

TGD 2203



Drone Scanner For Inventory Management Systems



UNIVERSITI TEKNOLOGI MALAYSIA
UTM

OUR TEAM

Meet our amazing team



MOHAMED SAFIR

LEADER



OMAR BATIS

INTELLIGENT THINKER



MOHAMED ABUJARAD

CREATIVE LEAD



MAHMOUD ATWA

CAMPAING STRATEGIST



MOHAMED MAGDY

DIRECTOR OF MARKETING

Great products depends on great people

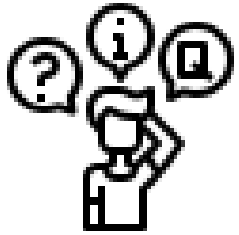
Great products depends on great people



BREAKING

NEWS





Material Handling Hazards and Control Measures



Factory in Selangor, Malaysia

2019



A general worker died after his forklift was overturned and crushed him.





Manual Material Handling Hazards

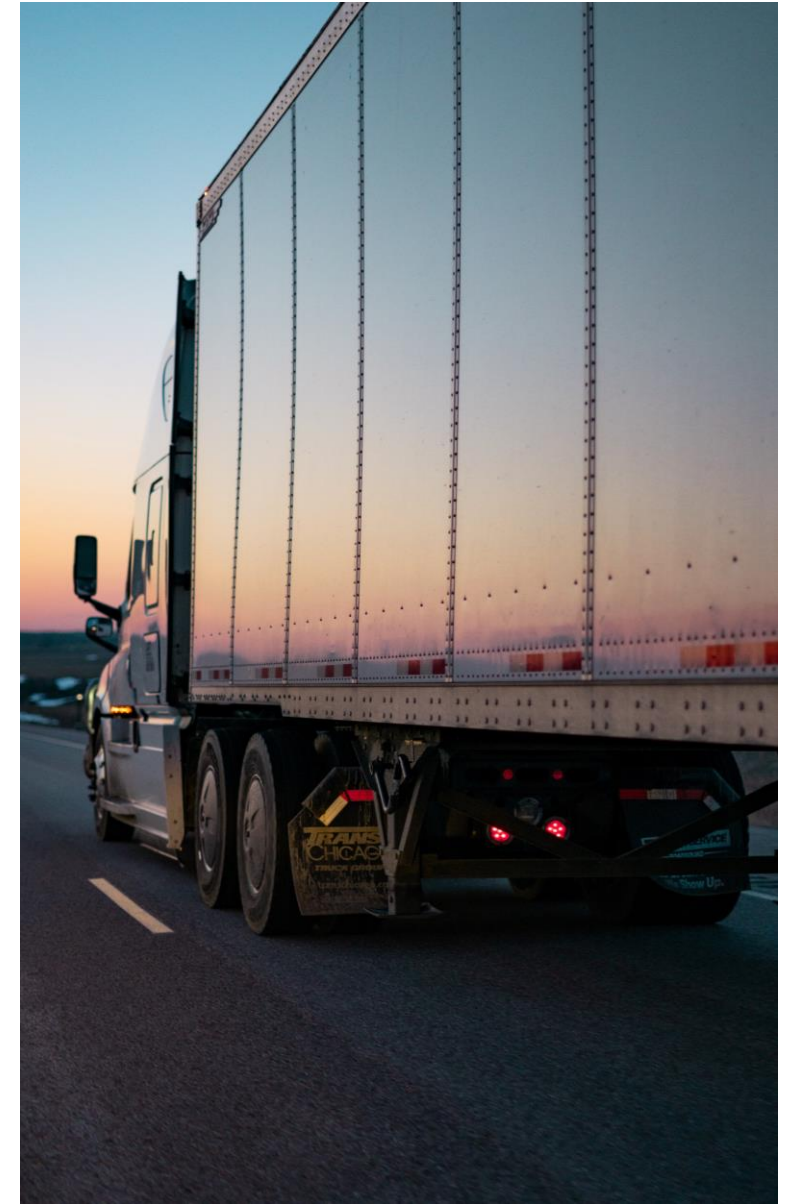


Factory in Johor , Malaysia



A worker was killed after a truck crushed him when reversing to load and unload materials.

2020





2020



Safe Drum Handling Procedures



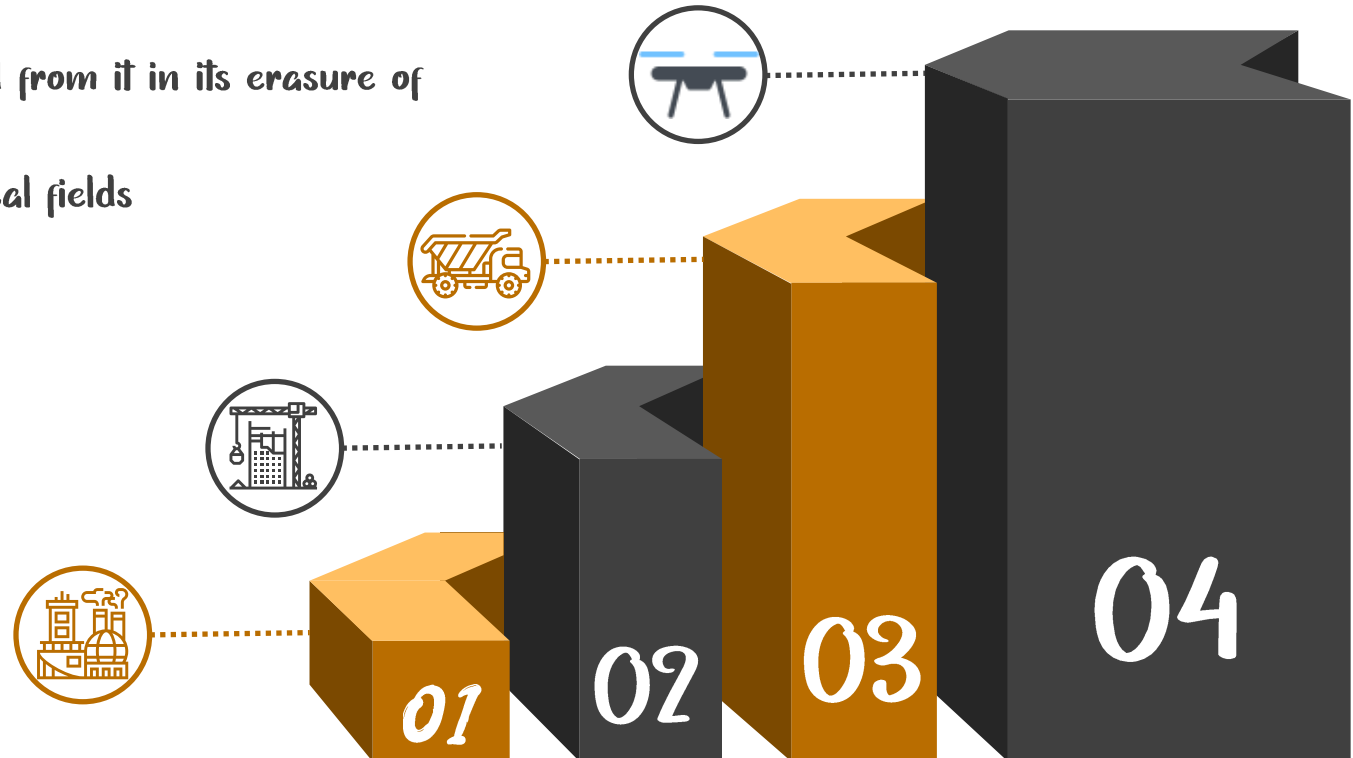
Factory in Melaka , Malaysia



A drum of liquid thinner exploded, killing a worker due to severe burns after catching fire from drum cleaning activities.

4TH GENERATION

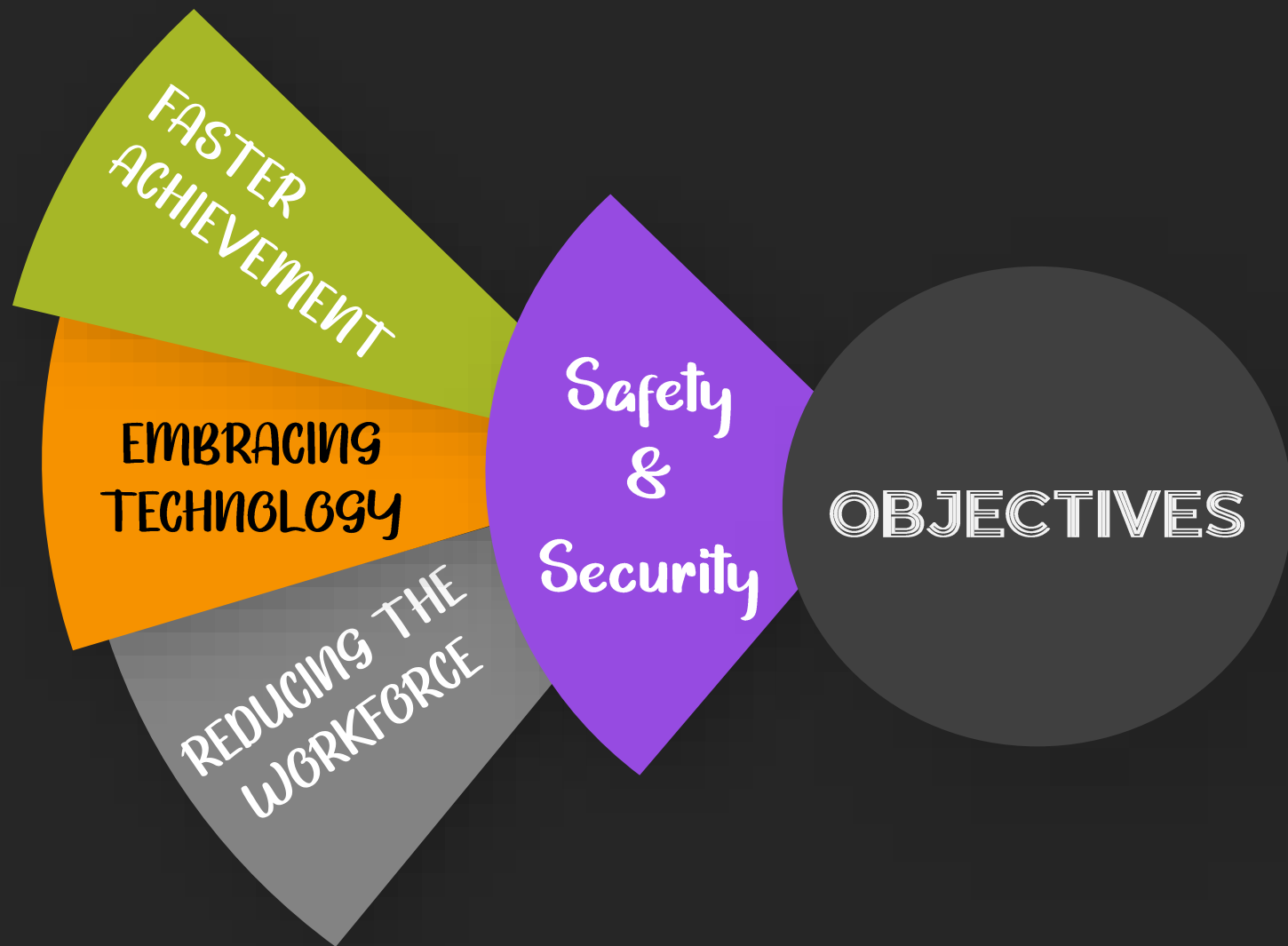
Here we are now in front of the Fourth Industrial Revolution, which took its predecessor – the digital revolution that began in the middle of the last century – as its basis. Although it is distinguished from it in its erasure of the lines between the physical, digital and biological fields





The Solution





HOW IT WORKS !?

It is divided into two parts

THE SENSORS

collect information from their surroundings
With this information, drones can maintain
their positions, determine how fast they are,
and avoid obstacles.



THE DRONE

which will be the moving part that will fly inside the
warehouse and scan the QR code images in a specific
path from the target tanks and send the data to the
server for analysis and sending it to the Dashboard



THE DASHBOARD

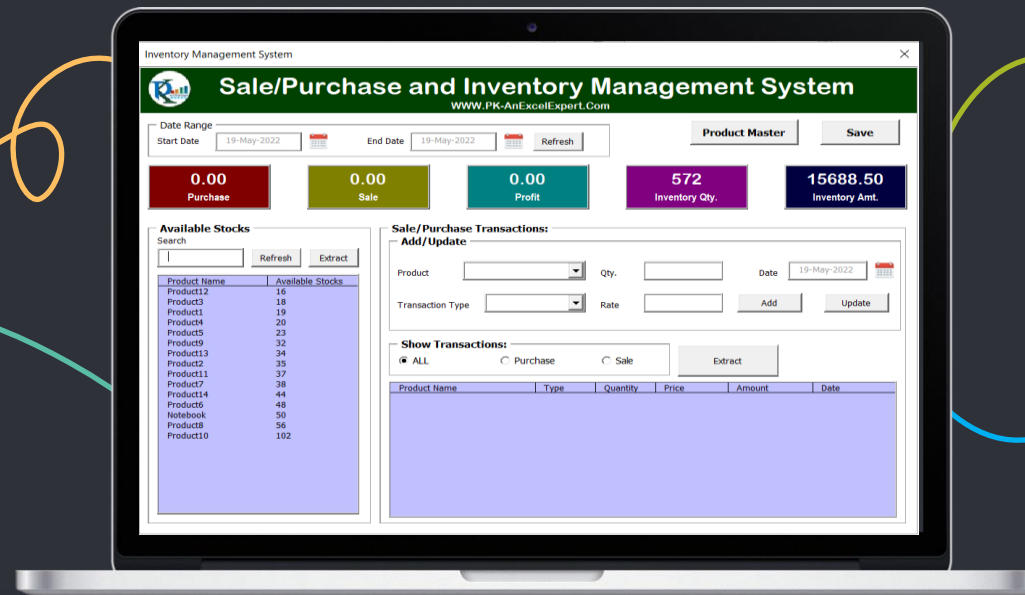
IT IS THE CONTROLLING PART THAT SENDS AND RECEIVES INFORMATION FROM THE DRONE
AND DISPLAYS IT TO THE USER IN THE SIMPLEST FORM



Make a comparison between periodic inventories in terms of quantity and sales



Display all survey results to the user
and easily access them



View the scanning process
periodically



View full drone information

DRONE COMPONENTS



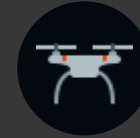
Flight Controller
&
Transmitter



BATTERY



Raspberry Pi



Highly streamlined body and lighter weight



RECEIVER



IMU 9 degree sensor



PIXHAWK



ULTRASONIC



PROJECT IMPACT



Reduced Inventory
Time



Reduction Of
Inventory Costs



Increasing In Inventory
Accuracy



Warehouse Automated



Reduce Safety Risk



Robert Howard

[THE LINK](#)



John Collins

[THE LINK](#)



Ninja Van Express

[THE LINK](#)



Brandon Green

[THE LINK](#)

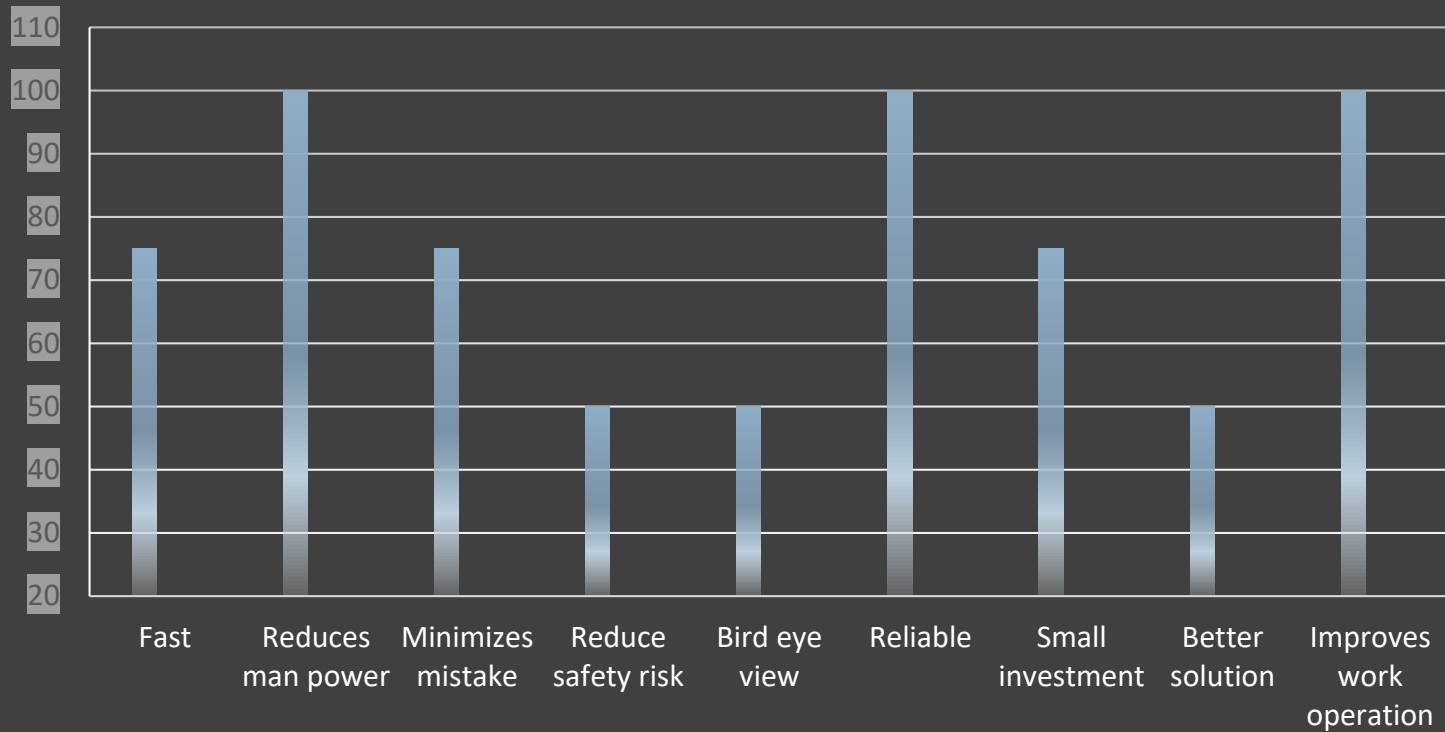
PROJECT VALUE

OUR PROJECT TARGETS SHIPPING,
LOGISTICS AND STORAGE COMPANIES



CASE STUDY

Overall Response On Drone Usage



THROUGH A STUDY THAT WAS THE YEAR **2020** A QUALITATIVE CASE STUDY ON THE USE OF DRONE TECHNOLOGY FOR INVENTORY TAKING ACTIVITY IN A THIRD-PARTY LOGISTICS COMPANY IN MALAYSIA, RESPONSES WERE TAKEN FROM MANY RELEVANT PARTIES



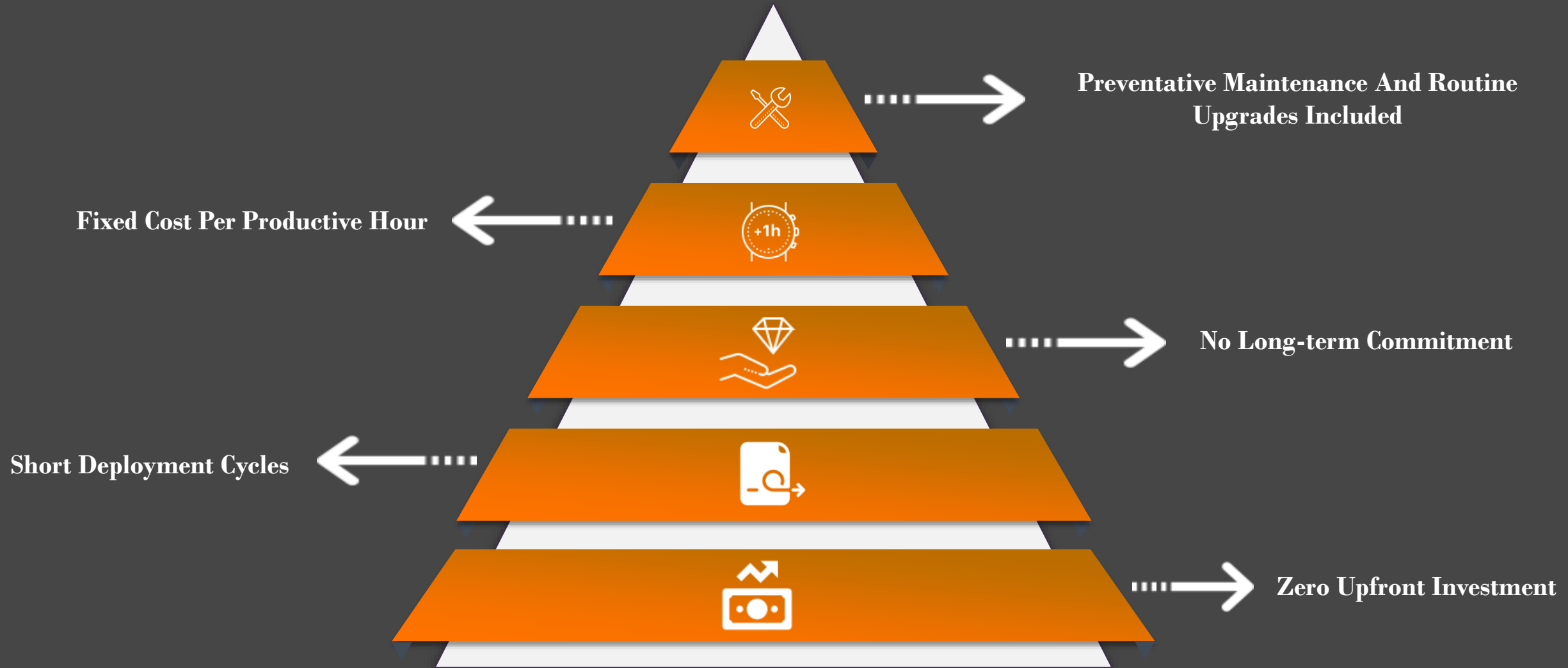
“

RENTING ALLOWS US ACCESS TO THE LATEST AND BIGGEST VARIETY OF
EQUIPMENT WITHOUT INVESTING A HUGE AMOUNT OF MONEY. HELIGUY
ARE THE BEST PARTNER TO OUR DRONE OPERATIONS – GIVING US THE
TRUST THAT THEY WILL NEVER LET US DOWN.

”

Cesar Hoyos Franco, Land Surveyor for NPS Group.

What Are The Benefits For CUSTOMER!?



BUSINESS MODEL

BUSINESS MODEL

START-UP COST

ITEM DESCRIPTIONS	QTY	UNIT PRICE	TOTAL
DRONE BODY	1	7,000 RM	7000 RM
SOFTWARE	1	15,000 RM	15,000 RM
LICENSE	1	1,000 RM	1,000 RM

GRAND TOTAL

23,000 RM

MONTHLY FEES

ITEM DESCRIPTIONS	AMOUNT (RM) 1 MONTH	AMOUNT (RM) 6 MONTH	AMOUNT (RM) 1 YEAR
DRONE MAINTENANCE	10,000 RM	52,000 RM	85,000 RM
SOFTWARE	500 RM	2,500 RM	4,500 RM
LICENSE	80 RM	400 RM	760 RM
LANDING AREA	10,000 RM	52,000 RM	85,000 RM

GRAND TOTAL

20,580 RM

106,900 RM

175,260 RM

PAYMENT METHOD

By Bank

Bank Name:

Bank Code:

SPARK THINKERS

Monnerr

AFTER 1 YEAR

The average company needs 10 Drones to complete the inventory, so within a year the company was able to recover more than the value of the capital!

And in 5 years, you have marketed yourself to a large number of Malaysian companies, as there are only a few drone companies in the field of warehouses in Malaysia and the market is open



BILL OF MATERIAL

No. 2756986035

Invoice to:

SPARK THINKERS

Manager

Bill To

MAHMOUD ATWA

SKUDAI

JOHOR BAHRU

ITEM DESCRIPTIONS	QTY	UNIT PRICE	TOTAL
DRONE FRAME	1	500 RM	500 RM
MOTORS	1	200 RM	200 RM
FLIGHT CONTROLLER	1	600 RM	600 RM
RASPBERRY PI	1	400 RM	400 RM
SENSORS	1	2500 RM	2500 RM
CAMERA	1	1000 RM	1000 RM
SMART BEACONS	1	1300 RM	1300 RM
REMAIN COMPONNET	1	500 RM	500 RM

GRAND TOTAL

7,000 RM

PAYMENT METHOD

By Bank

Bank Name:

Bank Code:

SPARK THINKERS

Manager

RECOMMENDATION LETTER



Mr Mohammed A. M. Abujarad
Mr Mohammed Safir Saeed
Mr Mahmoud Atwa
Mr Omer Batis
Mr Mohammed Magdy Al
45 Jalan Pulau
Taman Utama Skudai
81300 Johor Bahru
Malaysia

19/5/2022

Project | Drone scanning in Warehouse TGD2203

Thank you for contacting AlKhaimah For Plastic Industries to discuss your new product/invention. We realise that this is part of the university competition. Still, there is also a functioning prototype of the Drone available, and you are looking for comments on its commercial potential.

We had an internal debate about how you may go with developing your brand reputation and marketing this prototype. In our opinion, the present stage is pre-commercialization. What you can do is convince possible impact investors and manufacturers to work with you to refine the Drone and get it to a marketable standard. This would include first contacting different impact investors, start-up incubators, and the like to apply to their programmes and be permitted to present your Drone and business plan to their decision-makers to get crucial input for going ahead. Although not yet monetised, you must have a social media presence for your brand/product. This would be the first step in building a brand for your team as a company and connecting with the people mentioned above and keeping them updated. It will also assist you in asserting the more comprehensive intellectual property rights linked with your idea. I am pleased to provide you with some time to assist you with developing a brand name, an excellent social media presence, and some other documentation that may help you go ahead with your project.

Regards



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A laptop with a black screen is positioned on the left side of the image. The background is split into a red upper right section and a dark blue lower left section. A faint, thin-lined circle is visible behind the laptop. To the right of the laptop, the text "OUR DEMO" is written in a white, stylized, outlined font. Below the text is a short white horizontal line.

OUR DEMO

Thank You

