Q. List out 20 use cases of the Internet of Things.

Ans:

1. IOT IN MARKETING AND SALES:

In marketing it can used for the collection and analysis of product usage and consumable data to predict customer requirements and trigger cross - sell and

up-sell alerts.

It also helps in integrating of product usage and performance data for outcome,

performance and usage based pricing , and enhancement of customer's product operation leveraging

aggregated base data and domain expertise.

The detection of congestion on road through GPS navigation is made possible using IOT.

2. IOT IN PRODUCT DEVELOPMENT:

It can be used in connected product usage and quality analysis to ensure a better product

quality , reliability and safety , and also in the remote identification , management and control $% \left(1\right) =\left(1\right) +\left(1\right) +$

of the product configuration.

3. IOT IN MANUFACTURING:

It can help in logistic optimization through easy location and monitoring of key assets.

It also helps in unified factory wide communication via active and passive tags.

It can also be used to support faster and better decision making through operational data

silos connection and also in real time asset health monitoring.

4. IOT IN SERVICE:

It can be used for the better monitoring and diagnosis of product issues, and also

remote servicing of products throuh real time interaction.

It can be very useful in automated tecnician dispatching and service execution based on $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

connected product alerts and management.

Through continuous product usage monitoring ,identification and prevention of potential $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

warrenty compliance issue can be reduced.

5. IOT IN INFORMATION TECHNOLOGY:

It can be used to secure real time bidirectional device communication for access control,

logs and audits, and also for the scalable IOT operations management, and seamless data $\,$

integration.

It also helps in development and maintenance of innovative connected applications.

6. IOT IN CUSTOMER SERVICE:

It can be used for the customer allowance to minotor and tract product usage and performance.

It makes it easy for the customer for quick diagnosis and resolution of product issues

based on connected product data, and also add custom fearures and enhance experience.

7. IOT IN BANKING AND FINANCIAL INSTITUTIONS:

It can be used in inventory and cost monitoring to ensure follow of loan agreement, mininizing

of insurance frauds through real time theft detection mechanism , and automatic sanction of

home improvement loans on internal damage detection.

It can also save time through triggering branch staff preparation with relevant data before

client walks in.

It can also send automatic alerts on shopping loans when client goes for a day shopping, and

even with targetted credit/debit card offer in different products and different schemes

8. IOT IN INSURANCE:

It can help in maintaining usage based insurance based on real time data collection regarding vehicle speed, distance, time of travel, etc.

9. IOT IN RETAIL:

It helps in analysis of customer in-store navigation through sensors , and also in smart digital signage.

It also can reduce threat and damage using real time inventory tracking. We can also use it for an improved customer service life beforehand identification and

resolution of issues, and also personalizing consumer shopping experience to ensure increased profits.

10. IOT IN HEALTHCARE:

It can be usde in the management of warehouse and pharmacy inventory through ERP integration, and also in the medical device integration.

It can also be used under wandering patient tracking to nursing home/hospital engagement and activity monitoring.

It can also be used in several wearable devices like fitness band.

11. IOT IN EDUCATION:

It can be used for the digital collaboration and engagement of teachers and students via 24/7 accessible education tool.

It can also be used in the security system of school as to track students activity and incase of any danger transmit the notification automatically to the police.

12. IOT IN TRAVEL AND HOSPITALITY:

These can be efficient for product monitoring , as well as customer status monitoring through wearable and apps and also benificial for the customer experience tracking at business premises.

13. IOT IN AGRICULTURE:

It can be used for monitoring soil conditions of a plot of federal land, controlling water usage, determining custom fertilizer using sensor , and also managing animal husbandary and hence saving cost utilizing cattle health and well being data. It can also be used for farm resource savings using wireless sensors and remote monitoring devices.

14. IOT IN SMART HOME:

It can be used to connect appliances with remote diagnostics, management and analytics of home control.

It can be very helpful to manage fire safety devices remotely and trigger alerts to neighbours $\ensuremath{\mathsf{E}}$

in case of emergency.

Remtly home surveillance leveraging unmanned autonomous vehicles or UAV's like drones.

15. IOT IN CONNECTED BUSINESS:

Itcan be used for smart lightning through the optimal space illumination ensuring invaluable

security and life safety , and also as potentiate HVAC controllers, thermostats ans sensors.

It can asy be very helpful for surity and access controls by enabling the remote user access management.

16. IOT IN AUTOMOTIVE:

Using IOT in automotive it can be very helpful for connected car system monitoring like it $\ensuremath{\text{c}}$

can be given features such as city navigation, location based services, drive-assist applications,

car-on-demand services, remote diagnostics etc.

Even the real time fleet management can be done by the development of end to end fleet management,

and also deriver safety systems can be provided which triggers automatic alerts on emergency , and $% \left(1\right) =\left(1\right) +\left(1\right)$

also monitoring ateering movements and controlling in-lane position.

17. IOT IN CONSUMER ELECTRONICS:

It can be helpful in achieving building automation through use of connected devices, smart appliances and more, and also in development of robots for some specific works.

18. IOT IN LOGISTICS:

It can be helpful in real time inventory tracking by speeding up warehouse operation using smart labels, and also in cargo integrity monitoring by embedding electronics in regular containers and track it in its route.

19. IOT IN SMART EMERGY SYSTEMS:

It can be very helpful in smart metering system that would make data analytics, smart billing and smart energy profiling very easy and reduce the theft of electricity. It can also be used for smart grid automation like remote asset monitoring, smart grid load balancing, machine learning based predictive analytics , and also maintaining infrastructure remotely.

20. IOT IN SMART CITY:

It can be used for AD-HOC traffic balancing, smart parking systems , and also in smart public safety systems , and weather alert systems. It can be efficient in public services tracking.