

CMMI® V3

# BUILDING ORGANIZATIONAL CAPABILITY

*with Dragons*

*Wild Bill Smith*

## DAY 1

SAMPLE SLIDE





WHIRLPOOL OF UNREALISTIC EXPECTATIONS

The Bellicosi (high above)

CANADA

MIST OPPORTUNITIES

WEST FANTASTICA

FOREST OF DEFECTS

ICE ICE BABY

WHERE DREAMS GO TO DIE

Erik the Boatbuilder

Vikingdale

RDM VV PR PQA

MOUNTAIN OF COST OVERRUNS

REWORK WASTELAND

Mystery Portal

EST PLAN MC

MOUNT YETI

THREATWOOD

TENACIOUS KINGDOM

Strongholdia

ESAF ESEC MST

VULNERABILITY VALLEY

MOUNTAINS OF PAPERWORK

Merry Vagabond Tavern

Rollicking Robots  
Steampunk Llama Pizza

Tech City

TS PI

SDM STSM

EFFICIENT SEA

Gnome Depot

MIST DEADLINES

Data Mine

DM DO

EAST FANTASTICA

BUREAUCRACY QUAGMIRE

Pirate Bay

PCM PAD MPM

ISLE OF INSIGHT

The Ecosystem

Pyramid of Power

CMMI

Gnomesburg

DIGCO

MORASS OF BAD DECISIONS

ENCHANTED FOREST

DAR CAR CM

GRAVEYARD OF FAILED PROJECTS

FIRE MOUNTAINS

Continuity Cavern

Resilienton

RSK IRP CONT

SEA OF POSSIBILITIES

Jurassic Institute for Workforce Enrichment

OT WE EVW

JURASSIC JUNGLE

WIZARD ISLAND

GOV II

Billy's Bungalow

VIRGINIA



ENGINEERING & DEVELOPING PRODUCTS

# TECHNICAL SOLUTION

SAMPLE SLIDE

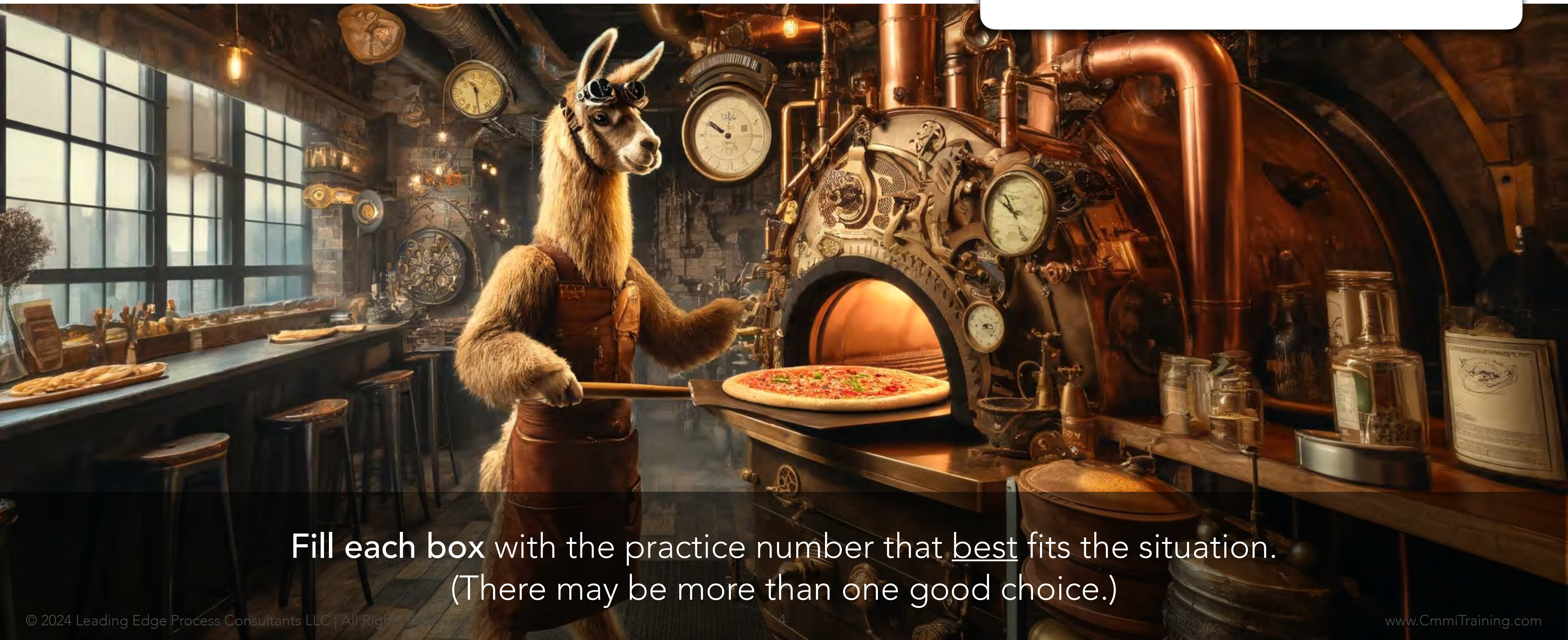


SERVICE DELIVERY MANAGEMENT

# EXERCISE SCENARIO: FANTASY

## STEAMPUNK LLAMA PIZZA

A new pizza place is opening in Tech City — Steampunk Llama Pizza!



Fill each box with the practice number that best fits the situation.  
(There may be more than one good choice.)

SERVICE DELIVERY MANAGEMENT

EXERCISE SCENARIO: FANTASY  
STEAMPUNK LLAMA PIZZA

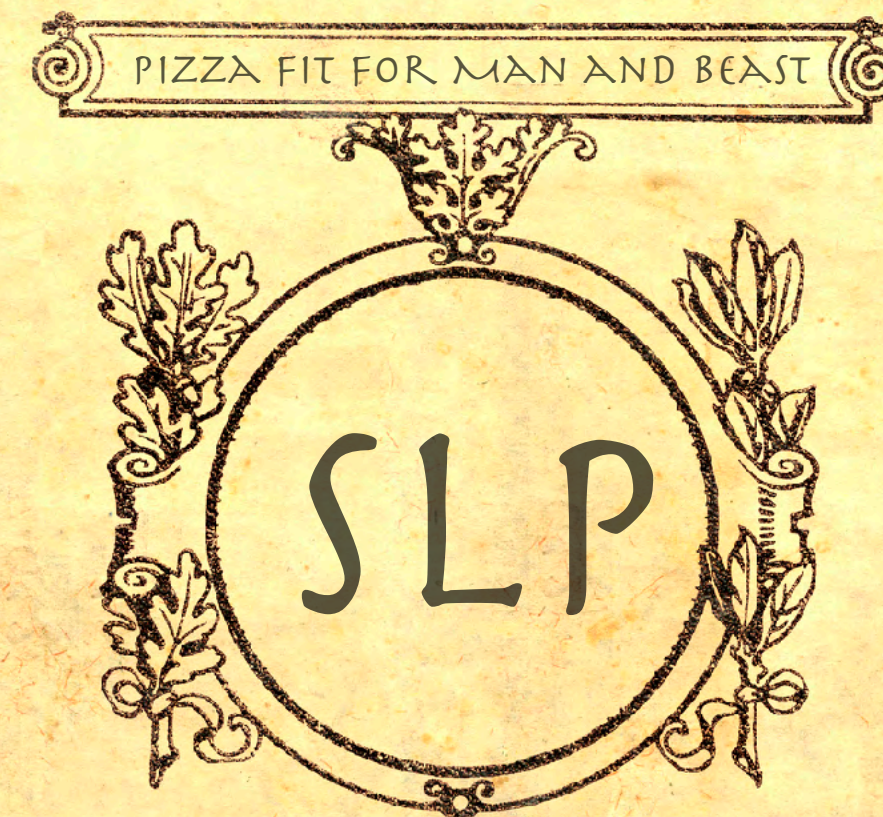
A new pizza place is opening in Tech City — Steampunk Llama Pizza!

1. New hires are trained, the oven is tested, and a pizza-making llama chef makes sure that ingredients are on hand to make the first several dozen pizzas. A taste test is conducted and the pizza passes with flying colors!

SDM 2.6

2. A hungry customer calls Steampunk Llama Pizza and orders a large mutton pizza.

SDM 2.2



3. Twenty minutes later, a delivery llama hands the pizza to a hard-working Rollicking Robots development team member.

SDM 2.3

4. After six months in business, demand for SLP pizza is off-the-charts! But their employees are stressed and turnover is high. They also have problems honoring their 30-minute guarantee. Management studies the situation.

SDM 2.4



We'll hear more about the vikings when we resume class tomorrow. In the meantime, **please have a relaxing evening.**



ENSURING QUALITY

# PROCESS QUALITY ASSURANCE

SAMPLE SLIDE



ENSURING QUALITY

# EXERCISE: ELEVATOR SPEECHES

1. I'll divide you into mini-teams of 3 (or so).
2. Each team will choose RDM, VV, PR, or PQA, and construct an "elevator speech" of the format: "Remember when <we did something bad>, wouldn't it be great if <we did something better>?"
3. If possible, make the speech about something that **one of you has experienced** on the job. Or, if you're feeling creative, center it on some **Viking drama**.
4. After we return, I'll ask some teams to share their speeches.







PLANNING & MANAGING WORK

# ESTIMATING



ESTIMATING

# EXERCISE SCENARIO - FANTASY

## THE BELLICOSI

The Bellicosi are an alien species planning to invade and conquer a tiny blue planet revolving around an inconsequential star.

1. Before their first visit to the blue planet, the Bellicosi developed a “rough order of magnitude” (ROM) estimate of the cost to invade and conquer it, based on the limited data they could gather from six light years away.

EST



2. The Bellicosi’s Commander Callous developed a Work Breakdown Structure (WBS) of tasks and activities needed to execute an invasion (e.g., “Build or acquire appropriately outfitted spaceships.”)



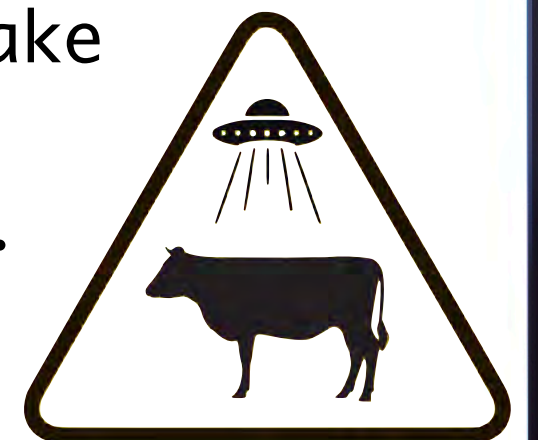
EST

3. Commander Callous has estimated that Phase 1 of the invasion will require a military force of 1 command ship, 6 carriers, 24 “peace-bringers,” and 120 fighters. Also 1500 personnel, covering 24 job specialties, will be needed.

EST

4. The Bellicosi have conquered six other planets recently, each time recording effort and cost, along with characteristics of the species conquered. They’ve used this data to estimate the work needed to take over the blue planet.

EST



PLANNING

# LEVEL 2 PRACTICES

## EXAMPLE RASCI CHART

**R**esponsible, **A**ccountable, **S**upportive, **C**onsulted, **I**nformed

For a more complete explanation, see <https://www.interfacing.com/what-is-ras-ci-raci>

### Stakeholders

				
The Mighty Foo of Whoomp	Commander Callous	Dylan Nicely	Ridley Rolliker	Geena Genial

### Tasks

- Plan and conduct the invasion
- Procure needed ships and supplies
- Establish government on conquered planet
- Establish mining operations

A	R	S		I
I	A		R	
A		R		C
A		R	S	C



MANAGING BUSINESS RESILIENCE

# RISK & OPPORTUNITY MANAGEMENT



SAMPLE SLIDE



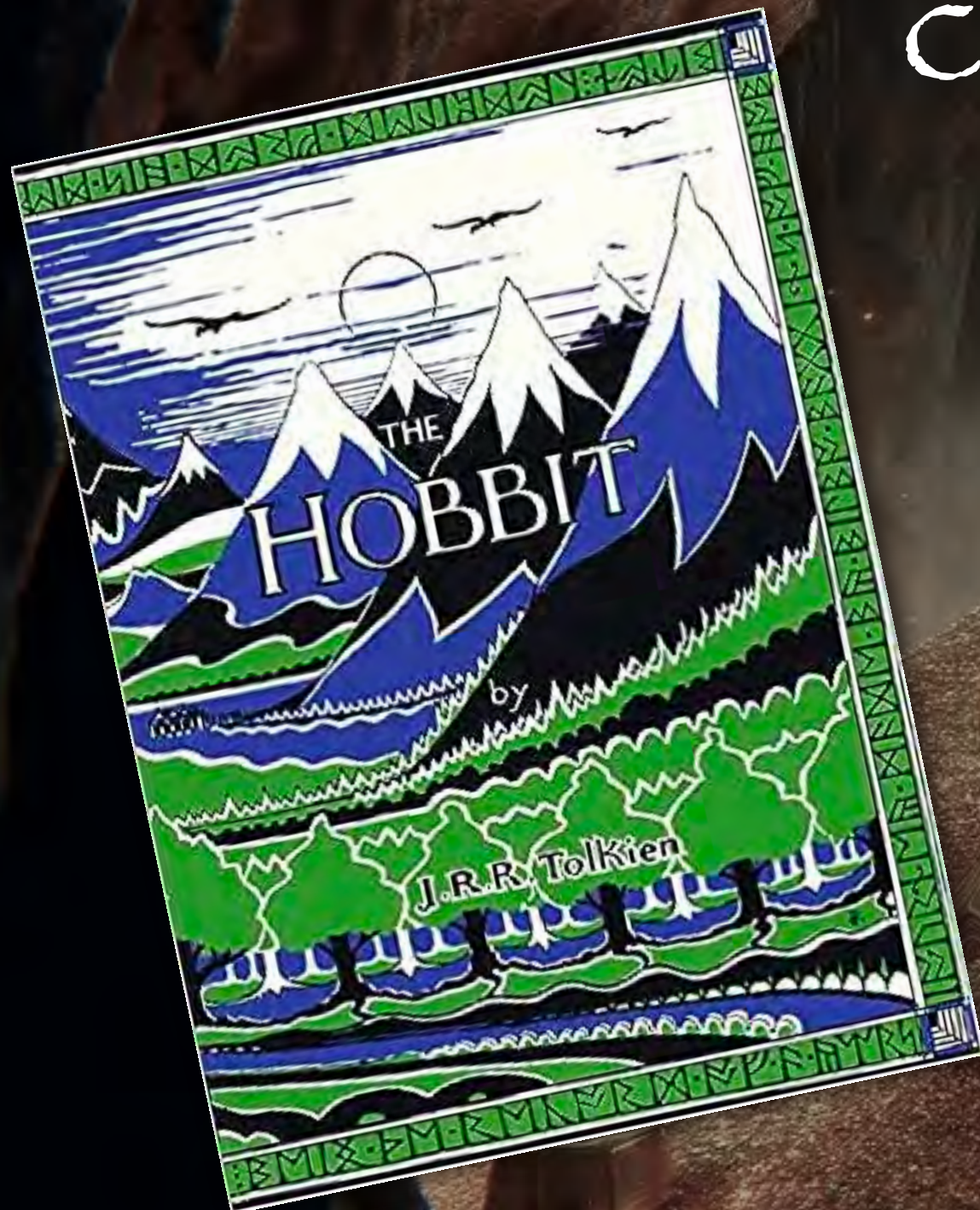
RISK & OPPORTUNITY MANAGEMENT

# LEVEL 2 PRACTICES

QUOTE

“It does not do to leave a live dragon out of your calculations, if you live near him.”

Gandalf, in J.R.R. Tolkien’s “The Hobbit”



DECISION ANALYSIS & RESOLUTION

# EXERCISE SCENARIO - FANTASY

## THE ENCHANTED FOREST



The Enchanted Forest is full of fairies and other magical creatures. Be careful as you journey through it, though. *You may never want to leave.*

1. You tire while walking through the Enchanted Forest, and identify possible courses of action: (1) drink from a beautiful spring beside a sign saying "Drink Me," (2) nap atop a huge and unusually comfortable-looking mushroom, (3) follow that wolf, or

(4) snack on the caffeine gummies in your pocket.

DAR



2. You decide to eat the caffeine gummies, using "likelihood of staying alive" as your primary criteria and the "expert judgement" you've accumulated while on your journey as your method.

DAR

3. A Fairy Queen rules the tribe of fairies living in the Enchanted Forest. By virtue of her position, her decisions are final... although she does enjoy a spirited debate.

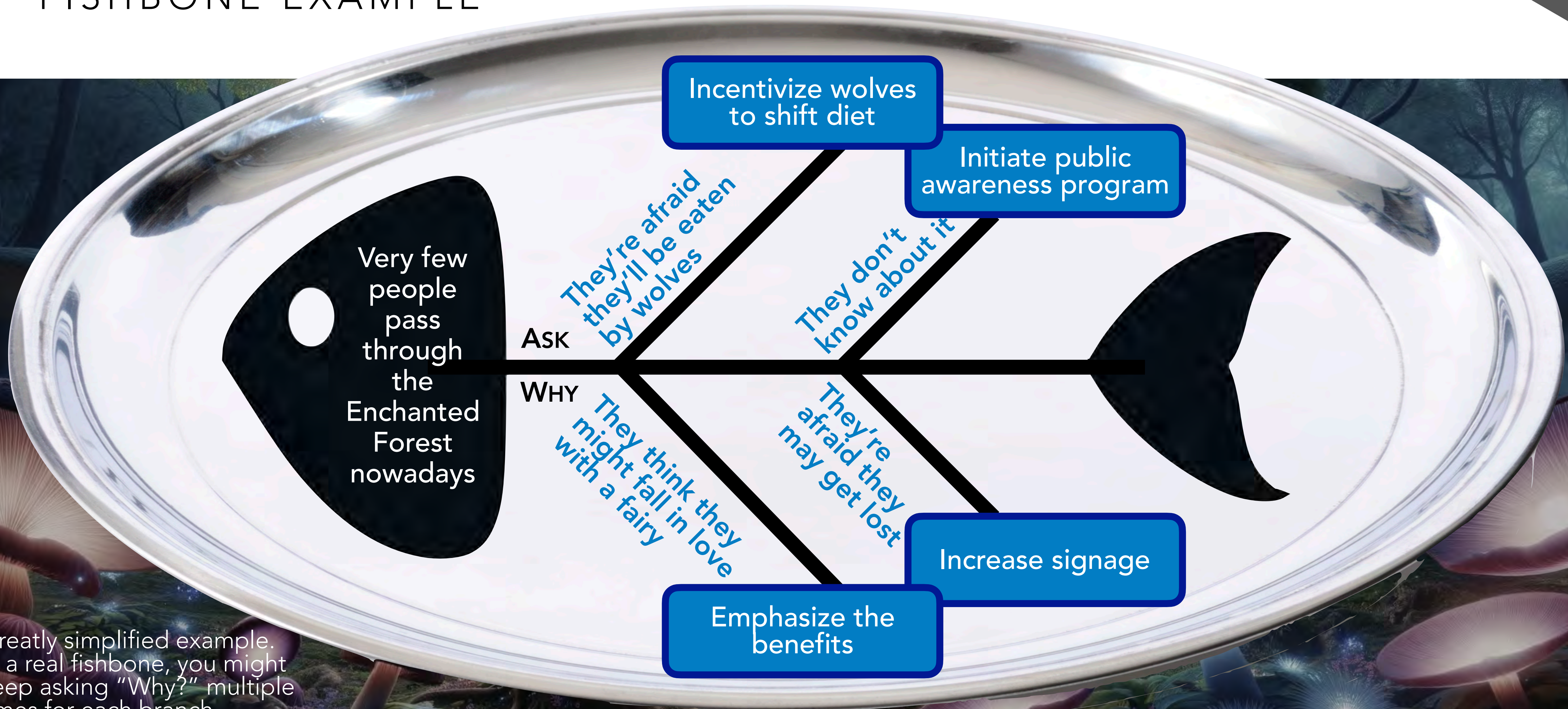
DAR



CAUSAL ANALYSIS & RESOLUTION

# LEVEL 3 PRACTICES

## FISHBONE EXAMPLE



Greatly simplified example. In a real fishbone, you might keep asking "Why?" multiple times for each branch.

CONFIGURATION MANAGEMENT

EXERCISE: CROSSWORD (SOLUTION)

1 r  
2 i  
3 r  
4 u n i q u e  
5 v e r s i n g s  
6 b a s e l i n e  
7 u a s  
8 d r a w i n g s  
9 i t e m  
10 s o u r c e  
11 h a n g  
12 c h e c k



# EXERCISE: SAMPLE EXAM QUESTIONS

1. The comprehensive availability of data attributes based on requirements:

- a. Conformity
- b. Availability
- c. Coverage
- d. Completeness

See DQ 2.1,  
Additional  
Explanatory  
Information

2. Typically involves removing or correcting inaccurate, corrupted, duplicate, improperly formatted, or incomplete data:

- a. Data cleansing See Glossary
- b. Data quality assessment
- c. Data audit
- d. Redlining



MANAGING SECURITY THREATS & VULNERABILITIES

# EXERCISE SCENARIO: FANTASY

## TEAM UNICORN

Team Unicorn functions as a force of good throughout the Tenacious Kingdom. They've been appointed security agents for the walled village of Strongholdia and its surrounding area.



# MANAGING SECURITY THREATS & VULNERABILITIES

## EXERCISE SCENARIO: FANTASY

### TEAM UNICORN

Team Unicorn functions as a force of good throughout the Tenacious Kingdom. They've been appointed security agents for the walled village of Strongholdia and its surrounding area.

1. Team Unicorn, after speaking with King Goodheart, has identified key security threats to Strongholdia including: land attacks from Threatwood, sea attacks from Pirate Bay, unauthorized visitors, and social unrest.

MST 1.1

2. Team Unicorn has also identified key vulnerabilities, including the coastline, outlying settlements (beyond the castle walls), the food and drink supply, and the King's penchant for socialization.

MST 1.1

3. Security criteria include degree of threat to the well-being of the King and Queen, well-being of other persons in the Kingdom, the crown jewels, the castle itself, and houses in the kingdom.

MST 2.2





IMPROVING PERFORMANCE

# PROCESS MANAGEMENT

SAMPLE SLIDE



PROCESS MANAGEMENT

# LEVEL 1 PRACTICES

## EXAMPLE PROCESS GROUP HIERARCHY



Capt. Compassionate

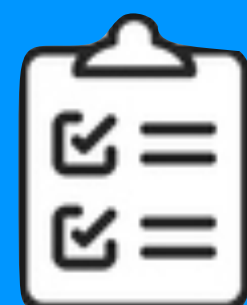
### Management Steering Group

Sets strategies, provides funding



### Buccaneer Process Group (BPG)

Manages & facilitates improvement



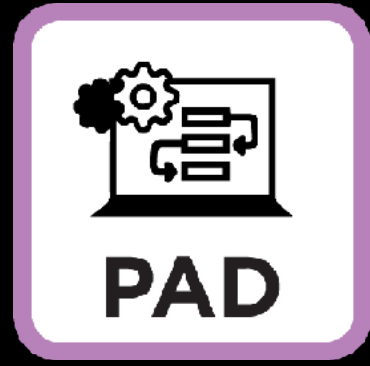
Management PAT  
EST, PLAN, MC, RSK



Improvement PAT  
PAD, PCM, MPM

Other PATs  
As needed

SAMPLE SLIDE




IMPROVING PERFORMANCE

# PROCESS ASSET DEVELOPMENT



# GOBLIN ALERT SCENARIO



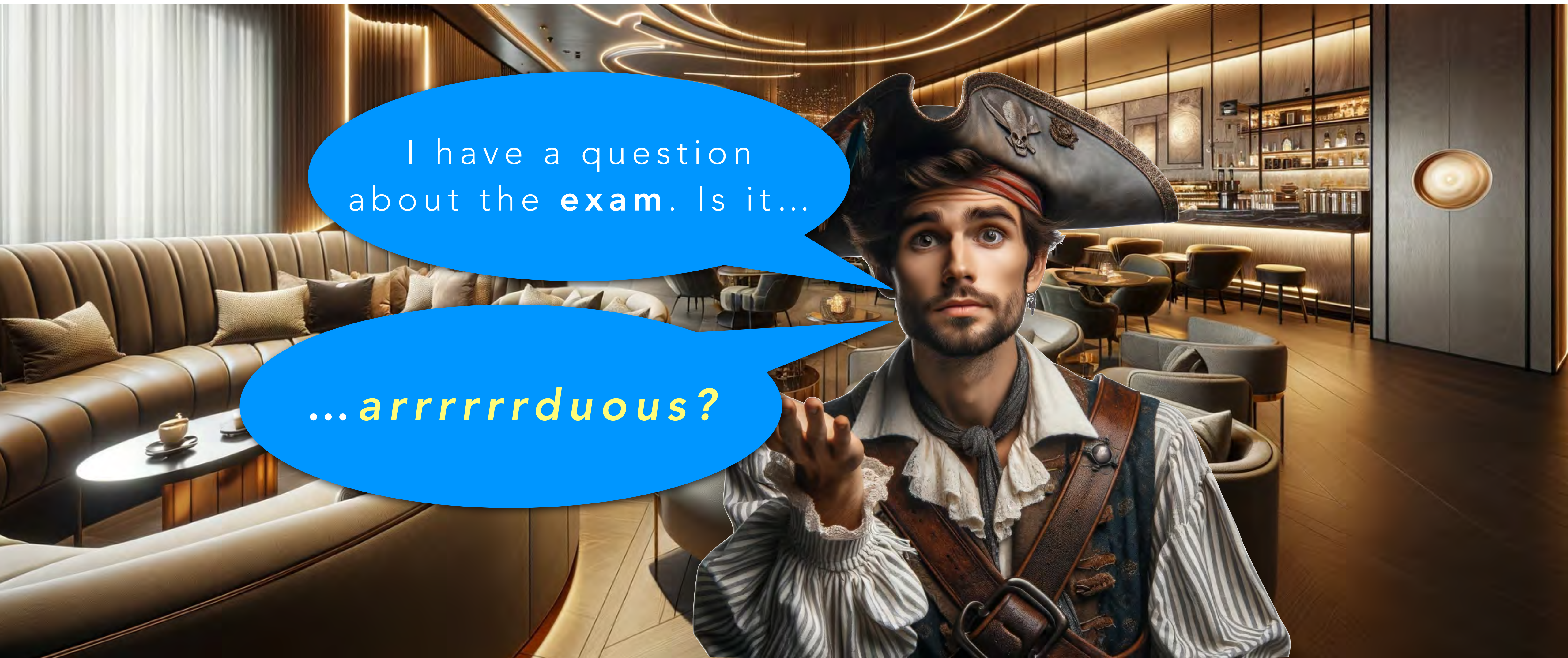
**Strange creatures**, born of rock, are bursting out of the mountains in Fantastica. Only a handful have appeared so far, but a new one is spotted every few days. They're moving through the land, **wreaking havoc** wherever they go. Fortunately, there have been no fatalities — yet.

NEXT STEPS

# THE CMMI PRACTITIONER CERTIFICATION EXAM

I have a question  
about the **exam**. Is it...

...*arrrrrrrduous*?





NEXT STEPS

# GRADUATION

