



Spring 2019



Tejasvi Sista, Rahul Patel, Valmir Magjuni, Anqi Luo, and Jaeweon Kim

---

Rutgers Consulting Group

# Executive Summary



## Problems

- Lack of customers
- No expectations set for customers
- Lack of metrics & data provided to customer
- Product is not finalized: still in pre-beta phase



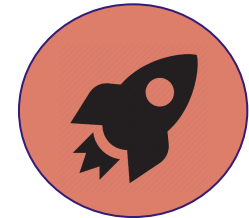
## Recommendations

- Build trust in product and company
- Identify target audience and advertise product
- Develop pricing & revenue model after pricing and market analysis



## Market

- Immense market size
  - Programmers, Software Companies & Researchers
- Competitors
  - CodeBots, Django, Slack & Banjo
- Growth Trends
  - Rise in AI technologies and large dependence on software development
- Revenue
  - Finalize revenue model



## Mission

- Establish customer basis and customer expectations
- Expand marketing and find investors
- Develop revenue & pricing name



# Agenda



# Overview of Project

The Goal of the Project is to develop a business model, create a concrete customer market, discover investors, and develop a pricing and revenue model for CodeBot, an Artificial Intelligence programming company by performing in-depth research in multiple areas.

## Develop/Understand Industry

- ❖ Artificial Intelligence Industry
- ❖ Competitive Analysis

## Develop Hypotheses

- ❖ Customer Segmentation
- ❖ Marketing Strategies

## Test Hypotheses

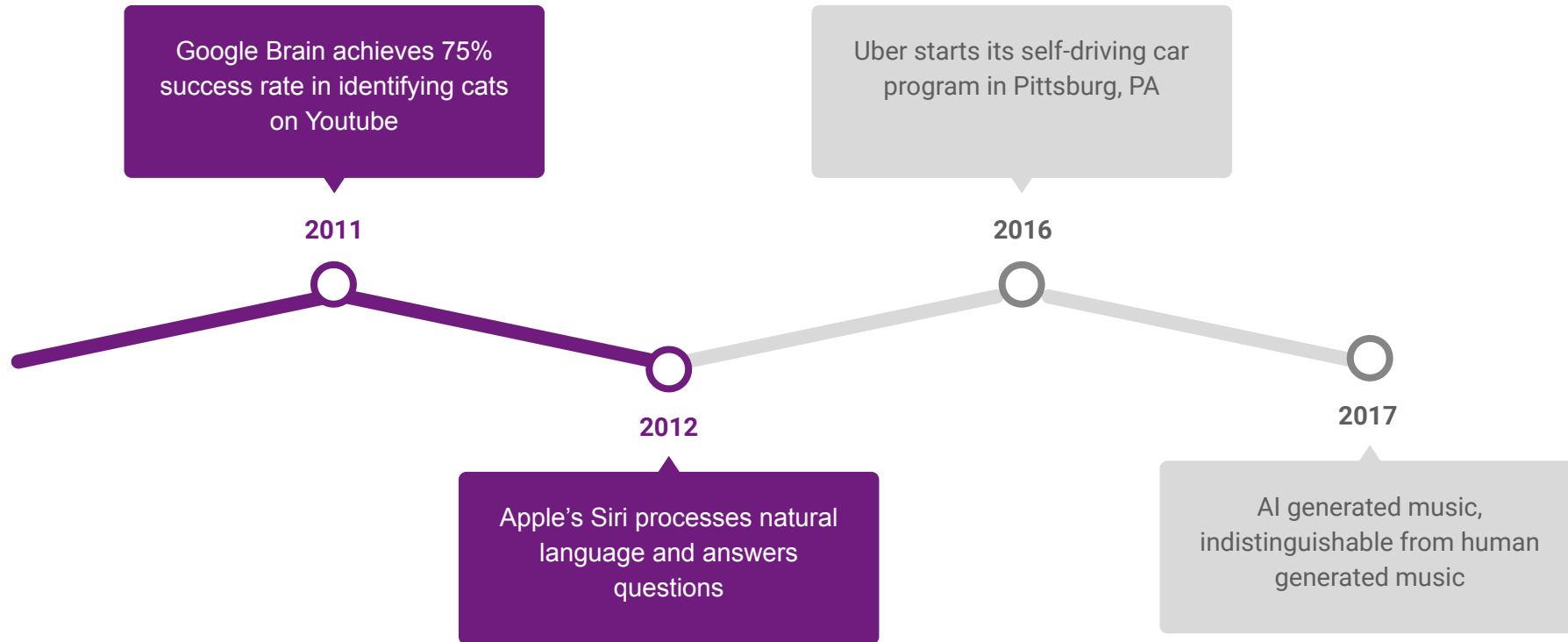
- ❖ Realistic Problem Feedback
- ❖ Customer Interviews
- ❖ Surveys

## Provide Recommendations

- ❖ Target Business Model
- ❖ Business Plan for Investors
- ❖ New Tagline/Marketing Strategies



# Timeline on Artificial Intelligence



## Where is AI Headed?

- 85% of interactions will be managed without a human by 2020
- \$5 billion in funding by VC firms into AI-related companies
- \$37 billion of spending on AI products by 2025

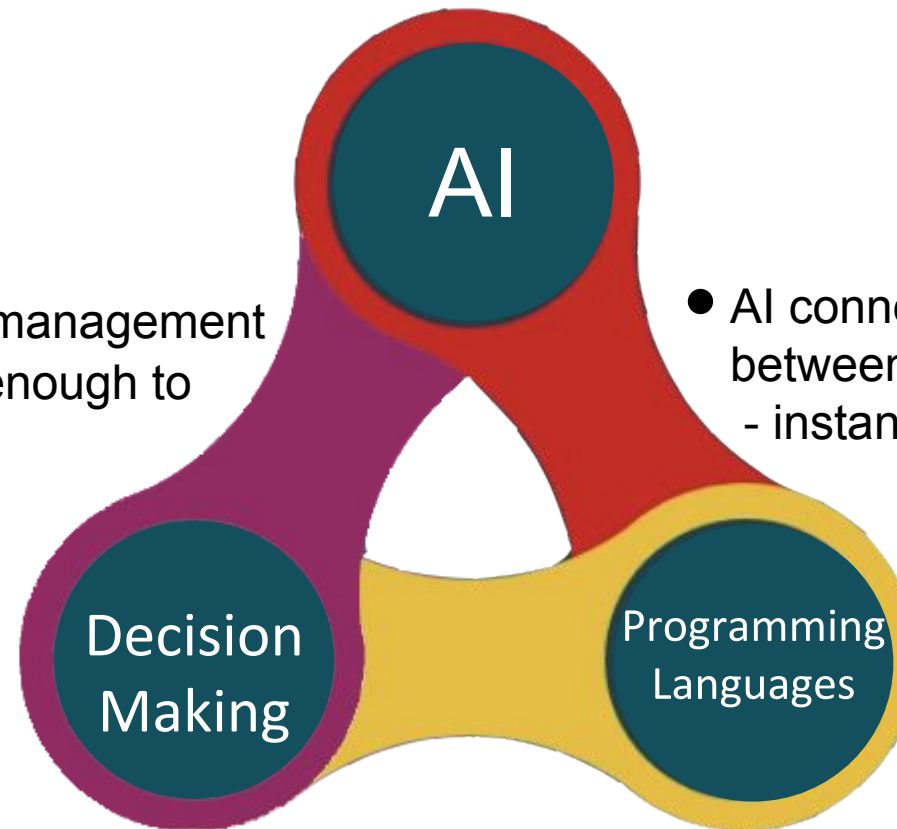


Sources: <https://snips.ai/content/intro-to-ai/#ai-metrics>

# Artificial Intelligence Programming Industry Snapshot

- Combination of AI and decision management systems have become capable enough to take decisions - court/enterprise

- AI connects us and serves as a transition between all discrete actions  
- instant change in programming languages

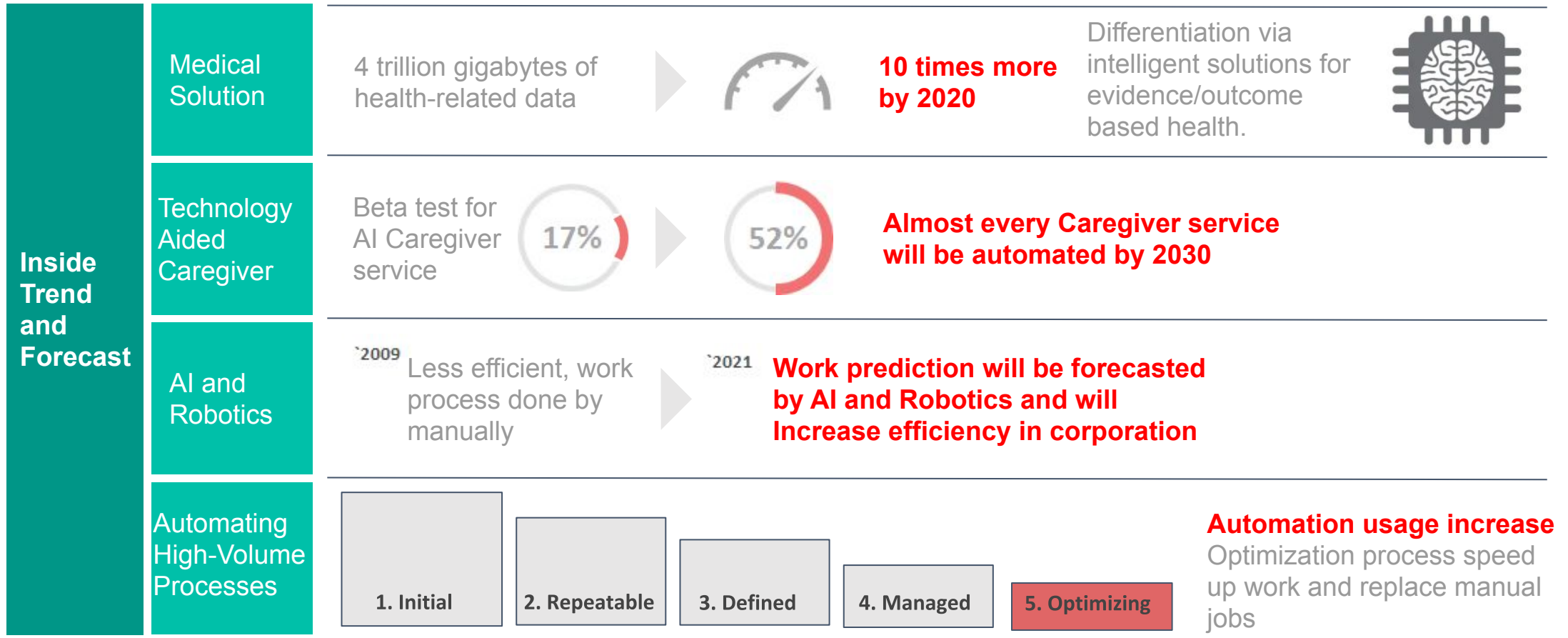


- Allow us to make decision based on large scale of data analysis



Sources:

# Artificial Intelligence Industry Growth Trends



Sources: <https://www.forbes.com/sites/laurencoleman/2018/05/31/inside-trends-and-forecast-for-the-3-9t-ai-industry/#3a1876842c86>  
<https://www.pwc.com/gx/en/industries/healthcare/publications/ai-robotics-new-health/five-trends.html>

# Company Overview

## Client Background

Kiran Karidi  
Founder and CEO of CodeBot

### Background:

- 15+ years of Programming experience
- Strong Expertise in Statistical Data analysis
- Prior experience in software development in Pharmaceutical industry
- 4th Start-Up
- [www.codebotai.com](http://www.codebotai.com)

## Product Offerings

1. Programming bot which can write programming code by itself.
2. All it needs is software requirement specifications (SRS).
3. Plans to come up in the next 3 months with AI based programming productivity tools such as
  - a. Code summarization(do deep code analysis and present in a dashboard)
  - b. Identify bugs/code breaks (Identify potential bugs)
  - c. Code suggestion tools (helps in suggesting code blocks already programmed and exist on the web or internal repositories)
  - d. Code completion tools(helps in typing code faster)

## Expectations & Goals

**Mission:** We intend to automate software and web development to the extent possible by creating productivity tools which helps developers be more efficient and reduce the development time.

- Establish Customer Market
- Develop Pricing Model/Marketing Strategy
- Develop Investor Analysis
- Collect feedback/metrics on the product



Sources:



# Direct Competitors



Providing free and open-source web framework and aims at ease the creation of complex, database-driven websites.

High level and reusable Web Framework

**\*\*Don't give codes\*\***

The "next IT" logo consists of the word "next" in a grey sans-serif font, followed by a blue stylized 'x' that also serves as a logo element, and the letters "IT" in a larger, bold, grey sans-serif font.

## next IT

An advanced tool set spanning Natural Language Understanding, Natural Language Processing, Natural Language Generation, machine learning

Conversational AI

**\*\*promoting retail enterprise success\*\***







developing programs that can learn to solve any complex problem without needing to be taught now.

The brains behind AlphaGo

**\*\*solid grounding in neuroscience\*\***



Sources:

Customer Market	 Undergraduate Students	 Freelance Software Programmers	 Software Bootcamps/ Organizations	 Small Firms/Start-Ups
Age	18-32	26-40	10-22	28-48
Project Types	<ul style="list-style-type: none"> <li>Computer Science Classes</li> <li>Hackathons</li> <li>Club Projects</li> </ul>	<ul style="list-style-type: none"> <li>Development of Chat Boxes</li> <li>Website Development</li> <li>Crowd Counting</li> <li>Object Recognition</li> <li>Paraphrasing Articles</li> </ul>	<ul style="list-style-type: none"> <li>Website creations for various causes</li> <li>Code with sound effects (ex-Scratch)</li> <li>Fashion API (search for specific items)</li> </ul>	<ul style="list-style-type: none"> <li>Data Collection and Analysis</li> <li>Less Resources into Outsourcing</li> <li>Better customer service (ex-Websites, customized service)</li> <li>Marketing Platform</li> </ul>
Examples	<ul style="list-style-type: none"> <li>Rutgers University</li> <li>NJIT/NYIT</li> <li>Middlesex County College</li> </ul>	<ul style="list-style-type: none"> <li>Joseph Haddad (Beta Tester)</li> </ul>	<ul style="list-style-type: none"> <li>HackRU</li> <li>Girls Who Code</li> <li>Women in STEM</li> <li>Venture Labs (RU)</li> </ul>	<ul style="list-style-type: none"> <li>IT Services</li> <li>Customer Service Web Development</li> <li>Firm Size of 3-50 people</li> </ul>

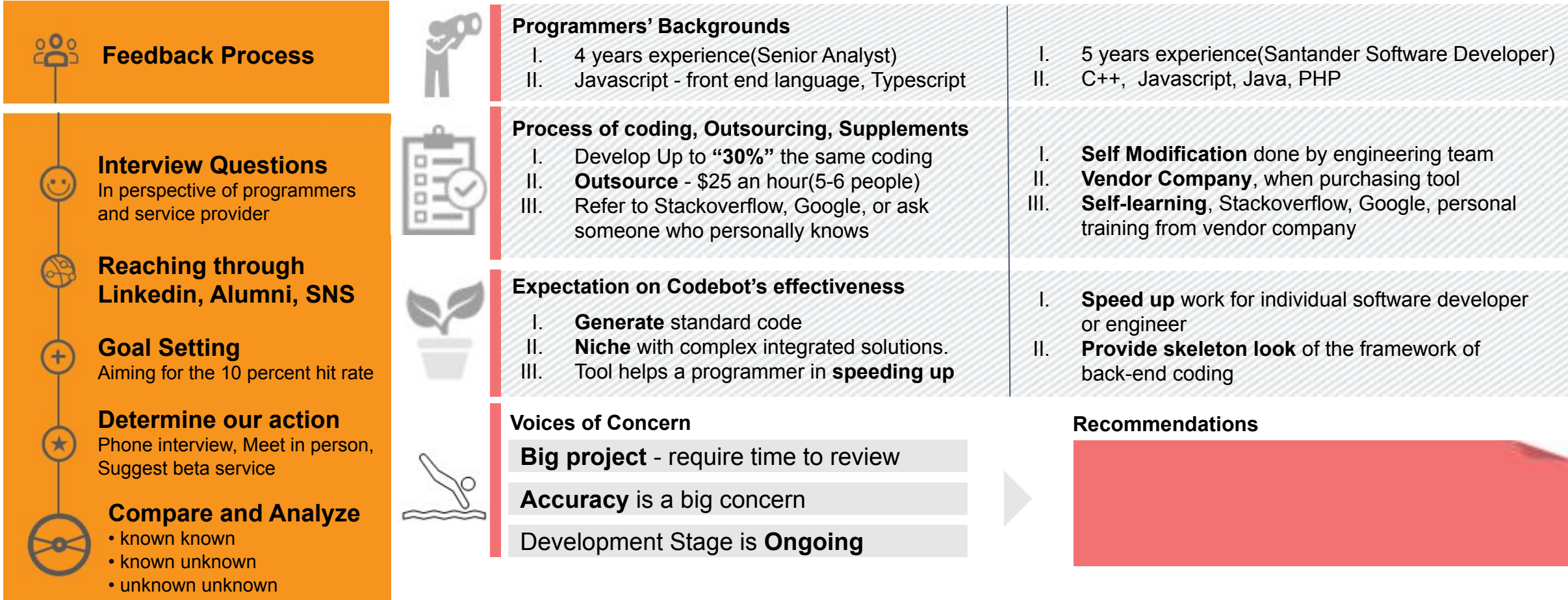


### Proposed Approach to Segmentation

- Social Media
- Advertisements on Student Study Websites (ex- Chegg, W3Schools, Khan Academy)
- LinkedIn
- Professors
- Stipend Payment for Testers
- Glassdoor

# Feedback

The goal of the feedback is to create guidelines to reach out potential freelancers and programmers and to understand the current recognition of automated coding service in the industry.



Sources:

# Who are our potential investors?

## Venture Capital

- Brook Venture, Johnson and Johnson, OCR Capital, Redpoint Ventures

### Advantages:

1. Substantial Funding
2. Best mentorship and support
3. Technology specific VCs

### Disadvantages:

1. 15-45% equity + management fees + 20-25% carried interest
2. Loss of Autonomy

## Accelerators

- 50% increase in accelerators each year
- Responsible for Airbnb, Twitch, Dropbox

### Advantages:

1. Gateway to large VCs
2. Moderate Funding
3. Offers education, capital, work space, network

### Disadvantages:

1. Possibility of low reward
2. Most firms require some equity in the startup (some don't)
3. Move very quickly to develop the startup

## Crowdfunding

- Kickstarter, GoFundMe, Fundly, Crowdfunder, etc.

### Advantages:

1. Low barrier to entry
2. Funding can be substantial
3. Good exposure for product
4. Most autonomy

### Disadvantages:

1. Only funds, no mentorship, support, etc.
2. Possibility of no funding
3. Will have to give up equity



Sources: Access to full research document with sources:

[https://docs.google.com/document/d/1GEnKAYNQiqaSdtUMtwMq\\_FLoG2l9xAMMmIgOTzfnU6g/edit?usp=sharing](https://docs.google.com/document/d/1GEnKAYNQiqaSdtUMtwMq_FLoG2l9xAMMmIgOTzfnU6g/edit?usp=sharing)

# Recommendations

Company Name  
Suggestions

Logo Design Suggestions

Tagline Suggestion

Other Recommendations

AutoBot



"The program that codes  
itself"

Patents

QuickScript



"More code in less time"

Pricing & Revenue Model

AutoScript



Should emphasize  
automation and efficiency

Target Audience



Sources:

**Thank you!**

