



Quality function deployment at Lexus

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Lexus QFD Case Study



In the early 1980s Toyota decided to develop a new vehicle to enter the lucrative Luxury car market segment. Other companies had tried and failed to do this, including Ford, GM, Renault and Fiat. After six years of market research and product development, the first Lexus, the LS400, was launched in 1989. In the key target market, the U.S., the Lexus marque quickly became associated with quality, luxury and superior customer satisfaction, winning many industry and customer quality awards, and became America's best-selling luxury automobile.



Milestones in the development of Lexus:

- ✓ August 1983: Toyota Chairman Eiji Toyoda agrees to create a luxury vehicle to challenge the world's best.
- ✓ May 1985: A study team visits the U.S. to conduct focus groups while a design team moves to California to develop concepts.
- ✓ July 1985: The first of the LS 400 running prototypes is built.
- ✓ May 1987: Management approves the final design of the LS 400.
- ✓ 1989: The LS 400 is launched at Detroit and Los Angeles auto shows.
- ✓ September 1989: The LS 400 begins sales in the U.S.
- ✓ July 1990: Lexus first appears in a J.D. Power and Associates study, ranked as the #1 in the Initial Quality Study (IQS).
- ✓ January 1992: Lexus outsells BMW and Mercedes-Benz to become the number-one luxury import in the U.S.
- ✓ July 1992: Lexus again tops the J.D. Power and Associates Customer Satisfaction Study.
- ✓ September 1992: A face-lifted LS 400 is launched, with more than 50 changes, including responses to dealer and customer requests.
- ✓ March 1995: In its first year of eligibility, Lexus is ranked by J.D. Power and Associates as the Best Overall Carline in Vehicle Dependability after five years of ownership.
- ✓ July 1996: The LS 400 is named one of the Twenty-Four Most Important Automobiles of the Century by Automobile Magazine.
- ✓ November 1999: Lexus celebrates the 10th anniversary, and sells its millionth vehicle in the U.S.



Questions

Apply QFD to the development of a new luxury car, using your group as the live target customers (i.e. wealthy, but undiscerning MBAs 😊). You should follow the following steps:

1. Identify the target customer requirements, in groups by 'brain-storming' or a more structured way.
2. Rank or weight these requirements in order of the perceived importance.
3. Where possible, translate each attribute or requirement into a scale or measurable characteristics.
4. Identify different technical or design options to deliver the best combination of these characteristics.
5. Compare or benchmark each attribute against real-life competing products.
6. Discuss the benefits of using this technique.
7. Assess the limitations of QFD.