**Connected door security**

**Unwanted Intrusions:**

**Lost Keys**

**Privacy Concerns:**

**Forgetting to Lock Doors**

**Lack of Remote Monitoring**

**User-Friendly and Efficient Solutions**

**Problem statement**:

"In the context of door security and access control, there are critical challenges to be addressed. Unauthorized entries and lost keys compromise security, leading to unsettling situations. Privacy concerns arise from data collected by access control systems, raising questions about data use. Forgotten door locks and the absence of remote monitoring affect safety. Solutions are needed to make security user-friendly and efficient while maintaining privacy and security.

**The pain points in the given problem statement include:**

**Unauthorized Entries:** Frequent occurrences of unauthorized access compromise security, leading to unsettling situations and potential security breaches.

**Lost Keys:** Traditional keys and access credentials are often misplaced or stolen, increasing the risk of unauthorized entry and security vulnerabilities.

**Privacy Concerns:** Data collected by access control systems raises privacy concerns, with users worrying about how their personal data is used and protected.

**Forgotten Door Locks:** Users sometimes forget to lock doors, creating security vulnerabilities and compromising the safety of spaces.

**Absence of Remote Monitoring:** The lack of real-time remote monitoring hinders efficient access control and creates safety and security challenges.

**User-Friendly and Efficient Solutions**: Current security systems lack user-friendliness and effective user support, resulting in user frustration and potential misconfigurations.

**Solution:**

**1. Unauthorized Entries:**

Access Control System:

Use biometrics, keycards, or mobile apps for secure entry.

Surveillance Cameras:

Install cameras at key entry points.

Monitor in real-time and record entries for security.

**2. Lost Keys:**

Using keyless entry systems like smart locks or digital access codes to eliminate the risk of lost keys.

Enabling remote key management for users to deactivate lost or stolen access credentials online.

**3. Privacy Concerns:**

Encrypt all collected data for security.

Clearly communicate privacy policies and give users control over data access.

**4. Forgotten Door Locks:**

Using smart locks with auto-lock features.

Developing a mobile app for door-lock reminders and remote locking

**5. Absence of Remote Monitoring:**

Real-time remote access control.

Real-time alerts for unauthorized access and security incidents

**6. User-Friendly and Efficient Solutions:**

Enhancing the user interface.

Providing comprehensive user training and support.

**Motion Sensors: These sensors can detect motion in front of the door and trigger an alert or action.**

**Wireless Communication Sensors:** Some smart locks use wireless technologies like Bluetooth or Wi-Fi to connect with smartphones or other devices for remote control and monitoring.

**Biometric Sensors:** These sensors include fingerprint scanners and retina scanners. They identify individuals based on unique biological characteristics.