



22Miles & Intel Guide Users Through Manhattan's Modern Transportation Hub

The new Moynihan Train Hall at New York City's Penn Station ushers in the future of the city's legendary train station. Intel-powered 22Miles technology plays a key role in transforming the user experience with visual communications, wayfinding, touchless interaction, and secure mobile control.

A Manhattan Mainstay

New York's Penn Station has been the transportation epicenter of the Big Apple for nearly a century. After many decades of wear and tear, the sprawling grounds recently underwent its most significant facelift and reimagining to accommodate record-high traffic to Midtown Manhattan.

Championed by its namesake, Senator Patrick Moynihan, the opening of the \$1.6 billion Moynihan Train Hall at New York's Penn Station demanded a technology infusion that matched its lofty goal: to reclaim prominence as a focal point of travel in the city.

Navigating Through "America's Front Door"

The architecture of the new Moynihan Train Hall is at the intersection of classic and modern-edge design, with massive parabolic skylights serving as a welcome in illuminated contrast to the old Penn Station's darker, more underground ambiance.

Though bright, Moynihan’s physique needed more than just a fresh look to provide an outstanding visitor journey. Major carriers like Amtrak are operating in the new station, while multiple floors of the station also house retail shops, eateries, the NYC subway, and other major transportation ports all present travelers with plentiful variety. With this assortment also comes the challenge of quickly navigating and interacting with it all.



Moynihan Train Hall’s curators realized that with thousands of people moving around the station daily, visitors would need a sustainable way to get to their destinations quickly and without difficulty. The station needed a new solution to compliment the way that passengers travel today, including access via mobile devices, voice-command, support for real-time GPS, and digital wayfinding apps around the station. The facility’s fast-paced nature also required a content management system that would deliver smooth interoperability across signage technology and an easy-to-update interface for keeping always-changing NYC travel information up to date.

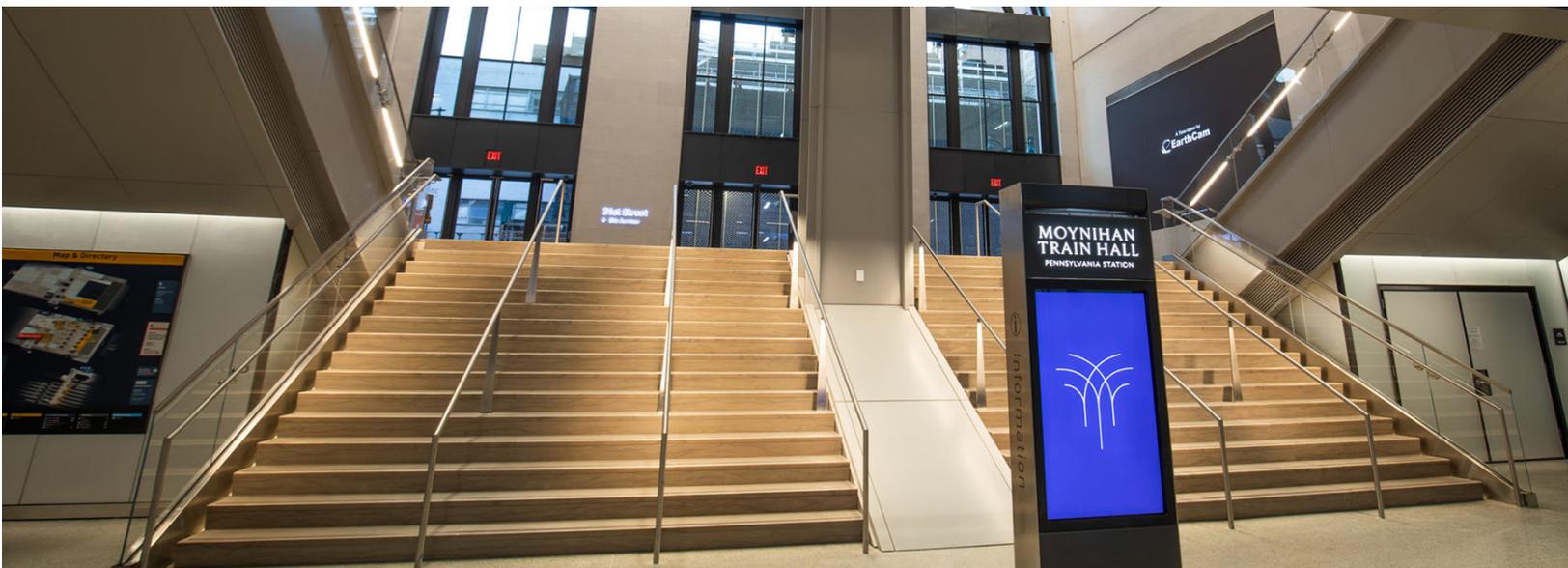
With the current state of COVID-19, the station also needed a solution that would meet the hygienic and logistical challenges of navigating a public place. Facing an uncertain future, the development team

sought a technology that could adapt to potential changes impacting travel and tourism, both now and in the future.

A Future-Proof Visual Communication Platform

The development team sought out 22Miles' Interactive 3D Wayfinding, Secure Mobile Control, and Touchless Touch solutions to check all the boxes: The combination of these visual communications solutions provides visitors and travelers from all over the world a rich, intuitive, and multi-lingual digital experience that simultaneously enhances the robust architectural and operational allure of the new facility. With a combination of technologies, 22Miles offers Moynihan a fresh infusion of dynamic and diverse technology, integrated into a solutions suite that was easily customized to the unique needs of the reinvigorated New York city transportation hub.

To deliver an excellent visitor experience on a more granular level, 22Miles integrated a Secure Mobile Control system, which allows users to use their mobile phones to control interactive screens without touching the display itself. In a post-pandemic world where viral spread looks to be an issue even after vaccinations have become more common, this technology provides a fully touchless experience, as users can interact with public digital signage from their cell phone via a digital mouse cursor. The solution requires no user downloads or extra steps; a user can simply scan the provided QR code on each kiosk home screen to allow for activation of a web link to accept the mobile control. The QR codes are dynamic and encrypted, alleviating any concerns for meeting security protocols.



At the center of it all sits Intel-powered 22Miles visual communication and 3D Interactive Wayfinding, spread across twelve 4K interactive displays positioned throughout Moynihan Train Hall. 22Miles software provides a centrally managed, visually dynamic, interactive experience to give passengers, visitors, and officials everything they need, ensuring that everyone gets to where they need to go, quickly, efficiently, and safely. 22Miles software completes centralized, visually dynamic screens give passengers, visitors, and officials everything they need, served in an increasingly interactive and intuitive way. When idle, the screens serve up targeted advertisements to passengers, while waiting to be indulged by touch-free devices.

The screens serve up what users need, displaying everything from wayfinding to specific carrier data, including:

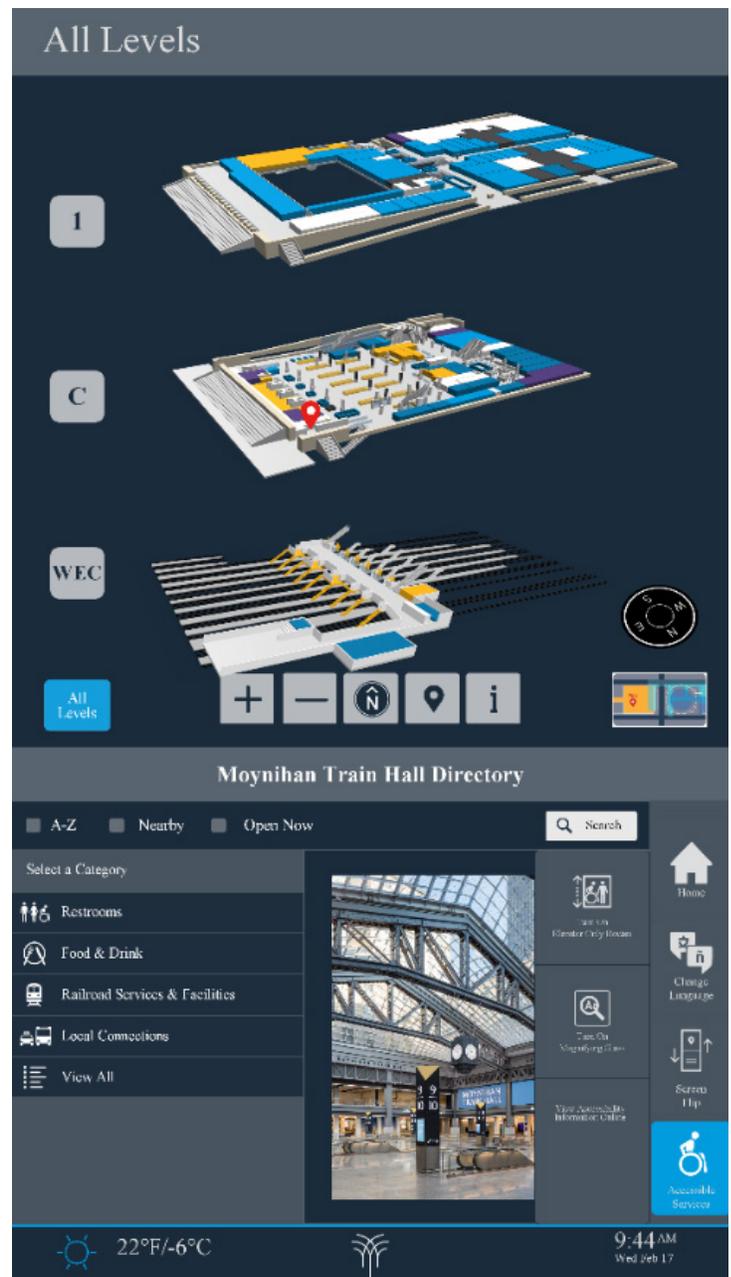
- AirTran travel information
- Automated rotational advertisements
- Amtrak Travel Feeds
- Events calendars, activities, and attractions
- Train, flight, route, and destination points
- 3D Interactive wayfinding maps
- Interactive maps of the surrounding New York Area

An Interactive, Immersive, and Informative Journey

With the completion of 12 interactive wayfinding displays, Moynihan travelers and visitors enjoy fully interactive 3D navigation around the massive station, while also gaining instant access to critical information on departure times, destinations, city routes, tourist attractions, and transportation methods. With Secure Mobile Control and Touchless Touch, users can interact using their own mobile devices for added hygienic and safety precaution or via intuitive touch screens. Moynihan’s project developers also have the option of adding gesture and voice commands for another accessible way to interact touch-free.

The displays boast more than 10 language input options including English, Spanish, Mandarin, Italian, German, French, Portuguese, Japanese, Korean, Russian, and Arabic. With a population as diverse as New York City’s, not to mention thousands of international travelers moving through the station daily, these flexible linguistic integrations were at the forefront of the content design. In keeping with the goal of accessibility, the technology also meets full ADA compliance from elevators to alternate routes, as well as a digital magnifier, screen adjustments, and an operation index.

From a management perspective, the train hall’s administrators have instant access and visibility to engagement data recorded by the wayfinding software, which allows them to analyze and



implement targeted advertisements, infotainment, news, weather reports, and more to generate revenue and increase traffic for the facilities in the station and around the city. The powerful, adaptive functionality of 22Miles content management system gives the station the flexibility to customize the user journey and maximize administrative goals while providing quality data to inform key decision-making initiatives.

The curated combination of touch-free screen interaction, 3D interactive wayfinding, and multi-language display technology brings an icon of New York's past into the present. As public safety and navigation needs continue to evolve, the 22Miles platform will allow managers the option to integrate additional features and update content easily and seamlessly.

With multiple layers of wayfinding technology and options for interaction, Moynihan can now offer visitors a truly customized, streamlined, easy-to-navigate travel journey, now and in the future.



22Miles Inc. an Intel® IoT Solutions Alliance Affiliate, has been a leader in Digital Signage & Wayfinding for nearly two decades.

From the beginning, Intel® has played a pivotal role, with the two companies working together to lead the industry in the development of a unique technological ecosystem, a system featuring the advanced processing power of Intel® solutions, combined with 22Miles' Digital Signage and Wayfinding CMS engine. 22Miles award-winning software helps customers seamlessly develop and deploy unique projects, serving the Banking, Government, Corporate, Education, Gaming, Healthcare, Hospitality, Quick Service Restaurants, Smart Retail, Transportation, Venue space, and other markets.

