2016 North American Aftermarket Telematics Customer Value Leadership Award
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Background and Company Performance

Industry Challenges

The average American commuter spends at least an hour a day in a car. In today’s ever-connected world, automotive manufacturers are connecting the last piece of the Internet of Things (IoT) puzzle. Although this is a welcome move, it still does not address the approximately 300 million cars, in North America alone, that remain unconnected; a number that is expected to increase to 331 million by 2018. Although this presents a huge opportunity for the aftermarket telematics industry, connecting these cars in a cost effective way presents a significant challenge.

The aftermarket telematics industry leverages the OBD-II connection (available in all US cars since model year 1996) to bring cars into the 21st century. Unlike hard-wired telematics black boxes, a dongle plugs into the OBD-II port to enable data collection from the CAN bus. This data is leveraged to offer connected services such as stolen vehicle tracking, fault code diagnosis, crash notifications, and on-board Wi-Fi.

The OBD-II dongle market is saturated with inexpensive products that offer basic features such as reading CAN bus information and clearing fault codes. On the other end of the spectrum are expensive dongles with a multitude of features including tracking teen drivers or summoning roadside assistance. OBD dongle manufacturers find themselves in constant need to develop and provide new and more valuable features to ensure brand loyalty and customer retention. Plus, the original equipment (OE) industry has been encumbered by customers who fail to purchase subscriptions once their free trial period ends.

Another key industry challenge is related to cybersecurity. Researchers from the University of California, San Diego recently exposed the vulnerability of some OBD-II dongles by hijacking controls and remotely operating brakes and windshield wipers. Of course, this poses an enormous risk to everyone from car owners to telematics makers, threatening to drive customers away from OBD-II dongles altogether.

Customer Impact and Business Impact

Brand Equity

One of the first things that really impressed Frost & Sullivan is that, although it is relatively new to the market, Vinli’s brand perception is among the highest in the industry. The company collaborates with a range of industry giants including Continental, Cox Automotive, Samsung, T-Mobile, and First Round Capital; each of these partners has helped enhance Vinli’s offering, enabling them to appeal to a wider and still growing audience.
Best Practices examples: In addition to the above alliances, Vinli has partnered with Uber for a number of events (CES, SxSW, JazzFest) and has delivered free in-car Wi-Fi to Uber drivers & passengers. While not a part of these deployments, the Vinli platform could enable Uber to gain deeper insights on vehicle health and drivers to enhance customer service while also protecting drivers from inaccurate customer feedback. For example, if a customer gives a low rating based on driver performance, a company representative can check telemetry data to verify the rating’s authenticity.

By building strategic partnerships with Tier I suppliers such as Continental, Vinli is transitioning from a technology startup to a Tier II supplier. This partnership resulted in an HTML5-based dashboard system known as Carport that brings the Internet of Everything (IoE) into the dashboard of new cars. The solution builds on the features offered by the OBD-II dongle and brings that into the dashboard of the car promising a safer, more convenient connected driving experience.

Customer Acquisition

To understand Vinli’s best practices in customer acquisition, it is important to understand how Vinli defines its customers. Unlike traditional OBD-II participants, Vinli’s customers encompass the entire automotive ecosystem. Its unique connected IoT transportation platform delivers value through OBD-II to Tier I suppliers, automotive dealerships, mobile operators, independent automotive car care centers, insurance companies, software developers, and of course, car owners/drivers.

Its primary customers are its software developer base. Vinli’s proprietary platform features an impressive application programming interface, with supporting software development kits that enable rapid and rich development of a broad range of smartphone apps and services for car drivers/owners.

The Vinli platform also enables dealerships and independent car care centers to increase consumer loyalty and retention. Dealerships rely on fixed operations (service departments) as the largest contributor to profits. Vinli’s device and cloud platform allows dealerships to collect vehicle health data to optimize efficient use of service bays, personnel, and tools, all while also ensuring minimal consumer downtime. Dealerships can also leverage this information to give consumers service or loyalty offers. For example, a dashboard warning light would normally require a driver to consult a manual or call a dealership. The Vinli platform informs the consumer and the dealership about the problem, which enables the dealership to reach out to the consumer and provide a detailed analysis while simultaneously preparing resources (such as ordering parts) to ensure expeditious service.

Its developer base continues to grow rapidly in an environment that supports building, testing, certifying, and publishing apps. Vinli’s expanding catalog also creates tremendous value for consumers. Frost & Sullivan is convinced that Vinli clearly understands the
automotive ecosystem; its differentiation between consumers and customers has been the key to its growth in this highly competitive market.

**Customer Experience**

As indicated earlier, the nascent aftermarket telematics industry faces some unique challenges, including customer retention. While most participants offer solutions packed with features, they often fail to retain customers because they fail to provide sustained value. Vinli’s holistic, customer-centric approach ensures that consumers’ needs are not only met, but that their expectations are exceeded. This includes the consumers’ interest in connectivity, even in their cars. So features like the built-in 4G/LTE modem for in-vehicle Wi-Fi makes this possible. Vinli’s device is connected to a cloud based platform which supports smartphone apps for iOS, Android, and Web compatible, enabling users to do a number of things like monitor the vehicle’s health, call for roadside assistance, conduct stolen vehicle tracking, geofencing, and even give crash notifications. Plus, Vinli’s 3rd-party catalog is constantly growing thanks to its dedicated developers.

Vinli is also poised to bridge the gap between the connected car and the connected home. It recently launched its ‘connected home’ smartphone app, which was developed in house and supports both Android and iOS. The app is compatible with connected home smart devices including Google’s Nest, Samsung’s SmartThings, and Icontrol Networks, enabling a home to adapt to the owner’s schedule. For example, interior lights may be set to turn off at 7 a.m., but if the consumer leaves home at 6 a.m., Vinli’s solution recognizes when the car leaves the driveway and turns off the lights to conserve energy. It can also recognize when consumers leave work to have the home environment ready for their arrival.

Regarding the cybersecurity concerns, Vinli offers the most secure OBD-II dongle in the market with comprehensive protection against cyberattacks. They call this approach to protecting users and the vehicle, Vinli Shield Technology. The device restricts bus access, enabling data only to be read, i.e. data can’t be written on the bus to ensure that, if the device is compromised, it does not jeopardize the car’s security. It adds multiple layers of authenticity checks to ensure that only trusted over-the-air updates are applied, and is supplemented by RSA signing of all payloads to the platform to ensure a secure chain from vehicle to device to platform. Finally, Vinli require apps to receive explicit permission from users through an OAuth process, which is both secure and familiar to most users. Vinli users have complete control over access to their own data and they can revoke an application at any time. This is another key attribute in exceeding consumer expectations and creating sustained value.

Vinli actively manages all devices connected to its platform. When a device is connected, the state of its security patches, Wi-Fi settings, data transfer rates, and data routes are actively monitored and updated over the air to maximize fidelity and service life.
Operational Efficiency

Vinli’s fast track to commercialization stands as a testament to its operational efficiency. The company formed in the fall of 2014, and completed funding and commercialization within a year; thanks to its staff’s stellar productivity and quality standards. Vinli adopted a bottom-up business approach by setting up its headquarters in Dallas, Texas, a city with low business costs and a low cost of living. And because Vinli takes its employee satisfaction seriously, the company has acutely focused on attracting and retaining the highest-caliber engineers to help drive growth and productivity.

Its commitment to operational efficiency includes the use of lean processes and tools in platform design and operations, external and internal communications, and productivity. To ensure efficiency in how its platform operates, Vinli uses a managed cluster of Linux containers. Leveraging the power of Google’s Kubernetes open-source container orchestration system, Vinli manages the container cluster as a single system. Vinli also uses GitHub development tools to streamline and increase efficiency of back-end operations.

Vinli coordinates external communication through social media platforms including Facebook, Instagram, Twitter, and LinkedIn by using HubSpot. Expensive communication tools such as licensed email and collaboration systems add to a startup’s overhead burden. Vinli instead leverages low-cost, new-generation Slack and Google productivity tools for effective, real-time coordination, communication, and collaboration to balance cost and productivity.

Growth Potential

Frost & Sullivan believes that Vinli has tremendous growth potential in the aftermarket telematics industry. Currently the OBD-II aftermarket is forecast to growth to $1.6 billion by 2020 with over 331 million unconnected cars by 2018. Vinli also plans to leverage telemetry data collected by its OBD-II dongle to offer consumers usage-based insurance policies that reward safe driving with lower premiums.

To ensure that it stays a step ahead of competitors, the company has started building a second-generation device with enhanced capabilities such as smart power management systems for longer battery life and systems that can integrate supplementary units such as a head-up display to for added safety. Building on its proprietary OBD-II stack and expanding its software development kit will ensure a fast track to growth.

Vinli embraces multiple global distribution channels to drive growth, including online sales, automotive dealerships, traditional retail outlets, and retail sales through cable companies and mobile operators. The company also leverages social media, live events, and retail merchandising to bolster both awareness and demand.

Vinli’s developer and application ecosystem has grown to become the largest in the connected car industry thanks to its open technology platform, extensive API
documentation and live developer support. Vinli’s platform caters to integration partners of all backgrounds and sizes, from indie mobile apps to established enterprise solutions. Vinli’s application ecosystem includes first party solutions such as Beagle, Drive, Lock and Key and Home Connect. Third party solutions include Drivemode, Dash, Everlance, Jerrycan, AutoMate, Openbay, TextNinja, Kampana, OBD Fusion, Fourstroke and more. Vinli is expected to release another 30 applications soon to expand its application and enterprise suite. Its platform also supports automation services such as IFTTT, IoT services such as Amazon’s Alexa, Samsung’s SmartThings and Google’s Nest. Additionally, Vinli’s platform supports developer services and customized enterprise solutions (Cox Automotive) and third and first party fleets with Vinli Fleet.

**Conclusion**

Frost & Sullivan’s independent market analysis on the aftermarket telematics industry clearly shows Vinli to be providing the most customer value in the market thanks to its truly holistic solution. By incorporating a variety of features in its OBD-II dongle, Vinli has enhanced customer experience significantly while concomitantly delivering sustained value; something that competitors have been unable to achieve. Because of its strong overall performance, Vinli is recognized with Frost & Sullivan’s 2016 Customer Value Leadership Award.
Significance of Customer Value Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. Delighting customers is therefore the cornerstone of any successful growth strategy. To achieve these dual goals (growth and customer delight), an organization must be best-in-class in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.

Understanding Customer Value Leadership

Customer Value Leadership is defined and measured by two macro-level categories: customer impact and business impact. These two sides work together to make customers feel valued, and confident in their products’ quality and long shelf life. This dual satisfaction translates into repeat purchases and a high lifetime customer value.
Key Benchmarking Criteria

For the Customer Value Leadership Award, Frost & Sullivan analysts independently evaluated two key factors—Customer Impact and Business Impact—according to the criteria identified below.

**Customer Impact**
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

**Business Impact**
- Criterion 1: Financial Performance
- Criterion 2: Customer Acquisition
- Criterion 3: Operational Efficiency
- Criterion 4: Growth Potential
- Criterion 5: Human Capital

Best Practice Award Analysis for Vinli

**Decision Support Scorecard**

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are illustrated below.

**RATINGS GUIDELINES**

The Decision Support Scorecard is organized by Customer Impact and Business Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criteria are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.
The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key players as Competitor 2 and Competitor 3.

<table>
<thead>
<tr>
<th>Measurement of 1–10 (1 = poor; 10 = excellent)</th>
<th>Customer Impact</th>
<th>Business Impact</th>
<th>Average Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Value Leadership</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinli</td>
<td>9.0</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Competitor 2</td>
<td>8.0</td>
<td>7.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Competitor 3</td>
<td>7.0</td>
<td>7.0</td>
<td>7.0</td>
</tr>
</tbody>
</table>

**Customer Impact**

**Criterion 1: Price/Performance Value**
Requirement: Products or services offer the best value for the price, compared to similar offerings in the market

**Criterion 2: Customer Purchase Experience**
Requirement: Customers feel like they are buying the most optimal solution that addresses both their unique needs and their unique constraints

**Criterion 3: Customer Ownership Experience**
Requirement: Customers are proud to own the company’s product or service, and have a positive experience throughout the life of the product or service

**Criterion 4: Customer Service Experience**
Requirement: Customer service is accessible, fast, stress-free, and of high quality

** Criterion 5: Brand Equity**
Requirement: Customers have a positive view of the brand and exhibit high brand loyalty

**Business Impact**

**Criterion 1: Financial Performance**
Requirement: Strong overall financial performance in terms of revenues, revenue growth, operating margin and other key financial metrics

**Criterion 2: Customer Acquisition**
Requirement: Customer facing processes support the efficient and consistent acquisition of new customers, even as it enhances retention of current customers

**Criterion 3: Operational Efficiency**
Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard

**Criterion 4: Growth Potential**
Requirements: Customer focus strengthens brand, reinforces customer loyalty and enhances growth potential
**Criterion 5: Human Capital**

Requirement: Company culture is characterized by a strong commitment to quality and customers, which in turn enhances employee morale and retention.

**Decision Support Matrix**

Once all companies have been evaluated according to the Decision Support Scorecard, analysts can then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.

![Decision Support Matrix Diagram](image-url)
The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan’s 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan Awards follow a 10-step process to evaluate award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

<table>
<thead>
<tr>
<th>STEP</th>
<th>OBJECTIVE</th>
<th>KEY ACTIVITIES</th>
<th>OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Monitor, target, and screen</td>
<td>Identify award recipient candidates from around the globe</td>
<td>Pipeline of candidates who potentially meet all best-practice criteria</td>
</tr>
<tr>
<td>2</td>
<td>Perform 360-degree research</td>
<td>Perform comprehensive, 360-degree research on all candidates in the pipeline</td>
<td>Matrix positioning all candidates’ performance relative to one another</td>
</tr>
<tr>
<td>3</td>
<td>Invite thought leadership in best practices</td>
<td>Perform in-depth examination of all candidates</td>
<td>Detailed profiles of all ranked candidates</td>
</tr>
<tr>
<td>4</td>
<td>Initiate research director review</td>
<td>Conduct an unbiased evaluation of all candidate profiles</td>
<td>Final prioritization of all eligible candidates and companion best-practice positioning paper</td>
</tr>
<tr>
<td>5</td>
<td>Assemble panel of industry experts</td>
<td>Present findings to an expert panel of industry thought leaders</td>
<td>Refined list of prioritized award candidates</td>
</tr>
<tr>
<td>6</td>
<td>Conduct global industry review</td>
<td>Build consensus on award candidates’ eligibility</td>
<td>Final list of eligible award candidates, representing success stories worldwide</td>
</tr>
<tr>
<td>7</td>
<td>Perform quality check</td>
<td>Develop official award consideration materials</td>
<td>High-quality, accurate, and creative presentation of nominees’ successes</td>
</tr>
<tr>
<td>8</td>
<td>Reconnect with panel of industry experts</td>
<td>Finalize the selection of the best-practice award recipient</td>
<td>Decision on which company performs best against all best-practice criteria</td>
</tr>
<tr>
<td>9</td>
<td>Communicate recognition</td>
<td>Inform award recipient of award recognition</td>
<td>Announcement of award and plan for how recipient can use the award to enhance the brand</td>
</tr>
<tr>
<td>10</td>
<td>Take strategic action</td>
<td>Upon licensing, company may share award news with stakeholders and customers</td>
<td>Widespread awareness of recipient’s award status among investors, media personnel, and employees</td>
</tr>
</tbody>
</table>
About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best in class positions in growth, innovation and leadership. The company’s Growth Partnership Service provides the CEO and the CEO’s Growth Team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.