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**Digital Signage Increases Customer Satisfaction and Security on Milan's Public Transportation Network**

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**THE CLIENT**

The Milan Transport Agency (ATM) is a private organization working in partnership with the City of Milan in Italy. ATM provides all of the public transportation services in the city, including underground, buses and trams.

In 2008, both parties started a project called "Transportation Renewal" with the objective to modernize the underground and the "above-ground" public transport network. The revitalization process included replacing all the vehicles with more environmentally friendly versions, increasing the efficiency of the transportation network, improving safety and the travelers comfort.

The goal is to complete the substitution or renewal of all vehicles and the modernization of the network by 2015.

**THE CHALLENGE**

When creating the Transport Renewal project plan, ATM's communication office identified the need to communicate more effectively and efficiently with the users of the transport system and with its own staff. The communication office required to share important information for trains regarding:

- Time tables;
- "Live" delay information in case of problems on the line;
- Alternate routes; and
- Safety messages in case of emergencies.

Furthermore, the system had to function as a communication tool between ATM's staff at the stations or vehicles and ATM's headquarters so that immediate action could be taken in case of problems. To create maximum manageability, the network had to be integrated with the existing services and hardware in order to be operated from the central control room.

**THE SOLUTION**

It was clear to ATM that the solution would be found in a digital signage network that could live up to all the information tasks. ATM's IT Department decided to look for a reliable digital signage platform that could guarantee the flexibility of communication over an extensive network and simultaneously be able to broadcast different messages.



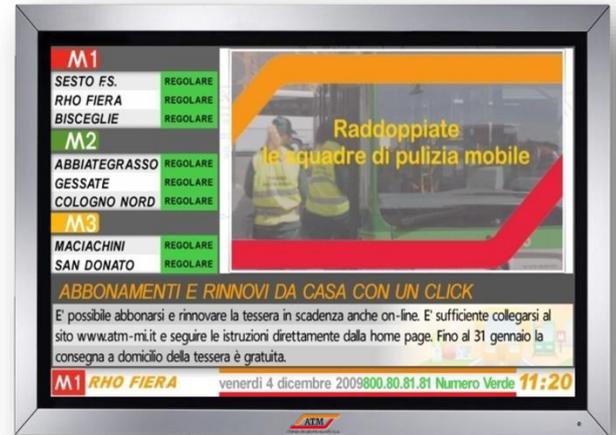
**ATM – Milan Transport Agency**

- Underground and above ground transport network
- Coverage: Milano and 45 towns of the province
- ATM Transport Network is used by 650 million people yearly
- Milano Underground Network has 3 metro lines and a total of 94 stations



It was also a prerequisite to find a company that could manage and execute the project by integrating existing system functions (like panic alarm, "train at station signaling," etc.) with the new digital signage system and that could guarantee the undertaking of the project in phases maintaining disruption and offline time limited.

M-Cube was chosen to develop and implement the underground section of the network and the above ground "Linate /San Babila" bus line section as it is a highly qualified multimedia company and it is able to meet the customer's set-time schedule requirements. M-Cube is also to provide ongoing technical support and content management support. Scala was chosen to provide the software because it is the most reliable and flexible digital signage platform on the market.



### Underground system

- **Mezzanine:** 42-inch LCD monitors are positioned above the stations' turnstiles communicating ATM corporate messages, network service updates, alternative routes and emergency messages. The monitors are certified to comply with special safety regulations for displays at stations. They are sealed in unbreakable glass as a fire precaution measure, so they are impossible to set on fire and will not explode in case of fire.
- **Don't Panic Buttons** for the staff are connected to the "Mezzanine" monitors to provide default messages in case of an emergency. A push of the button will also alert the central control room, which will manage the messaging toward the stations that are affected by the situation or towards the entire network.



### Above-ground system

M-Cube has implemented the modernization of the Linate Express information pole display on the "San Babila/Linate" Airport line, substituting the old LED monitors with two 26-inch LCD monitors per pole to ensure visibility from both sides. The monitors have received a special "optical bonding treatment" to give good visibility in all weather conditions, especially during bright weather conditions or when sunlight shines directly onto the screens. These displays provide information about the position of the bus on its route, as well as the arrival time at the stop where the traveler is watching the screen. This geo-tagged mapping solution created by ATM was integrated in the new system by M-Cube.



**Content**

All messages are communicated in Italian and English, and this content is managed by ATM from its central control room and is distributed via a wireless/3G protocol. The messaging consists only of service announcements or ATM promotions.

**External Applications**

A number of external applications interact with the digital signage system that was created:

- The GPS functionality installed on the "Linate Express" buses provides on route information that is displayed at the bus stops.
- The existing data exchange system provides basic transportation information that is used by the new network.
- A detection device at the tracks delivers information about the presence of a train at a certain station.
- A slow-down alert device signals the speed decline of a train. Decreasing speed of a train can cause dangerous situations because the tracks are used by multiple lines. The slow-down alert-device monitors these situations so that action can be taken to divert or reroute trains. The interaction with this application was especially challenging to integrate in the new digital signage network due to the different set-up of the two systems.

**THE BENEFIT**

The new network can now communicate efficiently and in real-time to all stakeholders internally and externally improving the service to customers, managing congestions better and improving safety measures.

On top of this, the staff is no longer tied up the majority of the time informing the public verbally regarding time schedule issues. They are able to concentrate on other duties to provide better service to the travellers.

**THE FUTURE**

The video information display system at the turnstiles has been implemented at present in eight underground stations comprising a total of 25, 42" LCD monitors.

"The adoption of the Scala platform as ATM's corporate decision to implement its digital signage network was a strategic choice. The new platform clearly meets the requirements of an ever-growing need to provide up-to-date and timely information to the public using our transportation services.

Because of its flexibility to integrate with our existing databases as well as its compliance with Service Oriented Architecture allowing the interface with our current application environment, the Scala system enables ATM to communicate important information about the transportation network in an easy-to-understand format, using captivating graphics and by distributing multiple messages simultaneously over a complex network without any extra development work."

**Roberto Carreri**  
**Project Manager**  
**IT Department, ATM**

## CASE STUDY: ATM Milan Transport Network

The target for completing the installation of all monitors and displays for the entire underground transport system Milan is set for 2015, along with the full renewal of all network vehicles.

### ABOUT ATM



Founded in 1932, Azienda Trasporti Milanesi (ATM) is a Public Limited Company owned by the Milan Municipality. We manage public transport in the Lombard capital and

in 45 provincial towns, serving an area with a population of 2.4 million people. Over the years, the services provided by our company have multiplied, both in the transport sector and in the commercial and leisure sectors. Today ATM is a company that designs and manages services and hi-tech systems for sustainable transport. To optimize the management of these activities and offer a service able to meet the changing needs of the community the company was restructured as a group on 1 January 2007, with nine companies headed by the parent company ATM SpA.

### ABOUT SCALA



Driving more than 500,000 screens worldwide, Scala is a leading global provider of digital signage and

advertising management solutions. Scala is the world's first connected signage company, offering the leading platform for content creation, management and distribution in digital signage networks and the first unified platform for advertising management of both traditional and digital signage networks.

The company's customers include Rabobank, IKEA, Burger King, T-Mobile, Virgin MegaStore, Warner Brothers, The Life Channel, Rikstoto, Repsol, NorgesGruppen, Audi, ECE Flatmedia, Kaufhof (Metro Group) and thousands more.

Scala is headquartered near Philadelphia, USA, and has subsidiaries in Canada, The Netherlands, France, Norway, Germany and Japan, as well as more than 450 partners in more than 60 countries. [www.scala.com](http://www.scala.com)

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### ABOUT M-CUBE

M-Cube SpA, part of the Media-Technologies Group (Trieste, Italy), started its operations in 2001 from the vision of offering new technologic marketing solutions for the point of sale. Its activities started with the patented technology of web-based in-store radio.

In 2004, M-Cube sealed its partnership with Scala for the Italian territory. M-Cube specializes in audiovisual/multisensory technology and is a leader on the Italian territory for the development of ad-hoc solutions. As a dynamic company in continuous evolution, M-Cube is capable of adapting the new market trends to the specific needs of its customers coming from multiple industry sectors: banking, retail, corporate, hospitality and transport.

M-Cube customers include: Giorgio Armani, Trussardi, Benetton, Mc Donalds, Euronics, Esselunga, Despar, Obi, Stefanel, Illy, UBI Banca, IBM, Cariparma, Michelin, ATM Milano, ICMoving, Acqua & Sapone and many more.