



**Network Manager**  
nominated by  
the European Commission



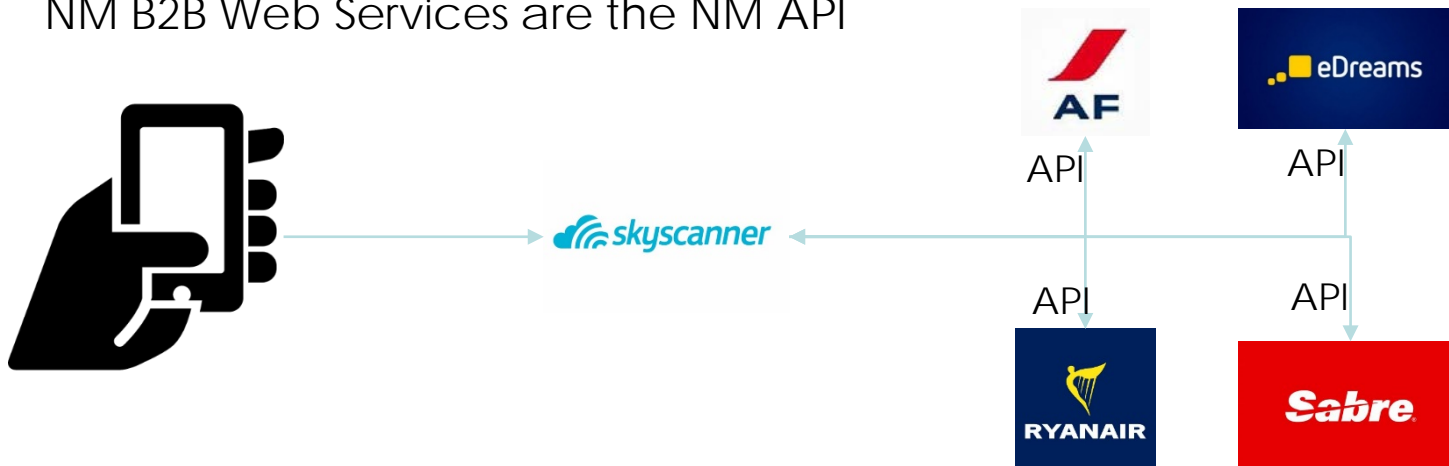
# Application Programming Interface (API) Basics

NM B2B Web Services Technical Forum 5.0  
11/12 June 2018

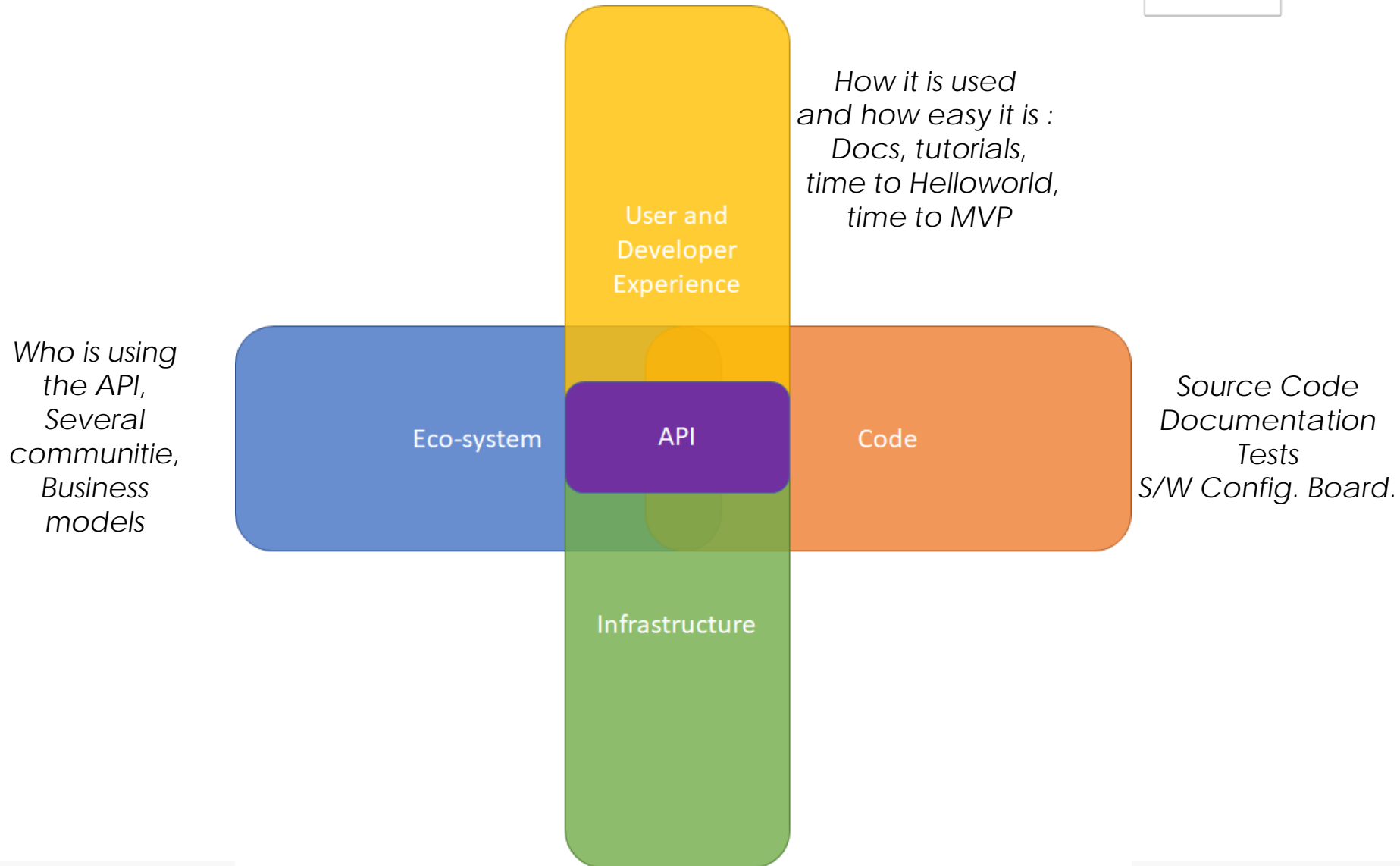
Benjamin Cramet  
NMD/NTS/SOF/TOR/SWI

# What is an API ?

- Application Programming Interface (API) is a piece of software that can be called by an external application
- API transfers data in a format directly usable by computer directly usable by other software with minimum integration
- NM B2B Web Services are the NM API



# As it is software – it isn't only code



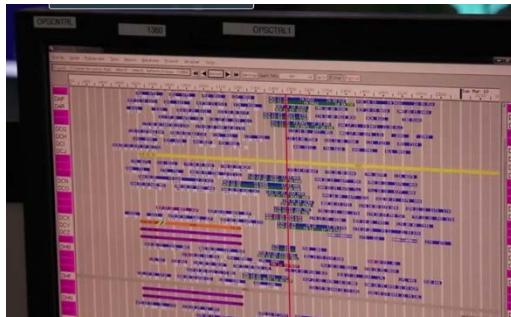
# Example of a delayed flight in an API world

- Imagine....



# Trivial Example of API for Major Productivity Improvement

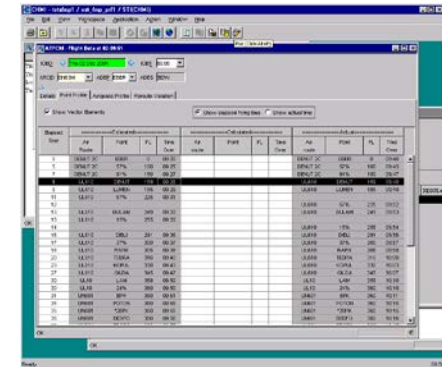
## Operation Control Centre



Listing schedule flight for the day  
Stand Alone Software



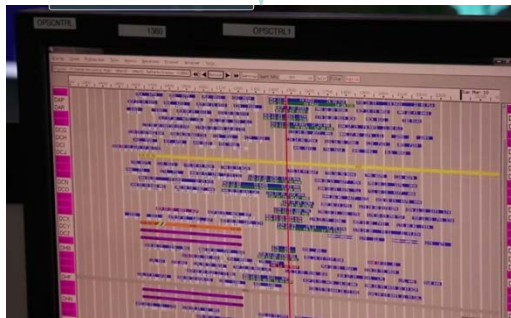
Airline OCC Operator



Manually looking regularly in CHMI for  
Estimated Time of Arrival

# Trivial Example of API for Major Productivity Improvement

Same information but directly usable by computer →



Software connected to B2B

Highlight Delayed flight – Amber

Highlight Delayed flight with Operation Impact - Red

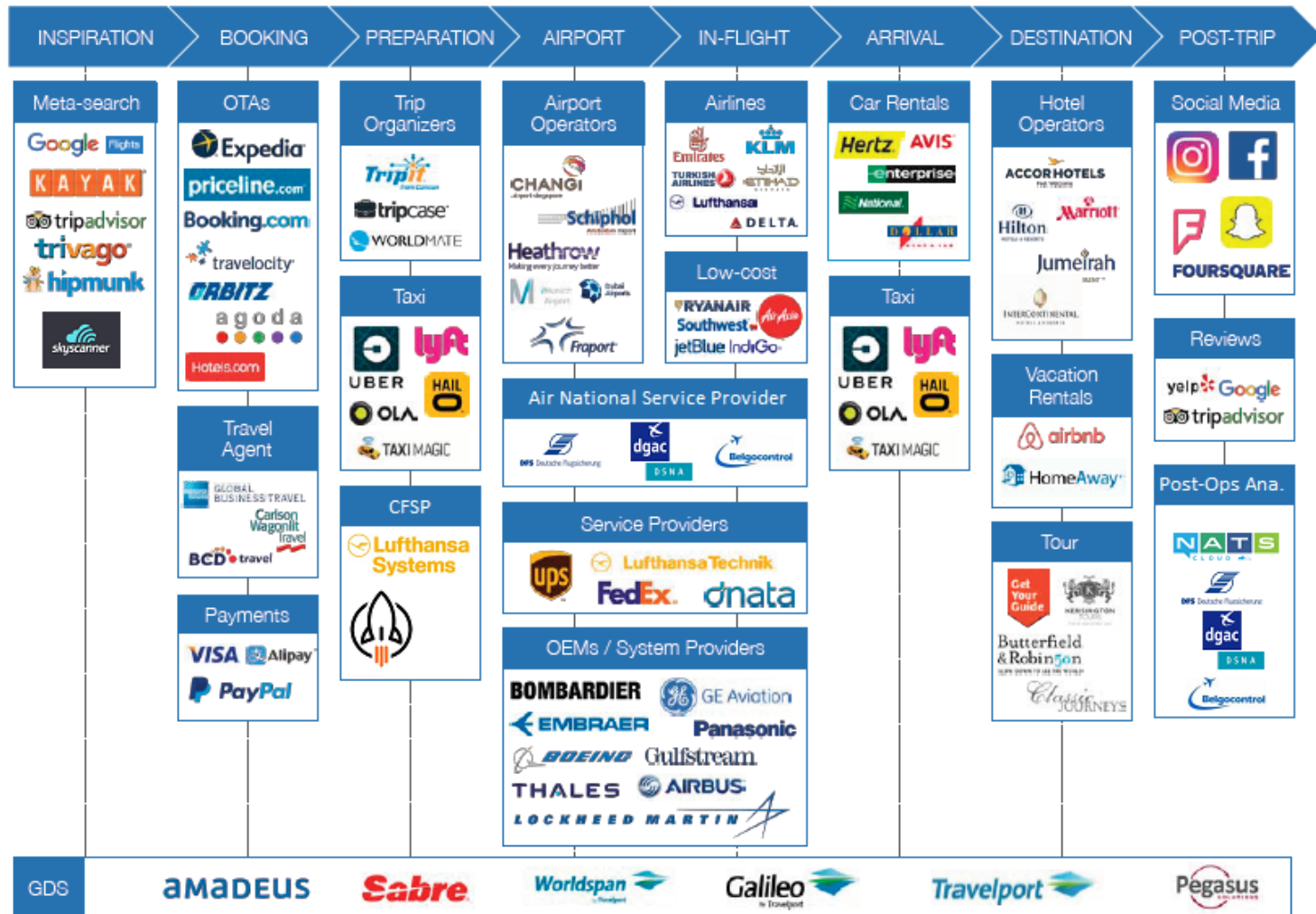


OCC Operator



*More time to do added value tasks*

# Aviation, Travel and Tourism Industry Ecosystem

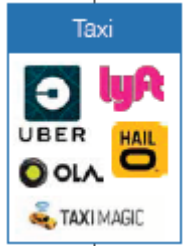


Based on: World Economic Forum – Digital Transformation Initiative – Aviation, Travel and Tourism Industry



Network Manager  
nominated by  
the European Commission

# EUROCONTROL NM Ecosystem



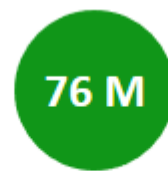


# NM API where we stand

- Ecosystem is formed and growing



Active Users  
+ 4 % vs April 2018



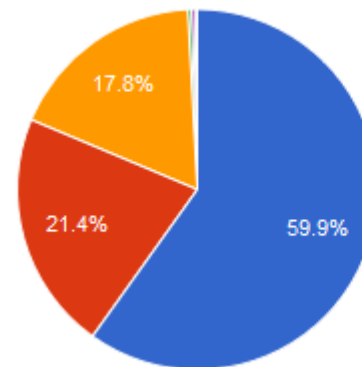
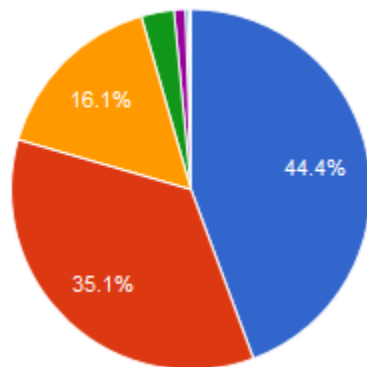
R/R Requests  
+ 21.6 % vs May 2017



P/S Messages  
+ 64.4 % vs May 2017

- Eco-system breakdown

R/R



# Next Step: Improving User and Developer eXperience

- API Management
  - Manage API as a Product
  - Manage Infrastructure to increase availability rate
  - Act as a single entry point for Operational and technical matters
  - Provide Analytics to observe API usage
  - Support and engage with the ecosystem to improve User Experience and Developer Experience
  
- Attain a strong understanding of business priorities and data needs
- Coordinate B2B releases within NM releases across stakeholders
- Serve as the point of contact for customers and internal stakeholders for questions regarding B2B use, optimization, and adoption
  
- *Source: Gartner*