WHY MAKERS MATTER TO MANUFACTURING

A September 2016 Collider event, organized by the AFRL Small Business Hub, invited community members associated with the maker movement to address the gaps between makers and manufacturers. The AFRL Maker Hub & Wright Brothers Institute captured the conversation and investigated the results.

HYPE

Makers offer promise...
but how can manufacturers apply it?

The Expectations

There is a lot of hype around the Maker Movement.

INNOVATIVE

It's often compared to Silicon Valley's Homebrew Computer Club, which spawned the Apple II in the 1970s.

DISRUPTIVE "The idea of a 'factory' is, in a word, changing."
Chris Anderson author of "Makers: The New Industrial Revolution."

LUCRATIVE

Makers using collaborative economy models like crowdfunding are reaching $1 Billion valuations within 4 years or less.

Forbes.com June 9, 2015

Niche industries... how can manufacturing take advantage?

MOTIVATION

Maker's motivations can vary.

- CREATIVE OUTLET
- SOCIAL - LIKE-MINDED PEOPLE
- BUILD A PROTOTYPE
- FREEDOM TO EXPLORE
- TEST A THEORY
- LEARN A NEW SKILL

Manufacturers motivations are different.

- SAVE TIME
- MAKE MONEY
- INVEST WISELY
- AVOID RISK
- WORK CLOSELY WITH SUPPLY CHAIN PARTNERS

So why connect?

Find the right maker and build your innovative workforce.

THE MAKER - TO - MANUFACTURER MINDSET

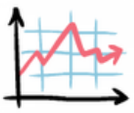
HOLISTIC DESIGN MENTALITY

Understanding how something is made, from start to finish.

COLLABORATIVE NATURE

Open to partnering with experts & other makers

ENTREPRENEURIAL SPIRIT



Desire to find the intersection between profit and creativity

What kind of people will have this mindset? They'll probably be younger.

Millennials are set to make up about 75% workforce by the year 2025.
And they aren't interested in traditional manufacturing jobs.

35% of manufacturers have expressed concerns about the growing tech scene disrupting their industry.

Holistic Design Mentality

Millennials are Entrepreneurial

In 2011, Millennials launched almost 160,000 startups each month, and 29% of all entrepreneurs were 20 to 34 years old.

U.S. Chamber of Commerce Foundation Study, 2012

Entrepreneurial Spirit

Millennials want

- flexible schedules
- to acquire leadership skills
- to work with a purpose

Fortune, March 26, 2015

Millennials fill tech gaps by:

- adapting changing technology
- firm grasp of the internet of things (IOT)
- derive insights from big data

The Manufacturing Industry, Millennials, & Makerspaces by Chris Margiotta

Collaboration with businesses emerging in the "maker movement" may potentially alleviate the rising problem of waning interest among millennials entering the workforce.

Collaborative Nature

Try Before You Buy

Maker Spaces Provide a Neutral Space for Prospective Employees

Avoid the risk of hiring the wrong person and see them in action.

"One of the most common mistakes made by small businesses in the human resources area is believing that a new hire will perform exactly as expected."

- entrepreneur.com/article/80126

Holistic Design Mentality

Start by asking them how the design started, how it's being built and how they'll adapt for changes.

Collaborative Nature

Teaming is common in maker spaces. Visit during a community build day or during a team activity to see how they work with others.

Entrepreneurial Spirit

Ask about their desire to go to market with their idea. Discover their level of business awareness.

AFRL Maker Hub

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