



API STRATEGY DEMYSTIFIED

Creating an API Program Your Developers Will Love

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WHAT ELEMENT OF AN API STRATEGY IS OFTEN OVERLOOKED?



... THE DEVELOPER'S EXPERIENCE

A minimalist abstract graphic in the background. It consists of several thin, horizontal grey bars of varying lengths and positions. Some bars have small white dots on them, suggesting a sense of data or progress. The overall effect is clean and modern, with a focus on negative space.

... THE DEVELOPER'S EXPERIENCE

*Platforms that developers enjoy using
are more successful.*

3:30:3 RULE ...for APIs

3:30:3 RULE ...for APIs

3 seconds
to
UNDERSTAND

3:30:3 RULE ...for APIs

**3 seconds
to
UNDERSTAND**

**30 seconds
to
DISCOVER**

3:30:3 RULE ...for APIs

**3 seconds
to
UNDERSTAND**

**30 seconds
to
DISCOVER**

**3 minutes
to
USE**

[Register/login](#)

Opening the door for future digital services

Welcome to the Government of Canada new API Store, our one-stop shop for Application Programming Interfaces (APIs). We encourage you to use these APIs – which provide a wealth of government data and information – to build new applications and services for Canadians. We welcome [your feedback](#) to this version of the store. Check back regularly as we continue to add more APIs to the store.

Start now by completing these 4 simple steps!



EXPLORE

View the list of services and pick what you'd like to use.



REGISTER/LOGIN

Create your user account to gain access.



SUBSCRIBE

Pick a plan and subscribe for each API you want to use.



TEST/USE

Test your key and use it for your project!

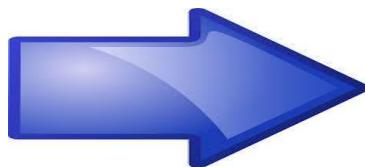
HOW DO I GET FROM HERE



HOW DO I GET FROM HERE



TO THERE?

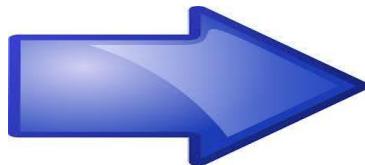


The screenshot shows the Government of Canada's API Store website. The header includes a 'MENU' dropdown, the 'API store' logo with a Canadian flag, and a 'Register/login' button. Below the header, a sub-header reads 'Opening the door for future digital services'. A text block encourages users to use APIs to build new applications and services for Canadians. A large call-to-action section titled 'Start now by completing these 4 simple steps!' lists four steps: 'EXPLORE' (View the list of services and pick what you'd like to use), 'REGISTER/LOGIN' (Create your user account to gain access), 'SUBSCRIBE' (Pick a plan and subscribe for each API you want to use), and 'TEST' (Test your key and use it for your project!). Below this, a diagram illustrates the API ecosystem: 'Backend Systems' connects to 'Open API', which then connects to 'Mobile & Web Applications'. This leads to four outcomes: 'Extend Customer Reach', 'Increase Revenue', and 'Stimulate Innovation', all represented by icons of people, a dollar sign, and a lightbulb. A large circular graphic on the right shows three stylized human figures.

HOW DO I GET FROM HERE



TO THERE?



... THE 4 PRINCIPLES



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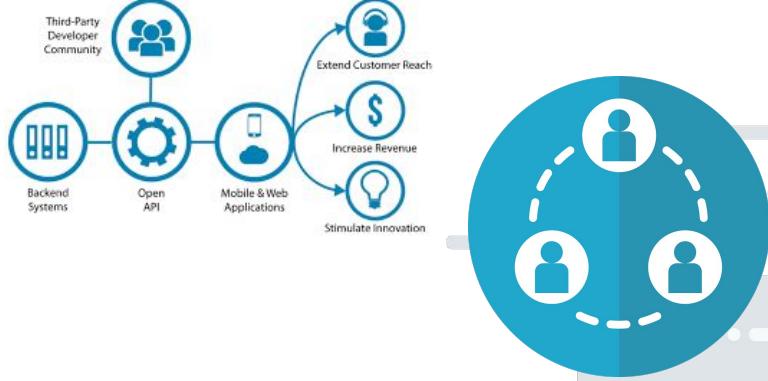
Create your user account to gain access.



Pick a plan and subscribe for each API you want to use.



Test your key and use it for your project!



1ST PRINCIPLE

- Define clear API program objectives that advance core business goals.

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Identify

1ST PRINCIPLE

- Define clear API program objectives that advance core business goals.



Identify



Measure

1ST PRINCIPLE

- Define clear API program objectives that advance core business goals.



Identify



Measure



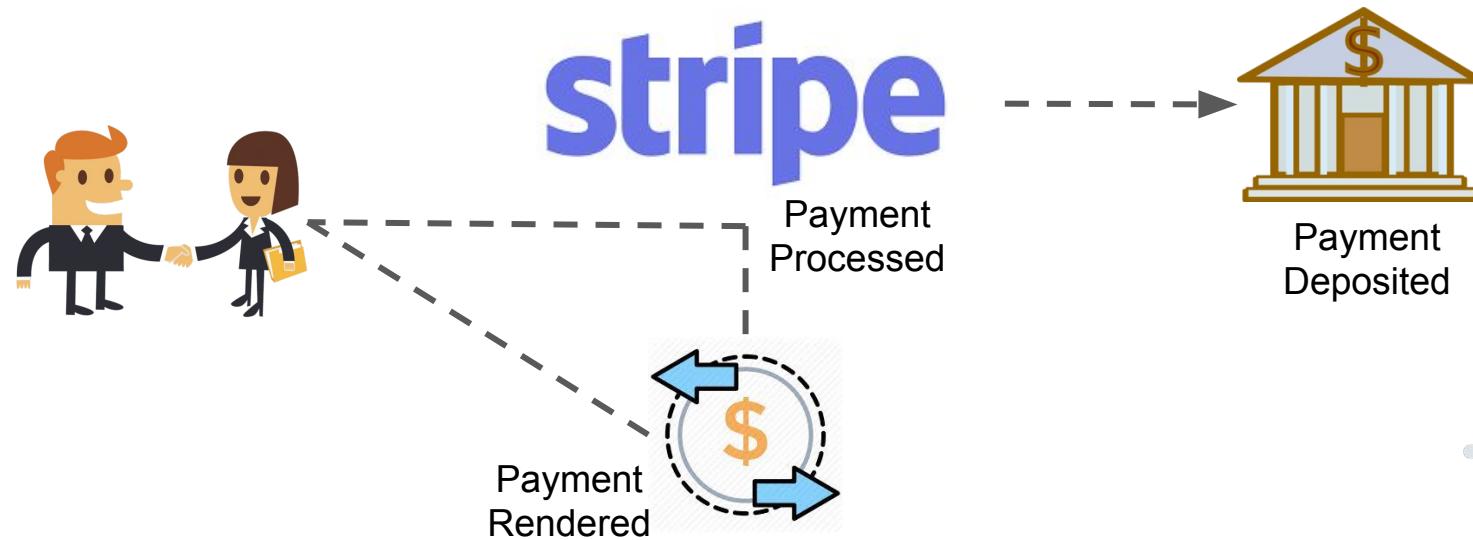
Brand



Patrick and John Collison

via CNBC

A Payments Platform that “Doesn’t Suck”



... a developer-focused, instant-setup payment platform that scales to any size

Simple things should be simple and complex
things should be possible.

—Alan Kay

2ND PRINCIPLE

- Structure your delivery pipeline for changing requirements.

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Organize

2ND PRINCIPLE

- Structure your delivery pipeline for changing requirements.



Organize



Balance

2ND PRINCIPLE

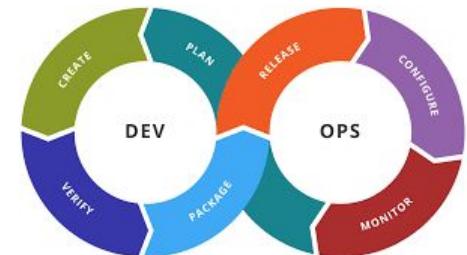
→ Structure your delivery pipeline for changing requirements.



Organize



Balance



Automate

LEADING independent provider of Aircraft Maintenance + Overhaul

On a typical day:

Inspect 2000+ aircraft and overhaul 1000+ aircraft components

110,000 components in stock

26,000 employees delivering parts to 2,000+ aircraft worldwide

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By 2025, more than 38,000 aircraft are forecasted to be in operation worldwide.

Latest aircraft types produce 50 times more data than older generations.



Prediction



Fulfillment



Open Digital Platform for the Aviation Industry



Lufthansa Technik AVIATAR

The innovative and holistic platform for the entire aviation industry: AVIATAR offers an extensive variety of digital products and services for airlines, MROs, OEMs and lessors by combining multiple apps in one place

— Discover more



... digital products and services for airlines, MROs, OEMs, and lessors

3RD PRINCIPLE

- Establish architecture and processes that will automate and scale, based on your culture and competencies



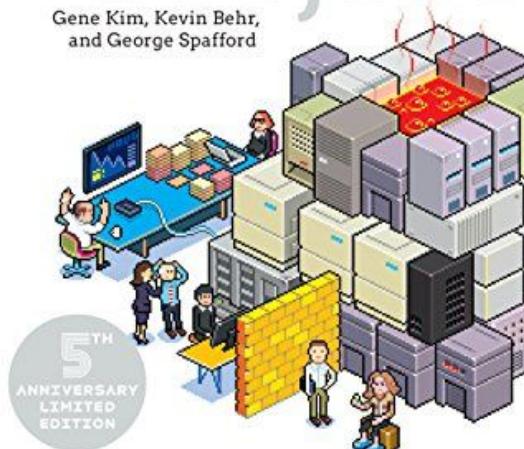
Assess

Software development as a manufacturing facility

- Cycle times
- Process flows
- Profitability
- Bottlenecks

A Novel About IT, DevOps, and Helping Your Business Win The Phoenix Project

Gene Kim, Kevin Behr,
and George Spafford



3RD PRINCIPLE

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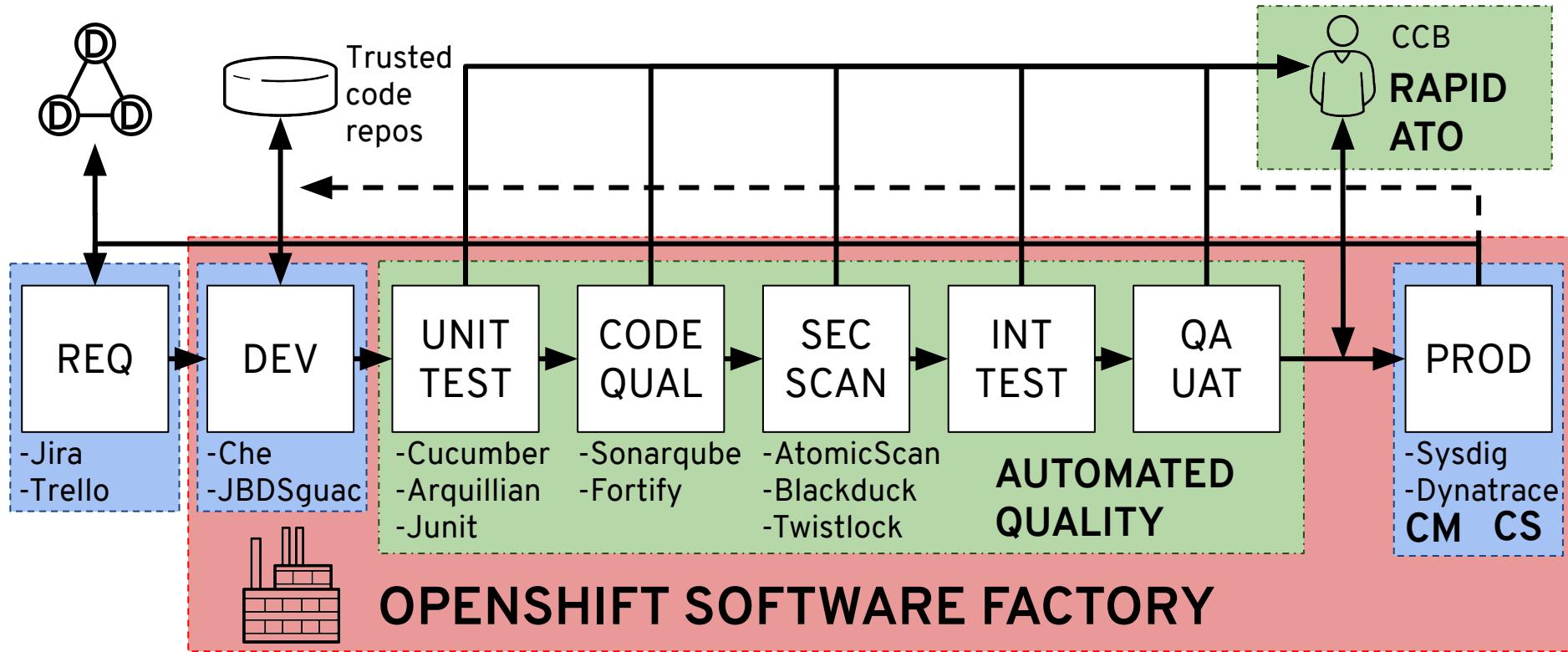


Assess



Standardize

3RD PRINCIPLE: OWNING THE ASSEMBLY LINE



3RD PRINCIPLE

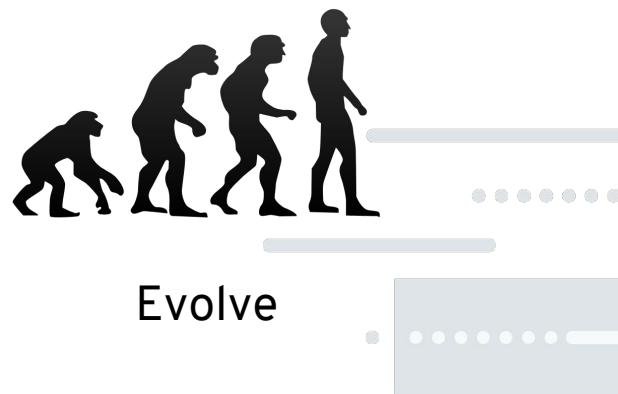
- Establish architecture and processes that will automate and scale, based on your culture and competencies



Assess



Standardize



Evolve

APIs AT SCALE

Schiphol Developer Center

API & Solutions

How it works

Examples

More ▾

Developer Center

Create, share
and grow



4TH PRINCIPLE

- Focus on engaging your developers.



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- Focus on engaging your developers.



Attract

COMPETITIVE INTENSITY

Percent of US manufacturers classified
as "hypercompetitive"



Source: "The Rise of Hypercompetition from 1950 to 2002"
by L.G. Thomas and Richard D'Aveni, 2004

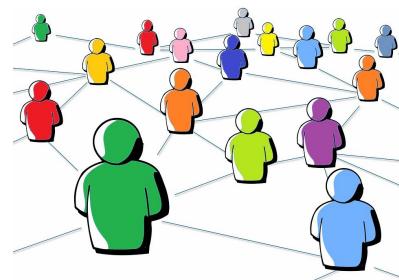
Source: Dave Gray, The Connected Company

4TH PRINCIPLE

→ Focus on engaging your developers.

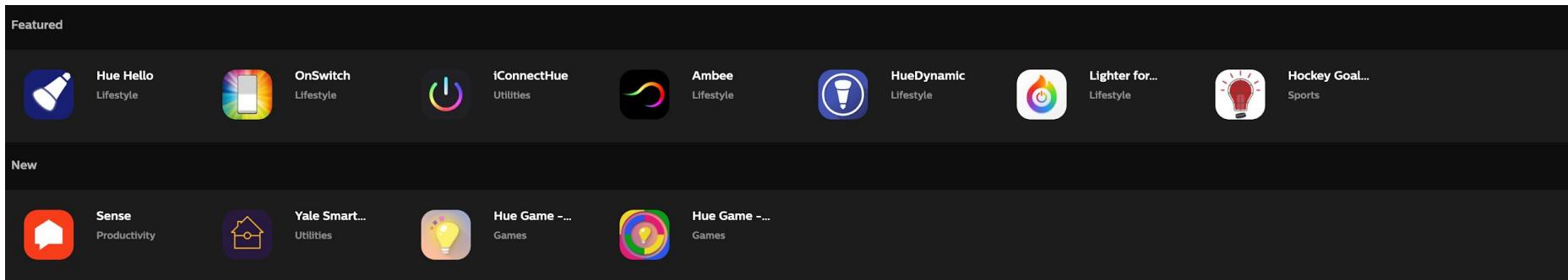


Attract



Socialize

Highlighting Your Developers' Apps: Philips Hue



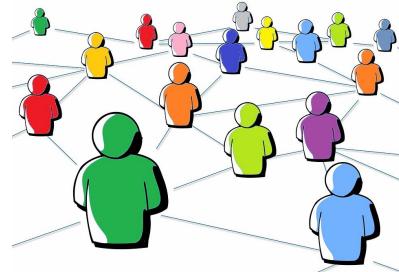
In 2014, Philips Hue developer adoption grew by 157%, as measured by average visitors to the developer portal. This growth has been fostered by a clear understanding of the different developer personas that are building on the API. ProgrammableWeb.com

4TH PRINCIPLE

→ Focus on engaging your developers.



Attract



Socialize



Equip

A large, white iceberg is the central focus, floating in a dark blue ocean. The iceberg's surface is textured and uneven, with a prominent crack running down its side. Below the water's surface, the submerged part of the iceberg is visible, appearing as a lighter shade of blue. The background shows a clear blue sky with a few wispy clouds and other smaller icebergs in the distance.

Documentation

Reporting

Policies

Testing

Security

Developer Portal

Advertising

Community

Promotion

Flexible Pricing

Product Management

FOUR PRINCIPLES RECAP

Define clear API program objectives that advance core business goals.

Structure your delivery pipeline for changing requirements.

Establish architecture and processes that will automate and scale, based on your culture and competencies.

Focus on engaging your developers.



An instant-setup payment platform that scales to any size ... offering a delightful payment experience for consumers and is fun for developers to work with.



“We have infrastructure as code, reproducible at any time”



“This new infrastructure needed to provide massive scalability to support one of the key tenets of the airport’s goal: sharing relevant data via RESTful APIs based on open data principles”

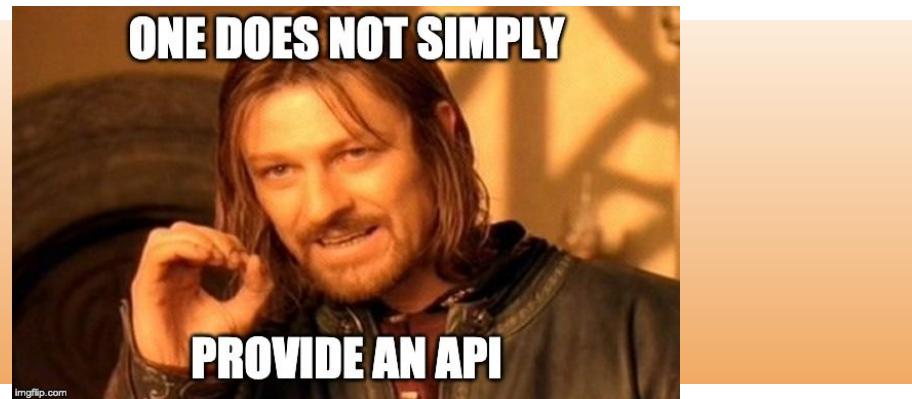


“Growth has been fostered by a clear understanding of the different developer personas that are building on the API.”

AND DON'T FORGET ...

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... THE DEVELOPER'S EXPERIENCE



LEARN MORE

API Owner's Manual

<https://red.ht/2UjyM7B>



Agile Integration E-Book

<https://red.ht/2UYElg3>



Red Hat 3scale Trial

3scale.net





THANK YOU



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twitter.com/RedHat