# MEETING INSIGHT COMPUTING SYSTEM

## CROSS REFERENCE TO RELATED APPLICATIONS

**[0001]** This application is a continuation from U.S. Non-Provisional patent application Ser. No. 16/037,876 filed Jul. 17, 2018, which claims priority to U.S. Provisional Patent Application Ser. No. 62/667,362, filed May 4, 2018, the entirety of each of which is hereby incorporated herein by reference for all purposes.

## BACKGROUND

**[0002]** Interconnected "Internet of Things" (IoT) devices and sensors can be used to record and report data regarding their local environments. As modern workplaces come to embrace emerging technology, worker behaviors change, as do the relationships between physical spaces and the people and devices that occupy them.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0003]** FIG. **1** depicts an example meeting including several meeting quality monitoring devices.

**[0004]** FIG. **2** illustrates an example method for computer-generating meeting insights.

**[0005]** FIG. **3** schematically depicts an example meeting insight computing system.

**[0006]** FIG. **4** depicts an example graphical scheduling interface of a meeting insight computing system.

**[0007]** FIG. **5** schematically depicts example meeting trends reported by a meeting trends reporting machine.

**[0008]** FIG. **6** schematically depicts an example computing system.

## DETAILED DESCRIPTION

**[0009]** Many computerized meeting scheduling solutions allow users to create and schedule meetings, oftentimes providing an interface that allows the user to select a meeting time and location and invite other users to attend. However, such conventional solutions lack information regarding the real-world context in which scheduled meetings take place. For instance, a user may invite seven other people to attend a meeting in a small room that only comfortably fits four. Similarly, a user may schedule a meeting for mid-afternoon in a room that tends to be intolerably hot during the afternoon hours. Because conventional computerized scheduling systems lack real-world context, users may not be aware that they are attempting to schedule non-optimal meetings, which may result in meetings that are unproductive at best. At worst, such meetings can negatively impact the health of meeting participants who attend, for instance when the temperature, air composition, brightness, noise level, etc., of the meeting space are non-ideal. Conventional meeting solutions similarly do not offer information regarding the efficacy of meetings they are used to schedule and maintain. For instance, many organizations are plagued by overly long, poorly attended, and recurring meetings that could be modified and/or avoided if more information regarding meeting quality was available.

**[0010]** Accordingly, the present disclosure is directed to a meeting insight computing system that reports useful and meaningful information regarding meeting quality. The meeting insight computing system relies on quality parameters received from a plurality of meeting quality monitoring devices. These parameters enable an understanding of the real-world context in which meetings take place and can be used by users or organizations to improve overall meeting quality. For example, based on the plurality of quality parameters, a "quality score" can be calculated for a meeting, with higher quality scores corresponding to better overall meetings. The specific factors that contribute to a quality score may vary from implementation to implementation, and may include how efficient the meeting was, an emotional sentiment expressed by meeting participants, how comfortable the meeting environment was, etc. Information regarding meeting quality may be distributed to members of an organization as meeting trends, for example listing the highest quality meetings, most productive times of day, most popular meeting spaces, etc. Furthermore, when new meetings are scheduled, the meeting insight computing system can generate an insight aimed at improving a quality score of the meeting by changing properties of the meeting (e.g., time, location, invited participants).

**[0011]** In this manner, the meeting insight computing system represents an improvement over conventional computerized meeting solutions, and therefore the field of computer technology itself. A fundamental purpose of such conventional solutions is the collection, processing, and reporting of meeting-related information to facilitate meetings between meeting participants. Because the meeting insight computing system retrieves, processes, and outputs new and specific meeting-related information, it has substantially greater utility than conventional systems and results in higher quality meetings. For example, meeting insights and trends reported by the claimed meeting insight computing system provide new and useful meeting-related information that would not be available from a conventional computerized meeting scheduler.

**[0012]** FIG. **1** shows an example meeting **100** that has been organized via a meeting insight computing system, as will be described in more detail below. For example, a user may use a scheduling interface presented by a meeting insight computing system to schedule a meeting at a given time and location, and to include specific meeting participants. Once scheduled, meeting invitations may be sent to the specified meeting participants, and the meeting location may be reserved for the specified meeting time. In other examples, however, meetings may be organized or scheduled in other suitable ways, and need not be scheduled at all (e.g., the meetings may be ad hoc).

**[0013]** As shown in FIG. **1**, meeting **100** is taking place in a meeting location **102**, which may be a dedicated meeting space, such as a conference room or board room, or any other suitable environment in which meetings can be held. Meeting **100** includes three meeting participants **104**A, **104**B, and **104**C. It will be understood that meeting **100** may include any number of additional meeting participants attending remotely, for example via a conference call or a voice over IP service.

**[0014]** Finally, meeting **100** includes multiple meeting quality monitoring devices **106**A-**106**D. As used herein, a "meeting quality monitoring device" is any device or service that has information regarding conditions within the meeting environment, the behavior of meeting participants, and/or any other information pertaining to the efficiency, comfort level, and/or general "quality" of a meeting space and/or meeting itself. Such information may take the form of a "meeting quality parameter," meaning quality parameters