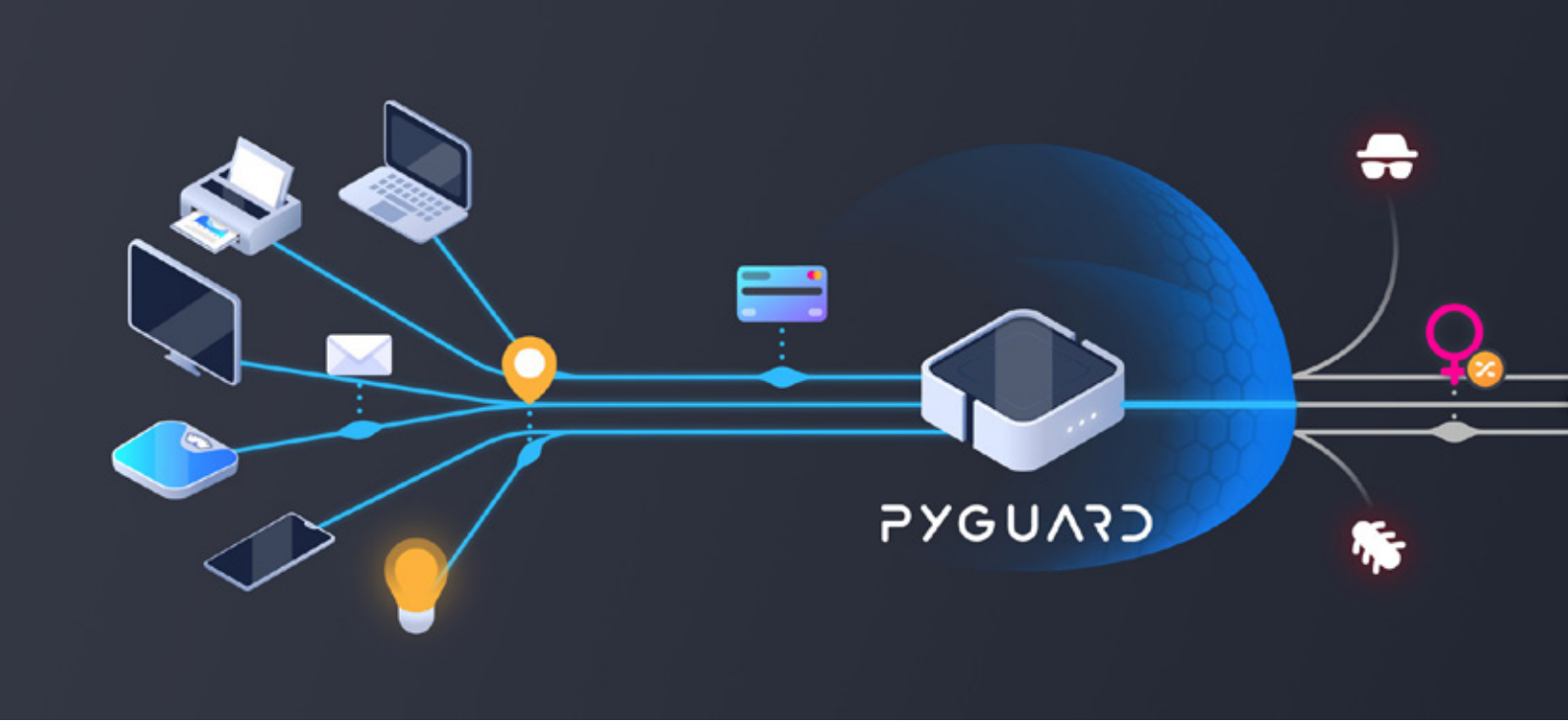

NGI TRUST

A human-centric internet is possible: NGI_Trust projects showcase their impact on privacy and trust technologies

Picture
Visual representation of the PyGuard solution

Since January 2019, the NGI_Trust project has funded and supported 57 third-party projects developing innovative solutions in the field of privacy and trust enhancing technologies, as part of the larger Next Generation Internet (NGI) initiative. Throughout the period, the selected initiatives received technical coaching, intellectual property and business mentoring support.

Several projects have now reached completion and worked with the NGI_Trust team to produce case studies demonstrating their impact on the Next Generation Internet.

PYGUARD

Data sovereignty: PyGuard protects your privacy online

Current business models relying on the sale of our personal data represent a risk for privacy, freedom of choice and free-will. Furthermore, phishing and cyberattacks are increasing, while we introduce numerous yet vulnerable connected devices into our homes.

PyGuard is a cybersecurity project that protects individuals from online tracking. Thanks to the support received by NGI_Trust, the project developed a prototype for an all-in-one hardware platform with embedded software, protecting and managing locally personal data and credential information, and acting as a central checkpoint for all connected devices.

The prototype filters at the network level third-party connections and unwanted data flows that happen automatically when a device is connected to the internet. Through a user-friendly interface, the system provides an overview of all network activities and personal data interceptions and allows non-technical users to easily set their own security and privacy settings.

NGI_Trust renewed its trust in the project and 2021 will be the year for productisation and commercialisation for PyGuard.

PyGuard was developed by the French startup Panga, in collaboration with MyDataBall, the XLIM and L3i research laboratories and with support by the Fondation MAIF.

For further information visit PyGuard: **https://www.pyguard.fr/en/**

SensioID: Solving ownership and copyright for the digital creative market

Kelp.Digital (ex. Sensio) is open-source software for content creators (for now, mainly, photographers) to manage, protect and license their work. Within the 9 months of NGI_Trust project funding, Kelp.Digital worked on the development of a web application for professional photographers that would allow them to create legally valid and verifiable digital copyright statements for their work in a simple and straightforward way.

Kelp's approach is different from other projects that are tackling this issue as – in order to claim copyright of a photo – their solution asks to prove ownership of a physical asset by going through an equipment/device verification workflow.

Throughout the implementation stage the project's initial concept expanded significantly and ultimately grew into Anagolay Network, a decentralised protocol built on Substrate framework. On top of it, the team built a web-application, currently available under private Beta, and soon expected to open to the wider community under the new name "Kelp.Digital".

In the long run, Kelp's ambitious goal is to form a creative market where content creators are not bound to any platform and can set the terms for others to use their work without much effort, and where publishers, marketers and other creatives can acquire quality content directly from its authors in a few clicks.

If successfully scaled, Kelp.Digital has the potential to become a key infrastructure for the new transparent market of creative content in the human-centric internet.

The Kelp.Digital team is formed by Daniel Maricic (7Signals.io) and Elena Tairova (Sensio.Group).

For further information visit:

Sensio.Group: **https://www.sensio.group/**

Anagolay.Network: **https://anagolay.dev/**

Kelp.Digital: **https://kelp.digital/**

CAP-A PROJECT
A Community-driven Approach to Privacy Awareness

Cap-A: A Community-driven Approach to Privacy Awareness

Solid legal regulations and technical countermeasures are not always sufficient to achieve society-wide impact on privacy protection; data protection can also be powered by the society itself.

The CAP-A project is offering socio-technical tools to promote collective awareness and informed consent, whereby data collection and use by digital products are driven by the expectations and needs of the consumers.

The project developed a suite of ICT tools and implemented a gamification/rewarding strategy, allowing users to rate the privacy friendliness of apps of specific categories, annotate their Privacy Policy documents, and generate informative statistics about the behaviour and mindset of citizens and the privacy-consciousness of mobile apps. Pilots in the form of thematic events were also organised throughout the project, centred around specific categories of apps.

Users' contributions resulted in the expression of personal expectations for over 560 apps and in 1181 annotations, providing a wealth of privacy-related statistics that can be used by developers, social scientists, and policy makers to conduct analyses.

To achieve long-term sustainability, the team is now considering establishing a Non-Profit Organisation (NPO) and seeking additional funding for a follow-up project.

*The CAP-A project is part of the CAPrice initiative (**https://www.caprice-community.net/**) and it is driven by the Foundation for Research and Technology – Hellas (FORTH) and IN2 Digital Innovations.*

For further information visit:

CAP-A portal: **https://www.cap-a.eu/portal**

CAP-A mobile app: **https://play.google.com/store/apps/details?id=com.in2.cap_a**

Read the complete case studies here: **https://wiki.geant.org/display/NGITrust/Case+Studies**