Instructional Design Outline

Introduction to Model 3, Model Y and Supercharger

Project Description

New and existing individuals within the Tesla engineering organization need to be trained on the fundamental details, technologies and specifications of the Model 3, Model Y and Supercharger products. The instructional solution, as outlined in this document, will ensure that learners have a strong, introductory understanding of the Model 3, Model Y and Supercharger products.

Analysis

Needs Assessment

We can make some broad assumptions that our learner group is technical and familiar with the Tesla brand.

We can perform both a contrived learner analysis and a derived learner analysis. Our contrived analysis can be a simple brainstorm with the instructional design team, current engineering SMEs, and other related stakeholders. This brainstorm helps to determine our primary audience's needs and characteristics. Our derived analysis can look like a set of interview questions or surveys of incoming engineering staff. A simple Likert scale questionnaire could assist in formulating a useful learner profile too:

Please rate your familiarity with the following items.					
	Unfamiliar				Very Familiar
The Tesla brand and company.	1	2	3	4	5
The Model 3 (features, specs., technologies).	1	2	3	4	5
The Model Y (features, specs., utility).	1	2	3	4	5
The Supercharger (features, locations, process).	1	2	3	4	5

We execute on the plan for the above needs assessment and begin to generate data about our engineer audience. We can now create our audience analysis.

Audience Analysis

Learner characteristics

A. Range in age and career experience levels. College graduates to Senior Management-level.
B. Are very familiar with the Tesla brand.
C. Are mostly familiar with the Model 3 and Model Y.
D. Are least familiar with the Supercharger product.

Value Systems

A. Have a diverse set of personal values but maintain objectivity and openness to ideas.
B. They thirst for knowledge so more niche details would likely engage them in their learning.

Physical Traits

A. Are used to working at a computer most of the day.
B. Some work within laboratory and controlled environment spaces.

Prerequisite Skills

A. They're familiar with modern computer systems and software.
B. Able to navigate and use an eLearning platform easily.
C. Many of the learners already own a Tesla product and have end-user perspectives, knowledge and attitudes in place.

Learning Context

Physical Characteristics

The training will be delivered online using the company's Intranet/LMS.

Constraints

Newly hired engineers must complete the training within 2 weeks of their start date. Existing engineers have the option to complete the training but it is not mandatory.

Compatibility With Learner Needs

Localization for non-English regions will be required. Newly hired engineers must also have their credentials, non-disclosures, and system permissions in place in order to access the training.

Learning Goal

Learners will gain high-level knowledge of the Tesla company, Model 3, Model Y and Supercharger products.

Design

We've assessed our learner group, the expected learning context and determined the primary learning goal for this training initiative. We now begin design of our learning experience with the following learning objectives as our guide:

Learning Objectives

1. Learners must accurately identify the Tesla Model 3, Model Y and Supercharger products.
2. Learners will analyze the key features, specifications and value propositions of the Model 3, Model Y and Supercharger.
3. Learners must correctly answer questions as part of a comprehension assessment for the Model 3 and Model Y products.

Learning Theories Employed

Cognitivism

- Knowledge is objective, rigid, and organized.
- Information is naturally hierarchical.
- New learning must connect to prior learnings.

Rationale

- Engineering is highly objective and uses rigid conventions and principles. The Model 3, Model Y and Supercharger products that we're training our learner group on are robust, high-tech and thoroughly engineered. There is a strong parallel between what our learners have already been exposed to, and the topics to be covered in this training.

Adult Learning (Andragogy)

- Highly self-directed in learning.
- Most interested in learning topics that have immediate utility.

Rationale

- Our entire learner group will be adults and the information presented will have direct application to their jobs. While there is a disparity in that adult learning is best presented as problem-centered materials, versus content, we can still glean some important approaches to our designs by recognizing the distinction between Andragogical and Pedagogical approaches.

Learning Outcomes

Model 3	
(a) Safety	The learner will correctly identify the specific engineering features of the Model 3 that make it safer than other vehicles in its class.
(b) Performance	The learner will demonstrate an understanding of the design decisions and features that contribute to the Model 3's speed, acceleration and aerodynamics.
(c) Technology	The learner will accurately outline the individual technologies integrated in the Model 3 which give it unique advantages compared to other types of vehicles.
~~(d) Styling~~	~~The learner will generalize the unique style and vehicle design features of the Model 3.~~

Model Y	
(a) Overview	The learner will correctly identify the specific features of the Model Y that are both shared and unique to the Model 3.
(b) Performance	The learner will demonstrate an understanding of the design decisions and features that contribute to the Model Y's speed, acceleration and range.
(d) Utility	The learner will accurately outline the elements of utility which make the Model Y distinct to the Model 3.

Supercharger	
(a) Network	The learner will recognize the strategic placement and logistical strengths of the Supercharger network.
(b) Process	The learner will internalize the process of using a Supercharger.
(c) Performance	The learner will generalize details related to the speed and efficiency of the Supercharger.

Develop

See the Storyboard+Script document.

Implement

Articulate Storyline Link: https://360.articulate.com/review/content/ea4ce694-93f4-423c-8a09-a8ac9f54fb5e/review