US 20210365896A1

(19) United States
(12) Patent Application Publication
DAVULURI et al.
(10) Pub. No.: US 2021/0365896 A1
(43) Pub. Date: Nov. 25, 2021

(54) **MACHINE LEARNING (ML) MODEL FOR PARTICIPANTS**

(71) Applicant: **HUDDL INC.**, Santa Clara, CA (US)

(72) Inventors: **Nava DAVULURI**, Sunnyvale, CA (US); **Harish RAJAMANI**, Hyderabad (IN); **Krishna YARLAGADDA**, Sunnyvale, CA (US); **Prathyusha DANDA**, Hyderabad (IN); **Ramanathan PARAMESHWARAN**, Hyderabad (IN)

(21) Appl. No.: **17/308,772**

(22) Filed: **May 5, 2021**

**Related U.S. Application Data**

(60) Provisional application No. 63/028,123, filed on May 21, 2020.

**Publication Classification**

(51) **Int. Cl.**

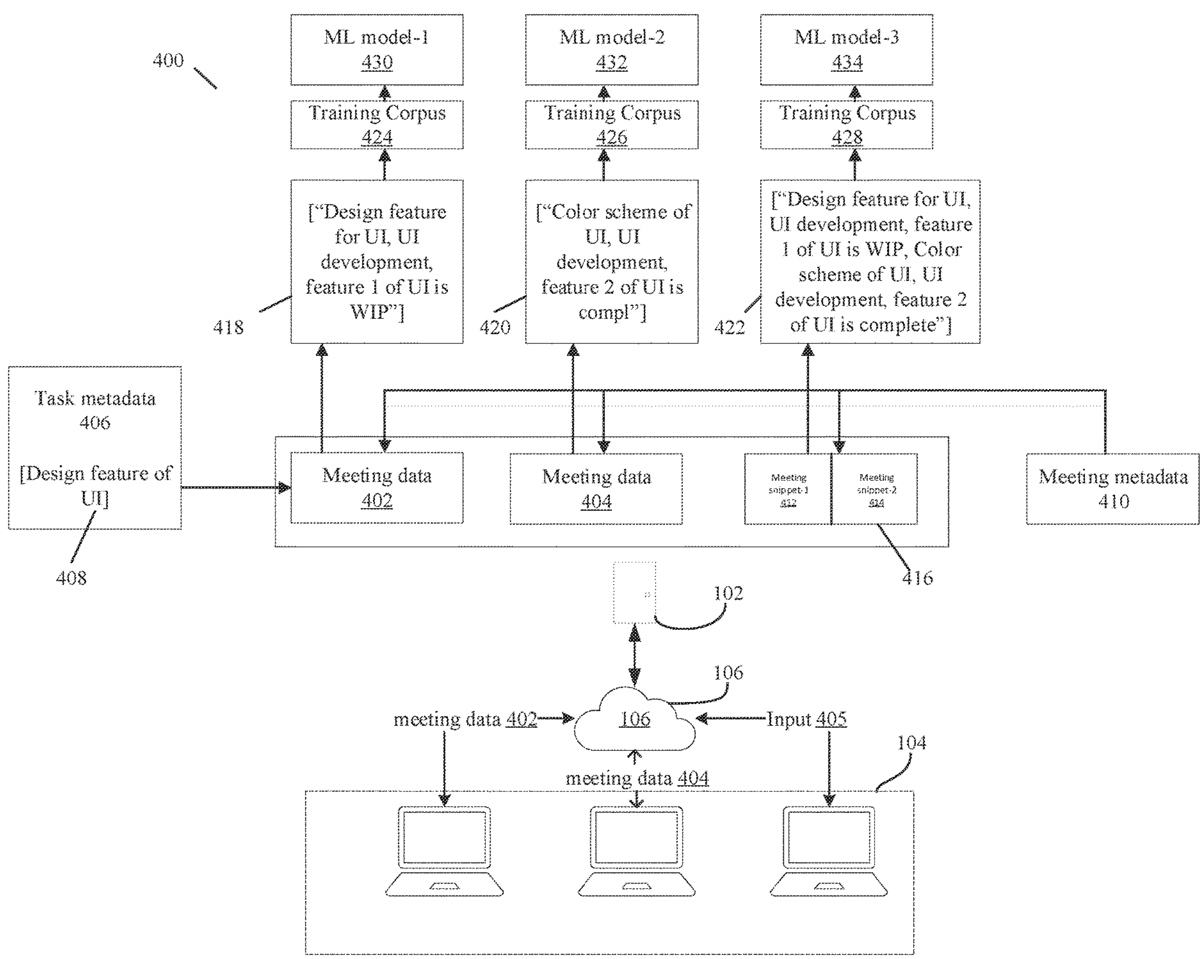
| | |
|---|---|
| ***G06Q 10/10*** | (2006.01) |
| ***H04L 12/18*** | (2006.01) |
| ***G06N 20/00*** | (2006.01) |

(52) **U.S. Cl.**

CPC ......... ***G06Q 10/1097*** (2013.01); ***G06N 20/00*** (2019.01); ***H04L 12/1831*** (2013.01); ***H04L 12/1818*** (2013.01)

(57) **ABSTRACT**

Provided is a method that includes identifying, by a processor in real time, a trigger event initiated by at least one participant of the meeting. The trigger event is indicative of at least a reference to meeting metadata associated with the meeting. The meeting data associated with at least one participant is recorded for a determined duration to generate meeting snippet based on identification of the trigger event. Further, the method includes training a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant. Additionally, the method includes generating one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.



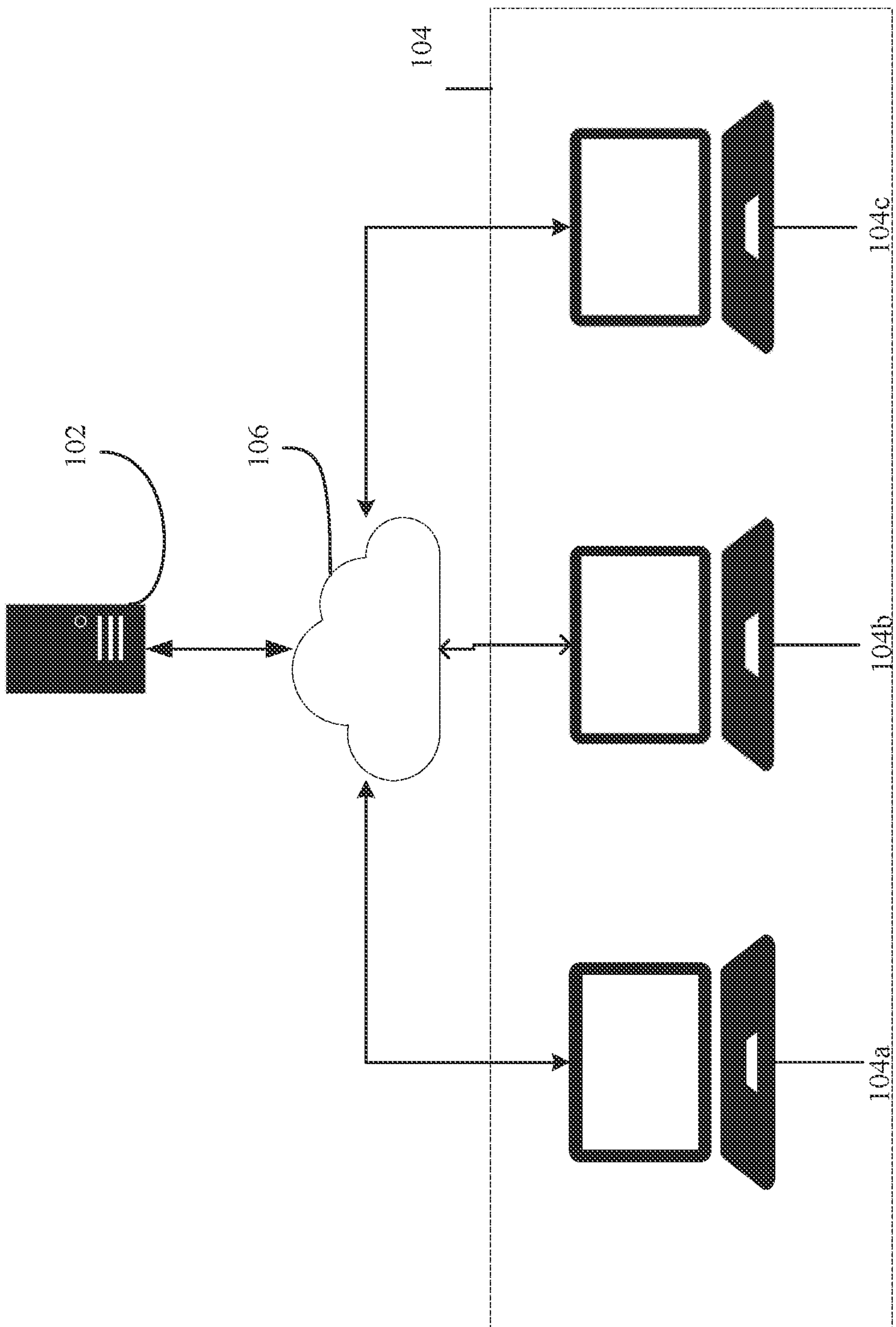



FIG. 1

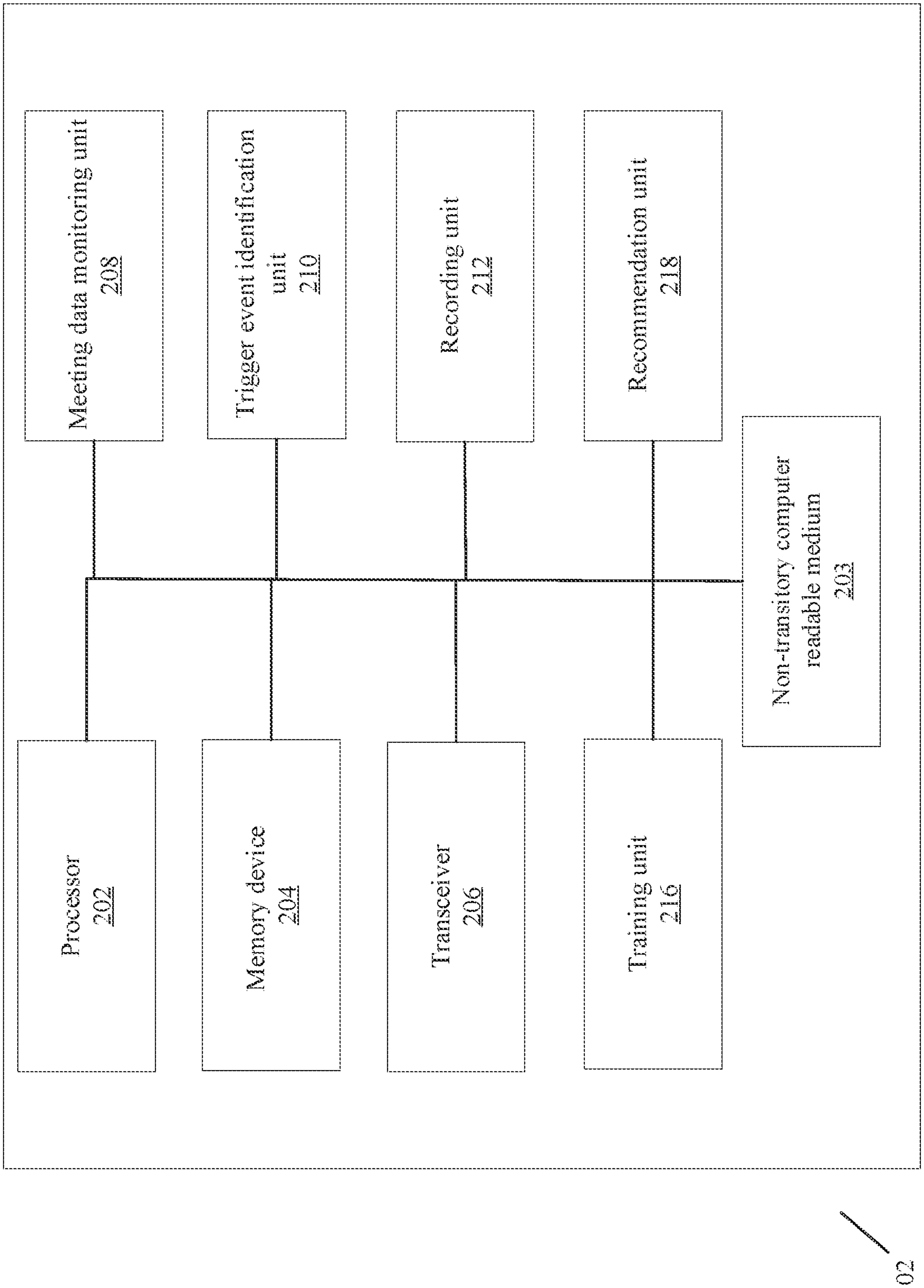

Meeting data monitoring unit
208
Trigger event identification unit
210
Recording unit
212
Recommendation unit
218
Non-transitory computer readable medium
203
Processor
202
Memory device
204
Transceiver
206
Training unit
216
102

FIG. 2

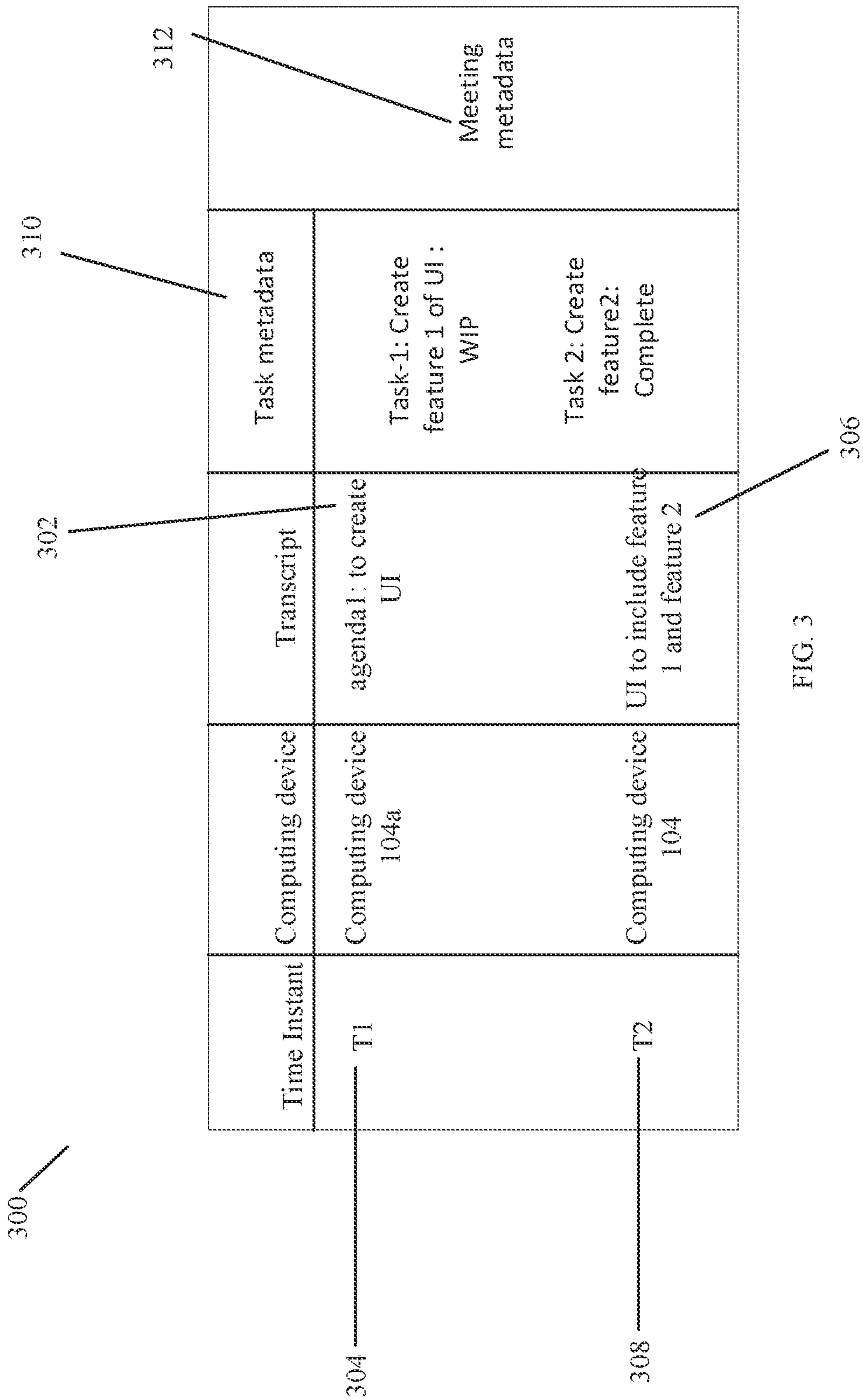

300
Time Instant
Computing device
Transcript
Task metadata
Meeting metadata
T1
Computing device 104a
agenda1 : to create UI
Task-1: Create feature 1 of UI : WIP
T2
Computing device 104
UI to include feature 1 and feature 2
Task 2: Create feature2: Complete
302
304
306
308
310
312

FIG. 3

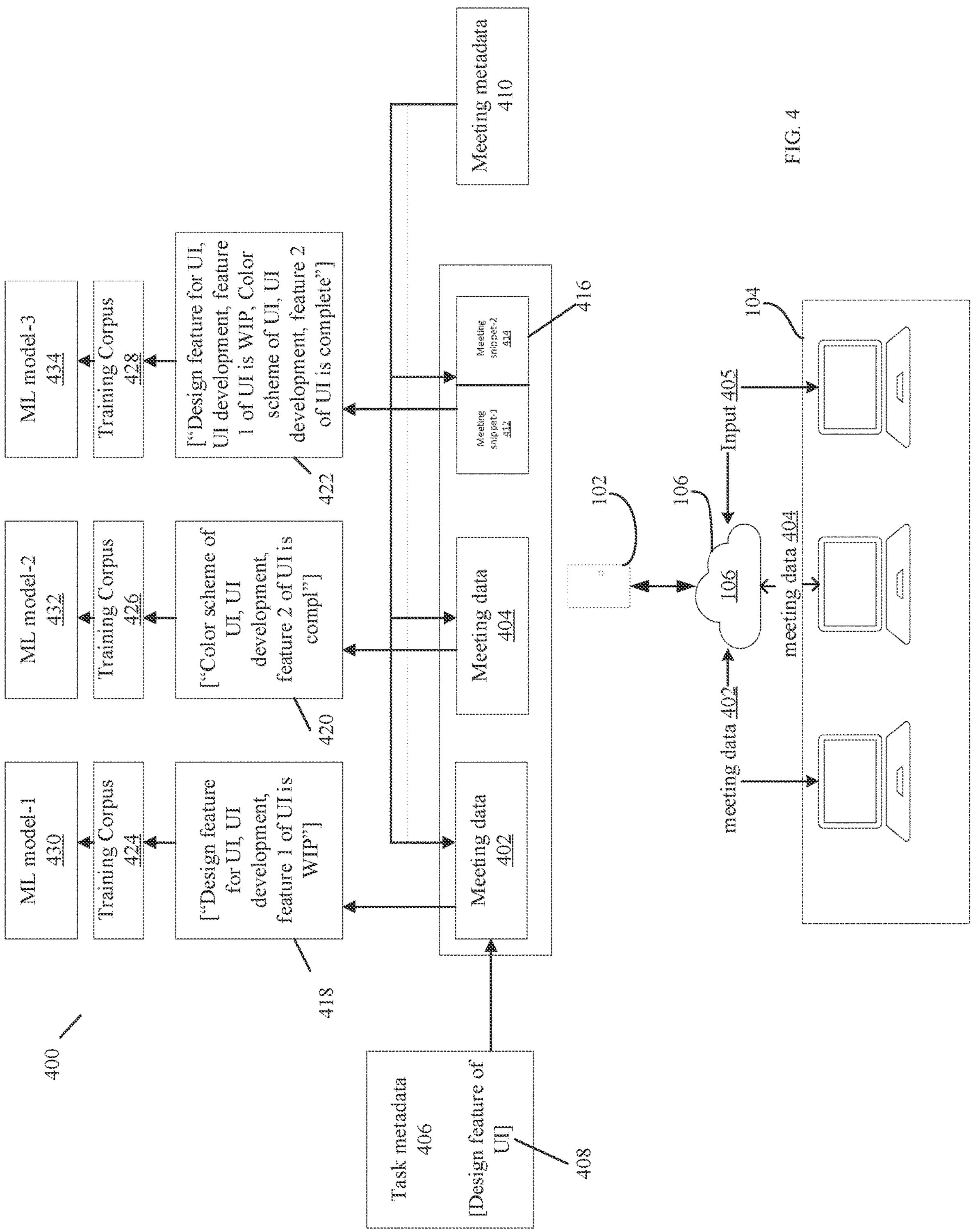

400
ML model-1
430
Training Corpus
424
["Design feature for UI, UI development, feature 1 of UI is WIP"]
418
ML model-2
432
Training Corpus
426
["Color scheme of UI, UI development, feature 2 of UI is compl"]
420
ML model-3
434
Training Corpus
428
["Design feature for UI, UI development, feature 1 of UI is WIP, Color scheme of UI, UI development, feature 2 of UI is complete"]
422
Meeting data
402
Meeting data
404
Meeting snippet-1
412
Meeting snippet-2
414
416
Meeting metadata
410
Task metadata
406
[Design feature of UI]
408
102
106
106
104
Input 405
meeting data 404
meeting data 402

FIG. 4

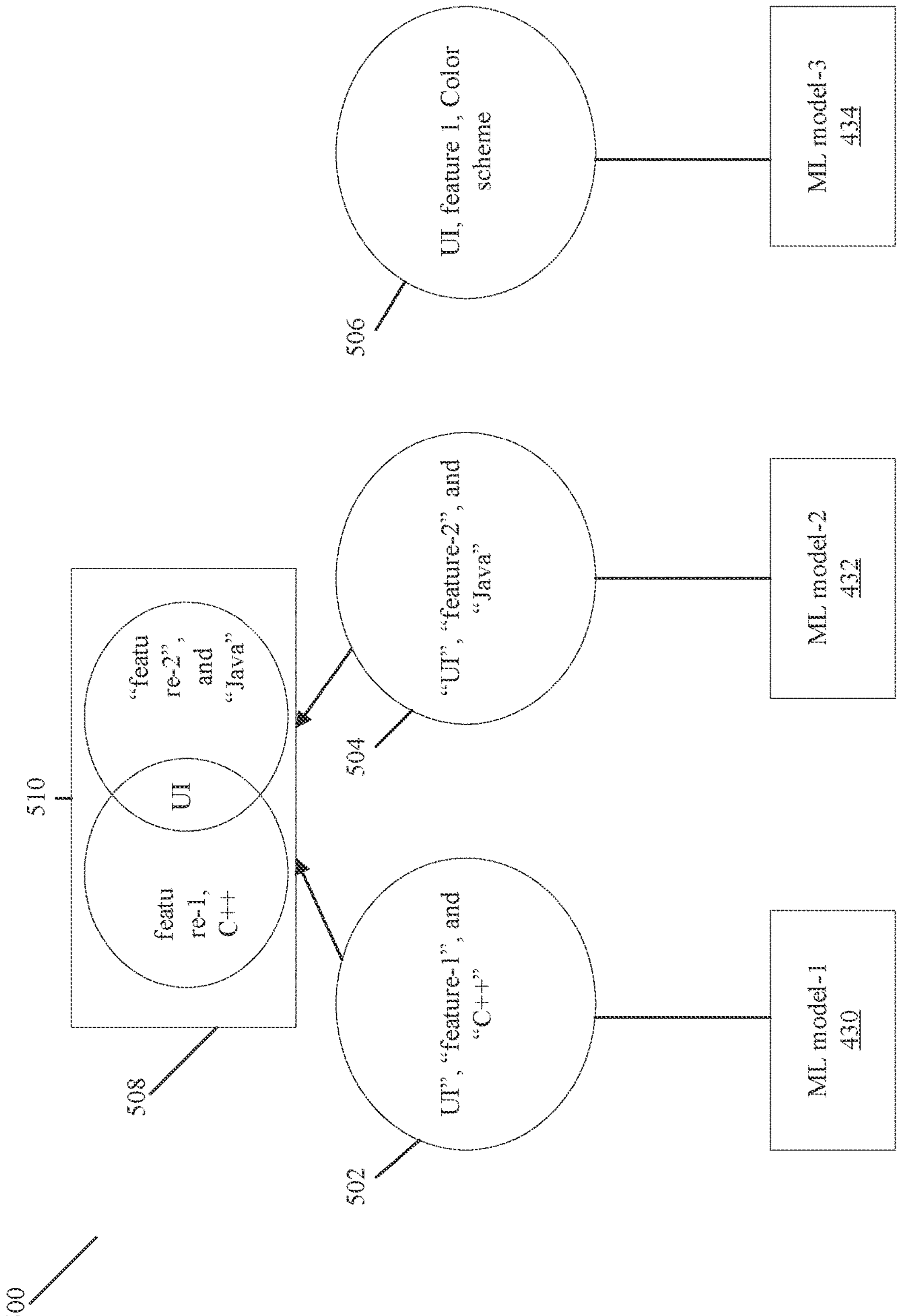

500
502
UI", "feature-1", and "C++"
ML model-1
430
504
"UI", "feature-2", and "Java"
ML model-2
432
506
UI, feature 1, Color scheme
ML model-3
434
508
510
featu re-1, C++
UI
"featu re-2", and "Java"

FIG. 5

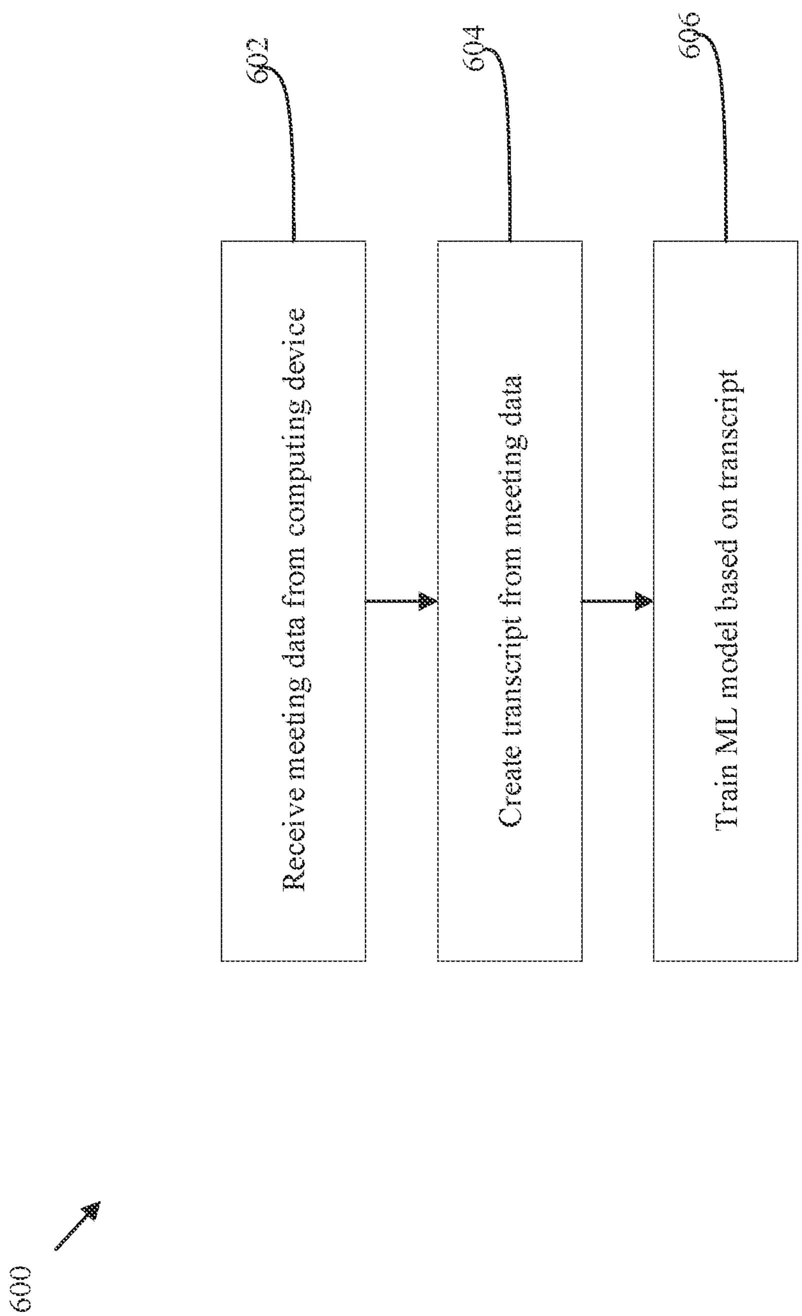

600
602
Receive meeting data from computing device
604
Create transcript from meeting data
606
Train ML model based on transcript

FIG. 6

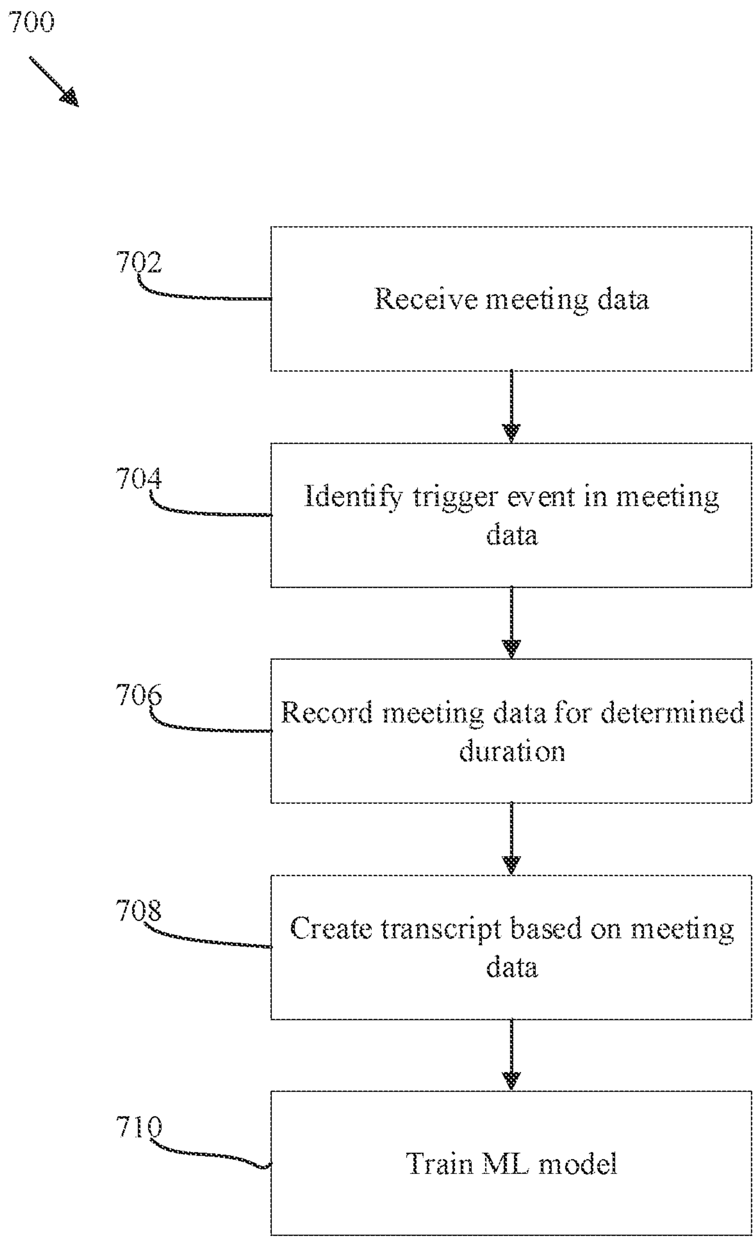

700
702
Receive meeting data
704
Identify trigger event in meeting data
706
Record meeting data for determined duration
708
Create transcript based on meeting data
710
Train ML model

FIG. 7

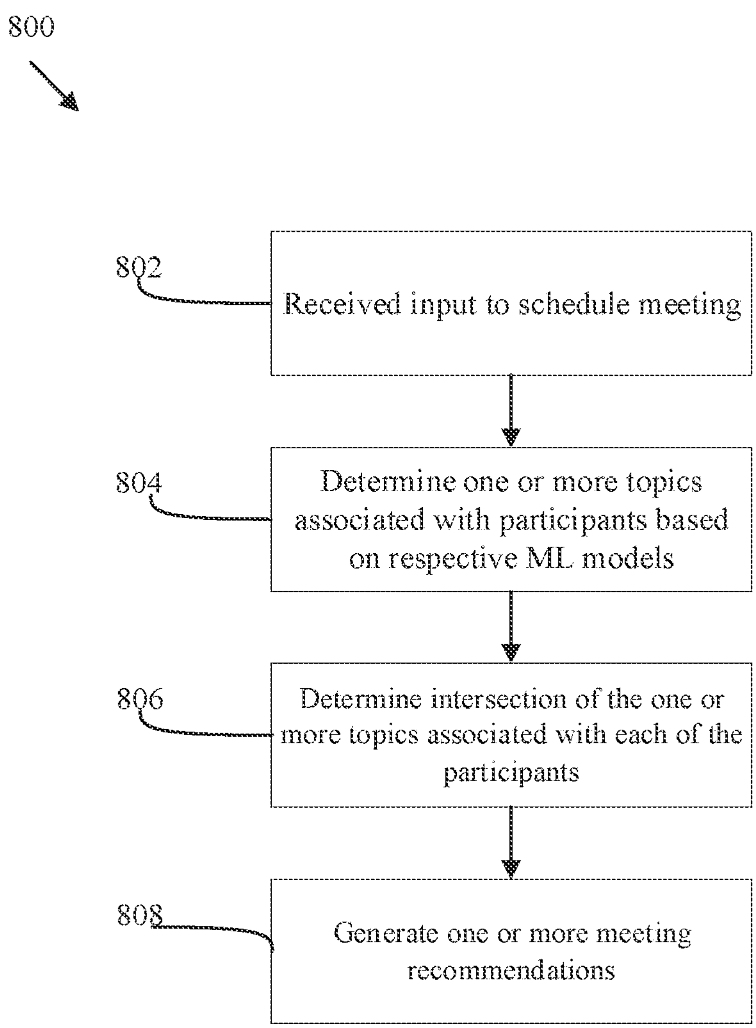

800
802
Received input to schedule meeting
804
Determine one or more topics associated with participants based on respective ML models
806
Determine intersection of the one or more topics associated with each of the participants
808
Generate one or more meeting recommendations

FIG. 8

# MACHINE LEARNING (ML) MODEL FOR PARTICIPANTS

## 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 ML model for participants of the meeting.

## BACKGROUND

**[0004]** Meetings, conducted over a communication network, involve participants joining the meeting through computing devices connected to the communication network. In some examples, 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 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 future 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 system and method to generate a ML model for participants 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 of 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; and

**[0013]** FIG. **6** is a flowchart illustrating a method for training the ML model, in accordance with an embodiment of the disclosure;

**[0014]** FIG. **7** is a flowchart illustrating another method for training the ML model, in accordance with an embodiment of the disclosure; and

**[0015]** FIG. **8** is a flowchart illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure.

## DETAILED DESCRIPTION

**[0016]** The illustrated embodiments describe a method that includes identifying, by a processor in real time, a trigger event initiated by at least one participant of the meeting. The trigger event is indicative of at least a reference to meeting metadata associated with the meeting. The meeting data associated with at least one participant is recorded for a determined duration to generate meeting snippets based on identification of the trigger event. Further, the method includes training a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant. Additionally, the method includes generating one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata and/or meeting data for one or more meetings.

**[0017]** The various embodiments describe a central server comprising a memory device that stores a set of instructions. Further, the central server includes a processor communicatively coupled to the memory device, wherein the processor is configured to identify, in real time, a trigger event initiated by at least one participant of the meeting, wherein the trigger event is indicative of at least a reference to meeting metadata associated with the meeting. The processor is further configured to record meeting data associated with the at least one participant of the meeting for a determined duration to generate a meeting snippet based on the identification of the trigger event. Furthermore, the processor is configured to train a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant. Additionally, the processor is configured to generate one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.

**[0018]** The various embodiments describe 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 include identifying, in real time, a trigger event initiated by at least one participant of the meeting, wherein the trigger event is indicative of at least a reference to meeting metadata associated with the meeting. The operations further includes recording, meeting data associated with the at least one participant of the meeting for a determined duration to generate a meeting snippet, wherein the recording is based on the identified trigger. Additionally, the operations include training a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant. The operations further include generating one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.

**[0019]** FIG. **1** is a block diagram that illustrates a system environment for training a ML model, 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 **104***a*, **104***b*, and **104***c* 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**.

**[0020]** 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.

**[0021]** 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 participants 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 an 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 input 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.

**[0022]** 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).

**[0023]** In operation, the central server **102** may receive a request, from a computing device **104***a*, 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, 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**.

**[0024]** 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 input 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 of the plurality of participants may present content saved on the computing device (for example, the computing device **104***a*) through screen sharing capability. For example, the participant may present content to other participants (of the plurality of participants) through the power point presentation application installed on the computing device **104***a*. In some examples, the participant may share content through other applications installed on the computing device **104***a*. For example, the participant may share content through the word processor application installed on the computing device **104***a*. Additionally, or alternatively, the participant may take meeting notes during the meeting. In an exemplary embodiment, the meeting data may include the audio content, the video content, the meeting notes, and/or the screen sharing content (e.g., through applications installed on the computing device **104***a*). Accordingly, in some examples, the computing device **104***a* may generate the meeting data during the meeting. Similarly, other computing devices **104***b* and **104***c* 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. 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.

**[0025]** 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 **104***a*, associated with the participant-**1**. Further, the central server **102** receives the meeting data from the computing device **104***b*, associated with the participant-**2**. Accordingly, the central server **102** may train a ML model for the participant-**1** based on meeting data received from the computing device **104***a*. Additionally, the central server **102** may train another ML model for the participant-**2** based on the meeting data received from the computing device **104***b*. Accordingly, the central server **102** may be configured to train the ML model for each of the plurality of participants.

**[0026]** 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 the computing device **104***a*. 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 **104***a* with the meeting metadata to identify the trigger event initiated by the participant associated with the computing device **104***a*. In an exemplary embodiment, the trigger event may be indicative of a timestamp at which the participant discussed or referred to a topic corresponding to the meeting metadata. For example, the participant discussed a topic mentioned in the agenda of the meeting.

**[0027]** 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 **104***a*) for a determined duration. In an example embodiment, the central server **102** may be configured to associate the meeting snippet with the participant associated with the computing device (e.g., computing device **104***a*). Similarly, during the meeting, the central server **102** may be configured to 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.

**[0028]** 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.

**[0029]** 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**.

**[0030]** 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.

**[0031]** 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.

**[0032]** 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.

**[0033]** Thus, 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).

**[0034]** 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**.

**[0035]** 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.

**[0036]** 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.

**[0037]** 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 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). The meeting data monitoring unit **208** may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

**[0038]** 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 **104***a*) of the computing devices **104**. The trigger identification unit **210** may identify the received input as the trigger event for the computing device **104***a*. The trigger event identification unit **210** may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

**[0039]** 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, received from the computing device **104***a*, 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., **104***a*). The recording unit **212** may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

**[0040]** 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 **104***a* (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 **104***b* (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 not limited to, one or more project tracking tools, and/or meeting metadata. The training unit **214** may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

**[0041]** 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. The recommendation unit **216** may be implemented using Field Programmable Gate array (FPGA) and/or Application Specific Integrated Circuit (ASIC).

**[0042]** In operation, the processor **202** may receive the request to schedule the meeting from at least one computing device **104***a* 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, and/or the like. Following table illustrates an example meeting metadata:

TABLE 1

Example meeting metadata

| Agenda | One or more topics | Time duration | Schedule of the meeting | Meeting notes from previous meetings |
|---|---|---|---|---|
| To discuss design of the User interface (UI) | 1. Layout 2. Fields to be displayed in UI 3. 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 |

**[0043]** In an exemplary embodiment, the processor **202** may be configured to store the meeting metadata in the memory device **204**. Additionally, based on receiving 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 connect to the meeting session.

**[0044]** 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 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 notes taken by the plurality of participants during the meeting. Additionally, or alternatively, the computing devices **104** may be configured to transmit the text input by the plurality of participants to the central server **102**. Further, in one embodiment, the central server **102** may be configured to share the text 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 text input by the plurality of participants amongst each of the computing devices **104**.

**[0045]** The plurality of participants may utilize the one or more features presented on the UI to interact and/or share content 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 includes 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.

**[0046]** 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 **104***a* is associated with the participant-**1** using the computing device **104***a*. For the purpose of brevity, the foregoing description has been described in conjunction with the meeting data received from the computing device **104***a*. 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**.

**[0047]** 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 **104***a*. 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 **104***a*) 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 **104***a*. For example, the processor **202** receives the meeting data at time instant $T_1$. 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 $T_1$. An example 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 of the meeting data received from the computing device **104***a* 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 $T_2$ based on the meeting data received at the time instant $T_2$. To this end, the meeting data monitoring unit **208** may be configured to generate the transcripts as and when the central server **102** receives the meeting data from the computing device **104***a*.

**[0048]** 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. 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®, Era®, and/or the like. In an exemplary embodiment, the task metadata may include, but 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 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. Further, the meeting data monitoring unit **208** may be configured to add the task metadata in the transcript.

**[0049]** 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 "agendal: to create UI" (depicted by **302**) received at the time instant $T_1$ (depicted by **304**) from the computing device **104***a*. 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 **104***a*. Additionally, the meeting transcript **300** includes the task metadata **310** associated with the set of tasks assigned to the participant-**1** associated with the computing device **104***a*. Additionally, or alternatively, the meeting transcript **300** includes the meeting metadata **312**.

**[0050]** In an exemplary embodiment, the training unit **214** may be configured to train a ML model for the participant-**1** associated with the computing device **104***a* based on the transcript (generated from the meeting data received from the computing device **104***a*, the task metadata associated with the set of tasks assigned to the participant-**1**, and meeting metadata). In some examples, the ML model 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**.

**[0051]** To train the ML model, 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, where n-grams 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.

**[0052]** Thereafter, the training unit **214** may be configured to train the ML model using the training corpus. In some examples, training the ML model 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. Those skilled in the art would appreciate that scope of the disclosure is not limited to using the neural network as the ML model. In an exemplary embodiment, the ML model may be realized using other techniques such as, but not limited to, logistic regression, Bayesian regression, random forest regression, and/or the like.

**[0053]** In an exemplary embodiment, as discussed, the ML model is associated with the participant **1**. Similarly, the training unit **214** may be configured to train other ML models for other participants.

**[0054]** In some examples, the scope of the disclosure is not limited to the training the ML model 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 not are 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 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 a 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 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 vector.

**[0055]** In some embodiments, the trigger event identification unit **210** may be configured to determine whether the similarity score is greater than or equal to a similarity score threshold. If the trigger event identification unit **210** determines that similarity score is less than the 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 similarity score is greater than or equal to the 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.

**[0056]** 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 an input from a computing device (e.g., **104***a*) of the computing devices **104**. The 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 to be interesting. Accordingly, in some examples, the participant may provide an 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 **104***a* may transmit the input (received from the participant through UI) to the central server **102**. Upon receiving the input from the computing device **104***a*, the trigger event identification unit **210** may identify the input as the trigger event.

**[0057]** Additionally, or alternatively, the processor **202** may be configured to categorize the transcript at each timestamp in one or more categories. In an exemplary embodiment, the one or more categories may include an action category, a schedule category, work status category, and or the like. 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 schedule of a subsequent meeting. In yet another embodiment, the work status category may correspond to a category that may include transcripts indicative of status of a task or a work.

**[0058]** 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 ML model may be capable of transforming the transcript into the transcript vector. Thereafter, the ML model may be configured to utilize the known classification techniques to classify the transcript at each transcript in the one or more categories. Some examples of the classification techniques may include, but 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 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 transcript 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.

**[0059]** In some examples, the trigger event identification unit **210** may be configured to identify the trigger event based on the classification 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 input from the computing device (e.g., **104***a*). 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 similarity score. Additionally, or alternatively, the trigger event identification unit **210** may be configured to identify the trigger event based on the similarity score and the reception of the input from the computing device (e.g., **104***a*). 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, reception of the input from the computing device (e.g., **104***a*), and the similarity score.

**[0060]** 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 **104***a*, 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 an alternate embodiment, the determined duration may be defined based on the timestamp of the reception of the input from the computing device **104***a*. 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 duration.

**[0061]** 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.

**[0062]** 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 **104***a*. 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.

**[0063]** 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 snippets. The meeting data monitoring unit **208** may be configured to generate additional meeting transcripts based on the plurality of additional meeting snippets.

**[0064]** In some examples, a computing device **104***c* 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 **104***c*. Further, the central server **102** may be configured to convert the meeting snippet to transcript, where the transcript is associated with the computing device **104***c*. Furthermore, the central server **102** may be configured to train the ML model for the participant associated with the computing device **104***c* based on the transcript obtained from the meeting snippet.

**[0065]** In an exemplary embodiment, the training unit **214** may be configured to generate a training corpus from the summary transcript and/or the additional transcript using the methodology described above. Further, the training unit may be configured to train the ML model using the training corpus generated from the summary transcript and/or the additional transcript. Similarly, the training unit **214** may be configured to train other ML models 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 examples, where the ML model 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. In such an embodiment, the training unit **214** may be configured to update the existing ML model based on the training corpus generated from the transcript of the meeting data associated with the participant.

**[0066]** In an exemplary embodiment, the processor **202** may be configured to receive another input from the computing device **104***a* (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 processor **202** may be configured to retrieve the ML model associated with the participant-**1** and the other participants from the memory device **204**. Thereafter, the processor **202** may be configured to generate one or more meeting recommendations for the other meetings based on the ML model associated with the participant-**1** and the other participants. For example, the processor **202** 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 processor **202** may be configured to utilize the one or more topics as the one or more meeting recommendations.

**[0067]** Further, during the other meeting, the ML model 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 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.

**[0068]** 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.

**[0069]** FIG. **4** is a diagram that illustrates an exemplary scenario of the meeting, in accordance with an embodiment of the disclosure. Referring to FIG. **4**, the exemplary scenario **400** illustrates that each of the computing devices **104** generates the meeting data. Additionally, or alternatively, each of the computing devices **104** transmit the meeting data to the central server **102**. The meeting data **402** transmitted by the computing device **104***a* comprises text corresponding to the audio content spoken by the participant-**1** associated with the computing device **104***a*. The text indicates "referring to topic **1**, participant **2** will provide the details". Further, the timestamp associated with the meeting data, transmitted by the computing device **104***a*, is $T_1$. At time instant $T_2$, the computing device **104***b* generates the meeting data **404** that includes text obtained from presentation content (by performing OCR). The text indicates "with reference to topic-**1**, the UI includes feature-**1** feature-**2** and feature-**3**". Further, at time instant T**2**, the exemplary scenario **400** illustrates that the computing device **104***c* transmits an input **405** to the central server **102**.

**[0070]** In an exemplary embodiment, the meeting data monitoring unit **208** appends the task metadata **406** associated with the set of tasks assigned to the participant-**1** to the meeting data received from the computing device **104***a*. As illustrated, the task metadata for the participant-**1** indicates "Design feature of UI" (depicted by **408**). Additionally, or alternatively, the meeting data monitoring unit **208** appends the meeting metadata **410** to the meeting data **402** received from the computing device **104***a* and the meeting data **404** received from the computing device **104***b*. Since the computing device **104***c* does not generate the meeting data, based on receiving the input from the computing device **104***c*, the recording unit **212** may be configured to record the meeting data **402** received from the computing device **104***a* and the meeting data **404** received from the computing device **104***b* for the determined duration to generate a meeting snippet-**1** (depicted by **412**) and a meeting snippet-**2** (depicted by **414**), respectively. Further, the meeting data monitoring unit **208** may be configured to consider the meeting snippet-**1** (depicted by **412**) and the meeting snippet-**2** (depicted by **414**) as the meeting data **416** for the computing device **104***c*.

**[0071]** In an exemplary embodiment, the meeting data monitoring unit **208** may be configured to generate the transcript **418** from the meeting data **402** (received from the computing device **104***a*), the transcript **420** from the meeting data **404** (received from the computing device **104***b*), and the transcript **422** from the meeting data **416** associated with the computing device **104***c*. The transcript **418** includes "Design feature for UI, UI development, feature **1** of UI is WIP". The transcript **420** includes "Color scheme of UI, UI development, feature **2** of UI is complete". The transcript **422** includes "Design feature for UI, UI development, feature **1** of UI is WIP, Color scheme of UI, UI development, feature **2** of UI is complete".

**[0072]** The training unit **214** may be configured to generate the training corpuses **424**, **426**, and **428** based on the transcript **418**, the transcript **420**, and the transcript **422**, respectively. The training corpuses **424**, **426**, and **428** are associated with the participant-**1**, participant-**2**, and participant-**3**, respectively. Based on the training corpuses **424**, **426**, and **428**, the training unit **214** may be configured to train the ML model-**1** **430**, ML model-**2** **432**, and ML model-**3** **434**. The ML model-**1** **430**, ML model-**2** **432**, and

ML model-**3** **434** are associated with the participant-**1**, participant-**2**, and participant-**3**, respectively. As discussed, the ML model is indicative of one or more topics and/or skills associated with a participant. For example, the ML model-**1** **430** includes "UI", "feature-**1**", and "C++" as the one or more topics and/or skills associated with the participant-**1**. In another example, the ML model-**2** **432** includes "UI", "feature-**2**", and "Java" as the one or more topics and/or skills associated with the participant-**2**.

**[0073]** FIG. **5** 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. **5**, the exemplary scenario **500** includes the ML model-**1** **430**, the ML model-**2** **432**, and the ML model-**3** **434**. Further, the exemplary scenario **500** illustrates the one or more topics **502**, **504**, and **506** represented by each of the ML model-**1** **430**, the ML model-**2** **432**, and the ML model-**3** **434**, respectively. For example, the one or more topics **502** associated with the ML model-**1** **432** includes "UI", "feature-**1**", and "C++". Similarly, the one or more topics **504** associated with the ML model-**2** includes "UI", "feature-**2**", and "Java". Further, the one or more topics **506** associated with the ML model-**3** includes "UI, feature **1**, Color scheme".

**[0074]** Further, the exemplary scenario **500** illustrates that central server **102** receives an input from the computing device **104***a* 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-**1** **430** and the ML model-**2** **432** (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 **508**). 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 **510**). Accordingly, the recommendation unit **216** may be configured to generate the meeting recommendation "UI" (depicted by **510**).

**[0075]** FIG. **6** is a flowchart illustrating a method for training the ML model, in accordance with an embodiment of the disclosure. Referring to FIG. **6**, at **602**, 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 **604**, 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 **606**, the ML model is trained based on the meeting data. In an exemplary embodiment, the training unit **208** may be configured to train the ML model based on the meeting data. In some examples, the training unit **208** may be configured to train the ML model for each of the plurality of participants.

**[0076]** FIG. **7** is a flowchart illustrating another method for training the ML model, in accordance with an embodiment of the disclosure. Referring to FIG. **7**, at **702**, 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 **704**, 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 **706**, 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 **708**, the transcript is created based on the meeting snippet. In an exemplary embodiment, the meeting data monitoring unit **208** may be configured to generate transcript. At **710**, the ML model is trained based on the meeting data. In an exemplary embodiment, the training unit **208** may be configured to train the ML model based on the meeting data.

**[0077]** FIG. **8** is a flowchart **800** illustrating a method for generating one or more meeting recommendations, in accordance with an embodiment of the disclosure. Referring to FIG. **8**, at **802**, 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 **804**, 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 **806**, 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 **808**, 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.

**[0078]** 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

**[0079]** 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 function.

[0080] In one or more exemplary embodiments, the functions described herein may be implemented by special-purpose 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 processor-readable 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 computer-readable 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 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 Disc™, 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.

[0081] 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:

identifying, by a processor in real time, a trigger event initiated by at least one participant of the meeting, wherein the trigger event is indicative of at least a reference to meeting metadata associated with the meeting;

recording, by the processor, meeting data associated with the at least one participant of the meeting for a determined duration to generate a meeting snippet, wherein the recording is based on the identified trigger, wherein the meeting snippet is associated with the at least one participant;

training, by the processor, a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant; and

generating, by the processor, one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.

**2**. The method of claim **1**, wherein the meeting data comprises a transcript of the audio generated by the at least one participant during the meeting, a 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.

**3**. The method of claim **1**, further comprising training, by the processor, the ML model based on the meeting metadata associated with the meeting.

**4**. The method of claim **1**, wherein the ML model may be configured to associate the at least one participant with one or more topics.

**5**. The method of claim **1**, further comprising generating, by the processor, the one or more meeting recommendations based on the ML model associated with the other participants of the other meeting.

**6**. The method of claim **1**, wherein the ML model associated with the at least one participant is further configured to facilitate capture of the meeting data during the other meeting.

**7**. The method of claim **1** further comprising retrieving, by the processor, task metadata associated with one or more tasks assigned to the at least one participant, from one or more project management tools.

**8**. The method of claim **7** further comprising appending, by the processor, the task metadata to the meeting data.

**9**. The method of claim **1** further comprising training, by the processor, the ML model associated with the at least one participant based on the meeting data associated with the at least one participant.

**10**. A central server, comprising:

a memory device comprising a set of instructions;

a processor communicatively coupled with the memory device, wherein the processor is configured to:

identify, in real time, a trigger event initiated by at least one participant of the meeting, wherein the trigger event is indicative of at least a reference to meeting metadata associated with the meeting;

record meeting data associated with the at least one participant of the meeting for a determined duration to generate a meeting snippet, wherein the recording is based on the identified trigger, wherein the meeting snippet is associated with the at least one participant;

train a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant; and

generate one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.

**11**. The central server of claim **10**, wherein the meeting data comprises a transcript of the audio generated by the at least one participant during the meeting, a 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.

**12**. The central server of claim **10**, wherein the processor is configured to train the ML model based on the meeting metadata associated with the meeting.

**13**. The central server of claim **10**, wherein the ML model may be configured to associate the at least one participant with one or more topics.

**14**. The central server of claim **10**, wherein the processor is configured to generate the one or more meeting recommendations based on the ML model associated with the other participants of the other meeting.

**15**. The central server of claim **10**, wherein the processor is further configured to utilize the ML model associated with the at least one participant to facilitate capture of the meeting data during the other meeting.

**16**. The central server of claim **10**, wherein the processor is further configured to retrieve task metadata associated with one or more tasks assigned to the at least one participant, from one or more project management tools.

**17**. The central server of claim **16**, wherein the processor is further configured to append the task metadata to the meeting data.

**18**. The central server of claim **10**, wherein the processor is further configured to train the ML model associated with the at least one participant based on the meeting data associated with the at least one participant.

**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:

identifying, in real time, a trigger event initiated by at least one participant of the meeting, wherein the trigger event is indicative of at least a reference to meeting metadata associated with the meeting;

recording, meeting data associated with the at least one participant of the meeting for a determined duration to generate meeting snippet, wherein the recording is based on the identified trigger;

training, a machine learning (ML) model associated with the at least one participant based on the meeting snippet associated with the at least one participant; and

generating, one or more meeting recommendations by utilizing the trained ML model, wherein the one or more meeting recommendations include meeting metadata for another meeting.

**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.

* * * * *