Case Study: LED Traffic Info in Almaty and Astana

Almaty and Astana are the largest, most developed, most ethnically and culturally diverse, as well as the most economically powerful cities in Central Asia, thus, the indispensable need for the sophisticated traffic info display.

Challenges

- The Smart Transport Networks outdated infrastructure, traffic systematization and streamlining
- Need for an automated info space for the entire city
- Need for a centralized system control
- An obsolescent static road navigation media
- Need for an outdoor advertising with new efficient multimedia display of information
- Need for an urgent information dissemination on all screens simultaneously

Solutions

- Digital ‘traffic light’ and traffic jam real-time info allowing drivers to take informed decisions
- Digital road signs and live video from cameras installed in the direction of traffic
- Animated warning signs about pedestrians crossing the road
- Display of weather info to adjust the driving style correctly, in particular off-season
- Animated schemes of complex interchange and temporary loops
- Nearby parking and other street info
- Commercial advertising with substantial return on investment
- Display of tourist info, social media and emergencies alerts
Result

The very first outdoor LED smart display of traffic info in Almaty was installed in August 2015. That was a fully automated system processing traffic cameras' data through analytic system. Data is captured through cameras and sensors installed in the direction of traffic, and received directly on the media player. Depending on received data, an image and info in three languages: Kazakh, Russian, and English is being updated in a real time mode on a LED screen.

Almaty Smart City today is a sophisticated system network for visual navigation in the metropolis as one of the key components underlining the principle of Smart City. The solution allows creating of unified citywide vibrant and dynamic info space with fundamentally new capabilities of centralized smart control. The LED screen installation is vertical very different from standard advertising formats for secure and easy perception of info by drivers in traffic. Design is tailored especially for drivers, it’s lightweight layout with well balanced shapes, colors and fonts.

This solution is the ultimate machine-to-machine communication which is the future for notifications and advertising systems, as well as retail and city info displays. This solution does not rely on a pre-recorded video, but is a smart and automated solution supported by media players, servers, sensors, and Internet interworking. A result is a real time image made by machines serving people without any effort on their side.

Integrator
BILLBOARD VIDEO
SpinetiX Certified Silver Dealer
Full-service engineering company specialized in comprehensive and fully integrated solutions
Galiev Yerlan, Project Manager

Technology
10mm pixel-pitch LED
SpinetiX HMP

Key Features
CCTV video decoding
Data widgets
Any format, any resolution
Synchronisation