

IoT & RFID TURN-KEY SERVICE PLATFORM

DIGITAL HEALTH

THE COALITION OF PARTNERS LED BY HORIZON IoT

TRANSFORMING HEALTHCARE WITH TECHNOLOGY

Horizon IoT is at the forefront of technological innovation, leveraging IoT, RFID, and AI technologies to transform the healthcare industry. Our mission is to enhance patient care, streamline hospital operations, and improve healthcare outcomes through our comprehensive Digital Health Turn-Key Service Platform.

We specialize in providing advanced end-to-end solutions tailored for healthcare, addressing challenges like patient safety and regulatory compliance. Our platform integrates RFID, IoT, and AI to monitor, manage, and optimize healthcare operations in real time, enhancing efficiency and reducing costs.

Our Digital Health Turn-Key Service Platform includes customizable SaaS, cloud services, network connectivity, cybersecurity, and edge device integration. This creates a robust and scalable system that meets the diverse needs of the healthcare industry. By automating routine tasks and providing real-time data insights, we help healthcare providers make informed decisions quickly, ensuring better patient outcomes and operational excellence.



KEY FEATURES OF HORIZON IoT DIGITAL HEALTH TURN-KEY SERVICE PLATFORM



Asset Tracking: Using RFID technology, our platform monitors and secures medical equipment throughout the hospital. This ensures that valuable assets are always accounted for, reducing the risk of loss or theft. By providing real-time location data, staff can quickly locate necessary equipment, improving operational efficiency and patient care.



Patient Identification: RFID wristbands are used to accurately identify patients, significantly reducing the risk of misidentification errors. Each wristband contains a unique patient ID and relevant medical information, ensuring that patients receive the correct treatments and medications. This technology enhances patient safety and streamlines hospital workflows.



Blood Tracking: To ensure the accuracy and safety of blood transfusions, RFID tags are attached to blood bags. These tags store critical information such as blood type and origin, which is matched with the patient's RFID wristband before transfusion. This process minimizes the risk of transfusion errors and enhances patient safety.



Operating Theatres: In operating theatres, RFID wristbands play a crucial role in preventing surgical errors. Each patient is tagged with an RFID wristband containing their medical information and a digital photo. This allows the surgical team to verify the patient's identity and the procedure to be performed, reducing the risk of wrong-site, wrong-procedure, and wrong patient surgeries.



Patient Tracking: RFID bracelets are used to monitor patient movements within the hospital, ensuring their safety and well-being. This is particularly useful for patients with conditions that require close monitoring, such as Alzheimer's or dementia. The system provides real-time location data, allowing staff to quickly respond to any issues and improve patient care.



Newborn Baby Tracking: To prevent mother-baby mix-ups, newborns are tagged with RFID ankle bands that are cross-referenced with their mother's RFID wristband. This ensures that each baby is correctly identified and matched with their mother, enhancing security and peace of mind for families. The system also allows for secure monitoring of babies in neonatal care units.

KEY FEATURES OF HORIZON IOT DIGITAL HEALTH TURN-KEY SERVICE PLATFORM



Emergency Response: RFID technology helps improve emergency response times by ensuring that critical equipment is always available and easily locatable. This allows medical staff to respond quickly and accurately to emergencies, enhancing patient care and outcomes.



Staff Utilization: RFID systems improve staff utilization by reducing the time spent searching for equipment and conducting inventory. This allows medical staff to focus more on patient care, improving overall healthcare quality and efficiency.



Access Control: RFID technology enhances security by restricting access to sensitive areas and equipment. Only authorized personnel with RFID-enabled badges can access these areas, reducing the risk of theft and unauthorized access.



Inventory Management: RFID tags on consumables and medications help manage inventory more efficiently. This includes tracking expiration dates and ensuring that items are used before they expire, reducing waste and ensuring the availability of necessary supplies.



Wireless Temperature Sensing: RFID-enabled sensors monitor the temperature and humidity levels of stored pharmaceuticals, tissues, organs, and other sensitive materials. This ensures that these items are stored under optimal conditions, maintaining their quality and safety.



Connected Health: Our platform supports the Internet of Health Things (IoHT), enabling remote and continuous monitoring of patient health. Data from various medical devices is aggregated and analyzed in real-time, promoting data-driven, evidence-based healthcare.

TARGETED IoT SOLUTIONS IN COLLABORATION WITH ECOSYSTEM PARTNERS

Remote Patient Monitoring (RPM): Wearables and sensors for tracking vital signs, heart rate, and physical activity enable continuous monitoring of patients' health, allowing for timely interventions and better management of chronic conditions.

Virtual Care: Telemedicine platforms for virtual consultations improve access to healthcare services, especially for patients in remote or underserved areas.

Medication Management: Devices that remind patients to take their medications on time ensure adherence to prescribed treatment plans, reducing the risk of missed doses and improving overall health outcomes.

Document Tracking: Solutions for managing and tracking medical records efficiently ensure that patient information is always up-to-date and easily accessible, enhancing the accuracy and speed of healthcare delivery.

Smart Medical Devices: Continuous health monitoring devices like smart inhalers and glucose monitors collect and transmit health data in real-time, enabling proactive management of patient health.

Smart Implants: Devices like insulin pumps and pacemakers continuously monitor and manage patient health conditions, providing real-time data to healthcare providers for timely interventions.

Environmental Monitoring: Sensors monitor temperature, humidity, and air quality within healthcare facilities, ensuring that the environment is safe and conducive to patient health, and helps maintain the quality of stored pharmaceuticals and medical supplies.

Emergency Response Systems: Devices that detect falls or emergencies and alert healthcare providers immediately ensure rapid response to critical situations, improving patient safety and outcomes.

Rehabilitation & Physical Therapy: Devices that track progress in rehabilitation exercises provide data to therapists and patients, helping tailor rehabilitation programs to individual needs and monitor recovery.





TARGETED IoT SOLUTIONS IN COLLABORATION WITH ECOSYSTEM PARTNERS

Smart Beds: Beds that monitor patient movements and adjust positions to prevent bedsores enhance patient comfort and reduce the risk of complications from prolonged immobility.

Connected Ambulances: Ambulances equipped with IoT devices transmit patient data to hospitals in real-time, ensuring that healthcare providers are prepared to deliver immediate care upon the patient's arrival.

Wearable ECG Monitors: Devices that continuously monitor heart activity provide real-time data to healthcare providers, enabling early detection of cardiac issues and timely interventions.

Smart Contact Lenses: Lenses that monitor glucose levels in tears provide continuous data on blood sugar levels, helping manage diabetes more effectively.

Connected Inhalers: Inhalers that track usage and provide data to healthcare providers ensure that patients are using their medications correctly and consistently.

Smart Thermometers: Thermometers that track and record temperature data provide accurate and timely information to healthcare providers.

IoT-enabled Wheelchairs: Wheelchairs that monitor usage and provide data for maintenance ensure that they are always in optimal condition for patient use.

Smart Pill Bottles: Bottles that track medication usage and send reminders to patients ensure adherence to treatment plans.

Connected Health Apps: Mobile apps that integrate with IoT devices provide health data and insights, enabling patients to monitor their health and communicate with healthcare providers easily.

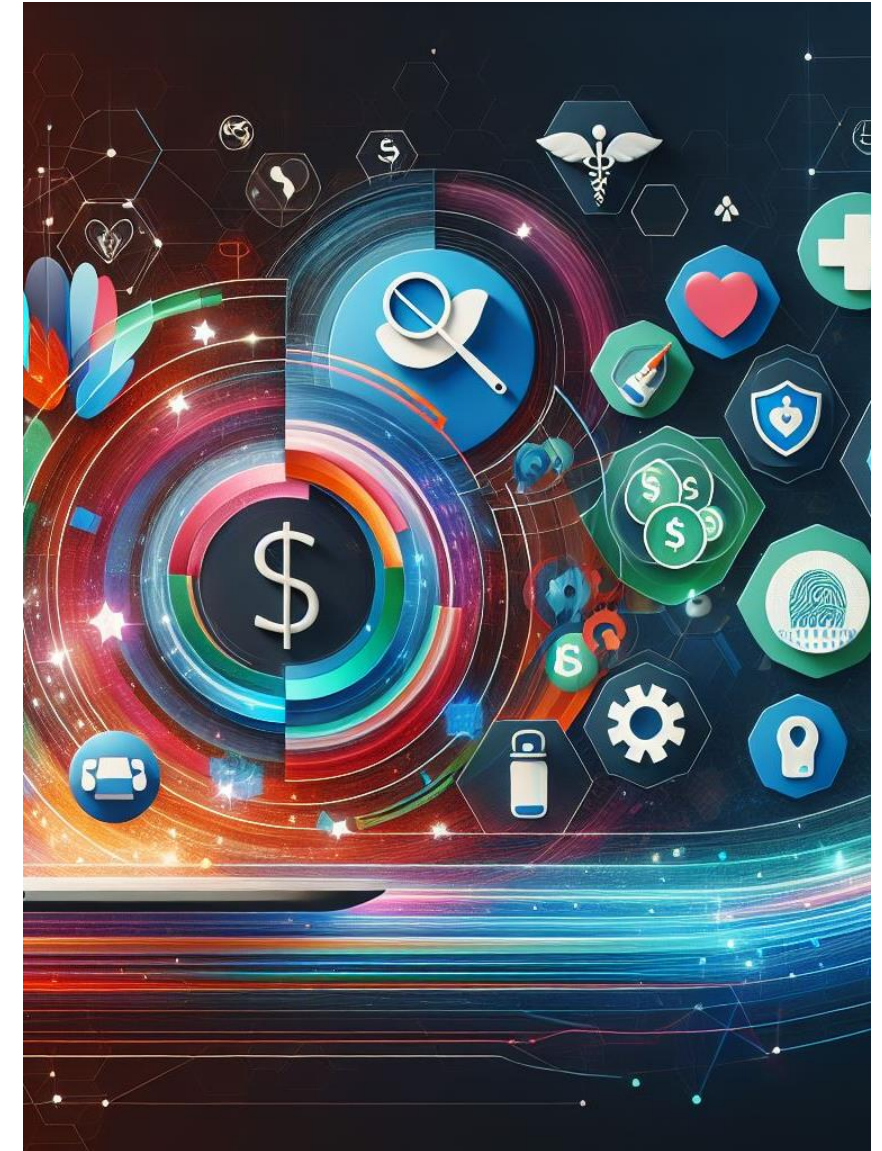
BENEFITS OF HORIZON IOT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

Efficiency: The Digital Healthcare Service Platform automates various hospital processes, significantly reducing the need for manual intervention. This automation minimizes human errors and saves valuable time for healthcare professionals. By streamlining operations such as asset tracking, patient identification, and inventory management, the platform ensures that staff can focus more on patient care rather than administrative tasks. The result is a more efficient healthcare environment where resources are optimally utilized.

Safety: Safety is a paramount concern in healthcare, and the platform enhances both patient and staff safety through accurate tracking and identification. RFID technology ensures that medical equipment is always accounted for and readily available, reducing the risk of delays in critical situations. Patient identification errors are minimized with RFID wristbands, ensuring that patients receive the correct treatments and medications. Additionally, the platform's ability to monitor patient movements and secure sensitive areas prevents unauthorized access and enhances overall hospital security.

Cost Reduction: By improving asset management and reducing waste, the platform helps lower operational costs. RFID tracking prevents the loss of expensive medical equipment and reduces the need for redundant purchases. Efficient inventory management ensures that consumables are used before they expire, minimizing waste. The platform's automation capabilities also reduce labor costs associated with manual tracking and inventory processes. Overall, the platform delivers significant cost savings, making it a financially viable solution for healthcare providers.

Improved Care: The timely availability of medical equipment and accurate patient information are crucial for delivering high-quality care. The platform ensures that healthcare professionals have immediate access to the tools and data they need to provide effective treatment. Real-time monitoring of patient vitals and environmental conditions allows for proactive interventions, improving patient outcomes. By reducing errors and enhancing efficiency, the platform contributes to a higher standard of care, ultimately leading to better patient satisfaction and health outcomes.





BENEFITS OF HORIZON IOT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

Enhanced Patient Experience: The platform's ability to provide real-time data and predictive analytics through AI enhances the overall patient experience. Patients benefit from personalized treatment plans and timely interventions, which improve their health outcomes and satisfaction. The use of RFID wristbands and other tracking technologies ensures that patients receive the right care at the right time, reducing anxiety and increasing trust in the healthcare system.

Scalability and Customization: The platform is designed to be scalable and customizable, allowing healthcare providers to adapt it to their specific needs. This flexibility ensures that the platform can grow with the organization and continue to meet its evolving requirements. Customizable SaaS solutions, cloud services, and edge device integration make it easy to implement and manage, providing a low Total Cost of Ownership (TCO).

Regulatory Compliance: Ensuring regulatory compliance is critical in healthcare, and the platform helps achieve this by providing accurate and timely data. The integration of IoT, RFID, and AI technologies ensures that all processes are documented and traceable, making it easier to comply with industry regulations and standards. This reduces the risk of non-compliance and associated penalties.

Environmental Monitoring: The platform includes wireless temperature sensing and environmental monitoring capabilities, ensuring that pharmaceuticals, tissues, and other sensitive materials are stored under optimal conditions. This not only maintains the quality and safety of these materials but also helps in complying with storage regulations.

Collaboration and Ecosystem Integration: Horizon IoT collaborates with ecosystem partners to provide targeted IoT solutions, such as remote patient monitoring, virtual care, and smart medical devices. This collaboration enhances the platform's capabilities and ensures that healthcare providers have access to the latest innovations and technologies, further improving patient care and operational efficiency.

HORIZON IOT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

CUSTOM-BUILT SOLUTION: COMMUNITY KIOSK VIRTUAL CARE SERVICES

Overview: The Community Kiosk Service Platform by Horizon IoT is designed to provide accessible virtual care services to underserved communities. This platform enables remote consultations, health monitoring, and access to medical resources, enhancing healthcare delivery and reducing the need for physical visits.

Key Features

Health Assessment: AI-driven health assessments to evaluate health status (e.g., fever, cough) for immediate attention.

Real-time Nurse Consultation: Video chat capabilities to connect users with nurses for medical advice or first aid.

Medication Reminders: Automated reminders for medication schedules and appointments to ensure adherence.

Health Monitoring: Integration with wearable devices to track vital signs and health metrics in real-time.

Health Education: Access to educational resources and health information through interactive kiosks.

Appointment Scheduling: Easy scheduling of virtual appointments and follow-ups.

Advantages

Increased Accessibility: Provides healthcare access to remote and underserved areas, reducing travel time and costs.

Improved Health Outcomes: Continuous health monitoring and timely interventions lead to better health management.

Cost-Effective: Reduces the need for physical infrastructure and in-person visits, lowering overall healthcare costs.

Convenience: Enables people in need to receive care from any location, such as on the street or in shelters using kiosks, enhancing patient satisfaction.

Data-Driven Insights: Collection and analysis of health data to inform public health strategies and personalized care plans.



HORIZON IoT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

CUSTOM-BUILT SOLUTION: HOSPITAL MANAGEMENT SYSTEM

Overview: The Hospital Management System is designed to implement a comprehensive solution for tracking assets, managing staff attendance, and streamlining patient administration processes. This system enhances overall hospital operations by improving efficiency, security, and resource management.

Key Features

Asset Tracking: RFID tags on medical equipment with strategically placed readers for real-time monitoring.

Time & Attendance: RFID-enabled ID tags for staff to automate attendance tracking and monitor movements.

Access Control: RFID badges with varying access privileges to secure sensitive areas and equipment.

Integrated Nurse Buzzer System: Improved communication and efficiency in hospital administration.

Advantages

Reduced Equipment Loss: Decrease in loss of expensive medical equipment, saving costs and ensuring availability.

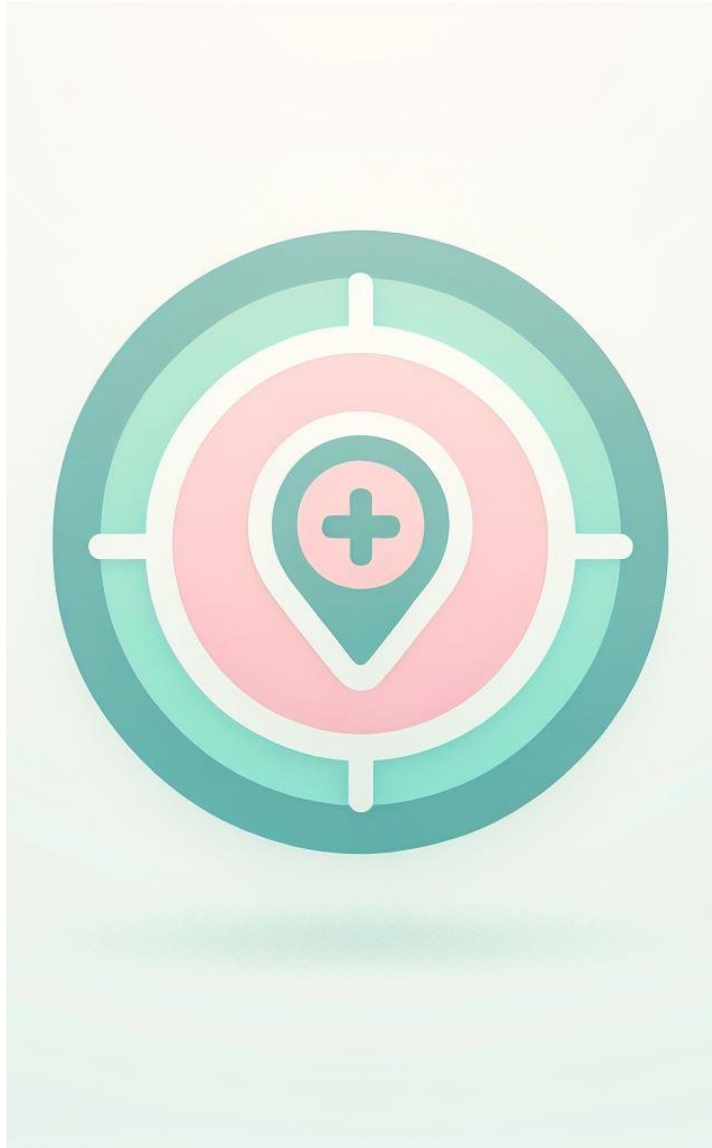
Faster Operations: Quick location and assembly of necessary medical equipment for efficient operations.

Remote Monitoring: Trustees could remotely monitor equipment, ensuring security and operational oversight.

Enhanced Security: Improved security with RFID badges restricting unauthorized entry.

Time Savings for Staff: Less time spent searching for equipment and managing manual processes, allowing more focus on patient care.





HORIZON IOT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM CUSTOM-BUILT SOLUTION: PATIENT TRACKING SYSTEM

Overview: GPS trackers are essential for ensuring the safety and well-being of vulnerable individuals, such as dementia patients, Alzheimer patients, autistic children, and other vulnerable adults.

Key Features

SOS Emergency: Equipped with an SOS emergency button to alert caregivers.

Geo-Fencing: Allows caregivers to set predefined boundaries, triggering an alert if the individual moves outside these boundaries.

Mobile App Tracking: Real-time location tracking via a mobile app.

Additional Features: Includes automatic fall detection, one-touch personal alarms, and a "Find Me" function.

Advantages

Increased Safety: Provides real-time location tracking and emergency alerts for vulnerable individuals.

Peace of Mind: Caregivers can monitor and ensure the safety of their loved ones.

User-Friendly: Easy to use with mobile app integration for real-time updates.

Comprehensive Features: Includes multiple safety features to address various needs.

HORIZON IoT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

CUSTOM-BUILT SOLUTION: ELECTRONIC DOCUMENT MANAGEMENT SYSTEM

Overview: The EDMS (Electronic Document Management System) is designed to handle documents by electronically storing, organizing, indexing, and filing them. This system ensures quick and efficient retrieval, eliminating the need for paper-based records and enhancing overall document management processes.

Key Features

Imaging Technology: Converts paper documents into electronic formats for easy access and management.

Electronic Storage: Stores all documents electronically, enabling desktop access without physical copies.

Powerful Archival System: Ensures the safety and integrity of documents for long-term storage and easy retrieval.

Support for Multiple Document Formats: Manages various types of documents, including paper, electronic files (Word, Excel, etc.), and images (TIFF, GIF, JPEG, etc.).

Advantages

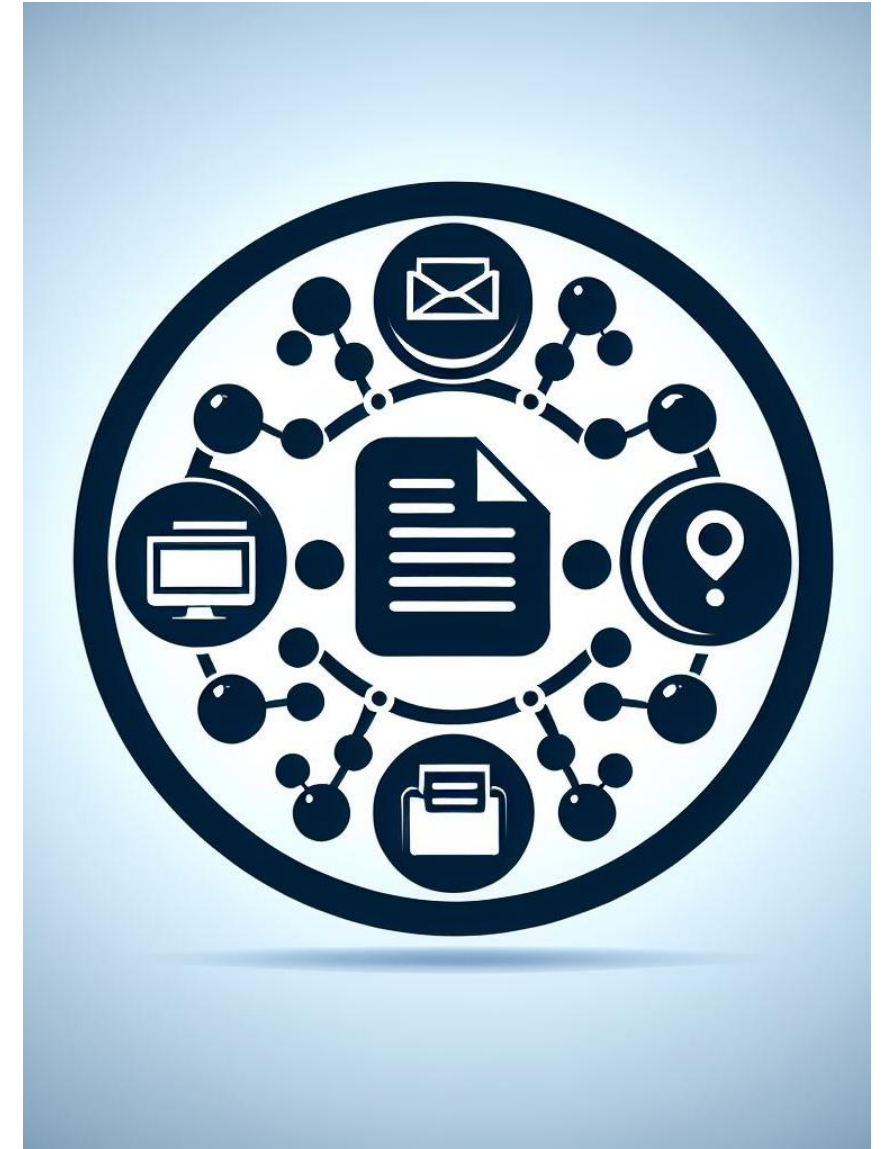
Faster Retrieval: Organizes documents for quick and easy retrieval, saving time and improving efficiency.

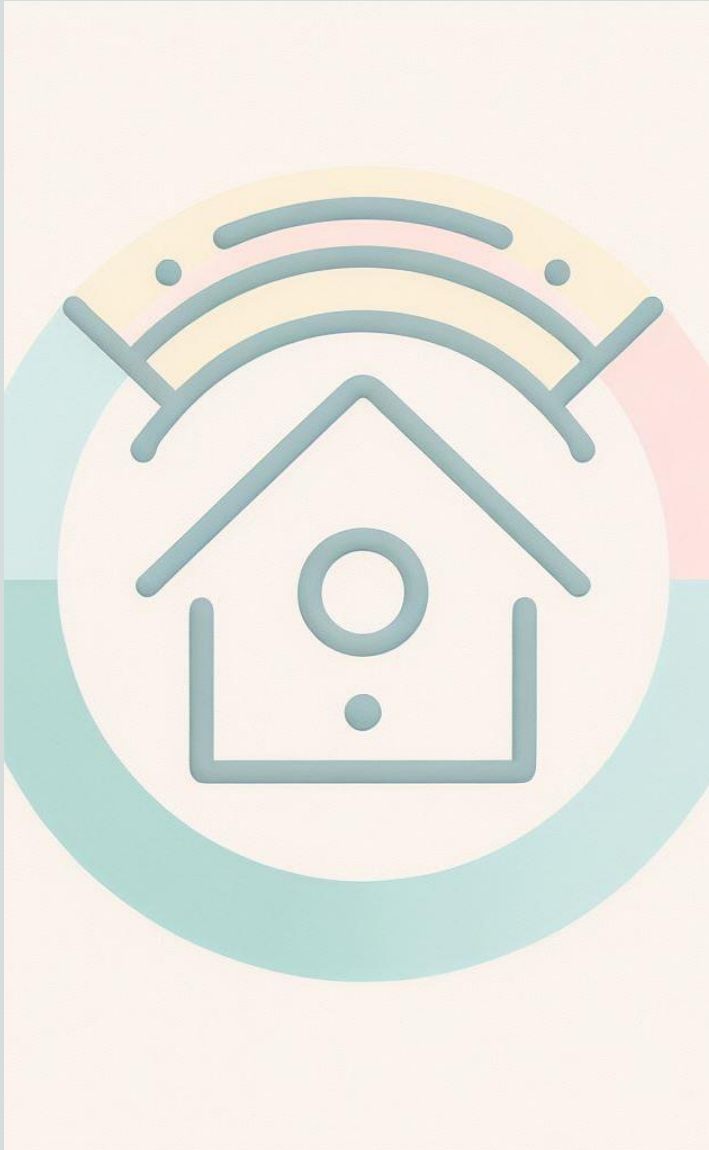
Disaster Safety: Protects documents against natural disasters by storing them electronically.

Multi-User Access: Allows multiple users to access and share documents simultaneously, facilitating collaboration.

Confidentiality: Maintains the confidentiality and accuracy of data, protecting sensitive information.

Error-Free Data Capturing: Ensures accurate data entry and management, reducing errors.





HORIZON IoT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM CUSTOM-BUILT SOLUTION: INDOOR AIR QUALITY MONITORING SYSTEM

Overview: The Indoor Air Quality Monitoring System ensures the safety and comfort of indoor environments by continuously monitoring air quality. It's ideal for use in hotels, hospitals, corporate offices, and homes.

Key Features

Easy Installation: Plug-and-play device that can be set up in under 5 minutes.

Custom Alerts: Personalized notifications for specific air quality thresholds.

Real-Time Monitoring: Monitors eight essential parameters, including Particulate Matter (PM1, PM2.5, PM10), HCHO, TVOC, CO2, Temperature, and Humidity.

IoT Connectivity: Connects to Wi-Fi, allowing users to access live data on mobile devices or web applications from anywhere.

Advantages

Enhanced Safety: Continuously monitors air quality to ensure a safe and healthy environment.

User-Friendly: Easy to install and use, with real-time data accessible from anywhere.

Customizable Alerts: Personalized notifications help maintain optimal air quality levels.

Comprehensive Monitoring: Tracks multiple air quality parameters for a complete overview.

HORIZON IoT'S DIGITAL HEALTH TURN-KEY SERVICE PLATFORM

CUSTOM-BUILT SOLUTION: HOME CARE MANAGEMENT SYSTEM FOR NURSING STAFF

Overview: The Home Care Management System is designed to help manage the attendance and payroll of nursing staff working at patient locations. It includes various components to streamline operations and ensure efficient management.

Key Features

Nurse Application: A simple mobile application for nurses to mark their clock-in and clock-out times as they arrive or leave patient locations. It also includes details of tasks they need to perform at the patient's location.

Manager Application: A mobile application for managers to receive alerts and updates regarding nursing staff in the field. It notifies managers if nurses are delayed or spending more time than expected at a patient location, along with details of tasks completed.

Admin Panel: A comprehensive web panel for the company to manage staff, managers, patients, finances, and other related aspects.

Advantages

Efficient Attendance Management: Simplifies tracking of nursing staff attendance and task completion.

Real-Time Alerts: Provides managers with real-time updates and alerts to ensure timely interventions.

Comprehensive Administration: Offers a centralized platform for managing various aspects of home care services, enhancing overall efficiency.





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CONCLUSION

Horizon IoT is at the forefront of healthcare innovation, leveraging advanced IoT, RFID, and AI technologies to transform the industry. Our Digital Health Turn-Key Service Platform enhances patient care, streamlines hospital operations, and improves overall healthcare outcomes.

By integrating real-time monitoring, predictive analytics, and automated processes, Horizon IoT provides a comprehensive solution that addresses the unique challenges of the healthcare sector. Our platform's scalability and customization ensure it meets the evolving needs of healthcare providers, delivering significant benefits such as increased efficiency, enhanced safety, cost reduction, and improved patient experiences.

Our commitment to innovation and collaboration with ecosystem partners enables us to offer targeted IoT solutions that support continuous health monitoring, virtual care, and smart medical devices. These advancements pave the way for a more responsive, data-driven, and patient-centric healthcare system.

In conclusion, Horizon IoT's Digital Health Turn-Key Service Platform is poised to revolutionize healthcare, making it smarter, safer, and more efficient. By harnessing the power of cutting-edge technologies, we are opening up new possibilities for the future of healthcare, ensuring better outcomes for patients and providers alike.