

Transportation Systems Move Beyond The Vehicle

Smart Vehicles Give Way To Smart Transportation

As wide area communications standards evolve (GSM/GPRS and CDMA - EVDO/ EVDV/1RXTT) and roll-out continues, the interest in remote monitoring of vehicles promises to increase an already thriving Telematics and Fleet Management industry. Common carriers can now perform remote system diagnostics on their vehicles as well as communicating with drivers. Another impact pervasive networking technology is having on the market is in field force automation. Service and maintenance has always been a “feet on the street” business but with M2M systems, technicians can be dispatched with a problem diagnosis and the proper parts to be able to address the problem on the initial visit. This reduces truck rolls and promises a significant savings in labor as well as wear and tear on a vehicle fleet.

Leaders in the transportation venue need to monitor vehicle performance remotely, gain better control of customer relationships, increase safety, and provide 24-hour assistance and maintenance. They also need to provide telematics and navigation solutions, since route-optimization plays an important role in B2B logistics and supply-chain efficiencies. More direct routes, increased vehicle reliability, and decreased downtime (by decreasing breakdowns or fewer drivers getting lost) means increased profit. The transportation venue needs solutions that are not prohibitively expensive, robust (lasting the life of the vehicle), remotely upgradeable, easily customizable, and that offer a quick financial benefit.

All of these drivers are becoming ever more acute due to the rapidly increasing price of oil and fuel. The telematics opportunity has historically focused much attention on the vehicle system and driver interaction. We believe we have now finally begun the integration of these systems with smart transportation systems and infrastructure.

Key Forces & Trends

Developments in the transportation market are driven largely by route-optimization and increased safety. Intelligent highway systems will feature advanced sensors capable of sensing an accident and signaling for emergency services. On the driver side, real-time information about accidents and roadway congestion could be merged with advanced GIS capabilities, enabling motorists to develop alternative travel routes. While transportation is not yet a rapid adopter, the benefits of networking are obvious and make the market ripe for adoption.

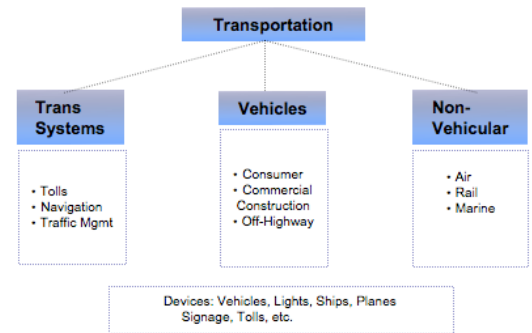
Harbor Venue Coverage

Venues and markets we address in our Pervasive & M2M research and analysis include:

- Energy & Power
- Industrial Systems
- Retail
- Smart Homes & Buildings
- Healthcare
- Physical Security
- Transportation
- IT & Comms Systems

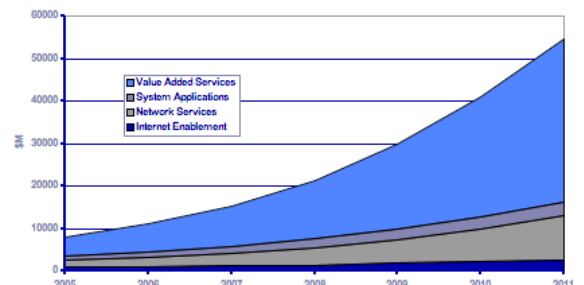
Transportation Venue Segmentation

The Transportation Venue includes cars, boats, planes, tolls, and other devices for traffic management. These services are designed to monitor vehicle health, control traffic congestion, and optimize vehicle performance.

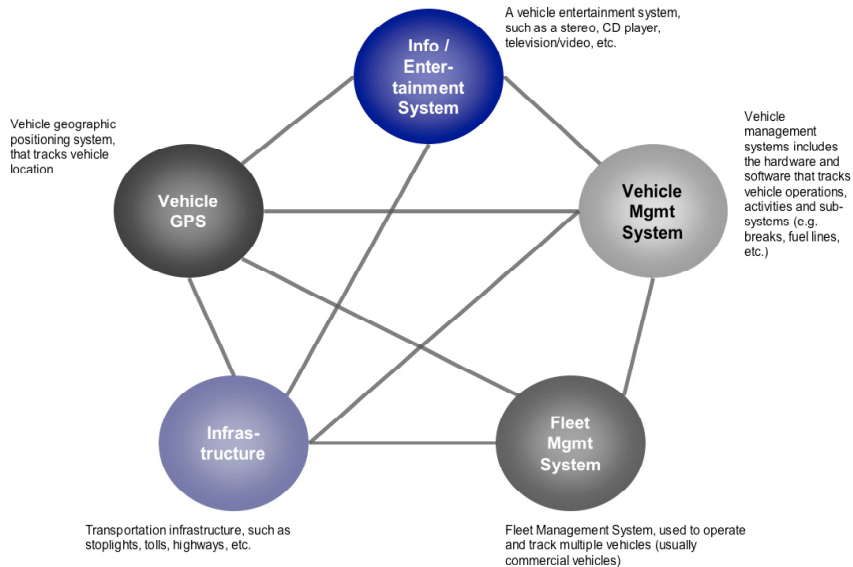


Venue Scale & Growth Potential

Value added capabilities and managed services within the Transportation Venue could grow to as much as \$30 billion by 2012.



As one of the fundamental underpinnings of any economy, the timely movement of people and goods around the globe is of paramount importance. As evidenced by disruptions ranging from labor conflicts in ports in the US or truck drivers in France, even a minor stoppage can have enormous financial consequence. Similarly, there is a premium that can be extracted beyond simply moving people and goods from point A to point B if you can provide the information about the status and expected delivery time, as shown by the global courier services like FedEx and UPS.



Given the need to track, and often secure, the flow of goods in a global economy, companies are looking more and more toward pervasive systems to shed light on the opaque periods of transit while at the same time monitoring the state of the people and vehicles actually carrying the item.

In consumer and commercial transportation venues, "always on" wireless connectivity to people and vehicles is essential. The transportation market is investing in device networking capabilities to extend direct services to customers, preemptively predict vehicle and route problems, deliver customizable services, and maintain vehicle health. Emerging needs include faster wireless throughput, better integration among mobile devices, and improved user interfaces.

Ultimately, the rapid embrace of information appliances such as the iPhone, will further drive the disaggregation of the "vehicle system" from the information interactions the driver and passengers are involved with.

We Clarify the Business Value

We understand that most potential adopters see the M2M / Pervasive Internet world as a daunting terra incognita. The technologies are difficult, the standards are constantly evolving, and the vendor landscape can seem fragmented and bewildering.

We make industry knowledge a key element of our toolkit. In order to keep ourselves fully up-to-date we perform continual analysis and research into specific markets and the maneuvers and strategies of the best performers. Our ongoing research gives us a rich context in which to view each client's opportunities and challenges.

We have direct consulting experience with virtually all the supply side and adopter segments within the over buildings arena

About Harbor Research

Harbor Research, Inc. has been providing strategic consulting and research services to leaders in communications, computing, control, equipment and content since 1983. Harbor's keen eye toward market results is manifest in all of our processes and tools, providing clients with the perspective they need to make best-informed decisions. We emphasize interactive analyses, the incorporation of outside perspectives, time-efficient workshops, and action-oriented decisions. Our multifaceted approach, ranging from the research we publish to the fully customized consulting engagement, provides optimal value to our clients and has also allowed us to develop important advantages as a firm.

Contact Us For More Perspective

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