

SmartBEAR – Research Project Fact Sheet

Title of Project	Visualizing SRI Upgrades in VR environment and BIM Integration - completed
Project Acronym	Smart BEAR
Funding Program	Single Market Programme (SMP)
Project Identifier	SMP-COSME-2021-CLUSTER-01
Total Budget/EUT Budget	50 000 €
Starting – Ending Date	03/2024 – 12/2024
Consortium	Euphyia Tech Ltd
Project Objectives	<p>The construction industry is undergoing a paradigm shift, with technology playing an increasingly pivotal role. Yet, challenges such as design complexity and communication bottlenecks persist. The Smart BEAR project addresses these issues head-on by combining innovative technologies. The Smart BEAR project aims to create a cutting-edge platform that facilitates the visualization of Smart Readiness Indicators (SRI) potential upgrades within a Virtual Reality (VR) environment and seamlessly integrates this vital information into the Building Information Modeling (BIM) environment. During its Alpha testing phase, the project focuses on developing both the backend and frontend components of the platform. The backend will handle data integration, analysis, and generation of SRI potential upgrades, ensuring that this information is accurate. The frontend, on the other hand, will provide users with an immersive VR experience, allowing them to visualize these upgrades in a dynamic and interactive environment. The integration of SRI visualization within a VR environment is anticipated to be a game-changer. Stakeholders will have the ability to explore and understand the potential upgrades with unparalleled clarity, fostering better decisionmaking and collaboration. Furthermore, this information will seamlessly flow into the BIM environment, enhancing the model's intelligence and facilitating informed choices throughout the building's lifecycle. As the Smart BEAR project advances towards TRL 4, it represents a critical step in harnessing the full potential of technology to improve construction and building efficiency. By combining SRI visualization in VR with BIM integration, this initiative aims to create a smarter, more efficient, and sustainable built environment, setting new standards for the industry.</p>
Work Packages	<p>WP1 – Regulatory analysis and integration framework for Smart BEAR</p> <p>WP2 – Backend development of the Smart BEAR digital platform</p> <p>WP3 – Frontend development and user interface design of Smart BEAR</p> <p>WP4 – Demonstration and validation of the Smart BEAR solution</p> <p>WP5 – Project management and milestone monitoring</p> <p>WP6 – Dissemination, communication and stakeholder engagement</p>
External Reference	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43252476/101074311
Role in the Project	Principal Investigator