APPENDICES

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BLOCKCHAIN, EXTRA INFO

How does blockchain work?

As mentioned in Chapter 2, a blockchain is a ledger of all validated transactions distributed among all of its participants. The ledger consists out of a chain of blocks (hence the term blockchain). These blocks are time stamped and contain information about all transactions within that block. Each block is linked to the previous block and the following block, thus the chain of blocks is in chronological order. Apart from a timestamp, each block has a unique digital fingerprint known as a hash. This hash is produced through a cryptographic function and is unique for every block. Each block is connected to the previous block by the hash, in essence using it as a point of reference.

In figure 34, an example of a blockchain transaction is shown. As can be seen, the network has multiple functions.

First, the network needs to determine whether the sender actually has sufficient funds to conduct the transaction. To do so, the network checks the entire transaction history in the ledger for the sender's account address to see whether sufficient funds are in place. Secondly, if sufficient funds are in place, the network has to prevent the sender from being able to send the same funds to another receiver simultaneously (the aforementioned double spending problem). This is done through the consensus algorithm.

There are different consensus mechanism in existence. The consensus algorithm for Bitcoin is called Proof-of-Work (PoW). This was the first one, but as the overall development of blockchain technology progresses, other consensus mechanisms have been developed. Examples are Proof-of-Stake (PoS), Delegated Proof-of-Stake (DPOS), Proof-of-Burn (PoB) etc.

The nodes validate the transaction and the user's The requested transaction is A verified transaction can involve a transaction. broadcast to a peer-to-peer cryptocurrency and other digital network consisting of nodes tokens, records, or other information The new block is then added to Once verified, the transaction is The transaction is complete. the existing blockchain, in a way combined with other transactions to create a new block of data

Figure 34. Schematic representation of a transaction on a blockchain, showing the multiple different functions (taken from PwC, 2018).

In figure 35, a Bitcoin transaction between Rob and Laura is shown. A distinction is made between the user and system sides of the transaction. As can be seen, the user interacts with a cryptocurrency wallet (through an interface) in which his funds are located. In order to transfer the Bitcoin to Laura, Rob has to enter Laura's Bitcoin wallet address, also known as the public key. A public key can best be compared to an email address as it represents the destination to which the Bitcoin are sent.

After requesting the transaction the system essentially takes over. First, the system uses Rob's private key to ensure the Bitcoin he requests to send are actually his property. A private key is in essence a digital signature, by which the sender (Rob in this case) can prove that he is the owner of the Bitcoin.

As Bitcoin utilizes the Proof-of-Work consensus mechanism, the blocks need to be mined by calculating the hash value of the prospect block. As this is in essence a very complex math problem, it takes some pretty hefty computing power to calculate this value. Once a miner has determined the solution for the math problem (i.e. has calculated the hash value he/she thinks is correct), the solution is shared with the rest of the network to be validated.

As soon as the other participants in the network have agreed (i.e. reached consensus) on the proposed solution being correct, the block is added to the blockchain and the transaction is confirmed. Once added to the blockchain, the transaction is locked.

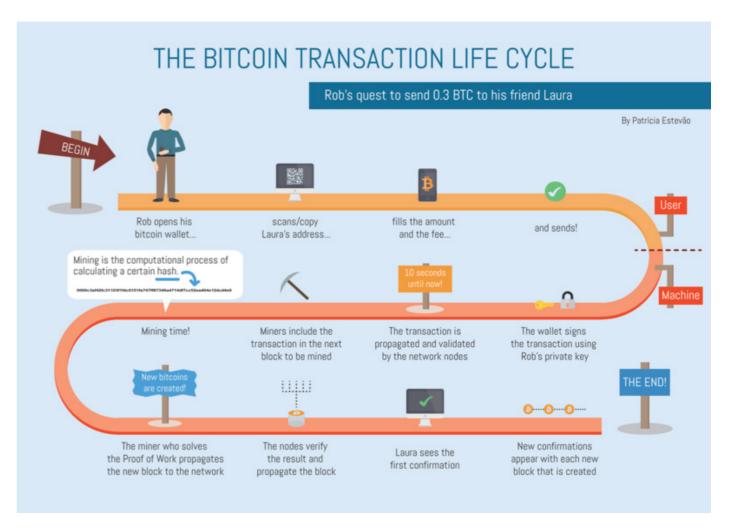


Figure 35. Example of a Bitcoin transaction between Rob and Laura.

Application areas

As mentioned earlier in this report, blockchain's real-world use cases are actively being explored among a wide range of industries. Whereas Bitcoin sparked a widespread interest about blockchain's potential for reshaping financial systems, the interest has grown much wider in recent times. Blockchain's potential implication areas are actively being explored among a wide range of industries.

In figure 36, an overview is given of the main overarching themes in blockchain applications as presented by Elsden et al. (2018). As there are no product archetypes yet for blockchain applications, many companies are working on multiple areas at the same time. For example, most companies are also working on the underlying infrastructure or payment systems within their network, due to the fact that they disagree with the existing blockchain products out there. As the technology progresses, it is not unreasonable to assume more classes can be distinguished in the future.

Application	Description	Examples
Underlying Infrastructure	Underlying protocols, decentralized application ecosystems, IoT architecture.	Ethereum Blockstack, IoTA
Currency	Payment services, internal currencies and utility tokens.	Bitcoin, Dash, Kin
Financial Services	Asset management, investment trading, and crowdfunding.	Ripple OpenLedger Swarmfund
Proof-as-a- service	Notaries, registers and attestation, supply-chain management.	Blocknotary Chronicled, Everledger
Property and Ownership	Digital rights management, copyright and ticketing services.	Creative Chain Blockphase Aventus
Identity Management	Self-sovereign digital identity, and authentication.	Civic, Blockchain Helix, Bitnation
Governance	Voting services, distributed autonomous organisations (DAO's).	Followmyvote, Backfeed Crowdjury

Figure 36. The seven different blockchain applications as identified by Elsden et al. (2018).

APPENDIX C

SOFTWARE DEVELOPMENT, EXTRA INFO

Lean Software Development

Lean

In their book Lean Software Development: An Agile Toolkit, Mary and Tom Poppendieck (2003) provide software professionals with the required way of thinking and principles to adopt the lean software development approach. Lean software development is based on lean manufacturing, which was in essence an adaptation of Toyota's Production System (Holweg, 2007). Lean manufacturing in concrete is an approach to determine what adds value by removing all other factors that do not (Womack, Womack, Jones & Roos, 1990).

According to Poppendieck & Poppendieck (2003), lean software development builds on and extends the principles of agile, as presented in the Manifesto for Agile Software Development (Beck et al., 2001).

Poppendieck & Poppendieck (2003) identify seven distinct principles for lean software development. These are:

- 1. Eliminate waste: eliminate anything that does not add value to the product for the customer.
- 2. Amplify learning: Developing is discovering.
- 3. Decide as late as possible: try to make decisions when they are based on facts, rather than speculation.
- 4. Deliver as fast as possible: fast development improves the reliability of feedback.
- 5. Empower the team: the teams are the experts and should be in charge of decisions
- 6. Build integrity in: the product's components should be cohesive and the product should remain useful over time.
- 7. See the whole: expertise in diverse areas is required, otherwise suboptimization will take place.

Lean vs. agile

Lean and agile are often used both or combined into one approach. Although there are a lot of similarities between agile and lean, there are some differences.

In short, the goal of lean is to eliminate waste and improve the overall operational efficiency (e.g. getting rid of repetitive tasks), as it originates from manufacturing. Agile, on the other hand, focuses mainly on executing tasks in a short amount of time with continuous customer involvement and allow for quick changes (Beck et al., 2001; Poppendieck & Poppendieck, 2003). Scott Ambler, former Chief Methodologist IT at IBM in charge of developing the Disciplined Agile Delivery (DAD) framework, argues that lean thinking enables the scaling of agile (Ambler, 2010).

APPENDIX D

COMPETITOR OVERVIEW

Below, an overview is provided of the different direct and indirect competitors that were identified and studied for the competitor analysis.

DIRECT COMPETITORS

- LAB15
- KrypC
- TYMLEZ
- Kryha
- Blockdata
- Xurux
- Synechron
- Axveco
- BASConsultancy
- Unchain.io

INDIRECT COMPETITORS

- IBM
- Deloitte
- KPMG
- PwC
- Cognizant
- Capgemini
- Berenschot
- Accenture
- Centric
- CryptoAssets
- Infloat
- Nyenrode Business School
- Computrain
- IT training group
- IIR

SWOT ANALYSIS

Here, background information and additional explanation of the conducted SWOT analysis can be found. The findings are summarised into one visual which is integrated in the main report.

SWOT

3.1 Strengths

- 1. Strong established network: GoBlock's founders have gotten a lot of media attention from the start and the company is quite well known. Their business network is elaborate and the contact with their previous and current customers is close. Strong relations.
- 2. Development resources are well established: Gapstars has been in existence for over 3 years now, and has been growing, having doubled in size last year (Gapstars, 2018). With these resources being available to GoBlock and these people already being trained for blockchain development, they have the supply to meet the demand. Moreover, the acquisition of new blockchain talent is accomplished quicker and cheaper compared to their competitors in the Dutch market.
- 3. Scaling: GoBlock's development resources (Gapstars' scrum teams) are specialized in facilitating scaling and growth for fast-growing tech companies.

3.2 Weaknesses

- 1. Technology is immature: there are no widely acknowledged product/service systems archetypes yet. There are some systems (e.g. Bitcoin, Ethereum, NEM etc.) that are considered to be good, but many different system architectures and protocols are still being created.
- 2. Location: as Gapstars, the development resource provider of GoBlock, is an offshore company with all developers currently located in Sri Lanka, this could influence clients' willingness to work with GoBlock.

- Some companies want on-site support, which would bring additional complexities and costs for GoBlock.
- 3. No structure: as concluded from earlier analyses, GoBlock is missing a structured approach for their consulting services. This currently results in inefficient projects and suboptimal outcomes.
- 4. Company size: relatively small company. GoBlock's resources are limited as they are a small startup, they can therefore not serve all customers.

3.3 Opportunities

- 1. Fast growing market: major demand for blockchain expertise, most significantly for blockchain trained developers.
- 2. Publicity: Being part of a successful project, given the newness of the industry, could have a significant positive effect on publicity for GoBlock. As media has picked up on blockchain technology since last year, a milestone project could put GoBlock on the map.
- 3. Design Thinking: All other (direct) competitors focus on the technology (some also on new business models), but none emphasize the importance of the user in their proposition. Applying a user-centered perspective to blockchain consulting could help GoBlock distinguish themselves from the competition as they take into account the three pillars of Design Thinking: technology, business and human.

3.4 Threats

- 1. Regulations in crypto industry: the legal framework that cryptocurrency projects operate in is still a grey area, as local and global governments have not yet dared to take a hard stance. Their attitude towards cryptocurrencies stays unclear. Changes in attitude/new laws can have tremendous influence on the market.
- 2. Funding: as the technology is so new, its exact

benefits are difficult to determine upfront. Hence, funding for blockchain projects is an issue as the future value of the innovation is hard to estimate. This prevents projects from going into development or prevents required scaling of development.

3. Bad publicity: The blockchain industry and specifically the cryptocurrency industry has been characterised by some large scam projects. As GoBlock, you do not want to get involved in a project that turns out to be scam, which could be fatal for their reputation.

APPENDIX F

CREATIVE SESSION HANDOUT

COLLABORATIVE IDEATION

IDE CREATIVE SESSION

This graduation project is being conducted at and for GoBlock. GoBlock is a blockchain consulting startup that strives to become a blockchain solutions provider. This means they do not just give advice but are also the technical partner when it comes to developing the product.

Key insights from analysis

- Context of this solution is after the exploration phase. Customers approach GoBlock that already have an idea for a blockchain use case and want it to be worked out and realised.
- In previous customer projects, GoBlock suffered from an overall lack of structure in their consulting process. Process was rather improvised in nature, leading to stagnation of projects.
- Most projects GoBlock conducted stranded before in or before the conceptualisation stage meaning they never got to actually developing the product. This had multiple reasons, the most important of which are:
 - 1. Blockchain was used for a use case that was not ideal. The technology was being pushed as answer to a question that was yet to be asked.
 - 2. In realising the use case and creating concept proposals, not all stakeholders would be provided with strategic value (i.e. no significant benefit) so they did not see a reason why they should develop the new product. So: lack of value for all individual stakeholders.
 - 3. The customer simply did not understand what it would exactly bring them. They did not understand the value that they would gain from having the product developed.
- Design thinking is well suited for the earlier phases and agile is well suited for the later phases (development). These two methodologies fit each other well.
- The main challenge for GoBlock is to ensure that the customer project proceeds into the development stage, as that is where their main strength lies and the main revenue will be made.
- It was found that in order for projects to go into development, it is imperative a valuable use case is present and the value is clear. Hence, it is proposed to GoBlock to implement a way of validating the customer's blockchain before creating concept proposals.

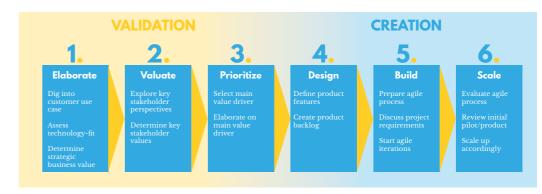
Design goal

Offer GoBlock a solution to help them structure their blockchain consulting process, which can be used to validate a customer's blockchain use case and to allow for a smooth transition into its development.

Design

Process outline is already designed. The new process structure of GoBlock based upon literature, expert interviews and their current capabilities. This can be seen below.

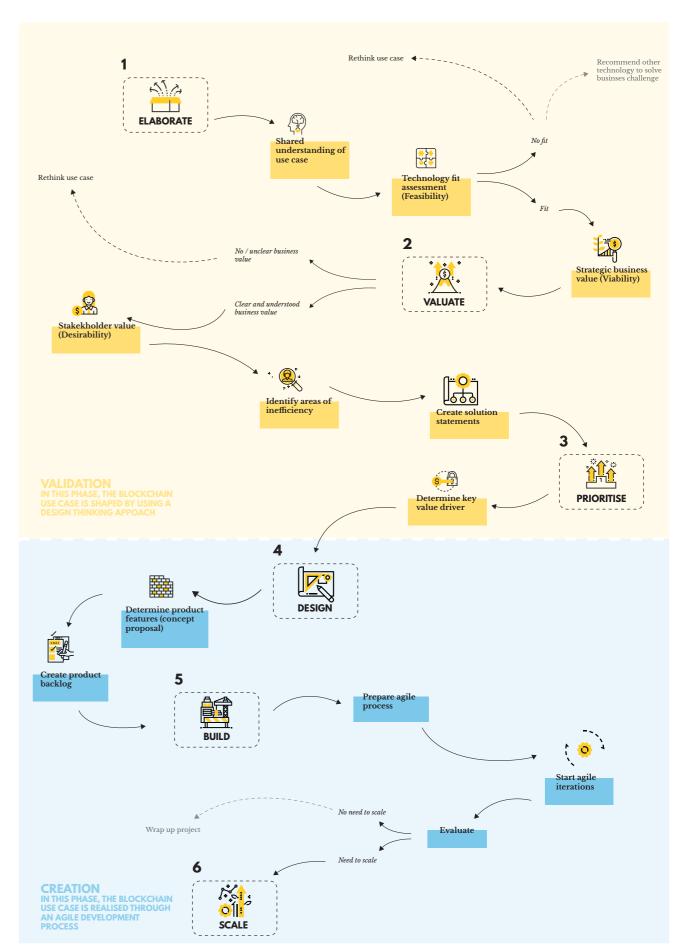
The process can be roughly divided into two main phases: Validation and Creation. The context of this session is the first phase: Validation.



CREATIVE SESSION

APPENDIX H

PROCESS FRAMEWORK



APPENDIX I WORKBOOK

On the following pages, the workbook for the workshop participants is shown.

VALIDATING YOUR BLOCKCHAIN USE CASE

A collaborative way of determining the strategic value of your blockchain ambition



1. MINIMUM VIABLE KNOWLEDGE (MVK)



The goal of this step is to figure out the bits and bobs of your blockchain ambitions. You are divided into teams to discuss the 6 exploratory questions shown below. These questions are aimed at sparking your thoughts about the use case and allowing for a meaningful discussion between workshop participants. In the end each team will present their answers and we will discuss. The goal of this step is to reach a shared understanding of the use case.

1. Describe the specific business challenge you are wanting to tackle in less than 30 words.	4. Describe the main steps of the current workflow of the asset moving through the business network.
2. How is this challenge currently solved?	5. What are the expected benefits?
3. Describe the transactions in the business network.	6. What are the needs for integration with existing
What are the assets, information and conditions?	systems?

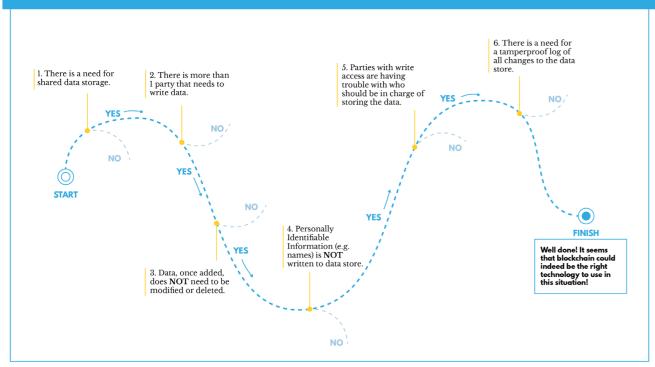
7. Which people and organisations are involved in the business network?
Draw all stakeholders and their role surrounding your blockchain use case.
Add as many as you can identify and draw links between them.



2. IS BLOCKCHAIN THE RIGHT TOOL FOR THE JOB?



In this step you and your team will walk through the route shown below. This route contains multiple yes/no questions aimed at determining whether or not blockchain is actually the right tool for the job ahead! Discuss each of the questions with your team and draw the route according to your answers. Where does your path lead? In the end we will discuss each team's result and see whether blockchain is the right technology for the given problem.

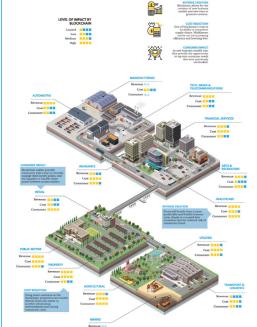




3. HOW CAN IT BENEFIT YOUR BUSINESS?



In this step, your team will think of why exactly the blockchain use case would benefit your business. A recent study from McKinsey (McKinsey, 2018) showed that in this stage, there are three main strategic value benefits that can be identified for business among different industries. Below, this is shown in an infographic. Take a look at this infographic with your team and then answer the three questions on the following page.



1. Can you think of a new business model for your business or a new way to generate revenue by realising this blockchain use case?

2. Can you think of ways how this use case can help you reduce costs?

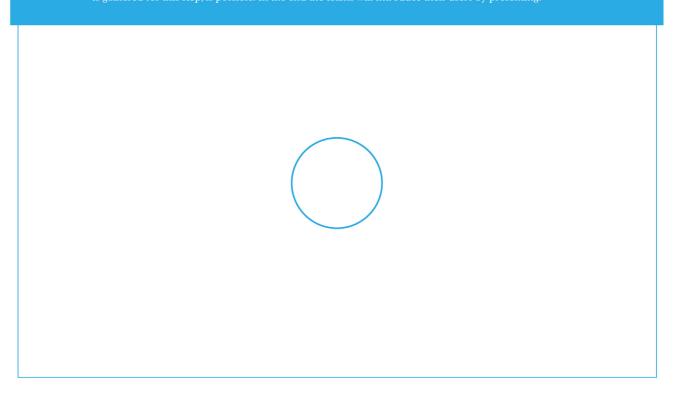
3. Can you think of ways how you can meet previously unmet consumer needs?



4. MEET YOUR USER



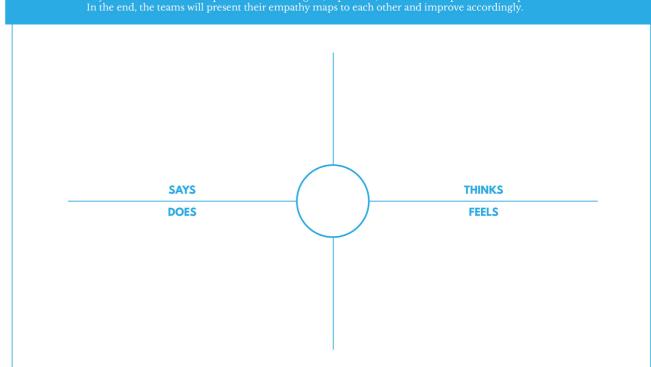
In this step, you will create a persona. Personas are created for each of the users of the to be developed use case. These can be drawn from the stakeholder map that was created earlier. A persona describes the main characteristics of the user, his/her job, experience, personal traits and more. Ideally real user input is gathered for this step, if possible. In the end the teams will introduce their users by presenting.



5. EMPATHISE WITH YOUR USER



After you have created the persona and got to know your user, it is time to better understand them. The quadrant shown below is divided into five areas. Place your user in the middle and then describe what he/she says, does, thinks and feels in the designated areas. This way, you will gain a deeper understanding of your user and what is important for them. Again, if possible, use real user input for this step.



	6. HELP YOUR USER In this step, you and your team will take a deeper dive into the user's thoughts and feelings that they experience as they currently fulfill their job in order to identify areas of improvement. First, identify the major tasks that are required for your user to fulfill their job (within the use case scope). Then, use the insights you gained from the Empathy Map to describe what your user is doing, thinking and feeling while performing the tasks. After the 20 mins the teams will present the scenario maps to gain feedback.	20 min
PHASES		
DOING		
THINKING		
FEELING		

(D)	7. 3-W STATEMENTS (M	VHO, WHAT, WHY?)		
	which you define a clear statem solution that will be delivered (created in the previous step, you select a fewent. This statement contains three main elewhat) and in what way they will be happy we tatement(s) to improve them incrementally	ements: your user (who), the ith it (why). Make sure to	20 min
	WHO	WHAT	WHY	

8. STORYBOARDING

0 min

After formulating the statements in step 7, the team then discusses the statements and selects the most important area for improvement one to focus on. You then storyboard the selected statement in the storyboard template below. Make sure to clarify who your user is, what he/she will get and why it benefits them . After this step, the teams will present their storyboards to each other and discuss feedback. The chosen focus area and statement will provide the input for the concept creation.

1.	2.	3.	
4.	5.	6.	

APPENDIX J

FACILITATOR GUIDE

Here, the developed facilitator guide for GoBlock can be found.

SESSION 1 OF 2

GoBlock

FACILITATOR GUIDE

In front of you is the facilitator guide for GoBlock's validation workshop. The goal of this workshop is to sit with a customer team and discuss their use case to ensure it is a valid and valuable use case. This document is here to guide you through the different steps of the workshops in order to provide you with a structured and methodological approach and to maximize the workshop's output.

This is the first of two sessions. The guide for the second session can be found on the next page. The goal of this first session is to assess the technology fit and business value of the customer's blockchain use case. The second session will focus on the

WORKSHOP SETUP

10 min

- Introduce yourself and welcome participants
- Explain the goal of today's workshop
- Explain workshop structure and schedule
- · Hand out workbooks and ensure there are enough materials (sticky notes, markers etc.)
- Questions

MINIMUM VIABLE KNOWLEDGE

60 - 90 min

- Introduce first exercise: Explain the importance of this step, why it is part of the workshop and what the participants need to do.
- Show example of filled in exercise to help participants get underway.
- Actively help participants with answering the MVK questions by probing questions. Ensure
 equal participant engagement.
- The goal of this step is to spark a discussion between customer stakeholders about the exact definition of the use case.

TECHNOLOGY PERSPECTIVE

30 - 60 min

- Introduce second exercise: Explain the importance of this step, why it is part of the workshop and what the participants need to do.
- Show example of filled in exercise to help participants get underway.
- Together with the blockchain expert, assist participants in understanding the questions at hand. Actively observe if revisiting of use case is required. Go back to step 1 if this is the case.
- The goal of this step is to ensure blockchain as a technology makes sense to use with the use case the customer has in mind. Allow for discussion to take place to reach consensus.

BUSINESS PERSPECTIVE

60 - 90 min

- Introduce third exercise: Explain the importance of this step, why it is part of the workshop and what the participants need to do.
- Show keynotes about 'Blockchain's Strategic Value' and discuss infographic.
- Exemplify customer's industry by explaining the value of existing use cases in similar companies/industries. Establish that participants understand basics of blockchain's strategic business value.
- Explain questions to participants and actively guide the discussion to reach necessary depth.

SESSION 1 WRAP-UP

10 min

- Confirm with customers that they understood different steps taken today.
- Ensure all thoughts and findings have been documented for further development.
- Recap session and discuss main findings and results.
- Evaluate session with participants (what went wel, what can be improved?)
- Explain the goal and requirements of the second session.

SESSION 2 OF 2

FACILITATOR GUIDE



This is the second session of the Validation Workshop. In this session, the participants will be focussed on familiarising with key users of their blockchain use case. This is done to determine which attributes of a solution deliver the most value. These attributes will be the first elements of the solution to be developed.

This is the second of two sessions. Please note that it is highly important for this session that the participants know what the goal of this workshop is before starting. Also, this session should not be held if there are no real user insights available. This can be achieved either through the presence of users at the workshop, or user interviews that were conducted prior.

WORKSHOP SETUP

10 min

- Introduce yourself and welcome participants
- Recap last session and explain the goal of today's workshop. Ensure presence of user insights.
- Explain workshop structure and schedule. Explain why Design Thinking is used today.
- Hand out workbooks and ensure there are enough materials (sticky notes, markers etc.)
- Ouestions

USER PERSPECTIVE 1

20 - 60 min

- Introduce Persona: Explain what a Persona is, why it is used and how it should be created.
- Show example of a Persona to ensure participant understanding and to get them familiar with it.
- The participants will work together on one user at a time, using the user insights they will draft the persona. When this is done they will move on to the next step. After all exercises are done for the user, the participants will do the same for the other key users.
- Actively guide the participants on how to use Design Thinking tools to familiarize them.

USER PERSPECTIVE 2

30 - 90 min

- Introduce Empathy Map: Explain what an Empathy Map is, why it is used and how it should be created. It is created based on the Persona of the previous step.
- Show example of an Empathy Map to ensure participant understanding and to get them familiar with it.
- Actively guide the participants on how to use Design Thinking tools to familiarize them.
- Participants might struggle with the Empathy Map, as it is also about what a user feels and thinks. Probe questions to reach depth of discussion.

USER PERSPECTIVE 3

20 - 60 min

- Introduce Scenario Map: Explain what a Scenario Map is, why it is used and how it should be created. It is created based on the Empathy Map of the previous step.
- Show example of a Scenario Map to ensure participant understanding and to get them familiar
 with it.
- · Actively guide the participants on how to use Design Thinking tools to familiarize them.
- Active involvement from both facilitator and blockchain expert in this step. It is important that the phases of the Scenario correspond with the Workflow described in the first session.

LUNCH BREAK

60 min



Here, the explanation of the use case for the student test can be found.



3-W STATEMENTS 20 - 60 min

- Introduce 3-W statements. Explain that Scenario Map was used to identify problem areas for that specific user, and that this step focuses on solving those problems.
- Active facilitation and guidance of participants to help them engage in solution-based thinking after establishing problems. Blockchain expert is also involved to help create solution statements.
- Have participants iterate on statements to refine them.
- Participants choose the priority statement based on what will bring most value to that user.

STORYBOARDING 20 - 60 min

- Introduce Storyboard exercise. Explain what a Storyboard is and what it is used for. Visualising thoughts helps with understanding the interaction and communicating the findings.
- Show example of Storyboard to participants to give them an idea of what to draw.
- Allow for discussion to take place on how blockchain can deliver the value to the customer. Ensure involvement from blockchain expert to probe and let participants discuss.
- It should not become a technical discussion. All stkaeholders must understand each other and agree.

WORKSHOP WRAP-UP 10 min

- Confirm with customers that they understood steps taken today.
- Ensure all thoughts and findings have been documented for further development.
- Recap session and discuss main findings and results.
- Evaluate session with participants (what went wel, what can be improved?)
- Explain and discuss post-workshop steps and future of project.



CONTENT

- 1. PROJECT
- 2. SOLUTION: CONSULTING PROCESS FRAMEWORK
- 3. VALIDATION WORKSHOP
- 4. BLOCKCHAIN USE CASE
- 5. TODAY'S EXERCISE



PROJECT GOAL

Create a new process for GoBlock's new GoBlock LABS proposition to allow their consulting projects to transition into the development phase in order to become a blockchain solutions provider.



MAIN INSIGHTS

Three main challenges hindering engagement of development phase:



TECHNOLOGY MISFIT

Blockchain is often offered as answer to a question yet to be asked. Existing technologies are simply more efficient in some cases.



NO/UNCLEAR BUSINESS VALUE

The strategic impact that a blockchain use case can have on a customer's overall business is not always clear, or present.



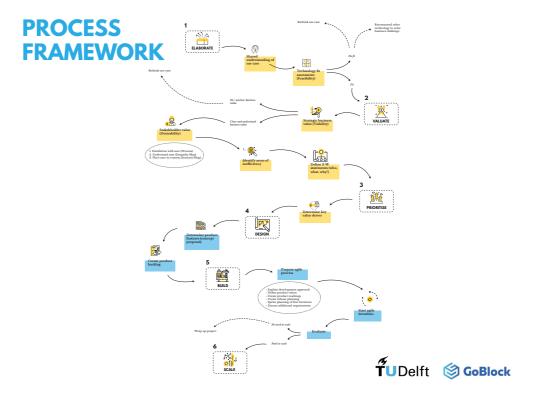
VALUE FOR ALL STAKEHOLDERS

Success of innovation is dependent on willingness to adopt. Therefore all stakeholders must experience benefit. Technology-centric perspective does not cut it.

These challenges translate well to Design Thinking's three main pillars:

FEASIBILITY VIABILITY DESIRABILITY





VALIDATION WORKSHOP

Consisting out of 8 exercises aimed at providing customers with a validated blockchain use case.

- The workshop tests the use case against the three principles of Design Thinking: feasibility (technology fit), viability (business value) and desirability (user value)
- Workshop is divided into two seperate parts. For this test session, the first part of the workshop has already been completed (i.e. technology fit and business value).
- Today we will focus on the last part of the workshop: user value.
- The goal is to come up with a priotity value driver which will provide the input for the first agile iteration.



BLOCKCHAIN USE CASE

- University X wants to use blockchain technology to tackle excessive paperwork and logistic challenges regarding student exchange processes with other universities.
- For student exchanges to get approved, verification of student information is required by other universities (e.g. certificates, grades, letters of recommendation etc.)
- Different universities have different internal processes. This leads to difficulty in the certification of diplomas and other student information.
- University X thinks a shared database can improve the efficiency of this process by allowing all universities to look at the information stored by the university on a student's account.

BLOCKCHAIN USE CASE

The general (expected) benefits of a shared blockchain database between universities are as follows:

- User is in control of their data.
- The data is stored safely.
- The data cannot be tampered with, which allows it to be used for certification and verification.
- The data is always available and can be accessed anytime.



TODAY'S EXERCISE

Approach the use case from the perspective of a student preparing to go on exchange. Below, some general user findings have been provided.

- Students currently experience the preparation of their exchange (i.e. getting approval etc.) to be a frustrating process. It takes needlessly long due to its bureaucratic nature and excessive paperwork.
- Students have no idea what happens to the information they provide. Is it stored safely? Who has access to it? Etc.
- Due to different workflows of different universities, there is a lack of guidance for students and it is is usually up to themselves to figure out what information they should provide to the exchange university and through whom this should go.

TUDelft SGOBlock



APPENDIX L

STUDENT TEST SURVEY

10-4-2019

Validation Workshop - User Value Driver

Validation Workshop - User Value Driver

	1	2	3	4	5	6	7	
Strongly disagree								Strongly agree
I understood the in Mark only one oval.		ıl exerci	ises of t	this wor	kshop			
	1	2	3	4	5	6	7	
Strongly disagree								Strongly agre
I felt the methods Mark only one oval.		this wo	rkshop	helped	with rea	aching t	he over	all goal
	1	2	3	4	5	6	7	
Strongly disagree								Strongly agre
Are the outcomes o iterations and start l	f the ses	sion cor	ncrete e	nough to	be use	d as inp		
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