

# [Good example of integrating touch screen technology in automobile essay](https://assignbuster.com/good-example-of-integrating-touch-screen-technology-in-automobile-essay/)

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6CC515, Monday 11th Nov 2013 @ Prof Nik Bessis   
Abstract   
Computing companies have been using a lot of money in computing automobiles and connectivity; My paper looks into the developments and how the use of touch screens and mobile applications in controlling vehicles will be interesting for the companies and those that will utilize the development and see it actually materialize; The smart automobiles also called smart cars are semi autonomous intelligent driven cars which are incorporated with systems that enable driving through artificial intelligence. The idea of smart automobiles began decades ago and has developed throughout the years up to now; the main technology involves the use of electric devices to control the cars. My paper looks into this very intriguing development and how it can improve the car industry as a whole. The idea that this paper presents is driving a car using touch screen. The touch screen is an in-built device and it enables the driver inside the care to control it.

## Introduction

Smart automobiles are always on the move to developing better technological enhancements each year. The future is gaining ground on the incorporation of robotic cars. Robotic races which act as proving grounds for different companies have even recorded an Audi TTS which broke the record by showcasing a driverless car that went on for about 12 miles in less than 27 minutes. As much as the vision seems to be gaining ground for a better future of this technological advancement, a lot of research is to be conducted and enhancements to ensure that no gaps are neglected to mark the success of robotic cars. As the focus shifts to driverless cars, there is a need to think about cars with drivers who uses the touch screen in controlling the car. The main Idea is that there cars that are fitted with GPS devices where drivers input information about the destination and preferred route. The system the guides the user to the destination using the shortest route possible with consideration to traffic jam and other issues. I believe that this idea can be expanded further instead of touch screen devices being used for navigation, they can be used for driving the car on the road (Tsugawa, , Takaharu, and Akio 82).   
The car that will use this technology will ensure that drivers are able to see the surrounding environment using the fitted cameras. The cameras will be used as side mirrors and they will be the main source that the driver will base in making judgment. The will scan the environment before overtaking a car in front of the driver or to apply brakes based the oncoming can. This will be controlled by the driver right on the touch screen. The concept of navigation system which directs the driver where to turn or how far one should a driver before making a left or right turn will be used to advance the touchscreen controlled car. Instead of the driver turning using the steer wheel, they will do so by touching on the screen at the appropriate spot and the car will turn (Tsugawa, , Takaharu, and Akio 182).   
This may be achieved only through a lot of research and insights into technological developments that will enhance and make driving more fun, easy and triple the efficiency of people generally. There should be precision and perfection in the technology on issues of turning, speed, breaks and other functionality of the touchscreen driven car. This will clearly mark the ultimate change and reflect the technological developments that are to take place in the coming years (Bajaj, and 71). The motivation to change for the better is evidently seen when Intel has invested $100 that was meant to improve the connectivity of the cars (Beresford, and Jea89).   
The main reason for coming up with this type of technology is to change the current focus of car innovation. Major players in this industry are more concerned with designing an automatic car that can be controlled remotely.

## The Need for a better Technological Advancement in Smart Automobiles

The introduction of the touch screen mobiles was quite a big step. Imagine if the same is incorporated in the car industry, Automobiles which can be controlled by drivers using in-build touch screen devices (Beresford, and Jean 72). Touch screens have enabled the existence of faster and easier access to the internet. The developments have actually linked people and ideas. Cars which would not require drivers to use steering wheel in order to be in motion would be a bigger step (Beresford, and Jean 81).   
This practically gives a lower hand to the licenses and the countless documents that might be needed to prove the ownership of a car. What might be needed would just be a warrant and receipt that I believe might be in softcopy among the personal files that only the owner can access. Car drivers can also prove their ownership by the use of finger prints. This can be incorporated in the system where unless your finger prints are in the database you cannot gain access to the car control system (Tsugawa, Nobuo, and Haruki 7).   
As much as the developments that have taken place over the decades are quite credible, the gap still exists to enhance simpler and better automobiles that do not require a steering wheel to be controlled. It is evident putting into consideration the disabled and how they might need to still run their errands without much ado and struggle will be quite beneficial. They will not need to use rods to even reach the brakes and the clutches; all that would be needed is just simple knowledge on how to control their cars through the in-built touch screen in their cars (Tsugawa, Nobuo, and Haruki 91).   
The cars will have sensors that will enable it to drive safely. The cameras fitted will be used to give the drivers a wider perspective of what is going on a long the street and the road (Tsugawa, Nobuo, and Haruki 72).

## The Overview of the Technological Advancement in Smart Automobiles

This advancement is quite intriguing as the changes will be seen both on the outside and the inside of the touch-screen driven by drivers to prove their uniqueness. The general outlook of the car will be better; it will be smarter and sleeker compared to the general design of the cars. The cars would not be the normal which any person would expect to come across or see on the road as they would look more like a demolition man (Abuelsamid 81). This improvised vehicle will actually involve a lot of developments to ensure security even while on the road and effectiveness. The challenge is presented whereby while in the traffic, the real situation presented has to be seen in order to know how to move and handle the car in every step (Beresford, and Jean 72).   
The touch screen should be effective and this would be through the use of cloud computing which also contributes to the major role of such a development. The controls have to be quite effective with incorporations of the gear, acceleration, the speed gauges, fuel and the kilometers which all have to be displayed and controlled on the dashboard of the touch screen. The cars should also be fuel efficient and be environmentally friendly, some can even have electrical batteries to reduce the consumption of fuel and ensure better service to the owner of the robotic cars (Beresford, and Jean 72).   
Unlike the remote controlled cares where the challenge presents itself in traffic which however can effectively be controlled and monitored by the presence of cameras at the front and the back of the car. This is to ensure that enough knowledge and control of what might be happening on the road is monitored ideally. The machine to machine electric control right from inside the car to the computer that might be the main control panel of the owner or the controller is what will lead to the realization of this intriguing technological development in the car industry. The touch-screen controlled car offers an opportunity for the drivers to use their judgment because they will also be on the road and in the same environment. It will not be based on only machine judgment (Tsugawa, Nobuo, and Haruki 731).

## Towards a better change for the Smart Automobiles

The automation and the ease that would enhance the things considered hard to do will seem easy through the incorporation of this technology in the automotive industry. There will actually be no need or use of licenses on the roads (Peelamedu, Constantin, and Nagi 88). The transition and the dynamic nature of the technological sector of the world will come into play through the successful incorporation of these automobiles that are controlled by the infrared lights, computers and other technological advancements, like the advancements that have been realized in the touch screens and smart phones like the use of a portable WIFI hotspot.   
The model of the present smart for two by the smart automobiles is an intriguing development that shows the vision might actually be realized. The control of the car using electric light is quite impressive which is as a result of the brilliant minds in the industry. The cars can extract information from the users and the surroundings, exchange information through connection to the servers with the nearby cars, either in the same or a different model and ensure better safety on the roads; as the behavioral patterns of the drivers can be improved for the better (Bajaj, and Kher 90).

## Conclusion

Smart cars are clearly the central feature of the Intelligent Vehicle Highway Systems of the future. They are the transition that is needed be among the next big in thing technological advancements. This technology is new because other companies are mainly focusing on driverless cars that are remote controlled. Their main focus is to get rid of the driver in the car. However my project aims at empowering the driver with modern technological tool in controlling the car. This is to ensure that decisions are based on information collected from all sides of the car by the cameras. There will be real world decision making by the drivers because they will be within the environment which they are controlling. This gives it more accurate judgment and decision making on the road.

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