

IoT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION.

PROJECT DESIGN PHASE-1 PROPOSED SOLUTION

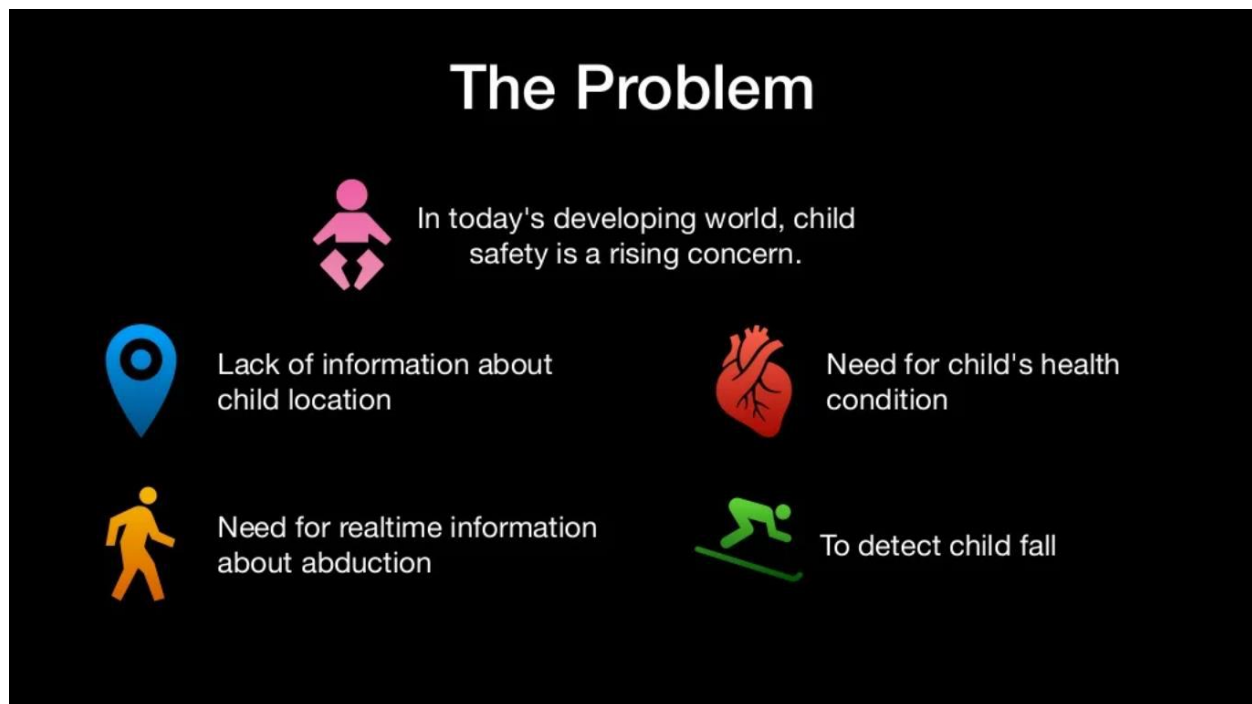
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PROBLEM STATEMENT:

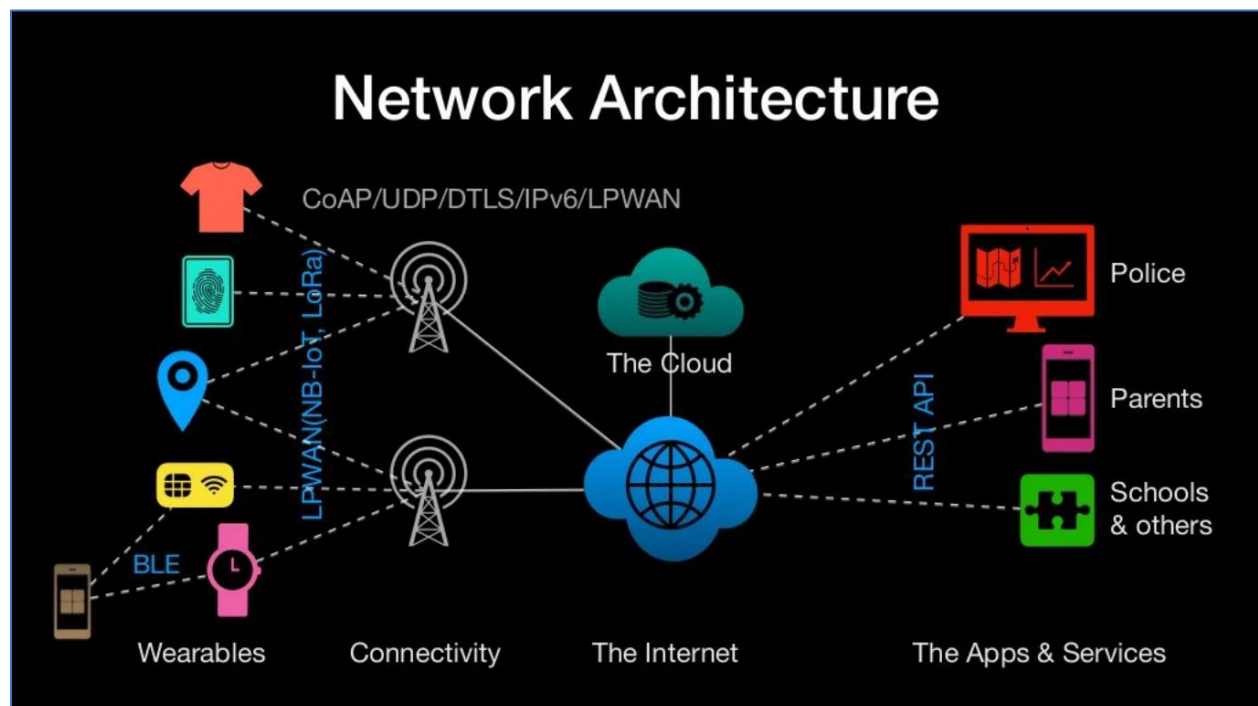
There are various techniques to monitor the child's activities and behaviours. But there are some drawbacks to maintain the child's location continuously to the parents. In the existing system, they use a voice recognition module in which the alert commands from the child are stored and kept for further reference. If the same child delivers the same command, it will compare with the alert command which was previously stored and sets an emergency level according to the alert command. The GSM has a SIM which is used to send an alert message or an alert call to the trusted people. The server will search the respective device ID from the database.



Many smart watches and applications are available in the market for kids care, but most of the parents are not aware and not purchasing those items for their children security. So, awareness is to be given to all parents those who admitted their children in the school. Most important thing is the production cost has to be reduced for distributing the device to the parents. This helping device will be able to provide perfect response about the kid's physical and mental status. But, all the smart watches and innovations are not enough to secure the child from violence.

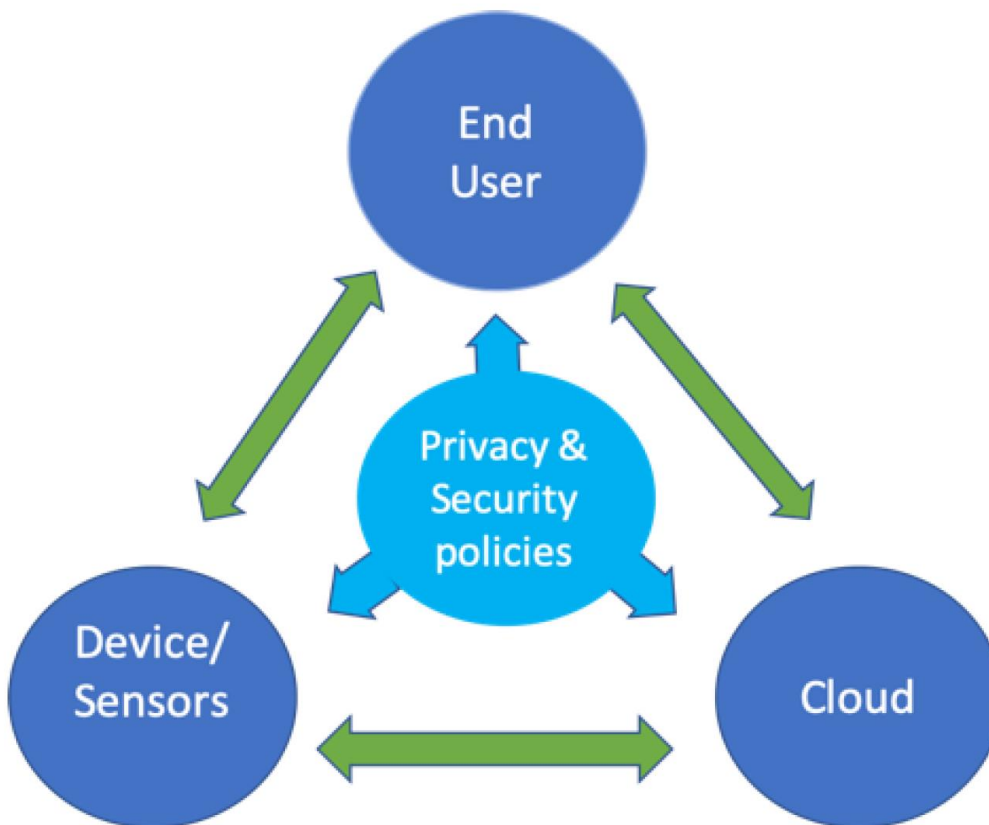
IDEA/SOLUTION DESCRIPTION:

The perfect solution is to track the child's health issues and monitoring that whether they are fully secured or not in their living place. Here we proposed a model to compose all IoT healthcare ideas with the sensors like Temperature, Respiratory and Heart beatsensing module to provide the best application for providing complete care for children. The child can be even tracked by the parents in remote place. It can be done by monitoring child's blood pressure to check whether it gets crossed the normal or acceptable level of a human body and even the location of the child can be reported if it's out of the school range. It can be developed the security devices using GPRS module. GPS checks the location on each and every movement. It focuses on children's safety, tracking the real-time location with the help of longitude and altitude, positioning of GPS and sending information through SMS and Voice messages. In addition the web cameras are fitted, the values of the camera is used to alert the specified guardians through SMS using GSM. When the user receives these alert messages from that device, they can turn on the web camera placed in that device, with which they can visually monitor the status of that child through the live video stream.



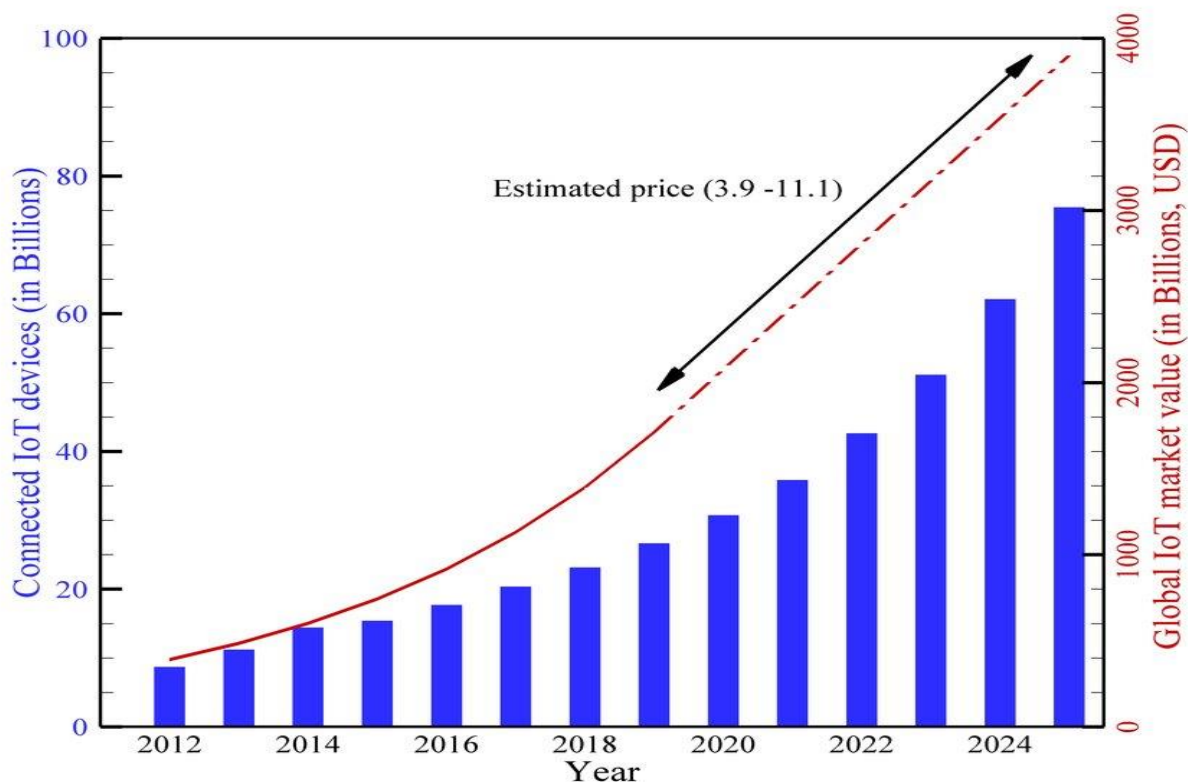
NOVELTY/UNIQUENESS:

The novelty of the work is that the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during emergency. The parameters such as touch, temperature & heartbeat of the child are used for parametric analysis and results are plotted for the same. This technology is used in sensors, for a real-time prediction of monitoring the child at any time. The Internet of Things may be the next industrial revolution in which interconnected physical devices will automate skills and tasks. In today's hyper-connected economy, Internet of Things can radically transform businesses and society increased transparency, optimized production processes, and decreased operating expenses. It provides effective communication using emailing and instant messaging services to any part of the world. It improves business interactions and transactions, saving on vital time.



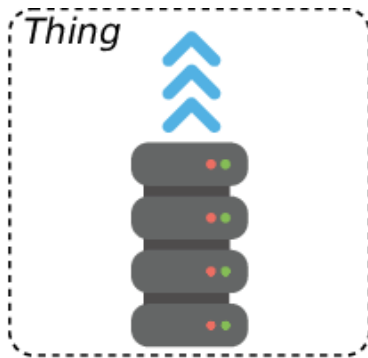
SOCIAL IMPACT/CUSTOMER SATISFACTION:

Social protection is particularly important for children, in view of their higher levels of vulnerability compared to adults, and the role that social protection can play in ensuring adequate nutrition, access to and utilization of social services. While existing evidence shows that social protection program successfully address several dimensions of child well-being -often in an indirect way - a move towards a more "child sensitive" approach to social protection has recently been advocated at the highest level in the international development community. Social protection is therefore particularly important for children, in view of their higher levels of vulnerability compared to adults, and the role that social protection can play in ensuring adequate nutrition and access to and utilization of social services. It helps in understanding customer's behavior, thus helps in generating important data for the business purpose. IoT and its insights help in personalizing communication and predictions for the customers. This. Increases customers satisfaction and attracts them to specific fields.



SCALABILITY OF THE SOLUTION:

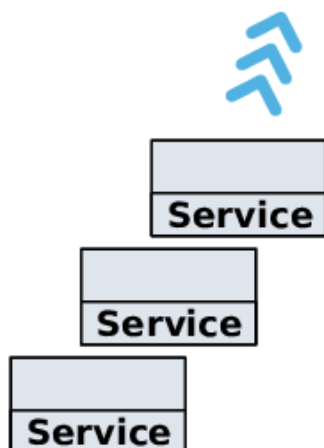
Scalability of the solution is the ability to go from prototype to production in a seamless way. Reliability and scalability go hand in hand here. Before you launch, make sure you can reach the number of devices and connectivity to properly deliver on the promises you make to your customers. Ensuring cellular coverage for an IoT deployment may also prove difficult, especially when you're deploying devices across vast geographic areas. Cellular connectivity is an essential piece of the puzzle for a successful deployment, as interruptions can mean the loss of vital data.



a) Vertical Scalability



b) Horizontal Scalability



c) Functional Scalability

Thing

IoT Service

Hardware Resource

BUSSINESS MODULE:

The one of the most important thing in a business module is giving a security and production to a end user. Provide a ability to collect data from the network and use advanced analytics to uncover business insights and opportunities, and reduce operational cost. Many of the smart watches and applications are available in the market for kids care, but most of the parents are not aware and not purchasing those items for their children security. So, awareness is to be given to all parents those who admitted their children in the school. Most important thing is the production cost has to be reduced for distributing the device to the parents. This helping device will be able to provide perfect response about the kid's physical and mental status. But, all the smart watches and innovations are not enough to secure the child from violence.

