

A Case Study of Service Design

Areas in which industrial design became involved in LEXUS Vehicle Development

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1. Study Background

Toyota owes part of its success to the decision to offer a series of systematic services to the luxury auto market at home, where upscale foreign carmakers have tended to focus their efforts on building their brands. Instead of going after cutting-edge technologies, Toyota has chosen to lay greater emphasis on making customer-focused services available to Japanese LEXUS buyers by refining matured technologies that it first developed for LEXUS models sold in the United States to fit Japanese needs. This approach has proven successful in offering customers a higher level of experiential values that go beyond conventional hospitality. We have decided to look into how services and service design played their roles in the launch of the LEXUS in Japan.

2. Purpose of the Study

As shown in the diagram below, we intend to develop a strategic approach to facilitating integrated design development for hardware, software and service elements: first by identifying the role that industrial design played in providing hardware, software and service solutions for the LEXUS before it was launched in Japan; second by identifying the new value that the LEXUS design created and added to the equation; and third by looking into design management approaches that Toyota took in the process.

In order to gain a fresh insight, we have delved into not only the areas with immediate relevance to automobiles—areas of primary focus in conventional R&D phases for cars—but also areas with indirect relevance to automobiles that have played the most important role in the launch of the LEXUS.

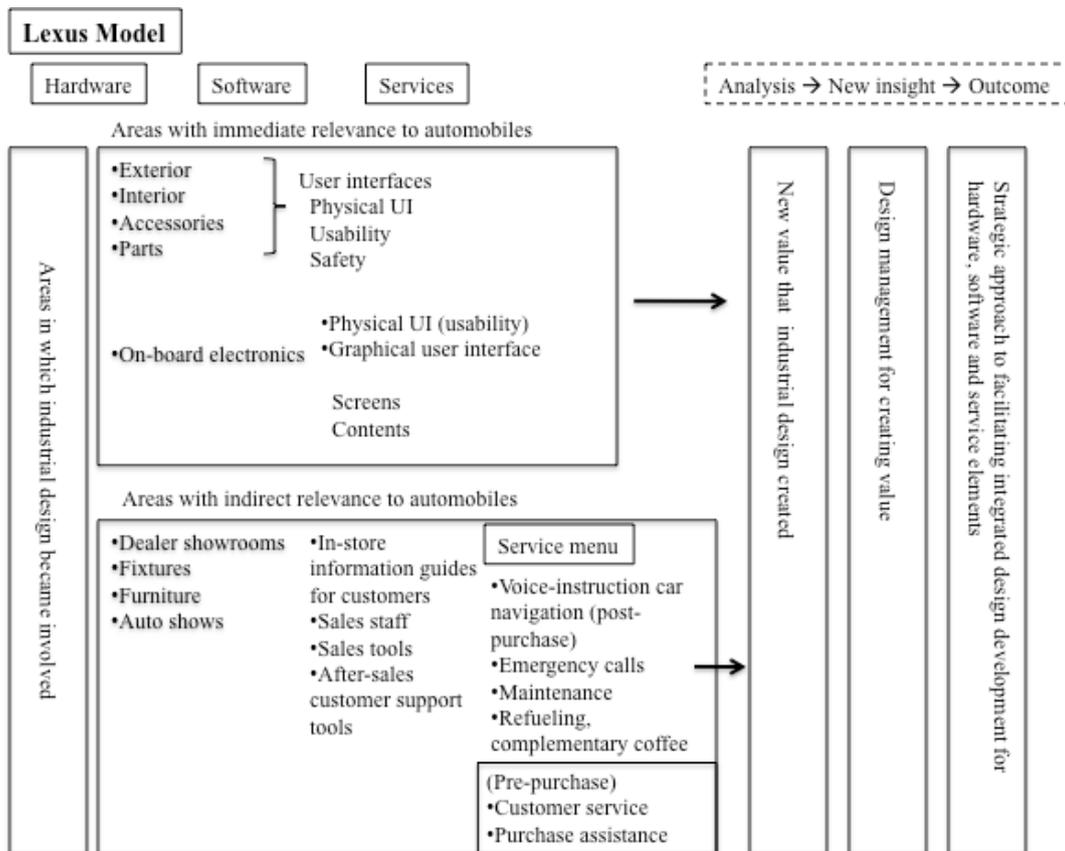


Figure.1 Areas in which industrial design became involved in LEXUS Vehicle Development

3. The Role that Industrial Design Played in Hardware, Software and Service Elements during the Development Process

3.1 Vehicle Planning

When Toyota introduced its first LEXUS cars in the United States, engineers focused their primary efforts on building high-performance cars to establish the LEXUS as a high-performance premium car brand, a departure from the Toyota brand that was seen by many at the time as synonymous with the Corolla and pickup trucks. Engineers developed and built LEXUS cars based on the “Yet Philosophy,” whereby contradictory objectives were reconciled—for instance, high speed yet fuel efficient, quiet yet light, and smooth handling at high speeds yet superb ride comfort. Industrial designers also implemented this philosophy in the design of LEXUS models, making seemingly paradoxical elements of simplicity and complexity complement each other, which became the basis of the distinctive LEXUS styling.

3.2 Designing Vehicle Exterior

What contributed to the success of the exterior design of LEXUS cars is that it had a distinctive

identity of its own—differentiated from mainline Toyota cars. The company placed particular importance on the design quality of LEXUS cars, ensuring that they were well built from top to bottom. Design cues were chosen to clearly differentiate a LEXUS from a Mercedes and a BMW; a typical example of signature LEXUS design characteristics is the slant-eyed headlights, which are different from the horizontally aligned headlights and grilles found on those competitive vehicles.

3.3 Designing Vehicle Interior

The L-finesse* design philosophy was first incorporated into the designing of LEXUS cars sold in the United States and then evolved in Japan to offer an even higher level of hospitality—an abundance of design and styling elements never seen before on conventional cars were selected to offer impeccable comfort and services to LEXUS customers. For instance, the instrument panel—designed with careful attention to safety, usability and user interface—has a set of meters that when powered illuminate their needles, numbers and letters on the face in exquisitely timed sequence. Another example is the quality tactile feel of every one of the nearly 200 switches in the flagship LS sedan. Furthermore, even the sound that the finely dampened glove compartment door, console lid and other lids make when they are opened and closed is meticulously controlled and pleasing to the ear.

Industrial designers worked with engineers who held the title “LEXUS Feel Evaluation Leader” to develop these fine design details.

* L-finesse: a term coined by Toyota, meaning the integration of incisive simplicity and intriguing elegance and representing the esthetic philosophy incorporated into the LEXUS design. The term epitomizes the simple yet deep and evergreen figurative beauty that the LEXUS pursues.

3.4 Designing Exterior Vehicle Color

One can tell the color of a car from the light reflected from its surface. Controlling such light reflection is the key to giving a pleasing color to a car. LEXUS cars come in a range of distinctive colors that LEXUS color designers have chosen not only for their three attributes—hue, saturation and brightness—but also for their quantified sensuous attributes such as vividness, depth, and clarity.

3.5 Designing In-Car Electronics Devices

A car navigation system is one of the most important electronics devices onboard a LEXUS. Being more than just an automated tour guide, it works as a control hub for a host of services explained later in this document. Industrial designers have devoted considerable time and effort to designing user interfaces for it; they have exercised their ingenuity in coming up with the screen structure and

layout that utilize well-designed graphic user interface (GUI) for accessing contents.

3.6 Designing Dealer Showrooms, In-Store Fixtures and Other Elements

Traditionally, car dealers were solely responsible for determining where to open showrooms and what they should look like. When Toyota launched the LEXUS in Japan, however, the automaker got involved with choosing locations and designs of LEXUS dealer showrooms, as they were critical gateways to the plethora of services offered to LEXUS customers. For instance, Toyota conducted numerous field surveys around the country to identify heavy-traffic areas and locations and recommend them to LEXUS dealers as prime showroom locations. To ensure consistency, Toyota's industrial designers offered input and advice on design details of showrooms and in-store fixtures to the contractors that dealers hired to design and build their showrooms; this approach was unheard of in the Japanese auto industry and the result was that LEXUS showrooms—consistent with a black-and-white design motif—opened their doors around the country. LEXUS designers even had a say in choosing the designs of uniforms that salespeople wore and of the sales support tools that they used in showrooms.

LEXUS owners are entitled to receive LEXUS Total Care with an access to LEXUS Owners Desk—a dedicated LEXUS call center staffed with concierges who offer restrained yet caring support to LEXUS owners when they need it. LEXUS Total Care is available 24 hours a day, 7 days a week, 365 days a year, and offers such services as setting up a car navigation system and downloading data to it, finding parking lots, and making reservations for hotels and restaurants on behalf of LEXUS owners. Its highlight is safety and security services for LEXUS cars and their drivers; a host of sensors and cameras monitor the vehicles from remote locations and, when an airbag is deployed, sensors detect it and automatically notify HELPNET Center, which dispatches an ambulance to the scene of the emergency.

4. Summery-Industrial Design's Contribution to the Success of LEXUS

The jury is still out on whether the introduction of the LEXUS brand in Japan was a success as compared to its earlier foray into the United States in 1989, but everybody seems to agree that the service design that the LEXUS tailored for the Japanese market was a success. This success can be attributed to the Industrial Design Division's active involvement in the entire process of launching the brand; neither Toyota nor any other Japanese automakers had ever taken such a novel approach to launching a car brand. The launch of the Lexus in Japan is certainly a model worth keeping our curious eyes on.