



MINING ON THE MOON

Lunar Ice

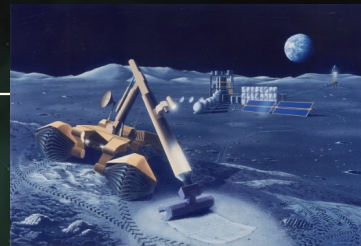
WHAT CAN WE DO WITH LUNAR ICE?



The main components of water — hydrogen, and oxygen — are two of the biggest materials that are used to power rockets right now. And making rocket propellant out of the water on the Moon could drastically cut down on the cost of doing ambitious missions in space



Usable as drinking water and fuel
lunar ice can enable a sustained presence on the moon



In conjunction with other volatiles found in the lunar regolith such as oxygen and methane, to support energy, construction, and manufacturing.

WHO ARE WE, AND WHAT ARE WE BECOMING?

- A French mining oil and gas corporate expanding its activity to the moon. The new branch, Lunar Ice is, specialized in ice extraction on the moon, teaming up with space X, the American heavy launch vehicle manufacturer
- The future of the branch is to be a rocket propellant manufacturer on the moon to allow rockets to refuel on the Moon



FROM EARTH TO THE MOON

A French mining corporate expanding its activity to the moon.

Now

Future

What?

Oil & Gas

Lunar Ice

Ice Extraction & Transformation

How?

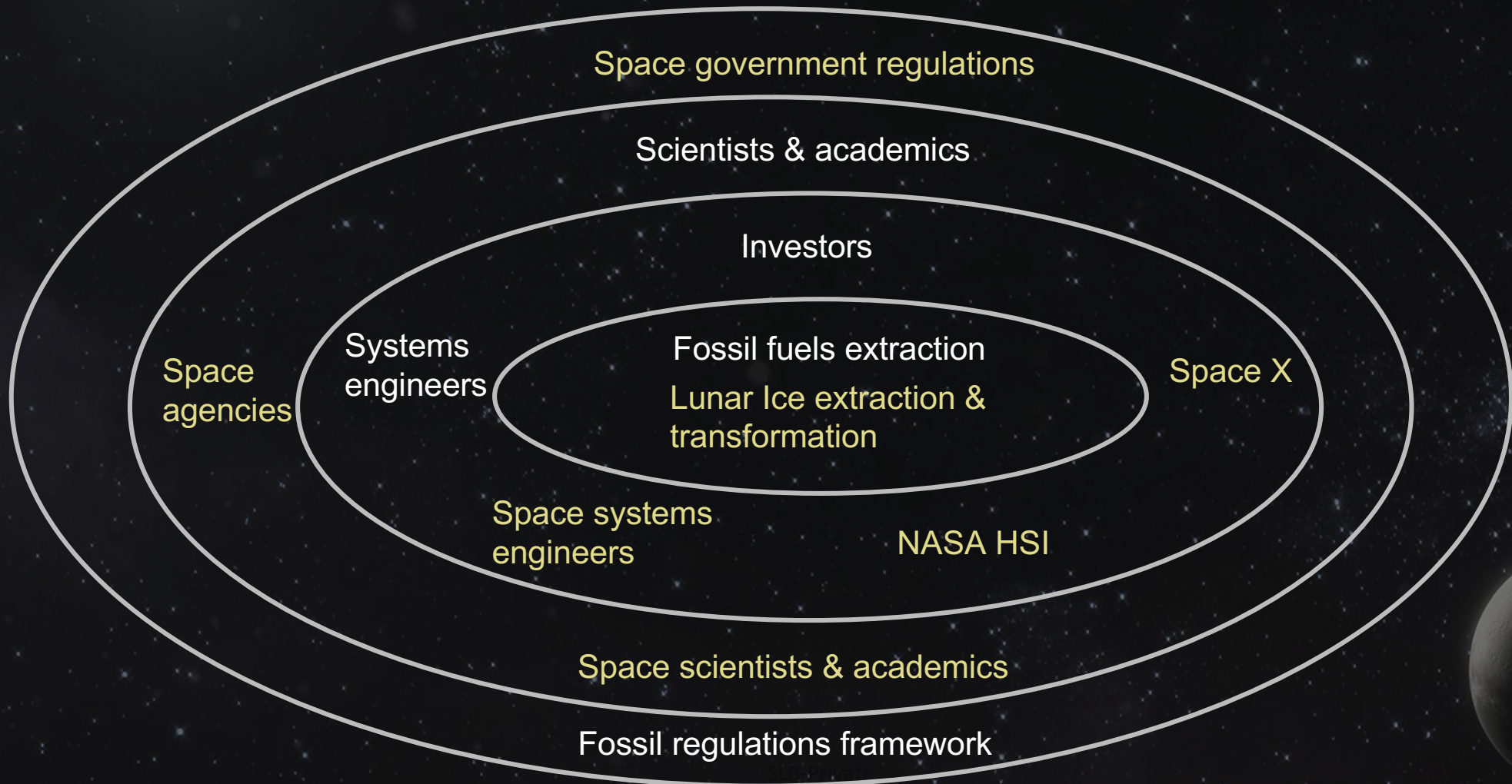
Mining Earth

Mining Moon

The future of the branch is to be a rocket propellant and Water supplier on the moon



STAKEHOLDERS AS IS & TO BE



STAKEHOLDERS ANALYSIS

Stakeholders

- Investors
- Systems Engineers
- Human Factors Engineers
- Space X
- Scientists & Academics
- Space agencies

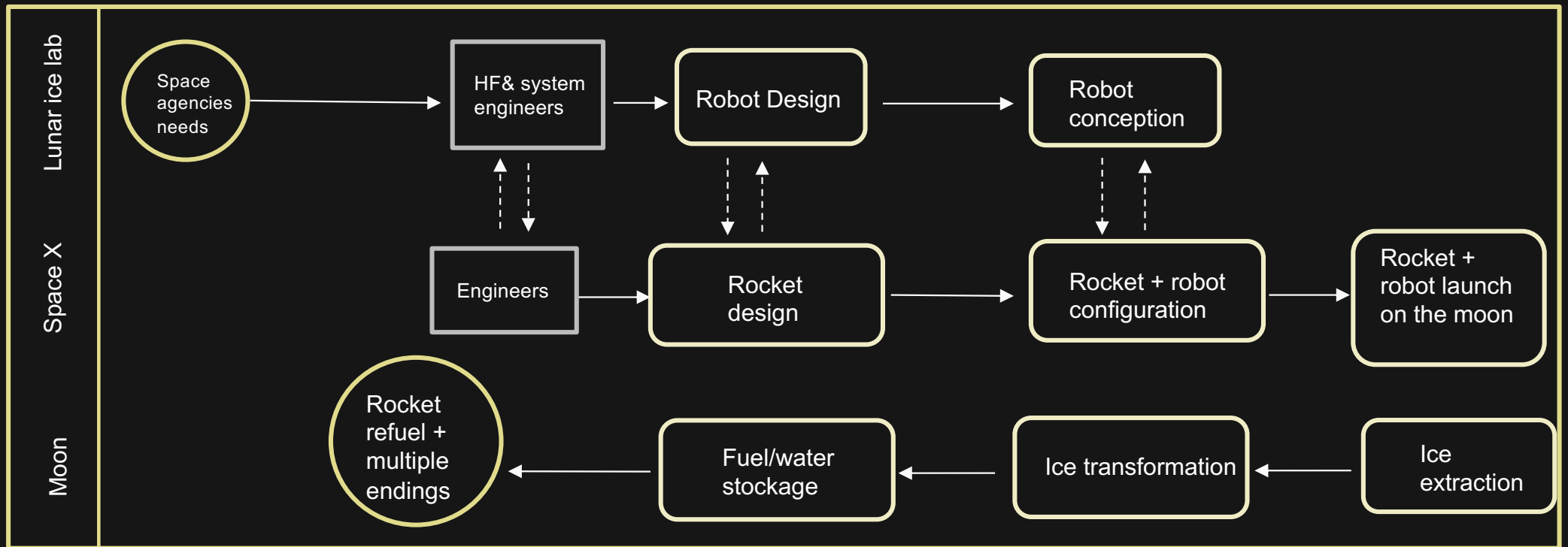
Needs

- Profitability
- Successful missions
- Efficient Technology Design
- Technology sharing & compatibility
- New domains of exploration
- Sustainable fuel & water

KPIs

- ROI
- Overall Equipment Efficiency
- Efficient Technology Design
- Functioning robots
- Technology improvement rate
- Fuel & water sales

BUSINESS PROCESS MODELING NOTATION



TRANSFORMATION RISKS & CHALLENGES

Impact

Inadequate/inefficient Robot
Technology

Business Processes
not strategic

Lack and low interest
in training

Resistance to
change in both
companies

Diversification
branch not
accepted/trusted by
space agencies

Lack of engineering
tools and methods

Collaboration with
Space X not
sucessfull

Not enough HSI
maturity level of
Lunar Ice for this
kind of diversification

HSI can
mitigate
these risks

Probability



THANKS

Lunar Ice