

4YourEars

Background

- 4YourEars is a chain that sells music through various retail partners. They realized that their spending on commission is high, and so they want to directly sell music to customers through an online channel.
- In addition, they also realize that there is potential to cross-sell other items like antique LPs, audio books, etc., to their customers.
- Their intent is hence to build an ecommerce site where they can directly sell to their retail customers.

Requirements Overview

- The initial target is to have a simple commerce site that can sell music CDs and audio streams to retail customers.
 - CDs are physical merchandize, whereas audio streams are digital and are downloaded to customers' computers. The store will hence need to support both physical and digital merchandise.
 - For the audio streaming, 4YourEars has already tied up with a technology partner to be able to do copyright protection, etc. This partner's system will expose an API that will return a media stream. The partner's system will be co-deployed with the rest of the solution, but capacity needs to be planned for.
 - Customers will access the site initially from India, but will later expand into Europe and US
- 4YourEars has a tie-up with two types of suppliers:
 - Medium-size suppliers will access the site to be able to view orders that they need to fulfill
 - Large suppliers require 4YourEars to provide a data dump of orders that they need to fulfill
 - Large suppliers manage their own inventory, so for some items, inventory and shipping information will come from these companies directly
- The company will also look to having a call center that will be able to service customer queries, etc.

- The company realizes that they will have a large user base that will use mobile devices, so they want to be able to target them as well.

Key Quantitative Information

- 4YourEars expects that they will be able to have a target audience of 1,000,000 visitors daily, and that they will grow at 30% year on year.
- Conversion rate is expected to be 5% initially, but the store is looking to build a strong targeting based on behavior analytics to increase this to 10%.
- Once they expand into other geographies, volumes are expected to triple.
- Visitors can access the site any time of the day

Concerns and Thoughts

- 4YourEars knows that they are a late entrant into this market, so they need to be able to differentiate themselves quickly.
- They however, have strong brand recall, and the management feels that they can use this to advantage
- Some other sites have mooted the idea that they could cross-sell 4YourEars' products through their site, and so they have asked 4YourEars if they can supply their catalog information to them. While 4YourEars feels this increases presence, they are thinking they only ought to share targeted information instead of a full catalog dump.

Your Deliverables

- You have been asked to give a solution to help 4YourEars reach their objectives
- For the purpose of this discussion, consider that this will not be based on an e- Commerce product.
- You are supposed to work on the following:
 - Solution Approach
 - Logical Architecture
 - Technical Architecture
 - High level risks that you see in such a program
 - Any other architecture views that you perceive as being relevant