

Kollaborative Aspekte der API Economy

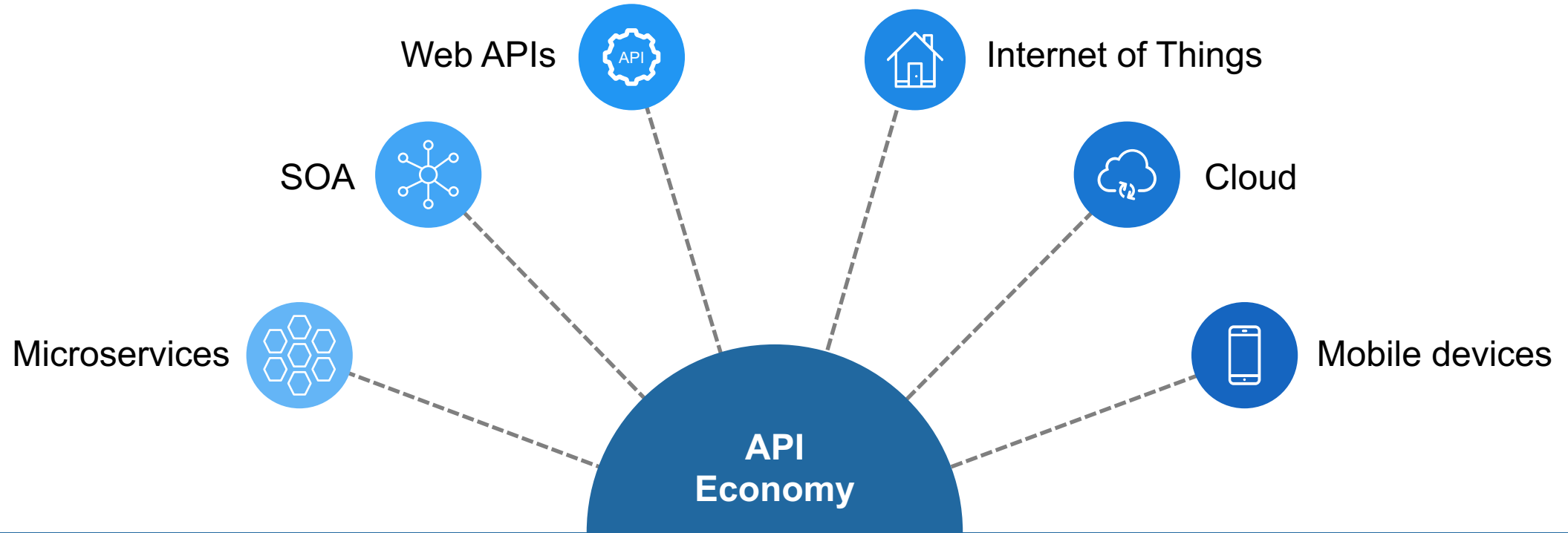
Gloria Bondel, 20.09.2018, Garching

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- 1. Introduction to API Economy**
2. Collaborative Approach for API Lifecycle Management
3. Barriers for Advancing the API Economy within the Automotive Industry

Introduction to API Economy

The focus on API Management increases



- Use of APIs to increase profitability
- Generate revenue by offering core competencies (functionality and data)
- Enable new business models due to easy access to new functionality and data

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Collaborative Approach for API Lifecycle Management

States and Activity Flow of Proposal Management



User



User



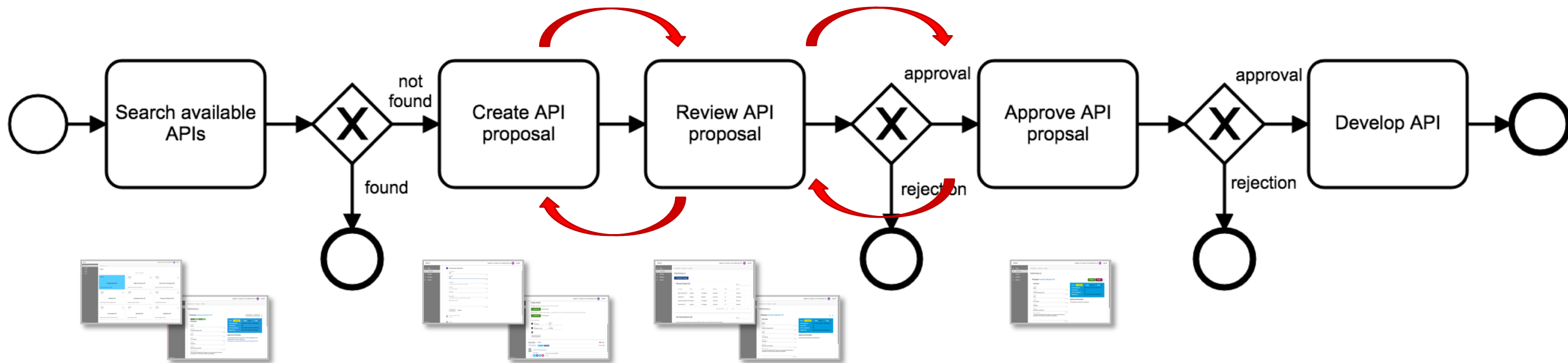
Enterprise
Architect



Asset
Owner



Developer



Collaborative Approach for API Lifecycle Management

Search for Existing APIs

CALM | Logged in as manager-insurance@example.com | Log Out

Dashboard / Home

HOME

FILTER BY A CATEGORY

Proposal	Category	Votes	API Name	Keywords
Propose New API	Insurance	0	/Basic Products API	Accident, Liability, Unemployment
Propose New API	Insurance	15	/Document Processing API	Document, Processing, Sharing, Automation
Propose New API	Insurance	15	/GetSafe API	Security, Robots, Healthcare, Health
Propose New API	Finance	5	/Hydrogen Atom API	Automation, Transactions
Propose New API	Insurance	50	/Insurance Reporter API	Reporting, Automation
Propose New API	Insurance	12	/Lemonade API	Home Insurance, Insurance as a Service, AI
Propose New API	Health	13	/Vericred API	Medicine, Health
Propose New API	Workflow	0	/Vertafore API	Integration, Products

Version: 1.0.3

Dashboard / Proposals / Details | Logged in as manager-insurance@example.com | Log Out

PROPOSALS

Proposal *Insurance Reporter API*

APPROVE REJECT

circled passing issues 0 open

Status	In Progress	Stage	Design	Votes
				50

Overview

Company *
Allianz

API Name *
Insurance Reporter API

Timeline *
2019

Pricing *
4€ / request

Category
Insurance

Keywords *
Reporting, Automation

Describe your API *
The Insurance Reporter API helps you to log and send all kinds of accidents to the insurance provider automatically.

Approval Information

The proposal has been reviewed! For further collaboration and development of the API, please visit <https://github.com/calmccorporation/Insurance-Reporter-API.git>

Item	Link
API Specification	https://s3.eu-central-1.amazonaws.c...
API Sandbox	N/A
API Documentation	https://calmccorporation.github.io/ins...
Related Files	https://s3.eu-central-1.amazonaws.c...

Version: 1.0.3

Collaborative Approach for API Lifecycle Management

Creating a New API Proposal



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Home
Proposals
Console
Analytics
Security

1 Provide general information

Your Company *
TUM 3 / 50

API Name *
Seb 3 / 50

Timeline *
Hint: Project duration or specific start and end dates 0 / 50

Pricing *
Hint: Price per request 0 / 50

Category

Keywords *
Hint: Separation with comma, semicolon or pipe characters 0 / 50

Describe your API *
0 / 1000

Next Cancel

2 Provide design details
Optional

3 Review

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Design Details

Swagger Specification (Please upload only one JSON or YAML file.)
[Upload File](#) No file chosen

Related Files e.g. Mockups, Documents, ... (Please upload only one PDF file or create a Zip file that includes all related files for upload.)
[Upload File](#) No file chosen

SLA Requirements

SLA	Comment
Availability	99%
Transaction Time	0.1msec

[Save Changes](#)

0 Comments CALM Login

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Collaborative Approach for API Lifecycle Management

Summary



Goal

- Prototype to support the Collaborative API Lifecycle Management
- Collaboration features to align users and reach higher product quality
- Acceleration approach to facilitate life-cycle

Solution Approach

- Requirements for conceptual model
- Collaborative API Lifecycle Management model
- Design and prototypical implement of main design artifact
- Evaluation in form of case study with expert interviews

Key Findings

- Prototype is a viable solution
- API Linter provides flexible and simple governance check
- Acceleration through structured form, transparency and automation approach
- Collaboration features helpful, but requires active commitment
- API First supported by architects, but doubted by developers

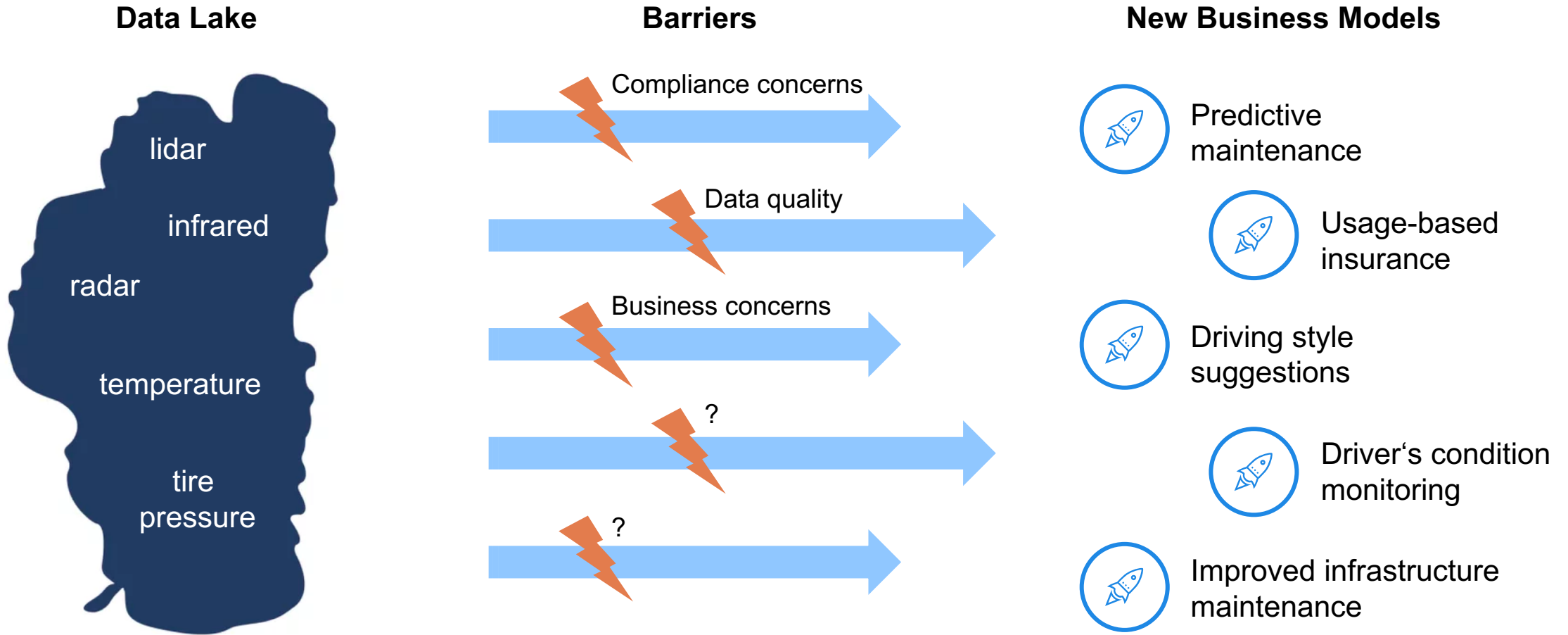
Future Work

- Further DSR iterations and include feedback from 1st iteration
- Evaluation of prototype with other stakeholders from other companies
- Evaluation of conceptual model in other companies
- Increase usability by including Gamification and Machine Learning
- Consideration of further API protocols beside REST

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Barriers for Advancing the API Economy within the Automotive Industry

Problem Statement



If you have knowledge in the fields of car data, API management, or open APIs we would highly appreciate support as an interview partner.

Bui, H. D. : Design and Evaluation of a Collaborative Approach for API Lifecycle Management. Master Thesis, TU Munich (2018).

Fremantle, P., Kopecky, J., Aziz, B.: Web API Management Meets the Internet of Things. LNCS 9341, 367-375 (2015).

Harvard Business Review, <https://hbr.org/2015/01/the-strategic-value-of-apis> (Accessed: 13.09.2018).

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Woods, D., Jacobson, D., Brail, G.: APIs: A Strategy Guide. O'Reilly Media, Sebastopol, California, USA (2011).



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