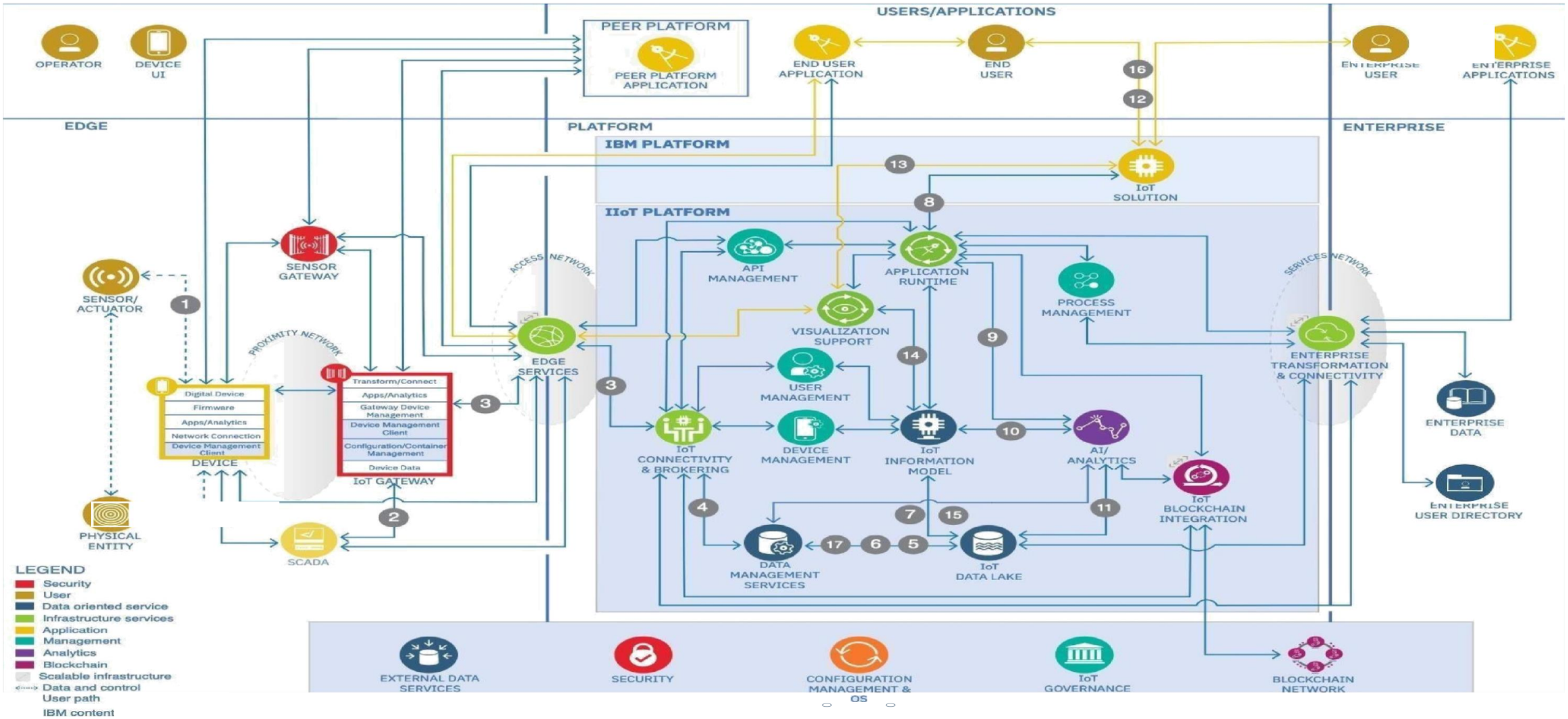
Project Design Phase-I

Solution Architecture

Date	1 NOVEMBER 2022
Team ID	PNT2022TMID05333
Project Name	Gas leakage monitoring and alerting system for industries


USERS/APPLICATIONS
OPERATOR
DEVICE UI
PEER PLATFORM
PEER PLATFORM APPLICATION
END USER APPLICATION
END USER
ENTERPRISE USER
ENTERPRISE APPLICATIONS
16
12
EDGE
PLATFORM
ENTERPRISE
IBM PLATFORM
IoT SOLUTION
13
8
IIoT PLATFORM
SENSOR GATEWAY
SENSOR/ ACTUATOR
1
ACCESS NETWORK
API MANAGEMENT
APPLICATION RUNTIME
PROCESS MANAGEMENT
SERVICES NETWORK
VISUALIZATION SUPPORT
9
PROXIMITY NETWORK
EDGE SERVICES
14
ENTERPRISE TRANSFORMATION & CONNECTIVITY
3
USER MANAGEMENT
ENTERPRISE DATA
Digital Device
Firmware
Apps/Analytics
Network Connection
Device Management Client
DEVICE
Transform/Connect
Apps/Analytics
Gateway Device Management
Device Management Client
Configuration/Container Management
Device Data
IoT GATEWAY
IoT CONNECTIVITY & BROKERING
DEVICE MANAGEMENT
IoT INFORMATION MODEL
10
AI/ ANALYTICS
IoT BLOCKCHAIN INTEGRATION
ENTERPRISE USER DIRECTORY
PHYSICAL ENTITY
2
4
7
15
11
SCADA
17
6
5
DATA MANAGEMENT SERVICES
IoT DATA LAKE
LEGEND
Security
User
Data oriented service
Infrastructure services
Application
Management
Analytics
Blockchain
Scalable infrastructure
Data and control User path
IBM content
EXTERNAL DATA SERVICES
SECURITY
CONFIGURATION MANAGEMENT & OS
IoT GOVERNANCE
BLOCKCHAIN NETWORK