

Abstract on Global Knowledge Sharing for Implementing a Digital Manufacturing Lab (FabLab) for Rural Development in Sri Lanka

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Digital Manufacturing is changing the way the world has seen manufacturing by sharing designs and blueprints over the internet. It will be possible to digitally print 3 -dimensional objects locally from anywhere —print almost anything. According to Anderson (2012) digital revolution in fabrication technology interpreted as the third industrial revolution. Started as project at MIT, the concepts of digital manufacturing is spreading all over the world in the form of Fabrication Laboratory (FabLaB). A group of Sri Lankan Social Scientists from Sri Lanka, Europe and United States has been conducting a project to explore the opportunities for digital manufacturing in post -conflict economic development in Sri Lanka & being a manufacturing based economy, digital fabrication technologies can be used small scale industries such as artificial limbs, prosthetics in cost effective manner .The group has been collaborating over the internet in setting up of a FabLaB for empowerment and economic development of a rural community in Sri Lanka. The objectives of the project are to share knowledge, enhance innovation and technology transfer in community development, to engage multi- stakeholders including Universities, the government, private sector, NGOs, community and other key players. This paper will discuss the objectives, process, progress and challenges in this project. The purpose of the paper is to demonstrate the use of Web technologies in conducting a global knowledge sharing project and also to discuss the power of digital manufacturing to empower rural community in developing country context. The paper will discuss the dimensions of project covering the planning process, implementation strategies, challenges faced and expected outcome.

Keywords: Digital Manufacturing, 3-D Printing, innovation, knowledge sharing, social enterprise, internet

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