



**Chapter XVI**

**M-Commerce in the  
Automotive Industry:  
Making a Case for Strategic  
Partnerships**

Mark Schrauben and Rick Solak  
EDS, USA

Mohan Tanniru  
Oakland University, USA

**ABSTRACT**

*The telematics technology, intended to streamline the information processing requirements of consumers driving a vehicle, has brought to surface the need for integrating the information technology architectures of various service providers with the manufacturing technologies of various automotive firms. While system integration has always been an issue when multiple vendors are involved in providing enterprise-wide solutions in business, this issue takes on greater prominence when it can impact the privacy and security of the driving public as a whole. This article briefly looks at various opportunities telematics can provide to satisfy the “mobile” society, and discusses the organizational behavior required to operationalize the technological capability and inter-company behavior to enable flexible business models. It will also discuss the role multiple business and government leaders have to play to ensure that these opportunities do not come at a significant social cost.*

*Mobile commerce (M-commerce) in the automotive industry* could be characterized in parallel and in conjunction with another term framed within the industry—*telematics*. The “telematics” industry is an emerging business area that allows car manufacturers and aftermarket producers to provide innovative solutions for information services. These information services include automatic and manual emergency calls, roadside assistance services, GPS, traffic and dynamic route guidance, Internet communications and personal concierge services.

In the highly competitive automotive business, both product quality and competitive pricing no longer provide sufficient differentiation to capture and retain a consumer. A manufacturer must provide each consumer with an attractive and desirable design, customer care, user experience and an overall *vehicle service package*, which includes telematics. The extent to which automobile manufacturers are successful in providing such a package is becoming a differentiating factor in the consumer’s buying decision (Hogan, 2001). In fact, a firm’s ability to provide information technology capabilities in an automobile may become as important as *cargo capacity and mileage* of an automobile for both retail customers and business service providers, i.e., leasing agencies, transportation and distribution companies, etc. While there are already some mobile applications such as fleet management, other applications such as in-vehicle computing, navigation and location-based services will start to take shape to support both customer groups.

In this chapter we will provide an *analysis of the market* that is moving the automotive industry in this direction, as well as the *business opportunities* that lay over the horizon. We will then discuss a few major issues that will, when resolved, ultimately dictate the potential growth and success of the M-commerce market in the automotive sector.

## MARKET ANALYSIS

The telematics marketplace is experiencing explosive growth in unit sales and user-acceptance in the domestic market and abroad. The in-vehicle information systems market for personal and commercial vehicles will rise from \$300 million in 1999 to \$5.1 billion in 2003 (Greengard, 2000). In-vehicle navigation has already seen acceptance overseas, and will account for a global market of \$16 billion by the end of 2004. Several other studies also point to the anticipated explosive growth in this market (Kalakota, 2002; Thurston, 2000). This anticipated growth has created an extraordinary opportunity for the automotive industry and consumer electronics marketplace. It has the potential to generate significant automotive, marine, and heavy truck OEM and aftermarket product sales, as well as alternative and additional revenue streams.

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