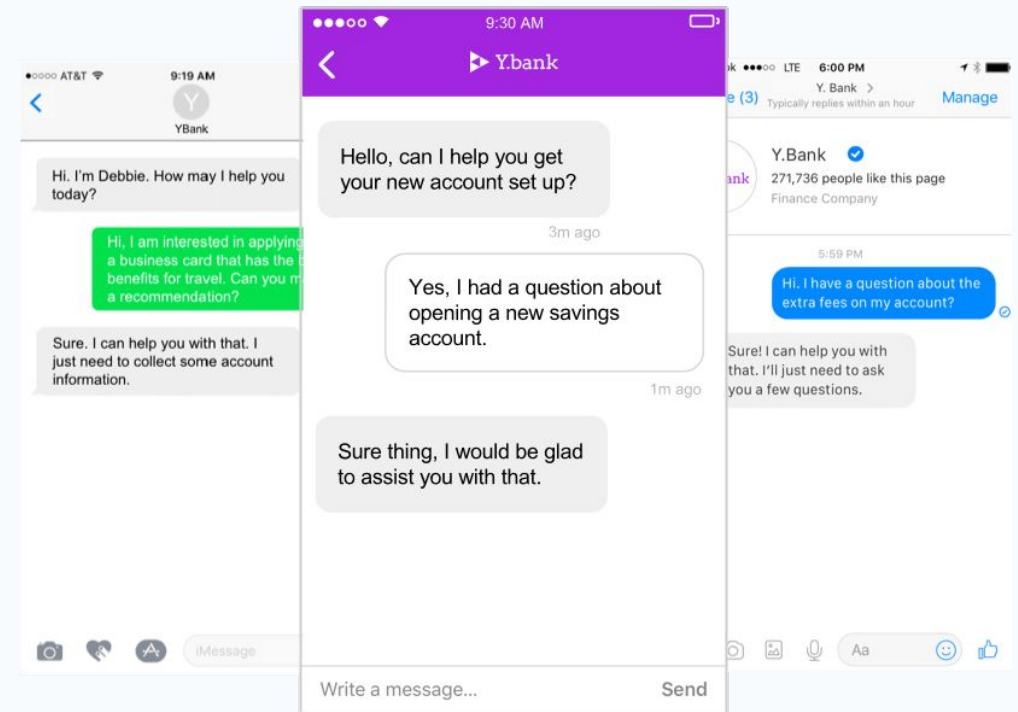


# Deep Dive: Finance

Board Education Program  
Jessica Wu, Valerie Yuen,  
Andi Spiride



LIVEPERSON



# LivePerson Overview

## Company Overview

- A global technology company developing artificial intelligence software to aid conversational commerce
- Known for innovation of Conversational Cloud
  - Conversational Cloud provides an integration of AI-powered chats into daily messaging

## Thesis Highlights

- LivePerson is well-positioned for growth in the healthcare and government markets
- LivePerson has a well-built AI infrastructure at the forefront of industry

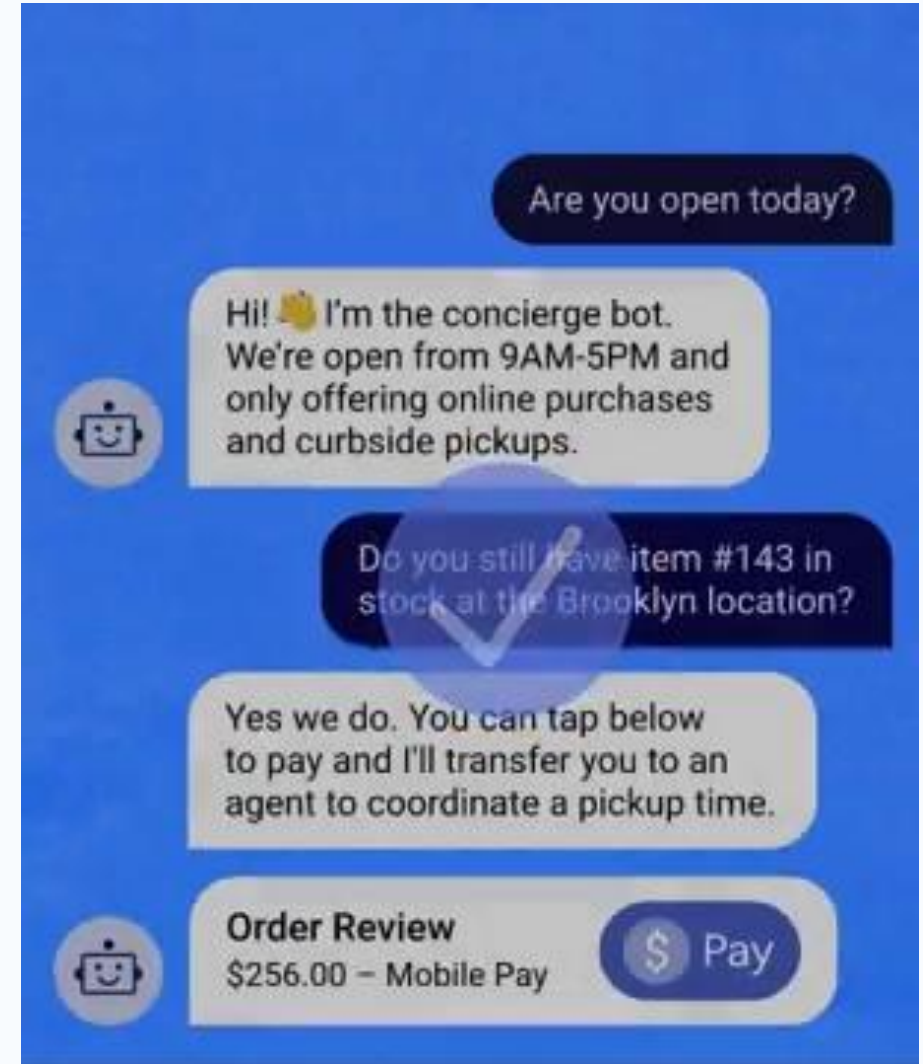
## Financials

LSPN	
Stock Price	\$58.53
Market Cap	3,870,000,000
Debt	739,018,000
Preferred & Other	0
Cash	349,700,000
Enterprise Value	3,865,000,000
EV/EBITDA	N/A
EV/EBIT	N/A
P/E	N/A
Gross Margin	71.4%
Operating Margin	-29.0%

# LivePerson Overview

## Key Features of Conversational Cloud

- **Intent Manager**
  - Uses a natural language understanding engine to analyze the intentions of customers
  - Provides feedback to brands
- **Conversation Builder**
  - Allows brands to build customizable bots
  - Easy to use so even non-technical staff of company can design bots
- **Conversation Manager**
  - Provides a space for human agents to supervise chat automations
- **Offers connectors through numerous messaging channels**
  - Facebook Messenger, Whatsapp, WeChat, Apple Business Chat



# Artificial Intelligence Industry

- Artificial Intelligence Industry
  - Rapidly growing industry - predicted annual growth rate is 40% to 50% over the next 5 to 7 years
  - Many large companies have started investing in the research and development of artificial intelligence (e.g. Google, Amazon)
  - Artificial intelligence is infiltrating many other industries (e.g. healthcare, automotive)
  - Covid-19 has spurred global interest in artificial intelligence
    - Alibaba (a China-based tech company) developed an algorithm using a computed tomography (CT) scan to detect new Covid cases
    - Google launched a Rapid Response Virtual Agent (an AI-enabled chatbot) to respond to customers experiencing difficulties due to the pandemic

# Business Overview

## Value-Adds

- Products and Services
  - Conversation bots that allow customers to text questions and get info/make purchases
  - Offer API that lets customers add specific chat functions
  - Conversation analytics to provide insight into customer demand
- Tools and Assets
  - Improved efficiency for customer interaction
  - Customizable features for customer-specific needs
  - AI and natural language processing infrastructure

# Business Segment Breakdown

- SaaS Business Model
    - 12-month long contracts with additional revenue based on level of interaction
  - Core market in the native US, but also serves Americas, Asia Pacific, and Europe/Middle East/Africa
1. Business Segment
    - a. Enables brands to leverage LiveEngage's sophisticated intelligence engine to connect with consumers through an integrated suite of mobile and online business messaging technologies
    - b. **Revenue:** \$267,129K in 2019 (~92% total) from an increase in customers and broader deployment of bot)
  2. Consumer Segment
    - a. Facilitates online transactions between experts and users seeking information and knowledge for a fee via mobile and online messaging
    - b. **Revenue:** \$24,480K in 2019 (~8% total) due to an increase in chat minutes and price/minute)

# Porter's 5 Forces Analysis

## Tech Company Threats

### ▪ **Bargaining Power of Buyers: Strong**

- Buyers have large bargaining power
- Many firms that offer similar tech
- Buyers can control/demand features and pricing because of abundance of substitutes

### ▪ **Bargaining Power of Suppliers: Weak**

- No strict suppliers
- Develop algorithms in-house and design API in-house
- Eliminates reliance on another company to supply materials/software

### ▪ **Threat of New Entrants: Strong**

- High threat of new entrants → tech companies
- Companies that develop voice assistants (Amazon, Apple, Google)
- Natural Language Processing companies

### ▪ **Threat of Substitutes: Strong**

- Voice assistants can parse info
- Web Scraping/3rd party companies that cut out middle man
- Automated customer service over the phone

### ▪ **Industry Competition: Moderately Strong**

- BotsCrew, Cedex Technology, Chatbots.Studio
- Many small companies, no industry leader

# SWOT Analysis

## Strengths

### ▪ Innovation

- 1995: founded by Robert LoCascio to bridge the gap between customers and businesses by offering chatbots on business websites
  - Noticed that customers often had to call businesses for more information - a much more tedious process
- August 2020: developed Conversational Cloud, an AI-enabled conversational platform that allows consumers to ask questions about companies on familiar messaging platforms such as Whatsapp, Facebook messenger
  - Moving towards a world where consumers can add companies as contacts and communicate with them as easily as they would converse with friends

### ▪ Data Availability

- Founded in 1995, has over two decades of chat history to draw from to feed into machine learning algorithms



# SWOT Analysis

## Weaknesses

### ▪ **Lack of Differentiation**

- Struggling to define a unique selling position from competitors
- Must continue innovating and investing in research

### ▪ **Seasonal Earnings**

- Heavily reliant on success of businesses that use LivePerson's services
- Many of LivePerson's clients experience seasonal sales that affect LivePerson's profits

### ▪ **High Costs**

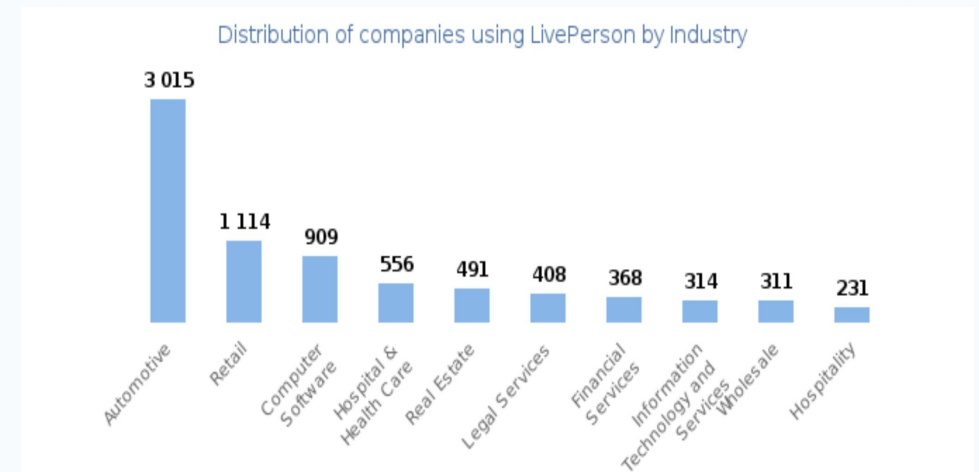
- Investing in AI research is costly - need to invest a lot of money upfront before seeing returns

# SWOT Analysis

## Opportunities/ Threats

### Opportunities:

- **Targeting New Sectors**
  - With Conversational Cloud, a lot of potential to expand into retail targeting younger generations
- **Shift to New Industries**
  - Potential to shift into other industries (e.g. healthcare) since core AI algorithms can be reused



### Threats:

- **Larger Companies**
  - As interest in AI grows, larger companies (e.g. Google, Microsoft) are investing resources into their own research and development

# Economic Moat Analysis

## Data Moat

- Data Moat
  - 2000s – chatbots popular on company websites
  - 1990s – LivePerson begins to offer text-chat for company websites
  - 2 decades of chats for ML algorithms – large and growing data set

The screenshot displays a 'Data Sources' management interface. It is divided into several sections: 'Data Sources' (introductory text), 'Connectors' (a table of data sources), 'Engagement Attributes' (a table of data categories), and 'Other sources'.

DATA SOURCE	STATUS
<b>LiveEngage Monitoring</b> Enables you to track, monitor, and engage your website visitors.	Disconnected <a href="#">Connect</a>
<b>Google analytics</b> Extract data from web analysis resources, in order to enhance targeting capabilities.	<span>✓ Connected</span> <a href="#">Disconnect</a>

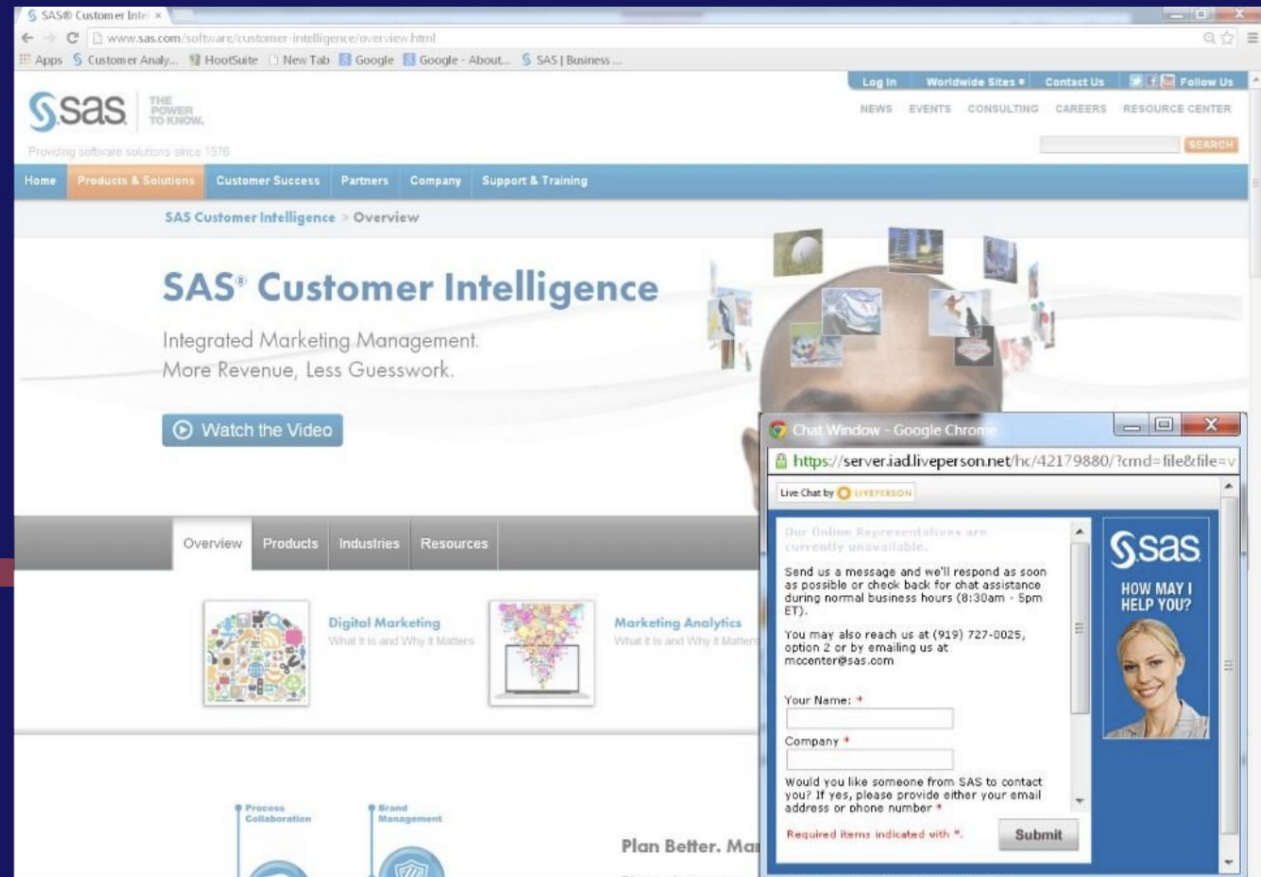
DATA CATEGORY	ATTRIBUTES
<b>eCommerce info</b> eCommerce information. These attributes allow you to track the commerce interests and activity of your visitors.	<ul style="list-style-type: none"><li>• Cart update</li><li>• Transaction</li><li>• Viewed product</li></ul> <a href="#">Configure</a>
<b>Visitor information</b> Retrieve specific details about your website visitors, for example: the channel they arrive from and the affiliate they are associated with.	<ul style="list-style-type: none"><li>• Customer info</li><li>• Marketing campaign info</li><li>• Lead</li><li>• Personal info</li></ul> <a href="#">Configure</a>

DATA SOURCES	
<b>Interactive Voice Response (beta)</b> Integrate with Interactive Voice Response to deflect voice calls to chat	<a href="#">Learn more</a>

# Economic Moat Analysis

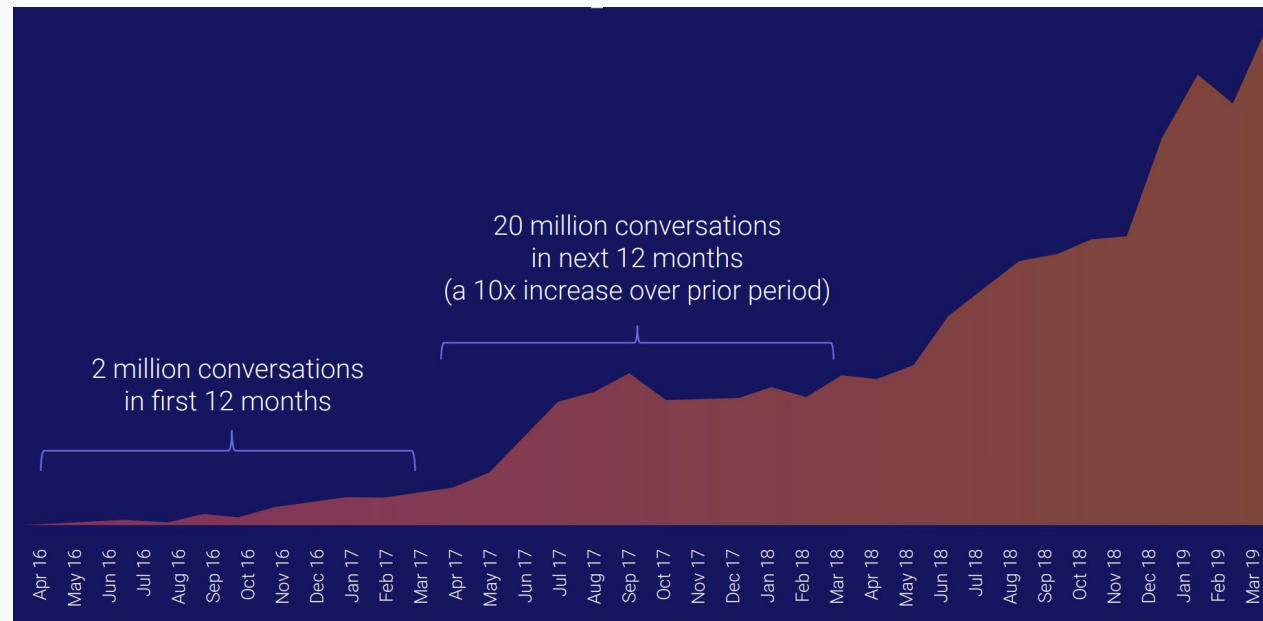
1997



# Economic Moat Analysis

## Switching Costs

- High Switching Costs
  - LivePerson improves chatbot over time through user input data
  - Building a new bot takes time



# Investment Thesis

- LivePerson is well-positioned for growth
  - With the outbreak of Covid-19, government agencies are challenged with developing systems for contact tracing and health inquiries — AI-powered messaging becoming increasingly important
- LivePerson has a well-built AI infrastructure that is at the forefront of industry
  - Its infrastructure is not being priced as an asset that will help them expand and take a larger market share of government and healthcare contracts
  - Rise of telehealth companies due to corona leads to need for chatbots to diagnose and categorize patients



Time Period:	YoY	3Y	5Y	10Y
Revenue:	21.19%	14.53%	7.08%	12.62%

# Analysis of Financials

## Projected Growth and Profit

- Recent growth in revenue and costs expected to stay at similar levels, contracts in government and healthcare industries
- Investment Thesis effect on future fundamentals:
  - Stable infrastructure and a constant customer base leads to more drive for economies of scale and improved per-unit profitability
  - Expansion into government and healthcare industry will result in accelerating revenue growth
  - Operating costs expected to lower as more time passes
  - Securing long-term contracts that will lead to stable revenue streams and consistent use of product

# Analysis of Financials

## Projected Growth and Profit

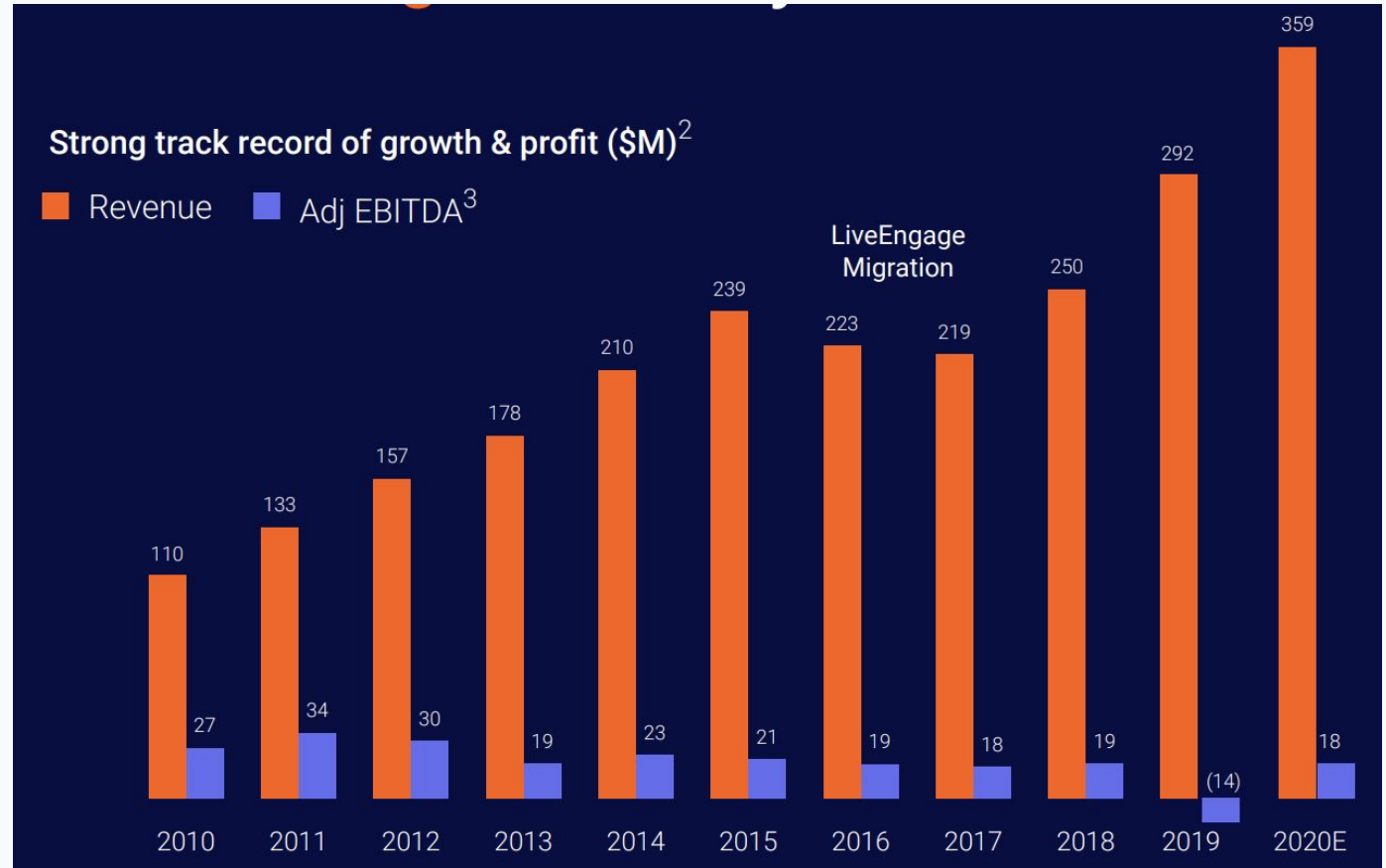
- Increases in quarterly earnings support strong demand claims among large enterprises
- AI support calls rise in demand due to pandemic-related changes in employee availability and behavior
  - Contact centers shut down and call capacities exceeded — automated live chats become increasingly important
  - Volume in LivePerson's conversational platform has already increased by 40% since the onset of Covid-19
- Projected sales for third quarter constitute a 24% year-over-year increase
  - Strong pipeline demonstrated in second quarter
  - Anticipated rebound of new customer activity



# Analysis of Financials

## Projected Growth and Profit

- Track record of growth led by innovation
- A lot of investment in research and development

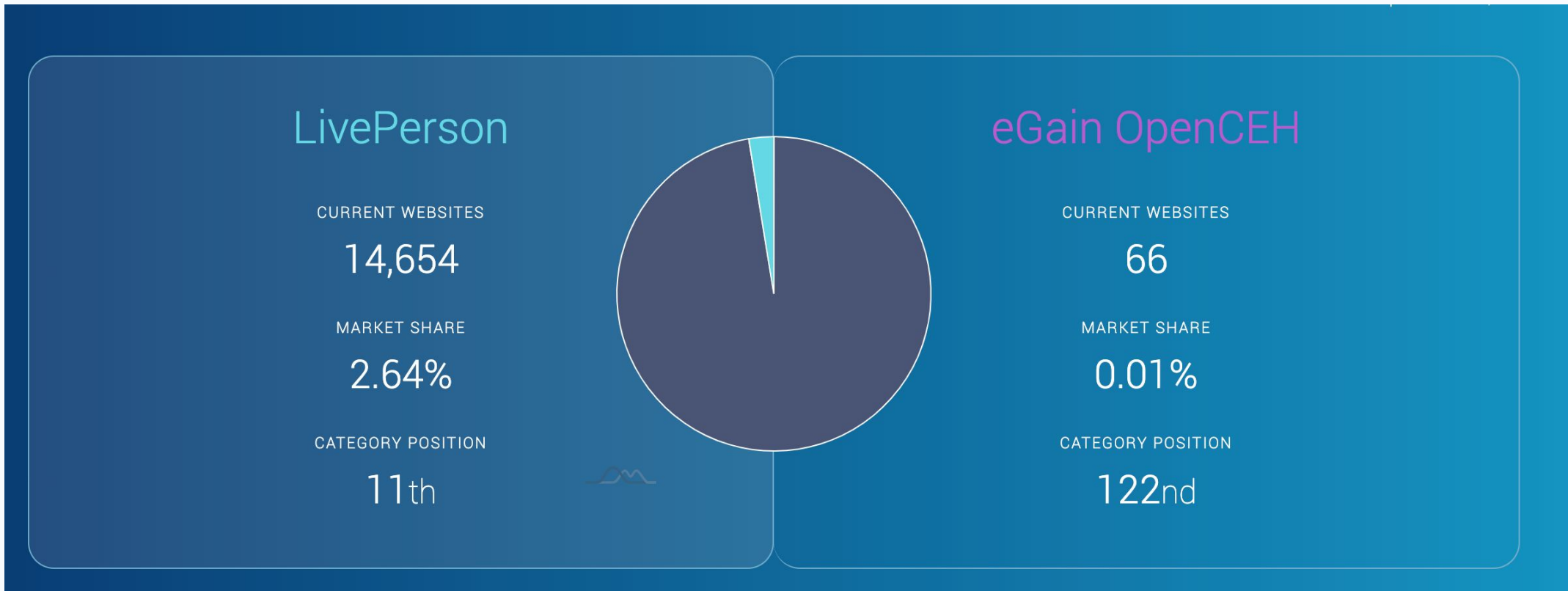


# Comps Analysis

Comparable Company Analysis					
	Ticker	Share Price	Market Cap (B)	EV/Revenue	Revenue (T)
LivePerson	LPSN	58.34	3.87	11.93	\$323,939
Hubspot	HUBS	315.6	14.38	18.39	\$762,382
Zendesk	ZEN	110.24	12.72	13.66	\$924,488
eGain	EGAN	18.52	0.572	7.18	\$72,729
Mean			7.886	12.79	\$520,885
Median			8.295	12.79	\$543,161
Mean (without eGain)			10.32	14.66	\$670,270
Median (without eGain)			12.72	13.66	\$323,939

- Comps: AI communications companies offering chat/email/service automation
- Low EV/Revenue: undervalued company
- High revenue relative to market cap
- Low operating margins: targeting expense discipline
- Included comps with and without eGain for very similar lines of work but a massive difference in company size

# Comps Analysis



# Comps Valuation

Implied Pricing: Bear Case	
<b>EV/Revenue</b>	12.294
<b>Revenue</b>	\$323,939,000
<b>Implied EV</b>	\$3,982,506,066
<b>Cash</b>	\$349,700,000
<b>Debt</b>	739018000
<b>Preferred and Other</b>	0
<b>Market Cap</b>	\$3,593,188,066
<b>Diluted Shares</b>	65,717,256
<b>Implied Price</b>	\$54.68
<b>Return on Investment</b>	-6.58%

Implied Pricing: Base Case	
<b>EV/Revenue</b>	13.66
<b>Revenue</b>	\$323,939,000
<b>Implied EV</b>	\$4,425,006,740
<b>Cash</b>	\$349,700,000
<b>Debt</b>	739018000
<b>Preferred and Other</b>	0
<b>Market Cap</b>	\$4,035,688,740
<b>Diluted Shares</b>	65,717,256
<b>Implied Price</b>	\$61.41
<b>Return on Investment</b>	4.92%

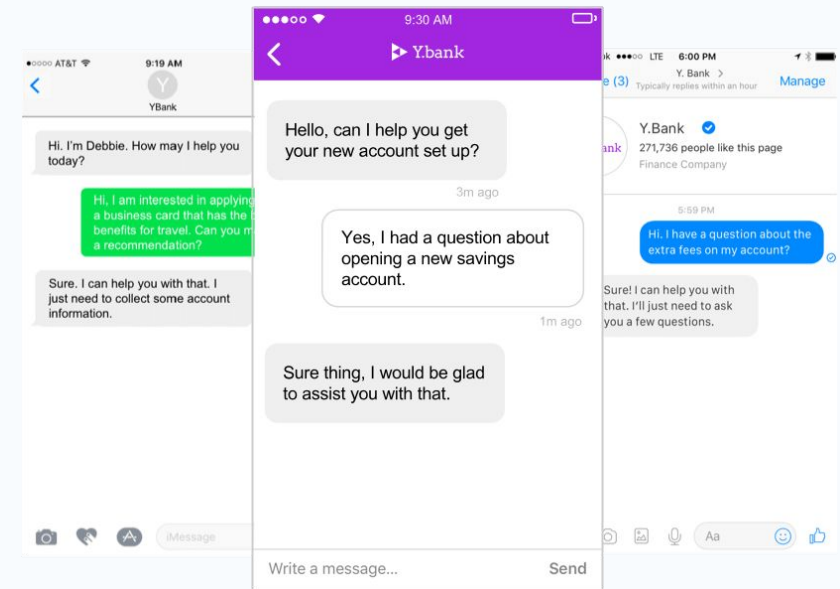
Implied Pricing: Bull Case	
<b>EV/Revenue</b>	15.709
<b>Revenue</b>	\$323,939,000
<b>Implied EV</b>	\$5,088,757,751
<b>Cash</b>	\$349,700,000
<b>Debt</b>	739018000
<b>Preferred and Other</b>	0
<b>Market Cap</b>	\$4,699,439,751
<b>Diluted Shares</b>	65,717,256
<b>Implied Price</b>	\$71.51
<b>Return on Investment</b>	22.18%

▪ Multiples Used:

- Bear: 12.3x (10% Lower than Median)
- Base: 13.7x (Median of Comps without eGain)
- Bull: 15.7x (15% Higher than Median)

# Catalysts and Risks

- Integration into existing popular messaging platforms such as Messenger and Whatsapp will cause a price correction
- Business performance hurt by large tech companies with product ecosystems that could move into AI chatbot industry
  - LivePerson 3rd party developer so it can support cross-platform messaging services
- Expect stock to reach projected price within next 6 months as platform for messaging services rolls out



# Recommendation Target Price: \$61.41

## Thesis Summary

- Having a stable customer base and infrastructure makes LivePerson ready to grab market shares in new government and healthcare contracts
- Virtual interactions due to Covid lead to higher demand for faster service in healthcare, technology, service industries

## Investment Support

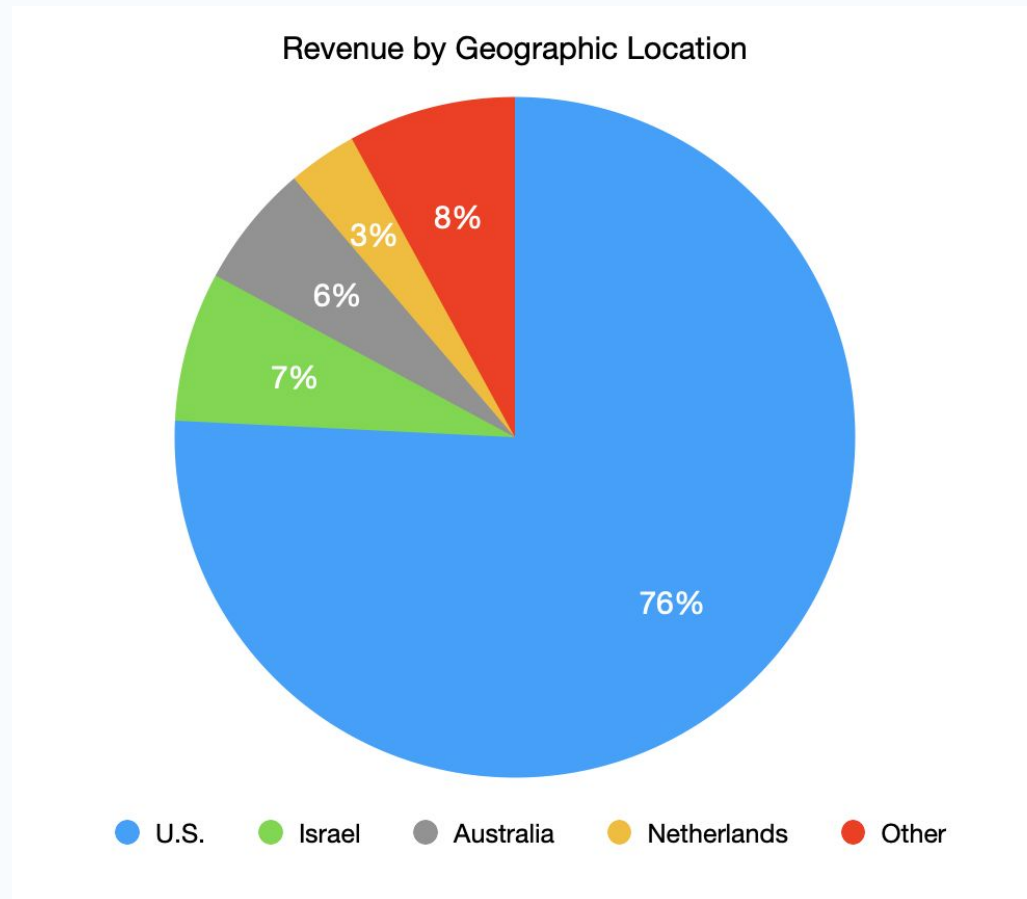
- Projected EV/Revenue multiplier in both neutral and bull markets lead to growth in LivePerson stock
- First company to integrate chatbot directly with popular messaging services
- Increasing customer base and more infrastructure over time leads to reduced costs and higher revenue

# Appendix

- Geographic Breakdown
- LivePerson Stock
- Comps Analysis (with all ratios)
- Full Financial Summary

# Business Segment Breakdown

## Geographic Breakdown





# LivePerson Stock



# Comps Analysis

Comparable Company Analysis (in Thousands)								
	Ticker	Share Price	Market Cap (B)	EV/Revenue	EV/EBIT	EV/EBITDA	Operating Margin(EBIT/Revenue)	P/E
LivePerson	LPSN	58.34	3.87	11.93	-40.56	-51.36	-29.41%	-34.43
Hubspot	HUBS	315.6	14.38	18.39	-280.57	-768.45	-6.55%	-188.98
Zendesk	ZEN	110.24	12.72	13.66	-89.85	-129.33	-15.20%	-70.67
eGain	EGAN	18.52	0.572	7.18	70.46	67.69	10.00%	80.52
Mean			7.886	12.79	-85.13	-220.36	-10.29%	-53.39
Median			8.295	12.79	-65.21	-90.34	-22.31%	-52.55
Mean (without eGain)			10.32	14.66	-136.99	-316.38	-17.06%	-98.03
Median (without eGain)			12.72	13.66	-89.85	-129.33	-15.20%	-70.67

- Comps: AI communications companies offering chat/email/service automation
- Low EV/Revenue: undervalued company
- Low operating margins: targeting expense discipline
- Included comps with and without eGain for very similar lines of work but a massive difference in company size

# LivePerson Overview

## Financials

LSPN	
Stock Price	\$58.53
Market Cap	3,870,000,000
Debt	739,018,000
Preferred & Other	0
Cash	349,700,000
Enterprise Value	3,865,000,000
EV/EBITDA	-51.36
EV/EBIT	-40.56
P/E	-\$34.43
Gross Margin	71.4%
Operating Margin	-29.0%