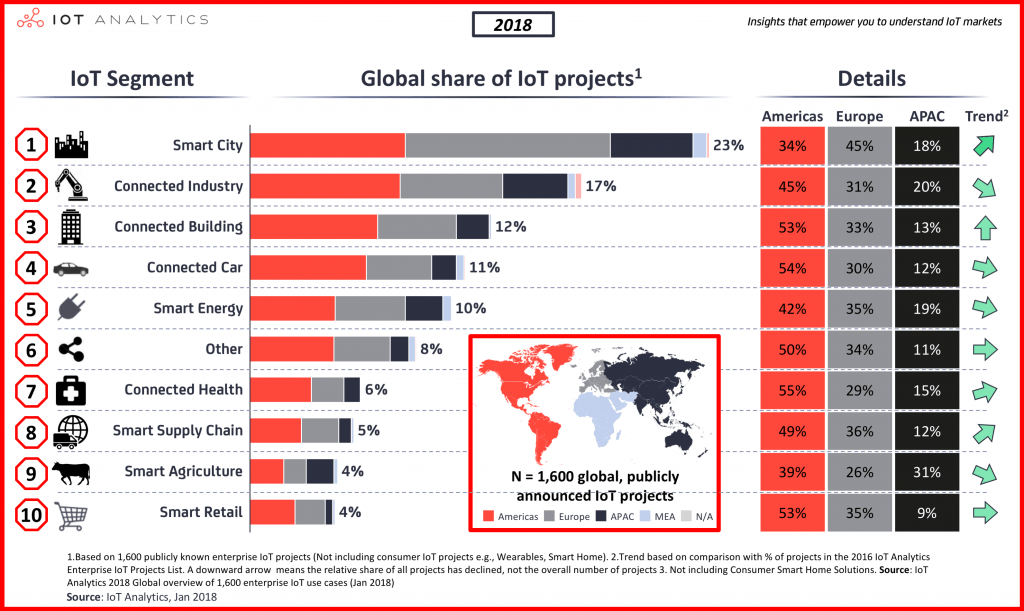
***Assignment -1***

***Andrew John***

***18BEC1278***

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

1. **Smart Metering**
   1. *Smart Grid*
2. **Digital Twins**: *A digital twin is a virtual replica of physical entities such as devices, people, processes, or systems that help businesses make model-driven decisions. With the help of IoT sensors, businesses collect data that is needed to create a digital twin.*
3. **Smart Logistics**
   1. *Fleet Tracking*
   2. *Platooning*
   3. *Connected Vehicles*
4. **Home Intrusion Detection Systems**
   1. *Smart locks*
   2. *Motion detection*
5. **Smart Homes**
   1. *Remote Control Appliances*
6. **Smart Workplace**
   1. *Sociometric badges*
7. **Smart Retail**
   1. *Supply Chain Control*
   2. *Near Field Communication (NFC) Payment*
   3. *Layout Optimization*
   4. *Smart Product Management*
8. **Digital Health**
   1. *Fall Detection*
   2. *Companion Robots*
   3. *Medical Fridges*
   4. *Patient Surveillance/Remote Patient Monitoring*
9. **Water Management**
   1. *Water conservation with alerts*
   2. *Smart Irrigation*
   3. *Leakage Management*
   4. *Water Quality Management*
10. **Smart Cities**
    1. *Outdoor surveillance*
    2. *Smart lighting*
    3. *Electronic Road Toll Collection and Traffic Management*
    4. *Smart parking*
    5. *Noise Monitoring*
    6. *Structural Health Monitoring*
    7. *Waste Management*
11. **Smart Factories**
    1. *Enterprise Asset management*
    2. *Predictive maintenance*
    3. *Industrial process automation/optimization*
    4. *Energy Management*
12. **Accessories to Mobile Phones**
    1. *Smart Watches*
    2. *Fitness Trackers*
    3. *Wearables*
    4. *Hearables*
13. **AR/VR Applications**
    1. *Extended reality experience in AR*
    2. *VR places users in a digital world*
    3. *In medical procedures*
    4. *In shopping experiences*
    5. *Entertainment sectors*
14. **Drones**
    1. *Cinematography and Photography*
    2. *Rig Inspections in Oil Rig factory*
    3. *Delivery of lightweight goods*
    4. *Search and Rescue*
15. **Smart Agriculture**
    1. *Streamlining Operations*
    2. *Tracking of herds*
    3. *Moisture Level Management*
    4. *Water Quality Management*
16. **Machine-to-Machine (M2M) Connected Devices**
    1. *IoT-enabled machines*
    2. *Track machine wear-and-tear*
    3. *Mapping machine workloads, inputs and outputs*
    4. *Safe and Efficient*
17. **Companion Robots**
    1. *Cleaning Robots at various sectors of industries*
    2. *Waiting Robots at Restaurants*
    3. *Assisting Robots at Hospitals*
    4. *Security Robots at Banks*
18. **Autonomous and Connected Vehicles**
    1. *Level 5 autonomous vehicle without human intervention*
    2. *Auto Drive*
    3. *Host of onboard sensors are being used to capture information about road conditions*
    4. *Car-to-Car communications*
    5. *Autonomous Delivery*
19. **Asset tracking**
    1. *Locate and monitor key assets*
    2. *Tracking supply chain*
    3. *Optimizing logistics*
    4. *Maintain inventory levels*
    5. *Prevent quality issues*
    6. *Detect theft*
20. **Saving the Bees**
    1. *Combat honeybee colony collapse disorder*
21. **Thwarting Illegal Fishing**
    1. *The Port of New Bedford installed Dell Edge Gateways, with V5 Systems solar video surveillance technologies to better track who was coming in and out of the port*
22. **Redefining Field-Based Intel for the Oil and Gas Industry**
23. **Imbuing Jet Engines with Artificial Intelligence**
24. **Real-time data analysis: processing incoming telemetry data, aggregation, and event detection**
25. **IoT-Based Pest Control**

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