User journey

by the Design Team of Accenture Interactive NL

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Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance company

People 4 | Time 30 min | Difficulty Beginner

Creating a user journey is a quick way to help you and your team gain a deeper understanding of who you're designing for, aka the stakeholder in your project. The information you add here should be representative of the observations and research you've done about your users.

1 Phases High-level steps your user needs to accomplish from start to finish	Requirements	Image Collection	Image preprocessing and Segmentation	Cost Estimation
2 Steps Detailed actions your user has to perform	Need Data set to train and test the model Selection of Machine Learning Algorithms Cost Estimation	We are given the dataset of damaged vehicles . User can take a picture of the damaged vehicle and upload it. The model needs to access the damage from scratch and estimate the cost of damage.	First we check whether the given input image of car has been damaged or not. Artificial Intelligence (AI) in the sense of machine learning and deep learning algorithms can assist in solving problems. A vehicle-damage detection technique based on transfer learning and a mask regional convolutional neural network (Mask RCNN) is utilized to quickly handle accident compensation problems.	These algorithms identify the damaged section of a car, determine its position, and then estimate the severity of the damage.
3 Feelings What your user might be thinking and feeling at the moment	The customer may get satisfied with the cost estimated by this model. The process of claiming insurance becomes faster. It reduces the discrepancy between the actual sum of money paid and the amount that should have been paid.	Helps to speed the process of claiming insurance as the model is already trained with the preset images.	Automatically detecting vehicle damage using photographs taken at the accident scene is very useful as it can greatly reduce the cost of processing insurance claims, as well as provide greater convenience for vehicle users.	An ideal scenario would be where the vehicle user can upload a few photographs of the damaged car taken from a mobile phone and have the dam- age assessment and insurance claim processing done automatically.
	Some defects may occur It might even lead to the disappointment of the custormer. May require large set of data to get better accuracy.	We need to collect a large set of data to train the model to get better accuracy. Sometimes it is difficult to detect and identify invisible damages.	It is difficult to analyze damages made internally. It is difficult to identify and give all damages to the vehicle.	The solution achieved using ML algorithms cannot achieve 100% precision in both detecting the damaged car parts and assessing the loss incurred.
Pain points Problems your user runs into	Documentation Process Adapt to new technologies To know the guidelines	Customer face difficulty in coping up with the new technology like using the apps and navigating to the correct website. •	Customers feel difficulty while asking their queries as there is lack of human resource. Customers face difficulty with the language of documentation and communication. Capturing of correct images of the damaged parts and uploading it in the app or website.	Customer expects to get the correct estimation of the damaged parts and wants the claim to be fair.
Opportunities Potential improvements or enhancements to the experience	Creating a good UI and using data to create personalized experiences Embedding AI throughout the customer journey Introducing intelligent workflows	Adding new channels to communicate with • customers for policy questions and claims. Offering hybrid experiences (human and artificial intelligence, physical and • virtual, direct and agent-based). By pre-filling information already obtained, you can focus on deepening the understanding of your customer by asking net new data.	Changing language in documents and communications to use less insurance jargon. Increase efficiency of image detection by using improved algorithm. Meeting customers at the right time on the right channels with a personalized message or content.	Engaging with customers daily or throughout the year instead of only at renewal time. Improving operational efficiencies and connecting businesses (repair shops, rental cars, tow trucks, etc.) from end-to-end. With access to the right data at the right time, insurers can create more personalized insurance policies and experiences even when the interaction is digital. This speeds up the process bay making it easier to share the