driVRy

Market and opportunities

Automotive industry trends for sales suggest the need in effective selling tools. Various sources of information say that forecasts are changing – just a couple of years ago the projected number of annually sold cars was 20 million by 2018. But according to Statista data, the projected light vehicle sales in the United States look different – 17.8 million in 2016, 17.4 million in 2017, 16.5 million in 2018, 17.3 million in 2019, and a bit more in 2020 – 17.6 million. Global car sales are predicted to come to around 103.5 million units. The data indicate that the situation get worse. And this hints the auto dealers to look for the ways fostering sales, such as virtual reality car dealerships.

People are fed up with old-fashioned style, in which the traditional dealers deal with customers when selling cars:

- People feel anxious or uncomfortable when visiting a car dealership;
- People dislike negotiation with a car dealer, especially aggressive selling;
- Women fell more pressured by salespeople to buy a car right away;
- All the surveyed feel they waste time, 54% would buy or sell a car without leaving home, and 42% would be comfortable to buy a car online without a test drive provided that they'd be given some assurances (such as money-back guarantee and the like).

Taking into consideration the fact that 89% of consumers look for vehicle information online, we can say that **integrated VR mobile apps for car dealership** can be a source of positive customer experience and can become sales drivers of future car dealership. Traditionally when you want to buy a new car you start exploring the market and visiting care dealerships. Very often, there are very few models displayed there and the number of colors and additional features is very limited.

Try to imagine you've got a quality VR headset and can customize any feature or model of the car you want to buy. Or you can get every technical detail you want to know about your future car. Or even sit at the driver's seat and make a virtual ride. Using VR technology and apps developed for a dealer almost every showroom can become a virtual reality car showroom at that it won't cost a car dealer a fortune.

Pros and cons

1. The biggest pro to build a solution for a car dealership is the availability and affordability of high-performance, easily wearable VR headsets, like Google Cardboard. According to some estimates global VR headset shipments will reach 61 million by 2020.
2. Another pro is the consumers' willingness to visit stores where VR/AR technology is used. Dealer Marketing Magazine states that 80% of the future purchasing generation (i.e. the people who are 13 to 17 years old now) tend to visit stores that offer interactive experiences via AR and VR technologies.
3. The third pro is the cost reduction of a car dealership – you'll need less floor space, shop assistants and car models displayed in the showroom in actual life.
4. And the fourth pro is the improved customer experience. VR showroom apps give customers a chance to make more informed decisions and to get the information about their possible new cars while staying at home. They give customers an ability to virtually sit inside a car, observe its exterior, get the information about is technical details and select the necessary options. After getting the information they need, buyers can visit a dealership and see a vehicle in the metal or even buy the car they liked without leaving home.

What are the cons? The cons are also visible. You'll need a high-quality content, such as 360-degree imaging or 3D model for every car you sell.

Our solution – what are we are going to develop

During this competition we are looking forward to developing a proof of concept where you can use a mobile app in which you will be able to choose a car, make a pre-configuration of it and see how it looks like in VR. We chose a Mercedes model in which you can stay on the driver's seat and configure the features of the interior car (like seats textures and colors, board and display functionalities).

The application will be developed in Unity, using our own 3D models created from scratch by Alexandru, our 3D artist. In the following pictures you can see what we have done these days:

For more details, please look in the README file.