

VOLKSWAGEN GROUP OF AMERICA

SUPPLY CHAIN STRATEGY, METHODOLOGY, AND IMPLEMENTATION

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Founded in 1955, Volkswagen Group of America (VWGoA) is a wholly owned subsidiary of Volkswagen AG, one of the largest automakers in the world. Headquartered in Herndon, Virginia, it operates the illustrious and exhilarating brands of Audi, Bentley, Bugatti, Lamborghini, Porsche, Ducati, and Volkswagen within the United States. In addition to its automobiles, the Group manages Volkswagen Credit, providing dealer and customer financing, leasing, and remarketing services. Volkswagen Group of America employs more than 6,000 highly qualified individuals in the United States. Over 1,000 dealers create an expansive and accessible sales and service network offering around 45 different models across its brands. VWGoA also supports the operations of the world's first and only LEED Platinum Certified Automotive Assembly Plant in Chattanooga, Tennessee.

Accessories are a critical complementary product sold by the company for their vehicle brands. Significant majority of the accessories business is generated on the sales of new cars. Eighty percent of the accessories are installed at the port of receipt for the cars since they are imported from Germany. This business segment is referred to as port installed accessories (PIA). PIA currently reflects a revenue stream of \$110M for Audi and VW. The PIA business has been witnessing a growth of 30% annually.

The company maintains an internal fill-rate target of 99.5% since accessories impact the sales of cars (highly visible-tangible impact on customer satisfaction). Forecasting demand patterns and managing inventory for accessories is challenging due to long lead times (6 months), changing customer preferences, and launch of new products. The high fill-rate target in combination with the unique challenges have been causing the company to lose 11.1% (\$12.21M) of revenue in form of obsolescence cost, lost sales, air-freight, etc.

The Tauber team developed a custom forecasting methodology for the business, raising forecast accuracy from 51% to 83%. The methodology was created using trend analysis of past sales data on a regional level, in combination with vehicle sales estimates. The team also developed an inventory management policy to guide all inventory related business practices. The new inventory management policy garners value through reducing obsolescence costs, air-freights costs, lost sales, etc. The team worked with a third-party vendor and implemented an integrated technology solution utilizing live data streams from multiple sources to deliver an automated self-correcting system. The portal is expected to reduce obsolescence cost, lost revenue, and air-freight costs to \$2.7M (reduction of 76%) rendering savings/additional revenue of \$83.1M over the next five years.