

IBM Finish Line Challenge

Watson Smart Shopper

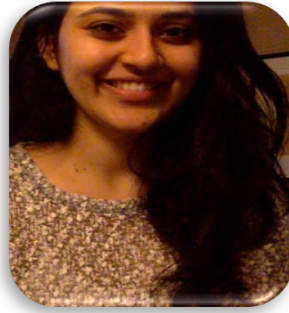
A virtual shopping assistant

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Team



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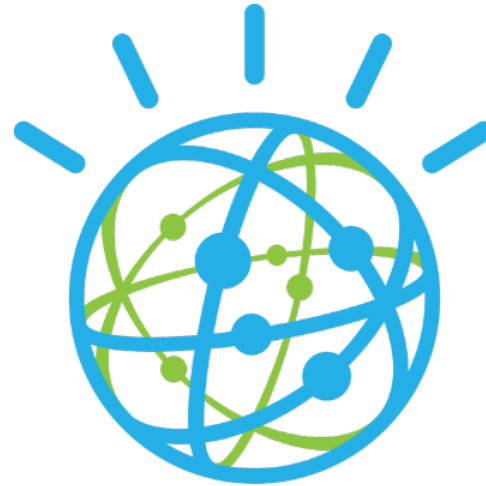
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Agenda

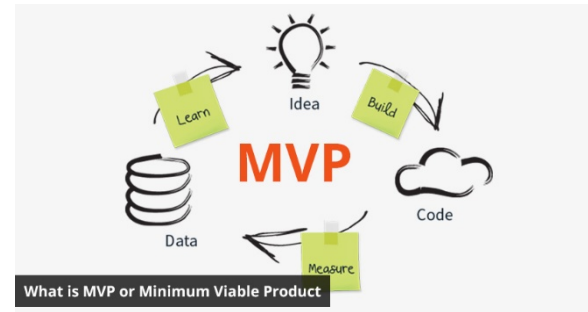
- MVP Brainstorming
- Lean Canvas
- Technical Architecture
- Use case Demo
- Future Expectations
- Technical Challenges
- Financial Viability
- The Ask
- Questions



MVP Brainstorming

- ▶ Some of the ideas that we thought about

- ▶ Cancer or Disease diagnosis
- ▶ Depression Recognition
- ▶ Stock Predictor
- ▶ Health Insurance Assistant
- ▶ Meeting Transcripts Generation



- ▶ Our Idea

- ▶ Interactive Chatbot to enable smart shopping, compare prices between retailers, interact with the user, and suggest the best possible price
- ▶ 51% of Americans prefer to shop online
- ▶ 96% of Americans with internet access have made an online purchase in their life, 80% in the past month alone

Problem

1. Help users find the things they want to buy
2. Too many retailers and options to choose from
3. It is really inconvenient for the user to compare and check for lowest prices

Solution

1. Chatbot to talk to users and find products across different retailers at lowest price
2. Make the chatbot interactive and make it convenient and easy to use

Key Metrics

1. Redirects
2. Number of Users
3. User ratings and reviews
4. Partnership with key retailers

Value Proposition

1. **Individual App**
Create a smart cognitive interactive chatbot to talk to the user and find the best deal for the user in terms of the product specifications and price. The process will be really easy and convenient
2. **Retail as a Service**
Partner with major retailers like Amazon or Walmart to assist them with matching prices and competing in the market

Unfair Advantage

1. Watson Analytics to analyze customer behavior and harness more data
2. Retailers – Information and IBM connections

Channels

1. Make the app available on App stores
2. Partnership with Retailers
3. Market using Amazon or IBM Watson connections

Customer Segments

1. Consumers shopping for the specific product (laptop, clothes, watches and so on)
2. Major retailers like Walmart, Amazon and Best Buy who want to match lowest prices

Cost Structure

1. Cost of maintaining a database (for Knowledge API)
2. IBM Cloud and Watson API licenses and services
3. Expansion of product features
4. Updates and Patches for every iteration

Revenue Streams

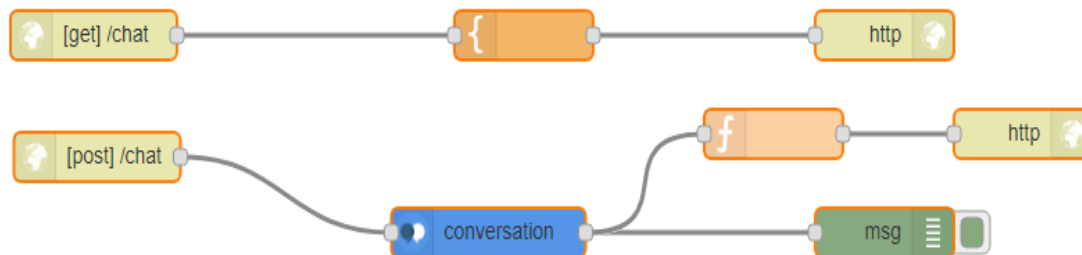
1. Take a x% cut for every redirect to retailer
2. Free app with advertisements
3. Or charge a small \$ fee to use the app for each account
4. Watson Retail as a service – Offer it to major retailers like Walmart, Amazon, or Best Buy for a partnership

PRODUCT

MARKET

Technical Architecture

- ▶ Node red platform for app
- ▶ Watson Conversation service
 - ▶ Configuring the Intents and Entities for Products
 - ▶ Configured context to access entities globally
 - ▶ Built the Dialog flow for chatbot to make it interactive
- ▶ HTTP Get and Post requests for web interface
- ▶ Debug module
 - ▶ Used the payload message to input/output data from user



Use Case and Demo

- ▶ Looking to buy a laptop based on specifications
 - ▶ Get the best possible price
 - ▶ Find the laptop based on specifications or price
 - ▶ Compare prices between different retailers
 - ▶ Chat with interactive Watson Retail chatbot to find the best product and price
- ▶ Demo Link
 - ▶ <https://nvbot19.mybluemix.net/chat>

Future Expectations

▶ Consumers

- ▶ expand the available products for search
- ▶ expand the pricing sources for the same product
- ▶ analyze consumer behaviors from the historical conversation data
Watson Toner Analyzer for Sentiment Analysis
- ▶ enable low price subscription alert
- ▶ enable image input from consumers (Watson Visual Recognition API)

▶ Retailer

- ▶ Basic Version
 - ▶ provide a separate interface for retailers
- ▶ Enterprise Version
 - ▶ list competitive prices from other retailers
 - ▶ enable product-specific low price alert from competitors
 - ▶ provide coupons for users
 - ▶ provide the option to purchase prioritization

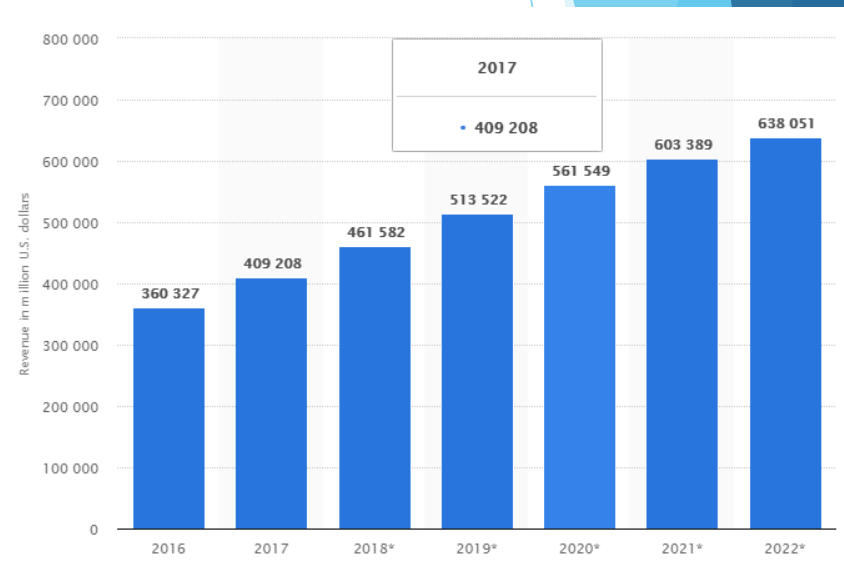
Technical Challenges

- ▶ Collect real-time prices with a web crawler for the products hosted
- ▶ Integrate Database Service to the application:
 - ▶ IBM Watson Discovery API
 - ▶ Visual Recognition API in future

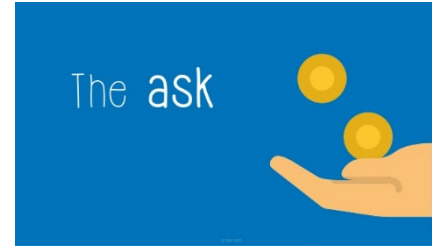


Financial Viability

- ▶ Global E-retail sales
 - ▶ 1.9 trillion U.S. dollars
- ▶ Projections for 2020
 - ▶ 4.06 trillion U.S. dollars by 2020
- ▶ Pricing
 - ▶ x % or \$x for every sale or redirect based on product type and market trend
- ▶ Competition
 - ▶ Chrome Extension that suggest better prices for online shopping



The Ask



- ▶ \$200,000 for 10% stake in the company
- ▶ 5 founding members
 - ▶ Team could expand to up to 10 people
- ▶ Profitability to IBM
 - ▶ IBM Watson can harness consumer behavior and data
 - ▶ Dictating the traffic through e-commerce world
 - ▶ Potential profitability from e-commerce sales
 - ▶ Good marketing and branding opportunity for IBM Watson and IBM Cloud services

Questions?

Thank You