

Whisper

Preventing double financing fraud in invoice financing

Fraud attempt

September 2022

Finspot is operating on the Serbian market for almost 2 years at this point. As a technology driven lender, we are employing various advanced techniques to make sure fraud risk is at a minimum. Our **platform is talking to a fraud prevention tool** developed by one of the biggest marketplaces in the country to check for fraudulent activities, we are doing **machine fingerprinting** and **advanced IP tracking techniques**, among other things.

One debtor sends an email that **he already paid the invoice** to another factoring company and that he's sure he shouldn't pay it twice...

Idea

We realized that the only way we can solve this problem is that all the factors **start communicating in real time** about financed invoices. Which immediately proves to be impossible as it would mean **sharing sensitive business information** about clients, exposure, portfolio size ...

Then we realize we can use hash functions to solve the problem.

Solution

Whisper implements an innovative way to exchange information about the financed invoices **without sharing** business sensitive information, by relying on *hash* functions. Every participant produces fingerprints of the invoice **on its own system** and only fingerprints are shared with a centralized Whisper instances that checks **duplicates**. Fingerprints are irreversible, meaning that there are no information leaks.

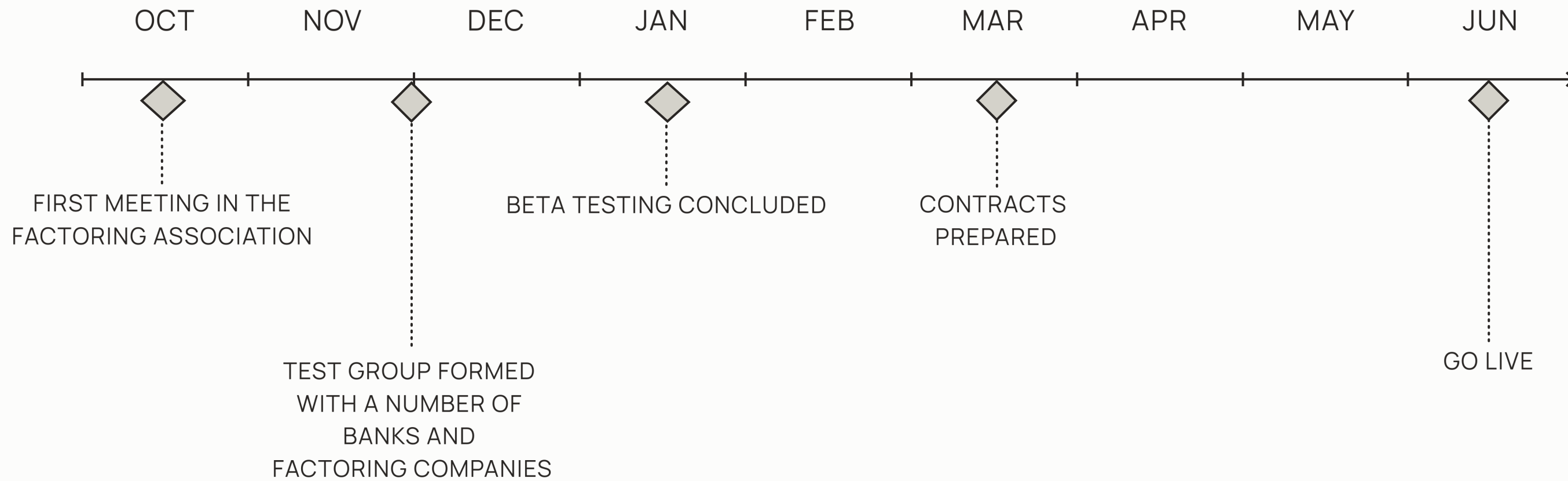
The screenshot shows a web application interface for entering invoice information. The title is "Invoice information" with a subtitle: "You need to enter the data of the invoice for which you want to check whether it w...". The form contains several input fields:

- Identification number of the supplier: 55553333
- Identification number of the buyer: 33335553
- Invoice n...: XYZ-1
- date of issue: 03/01/2024 (with a calendar icon)
- Date valued: 03/18/2024 (with a calendar icon)
- Amount: 45000
- SEF id: ad80b121-f0b8-4fa4-8a10-c72

At the bottom, there are two blue buttons: "Check for duplicates" and "Upload signatures". Below the buttons, a green message box states: "The invoice was not subject to factoring."

Implementation

October 2022 - June 2023



Traction

Whisper is **live in Serbia since June, 2023**. It has already been used to check **thousands** of invoices. Instance is hosted by the **Serbian Chamber of Commerce** and all the invoice financing players, both banks and factoring companies, are either using it already or integrating it into their workflows.

Why Whisper?

Simplicity of implementation

DUE TO SIMPLICITY OF HASHING AND THE FACT THAT NOTHING SENSITIVE LEAVES THE SYSTEM OF THE FACTOR, IMPLEMENTATION DOES NOT REQUIRE MUCH IT AND OTHER RESOURCES

Different document types

IT IS UP TO THE USERS OF THE PLATFORM TO AGREE IF THEY WANT TO INCLUDE CHECK FOR ANY OTHER DOCUMENT TYPE, APART FROM INVOICES.

Flexible integration

DOCUMENTS CAN BE SUBMITTED MANUALLY THROUGH THE BROWSER, THROUGH A FILE UPLOAD OR API INTEGRATION. IT FITS VARIOUS LEVELS OF OPERATIONAL SCALE AND/OR TECH CAPABILITIES.

Multiple fingerprints per document

VARIOUS COMBINATIONS OF FINGERPRINTS FOR A SINGLE DOCUMENT ENSURE PROTECTION EVEN IN MORE ADVANCED FRAUD ATTEMPTS

In-house (whitelabel) or cloud-based hosting

WHISPER INSTANCE CAN BE WHITE LABELED AND HOSTED WITH AN INSTITUTION OPERATING IN A GIVEN MARKET OR ACCESSED AS A CLOUD BASED SOLUTION ON FINSPOT'S INFRASTRUCTURE.

Pay as you grow

PRICING DEPENDS ON THE NUMBER OF DOCUMENTS CHECKED, AND THE PRICE PER DOC GOES DOWN AS THE SCALE GROWS.

Thank you!