

SMART
TECHNOLOGY
GREEN
SOLUTIONS



Seed – Investment Opportunity
India's most Advance, Smart and Green Vacuum
Technology based Waste Management Solution



Integerspin is HERE! WELCOME TO NEW FUTURE



Introduction Video Our HERO Product

Play on
You Tube



<https://www.youtube.com/watch?v=fIjWcbhvlrc>





Executive Summary

Co-Founders & Advisors

Dynamic & Balanced Team with Strong Domain Experience & Expertise



CEO
Gaurav Tyagi
(Sales & Marketing)

- B.Tech (Mechanical Engineering) , P.G.D.M
- 11 Years of Experience in Sales



CTO
Anupam Gangwar
(Research & Development)

- M.Tech (Mechatronics & Advance Robotics)
- 13 Years of experience in Applications , R&D



Advisor
Ameet Nandlaskar

Innovesta Group **Global Growth & Investment**

- MBA(Exec), Bachelors in IT(CQU-Sydney), Engineering Diploma In Electronics
- 28+ years of Exp in Strategy & Transformation Consulting, Technology, Business Turnaround, Market Entry, Ex Accenture, TCS, IBM, Hutchison



MD
Vijendra Yadav
(Design & Project Execution)

- B.Tech (Mechanical Engineering)
- 14 Experience of Design & NPD



COO
Vikrant Chaudhary
(Operations & Automation)

- B.Tech (Electrical & Electronics Engineering)
- 11 Years Experience in Programming & Control



Advisor
Atul Kulkarni

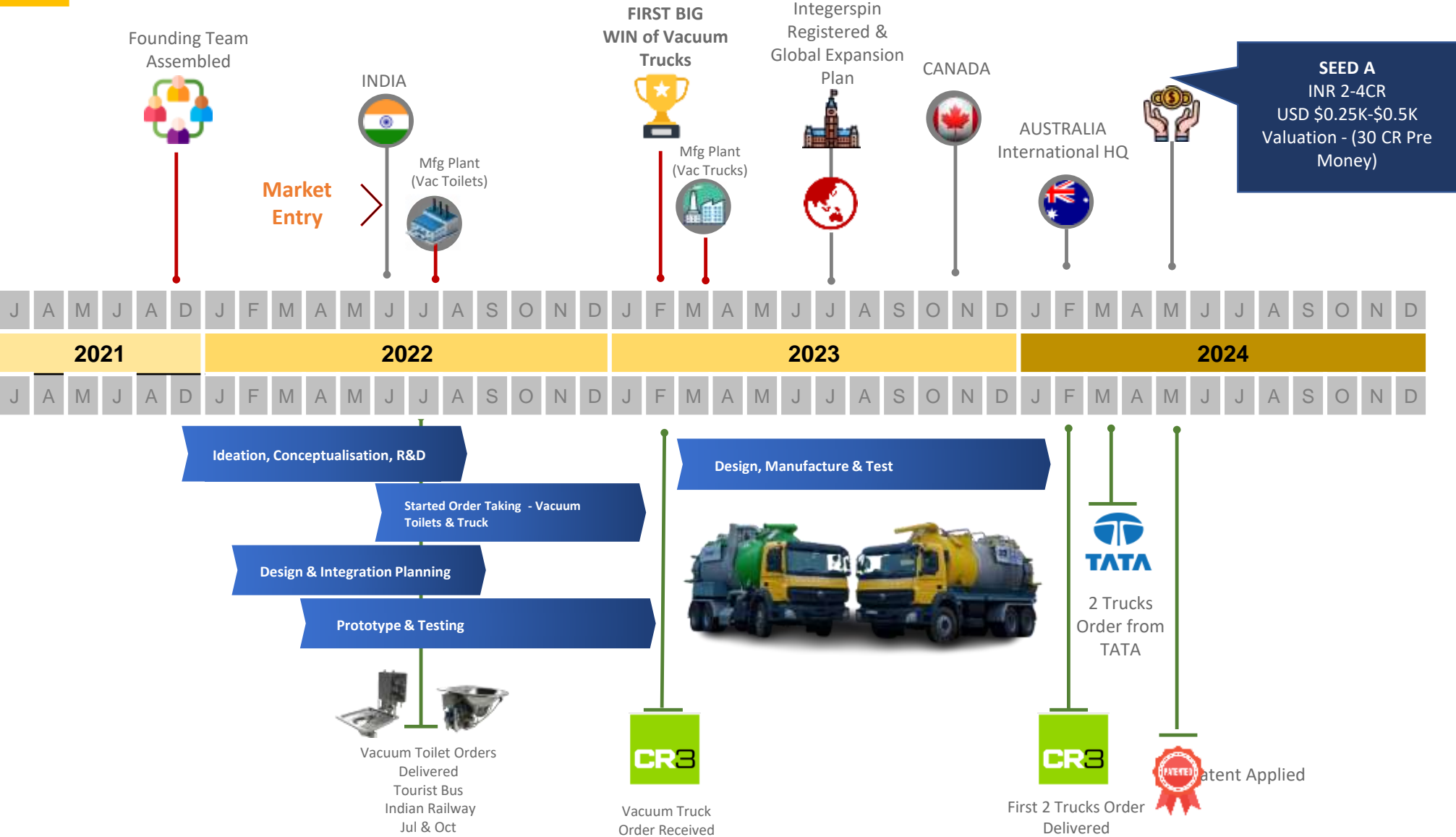
Industry & Gov Advisor

- MBA – Mumbai University, BE (Chemical Engineering)
- **Current** – Board Member IIM Shillong, Director – Eurasia SPL TECH (Defense Supplier), National VP – Yachting Club of India,
- **Ex** - CEO Chowgule Ports, Deloitte, Advisor: Ministry of Shipping, Gas Authority of India, Indian Ports Association,

Integerspin Journey & Key Milestones

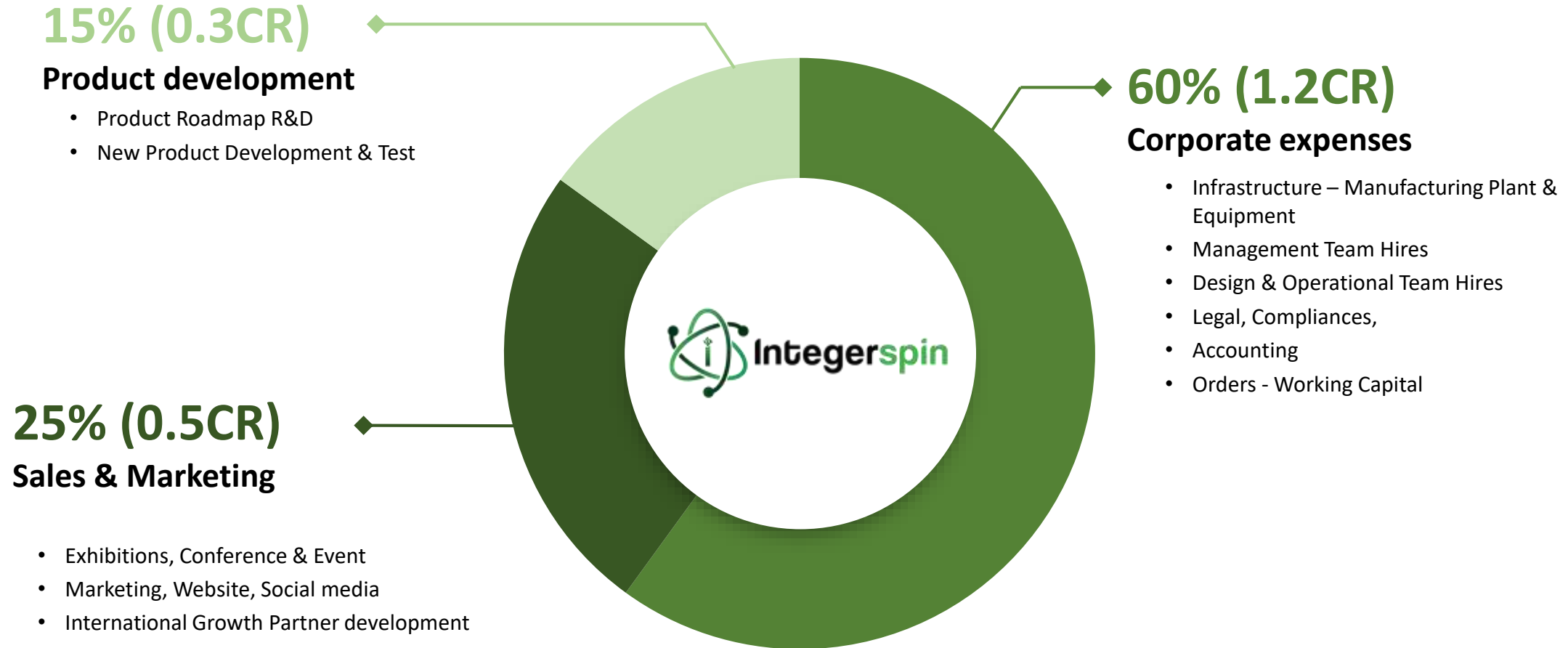


Evolving as India's Top Global Player in Vacuum Technology Based Waste Management



The ASK Seed A – Capital Funding Roadmap

Equity Round of INR 4CR, Pre Money-Valuation of INR 30 CR. INR 2CR Committed.



Early Traction

- **Net Revenues for FY24:** INR 1.82 Crore
- **Order booked for FY24-25 :** INR 10 Crore
- **Overall Opportunity Pipeline:** INR 43 Crore
- **Fund raised :** Bootstrapped
- **Patent:** Applied for CombiVac Spin (Vacuum Truck for Dry and Wet) & To be applied for Vacuum Toilet

Highlighted Clients



Clients in Pipeline



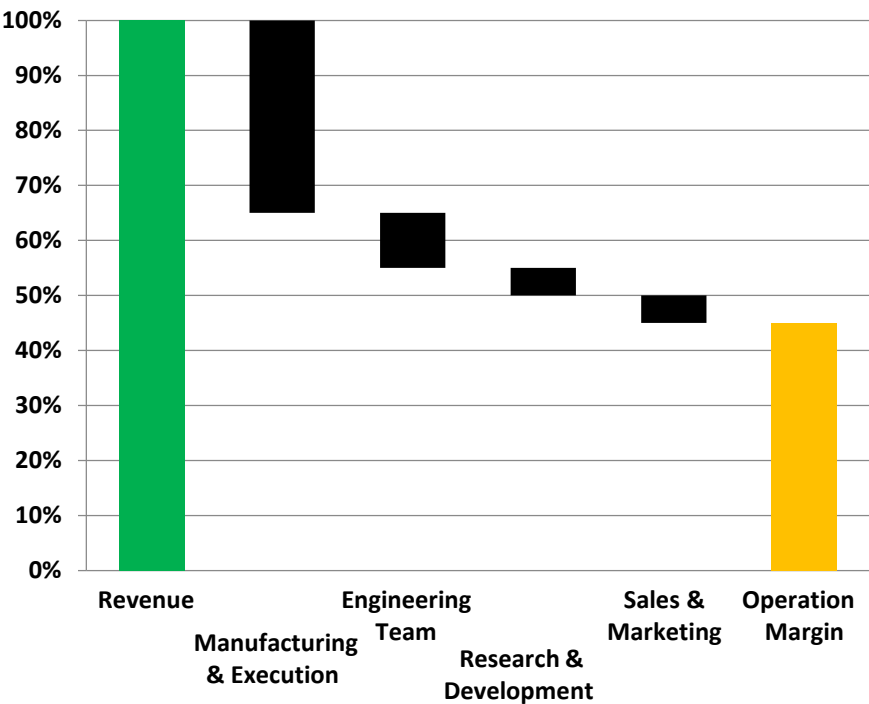
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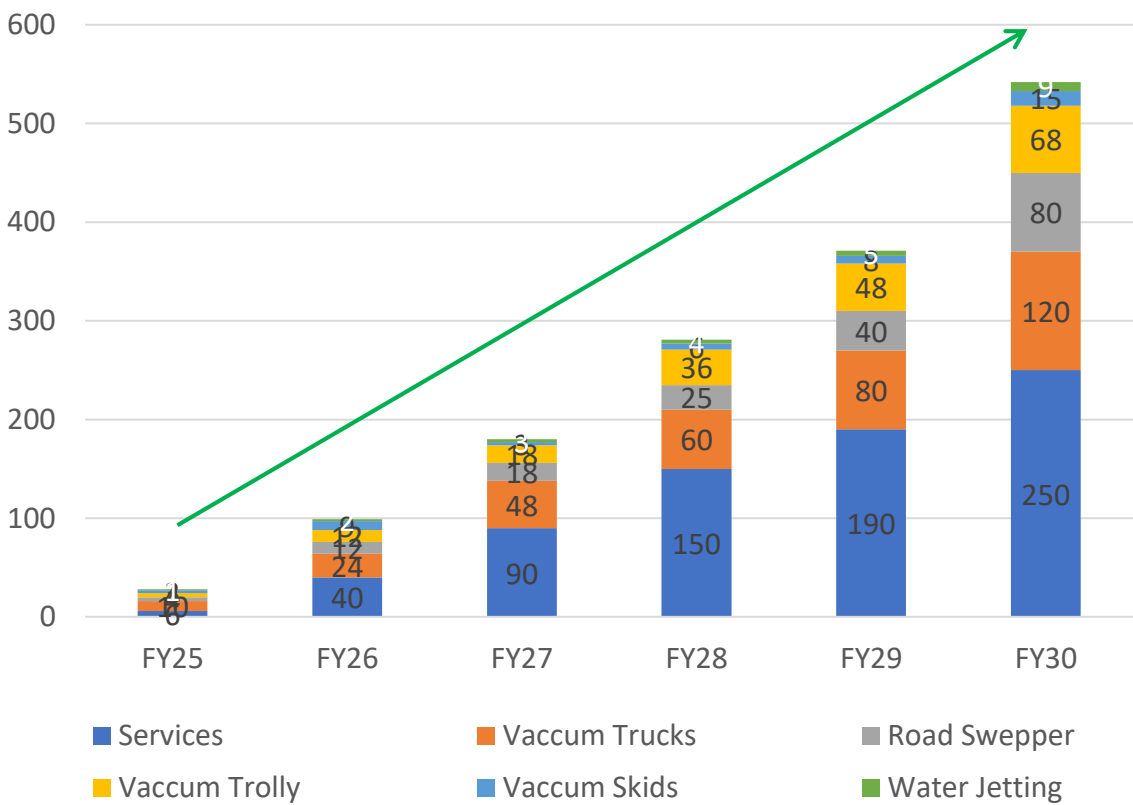
Unit Economics & Forecasts



Unit Economics – 45% Gross Margin



6 Year Forecast – Approx 550Cr Revenue



Our Markets

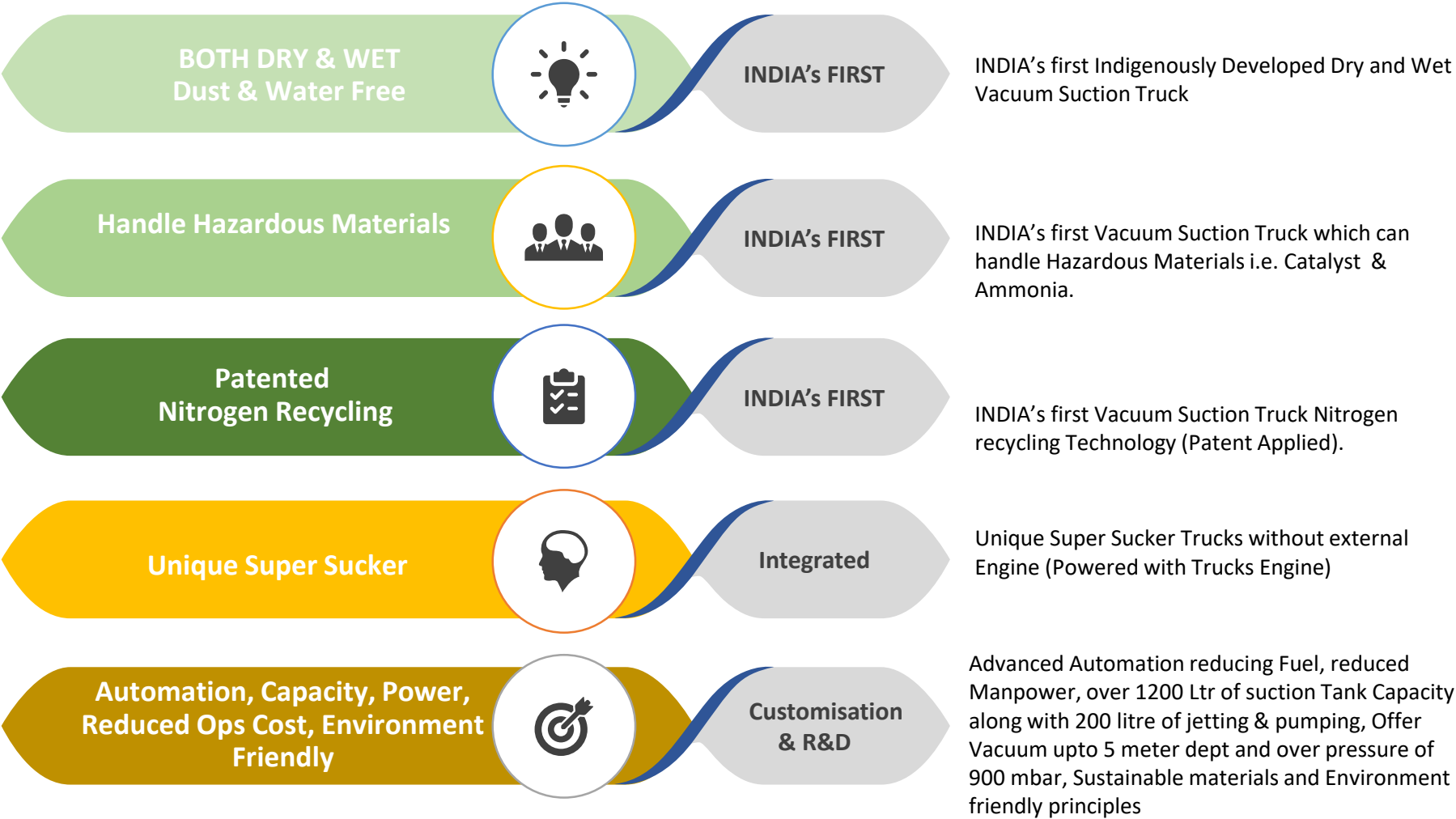


Our Current Offices, Key Target Markets & Expansion Plan





Integerspin Technology, USP's & IP's

High Level Product USP's & Patented Technology



Integerspin Vs Competition

Integerspin remains most Advance & Complete Waste Management Solution

	Vacuum Truck					Vacuum Toilets	Road Sweeper	Industrial & Petrochemical Waste	Nitrogen Recycling System	Pricing	Home Country/ Factory	Current Turn Over & Next Year Forecast	Founded
	Combi (Wet N Dry)	Solid (Dry)	Liquid (Wet)	Sewer Suction with Recycler	Normal Super Sucker (Limitations)								
	●	●	●	●	●	●	●	●	●	●	Noida-India	1.9CR/10Cr	2023
	○	●	●	●	●	○	●	○	○	🔴	Bhiwadi-India	200-300 Cr	1985
	○	○	○	○	○	●	○	○	○	🔴	Germany	EUR\$141M	1975
	○	○	○	●	○	○	○	○	○	🟡	Pune-India	200-300 Cr	2015
	○	○	●	●	●	○	●	○	○	🟡	Pune - India	150-200 Cr	1994
	●	●	●	🟡	●	○	○	●	●	🔴	Germany (Not Selling in India)	EUR\$50M	1989
	○	○	○	●	●	○	●	○	🟡	🔴	Switzerland (Not Selling in India)	EUR\$2800M	1807
	○	○	●	○	○	○	○	○	○	🟡	UK - Factory In India	EUR45M	2001

Customer Testimonials

Customer Appreciation & Vacuum Truck in Action!



<https://www.youtube.com/watch?v=eIMAJ2S48Lc>



"We are impressed with Integerspin technical capabilities, they are going to provide us customised vacuum truck for road cleaning"



"We were looking for a solution for mud suction and visited Integerspin from Oman, it is worth it for us. We are quite interested in Solid Vac Spin truck"



"Integerspin delivered beyond expectations on quality and product value add for our use case"

How we delivered Beyond Customer Expectations

CR3 Journey & Testimonial



Happy Customer

CR3 - “Rajesh Kumar” Plant Head
“We contacted every vacuum truck manufacturer in India but they could not manufacture vacuum trucks of our special refinery application as we wanted to use the same in hazardous applications.
We met with the Integerspin team and found them confident about our requirements. After several meetings and discussions with our team from many countries we decided to go with Integerspin and raised order of two vacuum trucks”

Design Started



Truck Chassis Delivered



Chassis Modifications

Fabrication Started

Sleepless Nights

Assembly Started

Dreams getting shape

Ready to Deliver





Problems, Challenges & Solution For Global Waste Management Industry

Challenges in Waste Management Industry

India and Global Regions



Sewage , Road, Garbage (Waste Management Solutions - Truck Mount Based)



Manual Scavenging (India & Undeveloped Nations)



Industrial Hazardous Material



Low Quality Products with minimum features at high cost



Environmental Pollution due to brush-based road sweepers



No End-to-End Player with Advanced Technology



Underserved Existing and New Segments & Industry Use Cases



High Production & Manpower Cost
Low Skills & Investment on R&D



Industrial Hazardous Material



EMEA –Expensive Dominated by EU & USA players. Unreliable Chinese products



Higher Delivery Timeframes



High Maintenance Cost



Zero or Low Customisation & Innovation appetite & skills

Vacuum Toilets

Limited Availability of Water & Advance Sewage Disposal & Pipping



Trains



Buses & Caravans



Marine & Cruise



Tall Residential Towers & Industrial Parks



Portable Toilets

The Solution- Answer to Challenges

Introducing India & World's most advance, smart and Green Vacuum Technology based Waste Management Solution



RANGE OF VAC-SPIN



Our Vacuum trucks are Capable to Handle Liquid, Solid, Hazardous, Non-Hazardous, Municipal and Industrial waste.



Vacuum Toilets by Integerspin Indian & Western Design



More than 80% Saving of Water

Each flush in a normal toilet takes 5-6 liters of water per flush and a vacuum toilet takes only 500 ml to 1 liter of water per flush

Comparison Between Normal Super Sucker Vs CombiVac Spin



- 3 Trucks required
- Tank capacity of 3 trucks 14000 Ltr
- Operator required for 3 trucks
- Vacuum capacity upto 500 mbar
- Vacuum depth upto 5 meter
- Noise level is very high 80 DB
- Super sucker can not work as dump truck



- 1 truck required
- Tank Capacity of 1 truck upto 14000 Ltr
- Operator required only for one truck
- Vacuum Capacity upto 900 mbar
- Vacuum depth upto 10 meter
- Noise level less is very less 63 DB
- Our super sucker can be used as dump tanker as well and work individually to create vacuum in other truck

Truck and Non Truck Products

Complete & Customised WASTE Management Solution from ONE Manufacturing Facility



The Solution - Add on Products & Services

Leveraging Same Clients and Industry Buyers

The Future Technology Products

Pipeline Dredging and Desliting



Removal of Old Paint Layers



Heat Exchanger Tube &
Tanks Cleaning



Marker Line Removal

Truck & Vacuum Based Industry Solutions



Normal & Specialty(E.g Airports) Fire
Trucks






Garbage Collection Trucks & Compactor



Revenue & Business Model

3 Baseline Revenue Models

	MAIN REVENUE	MAINTAINANCE	INSPECTION & OPERATIONS
 EQUIPMENT SALES	Outright Sales Per-unit Outright Sale (Net Margin)	Services & Parts	Expert Operators
 CLEANING SERVICES CONTRACTS	Direct to Clients & Governments as per Tender Tenure	NA	NA
 RENTALS & LEASE	Lease & Rentals of Equipment to Cleaning Services Companies & Direct Clients	Services & Parts*	Expert Operators

Product Sales, Managed Services & Consulting – Both Direct to Clients & Via Partners

Future Technology Roadmap & R&D

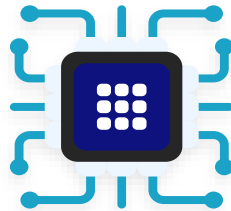
Innovate on current Products and Add New Products

IOT & Apps



- IOT enabled machines
- Online troubleshooting & modification possible
- Data dashboard for customer like waste collected, working hour, fuel monitoring, operators details etc.

GEN.AI & Machine Learning



- Future planning to launch AI module with Robot for tank and sewer internal health inspection & monitoring and report generation

Scale & Cost Optimisation



- Purchase cost optimisation upto 20% by advance planning
- Manufacturing cost optimisation by own manufacturing setup upto 15%

Add On Products



- High pressure water jetting machines development for sewer and industrial application upto 35000 psi

Robotics



- R&D start for development of Industrial robot for tank cleaning and sewer line inspection applications



Addressable Market & Global Growth Strategy

Total Addressable Market

Market if for Product & Services Both

Just Vacuum Trucks MARKET

The global vacuum truck market size was valued at

USD 1.76 billion in 2022.

The market is projected to grow from USD 1.86 billion in 2023 to USD 3 billion by 2030,

exhibiting a
CAGR of 7.1%

Road Sweeper
\$4BN (Global)

Cleaning Services Contracts Annual Spend (Just India)

INR31,000 + 10,000 CR/PA

(131+ Municipality/Town/Boards & Private Industries in India)

Vacuum Toilets (India)

Indian Railways – Over 1.2M Toilets

Growing Markets

Residential Tower Buildings

Industrial & Commercial

Source : www.fortunebusinessinsights.com
Report id : FBI103435

Understanding Market Segmentation

Wider Market Opportunities Globally – Direct to Clients & Via Partners



Government
Bodies



Municipal Corporations



Water & Effluent Treatment
Plants



National Road Bodies



Industries



Fertiliser & Cement -
Catalyst & Chemical Waste



Oil & Gas Sector – Hazardous
Waste & ATEX



Private Townships , Business Parks,



Enterprises
Vacuum Toilets



Marine (Cruises), Railway, Trucks &
Portable Toilets

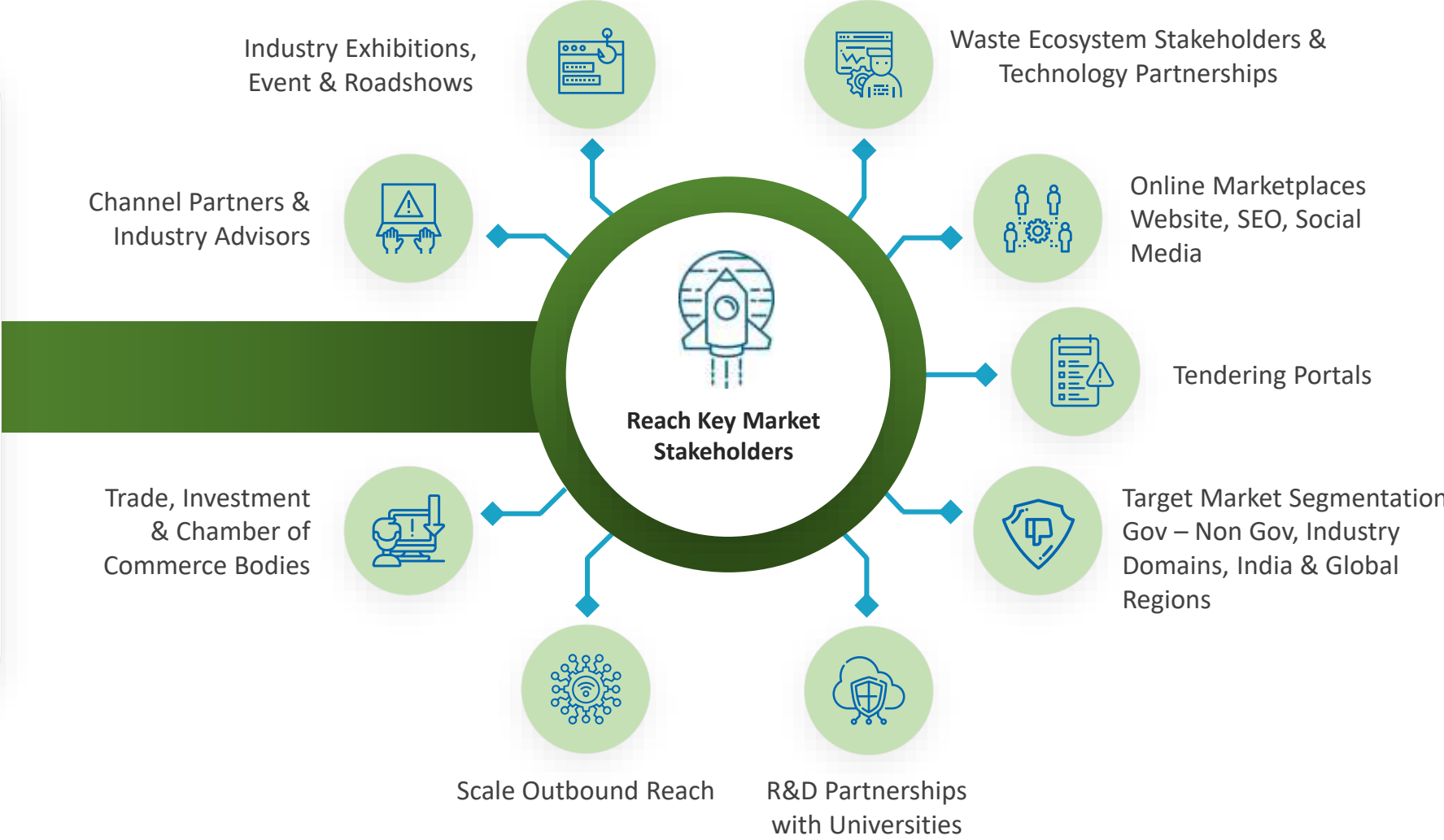


Business Parks, Residential
Towers, Buildings and Industries,
Commercial Properties

Marketing & Capturing Local & Global Markets



Targeting both
Product & Services
Opportunities



Developing Global Partnerships

Global Government & Enterprise Contractors and Service Providers



1

Cleaning Services Companies & Sales Companies

- Regional & National Government Service Providers

Trucks Sellers, Cleaning Contractors & Services Players

2

Gov & Non-Gov Trade & Investment Bodies

- Medium-size Cybersecurity, IT Services, MSPs, SIs
- Global & National IT Resellers/Distributors
- Strategic Advisory Network

3

Technology & Waste Management Ecosystem Partnerships

- Technology, Process & GTM Partnerships with Waste Management Ecosystem Players
- GEN AI, IOT, Tech Companies
- Co-development

Technology & Vendors



Appendix

Vacuum Toilets in Actions

Saving Water – Market Scaling Up for Vacuum Toilets



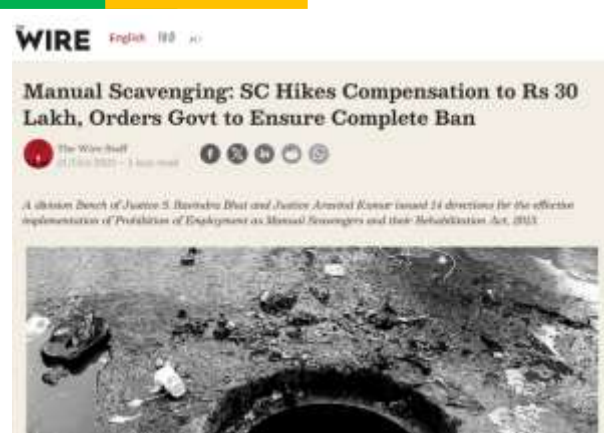
<https://www.youtube.com/shorts/Phf9NgGvWCs>



<https://www.youtube.com/watch?v=PHwxxdbGsg4>



Manual Scavenging still an Issue



The Prohibition of Employment as Manual Scavengers and their Rehabilitation Bill, 2012

Ministry: Social Justice and Welfare



Manual Scavenging is completely Banned in India
PEMSR Act 2013, 1993.

Due to which mechanized scavenging is emerging Integerspin is manufacturing vacuum trucks which is revolution in the market and capable to Handle Liquid, Solid, Hazardous, Non-Hazardous industrial waste.



Integerspin Pvt. Ltd.

THANK
YOU