MNGT414 Enterprise Studies

Group 22

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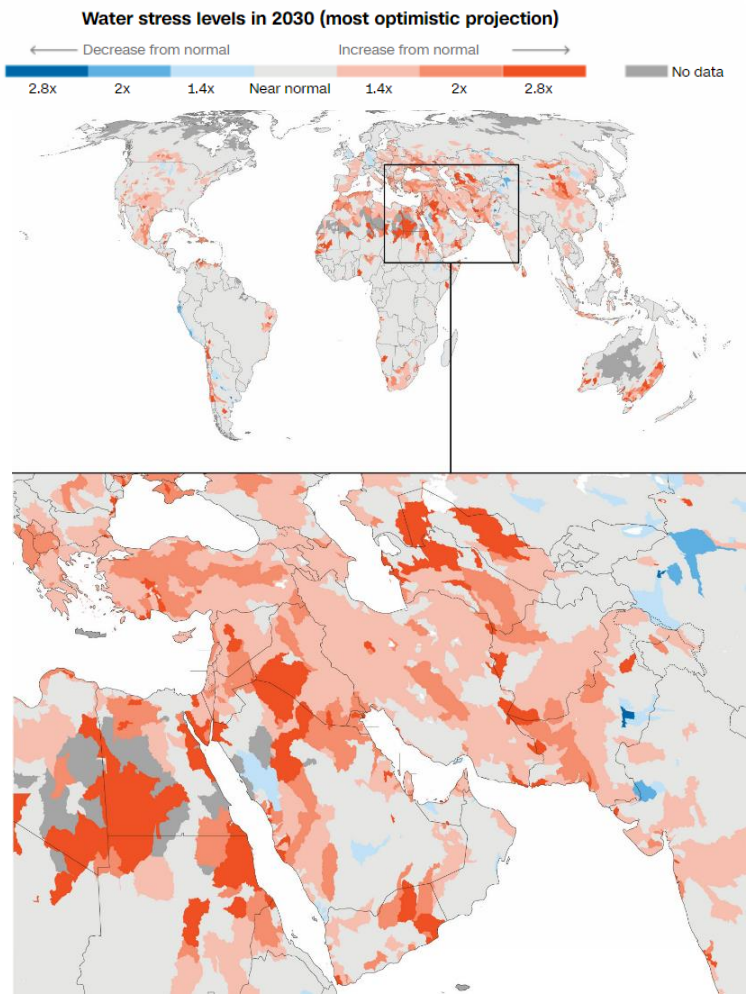
Problem



- Climate Change & Poor Management Usage
  1) Extracting large amount of water from underground
     - → Faster than it's being replenished by the rainfall
     - → Reduction of rainwater
  2) Hypersaline of lakes
     - → Affecting the crops
  3) Sharing same river / lake system among countries
     - → Importing water from countries with desalination program

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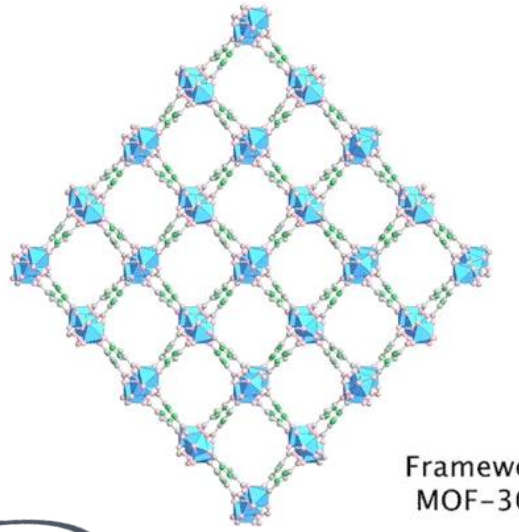
Solution

Traps water molecules in low humidity area

Water absorption is unlimited



Framework
MOF-303

Simple mechanism

High water quality

High efficiency

High cycle stability

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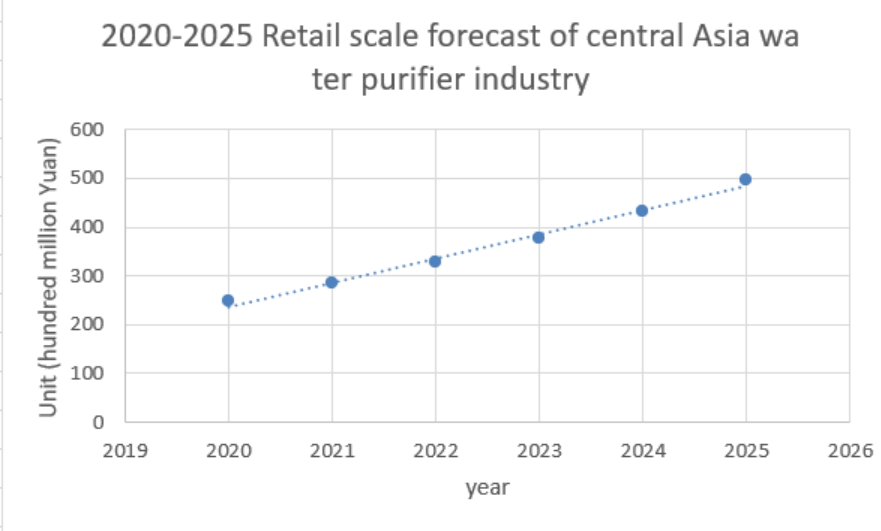
Market

- I plan to enter the market in Middle east, where there is little rain and drought, and our product MOF is a machine that catches water from the air, and the demand for water traps there is increasing year by year. I think it has a good market.



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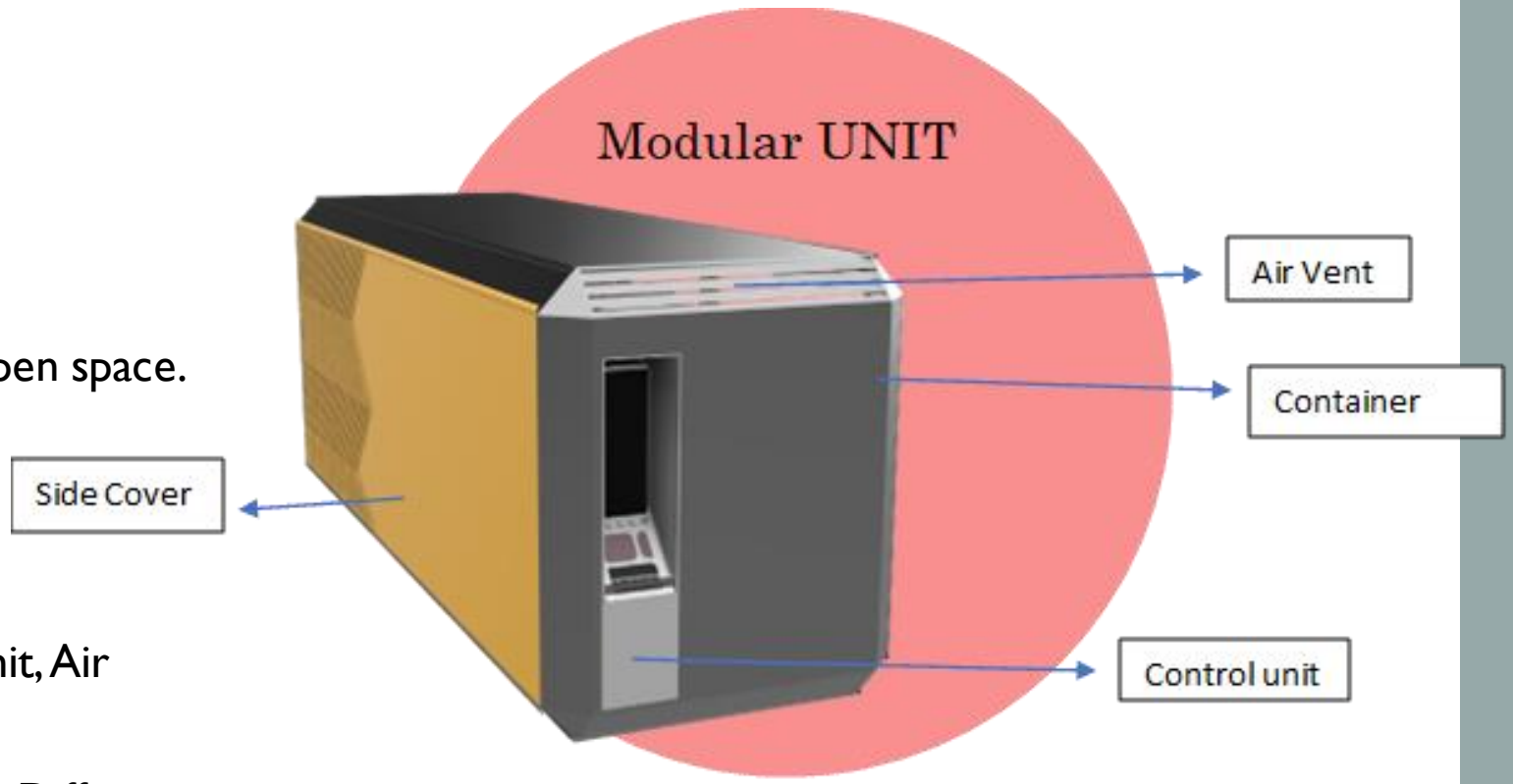
Product

- Harvesting water from air.
- By just keeping the AIR2WA unit in open space.
- MOF-303 to trap water molecules.
- Adsorption and Desorption phase.
- Unit includes – MOF capsule, Heating Strips, Condenser, Fans, Controlling unit, Air Pump.
- 06x02x02 m, Can stack on each other, Different water outlets.
- Company name, Trademark, Research, Design and Utility Patent.



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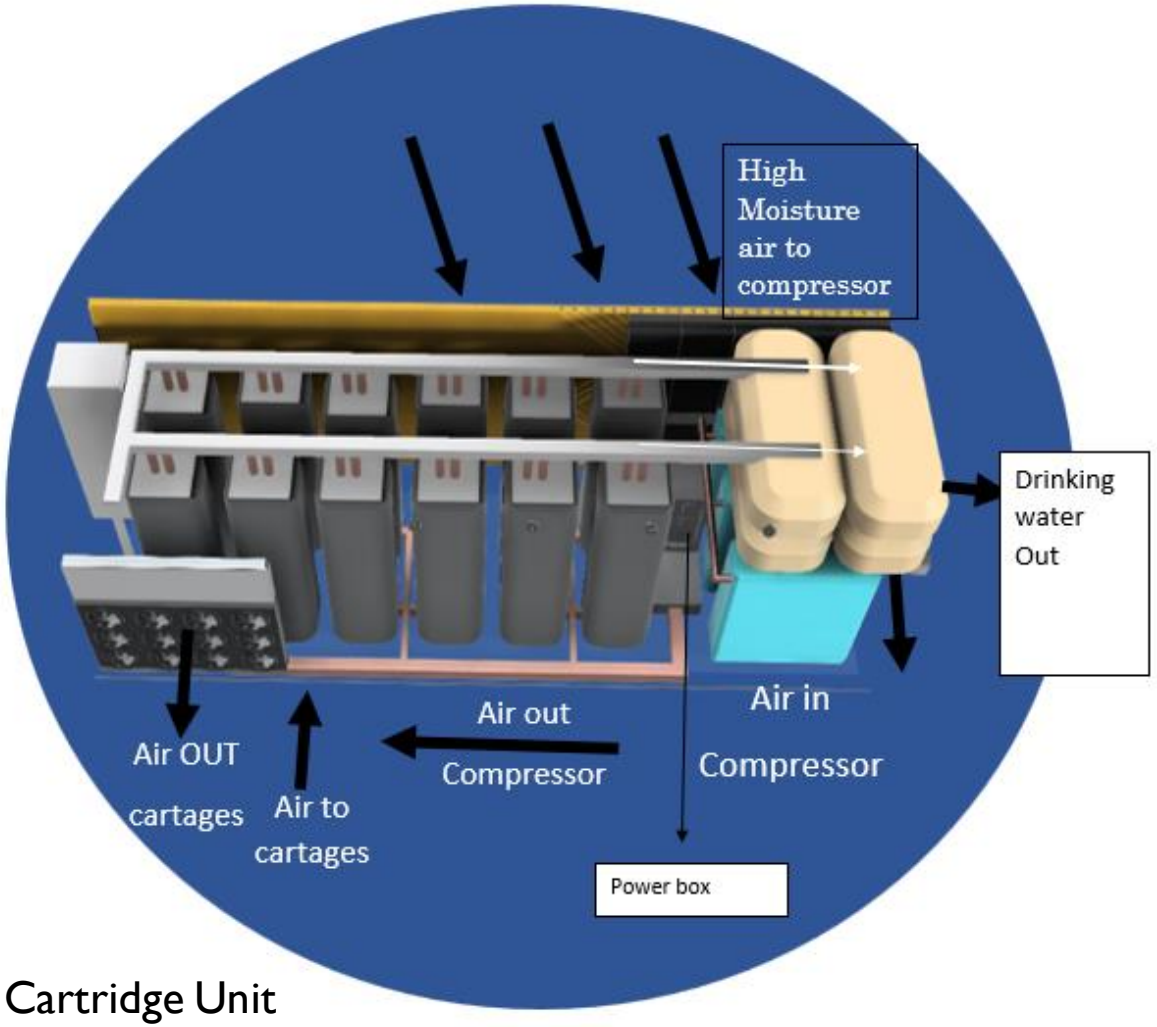
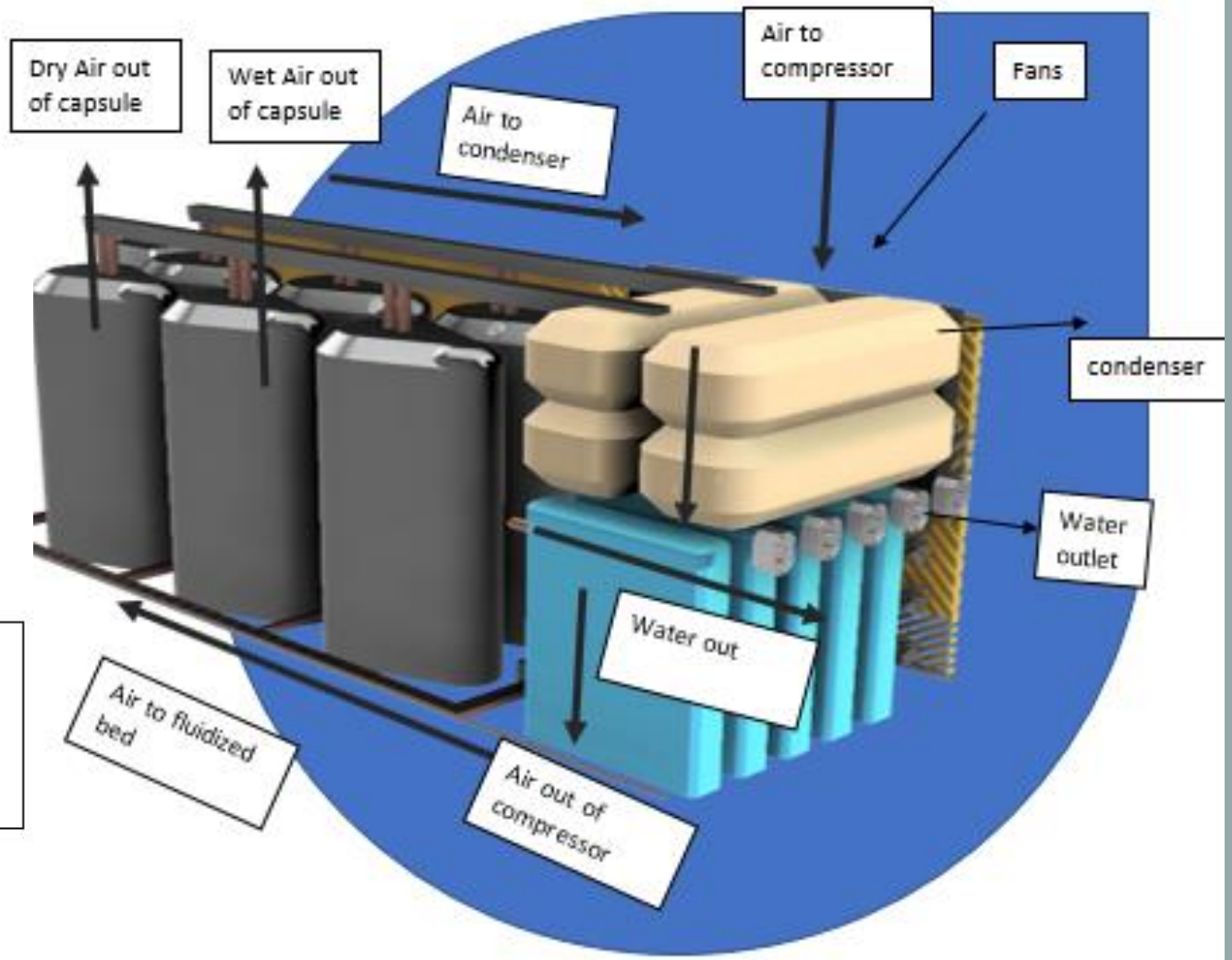
Product



Cartridge Unit

Liquidizing bed Unit



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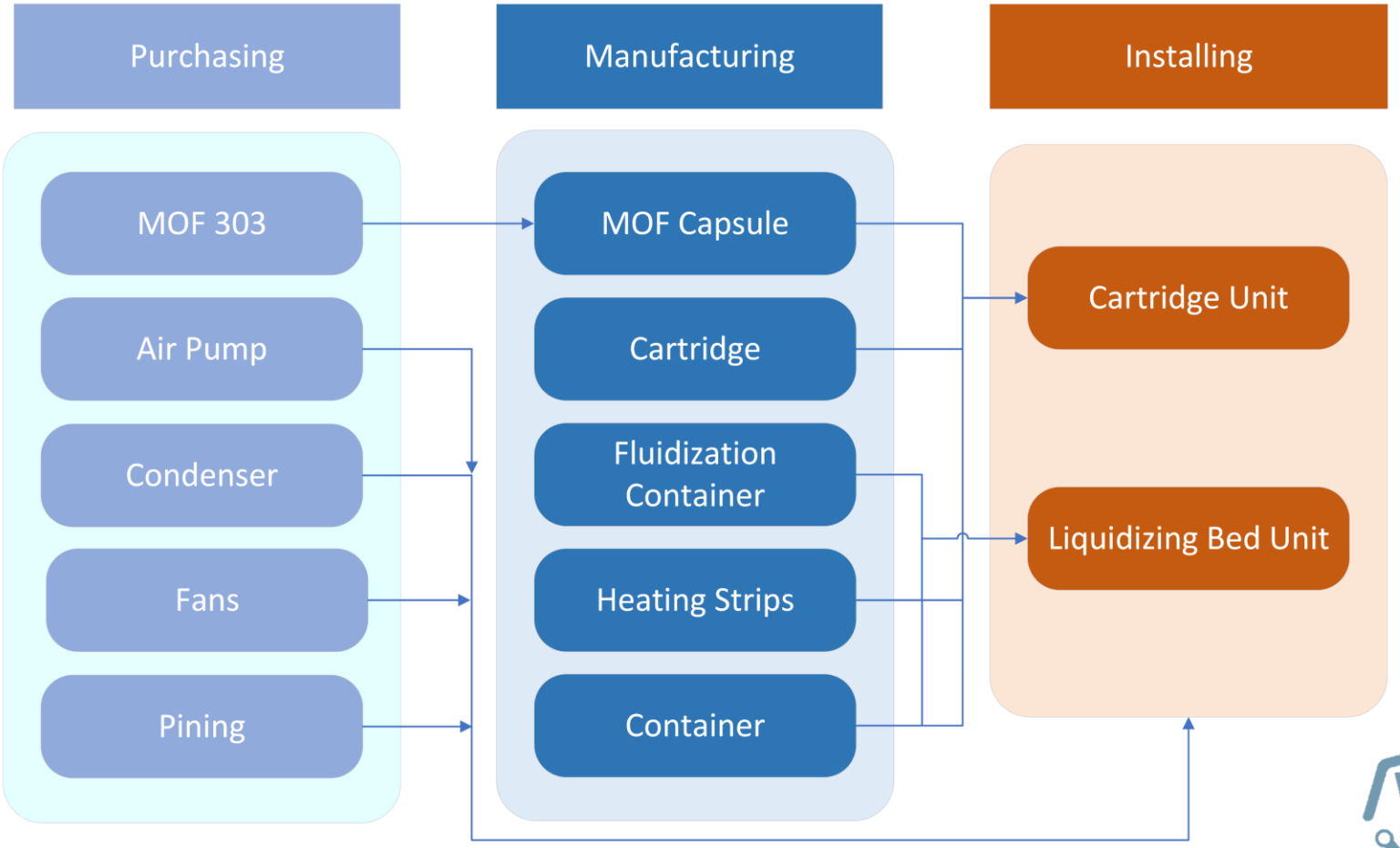
Technical Director: Kurde, Aadeesh Atul

Product



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Team

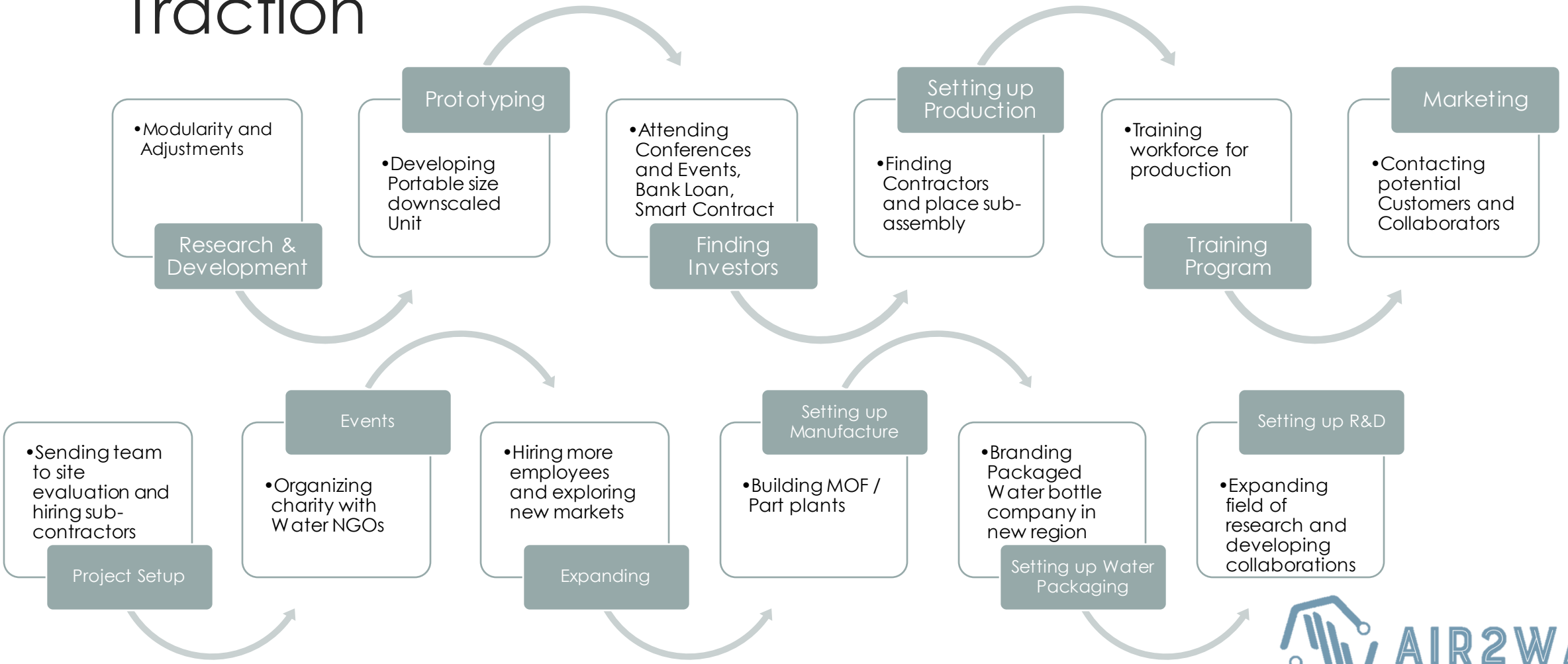
Experiences- Team consist of 5 members of which 2 specialize in Manufacturing Tech , 2 with specialization in design and 1 member perusing Bio tech

Team-

Despite coming from different backgrounds everyone is experienced at conducting elaborate research and going through data to analyze potential markets.

Everyone in team had done their part well by using all the resources available to them to come up with a great business idea.

Traction



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Managing Director: Patra, Swaraj

Competition

lower cost

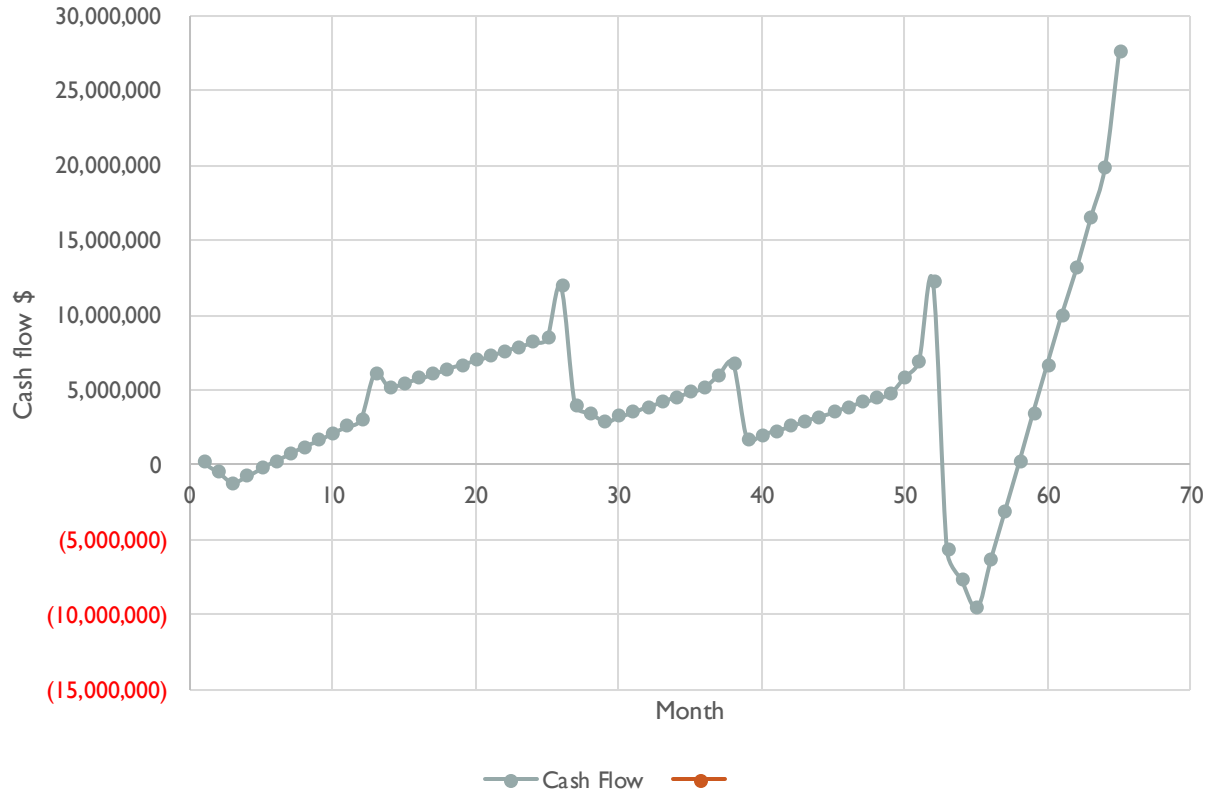
convenience

After-sale service

Business threats

- Market saturation- In the targeted countries there are already systems in place to collect drinking water, they might not want to replace these. The solution being to make it cheaper and more environmentally friendly to serve the ever-growing demand
- Bottlenecks - The amount of water collected by the system is dependent on the humidity and has a limited amount it can make, during periods of the year where the humidity may fluctuate this value meaning the water produced will be lower meaning the requirements needed will not be met. Have some reverse unit in place

Financials- Cash Flow



This is the cash flow diagram for the company over the next five years. It shows an overall increase in the cash over time with a dramatic decrease when the money to build a new plant comes out

Financials-Profit and loss

The profit and losses from year to year are all to do with a start up of a plant with the year 1 and three having the lowest profits.

Once the plants are set up, the profit is good, like in years 2 and 4.

Year 5 shows that if the amount of plants increase the starting up of new plants doesn't show that much loss as a result of high cash reserves and income from other plants.

Investment

- The investment needed is $4.5 million. This value would be a safe bet as if the plant was going to be built in a country there would already be a deal in place to sell a certain number of units to a company.
- This would be to build a new plant in Oman where the populations demands can be met by the humidity, this plant would cost $5.5 million altogether with $1 million coming from a mortgage.
- This would allow for the plant to be built and make profit within 7 months, then a cash reserve can be built to build different plants in different places and make more money on the investment.

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