



3 Steps to Embracing 3D Printing

March 16, 2017

Dr. Ripi Singh
Chief Innovation Officer and Coach
www.InspiringNext.com, +1 (860) 816-4420, Ripi@Inspiringnext.com



Do you want to know how easy it could be to bring 3D printing into your manufacturing environment?

Writing seems to be on the wall. Additive Manufacturing, or 3D Printing as popularly known, is here to change the face of manufacturing. I have several manufacturing clients who have been grappling with the idea of bringing 3D printing into their environment. How, what, when, are all legitimate questions.

I recommend these 3 steps:

1 Toys
A DREMEL 3D printer is shown next to various 3D printed toys, including a soccer ball, a blue car, a blue vase, a small tree, and a black phone stand.

2 Tools Demos
A yellow 3D printed tool, possibly a handle or a bracket, is shown.

3 Products
A large, complex 3D printed part, possibly a mold or a component, is shown. Below it is an ExOne MAX 3D printer.

STEP 1 – Start with a toy printer on the shop floor, labeled “Free to Play”

Buy an inexpensive plastic 3D printer from local store and place it in your cafeteria or other common area. Label it “Free to play outside working hours.” Very soon, you will find your technicians using it to make toys for their kids, and then repair parts for their appliances at home, and other small stuff for themselves. Let them... they are self-training at the of cost of consumables.

For example: you can have 9”x6”x5” capability from Dremel at less than \$1,000 at Home depot; or a fancier one Ultimaker to build 20”x13”x27” available at dynamism.com for about \$5K.

STEP 2 – Start using it on secondary applications - equipment repair, tooling, etc.

Very soon a few of your employees will get into using the same toy printer for facility or equipment repair at your own shop and then even making tools, dies, fixtures, artifacts for trade shows, Value added stuff while still learning. Then you all will move on to samples, demo pieces, and even prototypes to accompany your proposals.

You will reach a point, when your staff will start asking what next and when. They are trained, and ready to embrace the real stuff.

STEP 3 – Buy the real machine your business needs

While the employees are self-learning, leadership better get busy evaluating new markets, new machines and opportunities. With proper business case, make the serious investment required, to embark on the new wave.

Word of caution is that metal printers are very different than plastic ones. My suggestion here is aimed to overcome organizational inertia and fear. The staff would need full training on the machine you choose to buy.

SELF Discovery Question and improvement opportunity

If for less than \$5,000 you can influence the mindset of your manufacturing staff and mentally prepare them for new technology, what is holding you back?

About Ripi Singh

With 25 years in technology development, management, and leadership; Dr. Ripi Singh has learnt that Innovation, Productivity and Quality can be concurrently improved to reduce operational stress. He is now on an advisory and coaching mission to help businesses around the world, with his proprietary Innovation Framework called +4π. It goes above and beyond the traditional initiatives such as six-sigma and lean. He is natural at Strategic thinking, Innovative problem solving, Technology Commercialization, University-Industry relationships, and high performance team building. His people, process and technology leadership skills span across multiple domains - aerospace, defense, healthcare, energy, manufacturing, and IT. He holds a PhD in Engineering and Masters in Strategy and Innovation. Feel free to connect / follow him on LinkedIn.