

Business model for SMEs in the field of Additive Manufacturing

A.C. Costache^{1, 2*}, G. Moagăr-Poladian², C.V. Doicin¹,

Affiliation 1 Faculty of Industrial Engineering and Robotics, University “Politehnica” of Bucharest, Romania

Affiliation 2 National Institute for Research and Development in Microtechnologies – IMT Bucharest, Romania

**corresponding author e-mail: andreea.costache@stud.fiir.upb.ro*

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Abstract.

The paper presents a business model used by a SME that operates in the field of additive manufacturing and uses 3D printing equipment focused on plastic manufacturing, by SLS technology. The SME manufactures products with applications in the aerospace industry, by developing specific parts for UAVs, starting from the identification of the client's need, and customizing different components for various types of UAVs [1].

The company owns an industrial 3D printing system, Formiga P 100 from EOS, with the ability to produce objects in small and medium series, to rapidly change its size or geometry, and reducing costs compared to traditional methods for plastic parts - injection molding.

The SME develops new SLS applications as a response to market demand and produces customized objects for UAVs such as: camera / video mounting system, propeller protection grille, engine protection, leg extension for UAV landing on off-road surfaces, set propeller, signal amplifier housing. The objects are made of nylon 12 (PA2200) which has some important advantages: fast objects construction, minimum post-processing time, reliability and good strength of the material, and low costs. The decision of making these products imposed a detailed cost – benefit analysis and a new direction of commercial activity whose financial results are still under evaluation.

It seems that throughout its nearly 40 years of history, the Selective Laser Sintering (SLS) technology is a mature and suitable alternative for various and profitable applications [2].

References.

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