



GRIP

**GLOUCESTERSHIRE
RESEARCH
AND INNOVATION
PROGRAMME**

GRIP

CASE STUDIES



European Union

European Regional
Development Fund

CASE STUDY I - SAMBOARDS

- Challenges
 - Conversion of creative ideas to provide education support and muscle development for both disabled and autistic children and adults who have suffered trauma such as a stroke or head injuries
 - Development of rapid prototypes that could be used to ‘practically’ test the theory
 - Provide a method to effectively harness the ‘creative’ and ‘manufacturing’ requirements of the business without one dominating the other
 - Produce an robust business plan that would support both the development of the business and also enable it to attract funding
 - Protecting the IP

CASE STUDY I - SAMBOARDS

- Intervention applied
 - Education on Customer Value Propositions and Business Model Canvas
 - Use of the Alternate Board to gain peer review of the business model
 - Application of 3D design through both product design students and the design technician
 - Use of 3D printing of prototypes and moulds
 - Face to face support to maintain forward action plans and increase the companies network

CASE STUDY I - SAMBOARDS

- Outcomes
 - 3 rapid prototypes used to test the efficacy of the approach with students at special schools
 - Development of the product range through textures pad and 'fidget boards'
 - Development of the initial texture and shape prototype into a board supporting early stage learning called SATPIN
 - Patent application of all designs
 - Volume manufacturing processes researched and costed
 - Broadening network including special needs schools, National Star, NHS and Head Injury charities

CASE STUDY 2 – DUTY POINT

- Challenges
 - Management of many potential Innovations
 - Selling of complex ‘water solutions’ to architects and construction companies
 - Improving engineering capability
 - Managing the New Product Development process

CASE STUDY 2 –DUTY POINT

- Intervention applied
 - Introduction of 3D printing from Solidworks models
 - Developing a marketing 3D printed model of two innovations; underground plant room and packaged utility room
 - Introduction of a stage-gate process to define and manage the NPD process
 - Testing the stage-gate process with the present development portfolio

CASE STUDY 2 – DUTY POINT

- Outcomes
 - Marketing of the Packaged Utility Room PUR concept with customers and at the Off-Site Design Exhibition; winning most valuable off-site product in 2018
 - Business growing for the PUR at a rate that will see turnover grow from less than £.5 million to £3 million plus in 18 months
 - Underground plant room business gaining traction
 - NPD process under more control with better use of engineering resource and practical outcomes of initial ideas
 - Improved processes led by greater application of digital technologies and a integration of Engineering systems(PLM) and business systems (ERP)

CASE STUDY 3 - AI LEARNING

- Challenges
 - Development of assisted learning application for personal development
 - Marketing the product through the testing and launch phases
 - Creation of internal capability to continue development
 - Options to test the psychology of the 'notification/nudging' process applied to personal development

CASE STUDY 3 –AI LEARNING

- Intervention applied
 - Support and validation of the Customer Value Proposition and Business Model
 - Development of a KTP proposal for 2 year research Programme

CASE STUDY 3 – AI LEARNING

- Outcomes
 - Launch of ‘beta’ test version in 2019
 - KTP proposal in final evaluation phase

CASE STUDY 4 – WIGGLE TWEEZERS

- Challenges
 - Converting the idea of improved tweezer design for false eyelashes to a concept and prototypes
 - Protect the IP if found to be valid
 - Develop a suitable business model that enables the tweezers to be marketed to lash technicians

CASE STUDY 4 – WIGGLE TWEEZERS

- Intervention applied
 - Converting the initial idea using 3D CAD using both another GRIP client and the design technician
 - Developing a 3D printed example to evaluate it's benefit and usage
 - Reviewing the use of volume manufacturing companies that provide other tweezers for the professional market
 - Education sessions on customer value propositions and business model canvas
 - Supporting the ordering of initial metal samples

CASE STUDY 4 – WIGGLE TWEEZERS

- Outcomes
 - Completed concept evaluation using 3D design and printing techniques
 - Defined the potential volume production route
 - Documented outline business plan based on customer value propositions and business model canvas

CASE STUDY 5 – GRIP PREP

- Challenges
 - Development of initial concept and prototype
 - Identifying the correct design and material
 - Evaluating the best business model
 - Conducting ‘testing’ phase to attract investors/partners
 - Protecting the IP

CASE STUDY 5 – GRIP PREP

- Intervention applied
 - Development of the initial design through 3D modelling
 - Use of 3D printing to provide marketing samples and assess best materials
 - Developing the logo and brand guidelines
 - Supporting the understanding of customer segments and value proposition through education and peer review sessions
 - Beginning the development of the business model using the Business Model Canvas

CASE STUDY 5 – GRIP PREP

■ Outcomes

- Final Prototype ready for marketing promotion and field testing
- Beginning the creation of company presence
- Starting the development of the network to promote and test the product