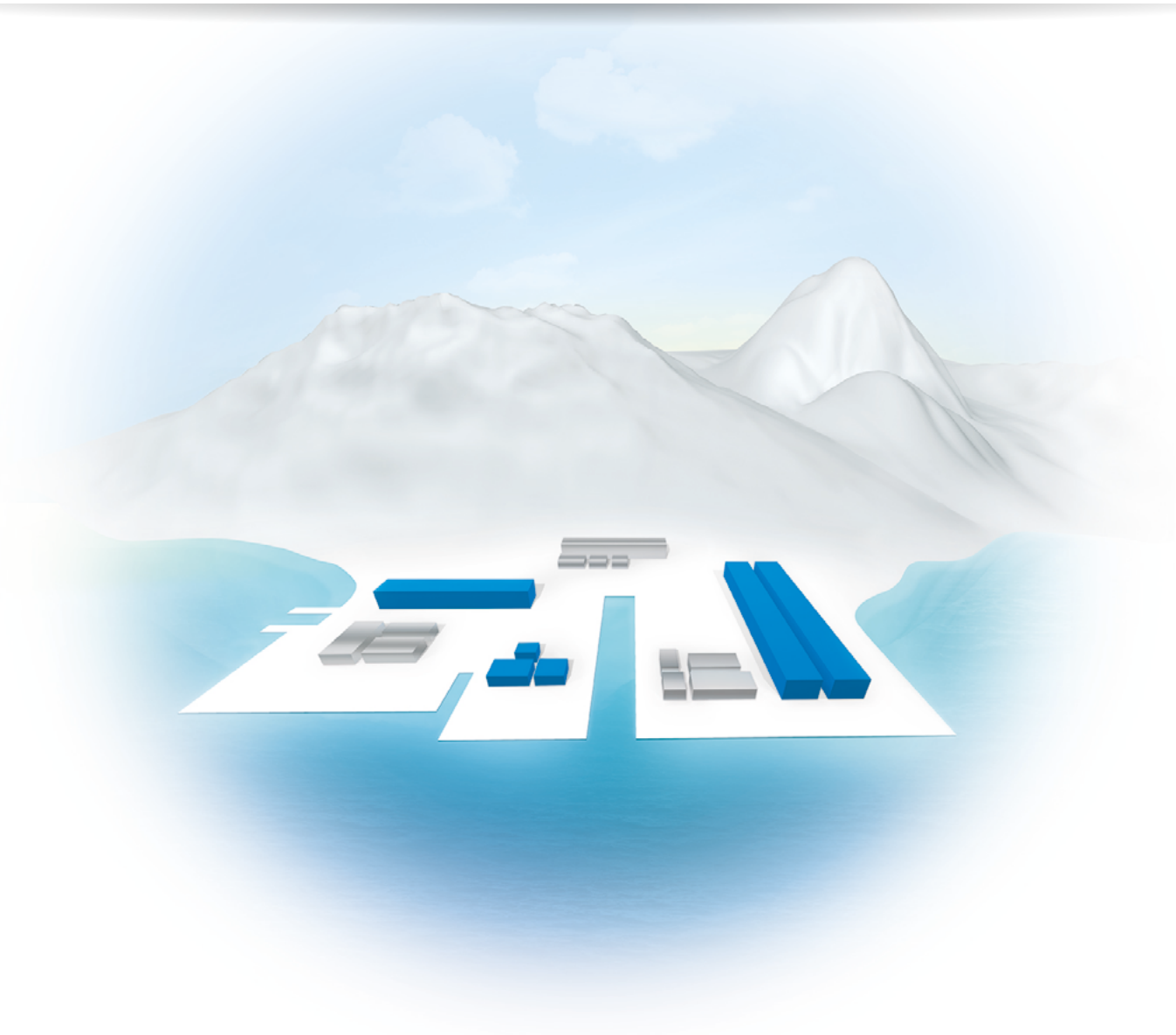
DASSAULT SYSTEMES

3DEXPERIENCE®

MARINE & OFFSHORE

BUILD FOR SEA

Optimize execution of your marine manufacturing operations



HOW CAN YOU DRIVE MANUFACTURING EFFICIENCY AND INCREASE CAPACITY?

As they strive to improve their competitiveness, shipbuilders must increase their manufacturing capacity and improve their efficiency. They need to rethink their business processes to streamline and optimize their manufacturing operations.

Based on the **3D**EXPERIENCE® platform, **Build For Sea** is an industry solution experience that enables manufacturing innovation and yields significant operational improvements. It provides shipyards with digital continuity from engineering to production planning and execution, enabling them to optimize production schedules and resources, manage digital work orders, and efficiently monitor manufacturing execution.

AVOID DELAYS AND PENALTIES

Delivering on time and on budget is critical to a shipyard's competitiveness and survival. Failing to meet their commitments expose shipbuilders to penalties that can end up consuming their margins and jeopardizing their reputation.

Taking advantage of the digital continuity between design, production planning, and manufacturing offered by the **3D**EXPERIENCE® platform, **Build For Sea** enables shipyards to continuously monitor and optimize production schedules so that concurrent projects benefit from the right resources at the right time. They can anticipate potential bottlenecks by simulating material flow and inventory as well as time and labor management processes. Resources are balanced between projects on a global scale and shipyard production schedules are managed optimally throughout production to ensure projects stay on track.

REDUCE COSTS

In a highly competitive and cost-conscious industry where owners are demanding more value at lower prices and an overall reduction of their total cost of ownership, shipyards need to optimize their manufacturing operations and reduce labor as well as procurement cost if they are to win new business and stay profitable. They need a way to eliminate bottlenecks and mitigate errors, in order to avoid program costs to skyrocket.

With **Build For Sea,** yards can keep costs in check by simulating and optimizing a yard's production activities before physical set-up. Leveraging the **3D**EXPERIENCE platform, **Build For Sea** provides a single collaborative environment for stakeholders to exchange ideas and solutions, which reduces the risk of making decisions on erroneous information. **Build For Sea** also helps ensure workers have the right materials, fabricated components, supplier parts and interim products at the right time to do their job, thereby reducing storage space needs and costs.

REDUCE PRODUCTION ERRORS

Managing a shipyard based on error-prone, paper-based, old processes is no longer viable. Shipbuilders need to transition to the digital shipyard. This transformation relies on digitization, automation, collaboration, and implementation of a lean manufacturing approach.

Build For Sea provides a fully integrated workflow from design to manufacturing execution. Up-to-date information and digital work instructions are made available to the right worker at the right time. **Build For Sea** properly manages modifications and ensures that all impacted production operators are notified. Embedded knowledge rules also help reduce errors and reworks while traceability helps supervisors understand issues and take appropriate corrective action as required.

INCREASE PRODUCTION CAPACITY

In an increasingly global and distributed industry, shipyards must be able to design anywhere and build anywhere by making the most of their human and material resources. In this way, they can improve build cycle time and increase production output.

Build For Sea provides a single collaborative environment across the yard's global ecosystem with the ability to implement a master production schedule and to coordinate and monitor production in real time. Taking advantage of lean manufacturing concepts, **Build For Sea** enables shipyards to be more agile and make rapid adjustments to work order distribution to increase capacity. Schedules are optimized thanks to simulation of shipyard layout and production that highlight snags and inefficiencies.

IMPROVE PRODUCT QUALITY

With owners demanding more quality and value from their ships and offshore platforms, shipyards have to ensure flawless manufacturing if they are to satisfy their clients' requirements and maintain their reputation. They also need to comply with regulations and certification rules.

Build For Sea proposes an end-to-end digital approach to production based on automated and repeatable processes that help ensure the highest level of quality. Very early and throughout the build process, to accommodate for changes, yards can match customer requirements with safety and environmental norms to make sure products are built right the first time. With **Build For Sea,** shipyards can also ensure that quality processes are documented and available to all stakeholders.

KEY BENEFITS

- Manage all aspects of manufacturing execution through a single collaborative platform
- Improve quality and reduce errors through digital continuity
- Effectively track and manage operational activities with master production schedule and capacity planning management
- Increase production capacity through improved resource utilization and by applying lean manufacturing principles

Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 210,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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