



KONICA MINOLTA

News Release

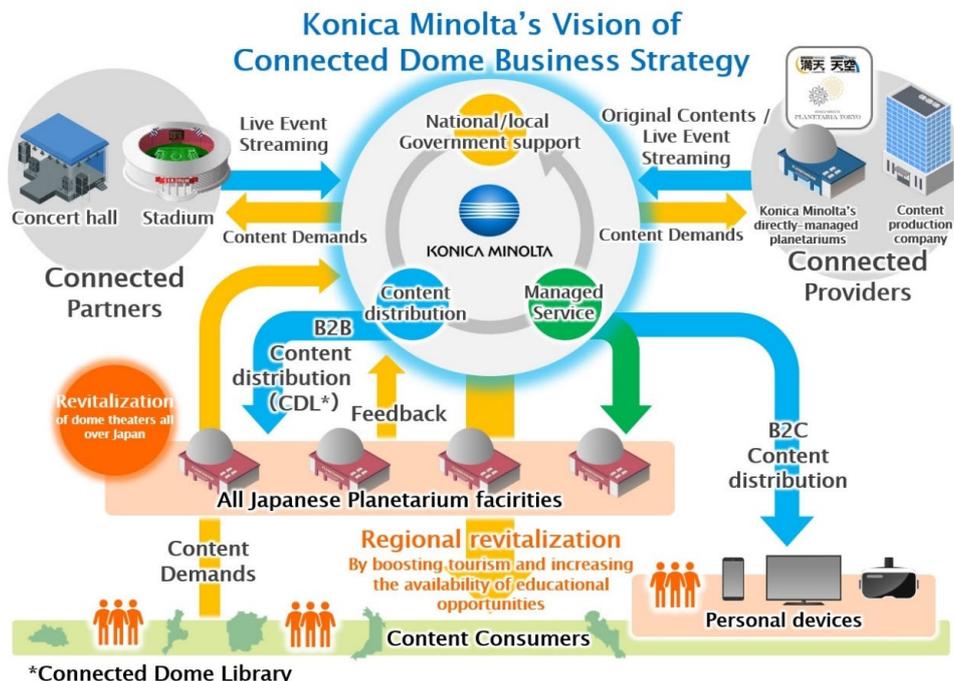
Konica Minolta Launches “Connected Dome” Business Strategy to Bring Digital Transformation to the Planetarium Industry Adding Greater Versatility to Dome Theaters by Distributing Contents that Give an Overwhelming Sense of Presence to Audiences

Tokyo (October 21, 2020) – Konica Minolta, Inc. (Konica Minolta) announced that the company and Konica Minolta Planetarium Co., Ltd. will launch a new “Connected Dome” business strategy to bring digital transformation (DX) to the planetarium industry in Japan. The strategy is designed to build a platform for next-generation video projection services for dome theaters, and to enable the theaters to be used for other purposes, by distributing contents that give an overwhelming sense of presence to audiences.



Connected Dome Business Strategy

Konica Minolta is ready to add Connected Dome, a new platform-based service combined with network and cloud services, to its existing visual solutions designed mainly for planetariums. The new Connected Dome service is based on Konica Minolta’s exceptional full-dome and VR video projection technologies that deliver an overwhelming sense of presence and immersive experience to audiences. This service is designed to connect planetariums, which have been run separately, via a network to provide a wider range of contents, while helping to enhance the efficiency of running planetariums and reduce their operating costs. Konica Minolta will also offer its cutting-edge digital technologies to enhance the value of dome theaters. These technologies include an edge server that enables planetarium operators to create original planetarium programs and DYNAVISION-LED, an LED dome system with a light-emitting screen.



In the future, Konica Minolta hopes to deliver interactive, full-dome immersive experiences to audiences by enabling all of about 350 planetariums located throughout Japan to be used for public viewing of sports events and community concerts. The company also aims to make it possible to watch the same starry skies in different planetariums and for audiences to communicate with each other; speak with space station crew; and watch live-streamed concerts and other events. The company believes that by enabling interactive distribution of video contents in Japan, it boosts tourism and increases educational opportunities, thus contributing to regional revitalization.

Outline of the Connected Dome Business

As the only company in the planetarium industry that has directly-operated planetarium theaters, content production and system development, Konica Minolta is poised to bring drastic changes to the dome theater market by using its unique resources and know-how.

The following achievements by Konica Minolta have set the stage for the Connected Dome business:

- Launch of DYNAVISION-LED, an LED dome system for 360-degree video projection, in the market in July 2019
- Acquisition of RSA Cosmos, the world's leading digital planetarium manufacturer, in December 2019
- Online distribution of VR programs for 360-degree projection produced for Konica Minolta's directly-managed planetariums from May 2020
- Online distribution of concerts held in Konica Minolta's directly-operated planetarium theaters from October 2020
- Selection of a Konica Minolta's directly-operated planetarium theater as the venue for J-WAVE INNOVATION WORLD FESTA 2020, a no-audience concert for live streaming, in October 2020

Konica Minolta's new directly-operated planetarium theaters that are opened in the future will be equipped with DYNAVISION-LED and a new content distribution system based on the "Connected Dome Library" service.

New Connected Dome Library Service

As the first step of the Connected Dome business, Konica Minolta will start the Connected Dome Library full-dome digital content distribution service to deliver planetarium programs via network.

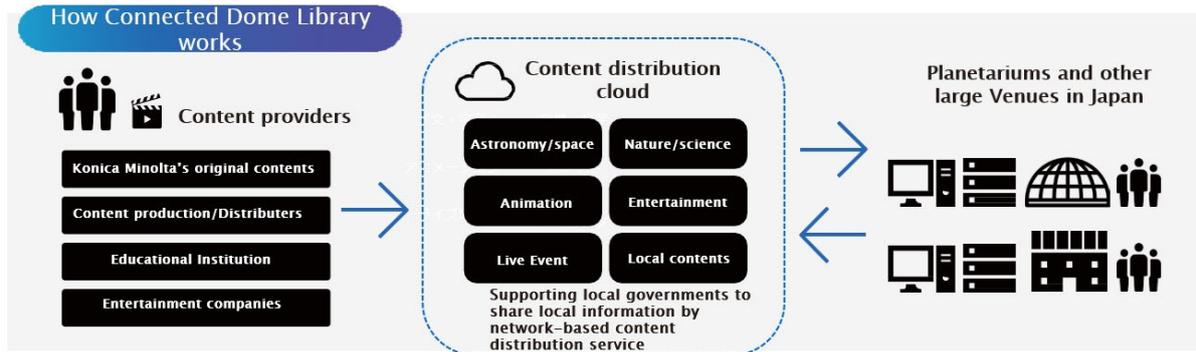
Conventionally, when a planetarium installs a new content, the settings of the content player have to be customized to each planetarium. This work takes a few days to complete, during which the planetarium has to be closed for installation. In contrast, the Connected Dome Library service enables contents to be downloaded via the cloud, stored in a dedicated server, and projected directly on the screen. This makes it possible to show a broader range of programs easily and effectively, and helps reduce down time.



This convenient content distribution system enables planetarium operators to present a wider variety of programs more flexibly, which encourages repeat visitors. It also improves the workflow and productivity of the staff at planetariums, allowing them to use more of their time for creative work.



Furthermore, Konica Minolta plans to connect dome theaters and distribute events live across them to enhance the value of planetariums as information centers.



In developing Connected Dome Library, Konica Minolta checked the basic specifications and carried out a demonstration experiment in cooperation with Tsukuba EXPO Center, which owns a 25.6 m-diameter planetarium, one of the largest in the world, built to commemorate EXPO '85. The demonstration was conducted by showing one of seven different planetarium programs in the last slot in the daily schedule, instead of the conventional showing of a fixed program every day. The result was a 150% increase in the number of visitors from the previous year, proving the effectiveness of the Connected Dome Library service as well as its usability.

The Connected Dome Library service will be introduced to Tsukuba EXPO Center in March 2021, Sasebo City Children's Science Museum "Hoshi Kirari" in April 2021, and then Konica Minolta's three directly-managed planetariums. Eventually, Konica Minolta will expand its content distribution service to planetariums all over Japan.

Tsukuba EXPO Center



Sasebo City Children's Science Museum "Hoshi Kirari"



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