Ant-like Poly-robots for moving, lifting and picking any load

in the sustainable factory, warehouse & construction site

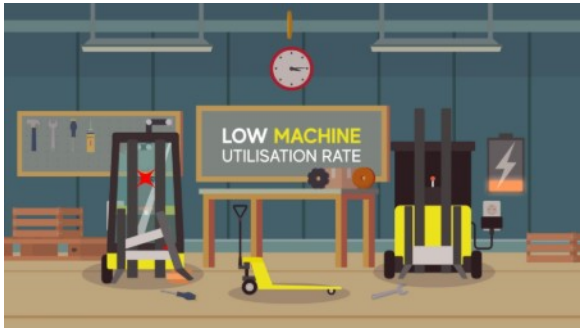
MecaBotiX
La mécanique & la robotique innovantes

Executive summary

Warehouse & Manufacture 5.0 Problems

1. Urban sprawl of warehouses

- Pushed by e-commerce and pandemic
- Ever increase is **non sustainable**
- **Storing more** in the same walls



2. Lack of productivity

- **Increasing productivity** with robots
- Less than 5% of FR warehouses use **robots**
- Too many types of machines
- Low **use rate** (<40 %)

3. Painful & repetitive tasks

- **M**usculo **S**keletal **D**iseases
- **Recruitment** issues
- **Cost: 21 k€** / MSD [Raja 25]

Vision / Solution

MecaBotiX
La mécanique & la robotique innovantes

Our vision

- Transporting loads of **any size**, **shape** and **mass**
- Robots with **20 year lifespan** fitting customer need thanks to **modularity**
- **Robot for SMEs** that do not have robots yet (**re-industrializing** France/Europe)
- MecaBotiX **Values** :
  - Robots that **help people**
  - **Sustainable** robots
  - **Disruptive** robots : **first modular AMR** (Autonomous Mobile Robots)

M3-Cooper poly-robots

- **Modular** poly-robots
- Bio-inspired from **ants**
- Capable of:
  - Moving
  - Lifting
  - Picking
- Any type of payload:
  - From **1 g to 1 ton**
  - Pallets / Boxes / Products / Outsize formats
- In the **sustainable**
  - **factory**
  - **warehouse**
  - **construction site** of the future

Modular
Mobile
Manipulators
that
Cooperate

High specific payload

Cooperation & interconnection

Our Modular Poly-Robots

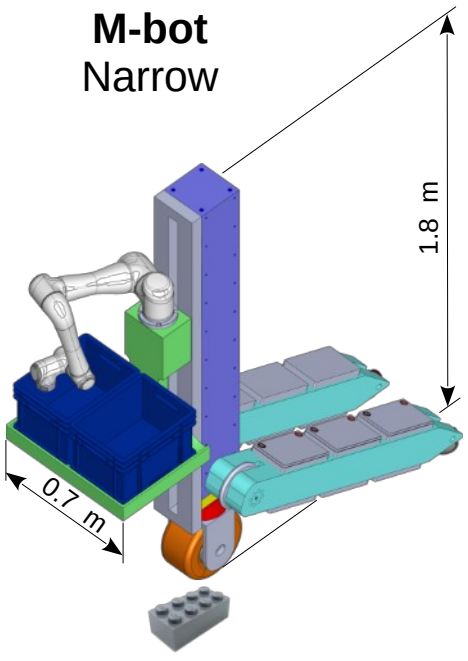
Types of payloads



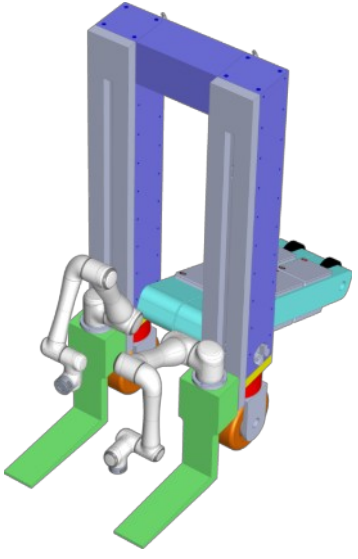



100 kg — 1000 kg

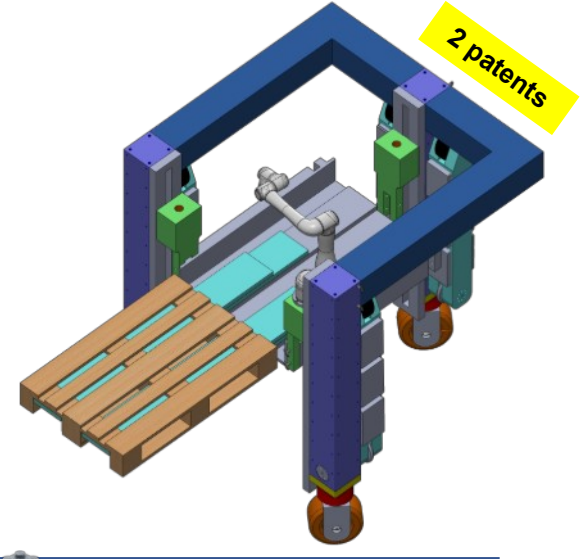
M-bot
Narrow



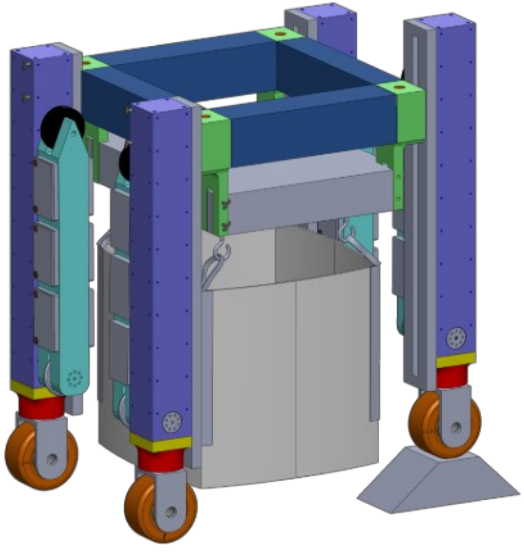
Bi-bot
Agile



Tri-bot
+30% pallet storage



Quadri-bot
Obstacle crossing



Unique Selling Point

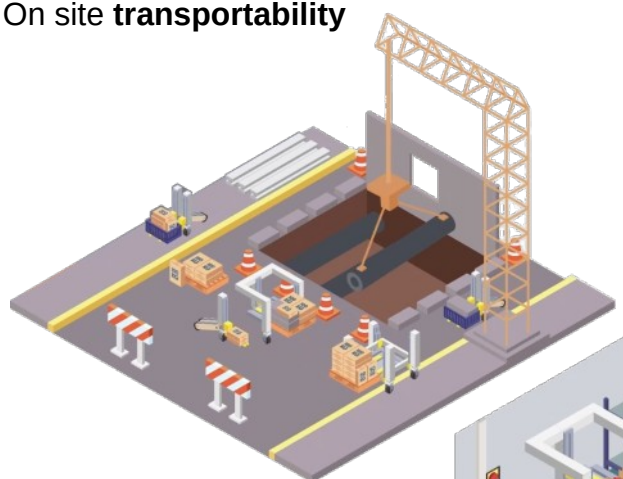
Modularity : one  to build many machines

→ Failure tolerance

User needs per market

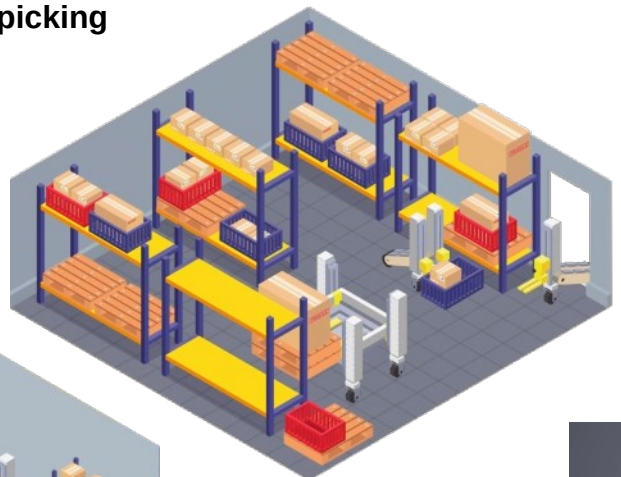
1. Maintenance & Construction

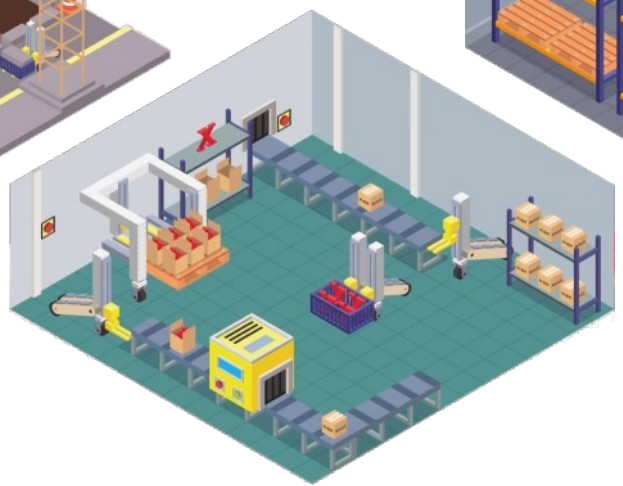
- Single tasks → **Tele-operated motion**
- **Outsize formats** : beams & plates
- **Door / obstacle crossing**
- On site **transportability**



2. Manufacture 5.0 & Small warehouse

- Routine tasks → **Autonomous motion**
- Storage at **2-3 m**
- Moving in **narrow spaces**
- Unitary **picking**





3. Large warehouse

- **Autonomous** motion
- Storage at **12 m**
- Better use of **higher storage**
- **Productivity** improvement
- Storage **densification**

Common needs

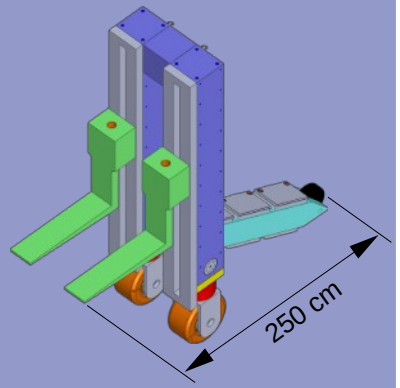
- **Safety**
- Avoiding **MSD**
- Lack of **workforce**

First product to market: 1 bi-bot, 6 configs

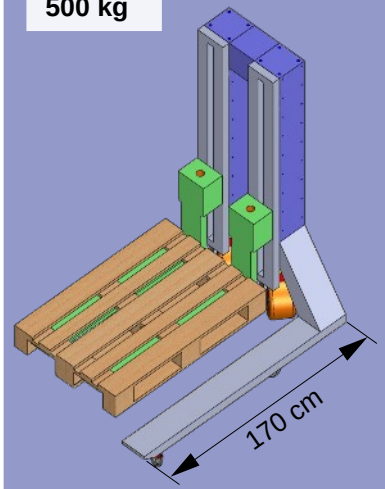
Rear stabilizers (easy stacking)

Front stabilizers (compact)

1 Bi-bot, Close columns

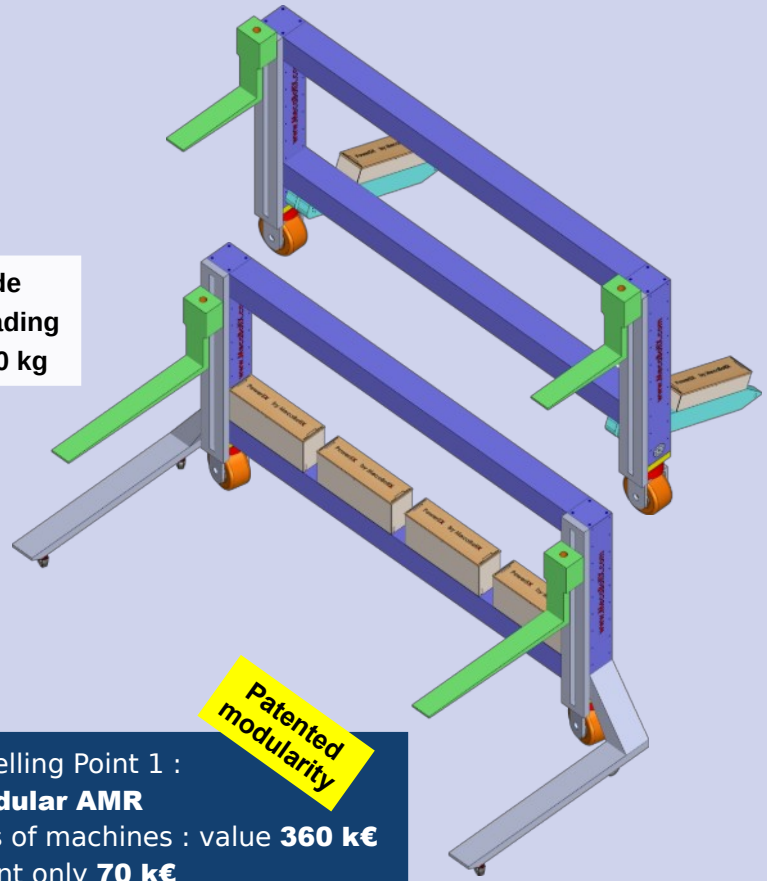


Front loading 500 kg



1 Bi-bot, Distant columns

Side loading 500 kg

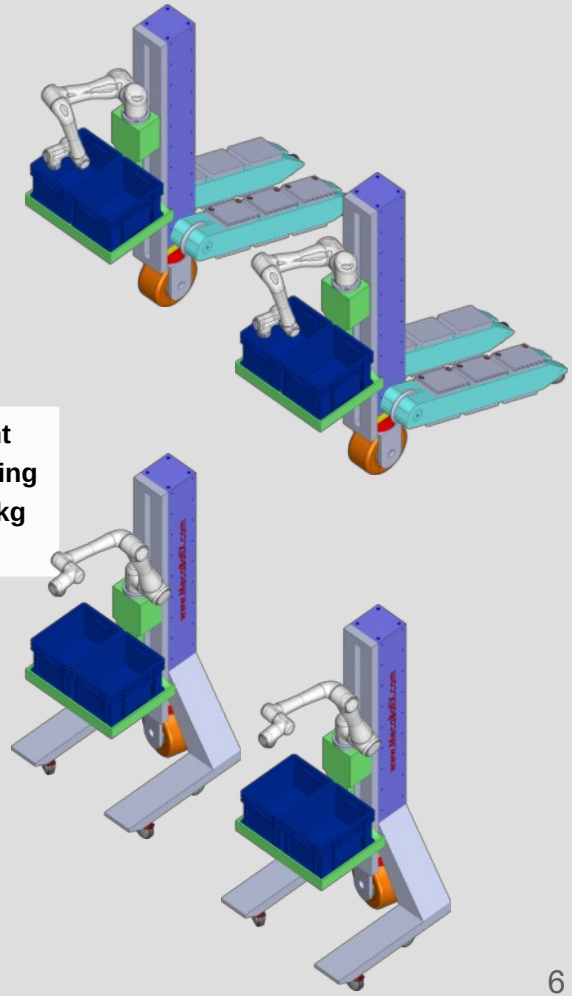


Patented modularity

Unique Selling Point 1 :
First modular AMR
→ 6 types of machines : value **360 k€** investment only **70 k€**
→ **Sustainable** poly-robot that fits needs along 20 years
→ **Failure tolerance**

2 independent M-bots

Front loading 250 kg X 2



Value proposition Warehouse

Passing aisles from 3,5 m to 1,5 m wide

Unique Selling Point 2 : **Horizontal storage density**

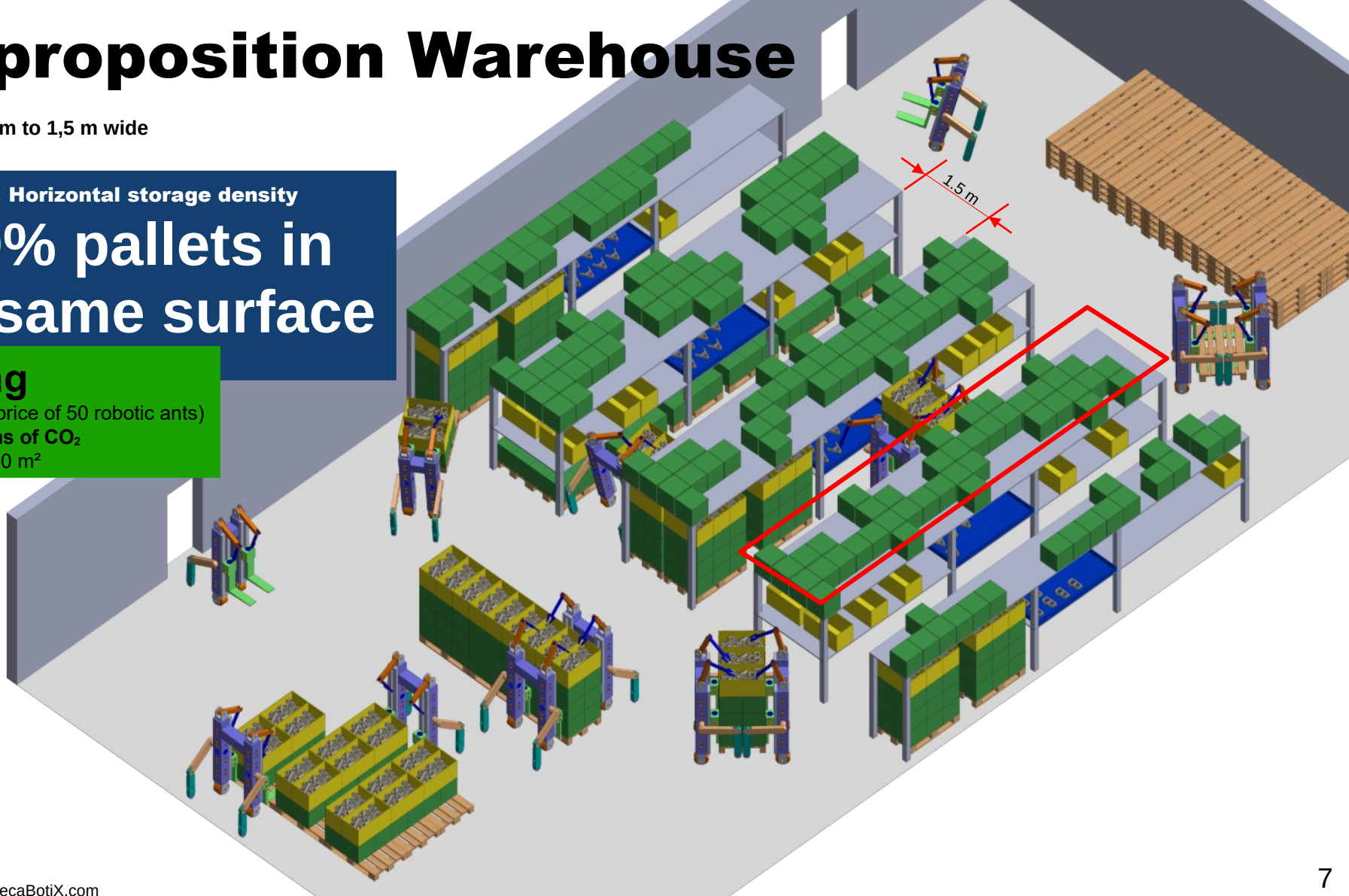
+ 30% pallets in the same surface

Saving

→ **2.1 M€** (price of 50 robotic ants)

→ **3000 tons of CO_2**

every 10 000 m²



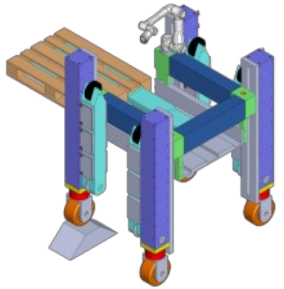
Competition

French unicorn
Valuation > 2 B€

Modular machines

EXOTEC Skypod

MecaBotiX M3-Cooper



- Modularity++
- Lifting & picking
- Price 30 k€
- Margin product + service

Standardized loads

Loads with varied formats

Forklift truck

AMR

AGV

Dedicated machines

- 20 historic brands
- Few innovations
- Price 10-150 k€
- Lifting 1-32 t
- Margin on service

FENWICK
BALYO
STILL
JUNGHEINRICH
TOYOTA MATERIAL HANDLING
Yale

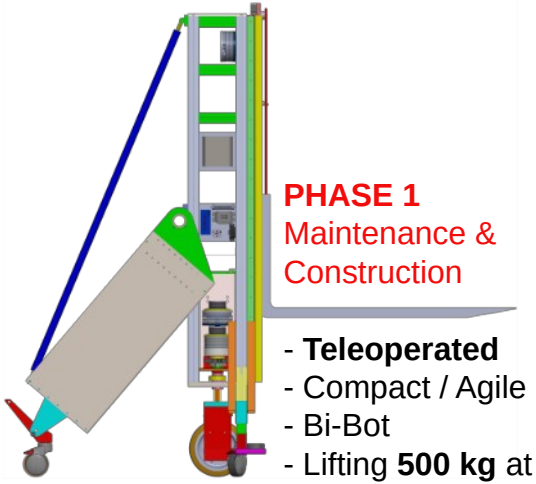
SSI SCHAFER
OMRON
MiR
Bastian SOLUTIONS
LOCUS ROBOTICS

- 200 new brands
- Innovation ++
- Price 30-300 k€
- Lifting < 1 t
- Margin ++ on product

Market access strategy in 3 phases

Prototype
scale **1:4**

2022



PHASE 1
Maintenance & Construction

- **Teleoperated**
- Compact / Agile
- Bi-Bot
- Lifting **500 kg** at **1,5 m**

Prototype
scale **1:1**

2023

POCs

2024

Industrialisation

2025

PHASE 2
Manufacture 5.0 & Small warehouse

- **Autonomous Bi-bot**
- Picking arm
- Lifting at **3 m**

Commercializing
First product

2026

PHASE 3
Large warehouse

- **Autonomous** Quadri-bot
- Lifting **1000 kg** at **12 m**

Options

- **Automation Pack**
  (sensors + onboard intelligence)
- **Lifting masts**
  (various heights & speeds)

Market size : a huge potential

First market to enter in: France

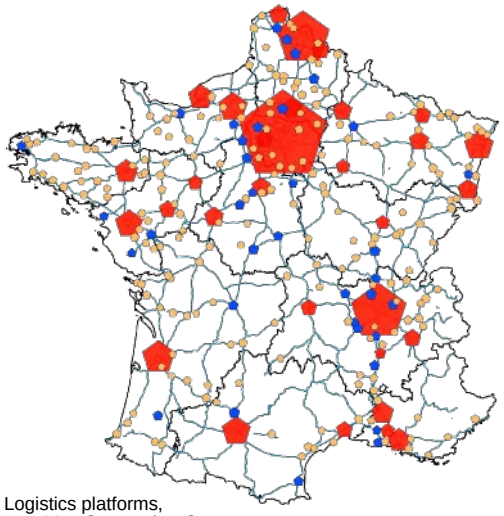
76 M m² warehouse > 5000 m² [Hemar-Daher 19]

5% robotized [DataLab 19] → Jump in!

Indoor logistics market France

Target share : 2%

9,45 M€



Logistics platforms, France 2015 [DataLab 15]

European market

+ 19 % T1 2021

[BNP Paribas 2021]

World market
10 Bm² of warehouse

Logistics automation

World market :
A two-figure growth
[Markets & Markets 23] [McKinsey 21]

$ 32,7 Billion 2023

$ 51,2 Billion 2028

Targeted market share : 0,5 %

256 M€

5 letters of interest
6 ongoing contacts
7 supporting letters

B2B Business Model & financial data

Robots sales

- **Selling pre-configured poly-robots**
- Direct sales
- **Long term leasing**
- On-site installation **fixed fee**

Recurring service

- Weekly **reconfigurations**
- Yearly **maintenance** for software & hardware

Robot As A Service (RaaS)

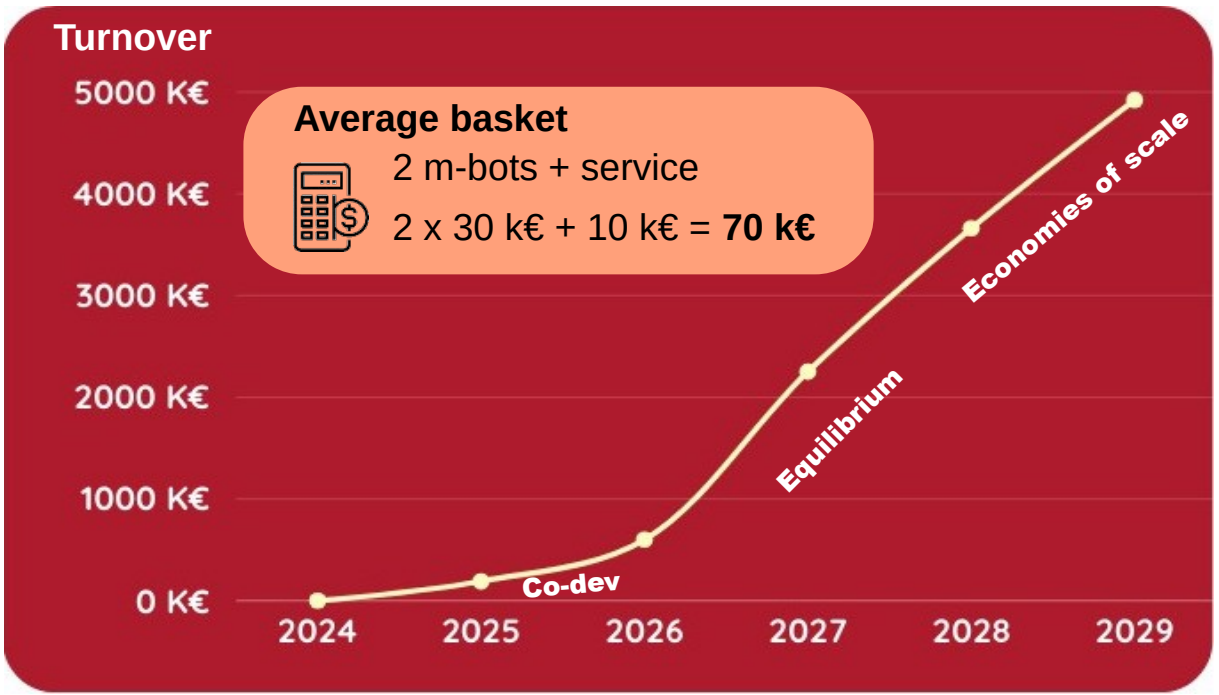
via a renting network

Key metrics

30 k€
Customer Acquisition Cost for 1 m-bot

50%
Gross margin

2027
Expected Break-Even point



Going further…

Raising

3 M€ on 3 years

to support our technological and commercial effort in 2025-2027

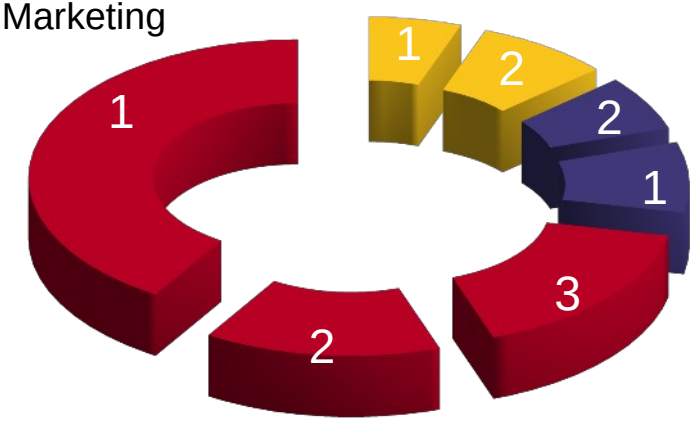
Creation 2021: Capital 50 k€
- French Tech Emergence (90 k€)
- i-Lab 2022 (375 k€)
- Projet EU DIH² (70 k€)

Seed 2025 : 450 k€
- Crowdfunding (50 k€)
- **Business Angel (250 k€)**
- BPI France lever effect (100 k€)

A Series
- EIC Accelerator
- European VC

60 % : Staffing
1. Engineering
2. Technicians
3. Marketing

10 % : IP
1. Existing patents
2. New patents



30 % : Industrialization
1. Design optimization
2. Production of robots

2027
Q4: USA subsidiary
Q2: Internationalization EU
Q1: Autonomous quadri-bot
Lifting at 6 - 12 m

2026
Q4: Bi-bot update
Q3: Customer feedback
Q2: Distribution network FR
2nd fundraising + EIC Accel
Q1: Sales bi-bot

2025
Q4: Certification bi-bot
Q3: Picking arm test
Q2: Industrialization autonomous bi-bot

2024
Q4: First fundraising

A complementary team

Jean-Christophe FAUROUX
CEO, Co-founder, Ph.D.

Zine Elabidine CHEBAB
CTO, Co-founder, Ph.D.

Hélène MARIETTE
Fund raising, Co-founder

Eric BALDO
Industrialisation, Associate

Antoine VILLEMAZET
Software development, Ph.D.

OUR STRATEGIC COMMITTEE

Gérard BRUNEL
Factory Director
Michelin / Sigma

Gilles ANGLADE
Senior expert
in logistics

Marco CALCAMUGGI
President French Federation
of Clusters in Robotics

Isabelle MOUNIER
Incubator Manager
BUSI by CAI

A COMPLEMENTARY TEAM

- 1 volunteer in Atlanta (GA), USA
- 6 colleagues regularly consulted for sub-contracting
- A networks of 20 sub-contracting companies
- 4 apprentice students
- 2 trainees

Conclusion & Contact

Our ambition:

Becoming leader

on FR/EU/US markets

of **modular mobile robots**

with **high impact** and **long lifespan**

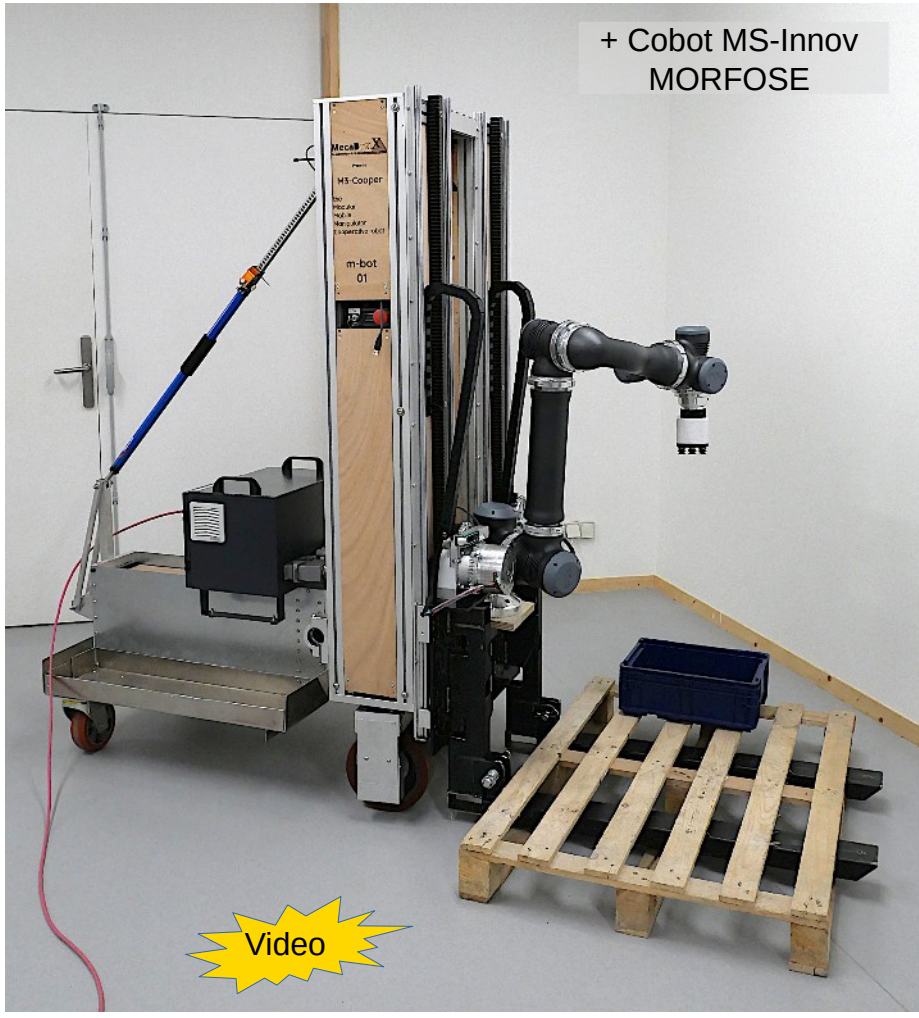
for **scalable** and **cost-effective**

applications in the **sustainable**

factory, **warehouse** &

construction site of the future

M3-Cooper
poly-robots



Jean-Christophe FAUROUX
JC.Fauroux@MecaBotiX.com
www.mecabotix.com