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Van: TKI Dinalog
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Overleg Nederland SCF en Teaser game SCF

Achtergrond

Eén van de ambities binnen de actielijn Supply Chain Finance (SCF) is om wereldwijd koploper te zijn op het gebied van SCF kennis. Om deze ambitie waar te maken is het van belang om de Nederlandse SCF kennis over te dragen aan het buitenland.

SCF NL

Binnen de SCF Community zit Martijn Siebrand een werkgroep voor die met elkaar spreekt over SCF en Blockchain ontwikkelingen op diverse Universiteiten en bedrijven.

In de groep participeren momenteel de volgende landen: Zwitserland, Italië, Duitsland, Engeland, Frankrijk en Nederland.

We proberen de groep bij elkaar te krijgen, kennis te delen en de individuele projecten vanuit het buitenland te betrekken bij lopende initiatieven.

Bijeenkomst

Tot op heden hebben er twee afspraken plaatsgevonden waarbij wij elkaar via een conference call hebben gesproken. In december stond er een bezoek aan TU Delft Blockchain campus op de planning echter hebben we deze moeten verzetten doordat er maar een beperkt aantal mensen kon participeren.

Verslag

Tijdens de calls bespreken we met welke onderzoeken de betrokken Universiteiten bezig zijn. Met welke bedrijven zij samenwerken op dit vlak en welke ontwikkelingen er in een bepaald land zijn. Hierbij kan gedacht worden aan het uitwisselen van kennis van Fintech bedrijven die zich met Blockchain en SCF bezig houden of bijvoorbeeld initiatieven van overheden. De leden van de SCF Community zijn ook betrokken bij het Blockchain & Logistic project dat recent gelanceerd is (zie persbericht op de volgende pagina).

Dit persbericht is via wereldwijde media gedeeld en wij krijgen veel vragen hoe het mogelijk is met zoveel partijen binnen de logistiek een project op te zetten. Tevens vragen veel partijen of ze nog kunnen participeren en willen ze de details van het onderzoek weten. Reacties komen vanuit Europa maar ook Azië en America. We volgen deze op om te zien of er kansen zijn voor samenwerking en om onze boodschap verder uit te dragen. Onder het persbericht staan een aantal reacties verzameld.

Logistics sector to make concrete progress using blockchain technology

15 November 2016, Breda

In a major TKI Dinalog project, TU Delft, ABN AMRO, the SCF Community, the Port of Rotterdam, Royal FloraHolland, SmartPort and 10 other partners will set to work using blockchain technology in the logistics sector. The total scale of the project amounts to €2.2 million. This is the first time anywhere in the world that a concrete blockchain project of this standard has been launched with various partners in the logistics chain.

Blockchain technology has been on the rise all around the world in recent years. The technology, which uses an open network of databases and functions as a public, digital, distributed 'ledger', has a wide range of applications. In the coming two years, the project will focus on developing the contours of a new information infrastructure based on block chain technology, uniting operational information, financial flows and contracts.

Three concrete use cases

In this project, the use of blockchain technology for logistics purposes will be concretely set up, tested and live tested. Johan Pouwelse, Project Manager and Associate Professor at TU Delft, confirms this point. 'This project is not about discussing potential, we are actually going to put words into action'. The final result of the project is centred on delivering three concrete Use Cases: chain financing, supply financing and circular economics. TU Delft will concentrate on creating an open-source core business infrastructure that will make the blockchain suitable for mission critical usage.

Improved collaboration throughout the chain

Martijn Siebrand, Supply Chain Finance Programme Manager, identifies a wealth of opportunities for this project. 'If you ask me, using blockchain technology for the financial routes in logistics is just the beginning. I see this as a stepping stone towards a logistics sector with improved collaboration throughout the entire chain.'

Partners

The 16-partner consortium features a balanced blend of various parties in the chain. TU Delft, Windesheim, the SCF Community, TNO, Centric, Exact, ABN AMRO, SmartPort, Royal FloraHolland, the Port of Rotterdam, FBBasic & Cirmar, BeScope Solutions, NBK, Innopay, and TransFollow together provide the force to drive this project to success. This project is complementary to the public-private initiative to establish a national research institute for Blockchain (working title: Blockchain Core Competence Center), initiated by the Ministry of Economic Affairs.

Press information:

About TKI Dinalog:

The Topconsortium voor Kennis en Innovatie Dinalog ('Top Consortium for Knowledge and Innovation', formerly TKI Logistiek) is focused on structurally stimulating and realising public-private collaboration in the field of research in the Logistics Top Sector. This concerns innovation through fundamental and applied research, alongside the valorisation and dissemination of expertise, experiences and results. United in the Topconsortium voor Kennis en Innovatie (TKI), Dinalog, the Netherlands Organisation for Scientific Research (NWO) and TNO collaborate to boost innovation in the Logistics Top Sector.

www.dinalog.nl

Contact:

[Martijn Siebrand](#), Supply Chain Finance Programme Manager at TKI Dinalog
[Johan Pouwelse](#), Project Manager and Associate Professor at TU Delft,
<http://staff.tudelft.nl/J.A.Pouwelse/>, <http://www.blockchain-lab.org/>

More information: www.dinalog.nl/blockchain



Teaser game

Met medewerking vanuit de Topsector logistiek is er een game ontwikkeld om SCF uit te dragen. Deze wordt wereldwijd gebruikt en heeft een zeer groot bereik. Deze game is ook input voor de Global Student Challenge die elk jaar alleen maar groter en groter wordt.

De huidige game is dusdanig uitgebreid dat het gewenst is om deze twee dagen achter elkaar te spelen. Wanneer wij op congressen met presentatie van de Nederlandse SCF expertise inzage willen geven welke impact SCF heeft op de bedrijfsvoering en met welke onderdelen van een bedrijf SCF allemaal raakvlakken heeft dan is de huidige game te complex. Doel van deze actie is om een game te ontwikkelen die in 1 uur de highlights toelicht van SCF in de praktijk.

De game wordt momenteel gefinaliseerd:

- 4 dilemma's zijn uitgeprogrammeerd in een werkende HTML tool – zie schermen hieronder
- De tool wordt nog uitgebreid met filmpjes om de dilemma's in te leiden, deze zullen worden geïntegreerd in het geheel.

Opbouw van de demonstratie game

De demonstratie game is gebouwd met een algemene inleiding en vier dilemma's, die elk bestaand uit een probleem definitie, taak, informatie en feedback.

De dilemma's hebben onderstaande thema's:

1. Credit limit
2. Inco terms
3. Increase in demand
4. Credit limit on supplier side

General introduction

- What is Supply Chain Finance and The Cool Connection?
 - o learning tool
 - o four roles
 - purchasing
 - sales
 - supply chain
 - finance
- Aim of this teaser game
- setup
 - o dilemmas
 - o feedback

Dilemma 1

- problem definition
 - o credit limit
 - o potential demand
- task
 - o choice
 - payment term 7 → 4
 - credit limit + 80%
 - supplier financing programme
 - o prediction
 - financing needs
 - sales price
 - insurance costs

- information
 - o credit limit/position
 - o terms in choices and predictions (payment term, financing needs etc.)

Feedback 1

- consequences of choice
 - o income statement
 - information about income statement
 - o explanation of consequences of choice
- comparison between prediction and reality

Dilemma 2

- Problem definition
 - o Inc term
 - o Credit limit
 - o payment instrument
 - o what can cause bad alignment
- task
 - o Point out bad alignment
 - o hint: has to do with too much insurance of too high credit position
 - o graph of credit position
- info
 - o inco terms
 - o payment instruments
 - o buns 'n braids information

Feedback 2

- Which answers were right
- Which answers were incorrect
- Which correct answers were skipped
- Why are the correct answers correct
 - o text explanation
 - o graph of credit position

Dilemma 3

- problem definition
 - o increase in demand
 - o new supply chain decisions
- task
 - o choose production interval
 - o choose safety stock
 - o minimize costs
 - o reach a given service level
- information
 - o production interval
 - o safety stock
 - o demand curves
 - o average demand

feedback 3

- output variables
- satisfy the service level restriction?
- costs optimal?

dilemma 4

- problem definition
 - o credit limit on the supplier side
- task
 - o predict the negative effects of restricting credit limit
 - o make a choice to avoid these negative effects
- information
 - o order postponement
 - o earlier payment
 - o agreements with quickpack
 - o graph of credit position

Feedback 4

- prediction of negative effects vs reality
 - o right answers
 - o explanation
- consequences of the choice
 - o income statement
 - o explanation of the observed effects

Opmaak nu nog in Cool Connection kleuren, deze wordt voor finale versie min kleur Holland Logistics opgeleverd.

Scherm 1



Introduction



Welcome to the cool connection teasergame. You will play a simplified version of the actual game. In this teasergame you will be faced with much of the same dilemma's you will face in the real game, but here they are isolated to make it more accesible.

Choose a dilemma in the orange bar at the top

Scherm 2



Dilemma 1

The Cool Connection is not fully realising the potential demand of their biggest customer, Giga-Mart. Giga-Mart is restricted by their credit limit to The Cool Connection. How to solve this issue?

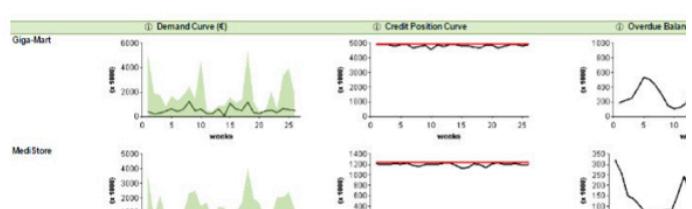
You can choose to agree with Giga-Mart that they pay earlier, to increase the credit limit with 80% or to accept supplier financing programme. Base your decision on the information provided below:

Payment term down from 7 weeks to 4 weeks

Increase credit limit by 80%

Accept supplier financing programme

Customer	Potential Demand (€)	Total Demand (€)	Sales bonus and penalties (€)	Average Demand (€)	Distribution Cost (€)	Order Value (€)	Days Sales Outstanding (days)	Frequency of Overdue Payments (1)	Overdue Payments (%)	Credit
Giga-Mart	42.332.290	13.972.378	385	336.801	416.047	147.370	32.0	31	39.4%	43
Medi-Store	37.625.216	4.588.149	2.468	176.803	131.315	59.206	33.0	36	57.5%	12
Buns 'n' Braids	14.968.696	14.968.696	2.022	576.488	503.581	161.342	26.0	0	0.0%	11
Chique Fantastique	10.055.815	9.941.121	730	382.452	0	107.238	7.0	0	0.0%	11
Samantha's	354.639	331.360	210	12.752	4.100	9.888	1.0	0	0.0%	
Omorose	5.689.095	5.689.095	1.422	218.810	47.315	68.878	26.0	0	0.0%	



Specifications

Name	Giga-Mart
Number of stores	1000
Market share	15.0 %
Size	Large
Country	Germany

Scherm 3



Dilemma 1

The Cool Connection is not fully realising the potential demand of their biggest customer, Giga-Mart. Giga-Mart is restricted by their credit limit to The Cool Connection. How to solve this issue?

You can choose to agree with Giga-Mart that they pay earlier, to increase the credit limit with 80% or to accept supplier financing programme. Base your decision on the information provided below.

- Payment term down from 7 weeks to 4 weeks
- Increase credit limit by 80%
- Accept supplier financing programme



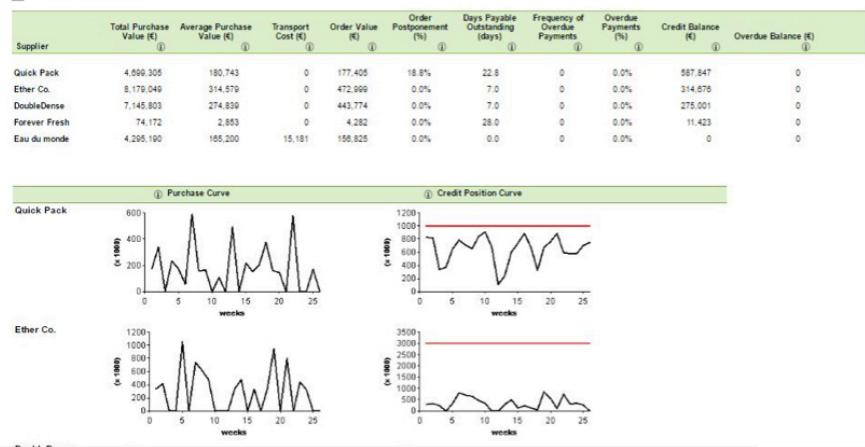
Scherm 4



Dilemma 4

From the info below you can see what influence a restricting credit limit on the supplier side can have on The Cool Connection. We are focusing on the supplier of packaging, Quickpack. Quickpack is The Cool Connection's supplier of bottles and jars. Check the options that can follow from a restricting credit limit.

- Increase in emergency loans
- Purchasing penalties
- Earlier payments
- Late deliveries



Bijlage
Internationale uitstraling naar aanleiding van persbericht Nederlands Blockchain project

Hi!

I caught the story on you and your consortium from the news, <http://www.consultancy.uk/news/12867/consortium-launches-blockchain-technology-initiative-for-logistics>. Congratulations, very exciting stuff!

I also wanted to take this opportunity to introduce myself and our consortium, working on the very same problem and with an almost exact same approach!

We are a EU funded, three-year project from Baltic countries of Finland, Sweden, Estonia and Latvia. Our project has been in preparation and planning for the past two years, and we finally got the funding approved and the project officially opened on September 1st this year. We are focusing not so much on the trade finances but the actual movement of intermodal containers and shipments, and are using a blockchain to collect that information from all the companies' data management systems along the various supply chains in Northern Europe. There is some more info on us in the site <https://smartlog.kinno.fi/>.

We have also been featured in the news,

http://blogs.forrester.com/martha_bennett/16-11-02-blockchain_and_iot_not_ready_for_primetime_but_nows_the_time_to_start

<http://cloudtweaks.com/2016/10/blockchain-and-the-iot/>

I would love an opportunity to have a chat with you and deepen my understanding of your approach, and perhaps try to find a common ground we could use in furthering collaboration?

Please send my best regards and congratulations to your team and the consortium – the logistics/blockchain space has started to fill up this year (there are startups in Bangalore, Copenhagen and Sydney which I am aware of) and we are amongst the very first to take a crack at this thing!

Mika Lammi, Head of IoT Business Development

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*Kouvolan seudun kehittämisyhtiö – Yrityksiä varten
Development Company of Kouvola Region – Mission Possible*

Hello Mr. Siebrand,

We are an Internet startup based in Trivandrum, India (www.kottackal.org). We have a pipeline of interesting Internet Products around Consumer Internet.

We have a Blockchain Technology practice whereby we are engaged in Blockchain projects for customers.

We are involved in a few pilot projects, which are at different stages of development. Some examples are below:

- 1. Smart contract based Buy circles for a UK firm*
- 2. IoT on the Blockchain using hardware devices for decentralization on the Industrial Internet.*
- 3. Supply Chain implementation on Blockchain connecting suppliers and consumers.*

We are currently exploring Solidity Ethereum as a candidate for the Blockchain.

I was wondering whether TKI Dinalog project and us could collaborate in the Blockchain based Projects. We are currently having an internal project whereby we are trying to streamline cargo transportation documentation & process flow using Blockchain.

We could explore options whereby we can work together in

- 1. Articulation of Usecases*
- 2. Demonstration of Pilot projects*
- 3. New Product Development*

Please let us know if there is interest.

Best Regards,

Jacob

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Jacob Ninan

Co-Founder + Director, Kottackal Business Solutions Pvt. Ltd.

SBC - 06, Thejaswini, Technopark, Trivandrum - 695 581, Kerala, India.

Phone : 91-9447763144, Email: director@kottackal.org, www.kottackal.org

Hi,

This is Red from China, 8btc.

I found your contact info via the following page:

<http://www.tudelft.nl/en/current/latest-news/article/detail/logistieke-sector-concreet-aan-de-slag-met-blockchain-technologie/>

I am writing to establish media contact and would like to invite you to publish blockchain-related news on our English news website.

I am particular interested in the use case that was mentioned: "chain financing, supply financing and circular economics."

Look foward to your reply.

P.S Here is a brief intro of 8btc:

8btc is #1 Chinese cryptos news outlets and community since 2011, covering mainland China, Taiwan and Hongkong. Check out 8btc article on bitcoinmagazine:

<http://bitcoinmagazine.com/7827/the-pirates-of-8btc-implement-the-idea-of-distributed-autonomous-corporations/>

Currently we have 4 products and more on the pipeline:

1. News outlets: <http://www.8btc.com/>

2. Forum: <http://8btc.com/>

3. Blockchain explorer: <http://www.blockmeta.com/>

4. Crowdfunding: <https://bizhongchou.com/>

Best regards,

Red Li

twitter: redtheminer

skype: gzreddragon

Tel: +86057186093123

Hello Martijn,

Can I ask for more information about the use cases and what particular blockchain technology you are going to use.

Best regards,

Ivan Klianev

Managing Director

Transactum Pty Ltd

Sydney, Australia

On Oct 8, Ranganathan Krishnan said the following:

Hi Martijn, I will be in Amsterdam for the Supply Chain Finance Forum on Dec 8. Look forward to meeting you then. I can schedule time to meet some of your partners in the Logistics Research project if a POC trial or research project is of interest. I can make myself available on Dec 7th and 9th for meetings in Amsterdam or other nearby cities. Best, Ranga