SensioID: Solving ownership and copyright for the digital creative market

Summary

Kelp.Digital (ex. Sensio) is open-source software for content creators (for now, mainly, photographers) to manage, protect and license their work. Simple, transparent and secure.

In the long run, Kelp's 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.

As the first step towards this ambitious goal, within the scope of NGI_Trust, we have developed a tool that will help photographers to stay in charge of their work while publishing and sharing photos online.

Keywords

Copyright, blockchain, substrate, digital identity, creative market, content creators, photography

Actors involved in the project

Daniel Maricic (7Signals.io), Elena Tairova (Sensio.Group)

The business

At Kelp.Digital we build open-source software for content creators (for now, mainly, photographers) to manage, protect and license their work. Simple, transparent and secure.

It all started as a relatively small project to fix issues in one photographer's workflow: back in 2017, Daniel [Maricic] started working on a simple yet elegant solution to improve his own workflow when developing and sharing photos. However, the project's scope and ambition quickly expanded. The more we looked in the market of digital photography and talked with the content creators, the more the issues in the field became obvious.

In 2019 the project idea took its current shape and both Daniel and I [Elena Tairova] decided to dedicate our full-time to making the market of digital photography more open, transparent, and fair towards the content creators.

Daniel Maricic (7Signals.io), Elena Tairova (Sensio.Group)

Our first step towards this ambitious goal was to develop a tool that would help photographers to stay in charge of their work while publishing and sharing photos online. We had a proof-of-concept and the first prototype ready when we applied to NGI_Trust 2nd call with our proposal.

The problem

So, what exactly is wrong with the market of creative content today? Quite a few things actually, but to put it shortly: the field is highly centralized, unfair to the content creators and, as a result, underperforming.

If you think of it, practically every internet user today is a creator of digital content: thousands of photos and videos published by an average user every year. At the same time, the majority of content distribution and management lies in the hands of very few tech corporations who impose their terms. Creators, in fact, have very little control over images and videos they share online. Once published, the content is often detached from the creator. It can be copied without attribution and used without author's consent. Talented people miss out on their fair reward, but that's not the only issue. Stolen images can be misused in identity thefts, blackmailing, or spreading misinformation.

The market of creative content as it is today doesn't work quite well. The recent approval of the new EU Copyright Directive and a contentious debate about its Article 17 (previously

art.13) makes it apparent. However, addressing the copyright issue by filtering and upload prevention is hardly a solution in itself.

The solution

At Kelp, we believe that the key to resolving the creative content market issues is not through fighting the industry incumbents. Instead, we are working to kick-start the transformation from within: from the users, creators of the content.

First and foremost, to truly put users in charge of the content we need to provide an easy-to-use content management tool with built-in copyright protection, fast & secure licensing and copyright transfer. The idea is to simplify the workflow: from organizing collections to sharing and managing on external platforms, and to, ultimately, selling or transferring the rights.

By putting a user in the centre of the system, we will prevent data locking, improve connectivity with different providers and create a more transparent and secure ecosystem.

To test our idea on the market, we decided to start with professional photographers and video makers, who we see as our first adopters and ambassadors. Being knowledgeable about the market and struggling with its bottlenecks and unfairness on a daily basis, these users are in need of a better tool to simplify their workflow (and their lives).

Within the 9 months of NGI_Trust project (April-December 2020) our goal was to design and build 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. Yet, to enable the above, first, we needed to create a robust algorithm for copyright storage validation and creation.

The other projects aiming to tackle this issue essentially offering Proof-of-Existence statements created by time-stamping services. They confirm only the fact that a certain digital asset existed at a certain point in time providing no evidence whatsoever about whether a user uploading the content is a creator and a rightful owner.

Our approach is different. Before anyone can claim copyright of a photo a user needs to go through the equipment/device verification workflow. Therefore, ownership of a physical asset needs to be proved first. Only when that is in place, a user can claim copyright of the photos created with that equipment.

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

Results

Throughout the implementation stage the project's initial concept expanded significantly and ultimately grew into [Anagolay.Network](#), a decentralized protocol built on [Substrate](#) framework that allows multimedia content creators to sign, permanently record, and create statements about their copyright and ownership.

On top of the Anagolay, we built a web-application for digital photographers, currently available under private Beta and developing into Kelp.Digital. The app has an integration with Lightroom CC that allows photographers to sync their albums. A straightforward equipment verification process allows photographers to claim ownership of camera & lens combination. Once the equipment is successfully verified a user can generate copyright statements for all the photos taken with the equipment they own.
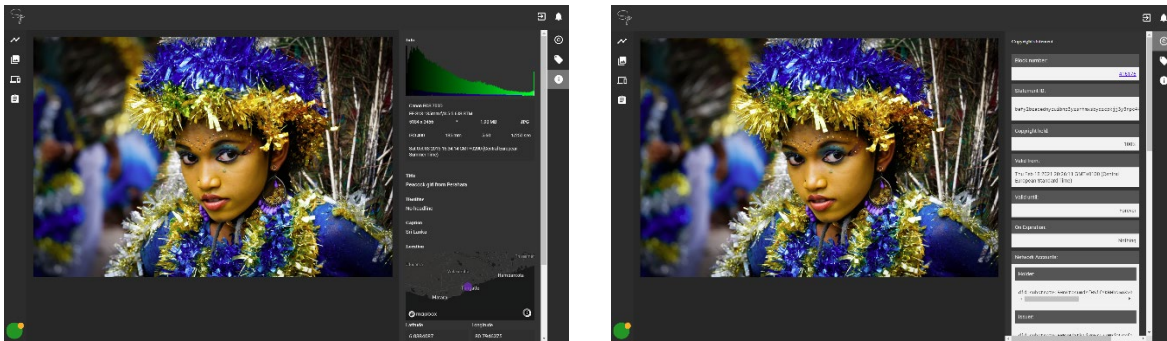
Interface of the private beta version of the web app and Copyright statement details

Throughout the project implementation, we have been not only testing our solution with the photographers but also making sure it is valid from the legal point of view. Through our partnership with the Blockchain School for management and collaboration on the "Legal applications of Blockchain & Compliance" programme, we established that digital statements created by Kelp.Digital are legally binding and can be used as sufficient evidence in court.

Testimonial

Back in 2019, we took part in the NGI Community event in Helsinki while looking for funding opportunities to keep working on the project, which initially was financed from our personal savings. Among various projects under the Next Generation Internet Initiative umbrella, NGI_Trust seemed to be a perfect fit.

The application process was pretty straightforward, even though it was our very first time applying for a grant. In about three months' time we got the exciting news about our proposal being selected under the 2nd open call.

First and foremost, NGI_Trust funding allowed us to keep working on the project full time and allocate additional resources to move faster. Besides, given the complexity of the project, doing additional research and testing new ideas had become our long-time habit. Having a set framework and a fixed timeline helped us to stay focused and move faster.

The three coaching sessions spread throughout the 9 months' timeline proved to be particularly useful, as they motivated us to ship feasible and coherent results in time for every session in order to make the most from our conversation with our coaches. Additional IP consultations were a nice addition - they gave us a nudge towards getting stronger trademark protection.

Overall, the straightforward communication and minimal amount of paperwork required by NGI_Trust allowed us to concentrate efforts on the project implementation and work in our full capacity.

It's also worth mentioning an additional perk that came with being a part of NGI community - our participation in Tetra Bootcamp. As one of the Pitching Competition winners, we got additional business mentoring support which we keep benefitting from.

If like us, you are working on a project with an aim of making the Internet more transparent and a safe place for the users, the resources that the NGI initiative has to offer can be of tremendous help.

Future plans

In the long run, Kelp's 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. Where publishers, marketers and other creatives can acquire quality content directly from its authors in a few clicks.

We still have a long way to go before we get there. Our primary focus for 2021 is to keep working on Anagolay.Network to make it stable and production-ready. Along with improving the network capabilities, we will gradually move towards the decentralization of the platform. The idea is that with time any trusted entity on the Network can become an 'Issuer' - a trustee signing the copyright & ownership statements on the Network.

The web application which is currently available under private Beta, will be open to the wider community in the next few months under the new name Kelp.Digital. The name choice, of course, is not random. The underwater Kelp forests are known to protect all its

inhabitants: from whales to the smallest fish. That's exactly what the digital Kelp will do - protect all the content creators and their work in the Internet waters.

Throughout 2021 we will keep improving the Kelp web app based on the feedback received from our first testers, and work on the new features, prioritizing based on the community requests.

The next step will be launching a mobile application which is the key to scale-up and onboard a broad audience of casual smart-phone photographers & bloggers.

Ultimately, in 2 years from now, with Anagolay.Network battle-tested and with content creators actively using [Kelp.Digital](https://kelp.digital/) to protect their work, we will be ready to launch the Peer-2-Peer marketplace for digital photography & videos.

As you can see, we have pretty ambitious plans and NGI_Trust allowed us to get started. If you want to join us or learn more visit:

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

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