

Team 378- Dream Face



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Principal Investigator
Expertise: Computer vision and
Social Robotics



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Machine Learning
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Ron Cole, PhD
Mentor
Expertise: Over 40 years of Academic
and Industrial expertise in developing
Spoken Dialog Systems



**Ryan: An Emotive Lifelike Social
Robot for Face-to-Face
Communication**

Customer Interviews:
Total: 102 (3 via phone and 5 via Skype)

Ryan: the Face of the Dream Face Team!

Ryan's Features

- Animation-Based Robot
- Spoken Dialog
- Multilingual
- Expressive and Emotive
- Facial Affect Recognition



What we thought...(Canvas, Version 1)

- Ryan is a cool robot and everybody would buy it!

Value Propositions

★ Emotive & Engaging Agent can improve learning and ...

★ Customizable appearance & voice can make a difference

★ Social robots are accepted similarly to teachers or ...

Does Physical Embodiement add any value to a ...

★ Can provide Concierge/ knowledgeable receptionist

★ Social robots can provide individualized instruction

★ Would a Multi-lingual Agent help serve a bigger group

Customer Relationships

Channels

Direct Sell
(DreamFaceTech.com)

Customer Segments

★ School directors

★ Thearpists(Language, Autism, etc)

★ Special education school directors

★ Visitor center / muesum managers

★ Coffeehouse, Restaurant & Hotels managers

★ parents

★ Research Labs Pls

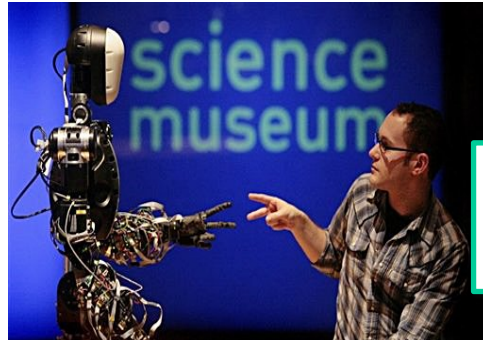
Who We Talked To

Hotels



9

Museums



8

Schools (Gen and Special Eds)



25

Parents



13

Lang. & ABA Therapists



10

Assisted Living Facilities



37

What we learned in the first few weeks!

Hotels



- Hotels are lazy in adopting new technology!

Museums



- Ryan would not add any values to their business services.

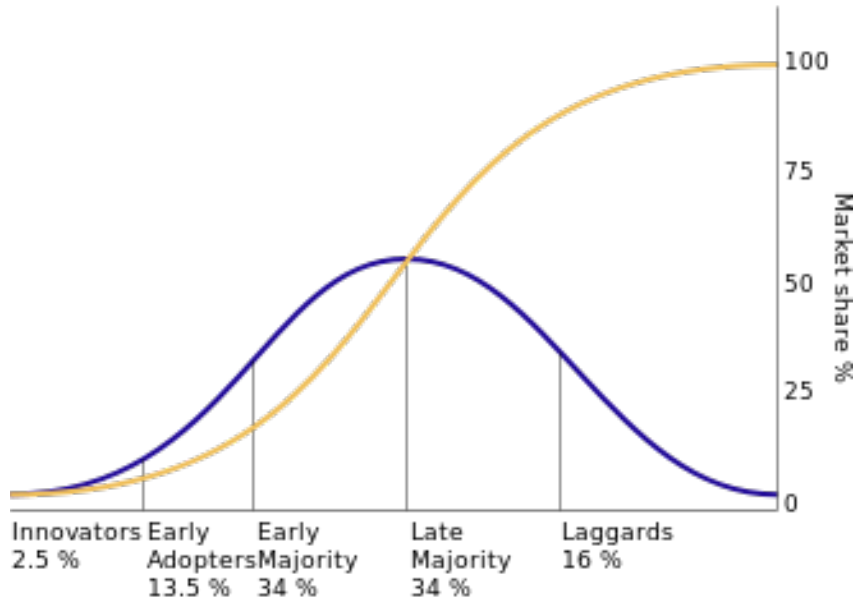
Parents & Therapists



- They had sticker shock with the price (\$5000)!

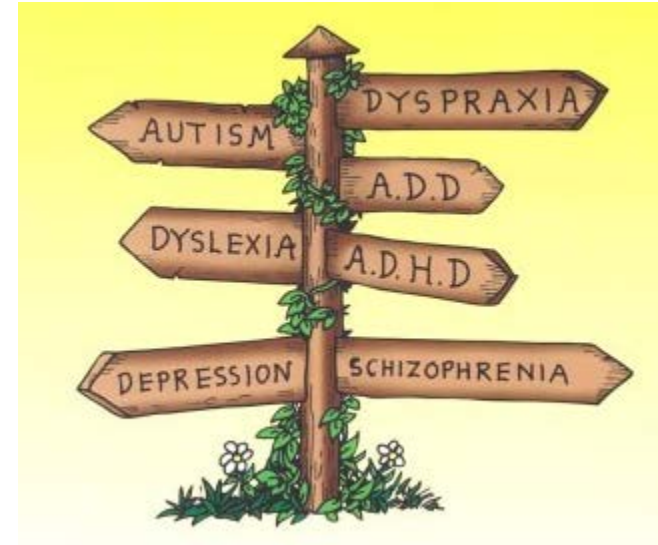
What we learned in the first few Weeks (Cont'd)

Schools General Ed programs



- Principals and teachers thought Ryan would be great!
- The buying cycle is very long.
- The school districts are the decision makers.

Schools Special Ed programs



- Positive feedback!
- Too many types of disabilities, all requiring different development!

The A-ha Moment!



- Directors and nurses of assisted living facilities were uniformly positive and excited about having Ryan in their facility!

Lesson Learned about Assisted Living Facilities!

- Ryan can increase longevity and happiness of elderly!
- Coach exercise, read news, have daily conversations, remind them take their medication!



Colorado Health Care Association

- Represents 180 nursing facilities and ~40 assisted living facilities
 - Aware of Paro robot
- **They are willing to partner up**
 - Bi-monthly assisted living committee meeting
 - Promote this in their website
- **Personalized Features!**



Paro, Developed in Japan, \$ 5,218

Final Business Model Canvas

https://www.launchpadcentral.com/team/austin-october-2014-378/canvas?week=9

assisted living facilities

Week << < 9 > >> Business Model Canvas + Add New

Key Partners <ul style="list-style-type: none">BLTDU research LabsDomain Experts: Physicians & GeriatricsColorado Health care association	Key Activities <ul style="list-style-type: none">Develop Ryan: software system & MechatronicsShow proof of concept (Pilot Study)Marketing Key Resources <ul style="list-style-type: none">HR: Two Software Engineers: \$200KHR: Mechanical Engineers, \$75KHR: Executive director, \$100KMachine Shop: outsource, \$30K	Value Propositions <ul style="list-style-type: none">Emotive & Engaging Agent can improve learning and therapyCustomizable appearance & voice can make a difference in engagingSocial robots are accepted similarly to teachers or clinicians in ...Does Physical Embodiement add any value to a screen-based ...Robots can be used as companionsSocial Robots increase the happiness and longevity of elderly ...	Customer Relationships <ul style="list-style-type: none">Paid awareness: printed Add, Public relationNon Paid Awareness: Conference, Journal PapersKeep: Maintenance, Free TrainingGrow: bundle, Personalized features for individuals Channels <ul style="list-style-type: none">Direct Sell (DreamFaceTech.com)Salesperson	Customer Segments <ul style="list-style-type: none">Directors of Assisted Living Facility (Decision Maker/Payer)Residence of Assisted Living Facility (End User)Director of Special Ed Segment in School districts
Cost Structure <ul style="list-style-type: none">HW (only head=\$1100, Torso=\$500, Embedded PC=\$500) per unitBLT avatar licence=\$300 per unitAffective licence=\$300 per unitDU robotic licence=\$300 per unit		Revenue Streams <ul style="list-style-type: none">direct sellPersonalized feature (each individuals can purchase additional features/program at additional cost)		

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Value Propositions

Value Propositions

Customizable appearance & voice can make a difference in

Does Physical Embodiment add any value to a screen-based

Robots can be used as companions

Social Robots can help caregivers to increase the

Customer Relationships

Paid awareness: printed Ad, Public relation

Non Paid Awareness: Conference, Journal Papers

Keep: Maintenance, Free Training

Grow: bundle, Personalized features for individuals

Customer Segments

Directors of Assisted Living Facility (Decision Maker/Payer)

Residence of Assisted Living Facility (End User)

Channels

Direct Sell
(DreamFaceTech.com)

Salesperson

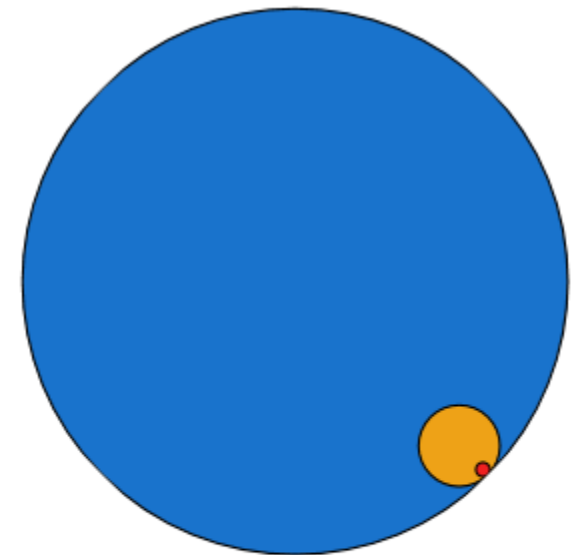
Customer Archetype

- **Influencers:**
 - Alzheimer's Association
 - Colorado Health Care Associations
- **Decision Makers/Payers:**
 - Directors & Managers of ALFs
- **Recommenders:**
 - Nurses
- **End Users:**
 - Elderly Residences of ALF



Market Size

- ~45 million elderly individuals (aged 65+) live in the US!
- Total Available Market: \$225 Billion (45M * \$5K)
- ~1 million Americans live in Assisted Living Facilities (ALFs).
- ALFs residences; Served Available Market: ~\$5 Billion (1M * \$5K)
- ~31,000 ALFs in the US and assuming they buy one Ryan: Target Market Size is about \$155M!



Key Partners, Key Activities, Key Resources

Key Partners

BLT

DU research Labs

★ Domain Experts: Physicians & Geriatrics

★ Colorado Health care association

Key Activities

Develop Ryan: software system & Mechatronics

★ Show proof of concept (Pilot Study)

★ Marketing

Key Resources

HR: Two Software Engineers: \$200K

HR: Mechanical Engineers, \$75K

★ HR: Executive director, \$100K

★ Machine Shop: outsource, \$30K

★ Physical office, \$30K

Cost Structure, Revenue Streams

Cost Structure

★ HW (only head=\$1100, Torso=\$500, Embedded PC=\$500) per unit

★ BLT avatar licence=\$300 per unit

★ Affective licence=\$300 per unit

★ DU robotic licence=\$300 per unit

★ Total Key Resources per year=\$680K

Revenue Streams

★ direct sell

★ Personalized feature (each individuals can purchase additional features/program at

What is next?



1. Optimize prototype design
 - Obtain funding (SBIR, STTR)
 - Define specifications for MVP
 - Establish Dream Face Technologies, LLC
2. Increase awareness
3. Cultivate key partners

