meeting data that is shared

amongst the plurality of participants outside the meeting. For example, the one or more non-real time meeting data may include text messages shared amongst the plurality of participants, the one or more audio messages shared amongst the plurality of participants. In some examples, first processor 202 may be configured to record the plurality of meeting snippets of the one or more non-real time meeting data using similar methodology, as is described above.

[0089] FIG. 4 is a diagram that illustrates another exemplary scenario illustrating generation of the one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 4, the exemplary scenario 400 includes the ML model-1 402, the ML model-2 404, and the ML model-3 406. Further, the exemplary scenario 400 illustrates the one or more topics 408, 410, and 412 represented by each of the ML model-1 402, the ML model-2 404, and the ML model-3 406, respectively. For example, the one or more topics 408 associated with the ML model-1 402 includes "UI", "feature-1", and "C++". Similarly, the one or more topics 410 associated with the ML model-2 includes "UI", "feature-2", and "Java". Further, the one or more topics 412 associated with the ML model-3 includes "UI, feature 1, Color scheme".

[0090] Further, the exemplary scenario 400 illustrates that the central server 102 receives an input from the computing device 104a pertaining to scheduling a meeting. The input may further include the details pertaining to the plurality of participants of the meeting. For example, the details pertaining to the plurality participants includes the participant-1 and the participant-2. Thereafter, the recommendation unit 216 may be configured to utilize the ML model-1402 and the ML model-2 404 (associated with the participant-1 and the participant-2, respectively) to determine the one or more topics associated with the participant-1 and the participant-2. Further, the recommendation unit 216 may be configured to determine an intersection between the one or more topics associated with participant-1 and the one or more topics associated with the participant-2 (depicted by 414). For example, the recommendation unit 216 determines that the intersection between the one or more topics associated with the participant-1 and the participant-2 is "UI" (depicted by 416). Accordingly, the recommendation unit 216 may be configured to generate the meeting recommendation "UI" (depicted by 416).

[0091] FIG. 5 is a diagram illustrating another exemplary scenario for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 5, the exemplary scenario 500 includes the ML model-1 402 associated with the participant-1. The ML model-1 402 includes the one or more category models 220. Further, the one or more category models 220 include the action item model 504 and the schedule model 506. Additionally, as illustrated in the exemplary scenario 500, the action item model 504 corresponds to a database that includes a first action item as "feature 1 of UI" and a second action item "feature 3 of network communication protocol". Further, as illustrated in the exemplary scenario 500, the schedule model 506 corresponds to the database that includes dates associated with each of the first action item and the second action item. For example, the date associated with the first action item "feature 1 of the UI" is Jan. 31, 2021. Similarly, the date associated with the second action item "feature 3 of the communication protocol" is May 22, 2021.

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[0092] The ML model-1 402 may be configured to compare the current date e.g., "28 Dec. 2020" with the date associated with the first action item and the second action item (i.e., Jan. 31, 2021 and May 22, 2021, respectively) to determine a count of days until the first action item and the second action item are due (depicted by 508). For example, the count of the days until the first action item is due is 34 days and the count of the days until the second action item is due is 145 days. Thereafter, in some examples, the ML model-1 402 may be configured to transmit the first action item as the one or more action items to the computing device 104a (depicted by 510) since the first action item is due early in comparison to the second action item. The computing device 104a may present the first action item as a reminder to the participant-1. In another example, the ML model-1 402 may be configured to transmit the first action item to the computing device 104a if the count of days until the first action item is due is less than a predetermined count threshold.

[0093] FIG. 6 is a diagram illustrating another exemplary scenario for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 6, the exemplary scenario 600 include the ML model-1 402 associated with the participant-1. The ML model-1 402 includes the one or more category models 220. Further, the one or more category models 220 include the action item model 504 and the schedule model 506. Referring to FIG. 6, the exemplary scenario 600 illustrates that the central server 102 receives the input 602 pertaining to the selection of the meeting recommendation 604 of the one or more meeting recommendations. The meeting recommendation 604 states "Progress on UI development". Based on the reception of the input 602, the recommendation unit 216 may be configured to generate meeting recommendation vector 606 from the meeting recommendation 604. Thereafter, the recommendation unit 216 may be configured to retrieve the one or more action items associated with participant-1 based on the action item model 504. As illustrated, the action item model includes the first action item and the second action item associated with the participant-1. Further, the recommendation unit **216** from the generate action item vector 607 for each of the first action item and the second action item. Further, the recommendation unit 216 may be configured to determine a similarity score between the meeting recommendation vector and the action item vector for each of the first action item and the second action item. Since the first action item is "feature-1 of the UI" and the meeting recommendation is "Progress of UI development" are related to "UI", the recommendation unit 216 may be configured to determine high similarity between the first action item and the meeting recommendation in comparison to the similarity between the second action item and the meeting recommendation. Accordingly, the meeting recommendation unit 216 may be configured to select the first action item as the one or more action items for the partici-

[0094] FIG. 7 is a diagram illustrating updating of the ML model, in accordance with an embodiment of the disclosure. Referring to FIG. 7, the diagram 700 includes the ML model-1 402 that is configured to generate the one or more meeting recommendations 702 and the one or more action items 704 for the participant-1. Further, the diagram 700 illustrates that an input 706 is received pertaining to the selection of the meeting recommendation 708 of the one or more meeting recommendations 704. Further, the input 706 may further include a response to the action item 710 of the one or more action items 704. The response may indicate completion of the action item.

[0095] Based on the selection of the meeting recommendation 708 and the completion of the action item 710, the training unit 214 may be configured to update the ML model-1 402 (depicted by 712). Further, during the meeting per the selected meeting recommendation, the meeting data 714 received by the central server 102 is used to update the ML model-1 402 (as is depicted by 716).

[0096] FIG. 8 is a flowchart illustrating a method for training the ML model, in accordance with an embodiment of the disclosure. Referring to FIG. 8, at 802, the meeting data is received from the computing devices 104. In an exemplary embodiment, the processor 202 may be configured to receive the meeting data from each of the computing devices 104 during the meeting. At 804, the transcript is created based on the meeting data. In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to transform the meeting data to the transcript. At 806, the ML model 218 is trained based on the meeting data. In an exemplary embodiment, the training unit 208 may be configured to train the ML model 218 based on the meeting data. In some examples, the training unit 208 may be configured to train the ML model 218 for each of the plurality of participants.

[0097] FIG. 9 is a flowchart illustrating another method for training the ML model, in accordance with an embodiment of the disclosure. Referring to FIG. 9, at 902, the meeting data is received from the computing devices 104. In an exemplary embodiment, the processor 202 may be configured to receive the meeting data from each of the computing devices 104 during the meeting. At 904, a trigger event is identified in the meeting data. In an exemplary embodiment, the trigger event identification unit 210 may be configured to identify the trigger event in the meeting data. At 906, meeting data is recorded for determined duration. In an exemplary embodiment, the recording unit 212 may be configured to record the meeting data to generate meeting snippet. At 908, the transcript is created based on the meeting snippet. In an exemplary embodiment, the meeting data monitoring unit 208 may be configured to generate a transcript. At 910, the ML model 218 is trained based on the meeting data. In an exemplary embodiment, the training unit 208 may be configured to train the ML model 218 based on the meeting data.

[0098] FIG. 10 is a flowchart illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 10, at 1002, an input to schedule a meeting is received from a participant. In an exemplary embodiment, the processor 202 may be configured to receive the input. In an exemplary embodiment, the input includes the details of other participants of the meeting. At 1004, the one or more topics associated with each of the participants is determined based on respective ML models. In an exemplary embodiment, the recommendation unit 216 may be configured to determine the one or more topics for each of the participants. At 1006, the intersection of the one or more topics associated with each of the participants is determined. In an exemplary embodiment, the recommendation unit 216 is configured to determine the intersection. At 1008, the one or more meeting recommendations are generated. In an exemplary embodiment, the recommendation unit 216 may be configured to determine the one or more meeting recommendations based on the intersection.

[0099] FIG. 11 is a flowchart illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. 11, at 1102, an input to schedule a meeting is received. In an exemplary embodiment, the processor 202 may be configured to receive the input to schedule the meeting. At 1104, the one or more meeting recommendations are generated. In an exemplary embodiment, the recommendation unit 216 may be configured to generate the one or more meeting recommendations. At 1106, another input is received to select a meeting recommendation of the one or more meeting recommendations. In an exemplary embodiment, the processor 202 may be configured to select the meeting recommendation. At 1108, the ML model 218 is undated based on the selection of the meeting recommendation. In an exemplary embodiment, the training unit 214 may be configured to update the ML model 218.

[0100] The foregoing method descriptions and the process flow diagrams are provided merely as illustrative examples and are not intended to require or imply that the operations of the various embodiments must be performed in the order presented. As will be appreciated by one of skill in the art, the operations may be performed in one or more different orders without departing from the various embodiments of the disclosure

[0101] The hardware used to implement the various illustrative logics, logical blocks, modules, and circuits described in connection with the aspects disclosed herein may include a general purpose processor, a digital signal processor (DSP), a special-purpose processor such as an application specific integrated circuit (ASIC) or a field programmable gate array (FPGA), a programmable logic device, discrete gate or transistor logic, discrete hardware components, or any combination thereof designed to perform the functions described herein. A general-purpose processor may be a microprocessor, but, in the alternative, the processor may be any conventional processor, controller, microcontroller, or state machine. A processor may also be implemented as a combination of computing devices, e.g., a combination of a DSP and a microprocessor, a plurality of microprocessors, one or more microprocessors in conjunction with a DSP core, or any other such configuration. Alternatively, or in addition, some operations or methods may be performed by circuitry that is specific to a given

[0102] In one or more exemplary embodiments, the functions described herein may be implemented by specialpurpose hardware or a combination of hardware programmed by firmware or other software. In implementations relying on firmware or other software, the functions may be performed as a result of execution of one or more instructions stored on one or more non-transitory computer-readable media and/or one or more non-transitory processorreadable media. These instructions may be embodied by one or more processor-executable software modules that reside on the one or more non-transitory computer-readable or processor-readable storage media. Non-transitory computerreadable or processor-readable storage media may in this regard comprise any storage media that may be accessed by a computer or a processor. By way of example but is not limitation, such non-transitory computer-readable or processor-readable media may include RAM, ROM, EEPROM, FLASH memory, disk storage, magnetic storage devices, or the like. Disk storage, as used herein, includes compact disc (CD), laser disc, optical disc, digital versatile disc (DVD), floppy disk, and Blu-ray DiscTM, or other storage devices that store data magnetically or optically with lasers. Combinations of the above types of media are also included within the scope of the terms non-transitory computer-readable and processor-readable media. Additionally, any combination of instructions stored on the one or more non-transitory processor-readable or computer-readable media may be referred to herein as a computer program product.

[0103] Many modifications and other embodiments of the inventions set forth herein will come to mind to one skilled in the art to which these inventions pertain having the benefit of teachings presented in the foregoing descriptions and the associated drawings. Although the figures only show certain components of the apparatus and systems described herein, it is understood that various other components may be used in conjunction with the supply management system. Therefore, it is to be understood that the inventions are not to be limited to the specific embodiments disclosed and that modifications and other embodiments are intended to be included within the scope of the appended claims. Moreover, the operations in the method described above may not necessarily occur in the order depicted in the accompanying diagrams, and in some cases one or more of the operations depicted may occur substantially simultaneously, or additional operations may be involved. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

What is claimed is:

1. A method, comprising:

receiving, by a processor, an input pertaining to scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant;

generating, by the processor, one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants;

receiving, by the processor, an input to select a meeting recommendation from the one or more meeting recommendations; and

updating, by the processor, the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.

- 2. The method of claim 1, wherein the meeting metadata associated with the meeting comprises at least one of an agenda of the meeting, and plurality of action items associated with the at least one participant corresponding to the meeting.
 - 3. The method of claim 1, further comprising:
 - determining, by the processor, one or more topics associated with the at least one participant;
 - determining, by the processor, the one or more topics associated with each participant in the plurality of participants; and
 - determining, by the processor, the one or more meeting recommendations based on an intersection between the one or more topics associated with the at least one

- participant and the one or more topics associated with each participant in the plurality of participants.
- **4**. The method of claim **1**, further comprising modifying, in real time by the processor, the one or more meeting recommendations based on addition or deletion of a participant of the plurality of participants.
- 5. The method of claim 1, further comprising identifying, by the processor in real time, a trigger event initiated by the at least one participant during the meeting.
- **6**. The method of claim **5**, further comprising recording, by the processor, meeting data associated with the at least one participant of the meeting based on the identification of the trigger event.
- 7. The method of claim 6, further comprising updating, by the processor, the ML model associated with the at least one participant based on the meeting data.
- 8. The method of claim 7, wherein the meeting data comprises transcript of the audio generated by the at least one participant during the meeting, transcript of the content shared by the at least one participant during the meeting, and/or meeting notes input by the at least one participant.
- 9. The method of claim 1, further comprising transmitting, by the processor, one or more action items, for the at least one participant prior to receiving the input to schedule the meeting.
 - 10. A central server, comprising:
 - a memory device comprising a set of instructions; and a processor communicatively coupled with the memory device, wherein the processor is configured to:
 - receive an input that pertains to a scheduling operation, the scheduling operation includes scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant;
 - generate one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants;
 - receive an input to select a meeting recommendation from the one or more meeting recommendations; and update the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.
- 11. The central server of claim 10, wherein the meeting metadata associated with the meeting comprises at least one of an agenda of the meeting, and a plurality of action items associated with the at least one participant corresponding to the meeting.
- 12. The central server of claim 10, wherein the processor is configured to:
 - determine one or more topics associated with the at least one participant;
 - determine the one or more topics associated with each participant in the plurality of participants; and
 - determine the one or more meeting recommendations based on an intersection between the one or more topics

- associated with the at least one participant and the one or more topics associated with each participant in the plurality of participants.
- 13. The central server of claim 10, wherein the processor is configured to modify the one or more meeting recommendations based on addition or deletion of a participant of the plurality of participants.
- 14. The central server of claim 10, wherein the processor is configured to identify a trigger event initiated by the at least one participant during the meeting.
- 15. The central server of claim 14, wherein the processor is configured to record meeting data associated with the at least one participant of the meeting based on the identification of the trigger event.
- 16. The central server of claim 15, wherein the processor is configured to update the ML model associated with the at least one participant based on the meeting data.
- 17. The central server of claim 16, wherein the meeting data comprises transcript of the audio generated by the at least one participant during the meeting, transcript of the content shared by the at least one participant during the meeting, and/or meeting notes input by the at least one participant.
- 18. The central server of claim 10, wherein the processor is configured to transmit one or more action items, for the at least one participant prior to receipt of the input to schedule the meeting.
- 19. A non-transitory computer-readable medium having stored thereon, computer-readable instructions, which when executed by a computer, causes a processor in the computer to execute operations, the operations comprising:
 - receiving, by a processor, an input pertaining to scheduling a meeting with a plurality of participants, wherein the input is received from at least one participant;
 - generating, by the processor, one or more meeting recommendations including meeting metadata associated with the meeting based on a machine learning (ML) model associated with each of the at least one participant and each participant in the plurality of participants;
 - receiving, by the processor, an input to select a meeting recommendation from the one or more meeting recommendations; and
 - updating, by the processor, the ML model associated with each of the at least one participant based on the reception of the input to select the meeting recommendation.
- 20. The non-transitory computer-readable medium of claim 19, wherein the meeting data comprises transcript of the audio generated by the at least one participant during the meeting, transcript of the content shared by the at least one participant during the meeting, and/or meeting notes input by the at least one participant.

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