



Infusing Immersive Technologies

To Enhance Training for

New Fuels Handling

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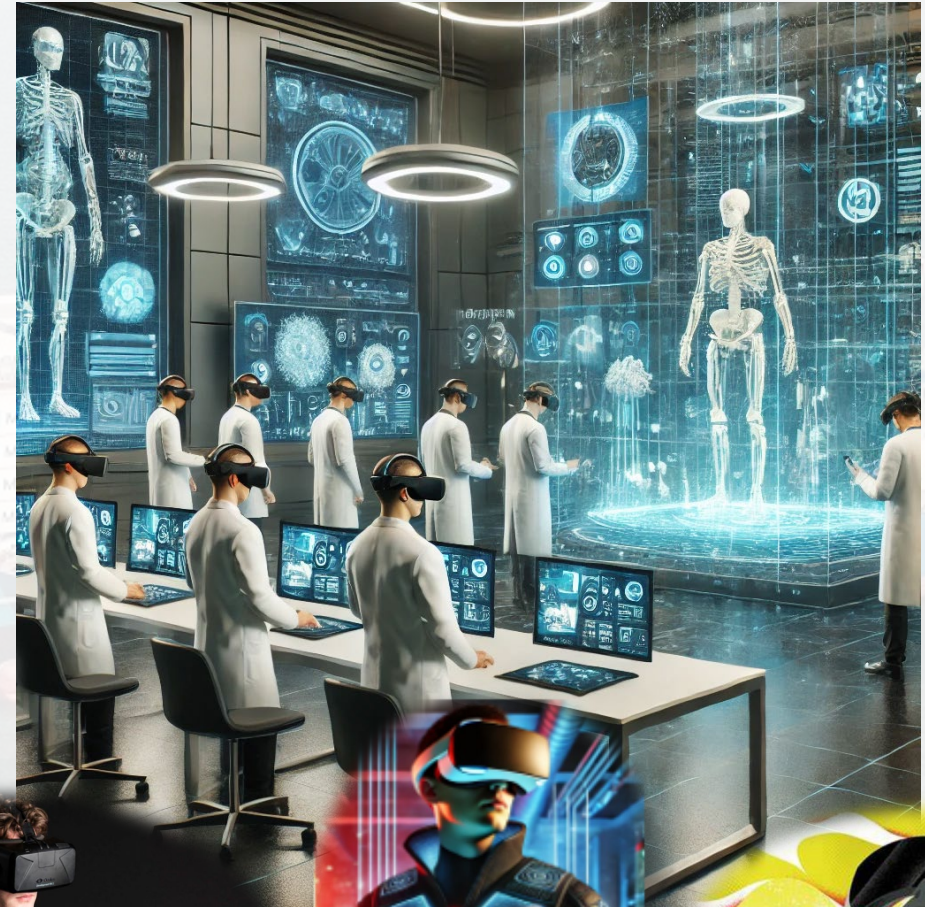
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NEW FUELS

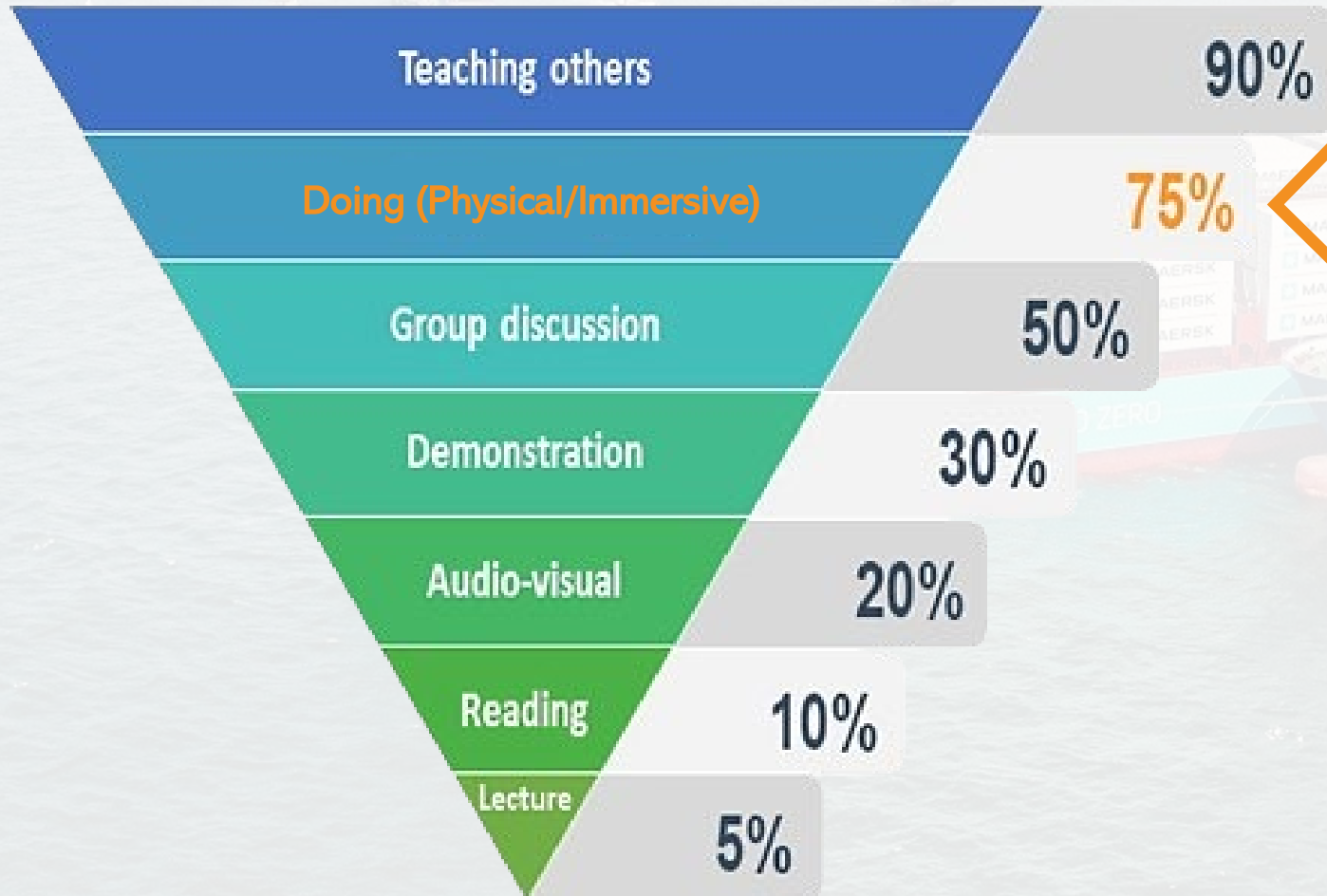
1. The **SAFETY** and **efficiency** of fuel handling are paramount.
2. **Complexity** - different types of fuel (Methanol, Ammonia, Hydrogen, etc.) and unique risk effects/mechanisms.
3. **Safety risks** in real-world training scenarios
4. **High costs** of actual equipment for training
5. **Limited access** to the new fuel ships

WHY Immersive Technologies?



KNOWLEDGE RETENTION

Immersion and Interactivity by simulating realistic scenarios



Supplements physical training:

1. RISK-FREE ENVIRONMENT
2. COMPREHENSIVE SKILL DEVELOPMENT
3. SCALABLE and COST EFFICIENT

Use Case

VR Training Module



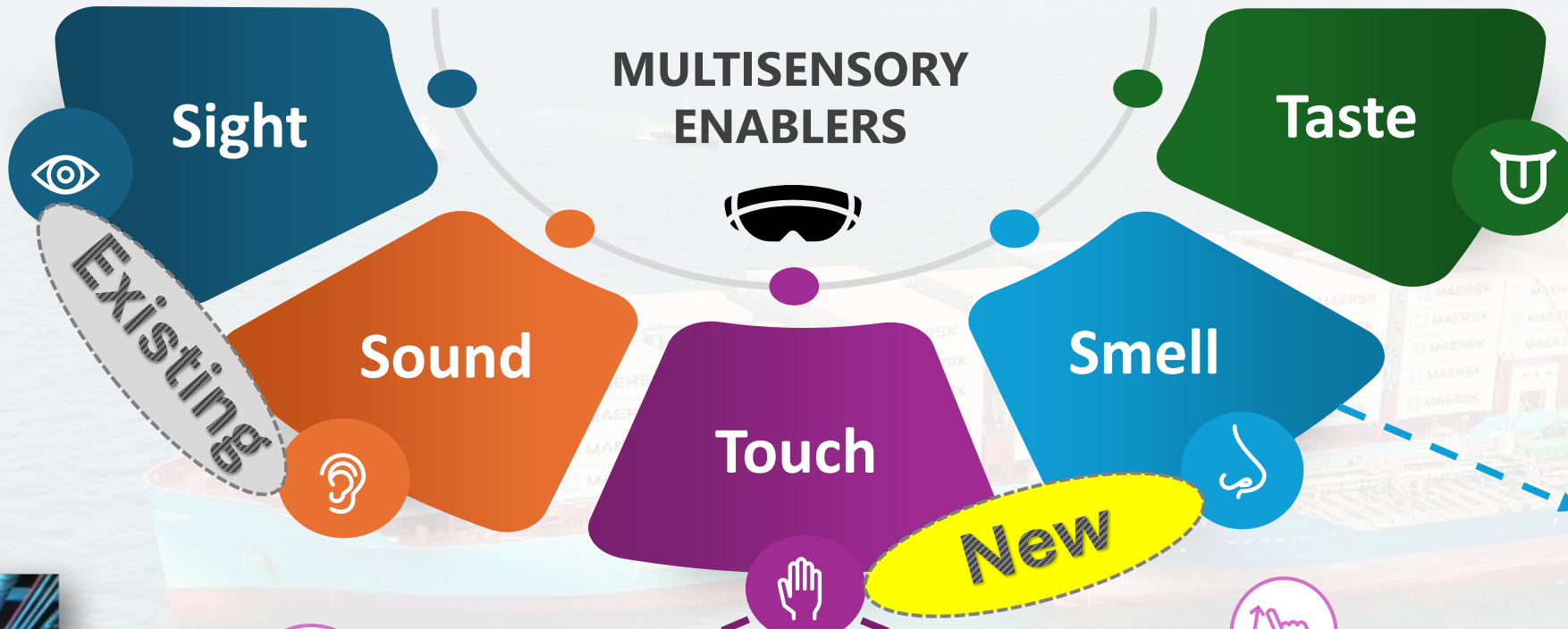
IMMERSIVE METHANOL BUNKERING OPERATION

- PRE-BUNKERING INSPECTION**: Shows a virtual inspection of a ship's deck with a crane. A menu on the left lists settings: Detector, Weather, Hose Leakage, Emergency. A 'Check Manifold Crane' notification is visible.
- PPE SELECTION**: Shows a virtual selection of Personal Protective Equipment (PPE) including a yellow hard hat, a black helmet, and blue gloves.
- EQUIPMENT SELECTION**: Shows a virtual selection of a handheld device or equipment on a table.
- FAULT REPORTING**: Shows a virtual reporting interface with text boxes for fault details and a 'REPORT' button. Text boxes contain instructions like 'The wind speeds seem a bit high, but I'm sure we can manage the bunkering.' and 'The sea currents are a bit over the limit, but I have set up an emergency stop.'.
- CONNECTION OF HOSES**: Shows a virtual connection of hoses to a manifold system.
- LINING UP OF VALVES**: Shows a virtual lining up of valves on a complex piping system.



**We're
not done yet...**

MultiSENSORY



Temperature Simulation

- Prototype of controlled heated vest
- Future immersive Firefighting

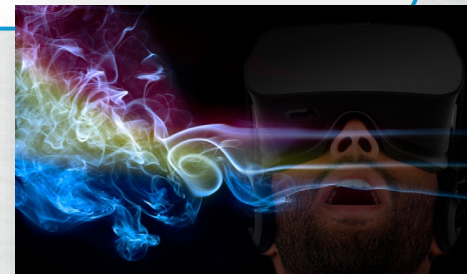


Haptic Feedback

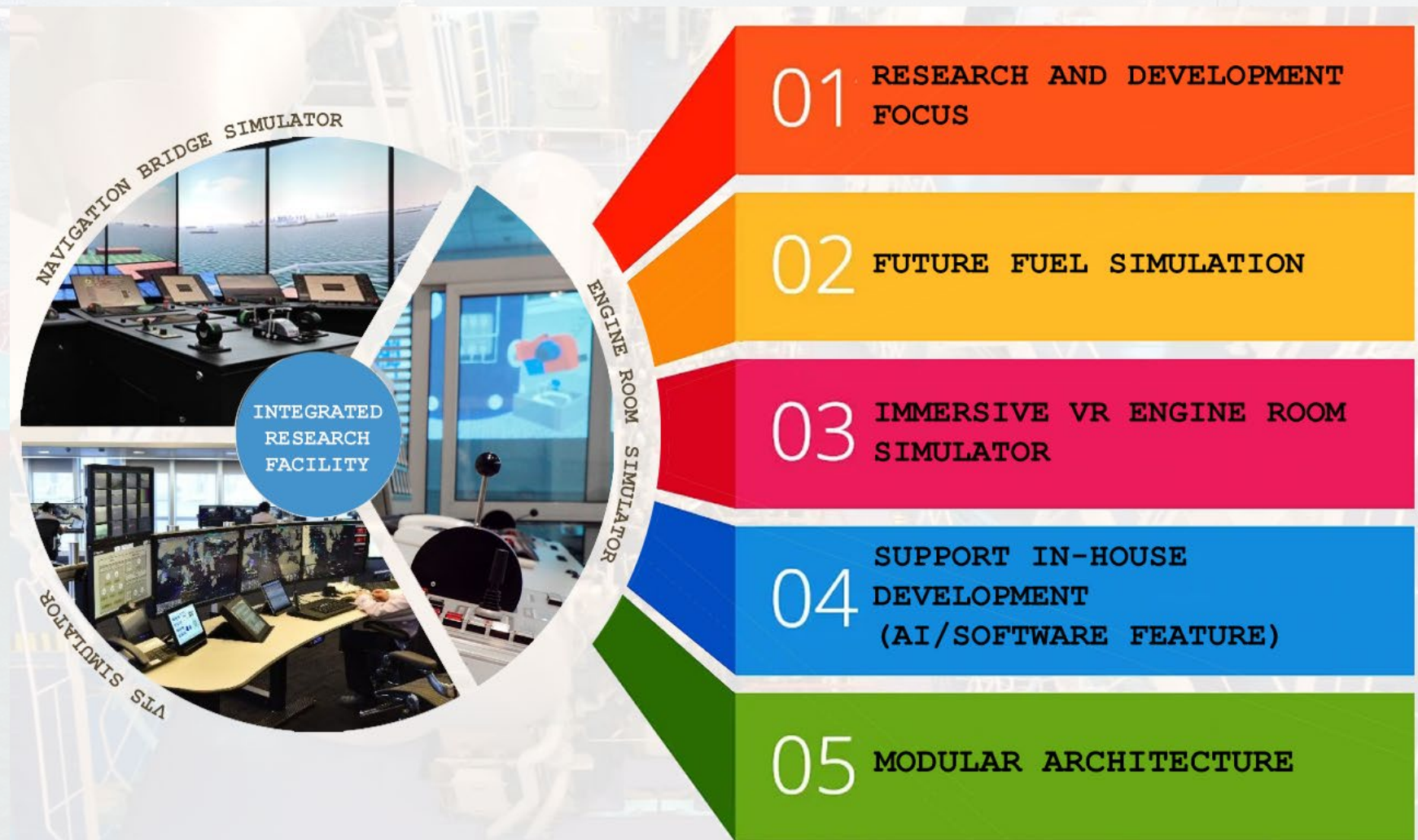
- Glove/Suit
- Future Mooring operation training

Olfactory (Smell)

- Prototype of controlled Ammonia diffuser
- Future immersive training for Ammonia bunkering
- Future escape room for emergency response during Ammonia leakage



ENGINE ROOM Research Facility (Planned)





THANK YOU!

ALL THE WAY TO ZERO

Contact us

