

# Flex4Apps

## Deep customer understanding, backed by data

Anybody in the industry knows that monitoring applications is important: you want to know how your apps are performing, both from a technical perspective, such as CPU usage, memory, errors, as well as from a user perspective. The problem today is that for many teams, monitoring and analytics is just one of the many things they need to do, with little technical nor methodological guidance. And collecting, storing, analysing and acting upon data from larger, distributed systems is not that easy.

Success story



The forming of the Flex4Apps project at the end of 2016 was paralleled with an increase in containers and serverless paradigms, making the monitoring challenge both harder and easier: harder in the sense that there is even more to monitor because there is more that can go wrong, and easier because the same building blocks allow for a team to build performance monitoring and analytics systems for themselves, at a reasonable cost. The Flex4Apps partners built reference architectures, providing template solutions for dealing with monitoring and analytics, and they developed the methodological support to help teams leverage these. For the reference architecture, they opted to make this available via one-click installs and they have published some of their work in a publicly available GitHub. The methodological insights were bundled in the book “Hyperscale and Microcare, the digital business cookbook” that is in its third print already, with over 1000 books sold to date.

### **Impacting in and beyond the project**

Thanks to improved monitoring and analytics, project partners were able to serve their customers better, yielding improved retention and

customer satisfaction as well as, in some cases, even better, sharper pricing of their offerings.

As an example, project partner Unifiedpost (formerly Inventive Designers) has been operating a Flex4Apps inspired platform in production for several years now. While it was initially used as an internal tool to support product management and customer support for one particular product line with both premise-based and cloud services, today the company is using the platform to provide daily business value and insights across several important product lines. This data helped the technical team to find the cause of a very rare race condition occurring in production, while giving sales a detailed view on actual product usage, resulting in better tailored contact with customers. Since its inception, it has required very little upkeep and has kept on churning through the masses of received data with ease. Additionally, in 2021, the success of this project has led directly to the creation of a dedicated data warehouse and machine learning project team of 15 persons, expanding on the original ideas and assisting in the rapid growth of the company.



Cloud  
computing

**Project start**  
November 2016

**Project end**  
October 2019

**Project leader**  
Till Witt, NXP Semiconductors  
Germany GmbH

**More information**  
<https://www.flex4apps-itea3.org/>

Nokia, another project partner, brought down the monthly costs of fixing bugs detected in both early and late development from over 16,000 euros to 1,900 euros – a yearly saving of 180,000 euros. The SaaS tool Survey/Anyplace, meanwhile, has increased their conversion rate by 33% and their activation by 54%.

In terms of improved services, the Belgian SME DataStories is now using Flex4Apps' automated algorithms in 25-30% of their projects. This has allowed them to move into data-driven product management and take on more complex assignments, enabling them to grow from 6 to 18 employees.

Evermind, which has connected Flex4Apps to the home automation platform Eigenheim Manager, has increased sales by 50-100,000 euros per white-label customer. Likewise, Genode's home automation use-case has reduced their trusted computing base by a factor of 20%, making an exhaustive examination of its code base feasible, and has grown their customer base on ARM by 70%. They predict a 200% growth

in licence revenue within two years, with the smart home market expected to be worth 19 billion euros in Germany alone by 2025.

Nick Boucart, Senior Technological Adviser Software and ICT at SIRRIS and author of the book "Hyperscale and Microcare" states: "We're also proud of the fact that we didn't limit ourselves to impacting only the partners in the project. By publishing our reference architectures, others can benefit from our insights too". This is testified by Arnab Naskar, CEO of the Fintech start-up STOKR: "STOKR is a crowd investment platform powered by Ethereum Blockchain. Through EU-compliant security token offerings (STOs), everyday investors can directly fund innovative start-ups and SMEs in return for a share of future profits. Flex4Apps greatly helped the team to untangle initial complexities related to the technical architecture of the platform. Flex4Apps perfectly understood the need of complex financial platforms like STOKR and provided the right advice."

The open approach of Flex4Apps, combined with the innovative nature of the framework, will

# Calendar

15  
NOV  
2021

**Smart City Business Forum -  
The road to climate neutral cities**  
World Trade Center, Barcelona

16-18  
NOV  
2021

**Smart City Expo World Congress  
2021**  
Fira, Barcelona  
<https://www.smartcityexpo.com/>

17-18  
NOV  
2021

**EUROPEAN BUSINESS SUMMIT  
2021**  
Hybrid event  
<https://ebsummit.eu/>

18  
NOV  
2021

**SWISS INNOVATION FORUM 2021**  
Congress Center, Basel  
<https://www.swiss-innovation.com>

23-24  
NOV  
2021

**CYBER SECURITY & CLOUD EXPO  
2021**  
RAI, Amsterdam  
<https://cybersecuritycloudexpo.com/europe/>

23-25  
NOV  
2021

**EF ECS 2021**  
Online event  
<https://efecs.eu/>

15  
FEB  
2022

**DEADLINE FPP SUBMISSION**  
ITEA Call 2021

Join us at the Expo:  
**booth 140**

**CYBER SECURITY  
& CLOUD EXPO**

EUROPE

23-24 November 2021  
RAI, Amsterdam

*“ Flex4Apps perfectly understood the need of complex financial platforms like STOKR and provided the right advice.”*

- **Arnab Naskar**  
CEO Fintech startup STOKR

play a crucial role in the digital transition. In the future, a company's most valuable intellectual property will be its deep customer understanding, backed by data, rather than its technology. Companies that take up Flex4Apps stand to gain the most from this insight.