Cisco Helps Indoor Maps Make Smart Exhibition Possible

Customer profile
Name: Indoor Maps Technology Co., Ltd.
Industry: Internet
Location: Guangzhou
Business pain points

- Exhibitors have demanding requirements for network customization, especially requirements for coping with increasing and frequently more-than-expected growth
- Operation and maintenance of conventional network is predominantly configured manually, which is vulnerable to malfunctions, and reduces drain on resources
- The diversity and contingency of applications and services calls for networks with sufficient capability and resilience, which can be deployed efficiently
- How to deliver accurate marketing data for operation by performing data mining over Wi-Fi services

Solution

- Cisco DNA Assurance
- Wired and wireless integrated access (SDA in Future)
- Cisco CMX customer orientation and behavioral data analysis

User benefits

- Deployment and change of network speeds up to improve the user experience
- The costs of installation, operations, and maintenance are reduced, and network failures could be identified rapidly
- The APP was developed to integrate with the Cisco CMX traffic flow information for accurate advertisement marketing
- Business sustainability and investments were secured to boost business service value

Project overview

How to make traditional exhibition services “smart,” and enable them to bring more valuable experience to sponsors, exhibitors and visitors? With the help of Cisco®, Guangzhou Indoor Maps offers a solution: supported by Cisco’s world-leading intent-based networking platform, massive customer data-based business intelligence is introduced to turn a conventional exhibition into digital one and to tap their potential!

When it comes to exhibition services, we deliver to different exhibitors by designing and erecting booths in venues to correspond with their respective brand characteristics and choose features of exhibition materials in order to attract visitors to their exhibition stands.

In the view of Indoor Maps IT Co., Ltd. (hereinafter referred to as Indoor Maps), the, however, have become “a thing of the past” for exhibition services. In this new digital era, Indoor Maps intends to enrich exhibition services, making them smarter and more valuable.

Established in February 2014, Indoor Maps, which is located in the New City of Pearl River, CBD of Guangzhou City, is well positioned to run diversified businesses. On the one hand, as a professional partner of Amap, it has introduced HappyShare, a timeshare lease brand of electric cars, as well as Internet-related businesses.

Meanwhile, Indoor Maps also focuses on the Smart City Solution sector, transforming from a traditionally integrated business to operation of the mobile Internet and IoT. Among them, it predominantly made a foray into the smart exhibition sector, delivering digitized services for smart exhibition and stadium operation.

Specifically, it delivers services in two major dimensions: the basic one, designed to provide an exhibition venue with high-quality Internet access (wired and wireless networks). And a second underlain by the basic one, that is, business smart analysis service integrating Wi-Fi, Bluetooth, APP and massive customer data. In this dimension, intelligent analysis of such data as statistics of visitor traffic in the venue, time visitors stay in a booth, and behavior tracking turns this data into information valuable to business. This precise marketing data, in turn, could be leveraged to enhance a sponsor’s operation and management, boost visitor traffic, and improve exhibition experience.
“The intelligence, visualization and automation of the intent-based networking of Cisco meet our requirements for rapid deployment, maintenance, and troubleshooting, cut down on manpower and material resources, and effectively secured our investment made during the operation period! Meanwhile, it enables us to have our digitized business expanded rapidly by developing the interface, thereby improving business flexibility and allowing us to offer customers more value-added services to data mining.”

- Luo Yuansheng
General Manager of Indoor Maps

Smart project calls for a smart network platform
Recently, Indoor Maps undertook a smart exhibition project for the China Import and Export Fair (hereinafter referred to as the “Canton Fair”). The Canton Fair, which was founded in the spring of 1957, is held biannually in Guangzhou every spring and autumn and co-sponsored by the Ministry of Commerce and the Guangdong Provincial People’s Government. It is a first-of-its-kind comprehensive international trade fair in China in terms of history, scale, and categories of commodity. The Canton Fair’s project calls for a digitized platform to meet requirements of multiple businesses at present and in the future, as well as for network infrastructure with adequate support capability. These requirements call for capability, stability, and development of interface and other equipment. Meanwhile, this network equipment is expected to reduce service costs and make rapid diagnosis and intelligence possible during their operation.

In summary, the project has core demands for operation platform and underlying network architecture as follows: the system architecture and design are required to cope with increasing and more-than-expected data, amounts of users, and positioning and demands in the future. Furthermore operation platforms and networks must be capable and resilient enough and efficiently deployed to accommodate exhibitions for numerous sectors and their sponsors, exhibitors, purchasers and a diversity and contingency of application and services. They must enable Wi-Fi and networks to support large-traffic flow, and higher-intensity-based precise map and precision positioning. Operation platforms and networks must also be configured in an intelligent and automatic way, deployed rapidly, and be enabled for rapid troubleshooting.

Intelligent support of the Cisco DNA digital network
In response to the pressure adjustment to Indoor Maps’ business requirements for operation of venue and system launch scheduling, Cisco proposed the solution Cisco Digital Network Architecture (Cisco DNA).

Specifically, Cisco enables Indoor Maps to make across-the-board network partition design possible for Canton Fair, as well as introduce the brand new Catalyst 9K series switch to build new core, convergence, and access architecture, perfectly making unified access to wired/wireless networks available in the whole venue. Cisco also provides Software Defined Access (SDA), which enables businesses to mobilize network resources as required by exhibitors for their business for more flexible network segmentation and business strategy just by one simple drag move with mouse without changing the underlying hardware configuration of the network.
With such a large-scale network being deployed, Indoor Maps was impressed by the "automatic" characteristics of Cisco DNA. With the help of the Cisco DNA Center, the overall network can be automatically deployed, making it possible to configure thousands of network equipment items instantly with a simple one-click—which would otherwise take a multitude of engineers many hours to perform.

At the operation level, Cisco DNA Assurance technology contributes to make the net-wide visualization possible, and effectively reduces operation and maintenance management cost. Meanwhile, Cisco wireless sensor technology is leveraged to enable Indoor Maps to keep abreast of the health status of the wireless network and system availability of venue. Network-wide wireless network status report is made available upon demand before the opening of major exhibitions, turning passive operation and maintenance into active and intelligent operations. The APP, which was developed based on data derived from Cisco Connected Mobile Experiences (Cisco CMX), enables business to detect and connect, basing on location in its premise, and finally interact with customers, making it possible to accurately push venue ads and lay out booths more intelligently.

In addition, the Cisco also offers Cisco Solution Support, that is, solution support service, which helps Indoor Maps to provide one-stop technology support, which as a unified interface, enables intensive troubleshooting, offers final resolution, and streamlines operation and maintenance of Indoor Maps in an environment of multi-supplier solutions.

Be flexible and efficient, reduce costs, and secure business sustainability

With the assistance of Cisco DNA architecture, Indoor Maps has successfully deployed smart exhibitions for the Canton Fair. Indoor Maps optimized network strategies by business type through a smart exhibition service platform and basic network, and reduced excessive technician staffing and debugging on site through intelligent and rapid deployment, turning the conventional network, which is configured manually, into an automatic, distributed on-demand network with high availability.