Transforming Driver Well-Being Through Custom Seating

MSc Thesis

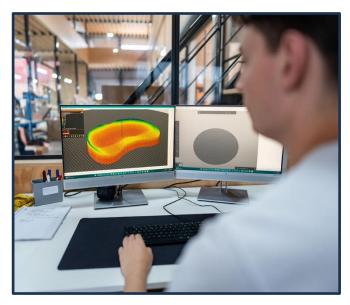
Custom Driver Seating Solutions: Tackling Musculoskeletal Discomfort (MSD) and Optimizing Driver Well-Being and Productivity in the Logistics Industry

Introduction

The Seating Expert Centre (SEC) specializes in a diverse range of seating solutions across healthcare, sports, maritime, and automotive sectors. SEC's focus on bespoke designs ensures that each solution is tailored to specific client needs, delivering optimal comfort, functionality, and quality for demanding industries.

Problem definition/opportunity

After years of experience serving the healthcare industry through personalised seating products, SEC is now expanding into the logistics market. The objective is to create custom driver seating solutions that tackle the prevalent issue of musculoskeletal discomfort (MSD), improving driver wellbeing and reducing work absences and operational costs for logistics companies.



These custom driver seats are being developed using advanced seating & positioning techniques, digital modelling, and diverse manufacturing methods. This integrated approach ensures the production of highly tailored, performance-driven seating solutions that offer superior comfort, durability, and sustainability, with minimal waste.

Project description

The student will begin by understanding the current design process and the specific requirements for custom driver seating. They will explore how bespoke seating solutions can enhance driver ergonomics and identify improvements through testing and development. Their findings will provide recommendations for optimizing both the design and manufacturing processes, contributing to the ongoing innovation in digital modelling and ergonomic seating within the logistics sector.

Client

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Key words

3D Scanning Seating & Positioning Computational Design Digital Fabrication Materials Experience Manufacturing Methods Driver Seating