**IDEATION**

**IDEA 1 :-**

**Smart connected Signs for Improved Road Safety**

In present Systems the road signs and the speed limits are Static. But the road signs can be changed in some cases. We can consider some cases when there are some road diversions due to heavy traffic or due to accidents then we can change the road signs accordingly if they are digitalized.This project proposes a system which has digital sign boards on which the signs can be changed dynamically.If there is rainfall then the roads will be slippery and the speed limit would be decreased.There is a web app through which you can enter the data of the road diversions, accident prone areas and the information sign boards can be entered through web app. This data is retrieved and displayed on the sign boards accordingly.

The idea of the smart city is inspiring many new ideas for integrating the services people rely upon every day. Today, there are solutions delivering – with every iteration – convenience, safety, and efficiency that only a few years ago was unimaginable. This unprecedented connectivity is enabled by – among other things – wireless communication and a vast array of sensors. This connectivity can improve urban lighting, infrastructure performance, and energy consumption.

**IDEA 2 :-**

**Smart building**

Wireless controls is a key component of the Smart Building eco-system and can be found across a wide array of devices found in a variety of building systems, including heating, ventilating, and air conditioning (HVAC), lighting, fire and life safety, and security and access. With the latest developments to wireless solutions, including the emergence of 5G technology, the increased capability of Wi-Fi and the rising smart city trends across the globe, the technology will continue to provide greater accessibility, therefore gaining more traction and widespread adoption. Across industries TE can provide safe, sustainable, and productive antenna solutions along with implementation and optimization services to enable a more connected world. TE can provide advanced antenna solutions for most wireless devices, with many combinations to address customer required features. Our antenna designs can accommodate a broad range of frequency bands for operation on any network in both regional and global markets.

**IDEA 2 :-**

**Smart City**

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Today, many municipalities are replacing standard street lights with LED luminaire lighting fixtures that are equipped with advanced sensors and connected to integrated networks. The result is a light system locally or remotely activated so that it responds only when the street is in use, such as when a pedestrian is walking at night. This type of system enables cities to replace street lighting fixtures, which can help them reduce power demand in the short term and realize cost savings over time.

If we first target large parking venues such as airports, shopping centers, and malls, by adding video capabilities, each lighting fixture can be locally or remotely activated only when there is activity. This can save energy and enhance security. All of the data and control could be accomplished through the current 4G wireless networks or 5G networks of the future. Since we will have this high speed connection to the internet and cloud, we could use WiFi access to provide information about parking availability and special offers at the stores and restaurants in the area. Advertising revenue can be used to offset the cost of rolling this technology out in places that want to place themselves at the leading edge of the technology adoption curve.

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