

Teach 04- Heuristic Analysis

Group 2

Tesla – All Glass Interface

STEP 1: Identify the Target Audience

The primary class of users that will be driving this car are men, between 40-50 years old who are secure in their careers, and are techy, hip, or executives. They like to be on the cutting edge of technology, class, prestige, and status. The second class of users are environmentally focused users who are excited to be driving a fully electric car that has style. They are not fully devoted environmentalists that were will willing to drive the first electric car, but mild ones that made the jump when the car looked like more than just a “green” project.

STEP 2: Identify the User’s Task

The users will do most of their tasks through the large touch screen panel. Users will use the screen to adjust mirrors, air vents, temperature and radio to meet their comforts. Most of the time while driving the screen will be used to show important information such as speed limits, navigation routes, and car status.

STEP 3: Identify the Criteria

On the Tesla interface the variable the screams the loudest is efficiency. Only one interface, one location to go to control everything. The touch screen is very efficient to use. With large user-friendly controls most users can quickly learn the system. Overall the system is not as simple as physical knobs and dials for each function, but it sure gives a sleek look. I can’t think of any variable that is largely a negative. The only setback I can see is the slight distraction the screen causes. This is more than compensated by the assisted driving of the car.

STEP 4: Analysis

Criteria	Score	Reasoning
Efficiency	2.0	With all controls being in one location, it makes the interface easy to use.
Learnability	-1.0	It’s hard to master where the controls are and what sequence they need to be activated in without looking at the screen
Familiarity	-1.5	This interface is unlike any other
Simplicity	1.5	All controls are intuitive and easy to use
Mapping	2.0	All controls have a clear meaning and are labeled well
Motivation	1.5	For users that have not tried it is possible for the user to not want to make the switch. However, after using this interface, you will want to use it again.
Trust	1.5	The responsive controls give the user a satisfying sense of accomplishment and trust that the interface will do the will of the user
Visibility	1.0	Each control has clear visible cues and symbols to depict what it will control

STEP 5: Criteria Hierarchy

It seems that the biggest concern with the interface is its familiarity. It's unlike any other car interface. This can be exciting or daunting to the user. The system is nearly impossible to master without looking at the screen for reference. This makes it hard learn the system.

Step 6: Draw Conclusions

The two problems are not related. The learnability and familiarity are each their own concern.

Criteria	Weight	Score
Efficiency	10%	0.2
Learnability	20%	-0.2
Familiarity	5%	-0.075
Simplicity	10%	0.15
Mapping	15%	0.3
Motivation	30%	0.45
Trust	5%	0.075
Visibility	5%	0.05
Total		0.95

The total score for the interface is reasonably high. The familiarity is not a big concern at all. Most users of these cars are tech forward people who are eager and excited to press all the buttons to figure out what they do. They don't mind taking the time to explore the unique and exciting interface. The learnability is a bit of a turn off for safety minded individuals. Overall though, users are very likely to come back and use the interface again. It's an enjoyable system