

Fusing Technology and Craftsmanship: Information System Design for Welding and Fabrication Services

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Abstract: *The study "Fusing Technology and Craftsmanship: Information System Design for Welding and Fabrication Services" explores the symbiotic integration of technology and craftsmanship within the welding and fabrication industry. This research presents a novel information system designed to harmonize these seemingly distinct domains, comprising four pivotal user interfaces: Project Management, Craftsman Collaboration, Automated Quality Control, and Skill Enhancement. Through qualitative and quantitative methods, the study examines the challenges, benefits, and outcomes of this integration. The findings highlight the delicate balance between preserving artisanal skills and leveraging technology, offering insights into enhancing precision, collaboration, and quality control. Ultimately, the study unveils a transformative approach to propel the welding and fabrication sector into an era of innovation and excellence..*

Keywords: Technology-Craftsmanship Fusion, Information System Design, Welding Fabrication Services

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