

Groningen Municipality

Case Study Papers

About LIKE!

Local governments, citizens, universities and SMEs come together to co-create smarter, more efficient and more innovative services through 9 transnational pilots that cover 3 core themes:



USING BLOCKCHAIN TECHNOLOGY IN THE DEBT RELIEF ECOSYSTEM

Lack of financial knowledge is a major cause of debt. Citizens can repay their debts and regain control over their expenses with the help of the Groningse Kredietbank (GKB, the municipal credit bank). The GKB wants to coach people in financially sound behaviour, but spends a lot of time updating overviews of late payments, earnings and expenses. At the same time, creditors incur unnecessary costs for receivables that are difficult to collect.

A blockchain solution could improve mutual coordination between the different parties involved in debt relief, and real-time exchange of information may help citizens gain better insight into their financial situation.

Blockchain & Debts

Relations to Workpackages

This pilot shows the LIKE! project's opportunity in combining smart technology with better and more efficient customer services. Blockchain is a cross-cutting technology which opens up new possibilities on trust and transparency for vulnerable groups.

Local partners

Groningse Kredietbank (GKB) www.gemeente.groningen.nl/gkb CGI Nederland www.cginederland.nl

This Case Study Paper is produced by Evite van Winkoop



Innovative Challenge

Although blockchain has become a bit of a buzzword, it is an innovative technology especially suited for application in environments where many parties wish to exchange small amounts of information in a reliable way within the same ecosystem while permanently guaranteeing the privacy of each party. The Groningse Kredietbank - part of the Groningen municipality - realized that the debt relief ecosystem might benefit greatly from the use of blockchain technology. The municipality partnered with CGI to refine this idea. Over the course of three months, both partners worked according to the Agile and Scrum methods, resulting in a fully functional Proof of Concept (PoC).

From Control

This use of innovation allows the GKB to move away from the current situation of control to the desired situation of coaching. In the current situation, lack of insight in their financial situation often causes citizens to make irresponsible purchases and never pay the bill or pay it late. This type of behaviour leads to arrears, payment reminders and visits from bailiffs, only increasing debt further. Since the GKB is often informed at a late stage about such situations, the debt relief officer generally needs a lot of time to straighten out the administrative facts and the finances. The creditors involved, such as health insurance companies and housing corporations, incur high costs for a debt collection process that was hopeless from the onset.

Solution

After joint analysis, a decision was made to adopt Ethereum as the blockchain platform in a Microsoft Azure cloud environment. Citizens will be able to access the final application via the official Dutch identity management platform DigiD. To ensure maximum privacy, the transactions will be stored using a meaningless Blockchain Citizen ID that does not contain personal information.

External parties will set the requirements, which will be stored in the blockchain via through a standardized link. For citizens, these requirements may be earnings and expenditure. The application includes a dashboard that allows citizens to keep track of their current financial liabilities and plan payments accordingly. External parties will also be able to use a standardized link to check whether their client is a GKB client, helping them avoid a debt collection process with little chance of success.

To Coaching

In the desired situation, creditors will have the opportunity to use an authorized link, i.e. the blockchain application, to check whether their client is also a GKB client, allowing them to avoid unnecessary debt collection costs. In addition, blockchain technology offers GKB clients an overview of current as well as periodic earnings and receivables in a user-friendly application, allowing them to keep track of their income and future expenditure. Receivables that are almost due or overdue will get a colour coding to enhance payment discipline. The GKB debt relief officers will have access to the same information as the clients, leading to a lower administrative burden and leaving them more time to coach their clients in financially sound behaviour.



"We strive towards better support for our citizens and therefore dare to think outside the box. To strengthen our income services for clients, we use experiments, projects and blockchain."

Hans Julsing, managing director Income Services at the Municipality of Groningen



Unique Cooperation

This close cooperation between CGI and the Groningen municipality is unique. The municipality contributed the product owner, an application architect and a security officer to the Agile team. CGI, in turn, assisted the municipality with the functional specification, development and building of the application and the creation of the cloud environment in which it runs.

Taking the blockchain technology from idea to functional product was both new and challenging, forcing us to retrace our steps more than once. It was a joint learning experience, in which all those immediately involved exchanged information, candidly discussed progress and made adjustments where necessary on a weekly basis.

Succes Story

After an intensive period for both parties, the Proof of Concept has demonstrated the feasibility of using blockchain technology in debt relief. The municipality is confident about its feasibility and has approached several parties to participate in a follow-up aimed at creating a fully-fledged blockchain application. The more parties involved, the better the insight of GKB clients in their finances and the easier it is for them to avoid incurring new debts. Reason enough for the Groningen municipality to share the results of this Proof of Concept based on innovative blockchain technology with the Association for Debt Relief and Social Banking (NVVK), in an attempt to achieve a broader, national roll-out.

Debt relief process; benefits for each party

GKB debt relief officers

- Will have more time for coaching due to less red tape
- Will be able to take the desired step from control to coaching
- Will not incur unnecessary legal or other costs

GKB clients

- Will gain better insight into and control over their earnings and expenditure
- Will receive better tailored debt counselling

Creditors

- Will notice improved payment discipline and a decrease in the number of defaulters
- Will reduce administrative costs and save on debt collection charges
- Will be better able to fulfil their civil duties towards citizens

