Personalized Sales Email Generation

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Creation of an AI engine to generate personalized sales email
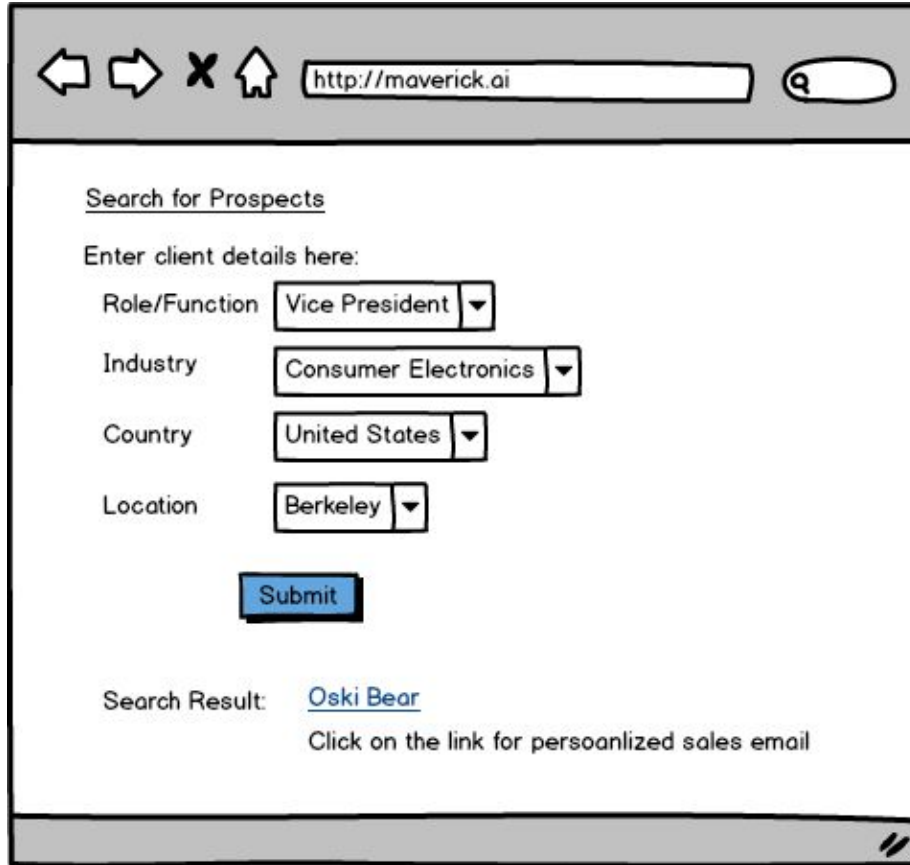
Next Generation Sales Prospecting

Project Overview

- B2B sales lead generation is a multi billion dollar business
- Generating quality sales leads remains a huge challenge
- Creating a unique and personal sales pitch takes a lot of time and effort
- Can we create an AI engine to automate personalized sales email generation?

Top 3 User Requirements

- Deliverability - Ensuring the delivery of personalized emails (email not filtered as spam or ad)
- Tracking emails - Optimizing and tracking sales leads' engagement
- Follow up emails - Retargeting cohorts based on engagement data decision

Step 1 - Enter Client Product Information to search for Prospects
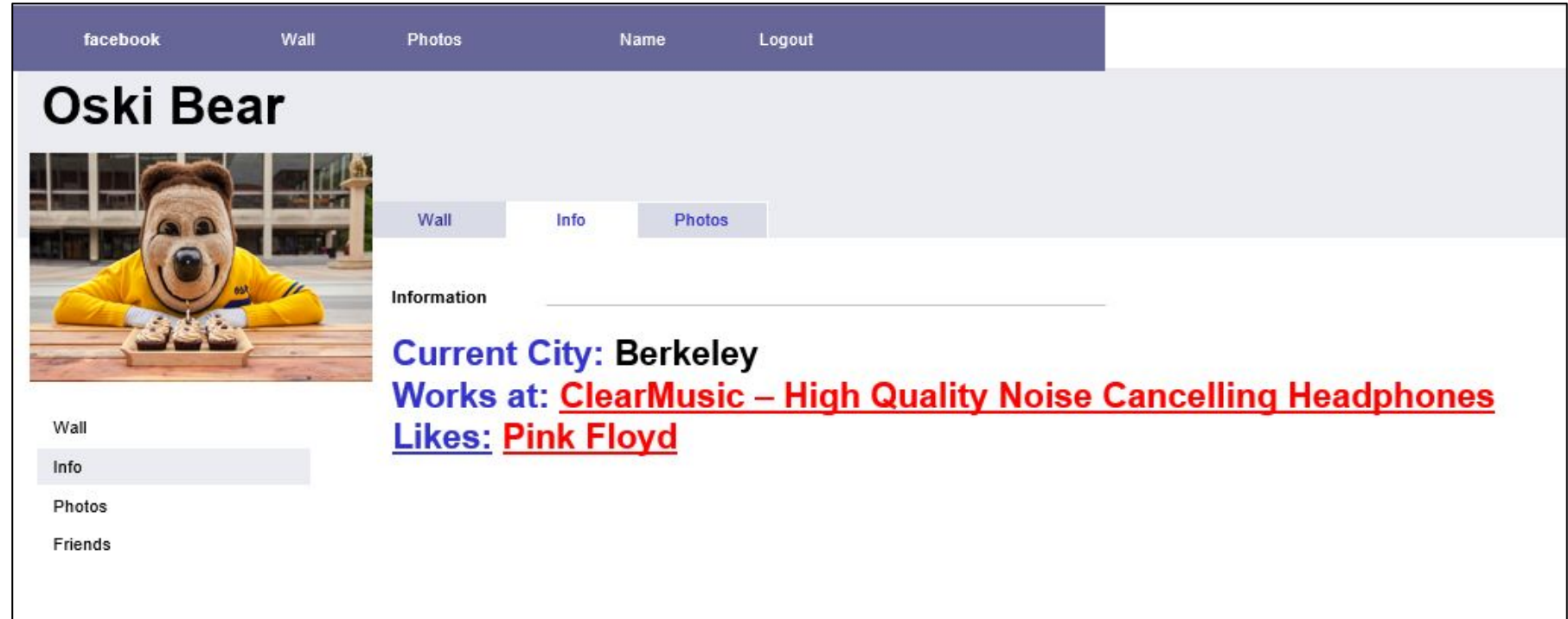

UI for Prospect Search

Obtaining data about the prospect - Trying to find connection with the product

Step 2 - Identify Prospect and match product information to personalize the sales experience

Product - New Earphones

+

facebook   Wall   Photos   Name   Logout

Oski Bear

Wall
Info
Photos
Friends

Wall   Info   Photos

Information

Current City: Berkeley
Works at: ClearMusic – High Quality Noise Cancelling Headphones
Likes: Pink Floyd

Personalization: Trying to match product characteristics with the prospect information

Step 3 - Send a Personalized Sales Email to the prospect

Subject Line: Oski Bear, open this email or you can't beat Stanford!

Dear Mr. Oski Bear,

Don't you hate it when your favorite Pink Floyd song is ruined due to bad earphones?

I really enjoy music and want to fully experience what the musician was trying to convey. A bad earphone just doesn't work for me and for music affectionados!

To allow this at an affordable price, we at Musica, have developed a new earphone which provides great listening experience at a very low price. It would be great to meet you to discuss this product and hopefully enjoy some Pink Floyd songs the way they are intended to!

Yours sincerely,

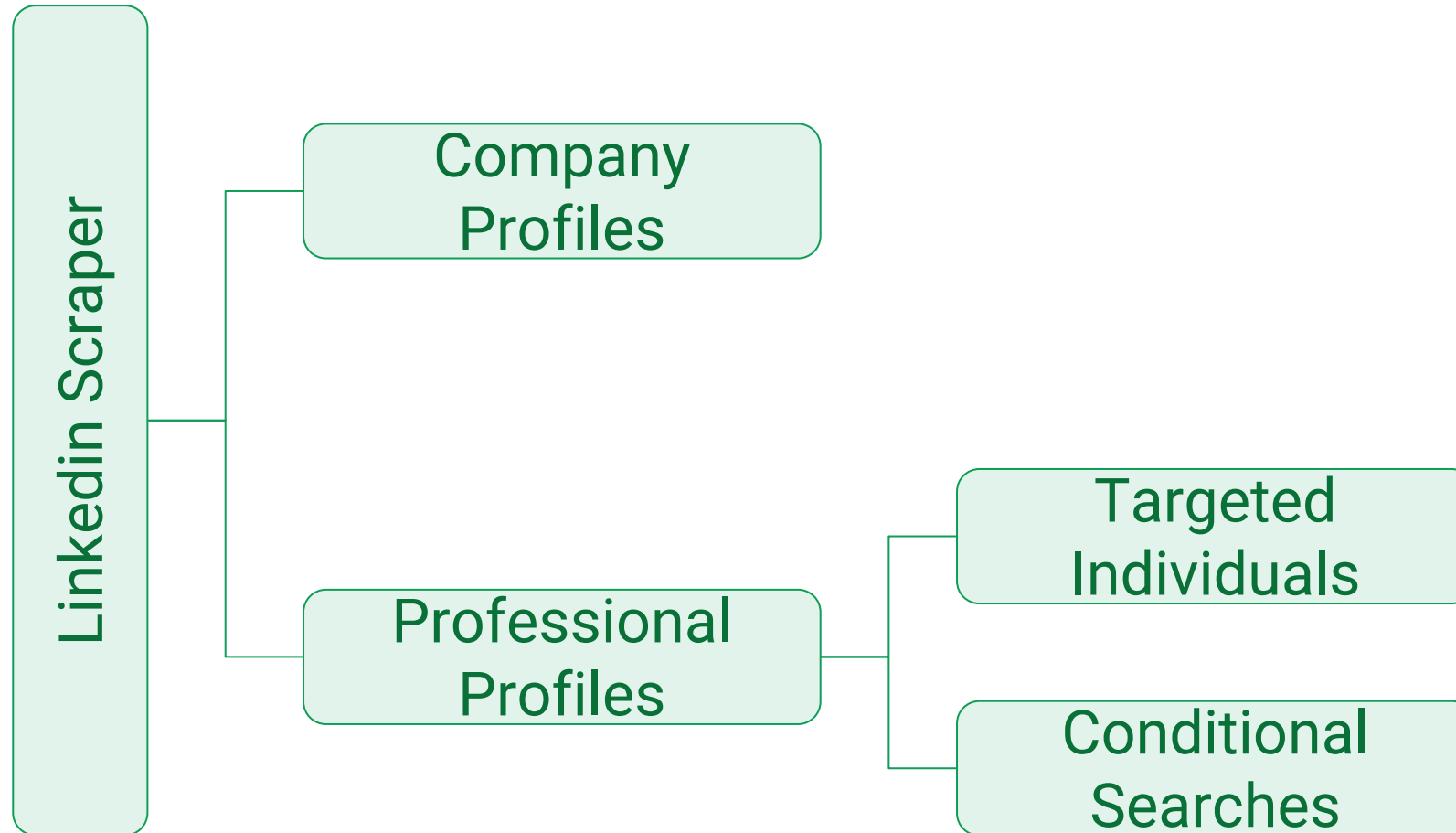XXXXXXXXX

Sample Architecture (SA)
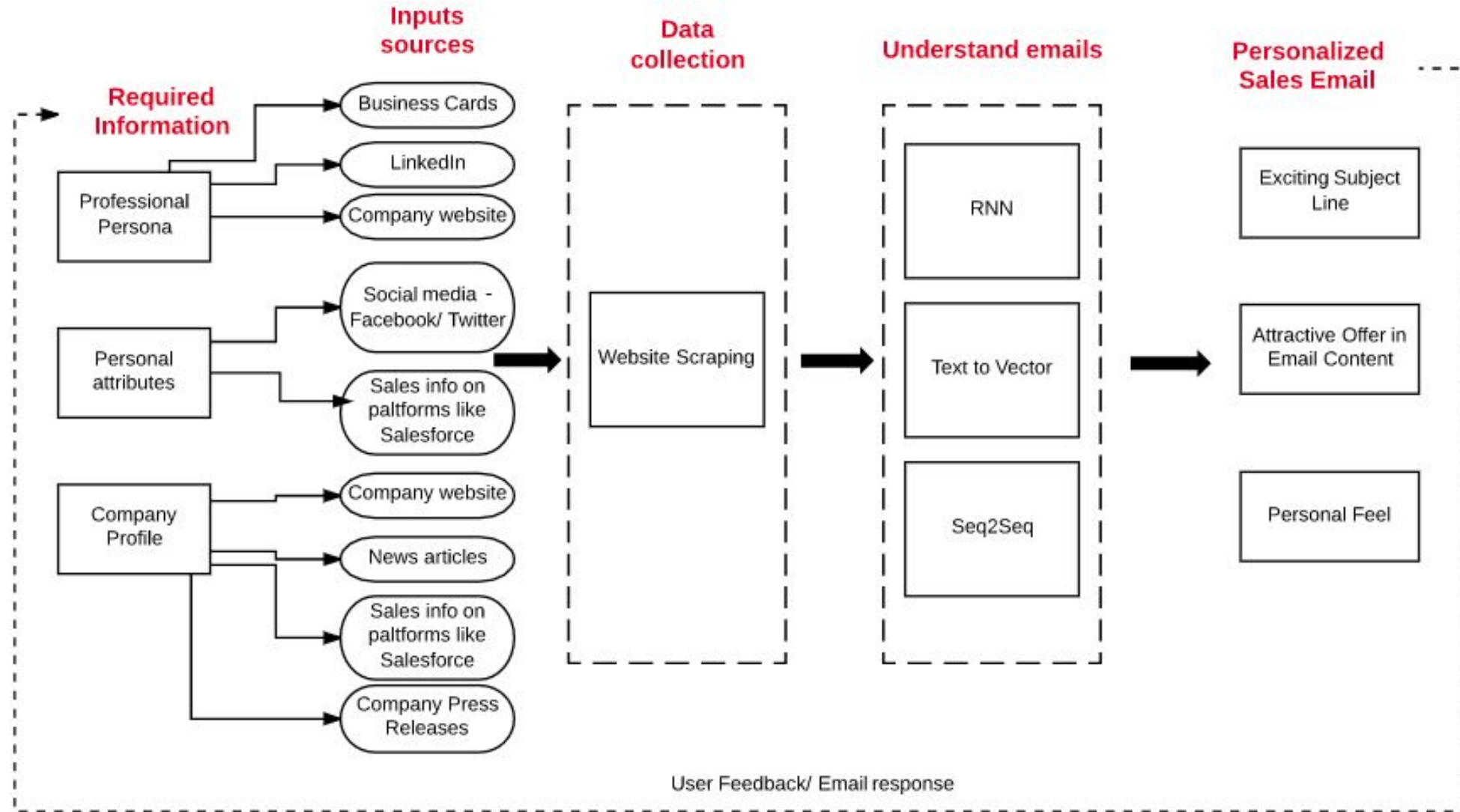
Technical Components of Project

Preliminary ideas on concepts and resources to be used -

- Learning to scrape websites
- Scrape and store the data
- NLP to analyze sentiment and make decisions
- Tools: SciPy, Scikit-learn
- Word2Vector
- Tensorflow
- Keras
- LSTMs
- RNNs, Seq2Seq
- Automated email drafting by customizing template emails.

Work done so far - LinkedIn Scraping & Data Cleansing

Linkedin Scraper

- Company Profiles
- Professional Profiles
  - Targeted Individuals
  - Conditional Searches

- Python Package: Selenium Webdriver
- Scrapes 1,000+ Professional Profiles a day
- Scrapes everything available on Linkedin

video:
https://www.youtube.com/watch?v=IIek6cfgHv0

Linkedin Data

Name	PageURL	HeaderPosition	Location	Industry	HeaderEducation		
Chinmay Abhyankar	https://www.lin	Director, Business Operations at eBay	San Francisco Bay Area	Financial Services	University of California, B	October 2015 P @eBay Director, Busin	June 2014 @eBay Inc Sr. Manage
Cherian Abraham	https://www.lin	MBA Student @ UC Berkeley - Haas School	Plano, Texas	Retail	University of California, B	February 2015 I @Fashion For C Advisor	February 2 @Rent-A-C Sr. IT Capa
Nikhil Achwal	https://www.lin	Systems Program Manager at Google	San Francisco Bay Area	Internet	Haas School of Business, L	March 2015 Pre @Google Learning & Dev	April 2014 @Google BizOps & S
Romi Agarwalla	https://www.lin	Economist at Shell Martinez Refinery	San Francisco Bay Area	Oil & Energy	UC Berkeley Haas School c	August 2012 Pro @Shell Martine Economist	October 20 @Shell Re Economist
Anurag Aggarwal	https://www.lin	Product Manager, Cisco	San Jose, California	Information Technology and Services	UC Berkeley Haas School c	2014 Present (1 @Cisco Product Manag	January 20 @Cisco Sy Senior Bus
Arthur Amador	https://www.lin	Vice President, Financial Consultant	San Francisco Bay Area	Financial Services	University of California, B	2008 Present (7 @Fidelity Inves Vice President,	2007 2008 @The Van Flagship R

Name	Linkedin Name	PageURL	Industry	Specialties	Type	Size
Google	Google	https://www.lin	Internet	search, ads, mo	Public Company	10,001+ employees
Facebook	Facebook	https://www.lin	Internet	not found	Public Company	10,001+ employees
Apple	Apple	https://www.lin	Consumer Elect	Innovative prod	Public Company	10,001+ employees
AirBnB	Airbnb	https://www.lin	Internet	travel accommo	Privately Held	1001-5000 employees
TESLA	Tesla Motors	https://www.lin	Automotive	innovation in el	Public Company	10,001+ employees
Uber	Uber	https://www.lin	Internet	mobile, transpo	Privately Held	1001-5000 employees
McKinsey & Company	McKinsey & Company	https://www.lin	Management C	Management C	Partnership	10,001+ employees
Amazon	Amazon	https://www.lin	Internet	e-Commerce, R	Public Company	10,001+ employees
LinkedIn	LinkedIn	https://www.lin	Internet	Online Professio	Public Company	5001-10,000 employees
Boston Consulting Group	The Boston Consulting Group	https://www.lin	Management C	Consumer insig	Partnership	5001-10,000 employees

Professional Profiles   Company Profiles

Customer Scoring/Cart Model Development
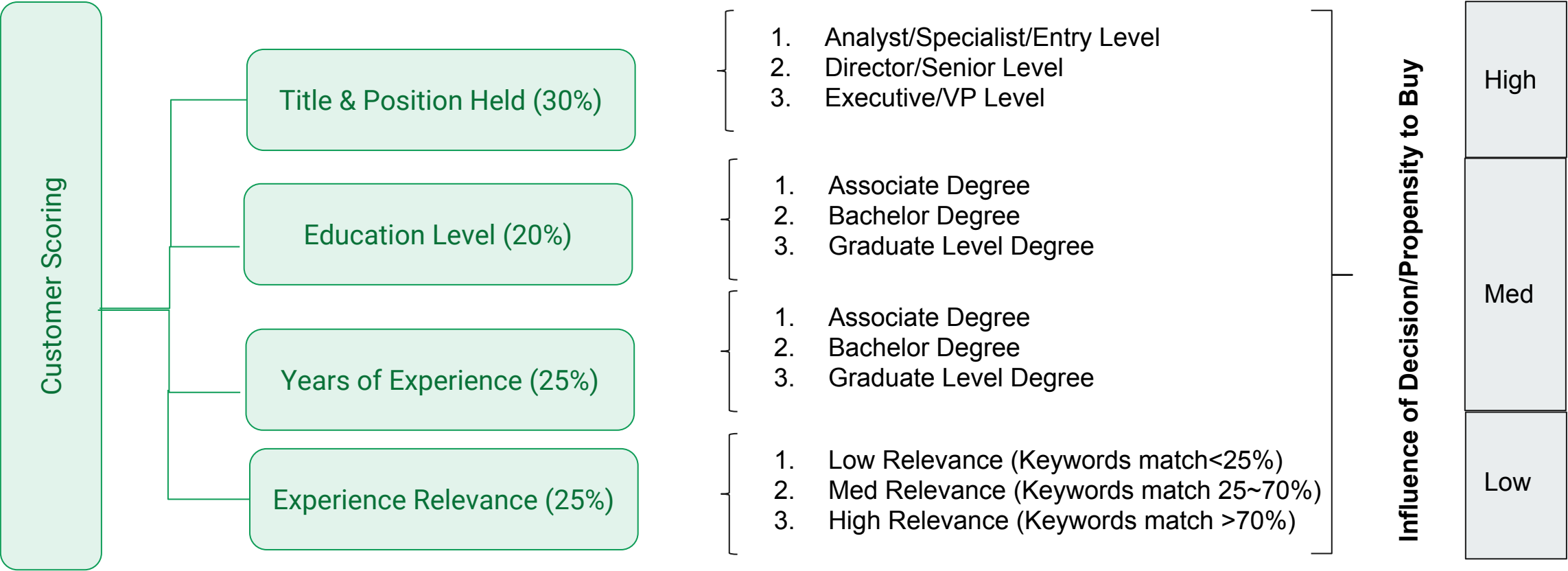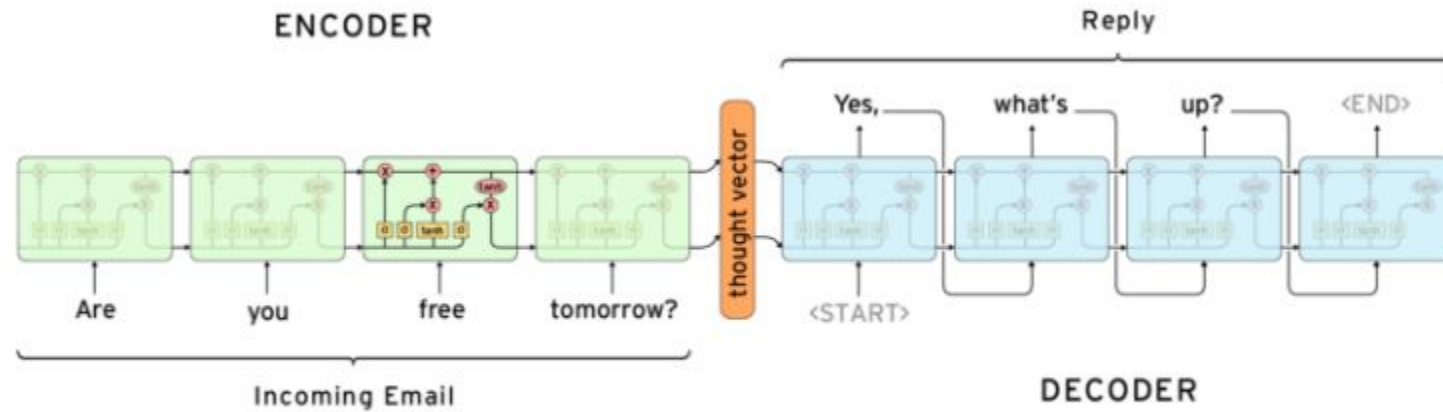
Explanation of tentative future work

Image borrowed from *Deep Learning for Chatbots : Part 1*

Thank You!

Questions?