**Instructions**

1. Read the scenario described below and answer the accompanying questions, along with presenting the solution.
2. You may present the solution in any way you like.
3. You are allowed to use any publicly available material. Pls avoid using any material from your past customers.
4. You may use a Whiteboard / put your pictures in Slides to present.
5. Clearly think through the flow of your presentation and the order in which you need to present various artifacts.
6. Please make any assumptions as required as there is no opportunity to ask clarifying questions.

**Good to have diagrams in your presentation**

* System Landscape
* ERD / Data Model

**Good to Focus on**

* Sharing & Security design / Visibility of Entities
* Large / High Data Volume considerations / Best Practices
* Governance of the Program
* Integrations (source, target, pattern, REST/SOAP etc.)
* Licenses (if applicable)
* Identity & Access Management solution

**Target Audience in Panel**

* CIO/CXO expecting solution to focus on Business Value, ROI, Business Fit
* Enterprise Architects expecting solution to focus on Scalability, Robustness & Completeness

**Timing**

- Preparation: 60 Minutes

- Presentation: 30 Minutes

- Q&A : 30 Minutes

**Scenario Overview & Context**

Universal Connections is a regional leader in providing fixed line and broadband and fiber-optic based internet services across 5 Asian countries, headquartered in Mumbai. UC is currently in 50 Tier -1 and Tier -2 cities across Asia, and are looking to expand to Tier- 3 cities in existing countries, and also to some new countries in Asia.

Their customer base is 2M strong, which includes households and businesses, and they are foreseeing good growth in their business in the coming 5 years.

UC also works with hardware vendors, who provide telephone systems, cables, optical wires etc. for their setup.

UC has an internal team of 1000 Sales Personnel, spread across all cities, consisting of city sales reps, Territory based Managers, Country based Sales Heads, rolling up to the Chief Marketing Officer. UC supports the setup of new connections and service to existing ones through its Service Organization, comprising 2 centralised support centres and service personnel deployed by the city.

UC currently have the following Systems

1. An ERP system to manage customer details, connections, billing and invoices
2. A custom mobile App for their fleet on the street (both Sales and Service) to cater to their functions, described in more detail later.
3. A Web Application where customers login to check their usage, pay bills etc.
4. CRM - UC is looking to replace their legacy CRM system which is no longer meeting the needs of their business.
5. They are planning to procure a middleware, but are not sure of its value yet, and need recommendations.
6. An Active Directory hosting all internal users, who require seamless access to the new system

**Business Process**

**New Connections**

Universal Connections collect interests in their new connections through their website, and incoming calls to their call centre. They are looking to leverage the power of social media to gather interests and follow up for improving their sales pipeline.

Once the interest is captured, it is nurtured by the Sales Reps with multiple meetings and understanding of the customer needs. Quotes are generated and sent, worked on possibly multiple times repeatedly, until a deal is closed. Once the deal is closed, all details are sent to the ERP system. The Sales Reps often complain of having to modify the prices manually based on city packages, having difficulty in selecting multiple products for the same deal and also having to do calculations of discounting.

**Setup Connections & Regular Operations**

Once the deal is closed, the service personnel cater to the setup of the connection in the household / business. They get all the required information on the mobile App to service the customer. Once the setup is done physically, a User account is created for the customer in the Web Application.

Customers often complain about the web application being slow, not reflecting the correct / latest internet usage, and not being able to see bills older than 6 months. It’s also difficult to change their personal details on the application. UC is looking for a recommendation to replace the Web Application. UC also wants the customer to be able to sign in Using Google / Facebook Credentials, and not force them to remember to use UC System specific credentials.

**Service**

UC support centres are connected to their existing CRM, and the call centre personnel often complain about the delay in searching about a customer and their details from the ERP system, or not able to find the right solution of the customer issue, leading to high resolution time. Oftentimes, the details of previous issues with a customer are not available, resulting in customer dissatisfaction. As UC is looking to replace their existing CRM system, they are looking for a system to support their service needs as well.

**Reporting**

HQ leadership is looking to have consolidated reports and dashboards, which they can use to present results to the CXO’s. They would want to drill down into the reports as required, and would want region based and product based Sales reporting in INR.

**Other Technical Challenges**

1. The CIO has enforced strong security policies on all systems, and would like the new system also to adhere to these. It includes 2 Way SSL for all communication, no storage of passwords in any system, multi factor based authentication.
2. The CIO has also asked for strict security measures on data, and the application of the principle of ‘least privilege’.
3. The CoE has enforced governance measures on all the IT systems of the organizations and are open to recommendations on how the new system will adhere to the best practices of governance and release management