

# HOYA



Hoya

Silicon Valley  
Disruptour  
March 2019



# Why are we here?

## Three primary objectives

### 1 Give Hoya a glimpse of the future and a sense of the art of the possible.

Based on the interests you shared with us, we identified five categories to investigate over the next two days:

**Physiological Monitoring.** What is the current state-of-the-art in body-worn physiological sensors? What states or conditions can be monitored? What are some of the biggest opportunities, and what is difficult in development of embedded monitoring systems?

**Pediatric Ophthalmology.** What eye diseases are of greatest concern? What is the latest research on prevention, mitigation and cure?

**Advanced Materials.** What new frame materials, lens materials, and lens coatings might be important to Hoya? How is development of these materials hastened by sophisticated modeling using AI?

**Insurtech (Insurance Technology).** What are some directions that the insurance industry will take in the future? How might emerging digital technology and new business models disrupt current business structures?

**Artificial Intelligence and Machine Learning.** How might data-driven solutions, using data that exists within Hoya divisions, help build analytics at scale and deliver value?

### 2 Begin to integrate Hoya into the Silicon Valley ecosystem

Use this two-day Disruptour to build relationships with startups, Global 1000 innovators, and domain experts. These meetings will help you to leverage the Silicon Valley innovation as a builder, customer, partner, investor or acquirer. Establish Hoya's sincerity with regard to reciprocal relationships, willingness to learn and interest in disrupting yourselves.

### 3 Create a portfolio of bold ideas

Work with your colleagues to synthesize important patterns from your conversations with innovators. Visualize a portfolio of bold new opportunities that leverage Hoya's core assets, and challenge existing silos by identifying synergies between functional groups.

# The best innovators have inquiring minds — they are master questioners.

## A story

A dad, Ed, and his daughter Jennifer were walking on a spectacular plateau near Santa Fe, New Mexico, he takes a picture of her, she asks “Can I see the picture?”

“No, you have to wait” he responds.

“Why?”

“Well you have to finish the film, take it to the pharmacy, they develop the film, and print the pictures and then we get to see them.”

“Why?”

Inspired by the landscape and her question, Ed asked himself provocative Why questions “Why do you have to wait? Why can’t a picture be developed straight away?”

This inspired a series of What If questions, “What if the darkroom was in the camera? What if the chemicals were on the paper?”

And a further eight years of grappling with “How Might We do this?”

Ed was Edwin H. Land, inventor of the Polaroid Instant Camera.

Over the next few days, your job is to ask questions, the right questions, bold questions — putting the customer and customer pain in the center of every question — identifying new challenges and opportunities, even noticing what others have missed.

Ask questions that provoke.

Questions that inspire lateral thinking.

Questions that suggest new paths to unexpected solutions.

**Why? What if? How might we?**



# This week is about asking great questions.

Disruptour Calendar – Monday, April 15

	GROUP ONE		GROUP TWO	
8:00a				8:00a
8:30a	Pick up at hotel: Residence Inn Mountain View   Palo Alto		Pick up at hotel: Residence Inn Mountain View   Palo Alto	8:30a
9:00a	Mach49 Welcome and Introductions: Jason Yotopoulos and Dave Blakely   Menlo Park		Mach49 Welcome and Introductions: Jason Yotopoulos and Dave Blakely   Menlo Park	9:00a
9:30a				9:30a
10:00a				10:00a
10:30a	SK2X: Stuart Neubarth   Menlo Park		SVIA: Mike Conner & Natalie L. Wood   Menlo Park	10:30a
11:00a				11:00a
11:30a	Boxed Lunches			11:30a
12:00p				12:00p
12:30p	Verana: Chet Kumar   San Francisco		Lunch	12:30p
1:00p				1:00p
1:30p			Cherry Labs: Nicholas Davidov   Palo Alto	1:30p
2:00p	Visibly: Ayo Jimoh & Laura Lieder   San Francisco			2:00p
2:30p				2:30p
3:00p			Wavelet: Abe Carter   Menlo Park	3:00p
3:30p				3:30p
4:00p				4:00p
4:30p	Synthesis: Dave Blakely   Menlo Park		Synthesis: Dave Blakely   Menlo Park	4:30p
5:00p				5:00p
5:30p				5:30p
6:00p	Dinner: TBD   TBD		Dinner: TBD   TBD	6:00p
6:30p				6:30p
7:00p				7:00p
7:30p				7:30p
8:00p				8:00p

Disruptour Calendar – Tuesday, April 16

	GROUP ONE	GROUP TWO	
7:30a		Pick up at hotel: Residence Inn Mountain View   Palo Alto	7:30a
8:00a	Pick up at hotel: Residence Inn Mountain View   Palo Alto	GoCheck Kids: Kevon Saber + Breakfast   Menlo Park	8:00a
8:30a	Citrine: Greg Mulholland   Redwood City		8:30a
9:00a			9:00a
9:30a			9:30a
10:00a	Byers Eye Institute: Dr. Scott Lampert   Palo Alto	Byers Eye Institute: Dr. Scott Lampert   Palo Alto	10:00a
10:30a			10:30a
11:00a			11:00a
11:30p	Lunch   San Jose	Adlens: Nick Rimmer + Lunch   Menlo Park	11:30p
12:00p			12:00p
12:30p			12:30p
1:00p	(1:15 – 2:15p) Linear Dimensions: Debbie Smrz   San Jose	(1:15 – 2:15p) Cortexxus: Ana Alves   San Francisco	1:00p
1:30p			1:30p
2:00p			2:00p
2:30p	(2:45 – 3:45p) NeuroSky: Stanley Yang   San Jose	(2:45 – 3:45p) Synapse: Gordon Gray   San Francisco	2:30p
3:00p			3:00p
3:30p			3:30p
4:00p			4:00p
4:30p	Brisbane Materials: Gary Wiseman   Menlo Park	(4:45 – 5:45p) Sanitas Ventures: Bart Foster   Menlo Park	4:30p
5:00p			5:00p
5:30p			5:30p
6:00p	Synthesis and Wrap-up: Dave Blakely   Menlo Park	Synthesis and Wrap-up: Dave Blakely   Menlo Park	6:00p
6:30p			6:30p
7:00p			7:00p



# Meet the Valley: Collaborate with startups, peers, VCs and thought leaders

## Mach49

We help Global 1000 companies create, build, and launch new ventures generated from within their organizations to drive significant organic growth.

Whether you're Disrupting InsideOut,<sup>™</sup> OutsideIn,<sup>™</sup> or Developing More Disruptors,<sup>™</sup> our ultimate goal is to help you build the capability to create a pipeline and portfolio of new ventures on an ongoing basis and to manage the mothership so that it embraces the 'from-to' shifts needed to ensure your new ventures reach escape velocity.

[mach49.com](http://mach49.com)

**Jason Yotopoulos**, Managing Partner  
[jason@mach49.com](mailto:jason@mach49.com)

**Dave Blakely**, Operating Partner/Masterclasses  
[dave@mach49.com](mailto:dave@mach49.com)

Why? What if? How might we?

Opportunities/Challenges



# SK2X

The common thread among our customers is their need to get a well-designed product to market using the latest technologies in an accelerated time frame.

SK2X, Inc. is an electronic product design firm that brings together all-star engineering teams to create winning new products for our clients.

sk2x-website.appspot.com

Stuart Neubarth, President



Why? What if? How might we?

Opportunities/Challenges

# SVIA

SVIA is recognized as a driving force and one of the top influencers in InsurTech, accelerating the dialog, connections, and solutions shaping the digital future of insurance.

SVIA accelerates innovation in insurance by facilitating the flow of market and technology insight, relationships, and investment between the established industry and our eco-systems of innovative technology, InsurTech Startups and Venture firms in Silicon Valley and other global innovation hubs.

sviaccelerator.com

Mike Connor, CEO



Natalie L. Wood, COO



Why? What if? How might we?

Opportunities/Challenges

# Verana Health

Verana Health enables life science companies to make informed decisions using real-world data from the world’s largest clinical specialty database.

Verana Health is a technology company assembling the largest clinical databases in medicine to accelerate research.

**veranahealth.com**

**Chet Kumar, Vice President,  
Life Science I Commercial**



Why? What if? How might we?

Opportunities/Challenges

# Cherry Labs

Cherry Home was sparked by a simple idea: we wanted to feel completely safe at home.

Our system, Cherry Home, provides private AI-powered senior home care monitoring. Our system of precise, private wall sensors immediately notifies caregivers when the situation isn’t right.

**cherryhome.ai**

**Nicholas Davidov, Co-Founder and President**



Why? What if? How might we?

Opportunities/Challenges

# Visibly

Visibly helps the world see well. Anywhere, anytime.

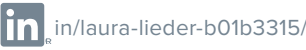
Visibly is a Chicago-based healthcare technology company that creates digital eye care technologies to help the world see better. Our online vision test allows patients to renew their prescription anywhere, anytime. We also offer eye care providers, eyewear retailers, and other organizations customizable software solutions to enable a better patient and consumer experience.

**govisibly.com**

**Ayo Jimoh, CTO**



**Laura Lieder, Global Strategic Accounts**



Why? What if? How might we?

Opportunities/Challenges

# Wavelet

Empowering investigators, patients and sponsors with comprehensive tools to transform health data collection and analysis in clinical studies.

Wavelet inspires people to improve their health. Our wearable devices track a variety of physiologic and lifestyle parameters including heart rate, heart rate variability, sleep and exercise.

**wavelethealth.com**

**Abe Carter, CEO/Co-Founder**



Why? What if? How might we?

Opportunities/Challenges

# GoCheck Kids

Helping pediatricians photoscreen to detect amblyopia risk factors in children too young for a visual acuity test.

GoCheck’s apps detect common vision disorders early, while they can still be treated.

Our first product, GoCheck Kids, serves over 3,500 pediatric teams in the U.S. and Europe in their quest to prevent vision impairment, the most prevalent disabling condition among children in the U.S. and many countries.


**gocheckkids.com**

**Kevon Saber, CEO**



Why? What if? How might we?

Opportunities/Challenges



# Citrine

The Citrine Platform empowers your teams to develop new high-performance materials and chemicals faster than ever before.

Citrine Informatics is the data platform for the physical world. Our platform ingests and analyzes vast quantities of technical data on materials, chemicals, and devices to streamline R&D, manufacturing, and supply chain operations for any organization that produces a physical product.


**citrine.io**

**Greg Mulholland, Founder, CEO**



Why? What if? How might we?

Opportunities/Challenges



# Byers Eye Institute

Dedicated to combating blindness and preserving sight

Created to accommodate the science of complex ophthalmic medicine, the Byers Eye Institute is comprised of multiple care centers, including an advanced Diagnostic Imaging Center, an Eye Laser Center, Comprehensive Ophthalmology and Optometry services, Ophthalmic and Neuro-Ophthalmic specialists, and more.


**[stanfordhealthcare.org/medical-clinics/byers-eye-institute.html](https://stanfordhealthcare.org/medical-clinics/byers-eye-institute.html)**

**Dr. Scott Lampert, Ophthalmologist, Professor**

[stanfordhealthcare.org/doctors//scott-lambert.html#summary-content](https://stanfordhealthcare.org/doctors//scott-lambert.html#summary-content)

Why? What if? How might we?

Opportunities/Challenges



# Adlens

We are world leaders in adaptive focus lens technologies.

Adlens is a diverse team of people including scientists, engineers and designers obsessed with giving people better vision. We are excited about pushing new lens technologies and see our role as perfecting the interfaces between the real and virtual worlds, our eyes and our brain.


**adlens.com**

**Nick Rimmer, Business Development Director**

 [in/nickrimmer/](https://www.linkedin.com/in/nickrimmer/)

Why? What if? How might we?

Opportunities/Challenges



# Linear Dimensions

Linear Dimensions develops custom and semi-custom system solutions for consumer, industrial and medical products.

Linear Dimensions develops machine learning systems for the fast growing consumer wearables market. Linear is focused on powering and interfacing sensors and microelectromechanical systems (MEMs) for use in industrial, communications, and biotechnology devices.


**lineardimensions.com**

**Debbie Smrz, Business Development Manager**



Why? What if? How might we?

Opportunities/Challenges



# Cortexxus

Intelligent real-time brain monitoring

A wearable medical device company giving doctors access to the neurological data they need to better diagnose, treat and understand brain disorders.

1 billion people around the world are affected by neurological disorders (World Health Organization).


**cortexxus.com**

**Ana Alves, CEO & Co-Founder**



Why? What if? How might we?

Opportunities/Challenges



# NeuroSky

Enabling technologies for next-generation mHealth solutions

NeuroSky technologies enable the most insightful and easy-to-understand health and wellness biometrics for mobile solutions, wearable devices, and service providers. The company's proprietary, market-leading biosensor technologies provide a foundation for analyzing biometric data in a way that's never before been practical. NeuroSky-enabled solutions deliver unique insights into body and mind health and wellness that can motivate people to make better lifestyle choices.


neurosky.com

Stanley Yang, CEO

 in/stanley-yang-8173602/

Why? What if? How might we?

Opportunities/Challenges



# Synapse

Rapid innovation and technology solutions for when the stakes are high.

Synapse Product Development solves the most difficult engineering challenges from concept through manufacturing for the leading entertainment, consumer electronics, life-sciences, and healthcare companies and organizations in the world. Synapse provides Mechanical, Electrical and Software Engineering services, and supplies essential project management and innovative product design assistance to a broad range of clients from garage inventors to Fortune 500 companies.


synapse.com

Gordon Gray, Account Director

 in/gordon-gray-a758ab13/

Why? What if? How might we?

Opportunities/Challenges



# Brisbane Materials

A specialty materials company focusing on creating innovative materials solutions in lighting, solar power, and other applications.

Based in Brisbane Australia and Silicon Valley California, Brisbane Materials has patented technology for creating low cost coatings of porous silica and other materials, made at room temperature and atmospheric pressure. When applied to LED lenses and covers, these coatings can improve the efficiency by up to 20%!


**brismat.com**

**Gary Wiseman, Founder & CEO**



Why? What if? How might we?

Opportunities/Challenges



# Sanitas Ventures

Focused on high-potential, early-stage eye care companies.

Sanitas Ventures is an eye care focused venture capital firm based in Boulder, Colorado. We invest in early-stage companies and focus in three core areas: Consumer Experience, Disruptive Technology, and Innovative Commercial Models.


**sanitas-ventures.com**

**Bart Foster, General Partner**



Why? What if? How might we?

Opportunities/Challenges



# Think Wrong

## Mini-Blitz — Fueling Your Business



Start with the dent you want to make in your industry.

Invite serendipity—letting people, places, and ideas inspire you.

Break the old synaptic links that result in the same old answers.

Quickly turn your ideas into something that can be shared.

Design and plan something that will take you a few steps ahead.

Prioritize your actions and get started as soon as you get home.

### Challenge

How might Hoya provide comprehensive vision care throughout people’s lifetimes; in ways that automatically adjust to changes in their eyesight, lifestyle, and preferences—so that their vision and life experiences—and the value they place on those—are the best they can be every single day?

### Objectives

- Expand customer set that might matter most to Hoya
- Identify customer pains for new ventures
- Frame opportunities and the impact Hoya’s new ventures might have on those pains
- Find fresh inspiration for Hoya new ventures
- Escape the constraints of existing businesses to expand what is possible
- Explore unmet market needs, opportunities, and solutions
- Identify existing assets and external trends to leverage for those solutions

### Outcomes

- A portfolio of new bold new venture ideas, actionable by Hoya’s incubation team
- An appreciation of the cultural shifts required to increase agility in adopting technology and driving change
- A new set of tools and methods to rapidly create new ventures.
- Inspiration from exposure to new technology and leading-edge business practices.
- Meaningful connections and a shared sense of urgency.



# Disruptour 2019 Attendees

## TEAM ONE (FPO)

## TEAM TWO (FPO)

Yuki Tani

Felix Espana

Sarah Marie Strese

Patrick McCarthy

Jim Day

Michael Gatti

Flo Kinzle

David Ray

Ed Niemiec

James Kaiser

So Miyamoto

Toshiaki Sonehara

Kazuma Kozu

Rubal Bedi

Fred Ysebaert

Derek Dodge

Holger Warth

Daniel Nutu

Marius Debeer

Richard Blacker

Grady Lenski

Jeff Brown

Marga Acevedo

James Mulligan

Augustine Yee

Hans Werquin

Oliver Fischbach

Seevali Fernando

Manish Acharya

R&D Vision Care, BD activities, startup search

Mass Customization, Europe

US R&D Technical Center

Corp Venture Group

Japan R&D

Japan R&D

Japan R&D

Head, Hoya Corp. Venture Capital

Head of the US

Head R&D

Cheif Strategy Officer

CMO, Prod Mgmt, Comms

US R&D Technical Center

US Sales Innovator

US R&D Technical Center

US R&D Technical Center

US R&D Technical Center

Corporate C Legal Officer

EVP, Global Commercial

VP Western Europe

CIO

VC BD

# MACH49™

Mach49 is the Silicon Valley incubator and accelerator focused exclusively on helping global companies create, build, and launch new ventures generated from within their organizations.

[www.mach49.com](http://www.mach49.com)  
[innovate@mach49.com](mailto:innovate@mach49.com)