

Case Study

Pram Wheels

Background

Pram Wheels is a small startup company created to develop a specific, at present confidential, product and bring it to market.

A significant in-depth research programme, based on potential consumers, has been carried out to establish the use and perceived failings of current similar products supplied by competitors. This has led to the development of a design brief that seeks to provide a superior, customer-driven product compared to existing products on the market.

Due to the size and maturity of both the company and product, there was an unusual opportunity to provide early assistance in key areas. Through this, paths to de-risking the creation and development of new core company activities were explored.

Challenge

Aligning expectations and establishing the required level of assistance across disciplines formed a unique challenge. A new company developing a product in a field with no specific experience of the intended market has, by default, no historical data or processes available to use for benchmarking.

After an initial period of assessment and general formalisation of information, the project settled into two main activities: support of engineering design and knowledge transfer related to digital marketing.

The challenge within the design process was complicated by the short timescales and an evolving approach to achieving key milestones. Therefore, the teams at Liverpool John Moores University needed to adapt and change to align with the requirements and the most appropriate resources available within the proposed timeframe.

Delivery Partner



Support for digital marketing aspirations has been more stable, enabling a simpler delivery. A key focus was to provide reliable and meaningful assistance within a field where there is typically a great deal of widespread information, some of which may not be applicable or valid.

Solution

Multiple delivery methods were considered for the major elements of the project, and the most appropriate was utilised in each case. Crucially, this included deferring parts of the assist to fit in with Pram Wheels' challenging timescales. This has only been possible through the adoption of agile working practices, ensuring clear communication at all times, and by building a close working relationship with the company.

The design approach evolved from providing direct assistance through a student project to a deferred direct assist, adapting to broader decisions made beyond Horizons, by Pram Wheels. The final outcome showcases a comprehensive demonstration of Computer Aided Design (CAD) and Finite Element Analysis (FEA) within a relevant context. To enhance the application of FEA, external expertise pertinent to the product was brought in, exemplifying established best practices. This was delivered after the formal project concluded, aligning with the overall project timeline.

The digital marketing component of the project began with preliminary desk research to define terminology and outline overarching strategies and tactics.

Case Study

Pram Wheels

Subsequently, the academic resources at LJMU were evaluated, and a staff member with relevant expertise was identified. Through comprehensive meetings, discussions about Pram Wheels' aspirations, leading to an investigation of the most effective techniques that could be conducted to reach their objectives.

Impact

The impact has been twofold. First, general guidance has been offered to enhance in-house expertise regarding engineering-related tasks, alongside a focused knowledge transfer aimed at minimizing risks associated with core digital media activities.

Second, the design support provided has strengthened internal knowledge, fostering the establishment of effective working practices, reducing risks in ongoing developments, and facilitating the transition to manufacturing.

Moreover, showcasing digital design analysis through practical examples has led to a deeper understanding of its benefits in decreasing time and costs associated with bringing products to market.

Digital marketing presents a significant opportunity to enhance the company's value by laying the groundwork for a robust strategy. Leveraging the expertise of an academic with practical experience enabled a swift progression from fundamental concepts to a targeted analysis of key areas of interest.

Delivery Partner



"We were introduced to the Horizons project through our local growth hub while looking for specialist support and expertise. Liverpool John Moores University was identified as a potential partner to help guide our project towards a sustainable path to commercialisation.

The experience has been both educational and inspiring. Working with a team that genuinely wants to see local businesses succeed has been refreshing.

Through their internal resources, we've gained valuable insight into best-practice marketing, whilst gaining access to external expertise has strengthened our overall development process.

Our network has grown, our knowledge has deepened, and we're genuinely grateful for the support we've received through Horizons."

Simon House, Director, Prams Wheels

