











#### **Market Challenges**



Cumbersome and outdated booking of marinas & tourist ports,

Lack of real-time data collection and communication



Unfriendly and polluted environment,
Limited range of added-value services,
Poor hosting- services for the sea travelers



Yachting trip is now viewed as a unique travel experience

#### **Transformation Areas**

- New generation of buyers/customers
- Environmental-friendly boats and infrastructures
- Increasing demand for Mega-Yacht facilities
- New designs (e.g. floating docks, moorings)
- New destinations

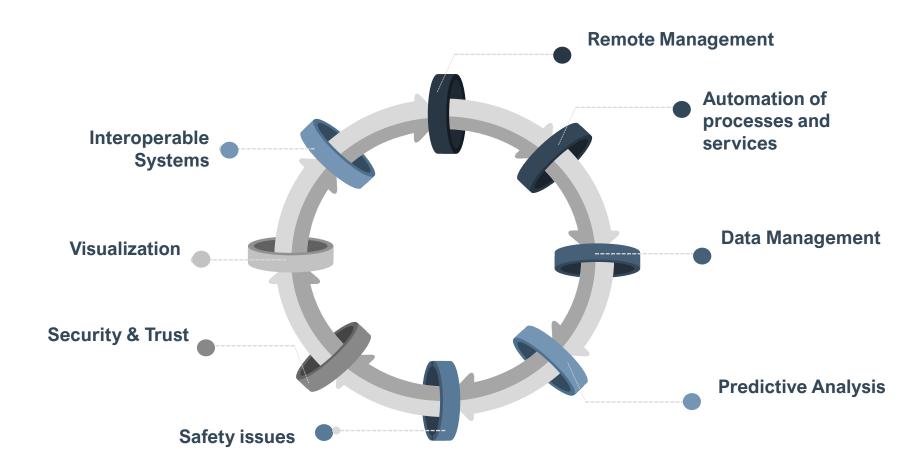








## Modernization through technology











## **Key enabling Technologies — Innovation Trends**

**Social Media** 

<b>IOT</b> Collection of real-time data (berth occupancy, water quality, noise levels, weather condition
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Al/Machine learning

Algorithms that process images, videos and data for traffic analysis, collision and/or incident detection.

Autonomous vehicles and vessels. Interaction and communication among tourists and marinas/ports, sophisticated real-time translation apps

**Big data**Better understanding of the market dynamics and trends, insights on current tourist behavior phycology and experience needs

Robotics, surface and u/w assistants Autonomous and remote-controlled devices for data collection and process automation

Blockchain Secure identity management, faster and efficient communication between travelers and marinas. Cryptocurrencies

VR/AR Hands-on experience of what the travelers will likely see when selecting a travel package/destination, increase their interest and affect their decision to travel there

Provide to their users targeted advertisements tailored made to their needs. Attract a greater number of bookings, interpret and capitalize the search efforts of the end-users

**5G/6G** Provide bigger bandwidth and less latency, reinforcing innovative applications (e.g. hull cleaning, remote control based on video signals, autonomous boats)

**Cloud** Scaling, less infrastructures, higher security, backed and protected data









## Technology Adoption Example — 'Croatian Marinas'

Smart technology	Marina									
	Funtana	Nautica	Veruda	Vrsar	Lošinj	Punat	Novi	Pičuljan	Porto Re	ACI*
e-booking	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
e-payment	<b>√</b>	<b>✓</b>	✓	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>
Smart smoke sensor	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Smart heat sensor	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	✓	
Weather conditions sensor										<b>√</b>
Dock Walk			<b>√</b>		<b>√</b>					
Smart Card										<b>✓</b>
Tesla Destination Charging			✓							<b>✓</b>
Video surveillance	<b>√</b>	<b>✓</b>								
Eco-islands			/							

Source: Transaction on Maritime Science, 2021, "Application of Smart technologies in Croatian Marinas". L. Maglic, A. Grbcic, L. Maglic, A. Gundic

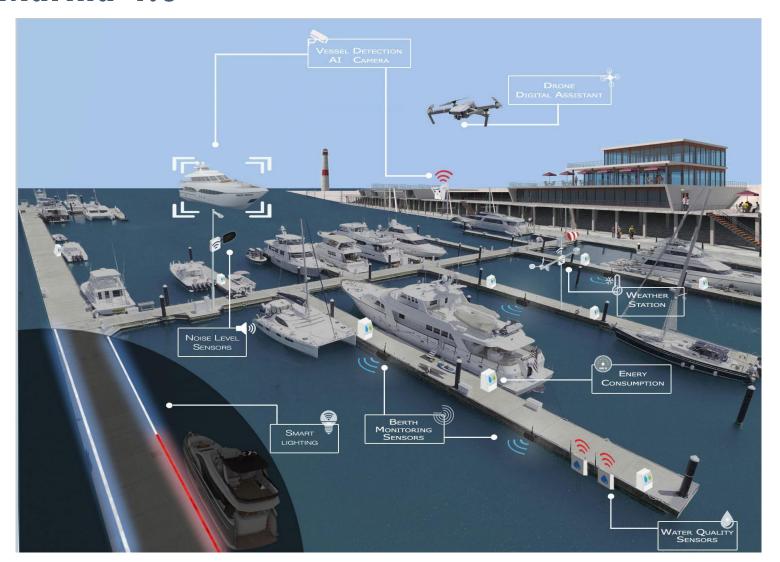








#### Marina 4.0



#### **Product Suite**

- MMS
- **Payment Modules**
- IoT Management
- Mobile App



www.sammyacht.com











#### **Our Presence**





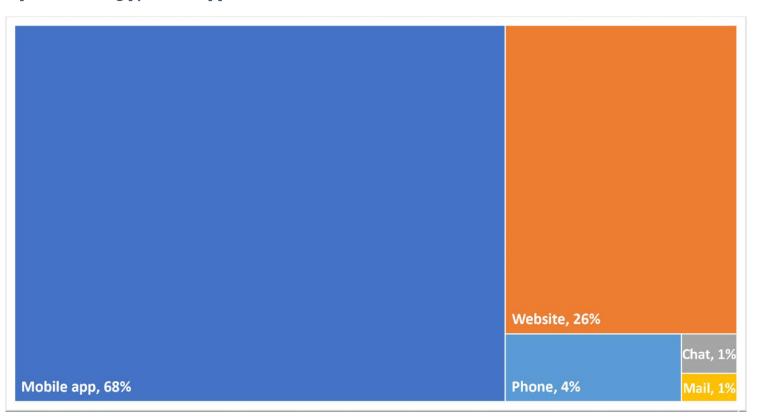


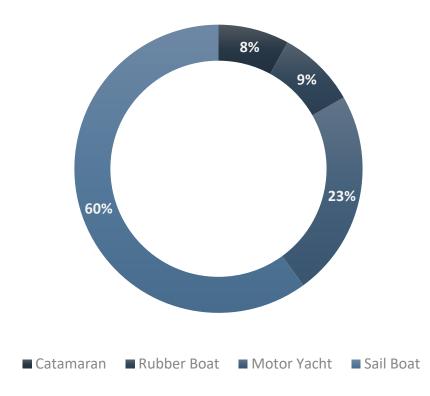




#### **Online Berth reservations (2021)**

By technology/boat type





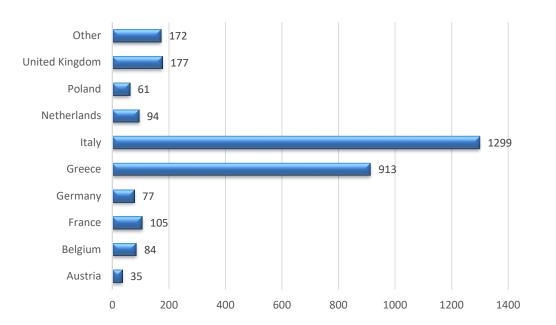






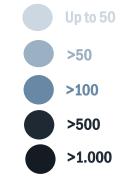


#### Online Berth reservations (2021) **By Country**





- Greece
- Italy
- UK
- **Germany**
- 5. **France**





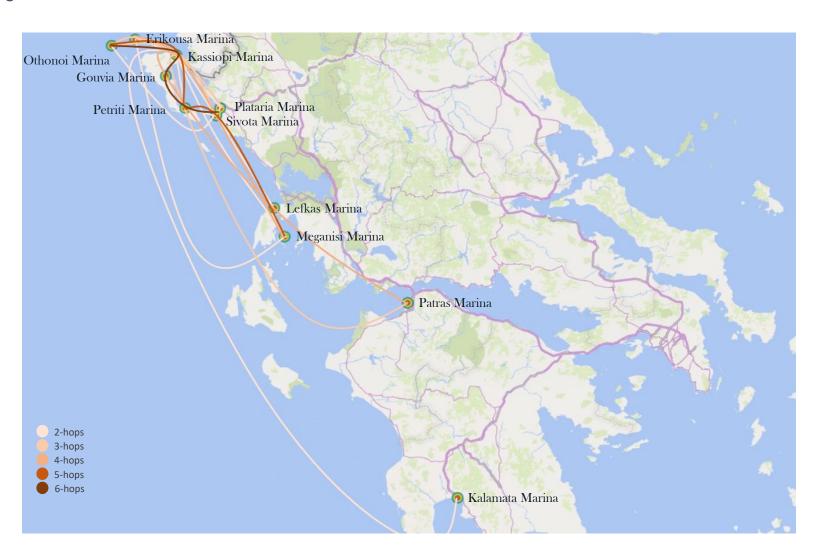








#### **Yachting Trips** Multi-hop planning











## **Environmental Monitoring — 'Patras Old Port'**











## Berth Space Monitoring — 'Patras Old Port'



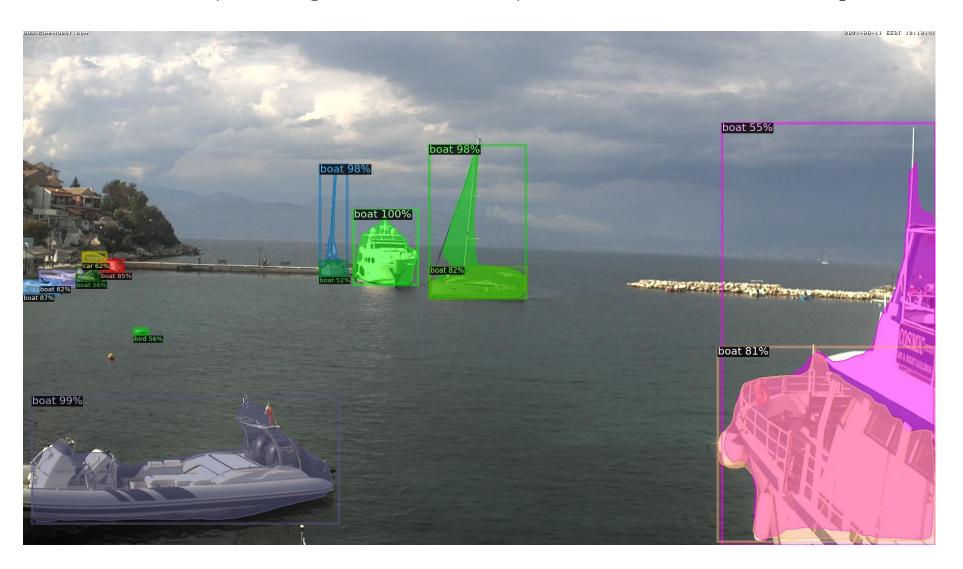








## Vessel Detection (AI, Digital Cameras) — 'Corfu Port Kassiopi'





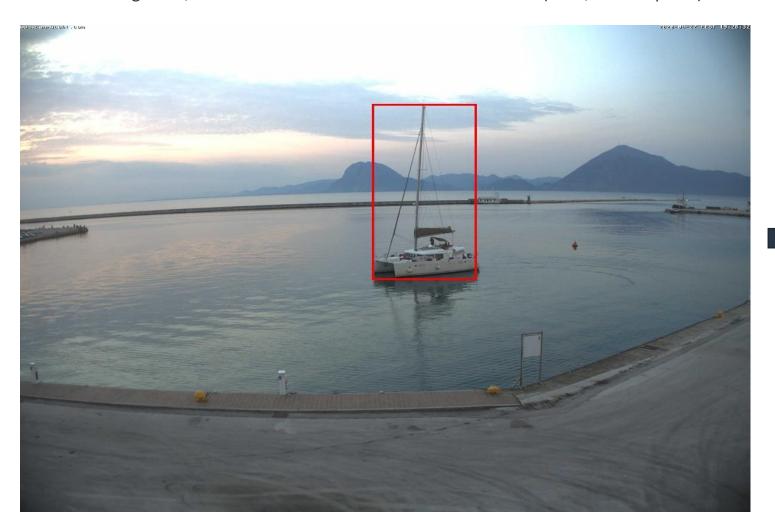


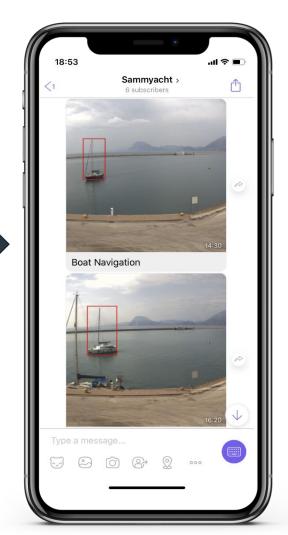




# Vessel Detection (AI, Digital Cameras) — 'Patras Port'

Vessel recognition, real time notification to marina administrator (viber, whats-up etc.).













#### **Conclusion**

Low level of technology adoption in small ports

Poor quality of services and limited docking staff in the ports

Isolation of ports from inland communities

Diversification of processes and policies within small ports community

High Impact of yachting in local economy development

Growing demand in the yachting sector

Extended or new port infrastructures and investments

Mature technologies and financial mechanisms to support the advancement of small ports

Innovative solutions and collaboration networks can fill the existing gaps and boost the sustainable development of the coastal and inland territories

