

# Reliability Thinking



How can we learn to improve the “broken” system, rather than simply blaming each other?



# Statement

**Problems in the system are always  
a “WHAT” never a “WHO”**

Empty Gasoline Drums Process

01



# Deconstructing Management.



# Statement

**Just because the fish cannot climb  
trees doesn't make it stupid**

02



# Management, where did we learn to manage a production line?

## In Nursing School? Surgical Tech Program? SPD Program?

There is a line between the [art of management](#) and [education](#).  
The formal education needed: Accounting, Economy, Finances, administration, marketing, computers, math, statistics, calculus, cost, etc.

Four pillars of management

– Planning - Organizing - Directing - Controlling

- Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may be differentiated from other health care providers by their approach to [patient care](#), training, and scope of practice. Nurses practice in many specialties with differing levels of prescription authority.

- A surgical technologist, also called a scrub, scrub tech, surgical technician, or operating room technician, is an allied health professional working as a part of the team delivering [surgical care](#). Surgical technologists are members of the surgical team. The members of the team include the surgeon, surgeon's assistant, circulator nurse and anesthesia provider.





## Definition:

Management is the common activity of aligning **people** and **processes** with a customer **purpose**

# 3P



**Purpose**

**Process**

**People**

We must have a clear understanding of purpose and the value needs to be created , once purpose is understood is easier to plan and create the process for achieving that purpose and how to engage people in implementing operating and improving that process, that why purpose comes first.



## **Purpose Definition:**

The reason for which something is done or created or for which something exists.

# Sterile Production Purpose:

Strive to deliver and support our customers in the surgical area **(Surgeons- Surgical Techs)** with clean, sterile and complete sets or single instruments; as needed for them to deliver their purpose to patients. We are always ready to deliver and listen to our customers as their needs change.

# Two faces of Purpose



01

## Customer Purpose

What does your customer need that you are not currently able to deliver?

## Production Purpose

What do you need as a department to support your customers in the surgical area?



# Process Definition:

Series of activities (Most Humans) to achieve or deliver a **value** good or service.

Starbucks – Disney

# Process



02

A process can only produce what they are designed to produce, never something better, often something worse.

A process must be:

Valuable,

Capable,

Available,

Adequate, Flexible.

Minimum stability = Capable + Available

# **Value Definition:**

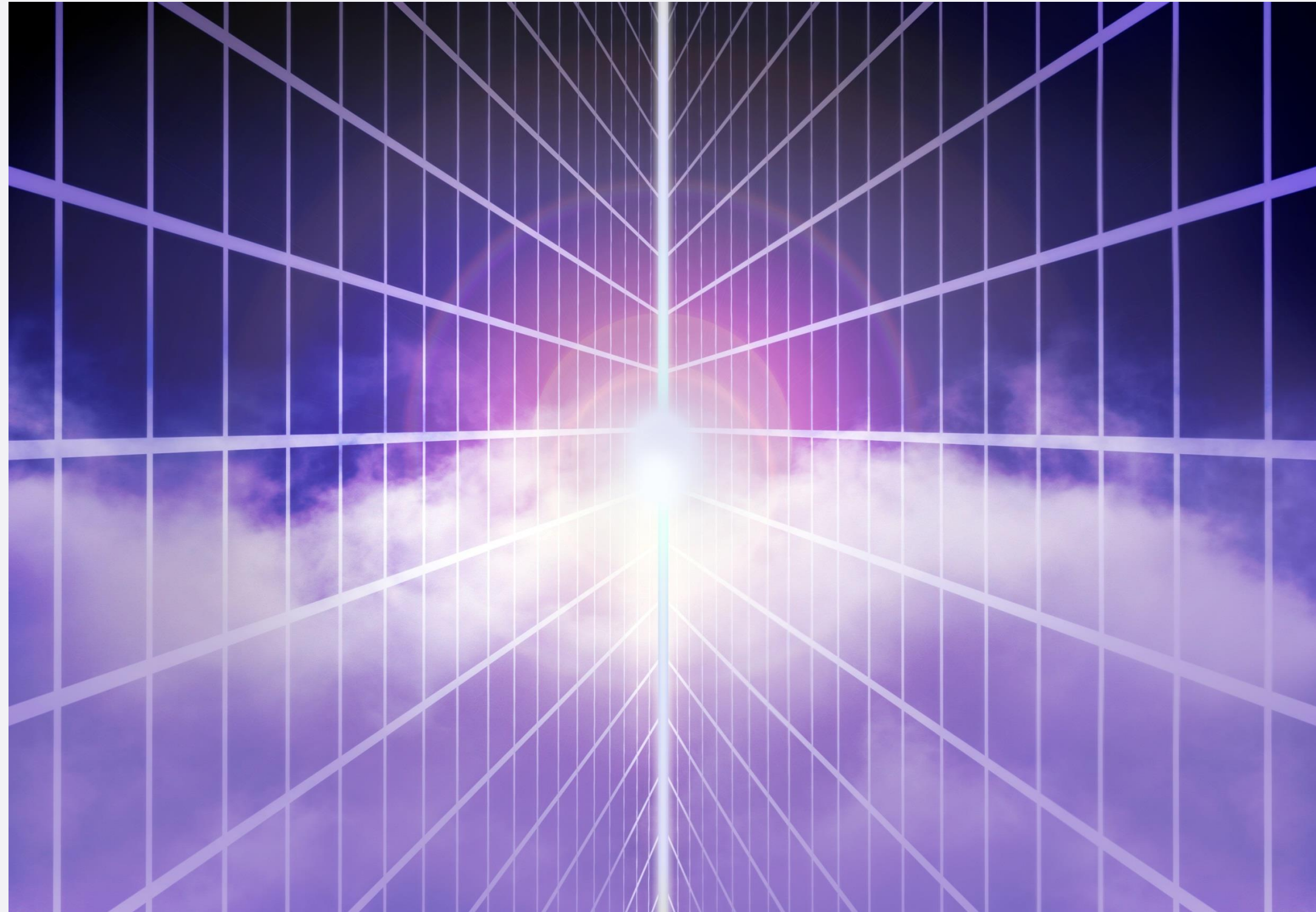
**A fair return of an end process**

**Where does value live?**

**Who makes it?**

The Traveler example

Value Unplugged





# SPD Customers

- Neuro
- OB
- Plastics
- General
- Spine
- Ortho
- Eyes...Etc.



**People Definition:**  
**Human beings making up a group  
or assembly or linked by a  
common interest**

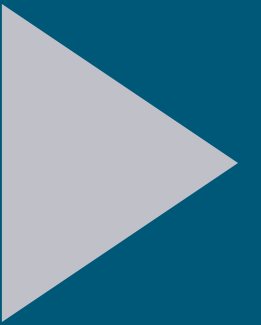
# People



03

## People need motivation

is the desire or willingness of someone to do something.



The love of your life....



# What motivates people?

- Work place with purpose
- Feel part of something important
- Feel safe when they speak out
- Good payment

# What engages people?

- Thank them when they do something for you
- Call everyone by their name
- Don't give them answers ask questions
- Don't give orders, give responsibilities
  - Always spend a few minutes talking with them
- Challenge them to experiment



# The problems when 3P fails

**Disconnected People = Low Morale**  
**No Purpose = No Direction**  
**Broken Processes = Bad outcomes**



# Statement

**First step in solving any problem is recognizing there is one.**

**For example:**

**Cross training/management is a problem for SPD**

03



# Benchmarking **High Reliability Organizations** vs **Cross Training**

**HRO: Organization that has succeeded in avoiding catastrophes despite a high level of risk and complexity.**

**Cross-Training: The action or practice of training or being trained in more than one role or skill.**

# HROs

- Nuclear Generation Plants**
- Nuclear Aircraft Carriers**
- Air Traffic Control Systems**

They are experts of being on top of operations, they stay mindful about everything that is happening around them.

We want to benchmark these organizations not because “They have it right” but because “They struggle to get it right” on a continuously bases.

Complacency and pride are two of their biggest enemies, once you understand HROs I hope they will be your enemies as well.

# HRO Principles

## 1-3 Anticipation

# HRO Principle

## Preoccupation with Failure



01

- They work hard to detect small emerging failures in the system
- They work hard to anticipate and specify significant mistakes they don't want to happen. Drills and imagination is key for them.



# HRO Principle



02

## Reluctance to Simplify Interpretations

- Simplification produces blind spots :
  - Empty
  - As Described
  - OK
  - Ready , no news good news, if required

# HRO Principle

## Sensitivity to operations

Routine becoming mindless (Not synonymous). Routine is an automatic activity as we say, “It is a routine Job” The problem is when you forget the “What if”

Speak up when something is not feeling right.

# HRO Principles

## 4-5 Contention

# HRO Principle



04

**Commitment to resilience**



# HRO Principle

## Deference to expertise

In complex situations you want to look to an expert before you see management



05

## Statement

**We humans are fallible  
and more dangerous  
when we think we aren't**

04



# The Enterprise

w3.nutrace.net





## Statement

**We all have the power to  
convert something  
simple and inefficient  
into something  
productive and valuable;  
just by touching it**

05



# QUESTIONS

**You better have some!**

# Thanks