J.D. POWER

Press Release

Improving Usability Is Critical for Aftermarket Navigation Systems, J.D. Power Study Finds

The Alpine Big X Series Ranks Highest for Fifth Consecutive Year

TOKYO: 26 Oct. 2016 — Improving aftermarket navigation system usability is critical to customer satisfaction and owner loyalty, according to the J.D. Power 2016 Japan Navigation Systems Customer Satisfaction Index StudySM—Aftermarket, released today.

Now in its 10th year, the study measures customer satisfaction with aftermarket in-dash vehicle navigation systems when used as in-vehicle information systems, including music and video player functions and telematics services in addition to search and guidance functions. Four factors are examined (listed in order of importance): navigation function (42%); infotainment equipment (21%); operation/ user interface (20%); and screen (17%). Satisfaction is calculated on a 1,000-point scale.

Overall satisfaction with aftermarket in-dash vehicle navigation systems increases by 10 points to 543 in 2016. Satisfaction improves in all factors, most notably in navigation function and operation/ user interface, each up 11 points from 2015.

Satisfaction with aftermarket navigation systems outpaces that for factory- and dealer-installed navigation systems (519), although repurchase intention among owners of aftermarket systems is much lower. Among owners of aftermarket systems, only 49% say they will repurchase the same type of system, while 65% of owners of factory- and dealer-installed systems say the same. Aftermarket system users who show higher satisfaction indicate lower loyalty, compared with factory- and dealer-installed system users.

"Manufacturers differentiate aftermarket navigation systems from factory- and dealer-installed navigation systems by providing higher functionality and performance, which results in increased customer satisfaction," said **Atsushi Kawahashi, senior director of the Japan automotive practice at J.D. Power**. "However, some customers report problems with their aftermarket systems, suggesting that multifunctionality and complexity may cause difficulties for entry-level users. To attract new customers and retain existing customers, it is important for manufacturers to not only evolve levels of functionality, but also improve usability."

Following are additional key findings of the study:

- **Problems Have Owners Questioning Loyalty:** Aftermarket navigation system owners who previously had a factory- and dealer-installed system—known as switchers—show lower levels of likelihood of repurchasing another aftermarket system than owners who previously owned an aftermarket system. Only 39% of switchers indicate they will repurchase another aftermarket system, compared with 67% of repeat aftermarket owners. One of the key reasons for lower intended loyalty among switchers is problems, as 26% say they have experienced problems with their current navigation system, while only 14% of repeat users have experienced any problems. The problems switchers indicate experiencing most frequently are related to usability, including search/ set destination: controls difficult to understand/ use (28%) and change map scale: screen difficult to see/ understand (29%). Only 3% and 6% of repeat users, respectively, experience the same problems.
- Satisfaction Equals Intended Loyalty: The study finds a correlation between overall satisfaction and the likelihood of customers repurchasing the same brand. Among customers who are highly satisfied (overall satisfaction scores of 800 and above), 98% say they "definitely would" or "probably would" repurchase the same brand. Among customers with low satisfaction (scores below 500), only 55% say the same.

Study Ranking

The **Alpine** Big X Series ranks highest for a fifth consecutive year, with a score of 595, a 6-point improvement from 2015. The Alpine Big X Series performs particularly well in the screen, operation/user interface and infotainment equipment factors.

The **Pioneer** Cyber Navi Series ranks second with a score of 566, an 11-point improvement from 2015. The Pioneer Cyber Navi Series performs particularly well in the navigation function factor.

The 2016 Japan Navigation Systems Customer Satisfaction Index Study—Aftermarket is based on responses from 2,296 vehicle owners who purchased an aftermarket navigation system from April 2014 through March 2016. The study was fielded in late July 2016.

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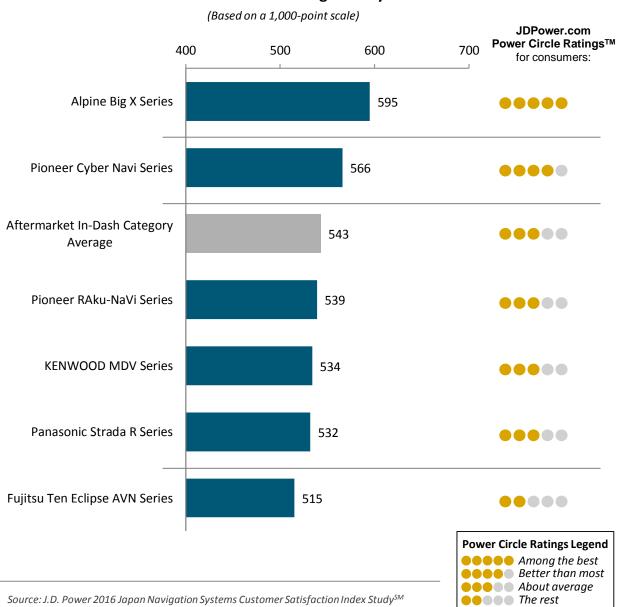
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Note: Two charts follow.

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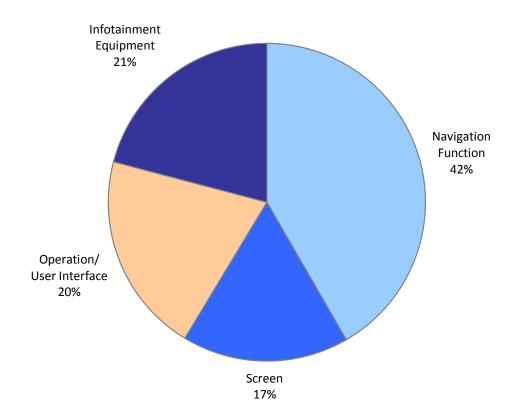
Overall Satisfaction with Aftermarket In-Dash Navigation Systems



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Factors Contributing to Overall Satisfaction with Aftermarket In-Dash Navigation Systems



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