Title:	The Concept of Reliability and Trustworthiness.
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Intended for:	Presentation
Issued:	2016-10-05 (rev.1)

The Concept of Reliability and Trustworthiness

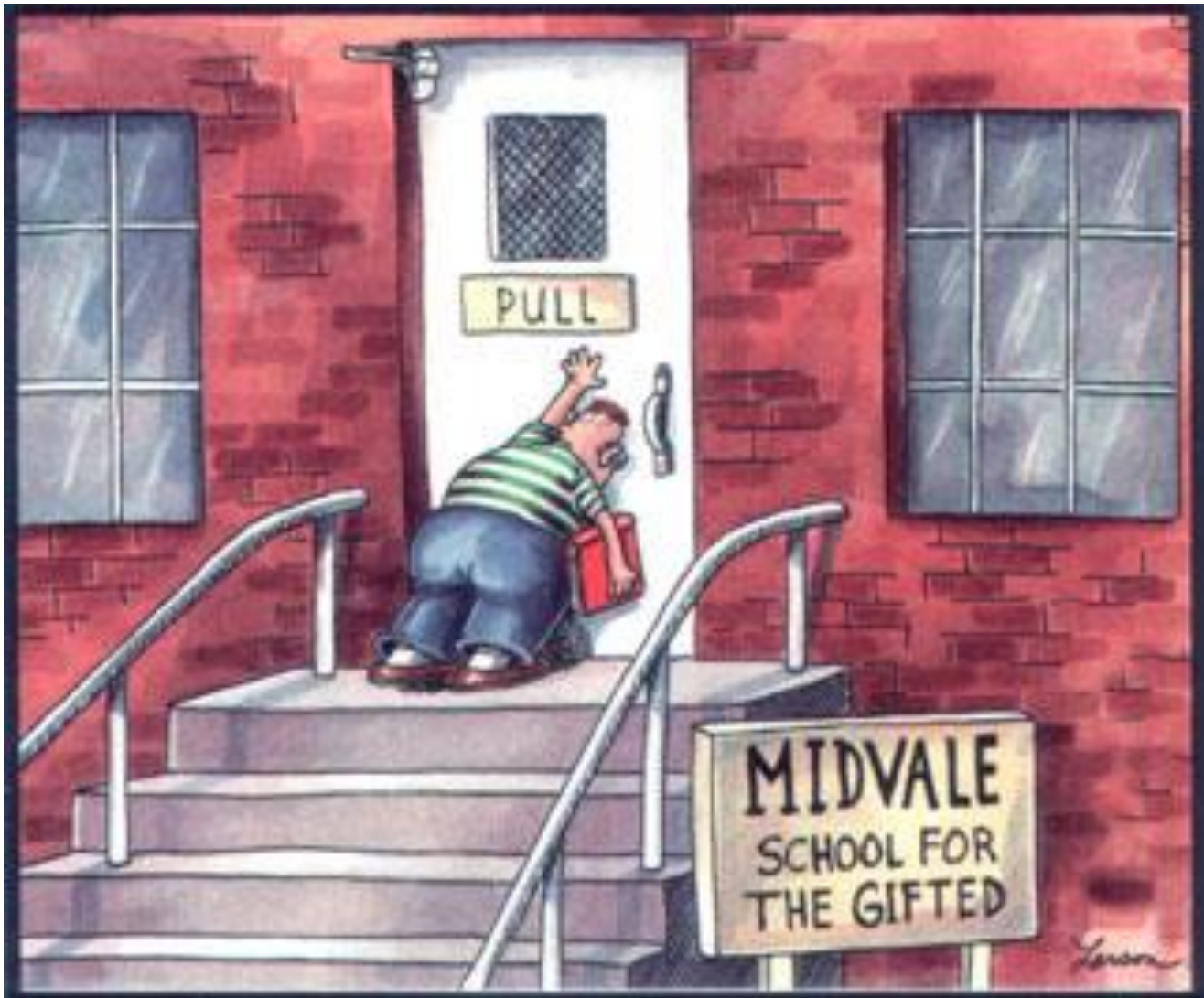## Julian Atencio
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Objectives

- **To obtain an appreciation and understanding of human behavior as it relates to critical jobs.**

- **To understand the basics of the Department of Energy's Human Reliability Program.**

- **To understand the importance of monitoring and deterrence.**

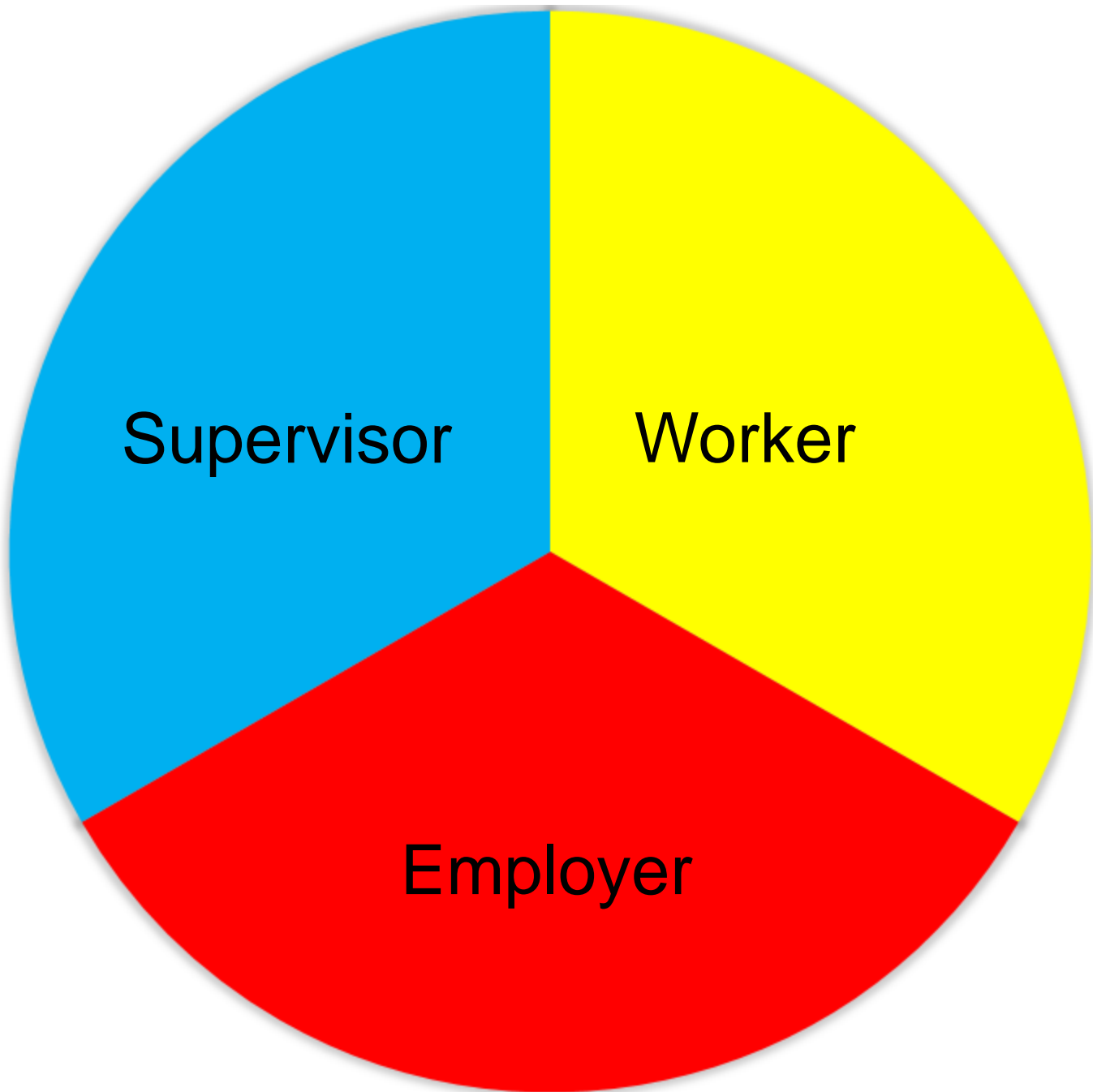- **To understand the effects of "right-sized" reaction.**

What Is the Process?

- **Evaluation and opinion**
  - **Supervisor, coworkers, history, discipline**
- **Medical evaluation**
  - **Suitability, mental issues, medical issues**
- **Compliance review**
  - **Drug/alcohol testing, training, refresher**
- **Security review**
  - **Debt, criminal, aberrant behavior**

Relationship

- **It is very tempting to dive into the process that looks for ways to identify workers who are not trustworthy.**

- **This can create an aura of suspicion.**

- **Much greater value is realized when you design, build and maintain a system for filtering for trustworthiness and reliability.**

- **This mandates all parties come to the table and be accountable.**

- **The worker, supervisor and employer must all be involved in the overall path toward building a trustworthy and realizable work environment.**

- **These relationships determine culture.**

Unbiased Consistency

- **No Favorites**
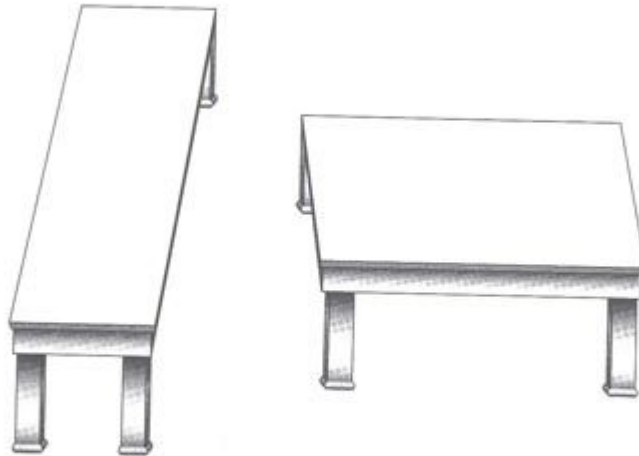- **No Goggles**
- **No Advantages**
- **Treat everyone the same**

Recognizing the bias

Have a look, if you will, at these two tables:
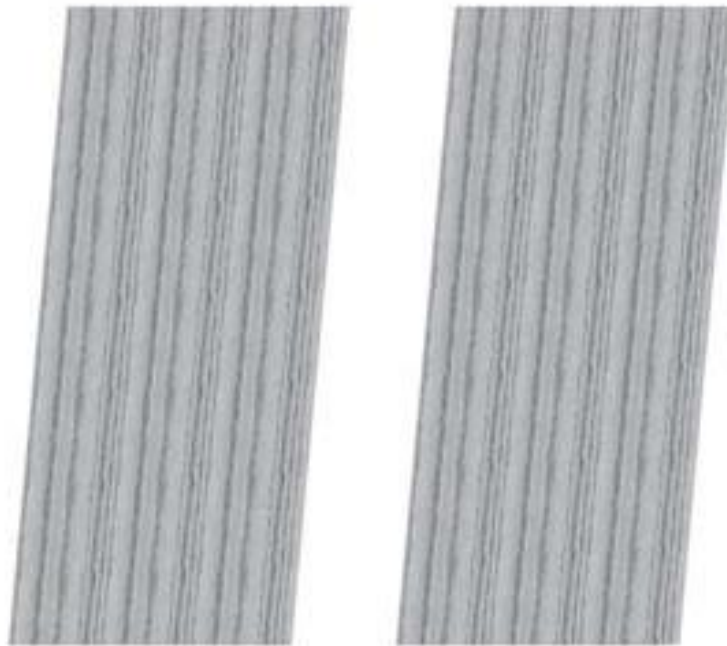
1.1.
Two tables (Adapted from Shepard [1990])

Removing the bias

Workers and Supervisors

Employers depend on good relationships between workers and supervisors to accomplish the work. The ability to recognize issues and concerns in reliability programs requires information be evaluated by a neutral party, otherwise hidden bias may impact the end result and compromise the overall program.

It is, what it is...
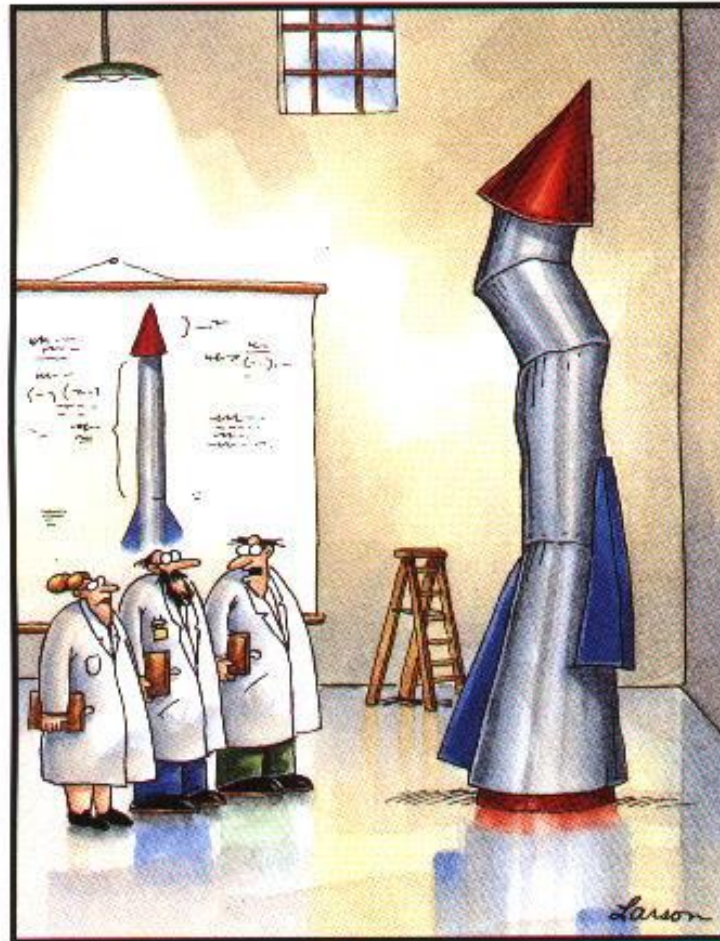
"It's time we face reality, my friends. ...
We're not exactly rocket scientists."

Malalignment

- **Not every person is suited for every job.**

- **The task of selecting the right person for the right job is that of Human Resources.**

- **When an error in this tasking occurs, it becomes the responsibility of a reliability program to deal with the remnants.**

Selection and Judgment

- **Filtering is where tough decisions are made.**
- **Most humans do not enjoy passing judgment on others in a negative way.**
- **The system must be willing to identify those individuals who don't meet the standard (this is where many programs fail).**
- **It is very difficult to select and sort humans.**
- **Nature selects every day for survivability.**
- **It is inherent in most humans to want to help instead of judge or filter.**

What Does the Worker Need To Do?

- **Be agreeable to the process**
- **Be open**
- **Be willing to provide information required to assess reliability**
- **Be willing to disclose pertinent information related to self and others**
- **Be honest with yourself and others**
- **Be able to report aberrant behavior of others**

Fairness

- A key element is the confidence participants will have when they believe the system is fair and realistic.

- A worker is more likely to report a concern when they know the partial information they supply will only be one part of a broader evaluation.

- Workers often confuse actions by exclusionary programs as being discipline.

- Workers will be more receptive to the process if they know the are being treated equal and fair.

What Does the Company Need To Do?

- **It must have a system in place which evaluates reliability**
- **It must demand the process to evaluate reliability be fair and constantly scrutinized**
- **It must be willing to filter out workers who do not meet the criteria of reliability**
- **It must create an environment where trustworthiness is the standard for all workers**
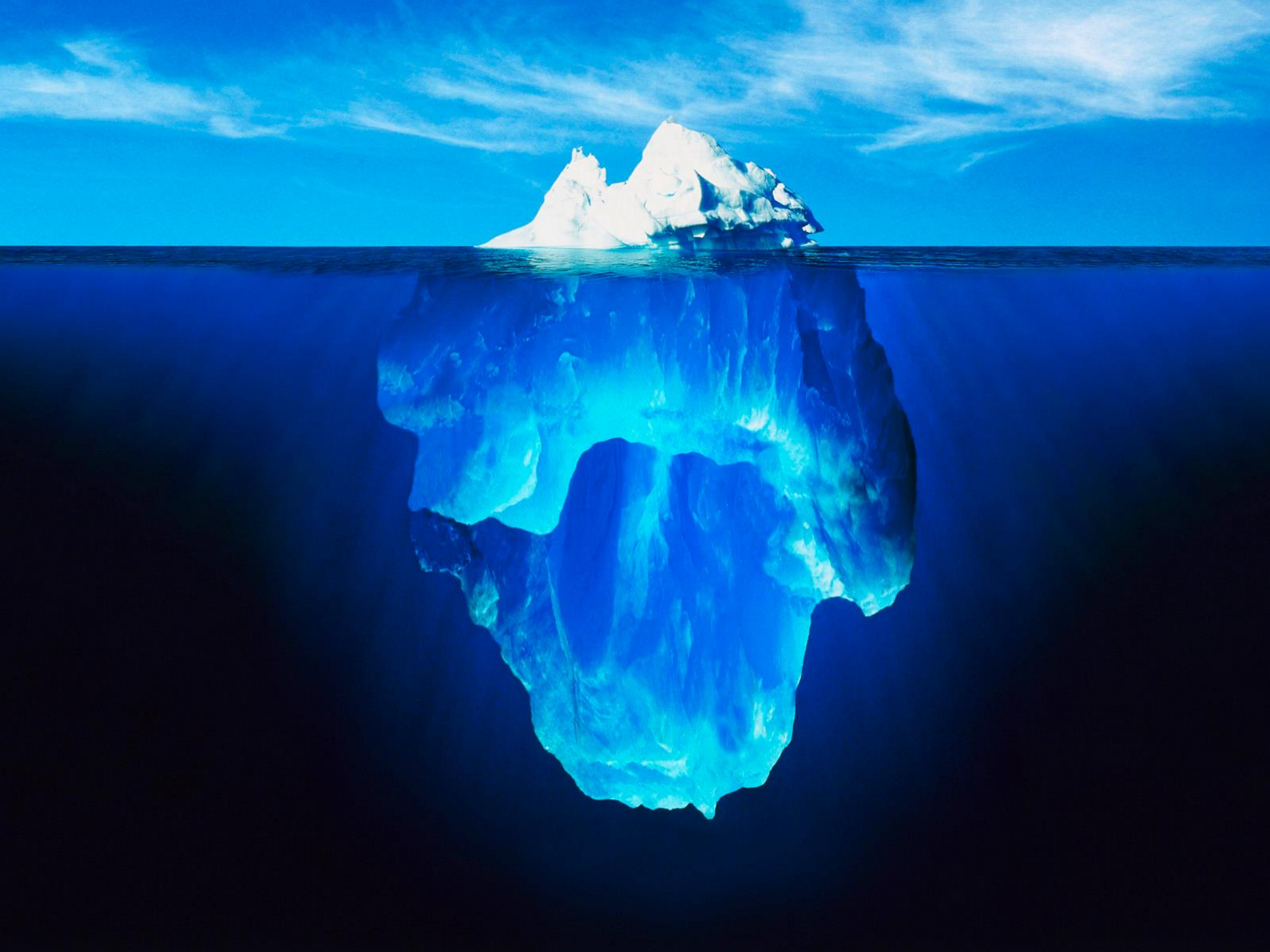- **It must be realistic about human behavior**

What are we doing?

Are we looking or are we preventing?

Thoughts become Acts;

Acts develop into Habits;

*Habits define Character;*

Your Character shapes your Destiny.
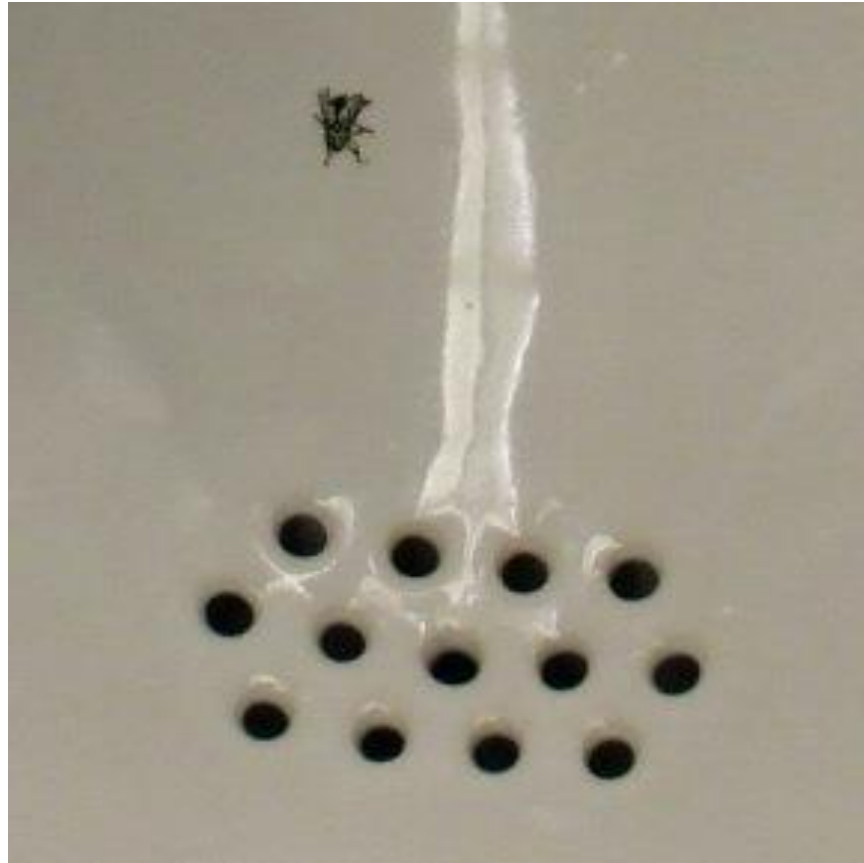
Human Non-Perfection

- **The program cannot have the expectation that every rule is going to fit every situation. If this were true, we could simply have robots conduct all of the HRP duties.**

- **We need living, breathing, thinking humans to make these critical decisions. These humans must be reliable and share certain attributes such as honesty, integrity and excellence in work ethic.**

- **A good program has the right tools to identify issues "under the surface" and make appropriate decisions about mitigating human non-perfection.** 1-31
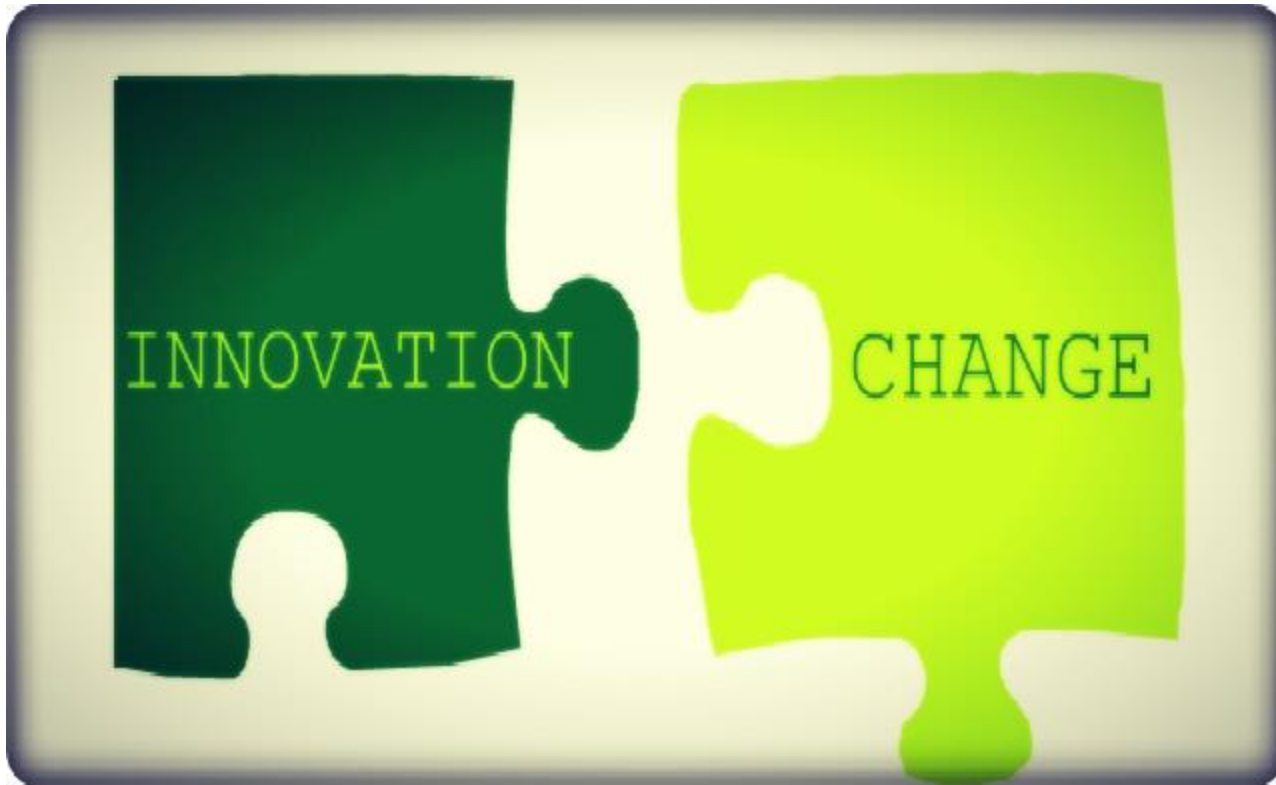
"*In time of change, learners inherit the earth; while the learned find themselves beautifully equipped to deal with a world that no longer exist.*"
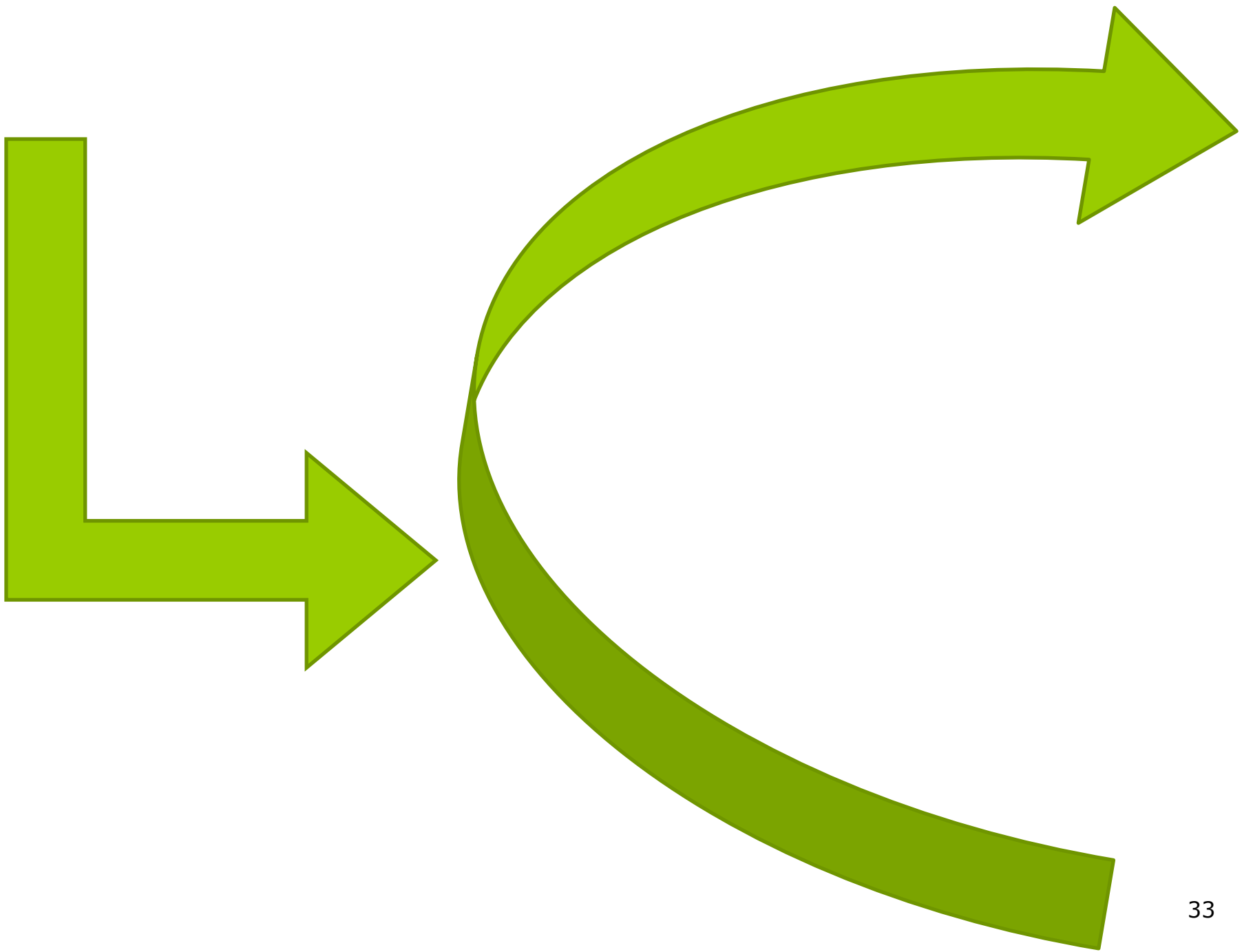
It doesn't take a lot to influence humans. A good system nudges workers in a positive direction.

Trustworthiness

Mission — What are you looking for?

Procedures — What process do we follow to get what we want?

Communications

Application — What tools do we use to obtain our product?

Product — Once we obtain our goal, how is it used?

Assess — The product has to be continuously assessed to ensure product quality

Clarity — Consistency — Efficiency — Delivery — Sustainability — Reliability

1-35

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid."

-Albert Einstein