Système Innovant de Traçabilité et de Confiance Basé sur la Technologie Blockchain
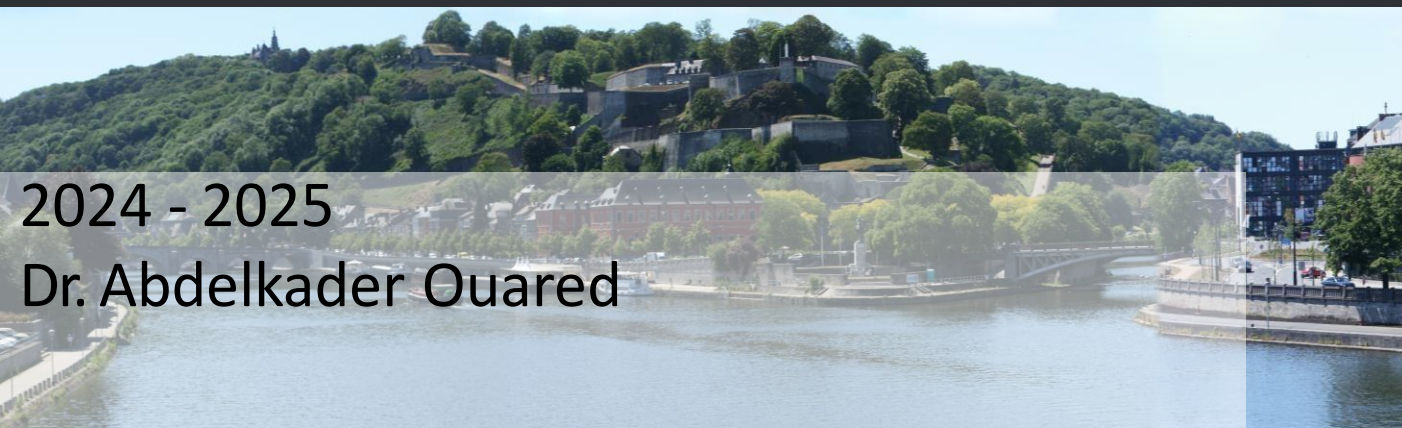
Brainstorming

2024 - 2025

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Structure of the course

- Introduction
- Brainstorming
- Intermediary Pitch
- Coaching Session
- Final Presentation

Brainstorming Session

- Prerequisite: groups of 4-5 students via Webcampus formed

- Guidelines about:
  - How to structure your Blockchain app project using the Business Model Canvas ?
  - How to Adopt a Traceability and Trust Perspective?
  - How to brainstorm for an innovative Blockchain app idea ?
  - Which tools to exploit in order to develop your project ?
  - How to pitch your idea?

- You receive feedback and coaching about your preliminary ideas

STRUCTURING

Business Model Canvas ... again

Where to start ? e.g. Open Data Canvas

Data Providers [2]	Activities	Value proposition	Channels	Partners
–government –private companies –organizations	-data collection -data maintain -data clean -data analyze	-Intended public value -Ways of data use [3]	-online websites -data lakes APIs -dedicated apps	stakeholders which help to process and improve data
Infomediary	Resources		Costs	Data users [1]
Individual or organizations who extract, aggregate, and transform data	-IT infrastructure -Technologies -Data scientist		Costs or efforts supporting the activities of the data re-use process	-Individuals -groups -one time or recurring use
Private benefits - profits - non-profit benefits		Public values Transparency, accountability, efficiency, decision-making, participation …		

1) Blockchain app: Requirements

- Ask yourself who are the users of the solution you are developing?
  - Who are they?
  - What are their roles?
  - What are their goals?

- Identified problems, Identified actors, Blockchain-based solution (traceability, characteristics, tools, architecture, advantages)

2) Applications Domain

CATALOGUE TRIÉ PAR THÈME

Thème

Aménagement du territoire, Urbanisme, Bâtiments, Equipements, Logement	49
Population, Statistiques	43
Administration, Gouvernement, Finances publiques, Citoyenneté	20
Transports, Déplacements	19
Culture, Patrimoine	13
Environnement	10
Santé	8
Sport, Loisirs	8
Energie	5
Economie, Business, PME, Développement économique, Emploi	4
Closed Data, Accès restreint	3
Education, Formation, Recherche, Enseignement	2

> *Moins*

3) Value Propositions of the Mobile app

Example: Milk Traceability Using Blockchain Technology

BRAINSTORMING

Brainstorming principles

- Go for quantity

- Withhold criticism (negative or positive)

- Welcome wild ideas

- Rebound, combine and improve ideas

Brainstorming takes time!

Number of ideas

Purge

Need for triggers!

Time
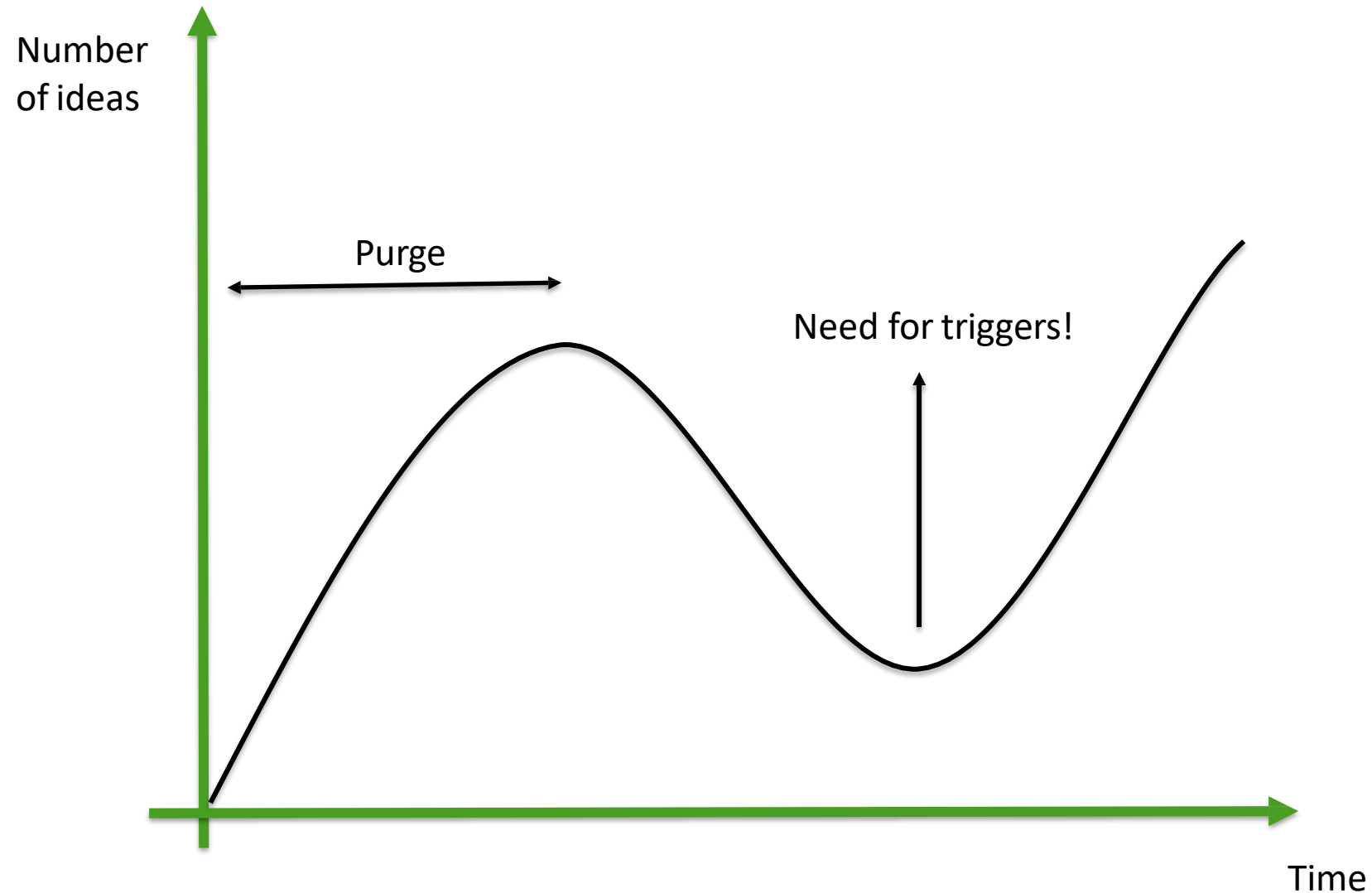
Trigger Cards and What-ifs

- Trigger Cards

- Online What-Ifs
  - https://whtifs.com/

Trigger cards

- **Innovation Deck** : focuses on new technologies and how they can improve your ideas

Trigger cards

- **Human-Centric Deck** : focuses on people and how your idea can add value for them

Six Hats Techniques

Blue Hat - **Process**

What conclusions or summaries can we make in moving forward on the issue or problem?

Yellow Hat -
Benefits
What are the positive aspects of the current situation, issue or problem?

Green Hat -
Creativity
What is the current information on issue or problem?

Black Hat - **Cautions**

What are the negative aspects of the current situation, issue or problem?

Red Hat - **Feelings**

How does everyone feel about the current situation, issue or problem?

White Hat -
Facts
What is the current information on the issue or problem?

Suggested Process

1. Define problem (e.g. smart city dimension, user need)

2. Think possible solutions

3. Use a trigger (What-ifs, Persona, Hats, …)

4. Refine/Brainstorm/Discuss

Choosing an idea: Mindmaps

- State the problem

- Brainstorm ideas

- Record ideas

- Sort ideas

- Identify common themes or categories

- Create the diagram based on ideas and categories

- Tool: https://klaxoon.com/fr/

Choosing idea: Target of Mark Raison

Choosing idea: Target of Mark Raison

- Red idea: main ingredient of an innovative project
    - Innovative and easy to develop

- Blue idea: enrich the red idea and reinsure stakeholders
    - Established idea and easy to develop

- Yellow idea: Give a challenge and an extra innovative layer
    - Innovative but challenging to develop

TECHNICAL SPECIFICATIONS

Technical Specifications - Blockchain Project: Traceability and Trust

- Modeling traceability transactions in the blockchain.

- Data management (recording information at each stage: production, processing, distribution).

- Cryptography to ensure the integrity and security of information.

- Smart contract features (conditions, trigger events, data storage)
- Validation and deployment on the blockchain.
- How to integrate an Oracle to get external data (weather, commodity prices, etc.) into the blockchain.
- Regulatory compliance (confidentiality).

Some technical specifications

PITCHING

Pitch

- Pitch that you will give to anyone who asks you who you are and what you do.

- Conferences, seminars, coffee, appointments, telephone prospecting,, …

- Clear, concise and interesting

- Just flip the question back and start a conversation.

Template

Framework de Geoffrey Moore *(Crossing the Chasm, 1991)*

For *(target customer)*

Who *(statement of need or opportunity)*

The *(product name)* **is a** *(product category)*

That *(key benefit, reason to buy)*

Unlike *(primary competitive alternative)*

Our product *(statement of primary differentiation)*

Template

Exercise!

- Example (coming from a winning idea from Hackathon)

	Catégories à remplir
Pour	Les agriculteurs en herbe
Qui souhaitent	Cultiver des legumes en ville
L'application	Potager partagé
Est un(e)	Application d'allocation de parcelles
Qui offre	À ses utilisateurs un moyen simple de trouver un endroit pour faire pousser ses legumes en ville
Par rapport à	Une recherche traditionelle de potager
Nous	Offrons une interface simple d'utilisation qui permet de trouver une parcelle rapidement et facilement

A few tricks …

- Generate interest right from the start
  - Asking a question
  - Bouncing back on the news
  - Telling a story that speaks to your audience
- Find a persona
- One idea = One slide
- Think about who your audience is and get their attention!

Sell me this pen.

Intermediary Pitch

- **Prerequisite**: upload the completed BMC
  - Can be upload in a visual manner or via a word file with bullet points
  - Describe how you proceeded to fill them in (brainstorming, start-point, etc.)

- Make an **intermediary pitch** (max 5 minutes) about your data analytics project, using the Canvas as structuring tool
  - Idea aspects
    - Idea generation and selection
    - Needs from the mobile app
    - Users targeted
  - Technical aspects
    - Data Sources selection
    - Foreseen data analytics used (ML, GM, IV,...)
  - Implementation aspects
    - Planning (What can we expect from your end-product?)
    - Envisioned issues (legal, ethical)

Thank you !

Questions ? abdelkader.ouared@univ-tiaret.dz

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