HEAD COUNT SOLUTION FOR MANUFACTURING COMPANIES

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Contents

Technical Proposal: Real-Time Headcount Solution

1. Introduction

This proposal outlines a technical solution for a real-time headcount management system designed to provide customer with a unified view of all personnel within their plant. The solution integrates data from attendance machines, visitor management systems, and transporter logs to deliver accurate, up-to-the-minute information on employee, visitor, and transporter presence.

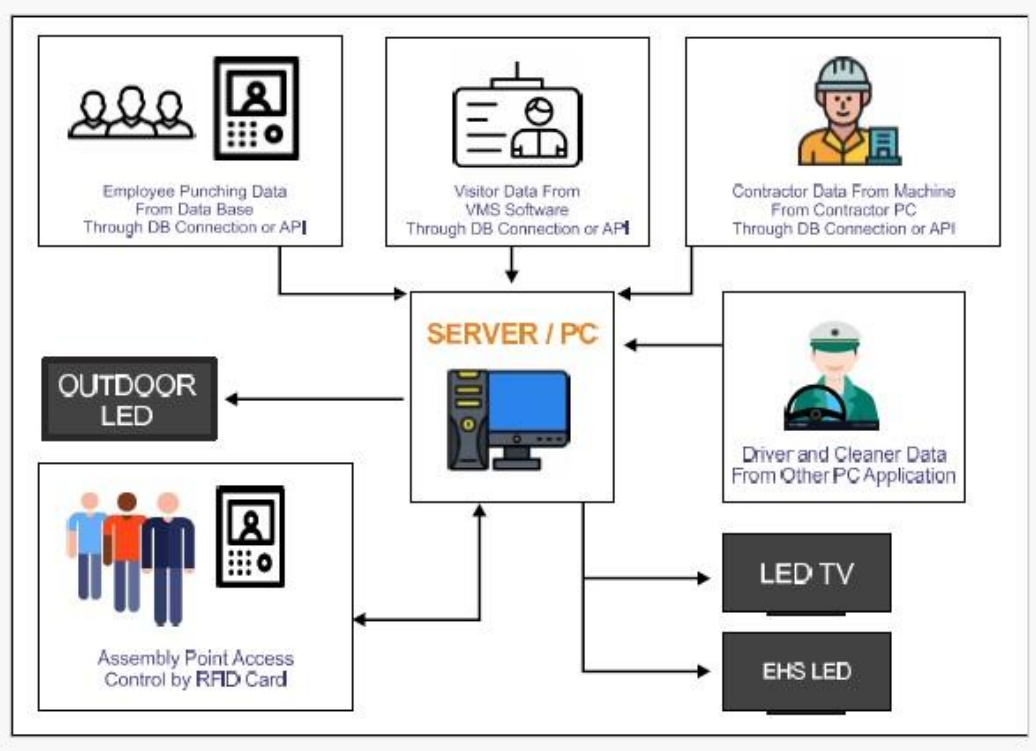
2. System Overview

The proposed system comprises the following key components:

- **Access Control Devices:** Turnstile/Tripod Gates: To manage and record employee, temporary employee, and visitor entry/exit.
- **Data Capture Devices:**

    - Attendance Machines: To record employee and temporary employee entry/exit.
    - Visitor Management System: To register visitor entry/exit.
    - Transporter Logs: To track entry/exit of transporters and their personnel.
- **Data Integration and Processing:** A central server to collect, process, and aggregate data from all sources.
- **Data Storage:** A secure database to store all collected data.
- **Real-Time Display and User Interface:** A desktop-based application with dashboard and report generation for visualizing headcount data.

3. Detailed System Architecture



The system architecture is illustrated in the following diagram:

- Attendance Machines (Employees, Temps) -> Data Capture
- Visitor Management System -> Data Capture
- Transporter Logs -> Data Capture
- Data Capture -> Data Integration & Processing (Server)
- Data Integration & Processing (Server) -> Database (Storage)
- Database (Storage) -> Real-Time Display & User Interface
- Real-Time Display & User Interface -> Client Devices with desktop application

3.1 Data Capture

- **Attendance Machines:**
    - Type: Two separate biometric (Fingerprint/Facial Recognition) and/or RFID card-based with in and out recording with NO-COM relay output for connecting Turnstiles.
    - Functionality:
        - Accurate recording of employee and temporary employee entry/exit times.
        - Unique identification of each individual.
        - Real-time data transmission to the central server.
        - Offline operation capability with data synchronization upon reconnection.

- Quantity and Location: [To be determined based on plant layout and entry/exit points. Incl details on proposed locations]

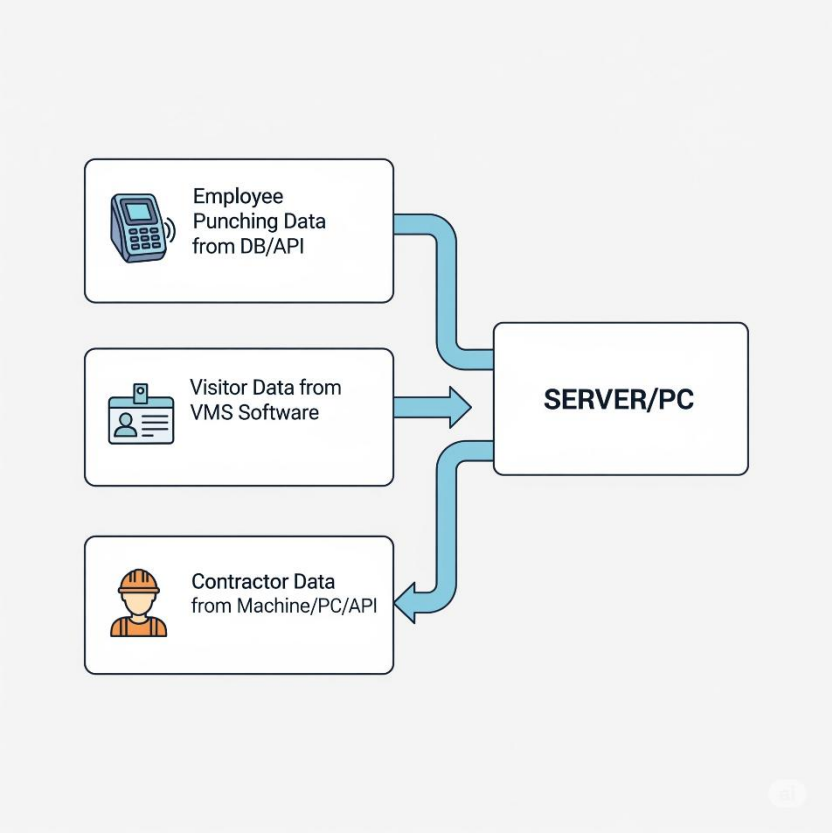
- **Visitor Management System: (Optional)**
  - Type: Online system for recording details of walk in visitors.
  - Functionality:
    - Visitor registration (name, contact details, purpose of visit, etc.).
    - Issuance of temporary credentials/badges.
    - Recording visitor entry/exit times.
    - Integration with security protocols.
    - Data transfer to central server.
- **Transporter Logs: (Optional)**
  - Type: Online system for recording details of transporter vehicles and personnel.
  - Functionality:
    - Capture vehicle number, driver details, and accompanying staff.
    - Record entry/exit times.
    - Verification of transporter credentials.
    - Data input via dedicated software/devices.
    - Data transfer to central server.

3.2 Data Integration and Processing

- **Server:**
  - Hardware: High-performance server with sufficient processing power and storage capacity. Any Desktop PC with current generation CPU can be used as the server.
  - Operating System: Windows 10 or higher
  - Software:
    - Data acquisition and integration module: To collect data from various sources.
    - Data processing engine: To validate, clean, and aggregate data.
    - Communication protocols: TCP/IP & HTTP
    - Security protocols: SSL or TLS
- **Functionality:**
  - Real-time data acquisition from attendance machines, visitor management system, and transporter logs.

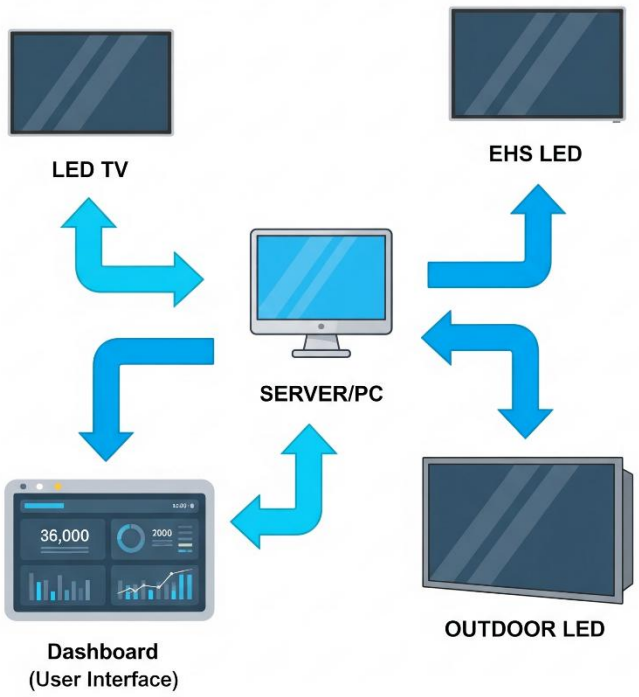
- Data validation and error handling.
- Aggregation of data to provide a unified headcount.
- Data transmission to the database, user interface, LED display or TV.

3.3 Data Storage



- **Database:**
  - Type: Relational database management system (RDBMS) e.g., Ms SQL Server Express Version.
  - Functionality:
    - Secure storage of all collected data.
    - Data indexing and optimization for fast retrieval.
    - Data backup and recovery mechanisms.
    - Data retention policies.
- **Storage Capacity:** 1 TB max. Timely backups can reduce the requirement.
- **Dotnet: 4.**8 or higher.

3.4 Real-Time Display and User Interface



- **Dashboard:**
    - Type: Desktop based application.
    - Functionality:
        - Real-time display of headcount data, categorized by:
            - Permanent employees
            - Temporary employees
            - Visitors
            - Transporters
        - Realtime headcount Data.
        - Alerting and notification mechanisms. **- (on chargeable basis)**
    - Technology: **Dotnet or C#**

4. Security

The system will incorporate robust security measures to protect data confidentiality, integrity, and availability. These measures include:

- Secure communication protocols (TCP/IP) for data transmission.

5. Integration

The system will be designed for seamless integration with existing infrastructure and systems, including:

- HR and payroll systems.
- Security systems.
- Network infrastructure.

6. Implementation Plan

The implementation will involve the following phases:

- Phase 1: Requirements gathering and system design.
- Phase 2: Hardware and software procurement and installation.
- Phase 3: System configuration and customization.
- Phase 4: Data integration and testing.
- Phase 5: User training and system deployment.
- Phase 6: Ongoing support and maintenance. **- Not Available**

7. Timeline

90 days from firm purchase order and site readiness in terms of availability of integration facility with existing systems.

8. Cost

Project cost will include:

- Hardware costs (attendance machines, servers, etc.)
- Software costs (licenses, customization)
- Installation and integration costs
- Training costs
- Ongoing support and maintenance costs

9. Support and Maintenance

Customer will be offered remote support or onsite support, as may be required including:

- Technical support availability (9 am to 7 pm)
- Service level agreements (SLAs)
- Hardware maintenance and replacement (if purchased from us with 1 year Warranty)

10. Company Profile

PFA company profile

11. Scope of Customer and Vendor Responsibilities

This section defines the roles and responsibilities of both the customer and the vendor Compucare India Pvt. Ltd. to ensure a successful project implementation.

11.1 Customer Responsibilities

- **Project Management:**
    - Provide a dedicated project manager to oversee the project and serve as the primary point of contact.
    - Participate in regular project meetings to review progress, address issues, and make decisions.
    - Approve project deliverables and milestones.
- **System Requirements:**
    - Provide clear and comprehensive requirements for the headcount management system, including:
        - Specific data to be captured (employee types, visitor information, transporter details).
        - Integration requirements with existing systems (HR, payroll, security).
        - Reporting and dashboard requirements. – (On chargeable basis)
        - Security and data privacy requirements.
    - Ensure that the vendor has access to all necessary information and documentation.
- **Site Preparation:**
    - Prepare the site for hardware installation, including:
        - Providing necessary power and network infrastructure.
        - Ensuring that the installation locations are accessible and secure.
        - Mounting provision for LED Display Boards.
- **Data Provision:**
    - Provide necessary data for system configuration and testing, such as:
        - Employee records.
        - Visitor data.
        - Transporter logs.
- **User Training:**
    - Ensure that designated staff members attend user training sessions.
    - Provide ongoing support to end-users within the organization.
- **Acceptance Testing:**

- Conduct thorough acceptance testing of the system to ensure that it meets the agreed-upon requirements.
- Provide timely feedback on any issues or discrepancies.
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11.2 Vendor Responsibilities

- **Project Management:**
  - Assign a dedicated project manager to lead the implementation and serve as the primary point of contact for the customer.
  - Develop a detailed project plan and schedule.
  - Manage the project team and resources.
  - Provide regular project status reports to the customer.
  - Manage project risks and issues.
- **System Design and Development:**
  - Design the headcount management system based on the customer's requirements.
  - Develop all necessary software components.
  - Configure hardware components.
  - Ensure that the system is scalable, reliable, and secure.
- **Hardware and Software Provisioning:**
  - Procure and install all necessary hardware and software components, including:
    - Attendance machines.
    - Servers.
    - Database software.
    - Desktop application software.
  - Ensure that all hardware and software is compatible and functioning correctly.
- **Integration and Testing:**
  - Integrate the headcount management system with the customer's existing systems.
  - Conduct thorough system testing, including:
    - Unit testing.
    - Integration testing.
    - System testing.
    - Performance testing.
  - Resolve any issues or defects identified during testing.

- **Training and Documentation:**
    - Provide comprehensive user training to designated staff members.
    - Develop and deliver system documentation, including:
        - User manuals.
        - System administration manuals.
        - Technical documentation.
- **Support and Maintenance:**
    - Provide ongoing support and maintenance services as defined in the Service Level Agreement (SLA).
    - Address any technical issues or problems in a timely manner.
    - Offer hardware maintenance and replacement services.

12. Conclusion

The proposed real-time headcount solution will provide customer with a powerful tool for enhancing safety, security, and operational efficiency. By integrating data from multiple sources and providing a unified view of site occupancy, the system will enable better decision-making, improved resource allocation, and compliance with regulations.

We are confident that our solution will meet your needs and exceed your expectations. We look forward to the opportunity to partner with you on this important project.