

Deep customer understanding, backed by data

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ITEA Award of Excellence for Flex4Apps providing a full digital loop

Software providers increasingly need to focus on the optimisation of their services, including the ability to react to customer preferences. Through its flexible framework and algorithms, the ITEA project Flex4Apps, led by NXP, creates a full loop that allows companies to offer more complex services while advancing the digital transition. For this unique result, the project partners have received the ITEA Award of Excellence during the Online ITEA PO Days 2020, from Vice-chairman Philippe Letellier.

Facilitating monitoring and analytics

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.

At the same time, when the Flex4Apps project was forming, one saw the raise of 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 performant monitoring and analytics systems for themselves, at a reasonable cost.

The Flex4Apps partners built reference architectures using containers and serverless paradigms 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 those 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 836 books sold to date.

"Flex4App belongs to the family of ITEA success stories on setting up the tools and methodology to develop and deploy a full digital loop allowing to base the design on usage fact rather than on the "clever understanding" of the market, which becomes more and more complex. Furthermore, they take care to propose a set of tools manageable by SMEs who are an important part of the ITEA ecosystem. I invite you to read the book 'Hyperscale and Microcare', you will learn a lot! - Philippe Letellier, ITEA Vice-chairman

Impacting in and beyond the project

Thanks to improved monitoring and analytics, project partners were able to serve their customers better, yielding better retention and better customer satisfaction, and in some cases, even better, sharper pricing of their offerings.

As an example, project partner The Unifiedpost (former Inventive Designers) operates a Flex4Apps inspired platform in production for several years now. While initially an internal tool to support product management and customer support, today the company is building customer facing addons on top of this data too, providing additional business value. During the first 6 months of 2020, UnifiedPost gathered 80GB of analytical and billing data, coming from both on-premise as SaaS-based installations of their software suite, with data peaks as high as 86.000 records/second. This data helped the technical team to root cause a very rare race condition occurring in production, while giving sales a detailed view on actual product usage, resulting in better tailored contracts with customers.

Nokia, another project partner brought down the monthly costs of fixing bugs detected in both early and late development from over over 16,000 euros to 1,900 – a yearly saving of 180.000 thousand euros. 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. And Genode's home automation use-case has reduced their trusted computing base by a factor of 20 and grown their customer base on ARM by 70%. They predict a 200% growth in license revenue within two years, with the smart home market expected to be worth EUR 19 billion in Germany alone by 2025.

“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”, explains Nick Boucart, Senior Technological Adviser Software and ICT at Sirris and author of the book “Hyperscale and Microcare”.

Arnab Naskar, CEO from the Fintech start-up STOKR testifies: *"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 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 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.

“It was a great honour to be able to lead this project and collaborate with many ITEA partners. Within Flex4Apps NXP demonstrated the ease of integrating secure elements and the benefit towards raising the security of IoT components. We took some home automation components, showed their vulnerability and secured them by shielding them with an i.MX & SE setup. I am very proud that the Flex4Apps project has won the ITEA Award of Excellence and congratulate all involved on this major milestone.” - Till S. Witt, Project Manager Flex4Apps

More information: https://itea3.org/project/flex4apps.html

About NXP

NXP Semiconductors N.V. (NASDAQ: NXPI) enables secure connections for a smarter world, advancing solutions that make lives easier, better, and safer. As the world leader in secure connectivity solutions for embedded applications, NXP is driving innovation in the automotive, industrial & IoT, mobile, and communication infrastructure markets. Built on more than 60 years of combined experience and expertise, the company has approximately 29,000 employees in more than 30 countries and posted revenue of $8.88 billion in 2019.
http://www.nxp.com

About Sirris

Sirris is the collective centre of the Belgian technological industry which was founded in 1949 by Agoria. The 150 Sirris experts help around 1,300 companies every year to make the right technology choices and to successfully realise their innovation projects. The combination of experts, exclusive, high-tech infrastructure spread throughout the country and an extensive network of (inter)national partners gives Sirris a unique position in the field of industrial technological innovation in Belgium. More than 2,400 Belgian companies are affiliated to Sirris, which gives them access to an extensive range of services and knowledge.
https://www.sirris.be

About ITEA

ITEA is a transnational and industry-driven R&D&I programme in the domain of software innovation. ITEA is a EUREKA Cluster programme, enabling a global and knowledgeable community of large industry, SMEs, start-ups, academia and customer organisations, to collaborate in funded projects that turn innovative ideas into new businesses, jobs, economic growth and benefits for society.
https://itea3.org

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