The proposed Meeting Management Information System is designed to streamline and automate the process of managing meetings within an organization. The system aims to provide a centralized platform for scheduling, conducting, and analyzing meetings, as well as facilitating communication and collaboration among participants and organizers.

The system consists of several key components and processes that work together to achieve its objectives. The main entities involved in the system are Users (Participants and Organizers), Meetings, Meeting Attendees, Meeting Transcripts, Meeting Summaries, Meeting Analytics, Surveys, Survey Questions, Survey Responses, Meeting Documents, and Login History.

The core functionality of the system revolves around two main processes: Meeting Data Collection and Analysis, and Meeting Dashboard and Survey Management.

The Meeting Data Collection and Analysis process is responsible for gathering and processing meeting-related data from various sources. It fetches scheduled meeting data from the Calendar integration early in the morning using a scheduled task or service. This data is then stored in the Meeting Database for further processing. After a meeting concludes, the system collects post-meeting data, such as meeting recordings, closed captions or transcripts, and participant attendance, from the Meeting Application (e.g., Zoom, WebEx, Teams). This data is also stored in the Meeting Database.

In addition to scheduled meetings, the system handles instant meetings that may not be present in the Calendar. It verifies and collects data for these instant meetings using the Meeting Application API and stores the relevant information in the Meeting Database.

The system performs meeting summarization at the end of each day. It retrieves meeting transcripts or recordings from the Meeting Database and generates concise summaries using natural language processing techniques. These summaries are stored back in the Meeting Database for later use.

The Meeting Dashboard and Survey Management process focuses on presenting meeting data to Users and managing the survey mechanism. It retrieves data from the Meeting Database to populate the Participant Dashboard and Admin/Organizer Dashboard. The Participant Dashboard displays the participant's meeting activity and details, such as invitees, attendance, agenda, summary, time, and platform. The Admin/Organizer Dashboard provides an overall view of meetings, including analytics and participant metrics for each meeting.

The system also facilitates the distribution and collection of surveys. Pre-meeting surveys are sent to Organizers to gather information about the meeting agenda and any supporting documentation. Post-meeting surveys are sent to Participants to collect feedback and any questions or concerns they may have. Survey responses are stored in the Meeting Database and can be accessed by Organizers and Participants.

To ensure secure access to the system, a User Authentication and Authorization process is implemented. Users can log in to the system using their credentials, which are verified against the User Database. The system maintains a Login History to track user login and logout activities. Based on the user's role (Admin, Organizer, or Participant), the system grants appropriate access rights to different features and data.

The User Database stores essential user information, such as name, email, password, and role. It serves as the central repository for user accounts and is used for authentication and authorization purposes.

The Meeting Management Information System leverages various technologies and integrations to achieve its functionalities. It integrates with the Calendar system (e.g., Outlook Calendar) to fetch scheduled meeting data and send updates. It also integrates with Meeting Applications (e.g., Zoom, WebEx, Teams) to collect meeting recordings, transcripts, and attendance data. The system utilizes natural language processing techniques to generate meeting summaries and analytics.

Overall, the proposed Meeting Management Information System provides a comprehensive solution for managing meetings effectively. It automates data collection, analysis, and summarization processes, facilitates communication and collaboration through surveys and dashboards, and offers secure access control mechanisms. By centralizing meeting-related data and providing valuable insights, the system aims to enhance productivity, streamline meeting management tasks, and foster better decision-making within the organization.