

## Featured Articles

# Interior Design for Collaborative Creation Space

## Creating a Collaborative Environment Based on Color/Material/Finish

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*OVERVIEW: The Global Center for Social Innovation – Tokyo was established in Akasaka with a collaborative facility that fuses tools and space to accelerate Hitachi’s Social Innovation Business. This facility not only satisfies the required functions for collaborative creation, but also delivers hospitality to visitors with a fresh and pleasant environment that is capable of encouraging free ideation. At the same time, the interior design was shaped by aspects of inspiration from a unique collaborative creation environment. This article introduces the purpose and process of this interior design with visual images.*

### INTRODUCTION

THE Global Center for Social Innovation (CSI) is positioning itself to conduct collaborative creation with customers as a means to accelerate Hitachi’s Social Innovation Business.

The process of collaborative creation with customers is first to extract the problems that are faced by customers and society, and then to share these problems among stakeholders who explore solutions with their data, technologies, and wisdom to bring new values that are difficult for one entity to produce. CSI-Tokyo has been developing technologies for collaborative creation and integrating them with information technology (IT). Consequently, a space that is away from the ordinary workplace and that fosters free ideation and active discussion among stakeholders while utilizing advanced collaborative creation technologies and tools is an inevitable requirement. At the same time, it is imperative to provide comfort for guests by offering hospitality and the uniqueness and aspects of inspiration so as to present an active environment.

Under these requirements, CSI-Tokyo collaborated with an external creator and completed the interior design of the collaborative creation facility in Tokyo, Japan in June 2015.

### SPACE AND FUNCTIONAL REQUIREMENTS

Before beginning the detailed interior design, the activities to be conducted in this facility were listed and their functional requirements were determined.

The collaborative creation activities were specified by benchmarking the existing facilities of competitors, and repeating the discussions with the members who have been developing the tools for collaborative creation. As a result, the required space for fostering collaborative creation with Hitachi’s uniqueness and its functional requirements are defined as follows.

#### Presentation Space

This space is for attracting customers and for conducting presentations that will accelerate and advance the decision-making for collaborative creation.

The maximum capacity of this room is about 30 persons. There is a large display of eighteen 55-inch high-definition screens. This room is called D1.

#### Collaborative Creation Space

This space is for allowing stakeholders to concentrate on collaborative creation to innovate values.

As a platform for deepening discussions while using the IT tools of Hitachi’s unique collaborative creation technologies, there is a custom-made touchscreen table and a large display with three 70-inch monitors.

Two rooms with different sizes: each room capacity is about 10–15 persons. These two rooms are called D2 and D3.

#### Lounge Space

This space is primarily for taking breaks during meetings or to use as a meeting point for greeting stakeholders. It also can host a casual party after work.

As a relaxing space, its furnishings must be able to trigger informal dialogues. The room is called the Lounge.

**Meeting Space**

This space is for conducting regular meetings apart from collaborative creation activities.

With the combined function of a reception space, there are two rooms with different sizes: one room has a capacity of 10 persons and the other a capacity of 5 persons. The ambiance of the rooms should offer maximal openness for visitors. These rooms are called B1 and B2.

**FLOOR PLANNING**

Based on these determined functional requirements, the details of floor planning were carried out. After this floor planning, the construction management and interior design was conducted by CSI-Tokyo and ITOKI Corporation as a collaborative project.

With the limited space, each layout was investigated repeatedly like playing with a jigsaw puzzle. The tasks

included placing the storage units for the devices that will be used for collaborative creation while anticipating the behaviors and movements of visitors. After trial and error, the final floor plan included a distinctive pathway for visitors to shift their feelings and emotions once they walk into this facility. The design of this pathway purposely divides the facility from the ordinary outside world to logically escort visitors to each Collaborative Creation Space. This pathway is called the Corridor (see Fig. 1).

**CONSTRUCTING A DESIGN CONCEPT TO EXPRESS THE SPACE**

While the layout was designed based on the required functionalities, the research and discussions for expressing the space to highlight the facility were conducted intensively at the same time.

The facility based on the determined floor plan consists of three areas: the Corridor to divide the spaces, rooms D1 to D3 for conducting effective collaborative creation, the Lounge for relieving tension, and rooms B1 and B2 for deepening the

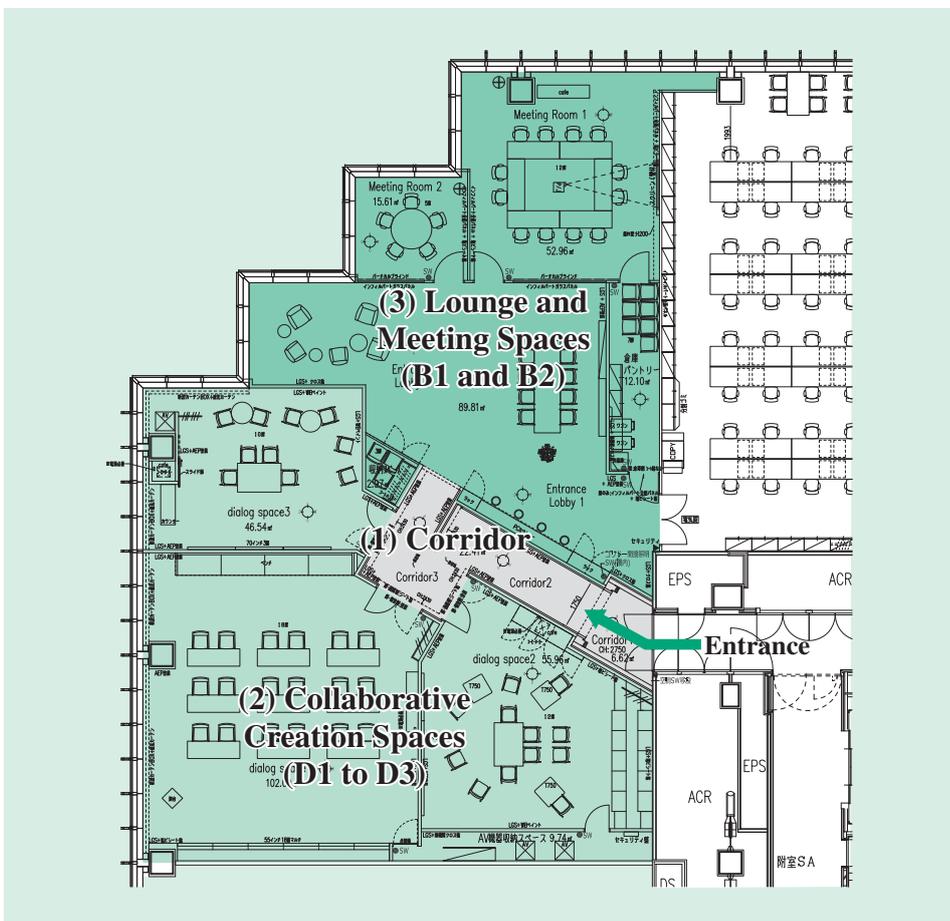


Fig. 1—Floor Plan of the Collaborative Creation Space. The focus of this layout is the Corridor (1), which runs at an angle from the entrance door, and expresses the characteristics of each space by contrasting the Collaborative Creation Spaces (2) with the Lounge and Meeting Spaces (3). The Collaborative Creation Spaces satisfy the required functions in the limited space available and offer closed spaces allowing users to concentrate better on any collaborative creation activities. The Lounge and meeting spaces provide openness for relaxation and discussion.

dialogue. To emphasize the uniqueness of Hitachi's Collaborative Creation Space, it is necessary to offer an attractive experience that allows visitors to imagine themselves engaging in collaborative creation activities in order to stir their interests in collaborative creation.

The CMF dominant design that was applied in Hitachi's product design was selected to create a unique design concept throughout the whole facility. CMF stands for "color, material, and finish," which is a design concept for focusing on the impressions created by objects. Non-professionals find it easier to recognize and distinguish the design differences with the CMF dominant design concept than with the conventional shape design concept. CMF dominant design has been cultivated through Hitachi's product design over many years. Its concept is to prioritize CMF over shape for expressing and constructing the target subjects. Utilizing CMF is effective for creating an attractive yet unique experience throughout a space due to its expression elements, which are intuitively and physically recognized, even with limited flexibility in floor planning due to space restraints.

By using CMF dominant design, the design of each space was explored based on the functionalities of these three areas. In the end, themes were established for each area: light, which is the base of all colors, is for the Corridor, a composition of multiple large colored surfaces is for rooms D1 to D3, and a harmony of different materials is for the Lounge and rooms B1 and B2. By applying the design concept using multiple colors and materials to weave out all the spaces in this facility, the overall consistency can be maintained while creating their uniqueness and attractiveness. Furthermore, the CMF-focused design can bring the features of "generating new and unprecedented value through collaborative creation that fuses different ideas and opinions" and "creating a rich and beautiful world in more than one color by harmonizing multiple colors out of each color, which is originally strong in declaring its own attractiveness."

## FEATURES OF EACH DEVELOPED ROOM

Each space was designed in accordance with visitors' experiences. Here the features of each room are explained according to the sequence followed by visitors once they walk into the facility.

### Corridor

Walking through the public hallway by opening the door of the collaborative creation facility leads to a



Fig. 2—Corridor.

*The Corridor offers an extraordinary atmosphere for visitors to transform their mindsets toward the upcoming collaborative creation activities.*

space with slowly changing lighting that draws visitors into the room. This is purposely developed to shift the emotions of visitors by establishing a space to separate the unique Hitachi collaborative creation from the ordinary world.

The installation of lighting was redesigned using red, green, and blue (RGB) color components that were sampled from morning and dusk. This development was a collaboration with Tsutomu Muto, an external creator who works on and researches lighting design (see Fig. 2).

### D1

After walking through the Corridor and opening the door indicating room D1, multi-screens covering the whole wall appear in front of visitors in the presentation room.

To present the screens clearly, the color scheme is set to coordinate multiple gray colors. An aqua-blue-colored curtain that blocks light and red-purple-colored



Photograph: Masaya Yoshimura



Photograph: Masaya Yoshimura

Fig. 3—D1.

*This room directs users to focus on the large multi-screens while motivating them by rich coloring in order to enhance the effectiveness of presentation.*

back wall allow the colors to distinguish each other in order to offer the impression of a sophisticated theater. This can enhance the effectiveness of presentations. The normal room capacity is 20 persons, but this can be increased to 28 persons by rearranging desks and chairs.

The design and development of effective lighting for optimizing each activity, and a lighting design that is capable of highlighting colors and materials, was achieved through collaborative work with Sawada Lighting Design & Analysis Inc. (see Fig. 3).

## D2

On opening the door, visitors see a bright and active space that is woven with the colors of cherry blossom and blue with a base of dark and light grays. The purpose of this interior design is to trigger friendly and peaceful dialogue in collaborative creation activities.

There are three connected monitor screens on the wall and a custom-made table with an embedded touchscreen. The maximum capacity for collaboration is 18 persons and the capacity for an audience is 10 persons with seating in the form of stairs at the back



Photograph: Masaya Yoshimura



Photograph: Masaya Yoshimura

Fig. 4—D2.

*This room offers the impression of brightness and activeness and is equipped with Hitachi-designed tools allowing users to engage in effective discussions during collaborative creation activities.*

of the room. This room is a closed space without any windows, but the room's irregular pentagon shape and the large colored-surface walls reduce the sense of closeness.

The wall next to the screen is furnished with a whiteboard that has a metal substrate. During the collaborative creation activities, this wall can be used for illustrating ideas and graphs, pasting notes and memos, and posting posters using magnets. Workshops can be conducted using a combination of digital and analog methods (see Fig. 4).

## D3

After opening the door of room D3, there is equipment installed that is similar to room D2. The space is smaller and more enjoyable. The windows are covered with gray curtains to intensify concentration on collaborative creation activities.

A vivid yellow color is used to oppose the gray in order to avoid making visitors feel that they are in a limited space. The design aims to trigger active discussions with a maximum room capacity of 10 persons.



Photograph: Masaya Yoshimura



Photograph: Masaya Yoshimura

Fig. 5—D3.

*This room is wrapped with a cheerful color scheme to distract users' awareness from its small size and to encourage active collaborative creation.*

This space also has a wall furnished with a whiteboard that has a metal substrate (see Fig. 5).

## Lounge

The end of the Corridor is a space full of openness.

Opposite to rooms D1 to D3 where the spaces are closed, the Lounge is designed to connect to the outside world as much as possible. The open views surrounding the space are capable of offering visitors a chance to relax. Compared to the large colored surfaces and abstract expression of rooms D1 to D3, the design of the Lounge focuses specifically on the materials in each part.

The interior design includes a grayish wooden pattern and a high-quality dark brown carpet, an artificial marble high-counter, and several other exclusive decorative items. All the materials echo each other to offer an impression of calmness in order to trigger informal and open dialogue (see Fig. 6).

## B1 and B2

There are two different-sized meeting rooms next to the Lounge. These two rooms are furnished with large glasses to reduce the sense of closeness.



Photograph: Masaya Yoshimura



Photograph: Masaya Yoshimura

Fig. 6—Lounge.

*The combination of a sensation of openness from outside views and an ambiance of multiple textures from the different materials in the space presents an environment for users to spend a slow and calm time.*

The maximum room capacities of B1 and B2 are 12 and 5 persons respectively. Both rooms are equipped with darker wooden furniture and bluish gray carpet so that the total design harmonizes with the dark blue of the wall. The overall design seeks to offer a high-quality and calm impression.

The views from these two rooms are open for several hundred meters above the ground, which provides a remarkable highlight to their distinctive position and endless openness (see Fig. 7).

## THOUGHTFUL CONSIDERATIONS FOR HOSPITALITY

The most important features for creating an environment to make visitors feel welcomed has been applied to the design of this facility. To realize this notion, the designers have poured their sentiments into every item in the facility.

For example, the photos in the Lounge are digital composite images of the four hours before and after the dawn of April 1, 2015, the day that CSI was



Photograph: Masaya Yoshimura



Photograph: Masaya Yoshimura

Fig. 7—B1 and B2.

These two rooms are adequately surrounded allowing users to feel secure while openly facing the Lounge. With the outside views, these spaces encourage comfortable discussions.

established. These photos were shot by someone on the staff who is good at photography (see Fig. 8). Also, the decorative flower arrangements are specially ordered to match the CMF of each space (see Fig. 9).

## CONCLUSIONS

The collaborative creation facility of CSI-Tokyo has been completed. Much of Hitachi’s Social Innovation Business will be created by utilizing this facility effectively and using the unique tools that are installed in the facility for rapidly processing discussions.

This space design project has combined knowledge and design sense from both inside and outside the company. This facility has achieved its goal of providing a space for creating innovations by fulfilling all the requirements because of all the talented people who joined this project and worked in close collaboration with each other. Our great appreciation goes to all the people who were involved in this project.



Fig. 8—Photograph Displayed in Lounge. Produced from photographs taken of the dawn sky on April 1, 2015, the work represents the launch of the new Global Center for Social Innovation (CSI).



Photograph: Masaya Yoshimura

Fig. 9—Flower Arrangements Placed around the Facility. The flower arrangements have been created specially to coordinate with the color schemes of the spaces in which they are placed.

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