LEAN COMPLIANCE

COMPLIANCE AT THE SPEED OF RISK

Are you ready?

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LEAN COMPLIANCE CONSULTING, INC.

PREFACE

A few definitions we need to know

- **Compliance:** the outcome of meeting obligations with respect to quality, safety, environmental and regulatory objectives (ISO 19600)
- **Risk:** the effects of uncertainty on objectives (ISO 31000)
- **Speed:** the rate at which risk becomes a reality

LEAN COMPLIANCE

PREFACE

Why are we talking about this?

PICTURES OF REALITY

STATEMENTS OF REALITY

- We are completely in compliance with all applicable laws, regulations, and statutes
- We are working to the highest standards
- We are following all the rules
- All our products function as designed
- We are doing nothing wrong

Not able to prevent risk from becoming a reality

COMPLIANCE AT THE SPEED OF RISK

PREFACE

All the rules were followed

PHOENIX PAY SYSTEM

WHAT HAPPENED

- In 2009 the Canadian government initiated the Phoenix project which rolled out in 2016.
- The original budget of $309m increased to $954m expected to rise to $2.3b by 2023 in unplanned costs.
- The Governor General Auditor in 2019 reported,

  "How could Phoenix have failed so thoroughly in a system that has a management accountability framework; risk management policies, program evaluations, internal audit groups, departmental audit committees; accounting officers; departmental plans; departmental performance reports; pay-per-performance compensation'; and audits by Office of the Auditor General?"

Not able to prevent risk from becoming a reality

COMPLIANCE AT THE SPEED OF RISK

PREFACE

Vehicle performed as designed

UBER AUTONOMOUS VEHICLES

WHAT HAPPENED

- In 2018 the first recorded fatality involving a self-driving vehicle occurred.
- Uber reported that the vehicle performed as designed.
- Uber argued that it did have safety policies, procedures, and engineering practices that, in aggregate, could be considered a safety plan.
- Uber has since suspended use of autonomous vehicles

Not able to prevent risk from becoming a reality

COMPLIANCE AT THE SPEED OF RISK

PREFACE

We did nothing wrong

FACEBOOK DATA PRIVACY

WHAT HAPPENED

- In 2018 Cambridge Analytica harvested data of millions of Facebook profiles.
- Facebook claimed that users had given their consent to give away their information and that Facebook did nothing wrong.
- In response to the Cambridge Analytica scandal Facebook has promised to “do what it takes to protect our community” and has established “Social Science One” to prevent similar breaches in the future.

Not able to prevent risk from becoming a reality

COMPLIANCE AT THE SPEED OF RISK

LEAN COMPLIANCE

PREFACE

Risk and compliance is falling behind

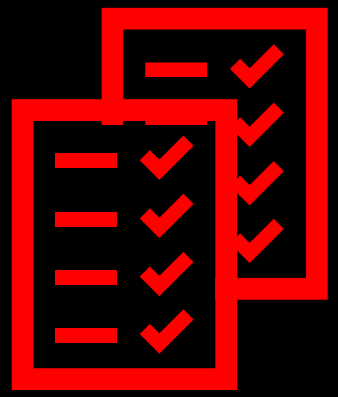
Not able to prevent risk from becoming a reality

COMPLIANCE AT THE SPEED OF RISK

PREFACE

How do we get ahead of all this?

Audit Double Down



Increase the number of:

- Training sessions
- Inspections
- Pre-audits
- Internal audits
- External audits

Assumptions:

- The problem is a lack of conformance to existing policies, standards, or regulations.
- Gaps will identify what to improve.
- We have the resources, capabilities, and time to make improvements before the next incident occurs.

PREFACE

How do we get ahead of all this?

Vision Zero

Zero Defects
Zero Fatalities
Zero Harm
Zero Incidents
Zero Emissions
Zero Violations
Zero Breaches

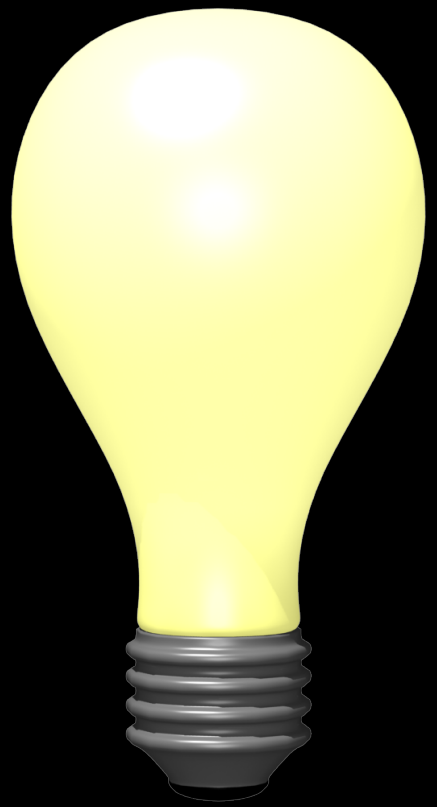
- Regulations and standards are changing from prescriptive and management-based to performance and outcome-based designs.
- Organizations will establish goals, objectives, and measures to make progress against these targets.
- Continuous improvement of capabilities is expected.

Assumptions:

- The problem is a lack of effectiveness.
- Prescriptive standards and regulations are not creating the intended outcomes.
- High consequence risk rarely occur due to a breakdown of a single activity but instead occur because of an alignment of weaknesses across multiple activities.
- Cannot wait for audit findings to make improvements, companies need to be proactive.

PREFACE

The Big Idea



1. **The risk and compliance landscape has changed.**
    - It is no longer only about loss prevention and conforming to and verifying prescriptive specifications.
    - It is now focused on reducing risk, ensuring obligations and advancing compliance outcomes (e.g. vision zero).
2. **Management approaches based on reactive processes (audit/fix cycle) are too slow** and too late to keep up at the speed that risk becomes a reality.
3. **A proactive approach is needed**; one that is holistic, risk-based, and drives continuous improvement.

THE COMPLIANCE LANDSCAPE

COMPLIANCE AT THE SPEED OF RISK

THE COMPLIANCE LANDSCAPE

Compliance is ineffective and costs are rising

70%

Lack of effectiveness

- **70%** of companies do not measure the effectiveness of their compliance programs
- Incomplete and invalid metrics
- Mistaking legal accountability for compliance effectiveness
- Self-reporting and self-selection bias
- Focusing on the elements and not the whole

The cost of compliance is too high and increasing

- Compliance alone is estimated to be between **8%-10%** of a FTE (time and salary)
- Compliance can be **2 to 3 times** that in highly-regulated, high-risk sectors (ex. oil & gas, energy, etc.)
- Risk & compliance will be more

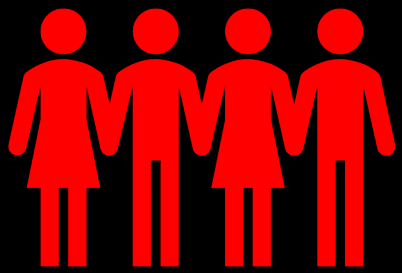
† Harvard Business Review (HBR)

THE COMPLIANCE LANDSCAPE

Attitude towards compliance is mostly negative

How do you view compliance?

- Necessary Good
  - Proactive — anticipate, plan, act to be more certain
  - Manage Risk
  - Goal is to meet obligations
- Necessary Evil
  - Reactive — surprised, always behind, uncertain
  - Only concerned about non-conformance
  - Goal is to pass an audit

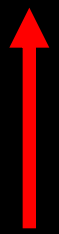


COMPLIANCE AT THE SPEED OF RISK

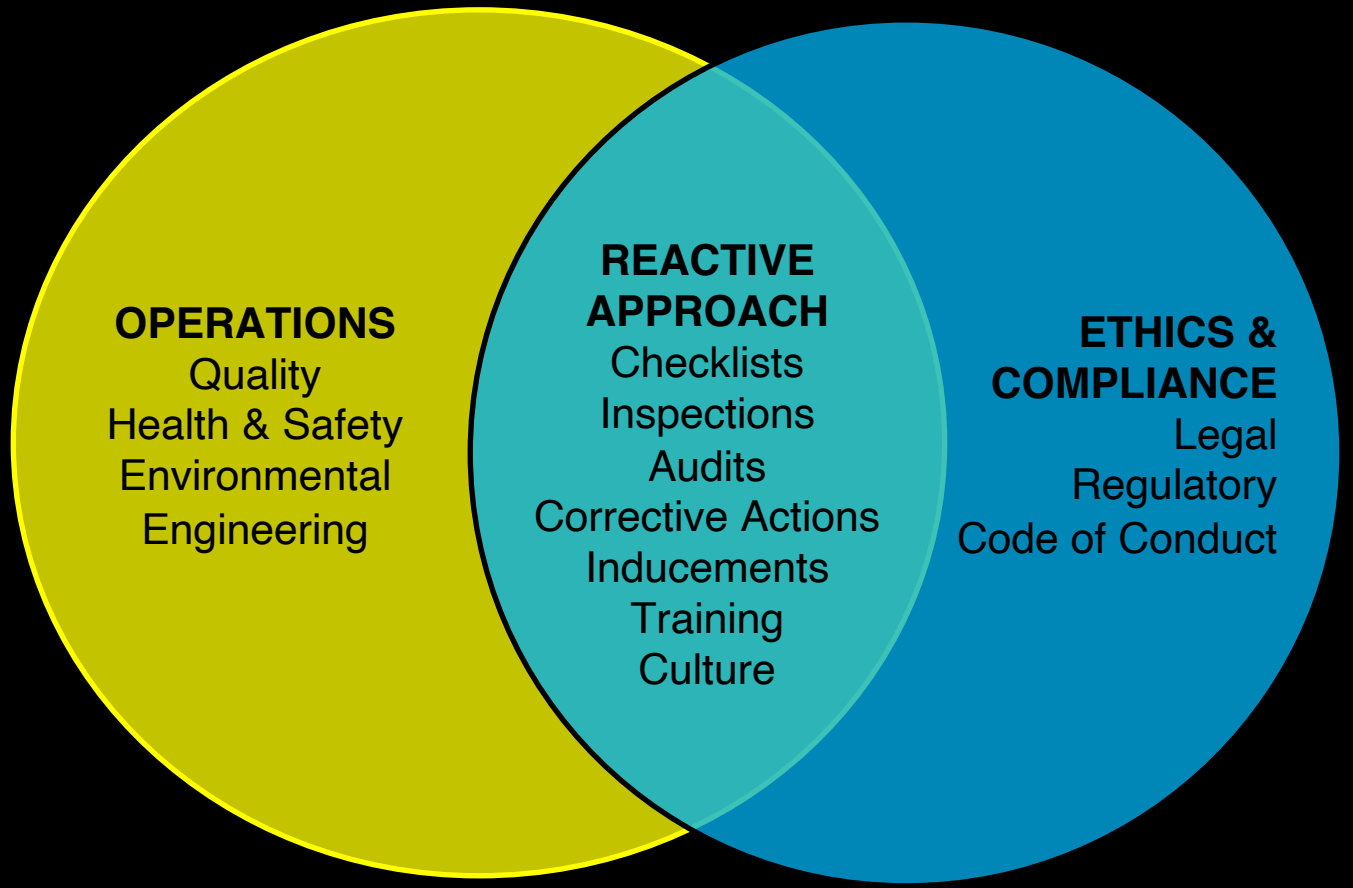
THE COMPLIANCE LANDSCAPE

Compliance focuses mostly on legal requirements

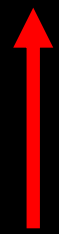
Accept Stakeholder
Responsibilities



Conformance
to Industry Standards



Accept Public
Responsibilities



Conformance
to Legal Requirements

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THE COMPLIANCE LANDSCAPE

Compliance is fractionated

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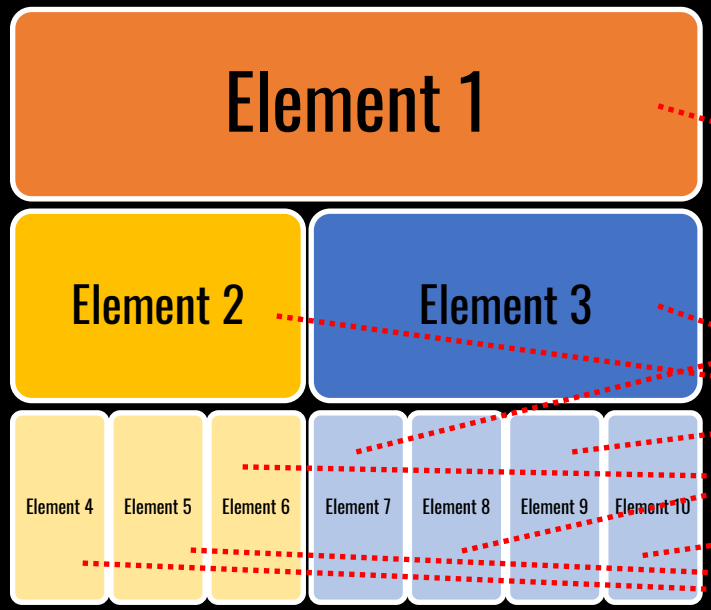
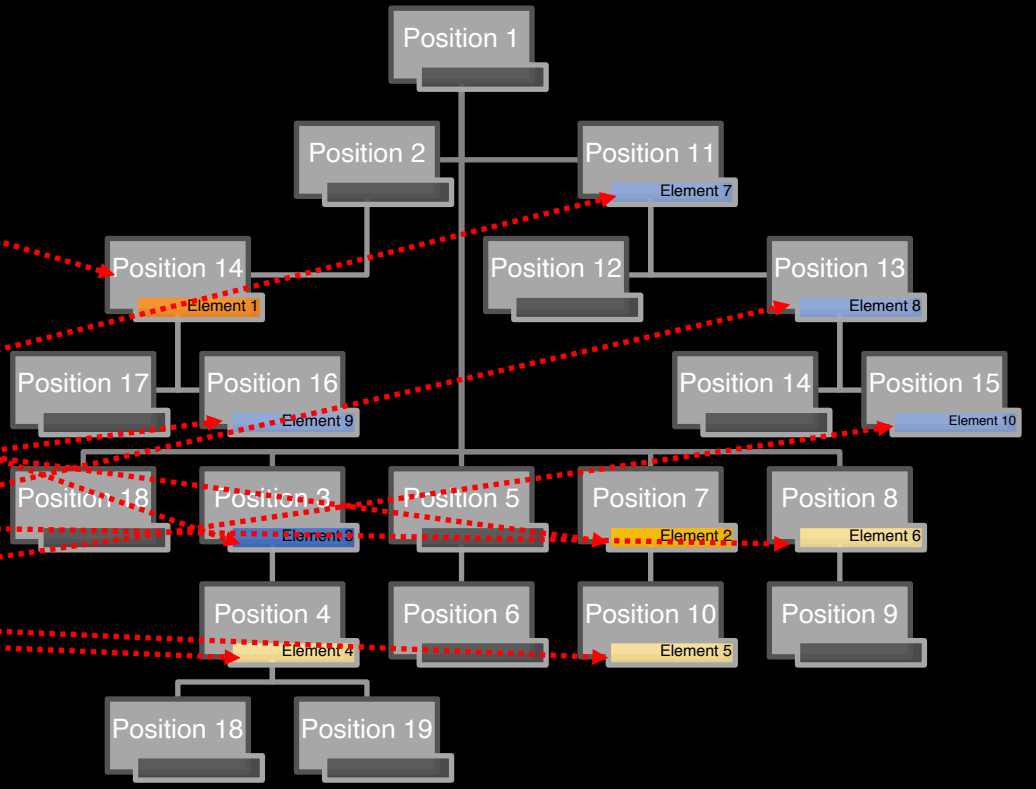
THE COMPLIANCE LANDSCAPE

Compliance effort is diluted across the organization

Compliance System



Organizational Structure

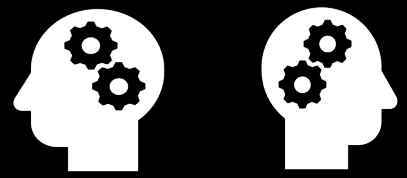


COMPLIANCE AT THE SPEED OF RISK

THE COMPLIANCE LANDSCAPE

Compliance is too reactive

Prescriptive-based Compliance | **Reactive Thinking** | **Proactive Thinking** | **Outcome-based Compliance**



Standards Based	Audit Based	Continuous Improvement Based	Risk Based
What should I do?	What must I do?	How can I improve?	How can I ensure objectives?

Findings / Lagging Actions (Audit Centric)

Ownership / Leading Actions (Obligation Centric)

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Risk management is changing

PREVENT LOSS → ENSURE OBJECTIVES

EARLY RISK MANAGEMENT

- Modern Risk Management
- Self Protection
- Insurance

TRADITIONAL RISK MANAGEMENT

- Increased focus on controls and compliance in the financial sector
- Tread-way commission on Fraudulent Financial Reporting (COSO)
- OSHA publishes 29 CFR 119 PSM – Hazardous chemicals

ENTERPRISE RISK MANAGEMENT

- Sarbanes-Oxley Act
- COSO publishes ERM Integrated framework
- ISO publishes 31000 risk management standard
- Risk becomes part of Project Management
- ISO publishes 9001:2015 "risk-based thinking"
- ICH publishes Q9 Risk Management

CERTAINTY MANAGEMENT

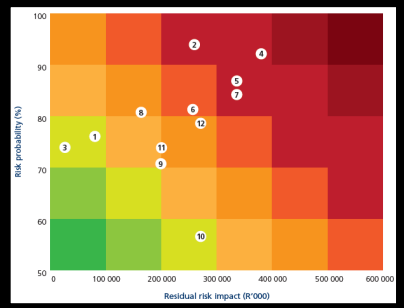
- Uncertainty understood to be the root cause of risk
- Focus on outcomes, performance and continuous improvement
- Increasing understanding of complexity and emerging risk
- Increased focus on prediction, resilience (safe-to-fail)
- Risk management is seen as cross functional capability

1950 1960 1970 1980 1990 2000 2010

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Risk management maps are out-of-date



	Project Name	Wales Software Upgrade							
	Last Updated	25-Apr-14							
#	Risk Title	Risk Description / Impact	Identified Date	Risk Category	Risk Sub-Category	Status	Owner	Risk Rating	Possible Mitigation	Date Closed
001	Tool License Expiry	Tool license expires in 3 months. This can halt development work. Cost not factored in the budget.	21-Feb-14	Project	Software	Open	IT Lead	High	1. Move to alternate tool. 2. Amend project budget to include software cost.	
002	Website design	The vendor has indicated that the graphics design cannot be completed by project deadline. Development phase could be dealyed.	23-Mar-14	Project	Software	Open	Project Manager	Medium	1. Move the project go live. 2. Work on weekends. 3. Add more resources to the project.	
003	Design Issues	The application design was not reviwed by the architect.	24-Apr-14	Project	Software	Closed	Project Manager	Medium	1. Arrange a workshop.	20-Apr-14
004	Customer Involvement	Our customers are not ready for the change.	21-Feb-14	Organisation	Software	Open	Program Manager	Critical	1. Arrange meeting with customer to see how we can help by 21-Mar.	

Likelihood X Severity

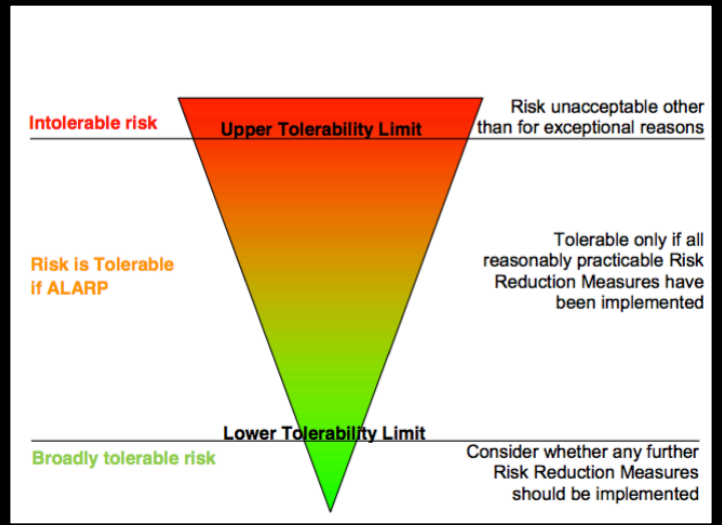
Value-at-Risk on Portfolio Loss Rate

- We need to solve for VaR^{1-p} in

$$\Phi\left(\frac{\sqrt{1-\rho}\Phi^{-1}\left(VaR^{1-p}\right)-\Phi^{-1}\left(PD\right)}{\sqrt{\rho}}\right)=1-p$$

- which yields the following VaR formula:

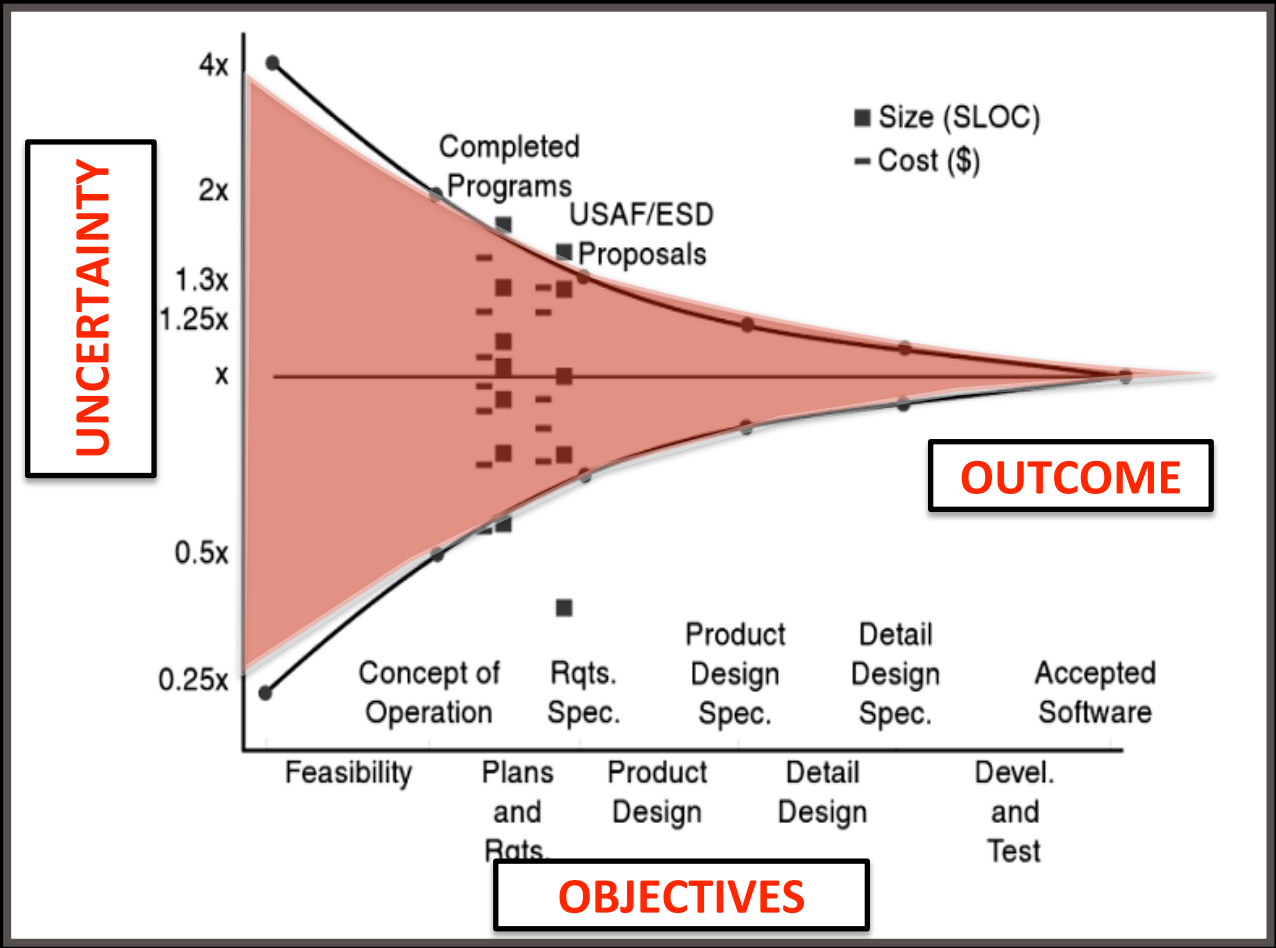
$$VaR^{1-p}=\Phi\left(\frac{\sqrt{\rho}\Phi^{-1}\left(1-p\right)+\Phi^{-1}\left(PD\right)}{\sqrt{1-\rho}}\right)$$



COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Everything happens in the presence of uncertainty



"effects of uncertainty on expected results"
ISO 9001

"effects of uncertainty on objectives"
ISO 31000

"an uncertain event or condition that, if it occurs, has a positive or negative effect on a project's objectives."
PMI PMBOK

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

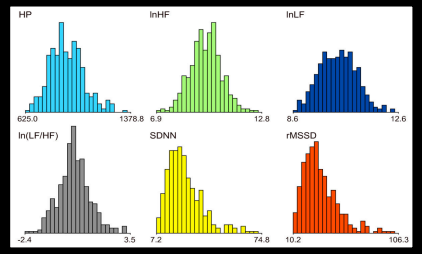
Uncertainty is the root cause of risk

ALEATORY

UNCERTAINTY

EPISTEMIC

IRREDUCIBLE UNCERTAINTY



Natural variability

Distributions

Having to do with chance

No ability to predict outcome

REDUCIBLE UNCERTAINTY

	Severity of the potential injury/damage				
	Insignificant damage to Property, Equipment or Minor Injury	Non-Reportable injury, minor loss of Process or slight damage to Property	Reportable Injury moderate loss of Process or limited damage to Property	Major Injury, Single Fatality critical loss of Process/damage to Property	Multiple Fatalities Catastrophic Loss of Business
	1	2	3	4	5
Almost Certain 5	5	10	15	20	25
probably occur 4	4	8	12	16	20
ossible occur 3	3	6	9	12	15
mote possibility 2	2	4	6	8	10
remely Unlikely 1	1	2	3	4	5

Lack of knowledge

Probabilistic events and outcomes

Having to do with knowledge

Can predict outcome

RISK

MARGINS

BUY DOWN

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Uncertainty hides and needs to be discovered

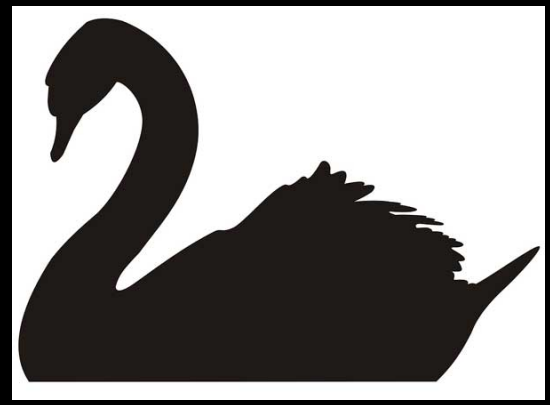
BLIND SPOTS

BIASES

PRIORITIES

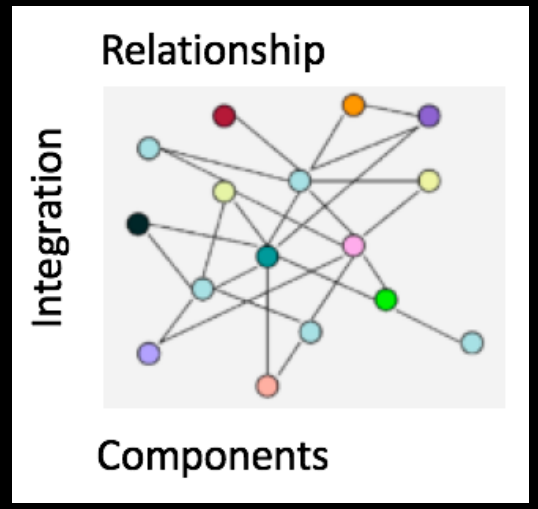
MASLOW

PREDICTION



BLACK SWAN

CAUSE AND EFFECT

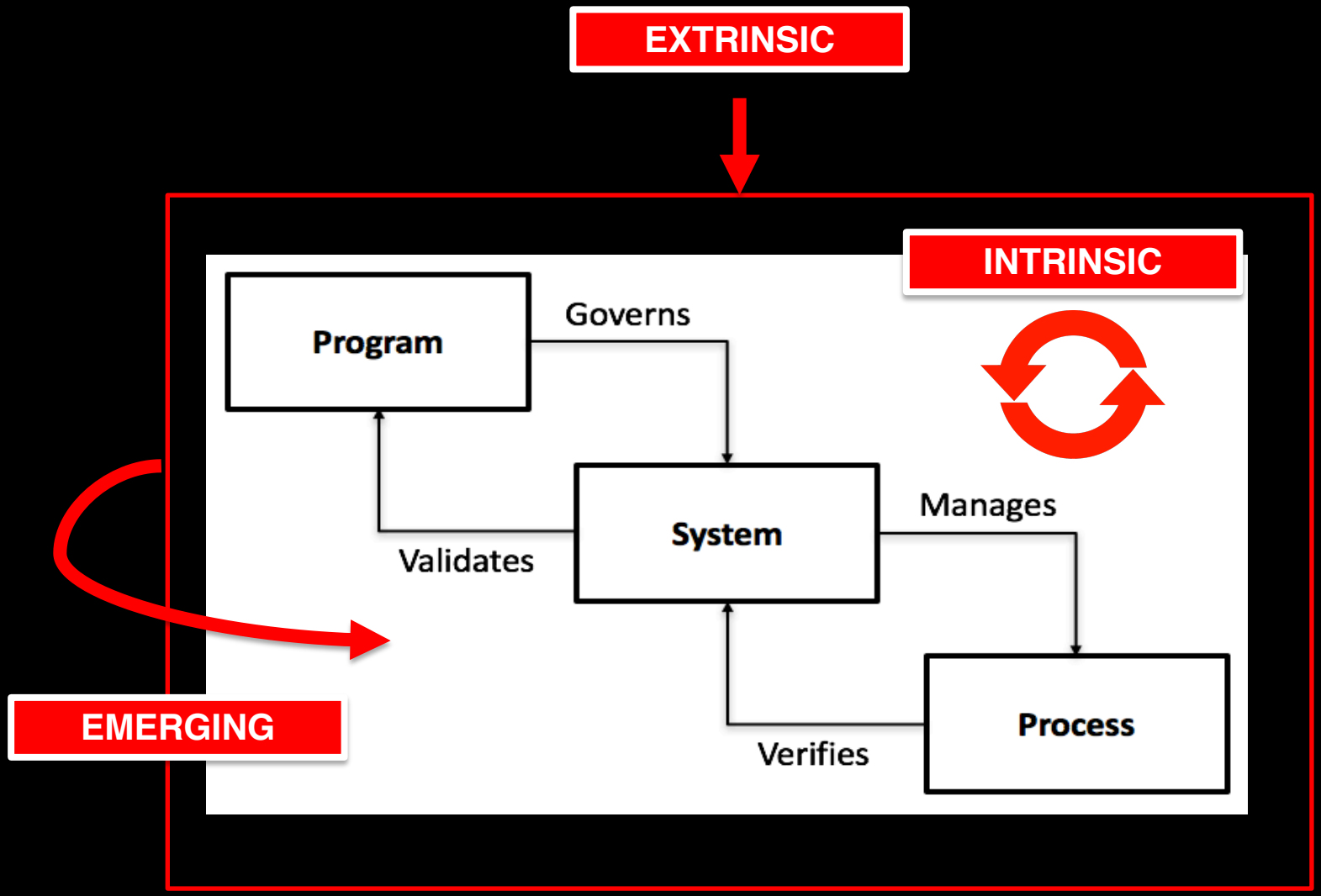


COMPLEXITIES

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

360º of protection is required



- EXTRINSIC – risks that are external to the organization.
- INTRINSIC – risks that are inherent within the organization.
- EMERGING – risks that arise because of changing conditions, behaviours, or capability

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Risk management requires a different mindset

Ostrich
I don't want to know

RISK TOLERANT

Avoider
I don't want any risk

RISK INTOLERANT

Manager
Let's size the risk and decide

RISK NEUTRAL

Gambler
Let's play the odds

RISK SEEKING

Strategist
Let's reduce threats and exploit opportunities

RISK OPTIMIZER

COMPLIANCE AT THE SPEED OF RISK

THE RISK LANDSCAPE

Risk management now has two objectives

Avoid Failure

- Protect (guard) against loss
- Minimize variation by preventing or recovery from threats
- Focus on efficiency (cost, schedule, technical performance)
- Pay attention to what might cause failure and what could go wrong

Pursue Success

- Ensure (make certain of) outcomes
- Maximize value by enabling and exploiting opportunities
- Focus on effectiveness (outcomes, value creation, benefits realization)
- Pay attention to what is critical to success and what needs to go right

HOW DO WE MEET OBLIGATIONS IN THE PRESENCE OF UNCERTAINTY?

RISK & COMPLIANCE

COMPLIANCE AT THE SPEED OF RISK

PROACTIVE RISK AND COMPLIANCE

Five Proactive Practices

1. MANAGE OBLIGATIONS

- Maintain registry of all mandatory and voluntary obligations requirements and specifications
- Model dependencies and relationships with outcomes, goals, objectives, capabilities, risks, and processes
- Estimate and evaluate uncertainties and risk
- Define measures of effectiveness, performance, and conformance

3. EMBED RISK & COMPLIANCE

- Automate critical to compliance actions
- Incorporate evidentiary actions and documentation
- Incorporate Risk-based Thinking
- Utilize effective tools and practices to sustain and improve compliance
- Embed lessons learned, information and knowledge to guide decision making

5. IMPROVE CONTINUOSLY

- Monitor measures of conformance, performance, and effectiveness
- Engage in continuous improvement between and across all levels of management
- Transition from reactive to proactive improvement cycles
- Learn from past experiences to improve future outcomes

1. MANAGE OBLIGATIONS | **2. ENHANCE CAPABILITIES** | **3. EMBED RISK & COMPLIANCE** | **4. UNLEASH PERFORMANCE** | **5. IMPROVE CONTINUOSLY**

2. ENHANCE CAPABILITIES

- Free up resources to work on improvements
- Exploit existing technologies
- Develop proactive capabilities (goal setting, problem solving, learning, risk management, systems thinking, analytics, etc.)

4. UNLEASH PERFORMANCE

- Eliminate Non-Value-Added Activities
- Remove bottlenecks
- Eliminate work arounds
- Exploit constraints

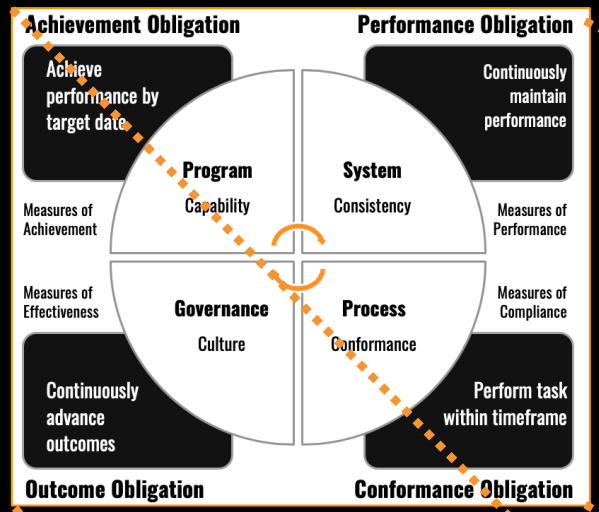
† Based on ISO 19600, ISO 31000, CMMI, Theory of Constraints, Systems Thinking, Continuous Improvement, and Performance Management

COMPLIANCE AT THE SPEED OF RISK

PROACTIVE RISK AND COMPLIANCE

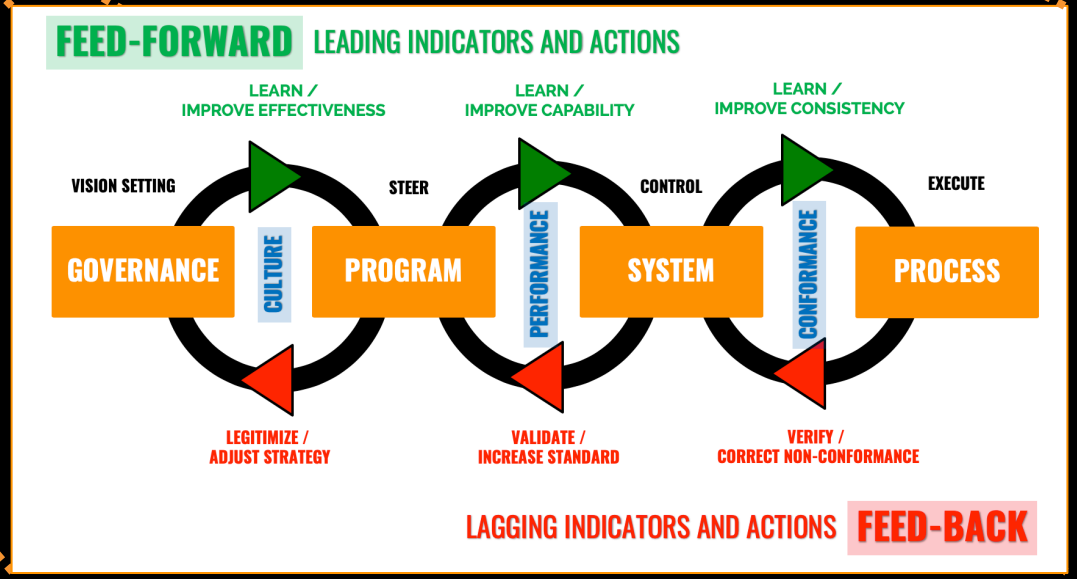
1. Manage Obligations

OBLIGATIONS



MAP OBLIGATIONS TO PROGRAMS, SYSTEMS, AND PROCESSES

MANAGED COMPLIANCE



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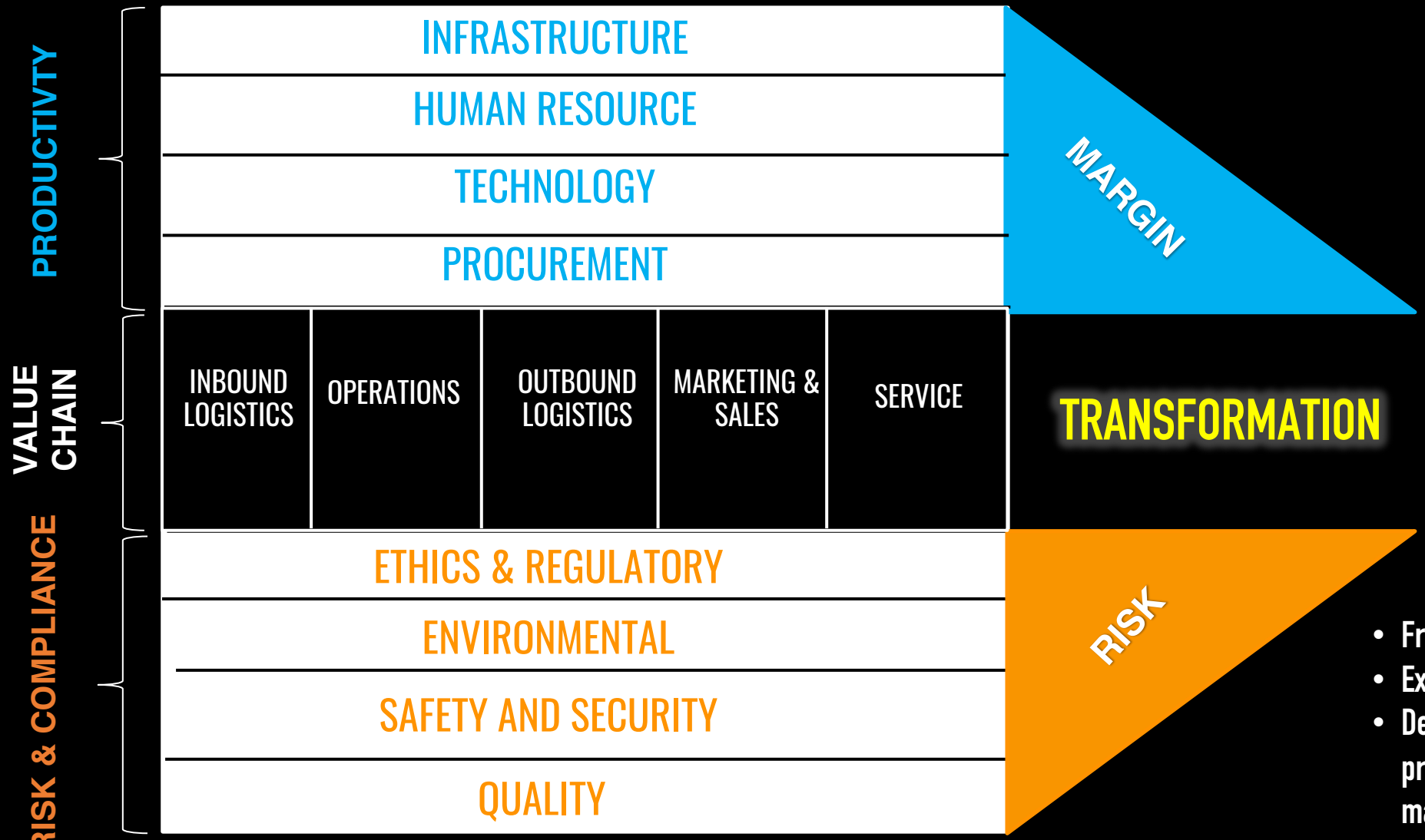
PROACTIVE RISK AND COMPLIANCE

2. Enhance Capabilities



TOTAL VALUE

Sustainability
Reputation
Quality
Safety
Trust

OUTCOMES

2. ENHANCE CAPABILITIES

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† Modified Value Chain Analysis (Michael Porter)

COMPLIANCE AT THE SPEED OF RISK

PROACTIVE RISK AND COMPLIANCE

3. Embed Risk & Compliance and 4. Unleash Performance

4. UNLEASH PERFORMANCE

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3. EMBED RISK AND COMPLIANCE

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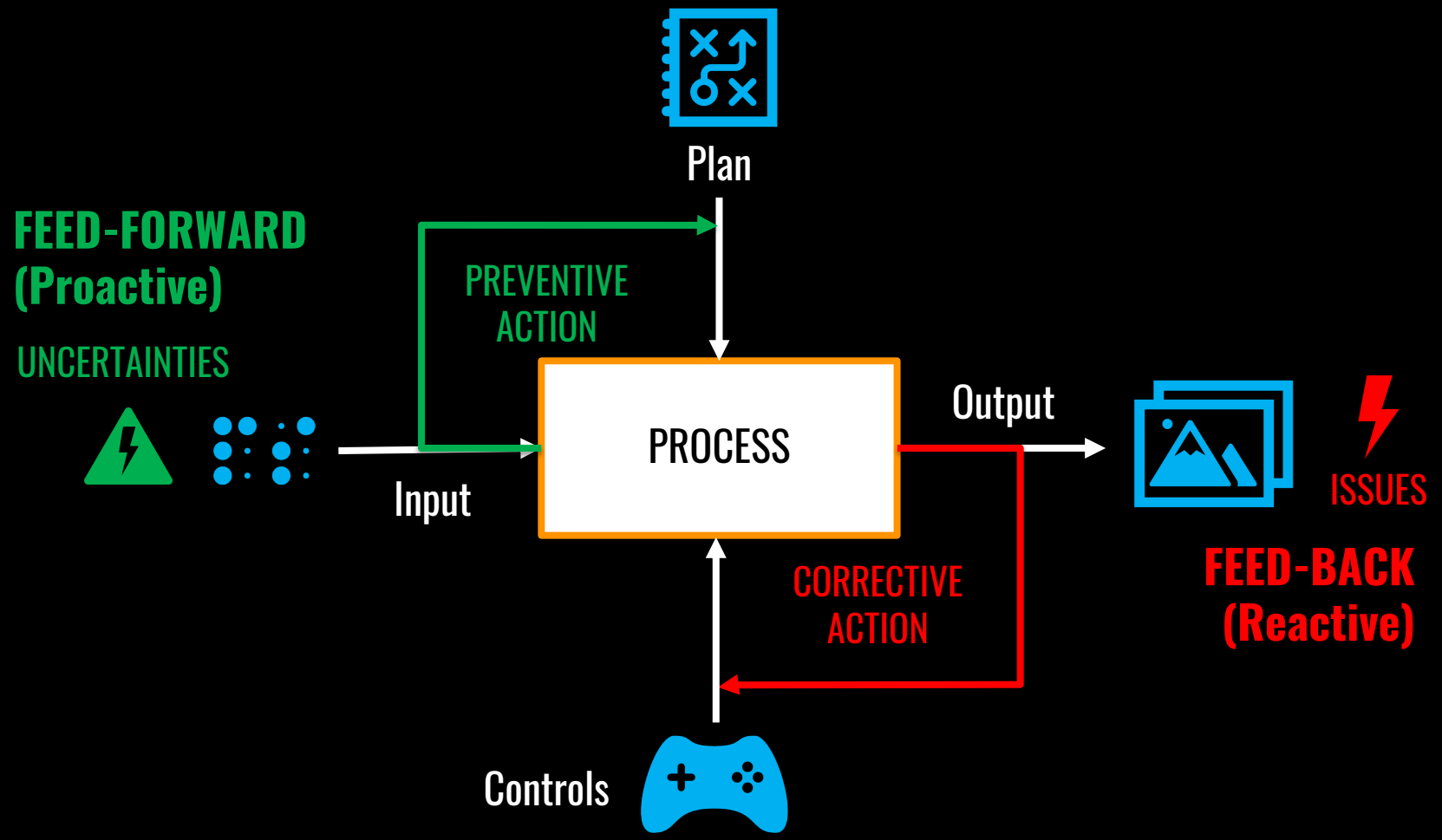

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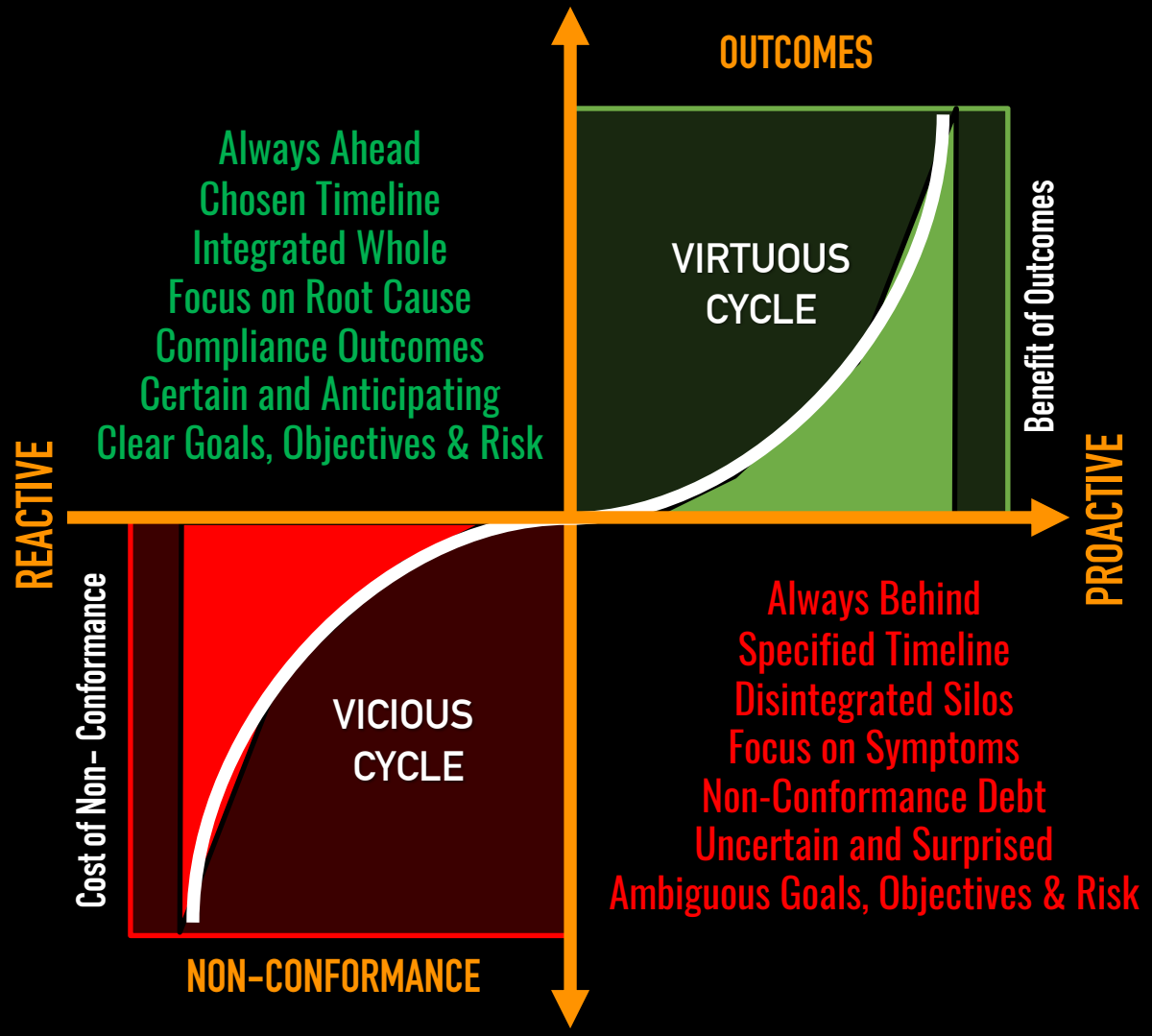
PROACTIVE RISK AND COMPLIANCE

5. Improve Continuously



5. IMPROVE CONTINUOUSLY

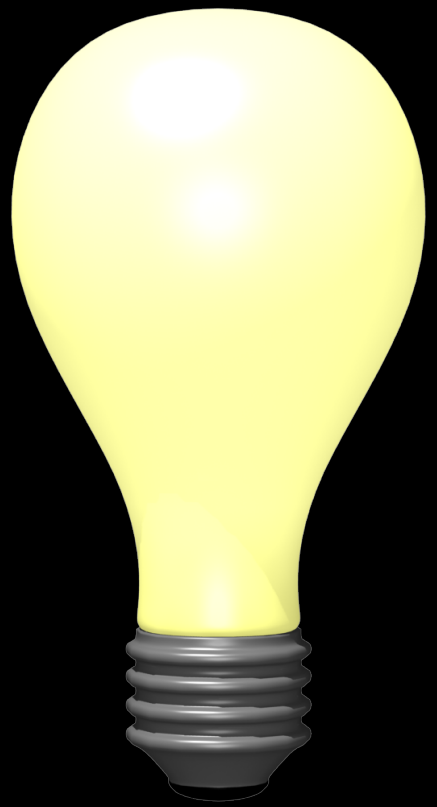
- Monitor measures of conformance, performance, and effectiveness
- Engage in continuous improvement between and across all levels of management
- Transition from reactive to proactive improvement cycles
- Learn from past experiences to improve future outcomes

- **Vicious non-conformance cycle** – the worst things get, and the faster things get worse.
- **Virtuous conformance cycle** – the better things get, and the faster things get better.

COMPLIANCE AT THE SPEED OF RISK

CONCLUSION

The Big Idea



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LEAN COMPLIANCE

CONCLUSION

Are you ready?

To prevent risk from becoming a reality

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Are you ready?

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