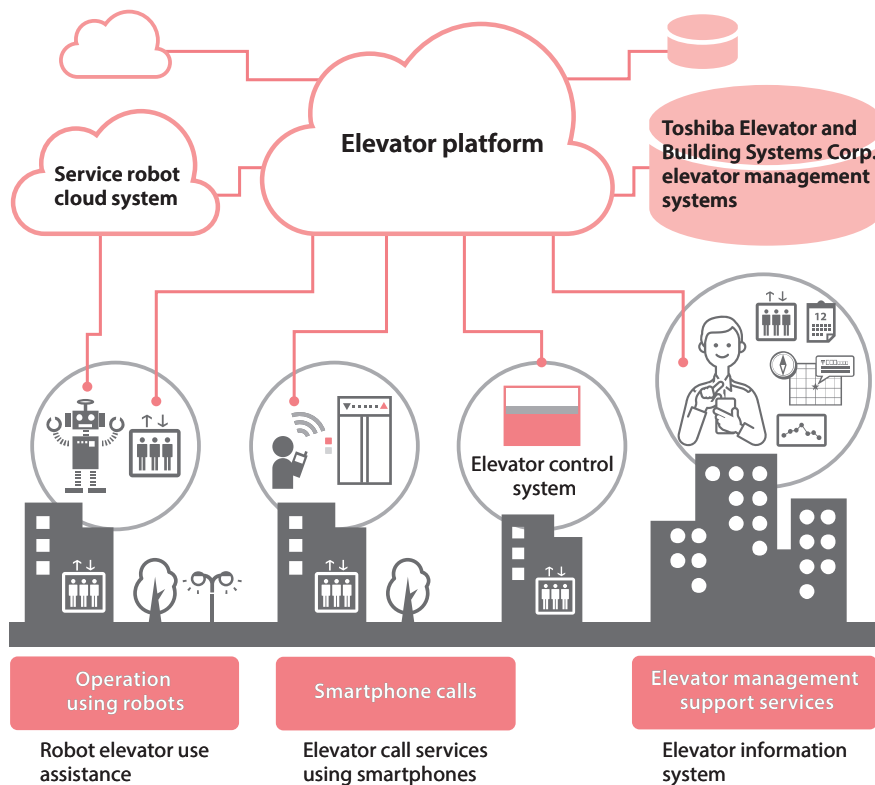


7. Building Solutions

7.1 Elevator Platform Utilizing Cloud-Based System



Overview of cloud-based elevator platform system

As the social environment changes rapidly and lifestyles diversify, expectations for solutions to improve the convenience and comfort of elevators continue to grow. To meet such expectations, Toshiba Elevator and Building Systems Corporation has developed an elevator platform based on the concept of software-defined elevators, which uses software distributed to elevator control units in buildings.

Because software can be distributed in a timely manner according to customer needs, the new cloud-based elevator platform system makes it possible to provide new functions and services at the right time in order to improve user convenience, reduce the burden of building management operations, and increase building value. Examples of new functions and services that can be achieved through software-defined elevators include a function for service robots to automatically board elevators, elevator call services using smartphones, and elevator management support services for elevator information system remote monitoring and configuration.

In addition to ensuring safe and secure elevator usage, we will continue to add new functions and services that support lifestyles and improve comfort and convenience.

7. Building Solutions

7.2 FLOORNAVI™ Elevator Group Control System Linked with Entrance Security Gate System



Destination floor display for security gates controlled by FLOORNAVI™ elevator group control system

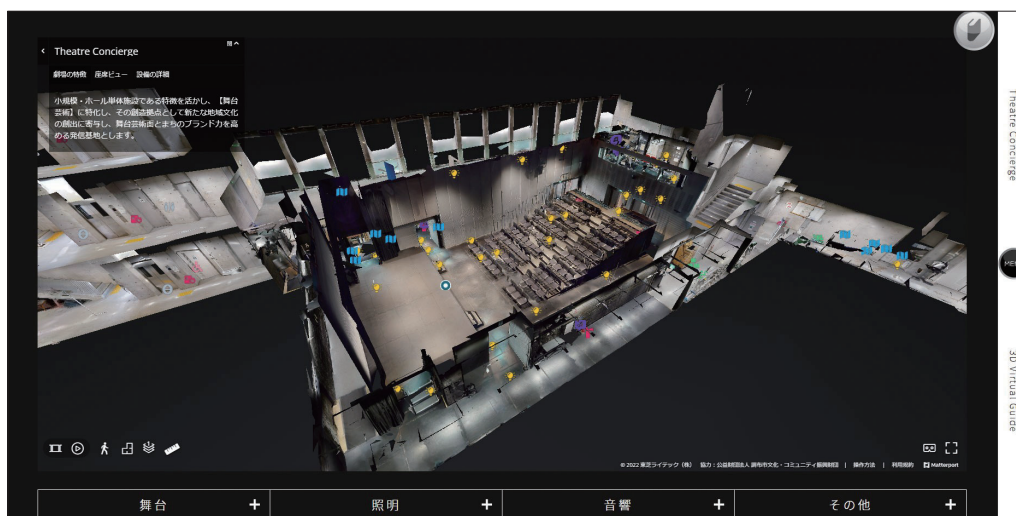
The FLOORNAVI™ elevator group control system facilitates efficient elevator operations by keeping track of waiting passenger numbers and their destination floors. Toshiba Elevator and Building Systems Corporation has developed a new function for FLOORNAVI™ that registers the destination floors automatically in conjunction with a building security gate system, automatically registering destination floors via card readers on building security gates. In addition, the new function uses a contactless face recognition security system and two-dimensional barcodes for destination floor registration. FLOORNAVI™ processes passenger destination floor information recognized by security gates and sends it to security gate display devices.

We designed the FLOORNAVI™ model considering the display device response speed and size. We delivered the first units to Tokyo Midtown Yaesu^(*), which opened in March 2023.

(*) Mixed-use facility in Chuo-ku, Tokyo developed by Mitsui Fudosan Co., Ltd.

7. Building Solutions

7.3 Theatre Concierge Service for Efficient Virtual Theater Tour Using Digital Twin Technology



Example of virtual 3D theater model provided by Theatre Concierge service



Example of glossary for defining terms of stage and dimension measurement function

It is important for theaters to show many performances and increase patronage. In order to do so, theater managers need to improve stage tour efficiency for event organizers. Following the onset of the COVID-19 pandemic, theater operational efficiency was affected by a rise in remote meetings between theater managers and event organizers.

With this in mind, Toshiba Lighting & Technology Corporation has launched the Theatre Concierge service using cloud-based digital twin technology. It provides three-dimensional (3D) images of a theater captured using a special 360-degree camera. A theater manager and an event organizer can walk anywhere in the theater in a virtual space while measuring stage dimensions and checking the lighting, audio, and stage equipment in detail.

The Theatre Concierge service also provides a glossary of stage terms with a search function and a theater guide that describes stage usage. These tools help theater managers to facilitate meetings with people who are unfamiliar with stage productions.

7. Building Solutions

The Theatre Concierge service enables virtual stage tours without the restrictions of time or place, contributing to increased viewings and theater patronage. In the future, we plan to further improve functionality, expand content, and provide links to theater facility data with the aim of bringing about work style reform in the field of theater management.