

**XR (VR/AR/MR)
PLATFORM
FOR SHIPPING**

WHATEVER CAN BE DIGITALIZED WILL BE

SHIP REALITY

Shipping XR tech pioneers, funded in 2018

End-to-end digital ship XR platform

- ✓ ShipMR – Design / Collaborative VR & MR
- ✓ ShipMR – Remote / AR cloud

Investors – Ocean Tech Accelerators

- ✓ Katapult Ocean – Oslo, Norway
- ✓ Creative Destruction Lab – Halifax, Canada

Partners, Grants, Awards



Why Shipping & XR

Decarbonization

HARD TO DECARBONIZE INDUSTRY

More GHG emissions than Germany

>50% GHG emissions reduction by 2050

>70% carbon intensity reduction by 2050

60,000 BWTS retrofits by 2024

Regulations

Digitalization

NO DIGITAL SHIP DESIGN DATA

Towards industry 4.0 tools

Remote

EXPERTS TRAVEL TO SHIPS

Towards remote / autonomous

Shipping Opportunities

\$Trillions

Decarbonization

\$100's of Billions

**Retrofits /
Green Energy Conversions
GHG Emissions Reduction**

\$10's of Billions

**Enterprise Software
(Design, Remote, PLM)**

XR Opportunities

\$Trillions

**\$1.5 trillion XR boost to global economy
by 2030 - PwC**

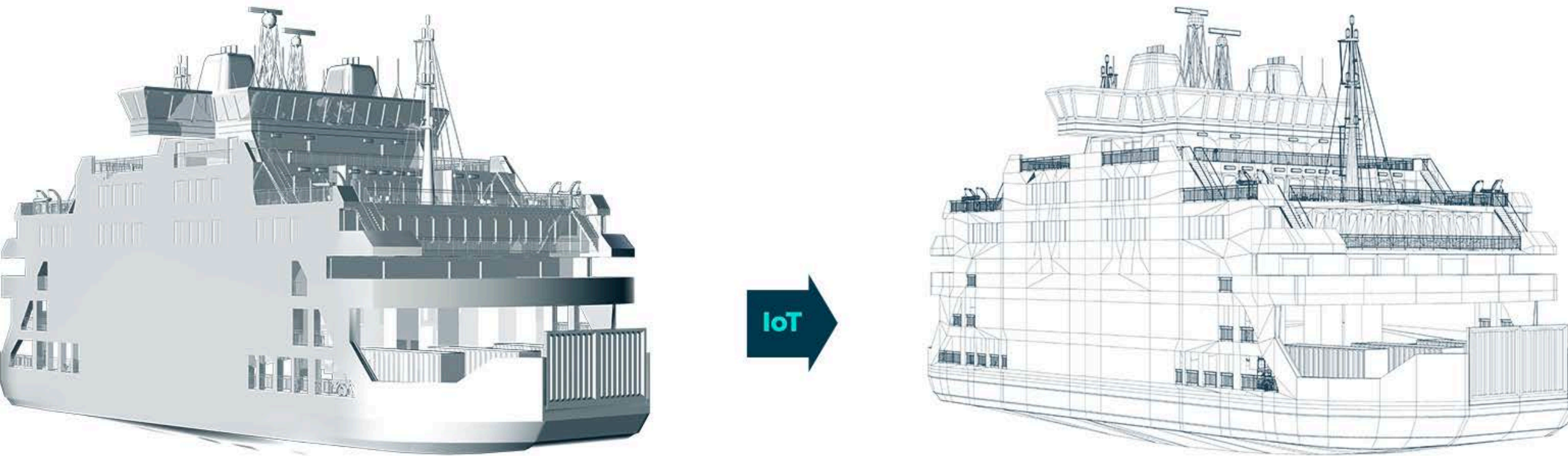
\$22 Billion

**Microsoft's 10-year XR services deal
with US Army (120,000 HoloLens2)**

**M&A
\$Billions**

- **Apple acquired 12 XR companies (out of 100) in last 6 years (@\$3M per engineer)**
- **Unity, Unreal, Niantic, Snap, Facebook, Microsoft buying XR startups every week**
- **\$billion computer vision startups coming - Forbes**

Metaverse (Virtual Universe)



SHIP

DIGITAL TWIN



SHIPREALITY



PREDICTIVE ANALYTICS	
DESIGN	OPERATE
INSTALL	SERVICE
RETROFIT	TRAIN

Merge
Physical & Digital
Ships & Offices

Native XR Software



ShipMR-Remote



ShipMR-Design



XR-Ship Platform

Proprietary Tech



AR cloud registration to remotely augment the physical world of the seafarer



Spatial Intelligence in ships, for identification in real-time



VR immersive experiences in huge point cloud datasets



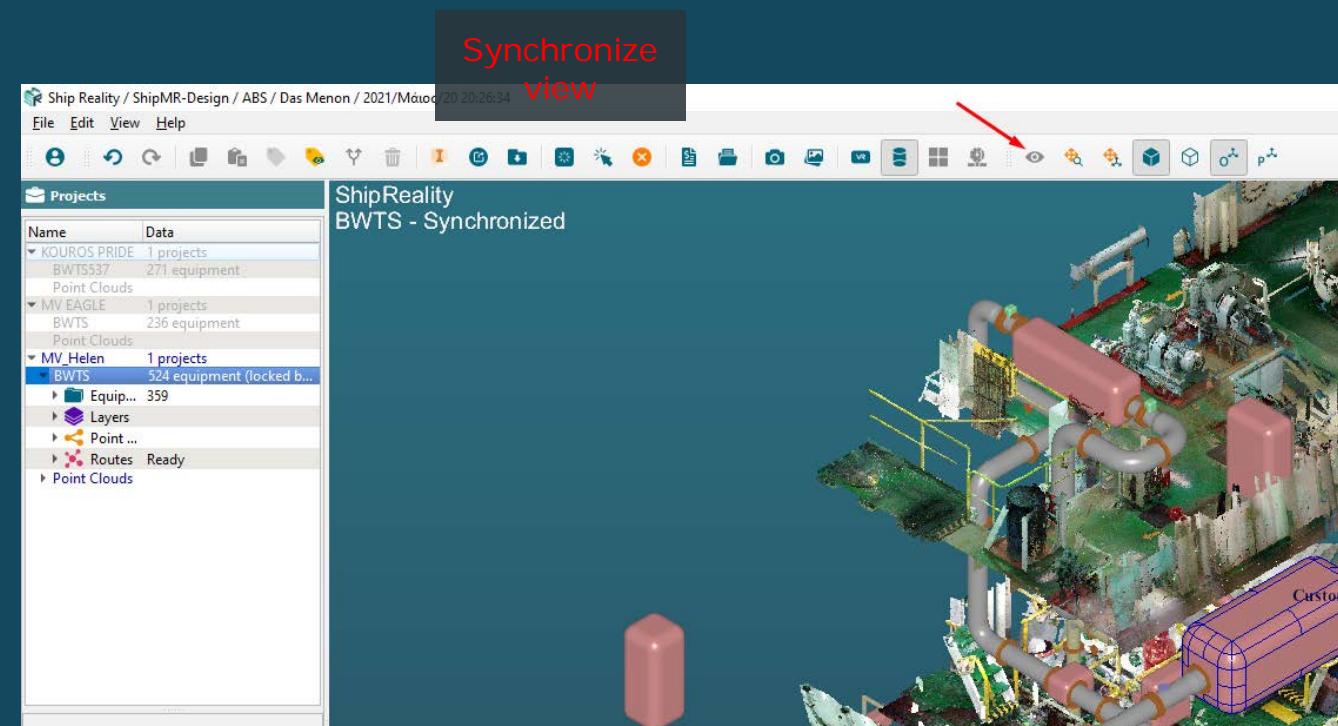
Pioneering **optimal route algorithms** for 3D ship design modification

ShipXR-Design

SHIPREALITY

We build a **new 3D design platform for shipping** from the ground up, as ship design tools have become outdated, lagging in terms of collaboration, speed, graphics, optimization and automation

Sharing of 3D designs in an easy-to-use environment that empowers all stakeholders, improving **efficiency of the design and quality of the outcome**



ShipXR-Design

SHIPREALITY

PROBLEM

No collaboration / digital data
(sharing of 2D PDF drawings)

Ship design tools outdated



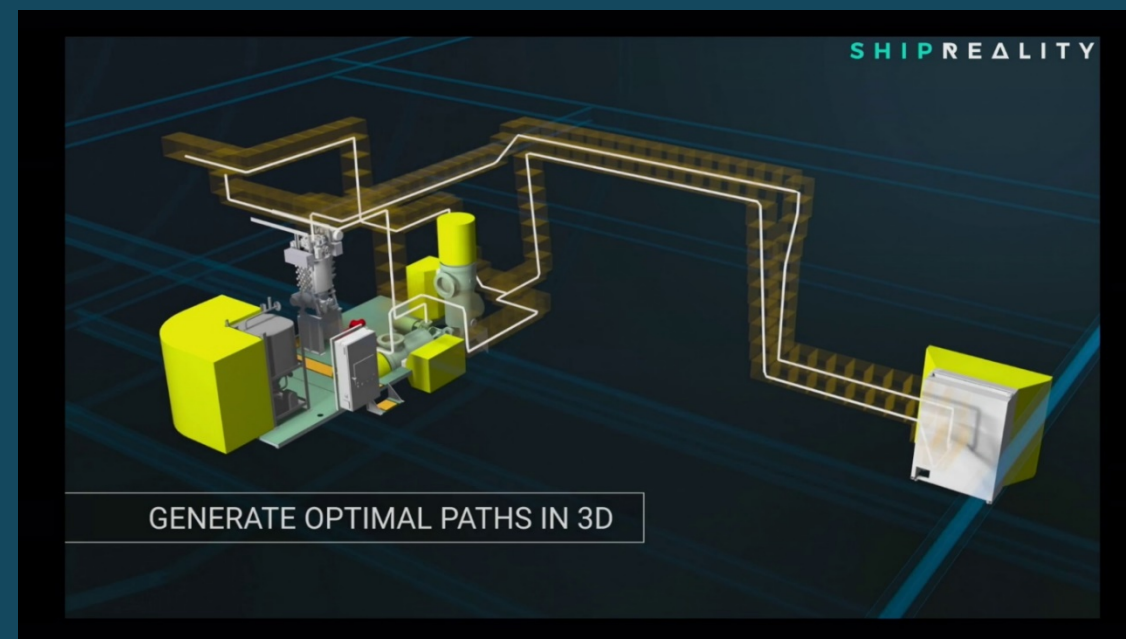
SOLUTION

New 3D ship design platform

Real-time collaboration with 3D models

Generative, 3D path finding algorithms

Drag-and-drop gamification



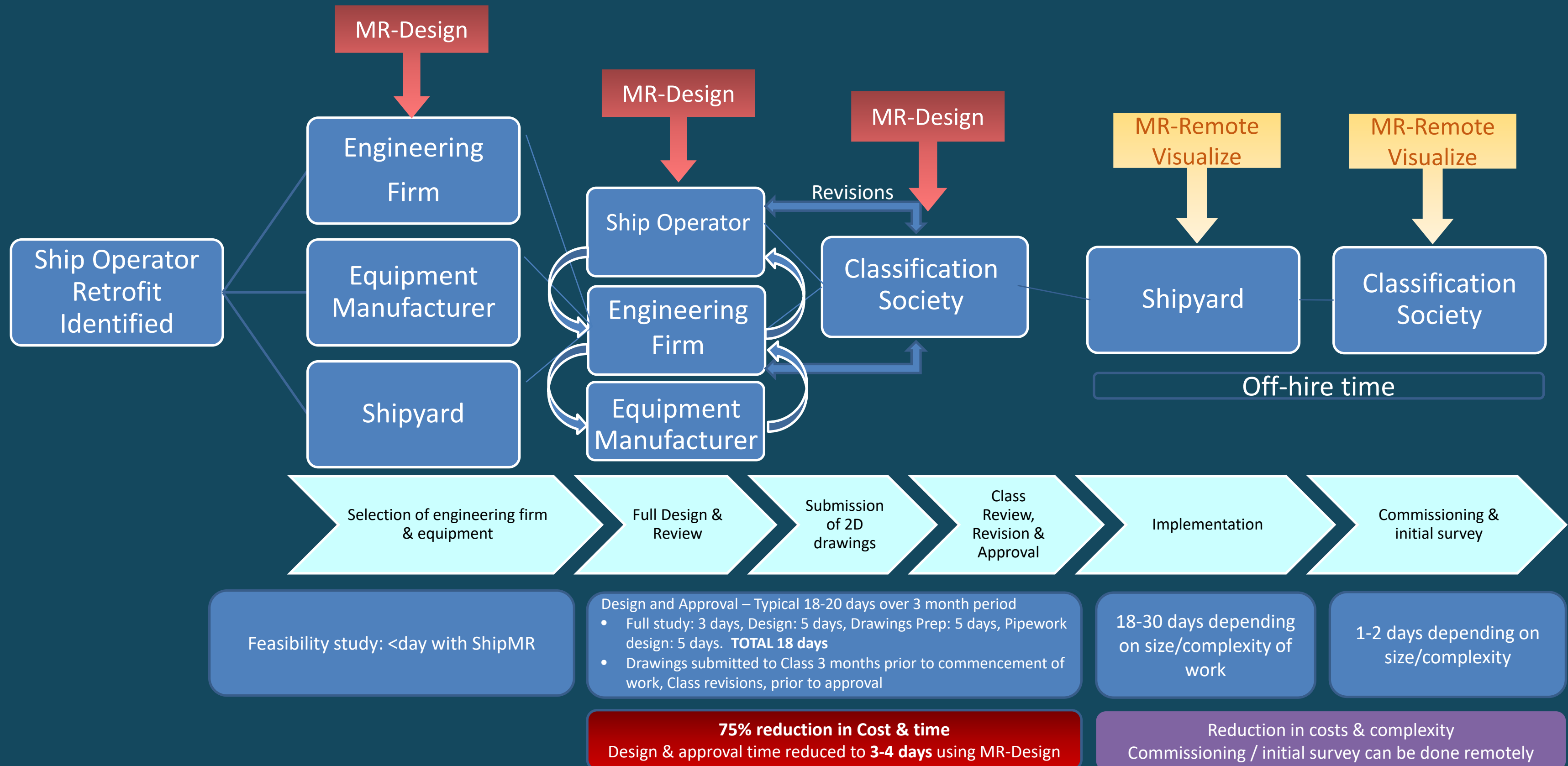
BENEFITS

10x faster optimizable designs

3D design sharing empowers all stakeholders and improves design efficiency and quality

3D design sharing for real-time installation monitoring, class approvals, and remote inspections in VR & MR

Retrofit Design – Flow Chart



COLLABORATIVE - ALL STAKEHOLDERS

SHIP REALITY

3D CAD model sharing direct in ShipMR with VR / MR visualization



Shipowner

- **Reduced Costs:** Faster designs, approvals & installations, optimized designs, design review for fewer errors
- **Future Benefits:** 3D ship models for lifecycle applications

Classification Society

- **Reduced Costs:** Faster approvals, remote commissioning / inspections
- **Future Benefits:** 3D ship models with spatial data (for lifecycle applications) and remote inspections

Engineering Firm

- **Reduced Costs:** Faster designs, approvals with fewer errors
- **Benefits:** Less labor intensive, increase design volume and quality using same resources

Equipment Manufacturer

- **Reduced Costs:** Faster approvals, remote commissioning
- **Future Benefits:** 3D parametric models for equipment remote support / preventive maintenance

Shipyard

- **Reduced Costs:** Real-time installation monitoring in MR
- **Benefits:** Immerse into the future space (before construction) starting from the design phase

ShipMR-Remote

SHIP REALITY

PROBLEM

Ship inspections and support by experts traveling

Travel costs, risks & downtime

Inspection data can't be



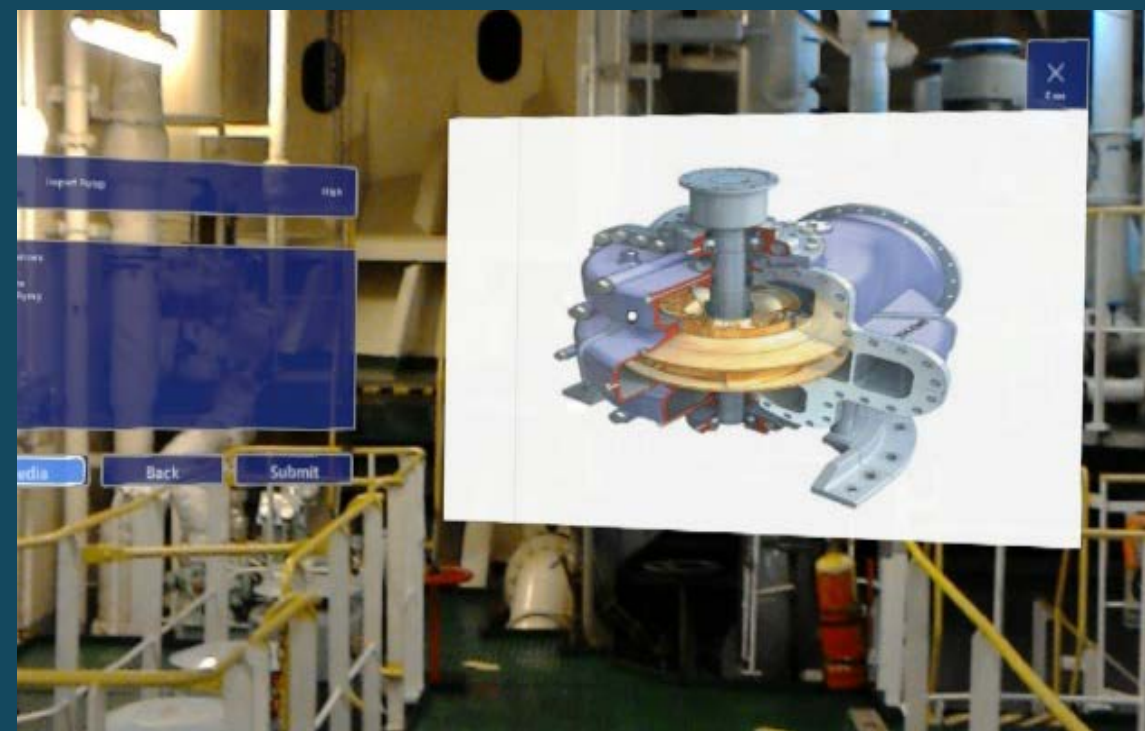
SOLUTION

Remote support:

Video call with spatial annotations & **2D** data/
photo/video **sharing** & 3D holograms

Spatial intelligence:

Anchoring of 2D docs, photos, video
& 3D holograms to machinery / **AR Cloud**



BENEFITS

97% reduction in time to information

50% reduction of travel time

Reduce inspection costs

Synchronous & asynchronous modes
for remote task management



XR-Ship Platform

Platform / Marketplace linking everything together

Virtual meeting place (Metaverse)

of digital data, 3D models & XR tools shared for cloud synchronized, real-time collaboration between stakeholders

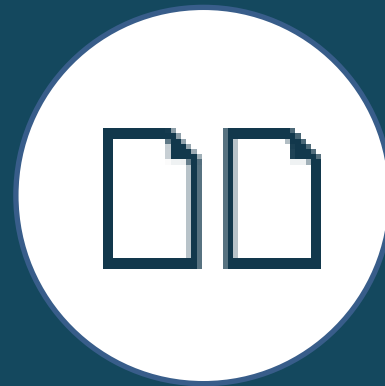
Marketplace for 3d party developers for XR applications addressing ship lifecycle issues



SaaS Revenue Streams

Proprietary Tech Subscriptions

Revenue Share 3rd Party



ShipMR-Design

COLLABORATIVE DESIGNS

ShipMR-Remote

AR CLOUD

XR-Ship Platform

XR APPS - MARKETPLACE

Sustainability impact

Air Emissions



3.9, 14.1
GHG, SOx, NOx, particulate matter

Ocean Health



14.1, 14.3, 17.6
(BWTS, Green energy)

Tech Innovation



8.2, 9.4
(Retrofits & Remote ops)

Team

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CEO

MA, Chemical Engineering
Princeton University

Salomon Brothers Inc.



Christina Costaridi Crosby

CCO

MSc, Shipping and Finance
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Chief Scientist

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Naval Architecture & Marine
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Dr. Alexandros Ginnis

Mixed Reality Lead

Associate Professor NTUA

Naval Architecture & Marine
Engineering



Joint experiences include:



Competitive Edge

Market Network

Greece, Cyprus = **30% of the world's fleet**

Deep Tech

9 PhD's/MSc's,
NTUA talent pool

Tech Innovation

Leaders in XR shipping apps

ITEM	QTY	PART NUMBER	DESCRIPTION
1	5200,000 mm	JIS G 3454 Pipe 250 A x Sch 40 - 100	Pipe
2	17	JIS B 2312 90 Deg Short Elbow Steel 250A x Sch 40	Elbow
3	47	JIS B 2220 Slip-On Welding Plate Type Flange SOP - 5K 250	Flange
4	23	JIS 5K GASKET DN 250	
5	3	CUSTOM FLANGE JIS TO DIN DN 250	
6	4750,000 mm	DIN 2458 Pipe 273 x 8.8 - 250	Pipe
7	12	DIN EN 1092-1 Welding Neck Flange Type 11 - PN 10 250 x 273	Flange
8	6	DIN PN 10 GASKET DN 250	
9	3	DIN 2605 90 Deg Elbow Type 2 273 - 8.8S	Elbow
10	1	9010336-83-84_AOT_Reactor_600_Simple	
11	2	JIS B 2312 Straight Tee Steel 250A x Sch40	Tee
12	12	JIS B 2220 Slip-On Welding Thin Plate Type Flange SOP - 10K 250	Flange
13	1	SAMPLING PORT 1	
14	1	V201-8	



The XR digital continuity platform for shipping

<https://www.shipreality.com>
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