When designing the business flow for your two microservices—**PIMS (Personnel Information Management System)** and **Payroll**—it's important to understand their respective responsibilities and how they interact. Here’s a high-level overview of the business flow for each service and guidance on where to store salary information.

**PIMS (Personnel Information Management System)**

**Responsibilities:**

* Manage employee personal information (e.g., name, address, contact details).
* Track employee roles, departments, and positions.
* Maintain historical employment data (e.g., hire dates, promotions).
* Store other HR-related information (e.g., benefits, performance reviews).

**Business Flow:**

1. **Employee Onboarding:**
   * New employee information is entered into the PIMS system.
   * The system assigns the employee to a department and role.
2. **Employee Updates:**
   * HR personnel update employee records for changes in personal information or job status.
3. **Data Retrieval:**
   * When needed, the Payroll service queries PIMS to get employee details (e.g., employee ID, department).

**Payroll Service**

**Responsibilities:**

* Calculate salaries, bonuses, and deductions (taxes, benefits).
* Manage payroll records, including payment history.
* Generate payroll reports for financial analysis.
* Handle compliance with tax regulations and labor laws.

**Business Flow:**

1. **Salary Calculation:**
   * The Payroll service retrieves employee information from PIMS as needed.
   * It calculates salary based on base pay, bonuses, deductions, etc.
2. **Payroll Processing:**
   * Payroll is processed periodically (e.g., bi-weekly, monthly).
   * The service generates pay stubs and reports.
3. **Payment Execution:**
   * After calculations, the Payroll service triggers payment execution through a banking or payment service.
4. **Tax Reporting:**
   * The service generates necessary tax documents and reports based on processed payroll data.

**Where to Store Salary Information**

**Recommendation:**

* **Keep Salary Information in the Payroll Service:**
  + Since salary calculations and payroll processing are core functionalities of the Payroll service, it makes sense to store salary-related information there.
  + This separation ensures that the PIMS remains focused on employee information management, while the Payroll service handles financial calculations and payroll records.

**Data Flow Example**

1. **Employee Data Retrieval:**
   * When processing payroll, the Payroll service queries the PIMS to obtain basic employee details (e.g., employee ID, department, role).
2. **Salary Information:**
   * The Payroll service holds all salary-related information (e.g., base salary, bonuses, deductions).
   * Any changes to salary (e.g., raises, promotions) can be initiated in PIMS but must be updated in the Payroll service.
3. **Reporting:**
   * The Payroll service generates reports that may use both employee data from PIMS and payroll data from its own database.

**Conclusion**

* **PIMS** should focus on employee management and personal information.
* **Payroll** should handle salary details, payroll processing, and financial records.

By structuring your services this way, you ensure clarity in responsibility and can leverage each service's strengths, leading to a more maintainable and scalable architecture. If you have further questions or need clarification on specific aspects, feel free to ask!