Ecosystem-focused API strategy

WIPO API day 2023

June 12th, 2023

Marjukka Niinioja, Founding partner at Osaango
Nice to meet you!

Marjukka Niinioja, Founding partner at Osaango
Founder, consultant and trainer at Osaango. The company mentioned as one of the top 20 API management companies in the world. She is co-author of API Economy 101 and co-founder of The API Collective.

Osaango Ltd
We are a specialized boutique consultancy. We focus on consulting on smart business ecosystems and underlying APIs, data and operational technology

Our clients
Our customers are medium and large enterprises in fintech, media, legal, education, public sector, technology, building and construction.

Osaango www.osaango.com is part of The API Collective, global API specialist consultants. More details from www.theapicollective.com
What are your strategic goals?

Enable innovation and data flows

Your goal: Modernize legacy architectures and organization?
- Improve API and data quality
- Improve development speed and quality
- Clarify operating model: roles, processes and ways of working around APIs and data
- Innovate with APIs and data
- Leverage new technologies like cloud, AI/ML, IoT, OT, blockchain
- Help attract the top talent for APIs and digital development
- Improve communication and collaboration with your internal and external stakeholders about API, data and collaboration capabilities

Your goal: Grow business profitably?
- Develop ecosystems
- Enable online and hybrid sales channels
- Bring more revenue with the right API-enabled business strategy
- Monetize APIs and data
- Cut costs due to faster and more efficient practices
- Invest in or innovate with the right startups

API and data economy maturity

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From a global societal and economy point of view, how can we make APIs more widely adopted? Why should we?

Figure 1. Global API locations

Visualizing the Geography of Platform Boundary Resources: The Case of the Global API Ecosystem

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Because:

The amount of APIs correlates with Global Startup Index and economic growth areas.

APIs thrive in cultures where user-centered design is dominant.

Mashups combining several APIs require certain amount of co-location and mindset for marketers and developers to co-create.

APIs can create co-dependencies between economies - to drive positive or negative impacts.

Source: Huhtamäki & al. Visualizing the Geography of Platform Boundary Resources: The Case of the Global API Ecosystem
APIs enable scaling and distribution of products, services and organizations. “Integration orientation”

Internal API development causes organizational changes from within. APIs provide possibilities to use external parties as innovators and service providers. This enables and forces organizations to open up and think of ways to collaborate with external developers, ecosystems and API providers.

Ecosystem and platform orientation creates opportunities for external developers to voice their needs to development roadmaps, both business and technical.

“Integration orientation”

Read more in Chapter 11 of API Economy 101 e.g. Bosch, J. – Bosch-Sijtsema, P. 2010. From integration to composition: On the impact of software product lines, global development and ecosystems. Journal of Systems and Software, 83(1), s. 67–76

“Ecosystem and platform orientation”
API strategy or strategy to use APIs?

- Technical capabilities and efficiency vs. Customer, partner and employee experience?
- Product management & strategy
- Tools and capabilities
- Pace of the business and industry
- Relationships and perceived change

Cost savings vs. revenue generation?
Regulation vs. innovation?
<table>
<thead>
<tr>
<th>API is...</th>
<th>Description</th>
<th>Example</th>
<th>Type of API</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important feature of a tangible product</td>
<td>API is part of a tangible product or productized service. Customer gets the API as part of the deal when buying the product.</td>
<td>Internet of Things (IoT) APIs for controlling and analyzing state of things like home appliances or sensors</td>
<td>Partner or public, sometimes also private</td>
</tr>
<tr>
<td>Productized service</td>
<td>API in itself is a productized service, offered to all customers in the same way</td>
<td>Translation APIs, Payment APIs</td>
<td>Public API</td>
</tr>
<tr>
<td>Part of a digital or real-world service</td>
<td>API is part of the service experience, for example maintenance service is ordered with an API, or you can monitor package delivery with an API</td>
<td>Logistics API</td>
<td>Partner or Public API</td>
</tr>
<tr>
<td>Customer-specific service</td>
<td>API is part of a service offered to customers as a tailor-made solution including for example an integration to a service providers system.</td>
<td>APIs in customer specific applications</td>
<td>Partner</td>
</tr>
<tr>
<td>Interface to resources</td>
<td>API is just a means to access a resource the company is selling</td>
<td>Company info APIs (risk category, owners, contact information). Cognitive APIs etc.</td>
<td>Open data APIs, Partner APIs</td>
</tr>
<tr>
<td>Interface to platform (boundary resource)</td>
<td>API is a means to connect with a platform and get added value through participation in the interconnecting relationships of the platform (in Platform Economy business model)</td>
<td>Online auction API, Apartment sharing API</td>
<td>Partner or Public</td>
</tr>
<tr>
<td>Part of an integration</td>
<td>API is means to connect in to applications and devices</td>
<td>Product API, Employees API, business transactions API</td>
<td>Internal or partner API</td>
</tr>
</tbody>
</table>

Collaborative ecosystem-oriented strategy?

APIOps Cycles is an openly licensed (CC-BY-SA 4.0) method of lean and business-oriented API development. It promotes collaboration, easy and fast methods that enable business, product and technical experts to collaborate and communicate on new API and feature discovery, reuse and improvements.
What are the goals of the water services ecosystem?

"We provide water" with legacy systems

"We provide service, also digitally" with customer portals and apps

"We provide enough and safe utilities with data- and API-driven partner ecosystem!"

<-2018  2020  ->202X?

Public data and interfaces
Private sector partners
Public sector partners
Security of supply partners
Regulatory bodies

Customer case
Business models and business model canvases are well known by the business people and designers.
Everyone hates NFRs so why not make them as easy and business user friendly
Prioritize APIs that deliver full ecosystem journey

Customer journey combined from resources provided by individual providers via APIs

- **Gains: things that make the customer happy**
  - Product reviews, tutorials and courses easy to find
  - Recommendations for products
  - Ordering with voice (hands-free)
  - Short delivery time (optimized routes)
  - Credit card payments

- **Pains: things that make the customer unhappy**
  - Too personal offers (privacy)
  - Typing a long order form
  - Having to call maintenance to fix the product
  - Security of the payments needs to be guaranteed

**Developer gains and pains** for using API to implement these touchpoints are added to the API value proposition canvas

- Awareness APIs
- Sense APIs
- Analytics and content APIs
- Product recommendation APIs
- Loyalty APIs
- Voice recognition APIs
- Text-to-speech APIs
- Order capture APIs
- Route optimization APIs
- Voice call APIs
- Fraud detection APIs for payments

Let’s make some more dots on the map with the open APIOps Cycles method – for a more sustainable future and more equal growth.

Lean more at www.apiopscycles.com and www.osaango.academy www.osaango.com and contact me in LinkedIn