

An innovative robot for ship unload

Powered by: LongoBot (1)

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ShipDyson in a nutshell





To innovate ship unload of granular goods to make it more sustainable according to Agenda 2030.

O2 Problem and Solution

Key Problem 1: Operators Safety





Key Problem 2: Pollution & Waste of Goods



Key Problem 3: Clamshells Productivity

< 800 t/h



Grab bucket unloaders

Key Problem 4: Not full traceability of quality







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Enhanced Traceability of Quality



Article

Application of Machine Learning for Insect Monitoring in Grain Facilities

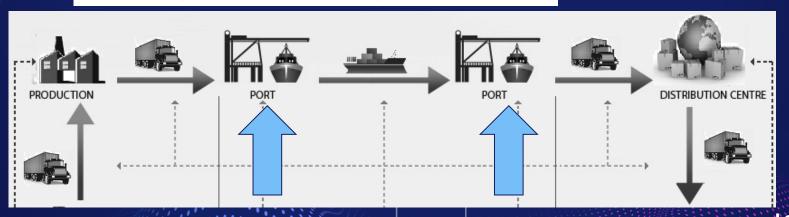




COMPREHENSIVE REVIEW

Enhancing traceability of wheat quality through the supply chain

15 - Grain quality evaluation by computer vision



Key Features



Operating Autonomously

ShipDyson can work without supervision



With the possibility to link it to external services



Weather Independent

With proper coverage the ship can be unloaded even with rain





STRENGTHS

- Creativity
- IT and software development skills
- Prototype laboratories

WEAKNESSES

- Complex B2B product
- Part-time resources
- No experience

SWOT

OPPORTUNITIES

- Need for a prototype
- B2B's stakeholder interest
- Potential patent

THREATS

- Similar products under development
- Goods' demand decrease
- Idea's hijacking



O4 COMPETITORS AND PARTNERS

Product Benchmarking

		ShipDyson	Tramoggia Depolverante	Portalink	E-Series Fuel Cell Engine	5G Smart Port
	Feature/Role	StartUp	Competitor/ Potential Partner	Competitor / Potential Partner	Potential Partner	Potential Partner
Ť	Goods Measurement	X	V	X	-	- [
	Dust Aspiration	V	V	V	-	-
	Weather Independent	V	Х	X	-	-
	Self Movement	V	Х	X	-	-
	Remote Control	V	V	∨	-	V
	Automatized	V	Х	Х	V	✓
	Electric Motor	V	X	√	V	
	Quality Traceability	V	X	mm <mark>X</mark>		\(\frac{1}{2}\) \(\frac{1}\) \(\frac{1}{2}\) \(\frac{1}2\) \(\frac{1}\) \(\frac{1}\) \(\frac{1}\) \(\frac{1}2\

Estimated Market Size in Italy

490,000,000

Tons of goods unloaded in the Italian ports on 2022 (Assoporti)

~12 %

Consists of granular & powdery goods (grains, sand, ...)

- 50%

Unload time reduction with ShipDyson

Come (e quanto) sono cambiati i traffici dei porti italiani dal 2019 al \$\text{\$\text{\$\text{HIPPINGITALY}}\$}\$

L'anno scorso il totale di tonnellate movimentate sulle banchine del nostro Paese è stato pari a 490 milioni ma 'scartando' il transhipment i livelli pre-pandemia ancora non sono stati riconquistati

50

ShipDyson required for 34 Italian ports

DI NICOLA CAPUZZO | 2

26 APRILE 2023

LongoBot **D**

1,500,000 €

Fixed Costs

200,000 €

Price per unit

4,500,000 €

Profit for 50 units sold

80,000 €

Variable Costs

10,000,000 €

Revenues







Target Market Size



The future

ShipDyson has already won a prize of 10.000€ and we are looking forward to getting other financial resources for further market studies, design and development.











Thanks





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3D models



Business Model Canvas



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Annual Report & graphics





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