

## **1. SEPARATE SERVICE FOR EXPERT ASSIGNMENT**

### **STATUS**

Accepted

### **CONTEXT**

Expert assignment needs to be done for tickets coming into the system and can be done within the ticketing service OR can be made a separate service

### **DECISION**

We will use a separate service.

Expert assignment can be done via various intelligent algorithms using geo location data and expertise data while ticketing service will manage the ticket lifecycle and serve as back end to view and update tickets.

If expert assignment is built into ticketing service then every time any intelligence is added for expert assignment all ticketing workflows will need to be validated.

### **CONSEQUENCES**

- Expert profile data needs to be stored in both user management service and expert assignment service.
  - All expert assignments will also be duplicated in both ticket service and expert assignment service.
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## **2. NOTIFICATION SERVICE DOES NOT HAVE A DATABASE**

### **STATUS**

Accepted

### **CONTEXT**

Notification service needs customer email / phone numbers etc. These can be stored within notification service OR can be retrieved via an API call to customer details service.

### **DECISION**

We will call customer detail service API

Customer data is sensitive data and hence customer detail service will have higher security compliance. Hence duplicating this data needs to be avoided.

### **CONSEQUENCES**

- Notification service has a dependency on customer detail service. In case customer service is down notification service needs to retry.

### **3. DATA DUPLICATION FOR REPORTING**

#### **STATUS**

Accepted

#### **CONTEXT**

Reporting could have called each service for data OR it can receive data from other services and store

#### **DECISION**

We will send data to reporting service to store

Reporting will use analytical tools to build reports over historical data which means either each individual service needs to store historical data which can overload their database interactions

Other services will have databases OLTP in nature and running OLAP operations can hinder scalability of the system.

#### **CONSEQUENCES**

- Data duplication in reporting database