



## Automotive Embedded Software Development Costs on the Rise

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Natick, MA ([PRWEB](#)) December 21, 2003 --In a recent survey of automotive embedded developers, VDC found that software development costs increased between 1999 and 2002 to exceed one-third of total automobile production costs.

### Software Development Costs as a Percentage of Total Production Cost (Average Percentage of Production Cost)

Automotive  
1999: 26.3%  
2002: 37.9%

All Industries  
1999: 29.5%  
2002: 33.5%

Key factors driving the rise of software development costs in automotive embedded projects include:

Increasing electronic content to satisfy safety, fuel economy standards, environmental requirements, comfort and convenience, multimedia, and entertainment services, requiring more time dedicated to software development per vehicle.

Additional labor costs - electronic control units (ECUs) are challenging automotive OEMs to develop software with increased complexity for both under-the-hood and in-cab subsystems that need to communicate in real time with each other and the driver.

Additional software licensing costs - as software content increases, automotive OEMs are adopting sophisticated, commercially available modeling, simulation, and test automation tools to help develop and test vehicles in a virtual prototyping environment to reduce design cycles and improve quality and safety.

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Report Availability:

<http://www.vdc-corp.com/embedded/reports/03/br03-33.html>

#### ABOUT VDC

Founded in 1971, VDC is a technology market research and consulting firm that specializes in industrial and commercial electronics, computing, and communications, software and power systems markets.

For further information about "Embedded Developers' Demand and Requirements for Commercial OSs and Software Development Tools, Volume I: Current Practices and Emerging Requirements in the Automotive Vertical Market" or any other VDC service contact:

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