

## عنوان مقاله:

An algorithm for Cloud-Based Design and Manufacturing using three-dimensional printers

## محل انتشار:

دومین کنفرانس بین المللی مهندسی صنایع و مدیریت (سال: 1395)

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## خلاصه مقاله:

Cloud-based design and manufacturing (CBDM) implies to a service-oriented networked product development model. In this model consumers can configure, select, and utilize their product resources and services such as computer-aided engineering software and systems for reconfigurable based on their own requirements. In this paper we discuss and compare the existing definitions for Cloud-based design and manufacturing, identify the basic features of Cloud-based design and manufacturing, define a set of requirements for an acceptable Cloud-based design manufacturing system. On the other hand, traditional manufacturing of dental products and restorations, including crowns, veneers and other structures made by ceramics, is labor-intensive and time consuming process. Therefore, in this paper we have presented an idealized Cloud-based design manufacturing application for development of design and manufacturing of different dental products by 3Dprinters in cloud environments in order to increasing the productivity and quality, also decreasing the price and delivery time. In conclusion, we have proposed a corresponding Cloud-based design manufacturing system architecture that incorporates Cloud-based design processes, integrated manufacturing services, information and supply chain management in a comprehensive form.

## کلمات کلیدی:

Cloud-based design manufacturing, Productivity, 3D-printing, Dental products

## لینک ثابت مقاله در پایگاه سیویلیکا:

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