1. **Excel --- okay**
2. **Presentaion uttam – okay**
3. **Canva – animation**
4. **Facts – death and revenue – okay**
5. **Flow chart --- okay**

**1) One-Time Sale + Maintenance Contract​**

* **Overview: The system is sold to the customer as a one-time purchase. The company then offers a maintenance contract for ongoing support, monitoring, and repairs.​**
* **Key Features:​**

**Target Customers: Government bodies, industrial zones, rail stations, or public utilities with significant upfront capital for equipment investment​**

**2. Subscription-Based Monitoring & Alert System​**

* **Overview: The system hardware is installed, and the business provides continuous monitoring of the earthing system health. Alerts and data are processed centrally in a cloud-based platform.​**
* **Key Features:​**
* **Alerts via Web app, email, or SMS.​**
* **Target Customers: Hospitals, commercial buildings, data centers, parking lots, and other facilities that need reliable electrical systems.​**

**3. Insurance Partnership Model**

* **Overview: Partner with insurance companies to offer lower premiums to facilities with earthing system monitoring in place, ensuring safety and compliance.**
* **Key Features:**
  + **Insurance companies offer reduced premiums for installing and using the monitoring system.**
* **Target Customers: Facilities requiring electrical safety insurance or companies looking to reduce operational risks.**

**4. Freemium Model**

* **Overview: Provide basic monitoring services for free, and charge for premium features such as advanced analytics, automated alert management, and integration with existing facility management software.**

**Target Customers: Facility managers of buildings, SMEs, and**

**​**

**Business –yes**

**Pitching –**

**Prentation - maybe**

**Business :**

**.**

**### 2. \*\*One-Time Sale + Maintenance Contract\*\***

**- \*\*Overview\*\*: The system is sold to the customer as a one-time purchase. The company then offers a maintenance contract for ongoing support, monitoring, and repairs.**

**- \*\*Key Features\*\*:**

**- Full ownership of hardware and software is transferred to the client.**

**- Additional revenue from optional maintenance contracts.**

**- Add-ons for software upgrades or additional features.**

**- \*\*Revenue Model\*\*: Initial sale plus recurring maintenance fees.**

**- \*\*Target Customers\*\*: Government bodies, industrial zones, rail stations, or public utilities with significant upfront capital for equipment investment.**

**### 3. \*\*Subscription-Based Monitoring & Alert System\*\***

**- \*\*Overview\*\*: The system hardware is installed, and the business provides continuous monitoring of the earthing system health. Alerts and data are processed centrally in a cloud-based platform.**

**- \*\*Key Features\*\*:**

**- Continuous remote monitoring using cloud software.**

**- Alerts via mobile app, email, or SMS.**

**- Maintenance team dispatch based on real-time system failures or malfunctions.**

**- \*\*Revenue Model\*\*: Monthly or yearly subscription for monitoring services.**

**- \*\*Target Customers\*\*: Hospitals, commercial buildings, data centers, parking lots, and other facilities that need reliable electrical systems.**

**### 6. \*\*Data-Driven Business Model\*\***

**- \*\*Overview\*\*: The system provides continuous monitoring of earthing systems and collects data about failures, malfunctions, and performance, which can be used for predictive maintenance. The data generated can be used to offer additional services.**

**- \*\*Key Features\*\*:**

**- Predictive maintenance service based on data analytics.**

**- Access to system performance reports for proactive decision-making.**

**- The data can also be sold or licensed to equipment manufacturers or regulators for compliance or improvement of electrical systems.**

**- \*\*Revenue Model\*\*: Subscription fees for data services, analytics reports, and premium features.**

**- \*\*Target Customers\*\*: Utilities, large enterprises, and regulatory bodies interested in system performance and predictive analytics.**

**### 7. \*\*Freemium Model\*\***

**- \*\*Overview\*\*: Provide basic monitoring services for free, and charge for premium features such as advanced analytics, automated alert management, and integration with existing facility management software.**

**- \*\*Key Features\*\*:**

**- Free basic monitoring system for earthing health.**

**- Paid add-ons like enhanced alerts, detailed analytics, and integration with other systems (e.g., building management).**

**- \*\*Revenue Model\*\*: Free basic services with a tiered pricing model for advanced features.**

**- \*\*Target Customers\*\*: Facility managers of buildings, SMEs, and public entities who may not be able to afford premium services upfront but could grow into it.**

**### 8. \*\*Consulting + Custom Solution Development\*\***

**- \*\*Overview\*\*: The company provides consultancy services to assess earthing health needs and develop customized sensor solutions based on the unique requirements of each facility.**

**- \*\*Key Features\*\*:**

**- Tailored sensor systems for individual customer needs.**

**- Consulting services for optimizing electrical system performance and safety.**

**- Ongoing maintenance and consulting for future improvements.**

**- \*\*Revenue Model\*\*: Consulting fees + custom solution development costs.**

**- \*\*Target Customers\*\*: Large enterprises, public works departments, airports, or industrial facilities that require bespoke solutions.**

**### 9. \*\*System Integration Partnership\*\***

**- \*\*Overview\*\*: Partner with electrical and construction companies to offer integrated earthing health monitoring systems as part of new builds or electrical system upgrades.**

**- \*\*Key Features\*\*:**

**- Integration into new or existing infrastructure projects.**

**- Bundling sensor systems with electrical installations or retrofitting older systems.**

**- Ongoing monitoring and maintenance services.**

**- \*\*Revenue Model\*\*: Bundled pricing with partner services or project-based pricing.**

**- \*\*Target Customers\*\*: Electrical contractors, real estate developers, and construction firms.**

**### 10. \*\*Insurance Partnership Model\*\***

**- \*\*Overview\*\*: Partner with insurance companies to offer lower premiums to facilities with earthing system monitoring in place, ensuring safety and compliance.**

**- \*\*Key Features\*\*:**

**- Insurance companies offer reduced premiums for installing and using the monitoring system.**

**- Regular reports provided to insurers to ensure electrical safety.**

**- The system serves as proof of compliance with safety standards.**

**- \*\*Revenue Model\*\*: Commissions from insurance companies based on policy savings or installation fees.**

**- \*\*Target Customers\*\*: Facilities requiring electrical safety insurance or companies looking to reduce operational risks.**

**Each model can be adapted depending on the scale of the facility, the criticality of the electrical systems, and the budget of the target customers.**

/// Facts

Total no of poles :

**India**: India, with its vast rural electrification program, likely has over **150 million** poles.

the total number of electric poles in the world might range from **1.5 to 2 billion**.

Reference : **India's Ministry of Power** and rural electrification programs for India.

No of poles for parking and stationary

**Total for India (Estimate):**

India has thousands of parking lots and stations across the country. If we generalize:

* **Parking lots**: Thousands across urban areas could result in approximately **500,000 to 1 million electric poles**.
* **Railway and bus stations**: Across more than 7,325 railway stations and thousands of bus stations, the number could range from **1 to 2 million poles** for infrastructure and lighting.

Detailed studies might exist in reports from:

* **Indian Railways** electrification reports.
* **Urban development authorities** for city planning and infrastructure.
* **National or regional electric utility companies** such as the Power Grid Corporation of India.

**Total Estimate:**

* **Parking lots**: **50–100 million poles** globally.
* **Stations (bus and railway combined)**: **1–2 million poles** globally.

**World Bank** and **United Nations (UN)** for urbanization data.

**International Association of Public Transport (UITP)** for data on global public transport infrastructure

**General Trends for Electrical Accidents Globally:**

1. **Worldwide Electrical Accidents:**
   * **According to the International Labour Organization (ILO), around 7% of all fatal workplace accidents are related to electricity.**
   * **The International Labour Organization (ILO) reports that globally, there are around 76,000 electrical injuries each year, with a portion of these being fatal.**

References for Further Information:

* International Labour Organization (ILO): For global electrical injury and fatality statistics.
* U.S. Occupational Safety and Health Administration (OSHA): For reports on electrical safety and fatalities in the U.S.
* World Health Organization (WHO): For general global health and accident reports.

**Estimated Revenue Loss due to Current Leakage from Electric Poles:**

While exact percentages related to poles in parking lots and stations are not reported globally, a rough estimate can be made by assuming that current leakage from poles could account for a small percentage of the overall T&D losses:

* **In developed countries**, current leakage from electric poles might cause **less than 0.5% of total electricity revenue loss**, as infrastructure tends to be well-maintained.
* **In developing countries**, where maintenance may be less stringent, the losses from electric poles (including those in parking lots and stations) could contribute to **1-3%** of the total revenue lost due to electricity inefficiencies.

If we assume that current leakage at poles in public spaces contributes around **1-3%** of the overall T&D losses, this would result in a **revenue loss of approximately 0.1-0.3%** of the total electricity generated globally. This is a speculative estimate and will vary widely by region.

To calculate the exact revenue loss amount, we need to know the total revenue from electricity generation. Assuming the total electricity generated globally in 2023 was 30,000 terawatt-hours (TWh), as mentioned earlier, and the average global electricity price is around $0.10 per kilowatt-hour (kWh), we can estimate the total revenue as follows:

Total revenue = Total electricity generated \* Average price = 30,000 TWh \* (1,000,000 kWh/TWh) \* $0.10/kWh = $3,000,000,000,000

Now, we can calculate the revenue loss range based on the given percentage:

Revenue loss range = 0.1-0.3% of total revenue = 0.1% \* $3,000,000,000,000 to 0.3% \* $3,000,000,000,000 = $3,000,000,000 to $9,000,000,000

Therefore, the revenue loss due to the mentioned issue could be estimated to be between **$3 billion and $9 billion**.