

SAP BTP Solution: Intelligent 3D Printing

Bringing digital to 3D printing performance

Function: Manufacturing | Process: Supply Chain | Industry: Cross-Industry

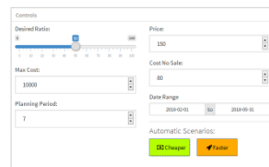
Application Overview

The 3D printing process can face some of the same efficiency challenges as traditional manufacturing if not managed properly. The intelligent 3D Printing application applies the power of analytics to the 3D printing process to optimize production.

During the manufacturing and replacement process this algorithm conducts cost comparisons for in-scope and similar SKUs to assess whether alternative options or scenarios are available. This evaluation aims to minimize the level of duplication in the activity of manufacturing and sourcing of parts and makes optimal use of available designs across product groups.

Solution

Intelligent 3D Printing is an SAP Cloud Platform-based application that executes intelligent manufacturing decisions based on sourcing, production and 3D printing alternatives. This app includes algorithms that perform according to economic and supply chain criteria for a product or group of products.



Business Value

- Provides real-time pricing for the group of product candidates to be 3D printed.
- Provides alternative materials to the original one to optimize the 3D Printing application, lead time and cost.
- Reduces repair time through faster repairs.
- Reduces lead time for some jigs, tools and fixtures.
- Optimizes resources through fewer resources in the production process.
- Enables in-house production for some jigs, tools and fixtures.
- Reduces transportation/logistics costs.
- Reduces weight, such as for a truck engine through redesign.

Features

- Multiple KPI channel integration into SAP Cloud Analytics.
- Single point for visualize production information.
- Automatic projection through simulation between 3D printing over manufacturing process.
- Visualization of which portion of demand is covered by which method.
- Possibility to create what-if scenarios (cheaper, faster, etc.).

Technologies in Use

- SAP Cloud Platform
- SAP BTP Analytics Cloud



Predictive Analytics



SAP Cloud Platform

[Click here](#) to watch the video.