

Honda Silicon Valley Lab

Driving Open Innovation

August, 2016

Welcome to Silicon Valley



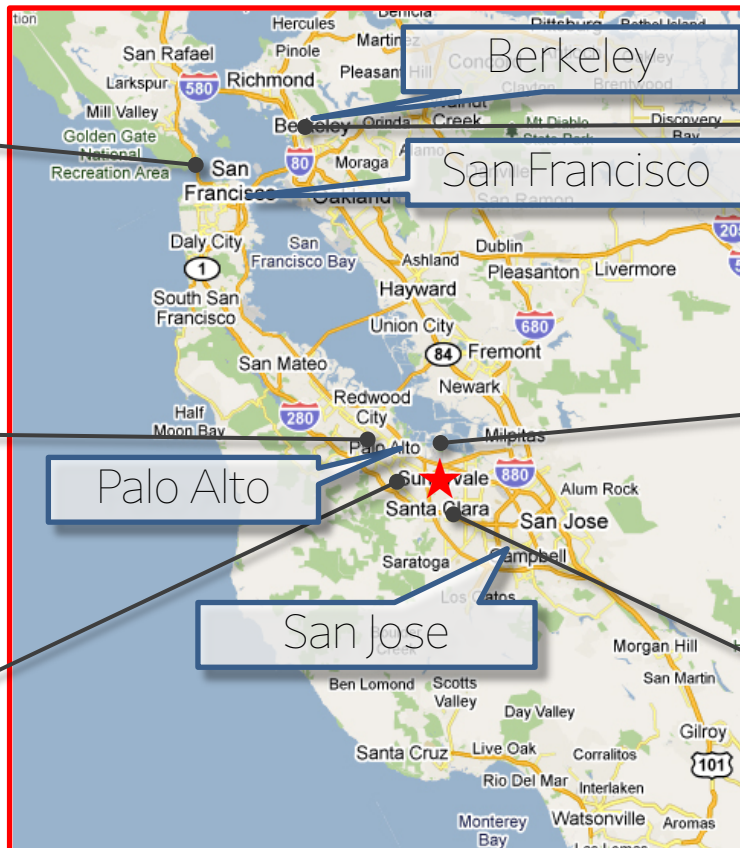
Golden Gate Bridge



Stanford University



Google HQ



UC Berkeley

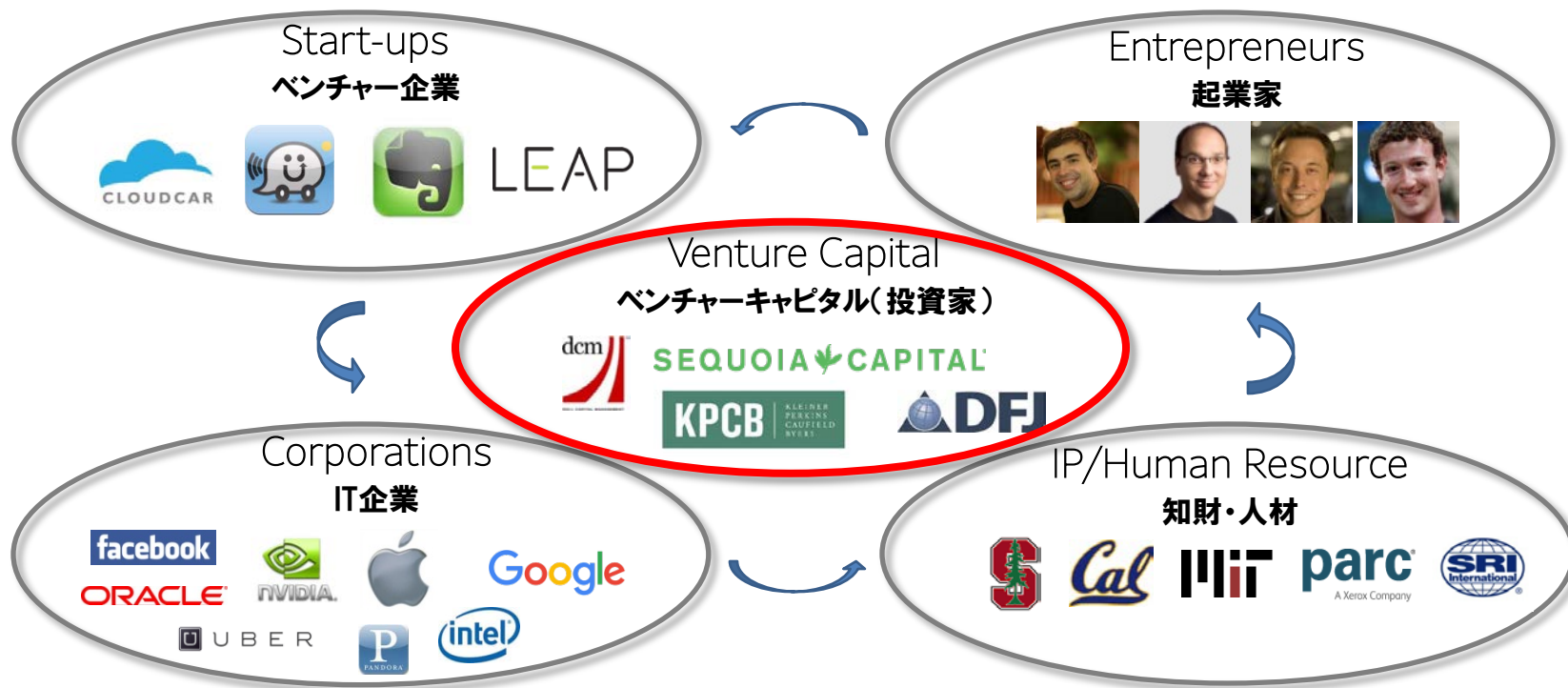


Facebook HQ



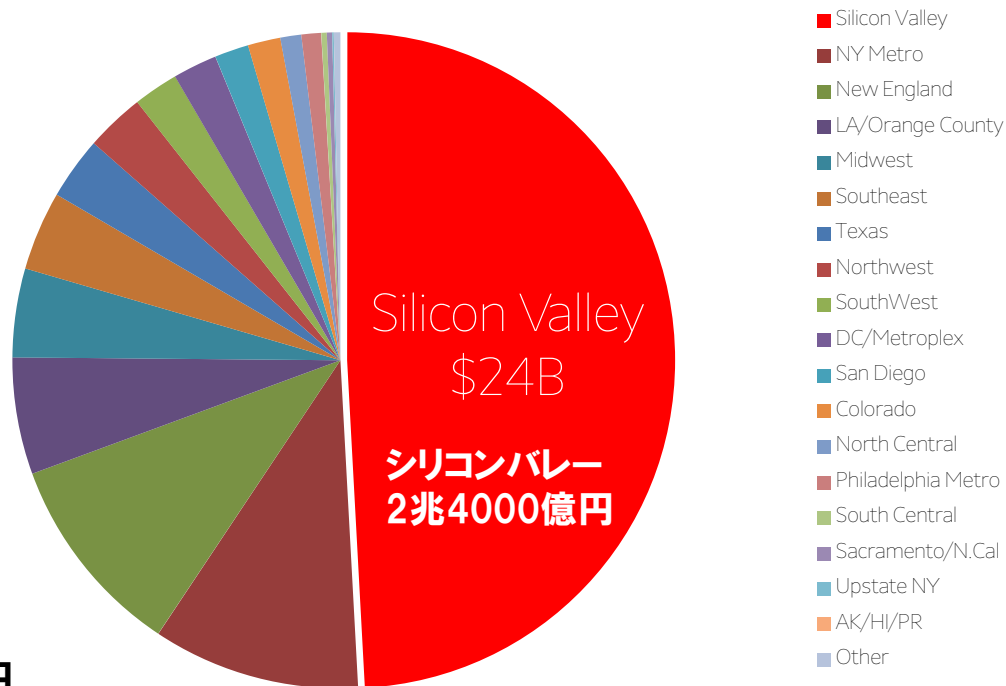
Apple HQ

Silicon Valley Ecosystem ※



※Ecosystem: 生態系

Silicon Valley Venture Investment

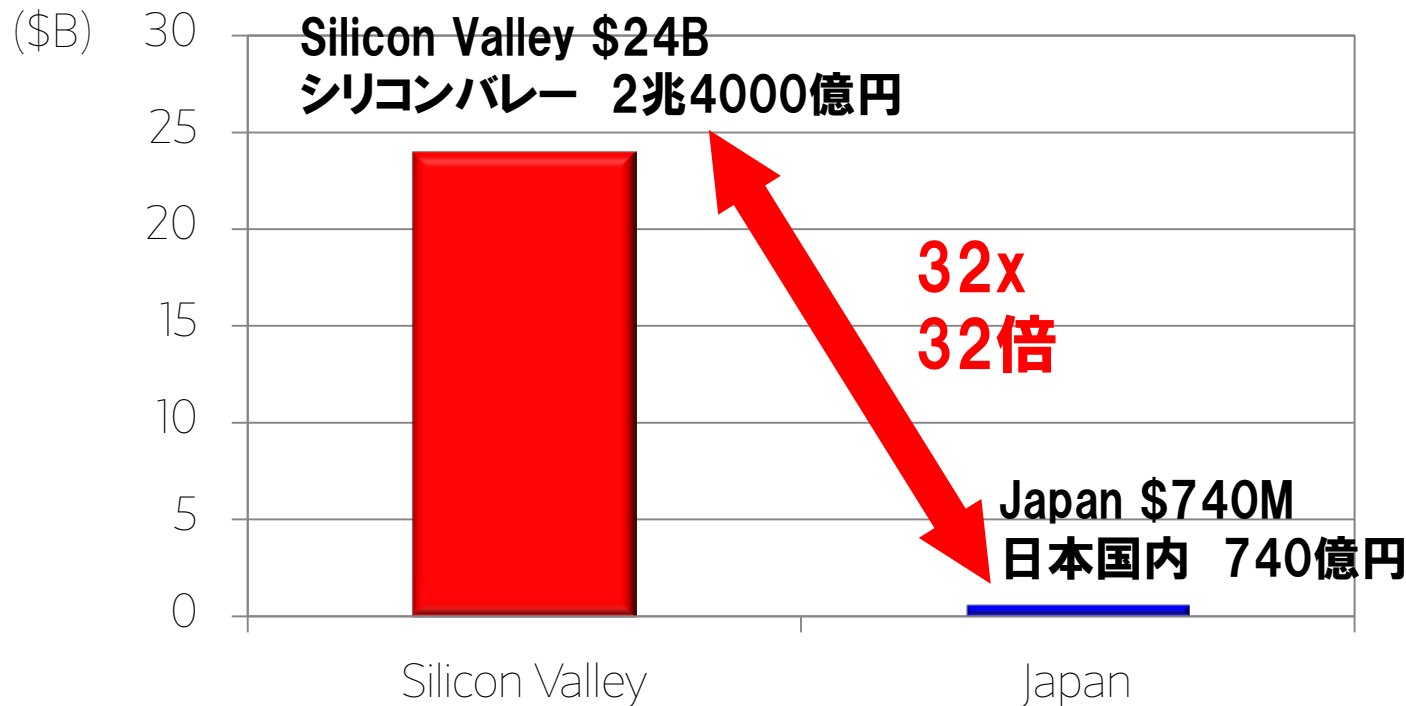


US Total \$49 B

アメリカ合計: 4兆9000億円

Source: PWC MoneyTree (2014)

SV-Japan Comparison



Source: US PWC Money Tree (2014), Japan Venture Year Book 2015(VEC), US\$1=JPY119

Honda in Silicon Valley

HRI

2000 Computer Science Research

Fundamental Research
基礎研究



2005 Venture Capital

Corporate VC
ベンチャー投資



2011 Open Innovation Lab

Open Innovation Lab
オープンイノベーションラボ



375 Ravendale Drive, Mountain View, California

HSV L Focus: Connected UX※ Innovation

IoT/Connected Vehicle



The mobile tech revolution is changing the way we live, and the car is no exception. HSV L is creating a cloud-based platform to provide drivers inside Honda or Acura vehicles with seamless access to information.

**IoT:モノのネットワーク化
つながるクルマ**

Human Machine Interface



How can we make interaction with Honda and Acura cars much safer, easier and more enjoyable? HSV L is exploring novel HMI ideas with external tech innovations such as sensors, displays, speech interfaces as well as tactile communications.

人と機械のインターフェース

Vehicle Data Business



Cars generate 'Big Data' which are only used for limited purposes today. How can we make our cars more fun and efficient with these data while protecting their privacy and safety? HSV L is building prototypes that leverage Big Data to deliver a new suite of services and provide a superior customer experience.

**車両データを利用した
新ビジネス**

Apps/Content



Users are not only consumers of digital content but are also creators. This content is often made available in the cloud in the form of apps. HSV L is working proactively to build a community of app developers and content creators to make the vehicle user experience more enjoyable and convenient.

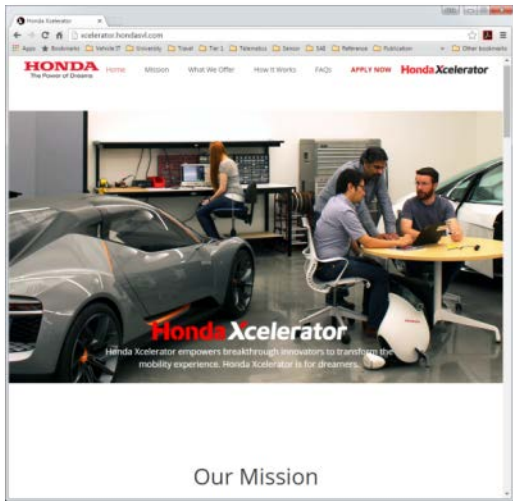
アプリ・コンテンツ

※UX: User Experience

HSV L Open Innovation Programs

Honda Xcelerator

車載技術イノベーター企業向け



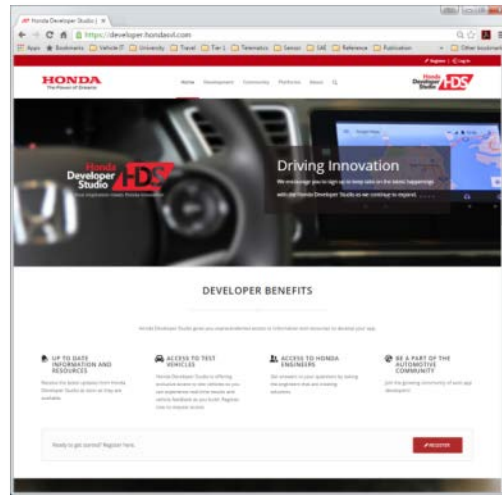
July 2015

Tech Innovators

Honda Mentors

Honda Developer Studio HDS

アプリ・ビジネスパートナー企業向け



November 2014

App Developers

Business Partners



Honda *Xcelerator*

Resources for Tech Innovators



Funding for Prototyping

Seeing is believing. We provide you with NRE funding to help you develop a rapid prototype.

試作費用



Test Vehicles

See your prototype in action. You will have access to Xcelerator vehicles and vehicle data to develop, test, and refine your prototype.

テスト車



Collaboration Workspace

You will gain access to our unique collaboration workspace located in the heart of Silicon Valley. The space includes state-of-the-art tools to assist all prototyping activities.

ガレージ・オフィス



Honda Mentors

All Xcelerator companies are paired with our network of Honda Mentors. Mentors share their knowledge and help guide your prototype development.

ホンダエンジニア

Siri Eyes Free

- iPhone voice integration announced in 2012
- HSVL proposed to Apple
- Launched in MY14 Fit
- MY13 Accord, ILX, RDX

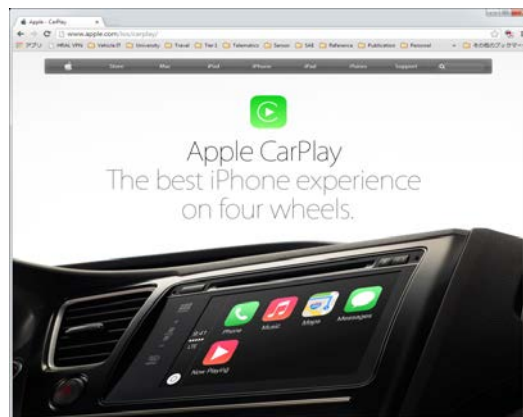
- HSVLがAppleに提案し共同で開発
- MY2014 Fitから量産適用



CarPlay

- Next gen iPhone integration
- Close collaboration with Apple
- Announced in June 2013 WWDC
- Introduced in MY16 Accord and Civic

- HSVLとAppleのコラボ
- MY2016 アコードとCivicから量産適用



2016 ACCORD

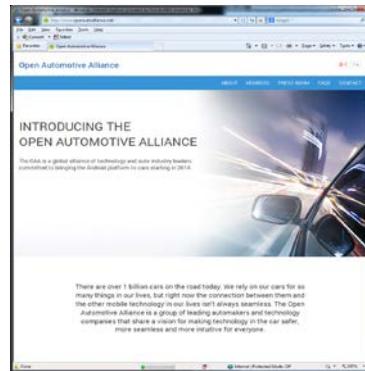


2016 CIVIC

Open Automotive Alliance (OAA)

- Announced in Jan. 2014
- Honda is the founding member
- Honda lead the vehicle data spec discussion

- **Hondaが主導 + OEM3社 + Google + Nvidiaで設立**
- **Android Autoの仕様を協議**
- **Honda中心にOEM4社が協力**



Android Auto

- Android phone integration
- Close collaboration with Android team
- Introduced in MY16 Accord and Civic



2016 ACCORD



2016 CIVIC

- **HSV1がAndy Rubin (Android 担当SVP) に提案し開発開始 (2012)**
- **MY2016 Accord、Civicから量産適用**

Smart Phone as Brain

Simple & Connected
Infotainment System

シンプル・低コスト・ネット接続車載機



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Smartphone App

車内ユーザーインターフェースアプリ

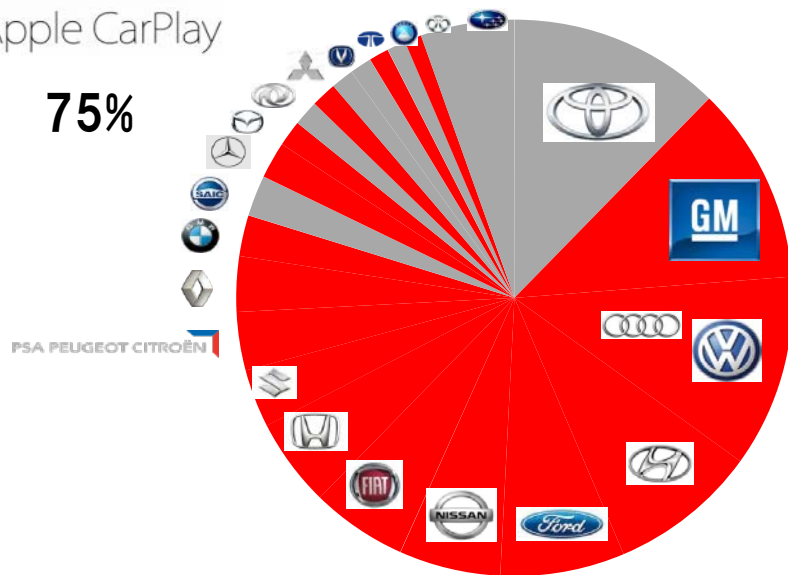
<https://drivemode.com/>



Car App Platforms

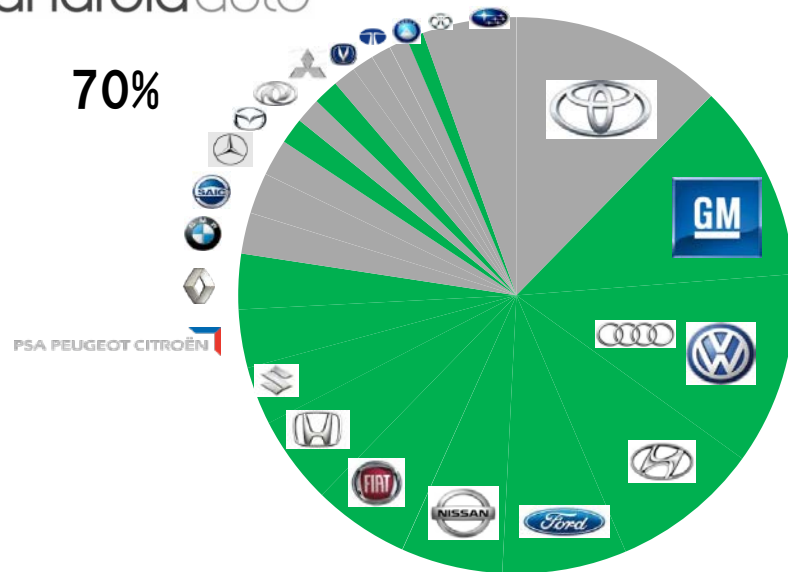

Apple CarPlay

75%



android auto

70%



CarPlay、AndroidAuto によって、クルマがアプリのプラットフォームになる
CarPlay & Android Auto will accelerate car app market

Building App Developer Community

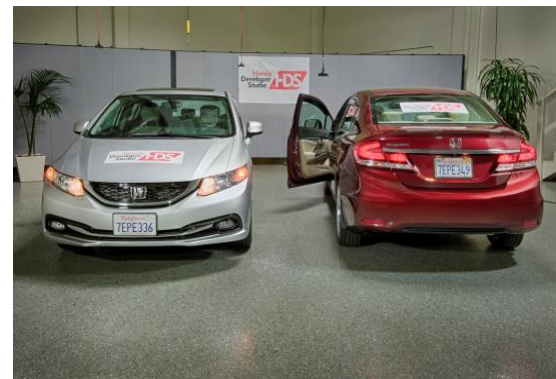


What is Honda Developer Studio?

- Online portal – developer.hondasvl.com/
- Open-innovation, collaborative workspace in Mountain View, CA

Developer Benefits

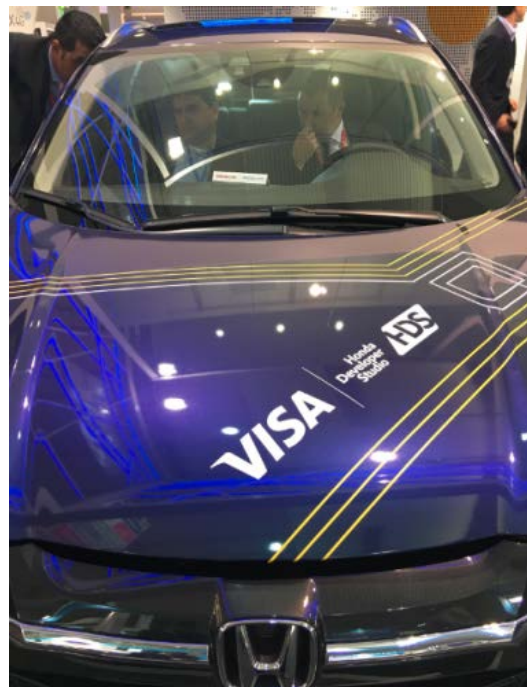
- Access to test vehicles
- Access to Honda engineering team
- Accelerate app development schedule



Developers Engaged with HDS



In-Car Payment Partnership



VISA × **HONDA**

Prototype demo at Mobile World Congress
(2/2016)

プロタイプをバルセロナのモバイル見本市でデモ

日本経済新聞

ガソリン代など支払い、車内で手軽に ホンダとビザ共同開発

2016/2/25 22:20 | 日本経済新聞 電子版

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【バルセロナ＝小川麗也】米クレジットカード大手のビザとホンダは、自動車向けの決済サービスを共同で開発した。ビザのモバイル端末向け決済サービス「ビザ・トークン」の仕組みを応用。ガソリンスタンドや駐車場での支払いが運転席の画面上で簡単かつ安全にできる。年内に米国で実証実験を始め、2～5年以内の実用化を目指す。

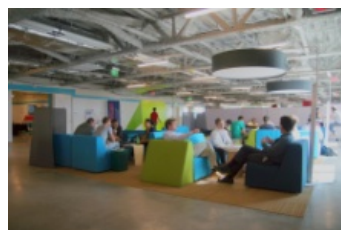
スペイン・バルセロナで開催された携帯見本市「モバイル・ワールド・コンGRESS (MWC)」で公開した。車載情報システムにインストールする専用のアプリ(応用ソフト)は、ホンダのアプリ開発拠点「ホンダ・デベロッパー・スタジオ」を中心に開発した。シリコンバレーにある同スタジオは無線通信でインターネットに接続する機能を備えた「コネクテッドカー」向けのアプリやサービスを開発している。

ガソリンスタンドの残量が少なくなると画面上に警告を表示。最寄りのスタンドまで案内してくれる。新サービスに対応したガソリンスタンドに着くと、アプリとスタンド側のシステムが無線で交信し、「満タン」「20ドル分」など複数の選択数から選んで、決済することができる。ビザ以外のクレジットカードにも対応する。

ビザのビル・ガジダ上級副社長は「ガソリンスタンドや駐車場にとどまらず、有料道路の支払いなどにも応用できる」と話している。

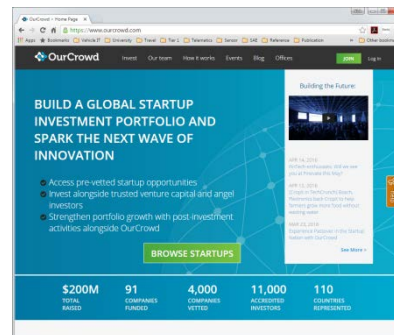
2016-2-25

Coverage Expansion



Aug. 2015 Launch
Boston

- Boston地区パートナー
- インキュベータ



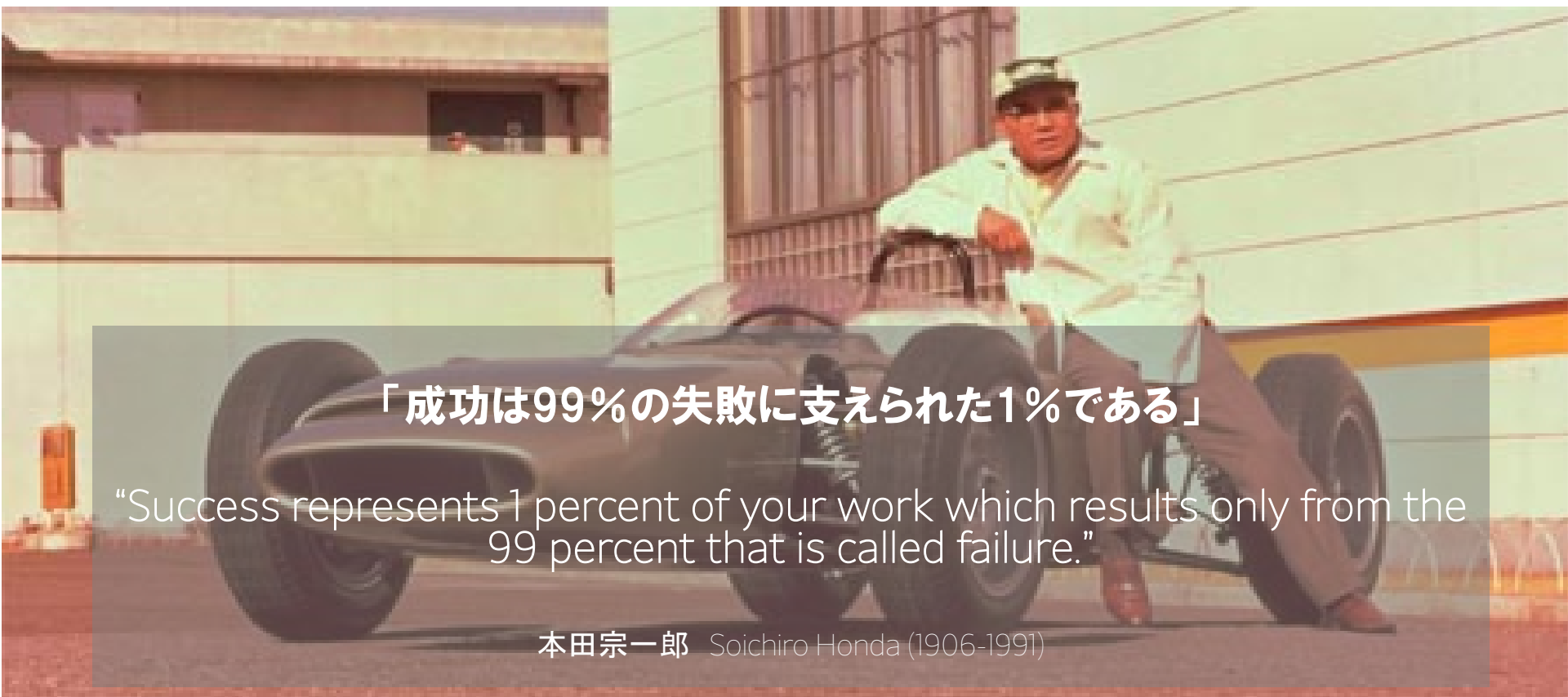
Nov. 2015 Launch

Israel

Next to US

- イスラエルパートナー
- ベンチャーキャピタル

Honda's DNA

A photograph of Soichiro Honda, the founder of Honda, sitting on a vintage open-wheel race car. He is wearing a light-colored long-sleeved shirt, dark trousers, and a racing helmet. The background shows a building with a balcony.

「成功は99%の失敗に支えられた1%である」

“Success represents 1 percent of your work which results only from the 99 percent that is called failure.”

本田宗一郎 Soichiro Honda (1906-1991)

Silicon Valley's DNA

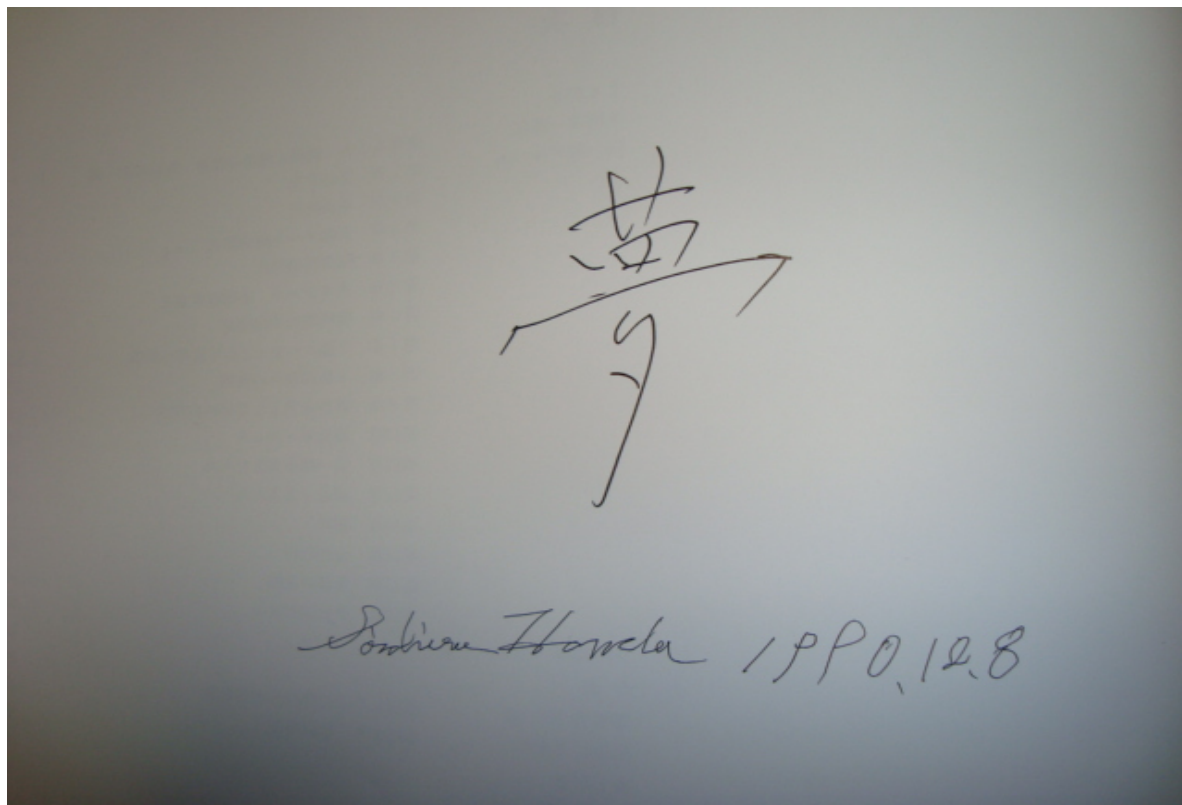


「自分が世界を変えられると本気で信じる人たちがこそが、本当に世界を変えているのだから」

“The ones who are crazy enough to think that they can change the world, are the ones who do.”

Steve Jobs (1955-2011)

The Power of Dreams



SV Open House July 23th 2015

