THEFUNDAMENTALS OF FITMANU FACTURING



THE FOLLOWING MUST BE UNDERSTOOD TO LEVERAGE THE VALUE OF

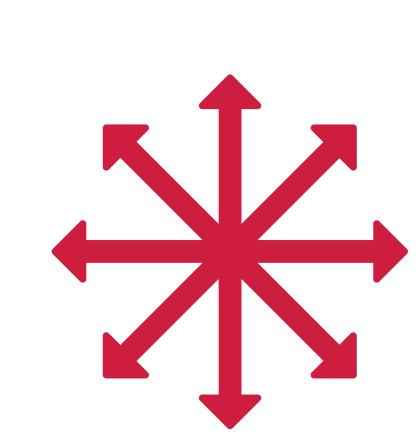
FIT MFG PROCESSES:

The 2nd Law of Thermodynamics, or the "entropy law," states It is fundamentally impossible to eliminate all waste in any systems. Unlike lean manufacturing, which strives to eliminate seven forms of waste, FIT MFG looks to focus the potential energy introduced into a system to maximize value. This enables organizations to realize the highest level of both earnings before interest, taxes, depreciation, and amortization (EBITDA) and cash flow returns (mid- and long-term). Essentially, FIT MFG enables analysis and drives actions leveraging the laws of physics to optimize entire value systems.



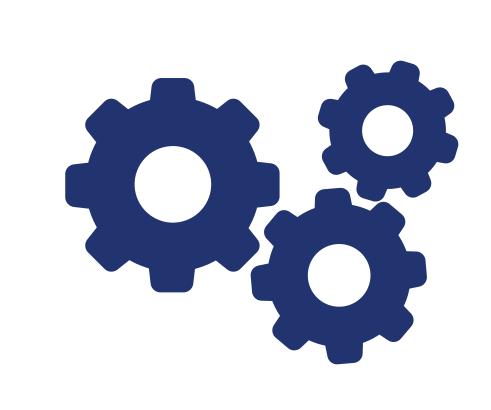
TIME

Within FIT MFG, time is the only independent variable and the most important resource in any business because time is the only resource that you can't get back once consumed. Maximizing the highest level of value in measured increments of time over the maximum amount of time is the primary goal of FIT MFG.



1. ENTROPY

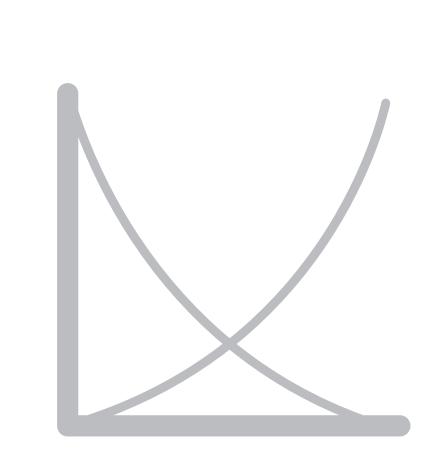
Entropy is the second law of thermodynamics. It explains that waste is produced as a byproduct of work. As a result, there is waste in every work producing system. FIT MFG evaluates the current and future states of entropy for each system and identifies misdirected entropy, looking at how much potential energy is consumed to produce a desired outcome. Successfully managing entropy requires channeling the consumption of potential energy into mostly value creating work and reducing how much energy is wasted.



2. SIMPLE COMPLEXITY

FIT MFG categorizes the degree of complexity of a system by evaluating both the current value generation of the system and the potential future value generation. In order to discover the optimal value proposition (state of health), it drives the system to its greatest state of positive disequilibrium while still maintaining control.

We call this optimal range the ABCs of FIT MFG. This is the trade-off point where declining anarchy (A) crosses increasing bureaucracy (B) to reach the lowest entropy or cost point (C).



3. TRADE-OFF

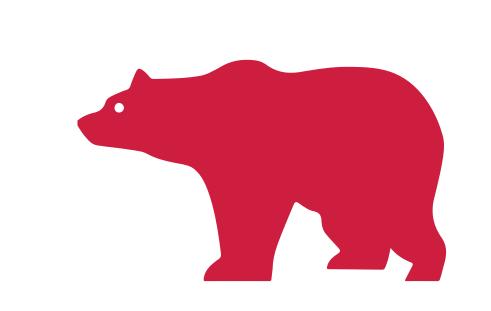
Many organizations mortgage their long-term overall health in favor of short-term gains. FIT MFG drives to the intersection point, always striving to minimize the cost in the system. It analyzes the short- and long-term gains inherent in each trade-off and looks at which will yield the maximum overall benefit.



4. ENVIRONMENT

Ensuring that your business responds appropriately to its environment is another key to long-term organizational survival. FIT MFG evaluates and adjusts your organization in response to threats, pitfalls, organizational adaptability, opportunities, and changes in the environment where the organization operates.

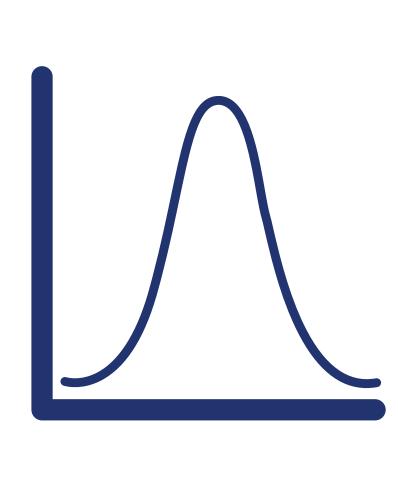
Like any organism, every business must understand its environment. Who are the predators and who is the prey? What are the risks and opportunities? Are there ample food sources to stay healthy? Who can steal the available food supply if you aren't healthy? If you are a grizzly bear, you better make sure your environment is in Alaska not the Serengeti!



5. ORGANISM

determines the overall health of the organizational structure and makeup—known as the MFG evaluates the health and interdependency/synchronicity of an organism's central nervous system, cardiovascular system, independent organs, diet, and external environment to ensure optimal performance.

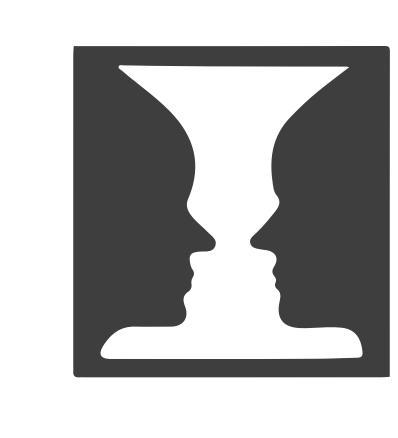
In any business, you must know what kind of animal you are. The bears of business (highly seasonal businesses) die at the hands of lean consultants. If you are a bear, then act like a bear. Put on as much weight as you can during spring and summer because winter is coming. Likewise, the leanest thing you can do if you have a highly seasonal business is to get fat with inventory during slow season. Often times, seasonal companies try to keep labor and inventory low during slow season only to die in winter (peak season) because they can't muster the required calories (potential energy) to survive it.



6. DISTRIBUTIONS

Distributions are variations in results. Every distribution is a measure of unmanaged entropy; the greater the variation, the more unfocused or misdirected entropy.

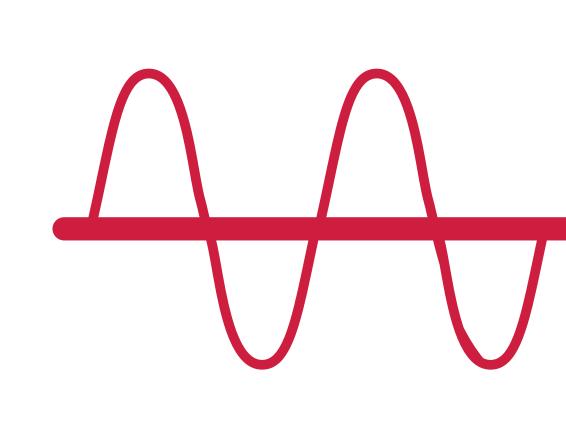
For example, a cycle that's fastest speed is 60 seconds will have most cycles run for around 60 seconds except for various downtime reasons which causes the distribution to be skewed toward the unbounded end, creating an entropy (Murphy's) tail. Most distributions in sub-processes are irrelevant to the success of the overall system unless they create a system-wide constraint; however, the distributions often receive unwarranted attention, wasting time and money.



7. RELATIVITY

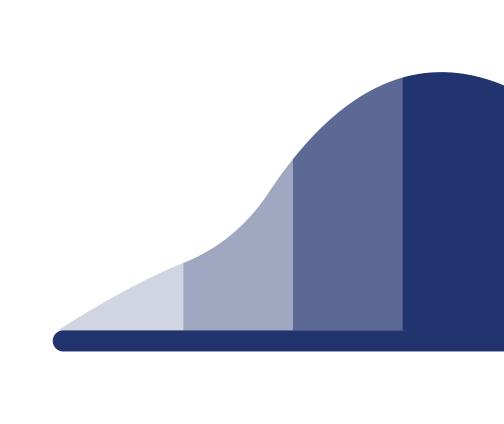
FIT MFG takes a relativistic viewpoint of both internal and external events that affect an organization.

For example, a quality spill will be viewed and interpreted differently by a quality manager and a production manager. Even though both observe the same event, they each view it from a different perspective. Understanding multiple viewpoints enables more accurate understanding and helps determine the best way to react, improve, and leverage each event.



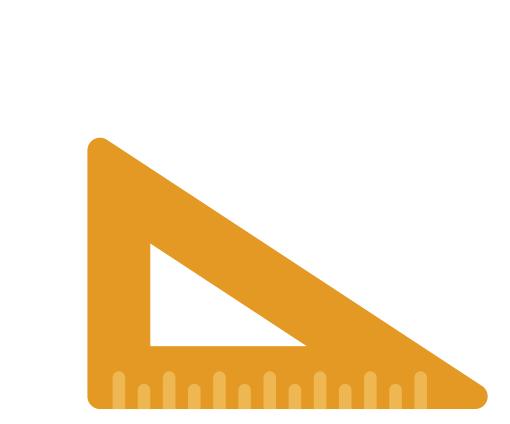
8. CYCLES

Cycles are naturally recurring intrinsic orders that command attention and certain prescribed reactions. FIT MFG evaluates the cycles that impact organizations and drive reactions that protect and enhance an organization's ability to leverage these cycles to its advantage.



9. PRODUCT LIFE CYCLE

Life cycles spring from the fight between complexity and entropy. Keep in mind, the mortality rate for all living organisms is ultimately 100%. FIT MFG evaluates where an organization is along the life cycle continuum and identifies the appropriate actions to extend the system's lifespan and quality of that lifespan, even if that means ending an industry group, department, or product line.



10. GOLDEN RULE

Proper leadership and respectful treatment of suppliers, internal partners, and customers is intrinsic to the success of any organization. How leadership interacts with, treats, and leads an organization will ultimately determine its success or failure. FIT MFG takes a deep dive into the health, welfare, and interactive processes that pervade an organization and works to adjust them for optimal results.



If you're interested in finding out more about FIT MFG and how it could improve your organization's efficiency and bottom line, contact us today.