arcana INFO
Delivering IT brilliance
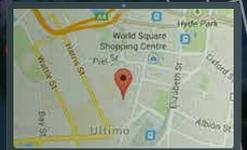
GPS Tracking System for Transport and Fleet Management

Pakistan's first vehicle surveillance system implemented in the education sector

Industry Outlook

The higher education system in Pakistan consists of around 163 universities, graduating approximately 3 million students every year. The literacy rate is profoundly increasing and stands at 58% in 2018 with expectations to increase in the coming years. With such developments, the quality and rapid security concerns are calling for more sophisticated systems that not only eliminate risks, but also increase the overall standards of the entire educational experience.

Student transportation, as one of the many aspects of an educational experience, is being modernized through technology and is now gradually moving towards the prevailing digital transformation throughout the industry in Pakistan.

--> Explore how Arcana Info is digitizing the education sector

The Client

Our client is one of the top prestigious universities of Pakistan in terms of research and standard of education delivered. In order to uphold their position in the education sector and to improve their infrastructure and security concerns, our client required an elaborate digital system to cover their entire vehicle tracking and fleet management operations seamlessly and optimally.

Having years of experience in the education sector, Arcana Info stepped up to bring its technological expertise in action. By developing such a system that agrees to the client's concerns and equips the education sector with a more digitally advanced solution, Arcana Info displays its extensive proficiency in its core technology industry.

Client's Challenges

As one of the most prestigious educational institute, the client wished to maintain and improve its status by offering a state of the art transport system for its students.

The client required utmost ease and efficiency in managing buses, drivers, routes, timings, emergency situations and live support for passengers, by utilizing the latest technology and not compromising on reliability or security. They also wanted to drastically reduce the waiting time for students and provide feasible alternatives in case a bus was missed. Moreover, they aimed to improve student security and monitor bus routes for fuel saving purposes.

Arcana Info stepped in by thoroughly addressing the clients concerns and developing a **high tech bus surveillance system**.

How We Helped?

We looked in detail upon each of the client's concerns and developed a web based administration panel for the management of busses, tracking management, report creation, big data analysis, user management along with login options, data backups and live hosting. Multiple screen display was provided to cater to the selection of multiple routes.

We provided ease in routes management by offering CRUD (Create, Read, Update, and Delete) operation for routes and stops along with terminal and stops management with latitude and longitude selection for each route and estimated arrival timings for each journey.

Furthermore, a mobile application was developed for the ease of students to be able to locate their bus, view expected arrival times and see alternate bus routes in case a bus is missed.

Solution Overview

Understanding the challenges faced, we developed an intelligent telematics system by connecting the client, vehicles and the passengers together to drive transport efficiencies. Appropriate, PTA approved, software and hardware was deployed and installed to cover all requirements including an advanced GPS tracking system to ensure real time tracking with maximum accuracy, automatic updates, speed alarms, data logging and more.

Business Outcome

With GPS tracking in place the client can easily locate its busses with real-time tracking and stay updated about the exact location and current status of a vehicle. Moreover they can optimize their routes, reduce fuel consumption and operations expenditure and ensure student safety. In case of certain emergency situations such as over speeding, or extra delays in routes, alerts are automatically generated.

The client has the option to monitor vehicles 24/7 and easily add, update, and delete routes and its information through a simple platform along with bus-driver mapping. Passengers can view bus timings and delay information in real time and plan their travel accordingly.

About Arcana Info

Arcana Info is a systems integration, IT consulting and outsourcing firm with a focus on helping today's enterprise for a better tomorrow. Partnering with global technology leaders and banking on the decades of experience behind each team member, Arcana Info is leading the way to become a dependable value added partner for organizations of all sizes.

To know more about us, please visit www.arcanainfo.com or write to info@arcanainfo.com. For further assistance, please reach us at +92 (51) 111 ARCANA.

#betterandmore is our series of client success stories and project case studies. The philosophy behind **'Better & More'** is to integrate smart solutions that not only harness business performance but enable the enterprise for a sustainable and scalable future.

www www.arcanainfo.com   📞 +92 (51) 111 ARCANA

Islamabad
656, Street 41, Sector E-11/4,
Islamabad - 44000, PK

Lahore
232, Street 9, Cavalry Ground,
Lahore Cantt, Lahore - 54810 , PK

Karachi
270/1, Nacon House, D.M Wafai Road,
Karachi - 75500, PK