

## NEXXIS ROBOTIC SOLUTIONS

REMOTE INTERNAL  
INSPECTION, MOVING FROM  
DATA LAKES, TO  
AUTOMATED INSPECTION

JANUARY 2024



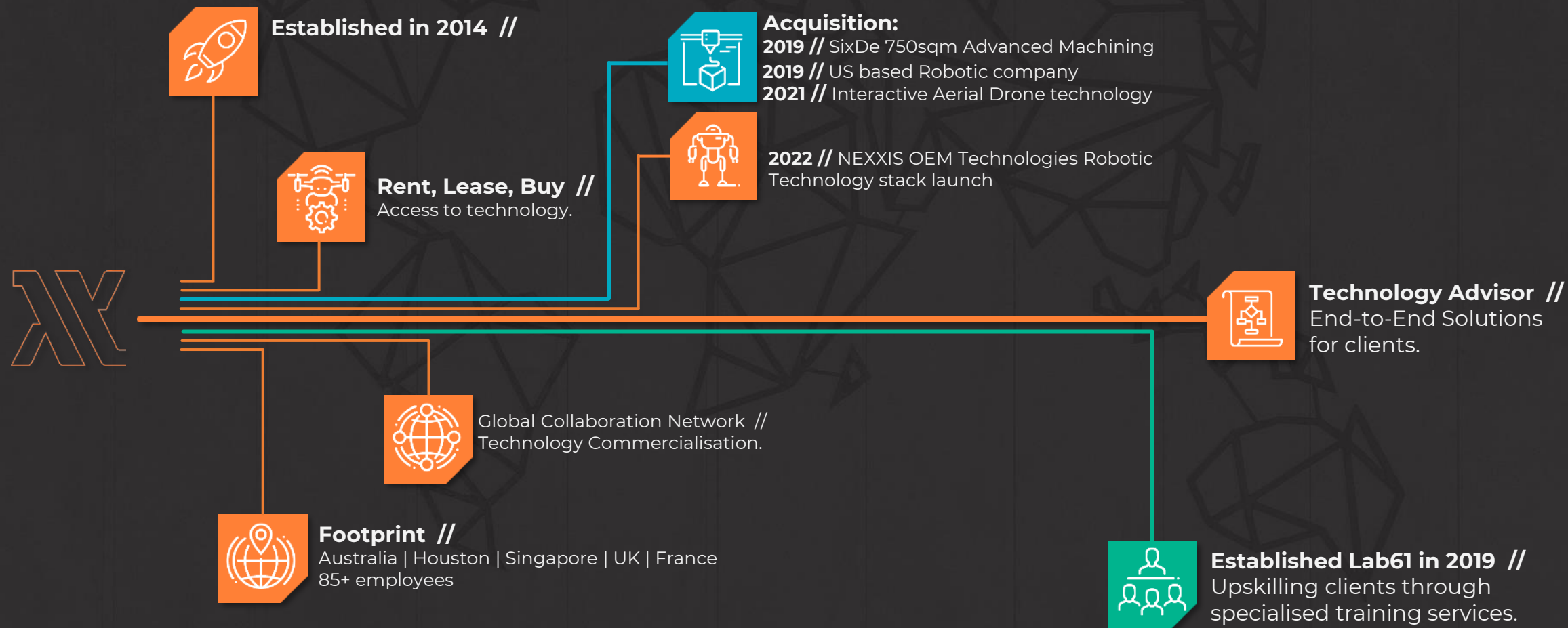
# AGENDA

// FUSING INNOVATIVE TECHNOLOGY AND PURPOSEFUL DESIGN, WE'RE PIONEERS OF CUTTING-EDGE, END-TO-END SOLUTIONS.

1. INTRODUCTION TO NEXXIS
2. NEXXIS SOLUTION METHODOLOGY
3. TECHNOLOGY STACKS – ADAPTABLE MODULAR DESIGN
4. **CASE STUDY:** IN SERVICE DIESEL TANK INSPECTION
5. OEM PRODUCTIZATION 2024
6. ROBOTICS INDUSTRY TECHNOLOGY ROADMAP – WHERE DO WE GO FROM HERE?

# WHO WE ARE

// FUSING INNOVATIVE TECHNOLOGY AND PURPOSEFUL DESIGN, WE'RE PIONEERS OF CUTTING-EDGE, END-TO-END SOLUTIONS.



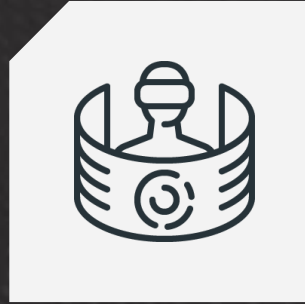
# Our Value Streams

## Off-the-shelf Solutions

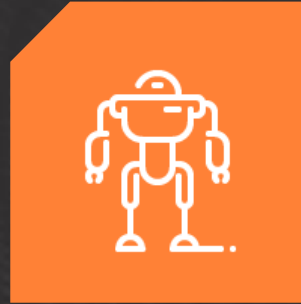


ASSET INTEGRITY RVI NDT & SENSOR  
TECHNOLOGY

## Custom Solutions Robotics



ENGINEERING & CONSULTING



ROBOTIC INSPECTION  
SOLUTIONS

## Advanced Manufacturing



CUSTOM SOLUTIONS DEVELOPMENT

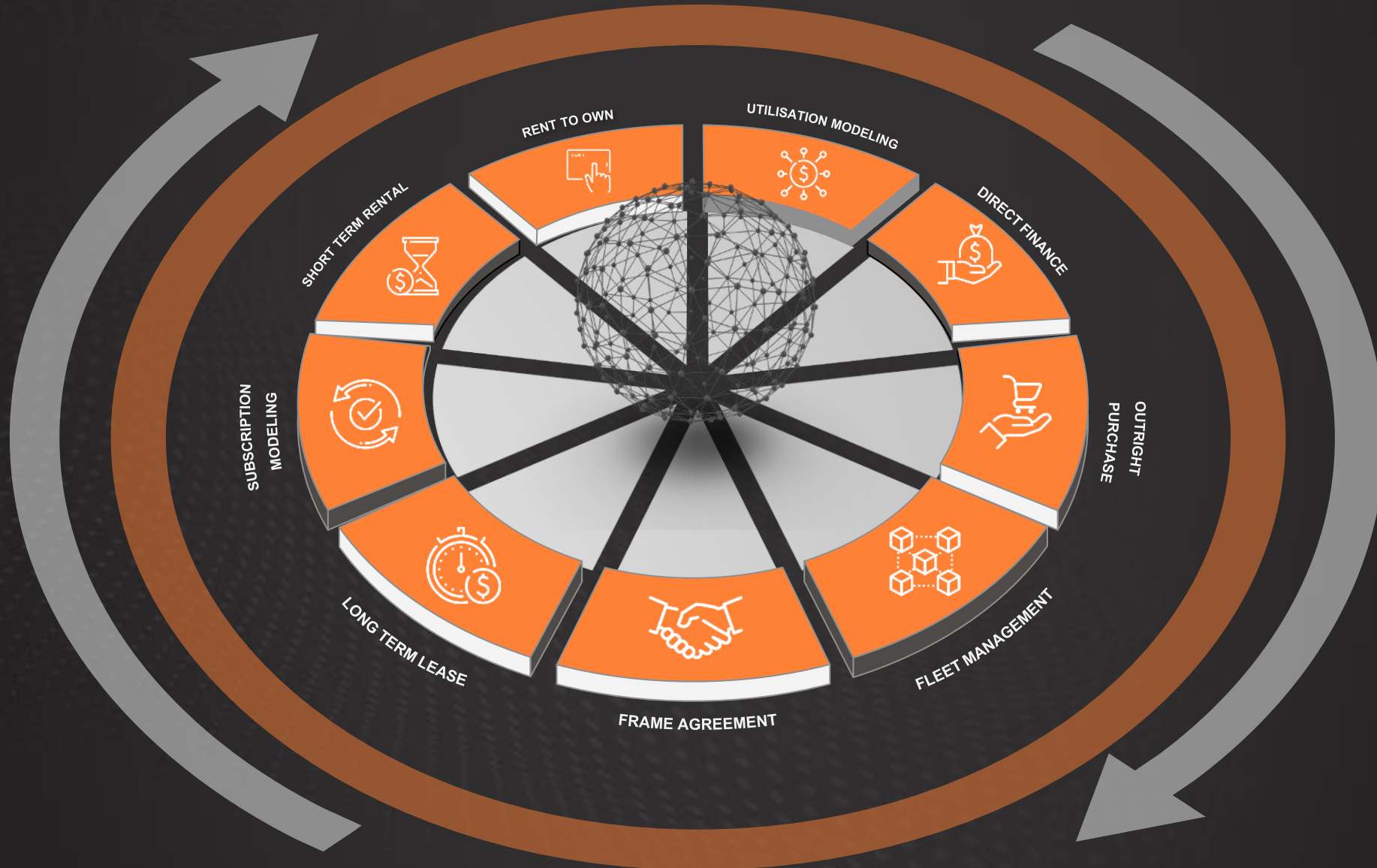
## Training & Skills building




SUPPORT & TRAINING

## WHY COMPANIES WORK WITH US

// GAIN DIRECT ACCESS TO THE LATEST TECHNOLOGY & INDUSTRIAL EQUIPMENT FROM ANYWHERE IN THE WORLD.



**nexis**



**NEXXIS TECHNOLOGY STACKS**  
DEVELOPING MODULES FOR  
FUTURE ADAPTABILITY

**nexxis**

08\_9418 4952  
[NEXXIS.COM.AU](https://nexxis.com.au)

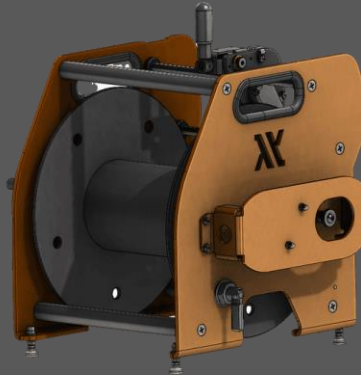
# TECHNOLOGY STACKS

## NEXXIS MODULAR STACKS CONFIGURATION

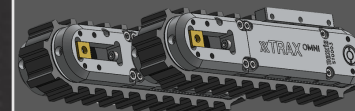
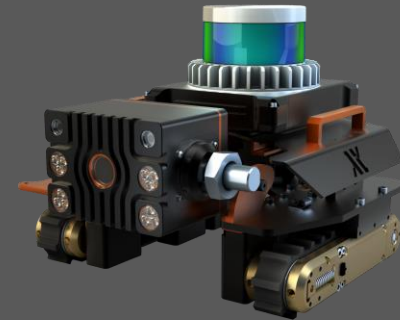
JUICEBOX CONTROL



MINI REEL



ROBOTIC PLATFORM



Xtrax Tracks



Argus LiDAR



Qube Camera

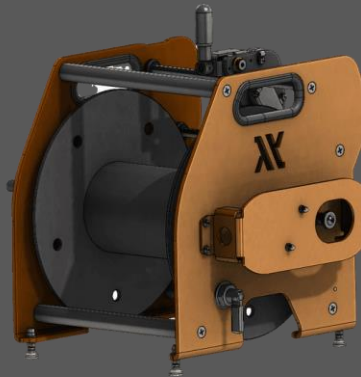
# TECHNOLOGY STACKS

## NEXXIS MODULAR STACKS CONFIGURATION

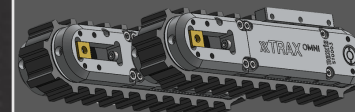
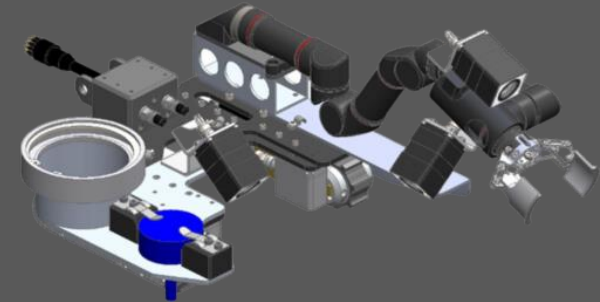
JUICEBOX CONTROL



MINI REEL



ROBOTIC PLATFORM



Xtrax Tracks



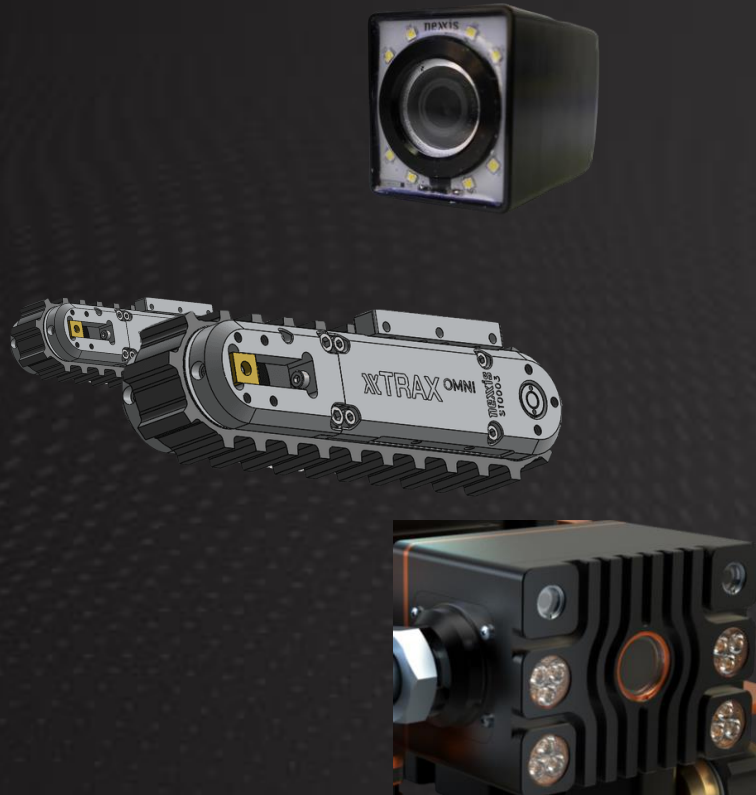
5-Function Arm



3X Monic Camera

# AGNOSTIC INTEGRATION

NO TIES – NO LIMITATIONS



## ROS2 Infrastructure

- Allows the system to talk, communicate and integrate
- Open Source and Easily Collaborative

## Common Fiberoptic Communication

- High Bandwidth / Technology Agnostic Integration across multiple applications and industries
- What is learned in one industry, will very likely suit another





**CASE STUDY**  
**IN-SERVICE DIESEL TANK INSPECTION**

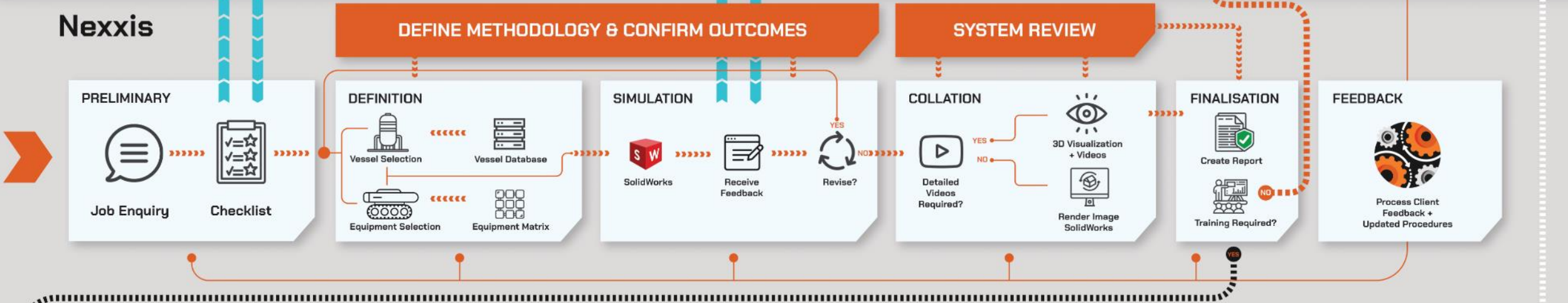
# SOLUTIONS DELIVERY METHODOLOGY

"The Nexxis way"

Client



Nexxis



Lab61



## CASE STUDY

### IN SERVICE TANK INSPECTION

- **Industry:** Oil and Gas
- **Challenge:** In-service diesel tank inspection
- **Evaluation:** Custom Solution required.
- **Solution:** This inspection was performed with the use of a submersible custom magnetic track crawler with a UT and cleaning device added to it.



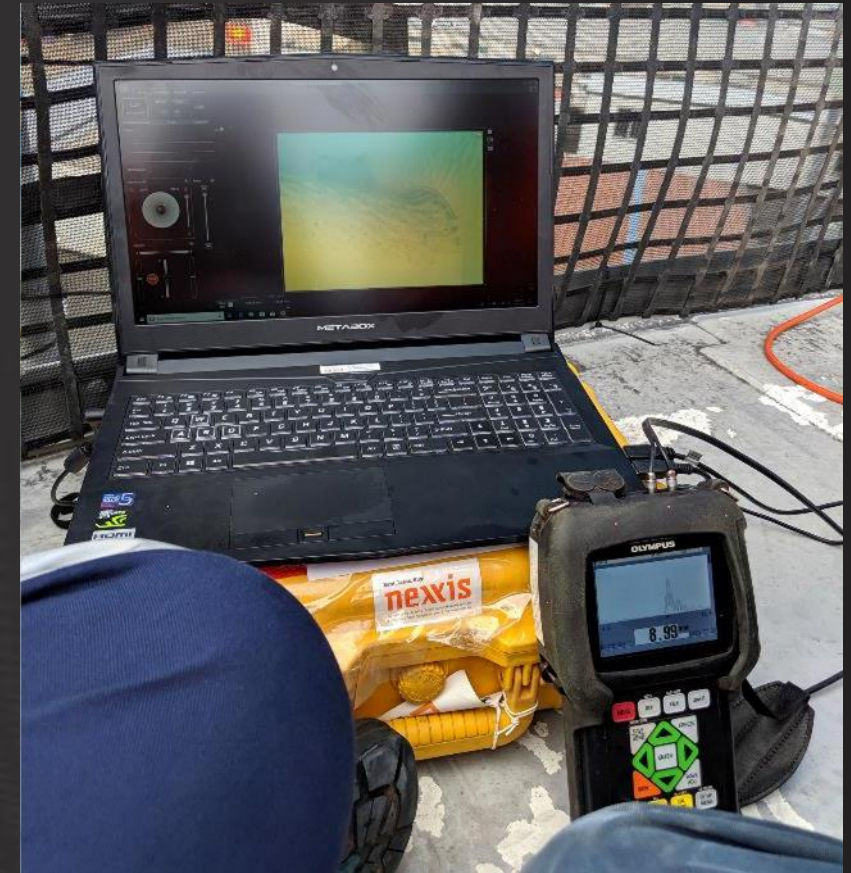
## CASE STUDY

### IN SERVICE TANK INSPECTION

The resulting inspection provided a range of benefits to the client including;

- ✓ **Reduced Risk (No CSE required)**
- ✓ **Reduced Work Scope during Shutdown**
- ✓ **Estimated \$1M USD cost saving**
- ✓ **Delayed tank emptying for an additional 4 years**

Additionally, the inspection sparked interest from employees and operators, highlighting the possibilities of robotic inspection and illustrating the positive outcomes.





**NEXXIS OEM SOLUTIONS**  
**NEW FOR 2024**

**nexxis**

08\_9418 4952  
**NEXXIS.COM.AU**

NEXXIS // PRODUCT MODULARITY

## NEXXIS OEM PLATFORMS

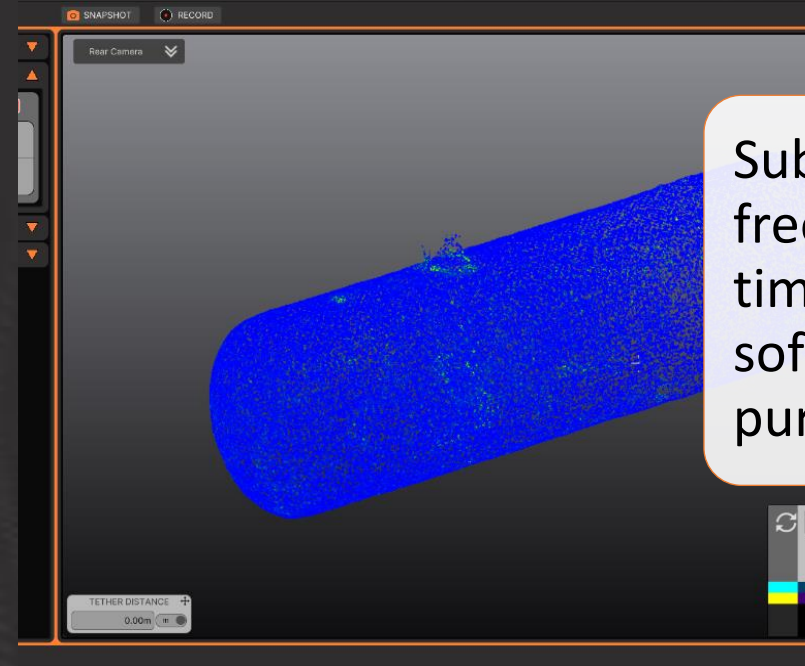
NEW FOR 2024

### Common Platform



Nexxis  
Juicebox for  
all Nexxis  
OEM Robotic  
Solutions

### Common Control



Subscription  
free, one-  
time  
software  
purchase

## NEXXIS OEM PLATFORMS

NEW FOR 2024



### Large Class Pipeline Crawler

- From 270mm to Flat >1KM  
Direct sensor Integration



### Small Class Modular Pipe / Surface Crawler

- From 100mm 300m  
Standard



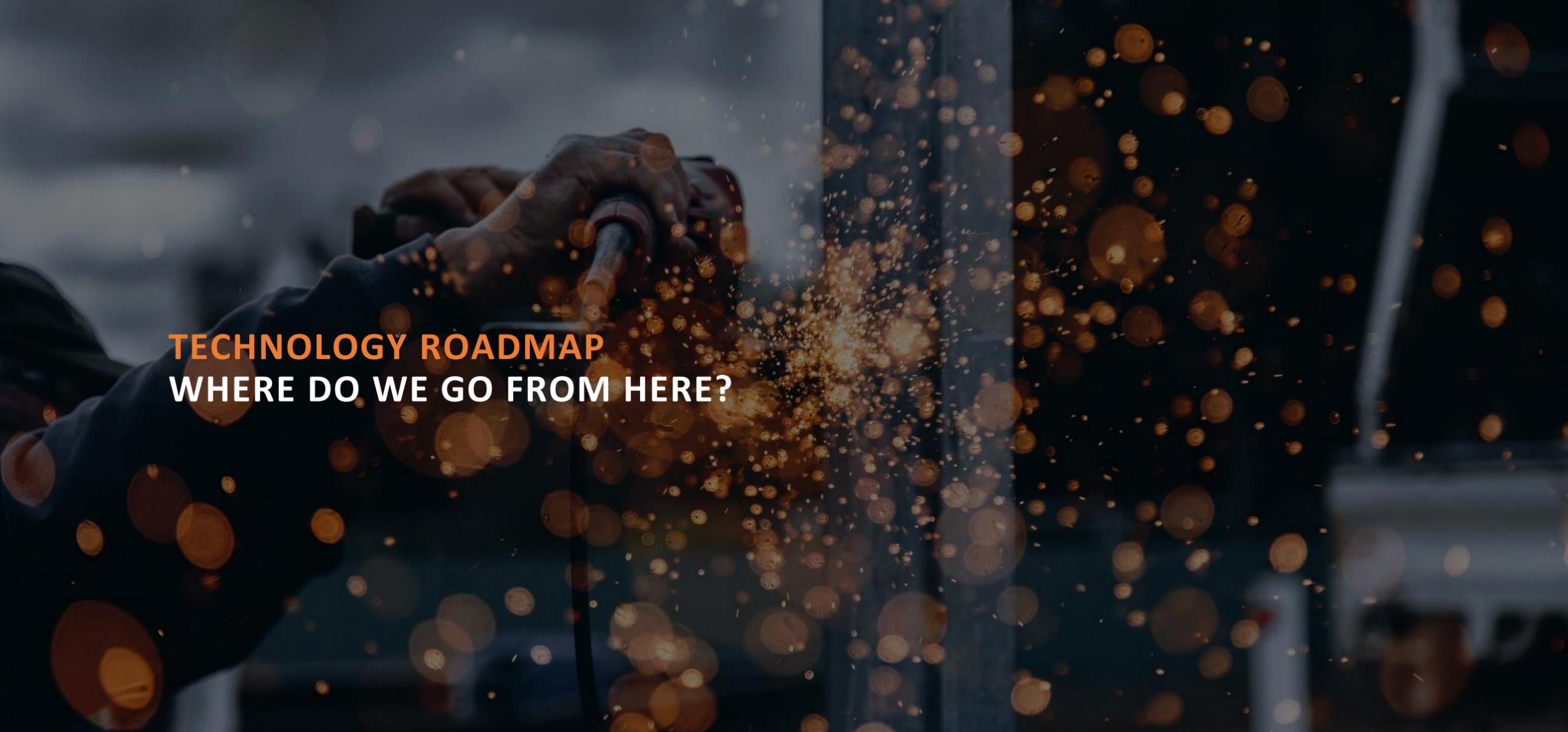
### Vertical Pipeline Crawler

- From 180-400mm and  
>400mm in XL Format HD  
front and Rear Cameras



### Magnetic Surface Crawler

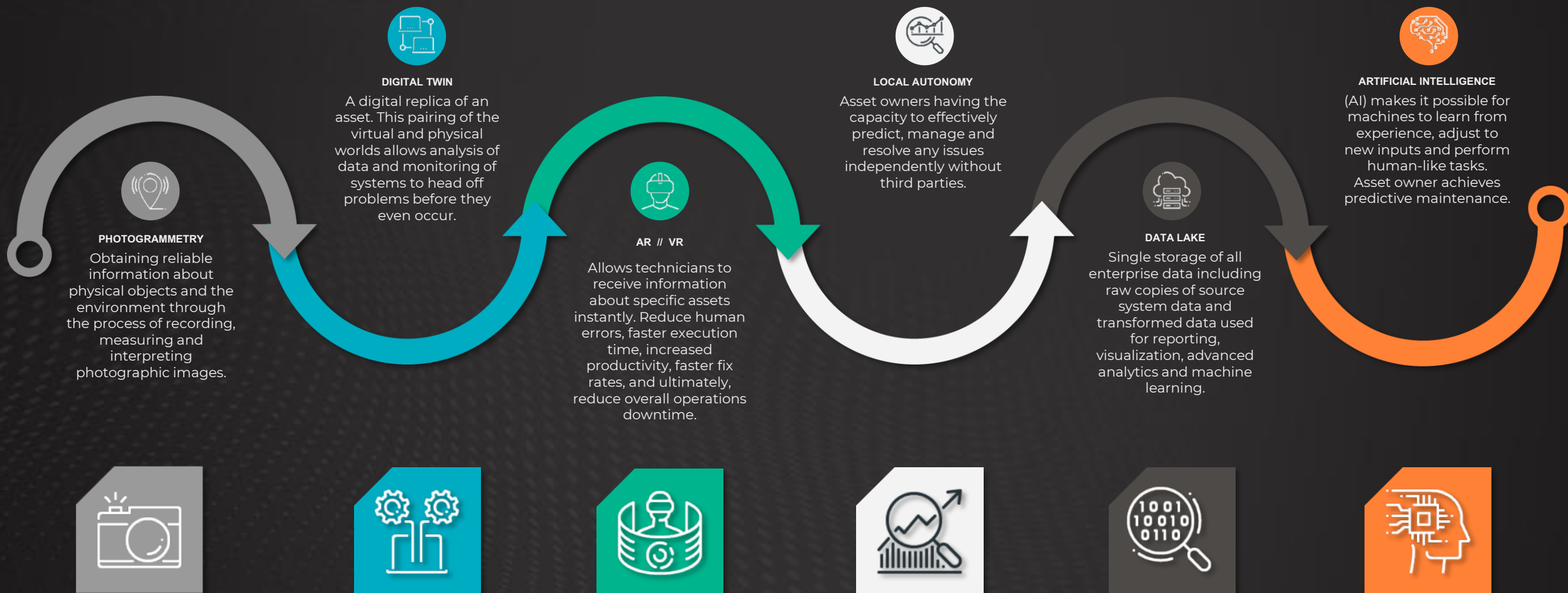
- HD Cameras, Fibreoptic  
communication, High  
Bandwidth Modularity



**TECHNOLOGY ROADMAP**  
**WHERE DO WE GO FROM HERE?**

# TECHNOLOGY ROADMAP

// NEXXIS WILL HELP YOU GET WHERE YOU WANT TO BE



SixDe | nexis | lab61

HOUSTON | AUSTRALIA | SINGAPORE

“ Together, let's reach the ”  
unreachable.