

F R O S T &amp; S U L L I V A N

**2006 North American Navigation & Mobile Phone  
Technology Innovation  
Customer Value Enhancement Award  
Award Recipient: WindSpring Inc.**

The Frost & Sullivan 2006 North American Technology Innovation Customer Value Enhancement of the Year Award is presented to WindSpring Inc. for developing and marketing multiple products that use Data Miniaturization Technology (DMT™) in the area of micro data format (MDF™). This technology is particularly useful to automakers and their suppliers that build electronic control units (ECU). By providing extra space via data miniaturization and faster access speed, these features resolve the challenges of running real-time, embedded software applications with time-bound codes. WindSpring's products are uniquely suited for space-constrained environments such as personal navigation devices, in-car navigation devices, mobile phones, smart phones, and PDAs.

WindSpring technology is changing how data is stored and retrieved. WindSpring's DMT technology adds value for customers by offering the following advantages:

- Miniaturizes and transforms large files into MDF.
- Enables high-speed data search, edit, transfer, and display in the miniaturized state.
- Allows Edit-In-Place, Update-In-Place and Firmware-Over-The-Air (FOTA) in the miniaturized state, especially for converged on-board and off-board applications.
- Works without changing application code or data format.
- Increases server and client storage capacity for application data.
- Reduces server loads and increases rotating-disk access speeds.
- Reduces impact of disk errors on data.
- Reduces network hardware and bandwidth requirements.

Given its focus on innovation for the navigation market and developing applications to store large amounts of data, WindSpring is establishing itself as a premium technology provider for innovation data storage products. WindSpring has successfully cultivated its research and development efforts to develop software applications that not only increase efficiency in miniaturized high-speed search and data retrieval, but also reduce total data transfer time by 90 percent or more. This will help WindSpring clients to retrieve more information in less time, which is of

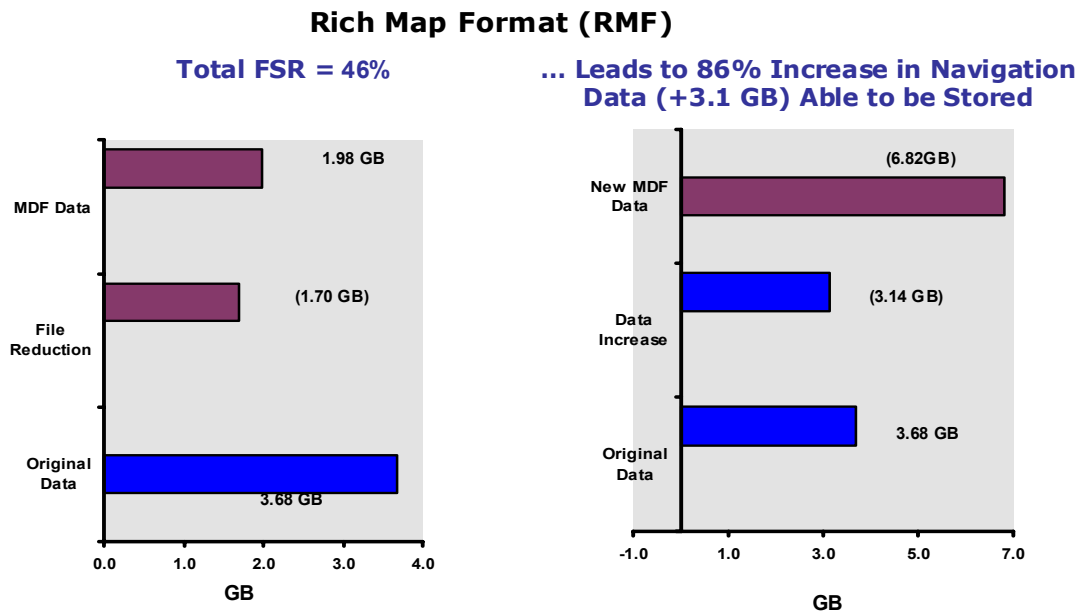
paramount importance in the automotive sector because of space constraints and real-time needs.

WindSpring technology is completely different from traditional methods of data compression. DMT enables and ensures complete data access. Users can seek, search, edit and view data in MDF, without the need to enlarge or decompress the content to its original size. This unique capability reduces storage space, leading to faster data access and increased functionality for a large variety of applications, including search, mobile, high-speed storage, digital mapping, and wireless. This allows WindSpring customers to add more features to their products without upgrades in memory space.

Chart 1.1 shows the test results of WindSpring’s customers in the GPS device manufacturers market. The chart depicts miniaturization of selected data comprising of POIs (points of interests) and map data. A data file of 3.68 GB in size was reduced to less than 2 GB. Similar results were achieved for another customer in the navigation content market.

Chart 1.2 on the following page depicts test results for file access speed. The improved performance illustrates how WindSpring enhances the value its customers receive.

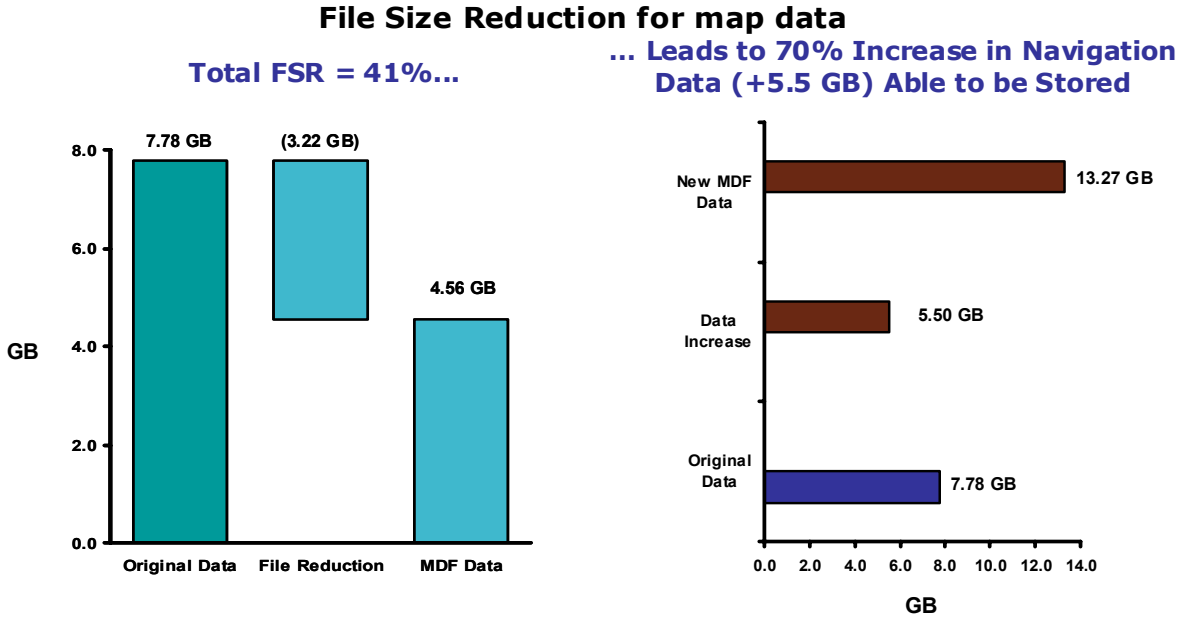
Chart 1.1: Test results for navigation market  
Original Device Manufacturer (ODM)



Test hardware: Pocket PC 2003 iPacQ; Intel® PXA 255 (ARM4) 400 MHz; 56.77 MB ( Specified as 64 MB)

Source: WindSpring Incorporated

Chart 1.2: File Read Speed Map data provider



Source: WindSpring Incorporated

In DMT, the data is not only accessible, but it is also editable. This further reduces device storage requirements and increases application speed. This feature is particularly advantageous for embedded operating systems in automotive applications and on resource files on mobile phones and smart-phones. While most companies were focused on developing applications to compress data, WindSpring became a niche player in data miniaturization in the automotive navigation systems market. MDF technology improves mapping application performance and enables component manufacturers to reduce the overall cost of devices for consumers.

Transforming mapping and POI data files to MDF using DMT can substantially increase effective storage capacity of the navigation devices without increasing overall hardware costs. Storage costs are reduced by a cost of \$40 to \$60 per device. The increase in space allows navigation component manufacturers to add larger city, state, and country maps on each device. DMT also improves device reliability and performance by eliminating the need for more expensive and unreliable mini-hard drive solutions. Due to these advantages, WindSpring customers can use this technology as a differentiator in the highly competitive navigation market.

Frost & Sullivan has identified the factors that contribute to WindSpring's technology innovation and customer value enhancement:

- Strong emphasis on research and development, with the customer in mind.
- Continuous focus on innovative futuristic applications to enhance high-volume data storage.
- Strong emphasis on quality enhancement initiatives, leading to the development of reliable, state-of-the-art, client-focused products.

WindSpring technology and products reflect the company's goals to develop innovative, user-friendly products, demonstrating its focus on delivering greater flexibility to their navigation customers in automotive domain. This level of product initiative and client-focused research support the brand's image as a supplier of cutting-edge technologies that are well received by customers and that ensure quality products are delivered to the market.

Independent analysis by other industry experts has shown that there are no other technologies that offer the unique capabilities of DMT to customers in the automotive industry.

Frost & Sullivan recognizes WindSpring's contribution in developing the North American navigation and mobile phone market through the introduction of its innovative and flexible Data Miniaturization Technology to meet the needs of automakers and suppliers better than competing products.

### **About Best Practices**

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.

### **About WindSpring, Inc.**

WindSpring is a provider of advanced compression software for the digital mapping and navigation markets. The company's patented data miniaturization technology (DMT™) eliminates the need for file decompression, drastically reduces the data footprint of large files, and allows total data manipulation while in the reduced state. The company is focused on in-dash navigation, personal navigation devices, trucking/logistics and Internet/consumer wireless. More information about the privately-held, San Jose, California-based company is available at [www.windspring.com](http://www.windspring.com).

## Award Selection Criteria

### Award Description

The Customer Value Enhancement Award is presented each year to the company that has best demonstrated the ability to expand the customer base, while maintaining its existing install base, with more innovative value creation and enhancement strategies than competing vendors. This Award recognizes the company's successful sales entry, customer acquisition and service strategies, and the degree to which those strategies have met customers' stated needs and requirements. Such innovation is expected to significantly improve customer interaction and contribute to customer satisfaction.

### Research Methodology

In order to select the Award recipient, analysts quantify several market factors for each market participant according to predetermined criteria.

Through primary and secondary research methods, all companies' market positions and market growth are tracked, and those exhibiting significant growth are noted. Company install base and revenues are compared year to year to monitor customer response and market expansion. When a company continues to demonstrate solid growth rates, from market expansion and among its install base, it is a candidate for the Customer Value Enhancement Award.

### Measurement Criteria

In addition to the methodology described above, there are specific criteria used to determine the final Award rankings in this industry. The recipient of this Award has excelled based on one or more of the following criteria:

- Expansion of install base
- Ability to grow in a saturated or maturing market
- Implementation of a new or unique pricing strategy
- Implementation of a new or unique product bundling strategy
- Launch of a new product(s) to offer a "one-stop shop" in response to customer demands
- Launch of a new service protocol to improve overall customer ownership experience
- Launch of a new program to help improve the utilization rates for products or services procured by clients
- Creating new venues, such as online services, for an established product
- Strategic mergers, acquisitions, or joint ventures to provide additional benefits to the customer

## About Frost & Sullivan

Frost & Sullivan, a global growth consulting company, has been partnering with clients to support the development of innovative strategies for more than 40 years. The company's industry expertise integrates growth consulting, growth partnership services, and corporate management training to identify and develop opportunities. Frost & Sullivan serves an extensive clientele that includes Global 1000 companies, emerging companies, and the investment community by providing comprehensive industry coverage that reflects a unique global perspective and combines ongoing analysis of markets, technologies, econometrics, and demographics. For more information, visit [www.frost.com](http://www.frost.com).