

Application of Design Thinking for Technology Transfer of Remotely Piloted Aircraft Systems for the Creative Industry

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Abstract : With this contribution, we want to show a successful example of the application of the Design Thinking methodology, in the European project 'Technology transfer of Remotely Piloted Aircraft Systems (RPAS) for the creative industry'. The use of this methodology has allowed us to design and build a drone, based on the real needs of prospective users. It has demonstrated that this is a powerful tool for generating innovative ideas in the field of robotics, by focusing its effectiveness on understanding and solving real user needs. In this way, with the support of an interdisciplinary team, comprised of creatives, engineers and economists, together with the collaboration of prospective users from three European countries, a non-linear work dynamic has been created. This teamwork has generated a sense of appreciation towards the creative industries, through continuously adaptive, inventive, and playful collaboration and communication, which has facilitated the development of prototypes. These have been designed to enable filming and photography in interior spaces, within 13 sectors of European creative industries: Advertising, Architecture, Fashion, Film, Antiques and Museums, Music, Photography, Television, Performing Arts, Publishing, Arts and Crafts, Design and Software. Furthermore, it has married the real needs of the creative industries, with what is technologically and commercially viable. As a result, a product of great value has been obtained, which offers new business opportunities for small companies across this sector.

Keywords : design thinking, design for effectiveness, methodology, active toolkit, storyboards, PAR, focus group, innovation, RPAS, indoor drone, aerial film, creative industry, end users, stakeholder

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