#### HSSE - Acumen Safety Learning Model

Part 1: The Acumen Safety Model Part 3: Applying the Safety Model: Labour Welfare & Site Visibility

Delivering Innovative Enterprise Solutions



- Part 2: Applying the Safety Model: Heat Stress & Weather Awareness



#### Part 1: The Acumen Safety Learning Model



#### Introduction

#### Acumen

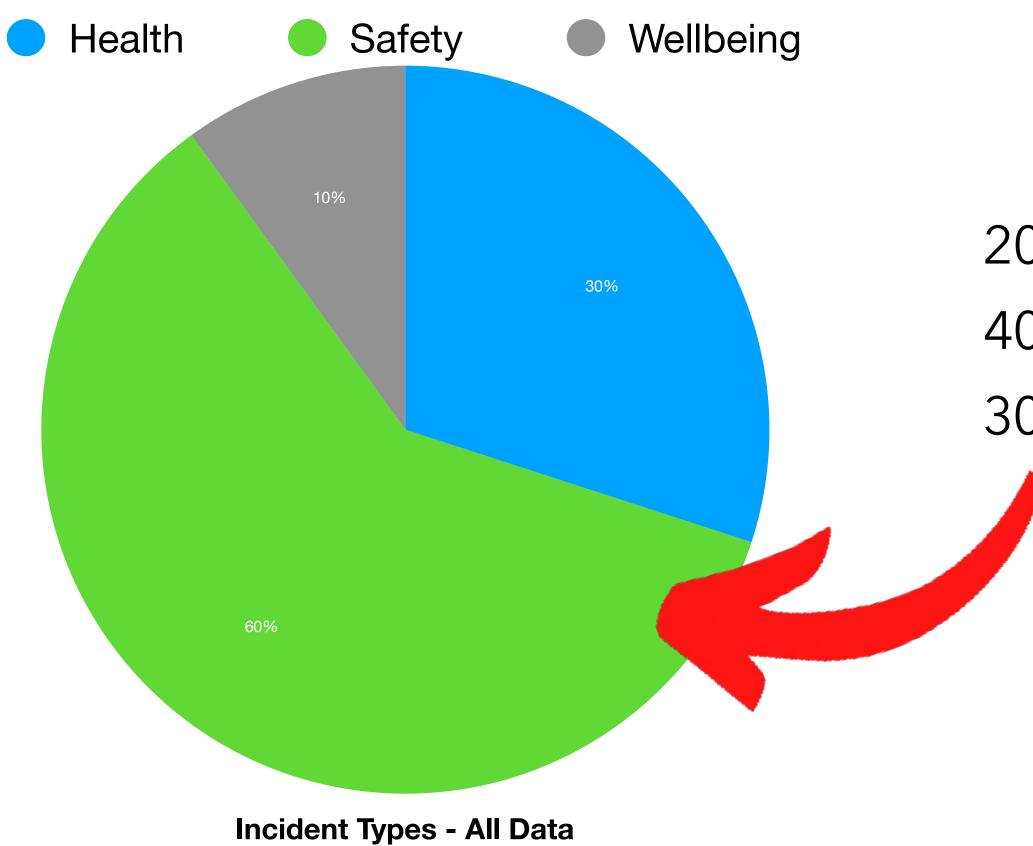
- Delivering Safety Management Solutions since 2004
- Supporting over 200 clients
- Over 100,000 users \_
- 350 million transactions

#### Paul Robinson PhD

- Blends his academic track record with 20 years industry experience in technology and safety solutions working for organisations
- Working with NHS Patient Safety Program, Skanska, Qatar Foundation. \_ Microsoft, Amey, AVOVE, Pitney Bowes, Balfour Beatty and many others.



#### Data, Data & More Data



20% Heat & Weather 40% Labour Safety & Welfare 30% Failure in Laws



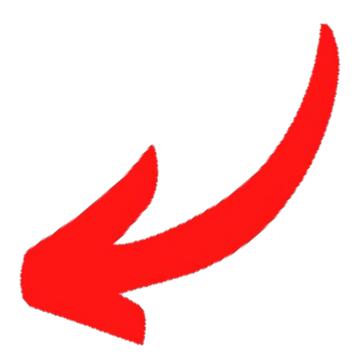
#### The Acumen Safety Model



This model can have a direct impact on how we all can:

- -Improve heat stress & awareness by reducing injuries caused by weather.
- Improve labour welfare conditions by complying to regulations & laws

Reduce injury & deaths Reduce fines Reduce possibility of bad PR



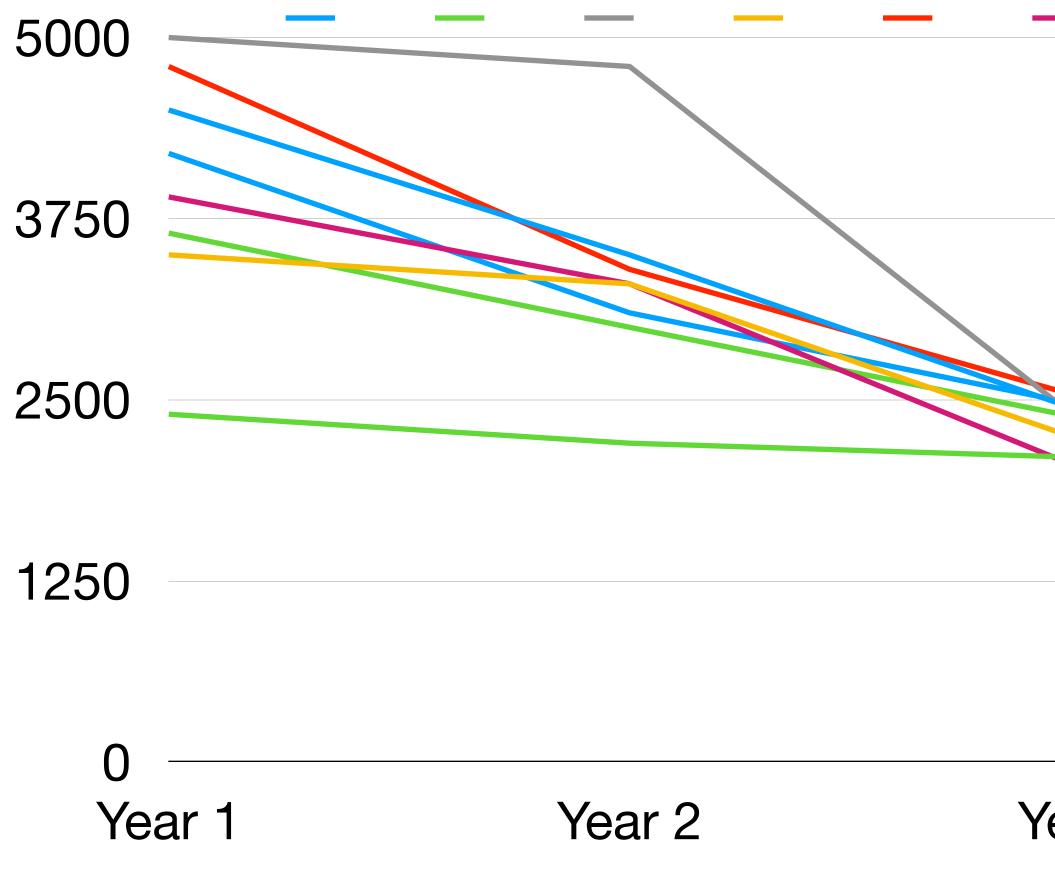








#### Change Can Happen



Safety Incident Progression After Acumen

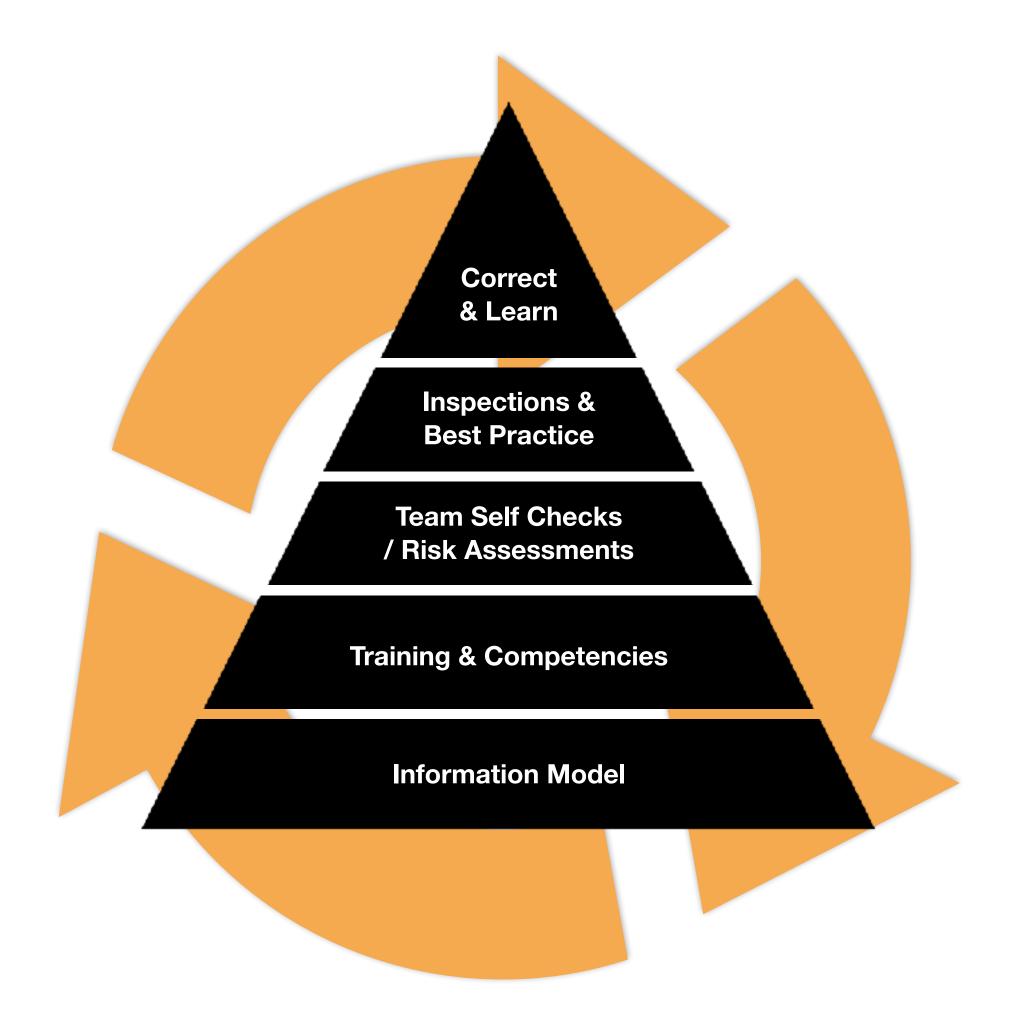
Implement the right model and you can make a difference to safety.

Year 3

Year 4



## The Acumen Safety Model - Removing Information Barriers

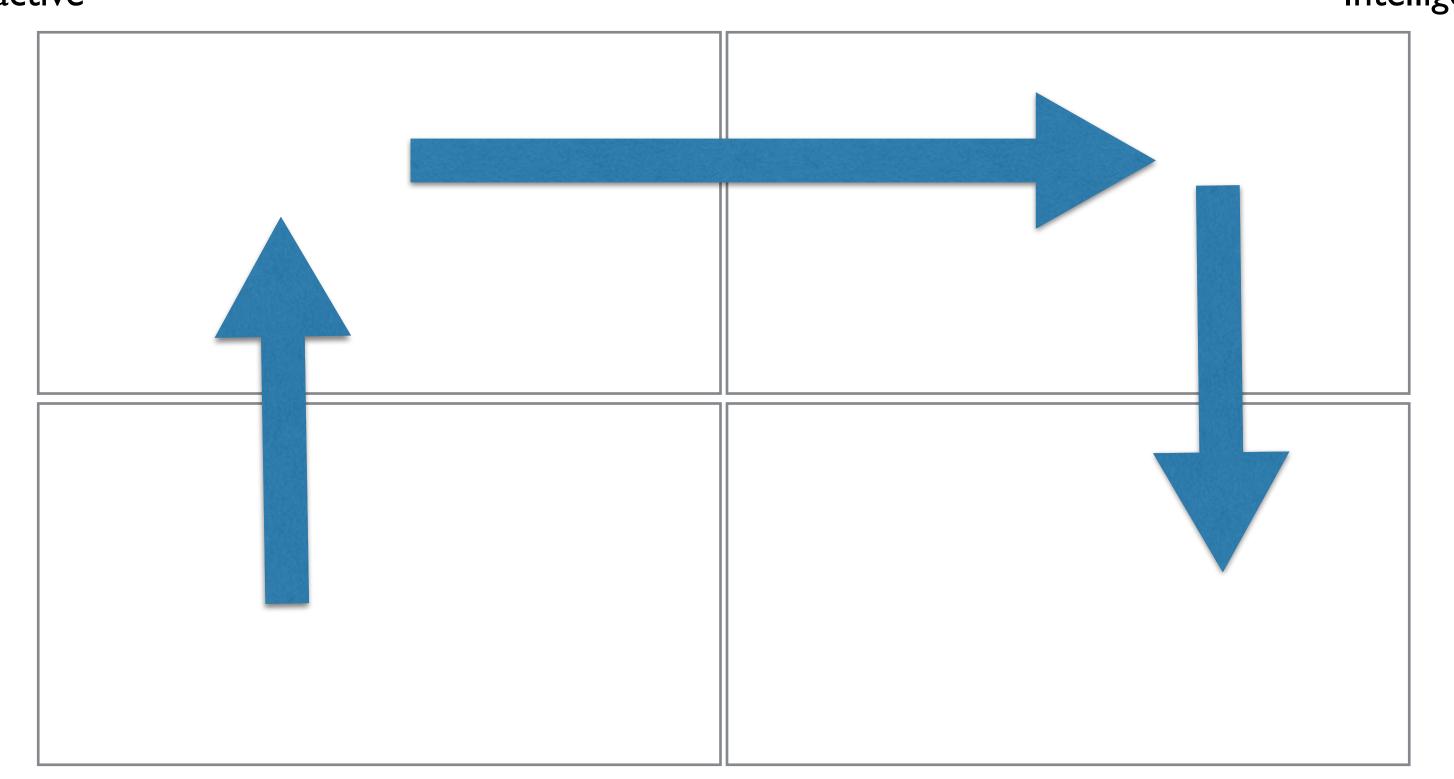


- People are Multi-Dimensional
- Communication is not Flat
- People are not Isolated Islands
- Information is not Static
- Value of Information
- Information Fatigue
- Information Overload
- Miss Information + Miss-Trust
- Message Overload
- Lack of Processing Mechanisms
- Too Complex
- Missing Information



## **Conceptual Model - Technology Adoption**





Reactive

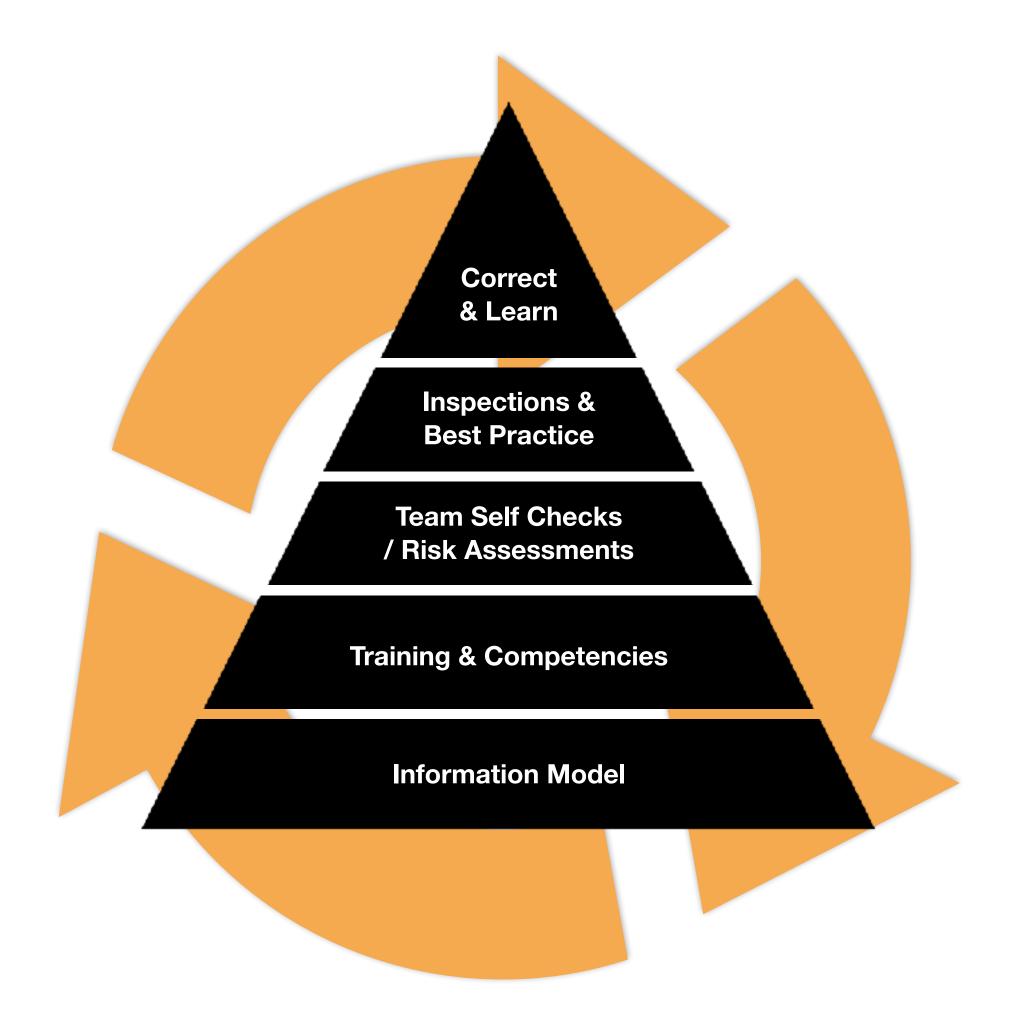


Intelligent

Social



## The Acumen Safety Model - Removing Technology Barriers



- Lack of Technology Familiarity
- Differing Approaches
- Restrictive Platforms
- Miss-match to Information Norms
- Inability to Support Cultural Change
- Lack of Intelligence
- Rapidity of Technology to Inform

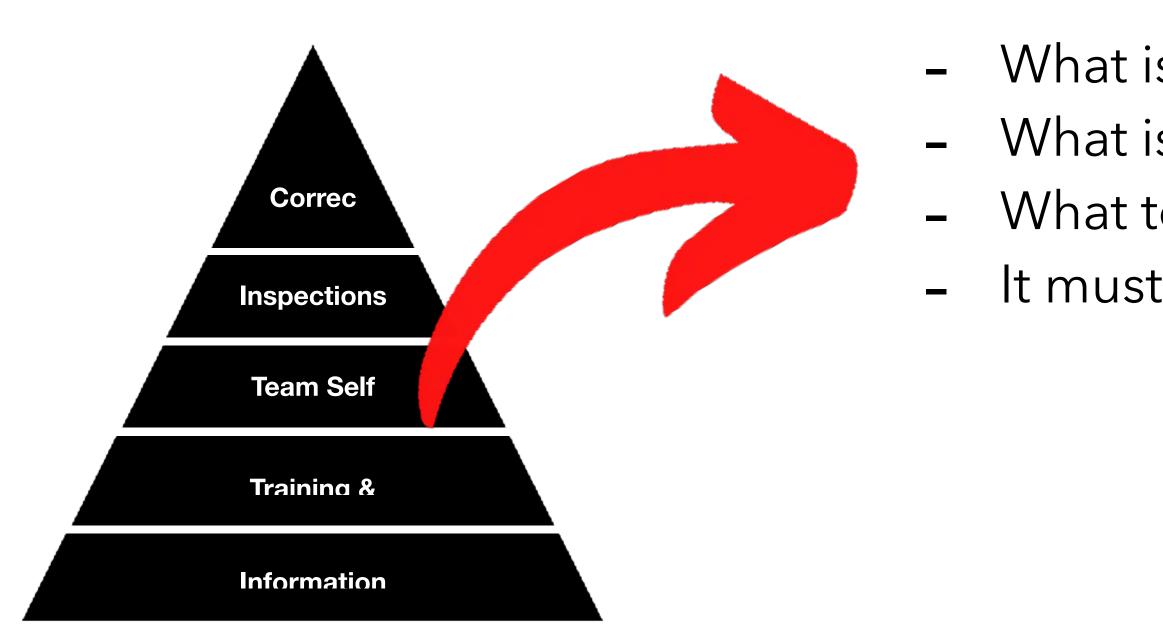


# Part 2: Applying the Acumen Safety Model Heat Stress & Weather Awareness



#### Heat Stress & Weather Awareness - The Challenge

- Heat Stress & Weather can cause serious harm.
- Need a mix of formal & informal information.
- Information can evolve rapidly as conditions change
- Need to inform quickly and give direction / guidance
- Need to reach a potentially large group of people



What is guidance OR directive

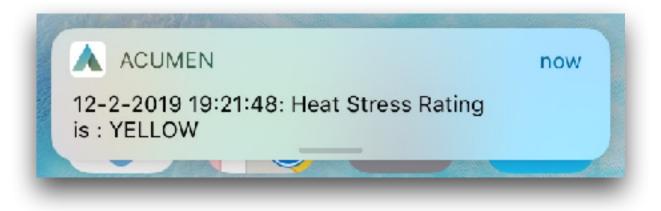
What is the known true single source of information What technology?

It must be usable and robust



#### Heat Stress & Weather Awareness - The Solution

#### Technology available to ALL

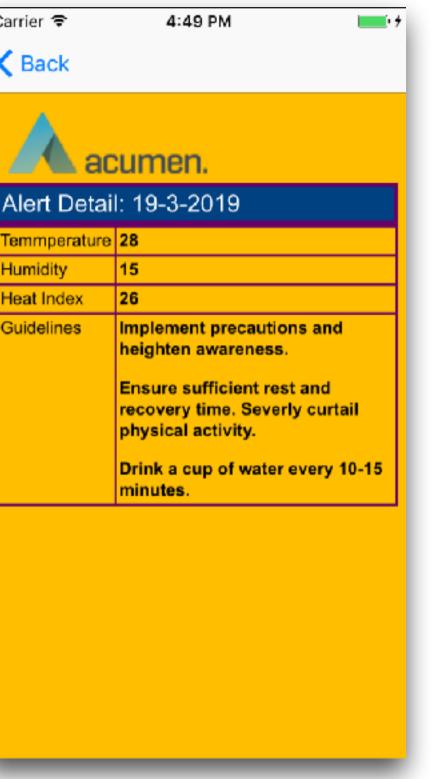


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3 Additional () Guarding (Heras)	1			
4 Trees / (1) Hedgerows - Main	1			1
5 Is temporary land () acquisition requir	1			
6 Housekeeping (1)			-	
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Waste Disposal () icences / Segre				1
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Humidity: 20	Humidity		
			Heat Index
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	4:33: Heat Stress Rating is : - Caution. Temp: 28. Humidity:	>	
	4:33: Heat Stress Rating is : : 26 - Caution. Temp: 28.	>	



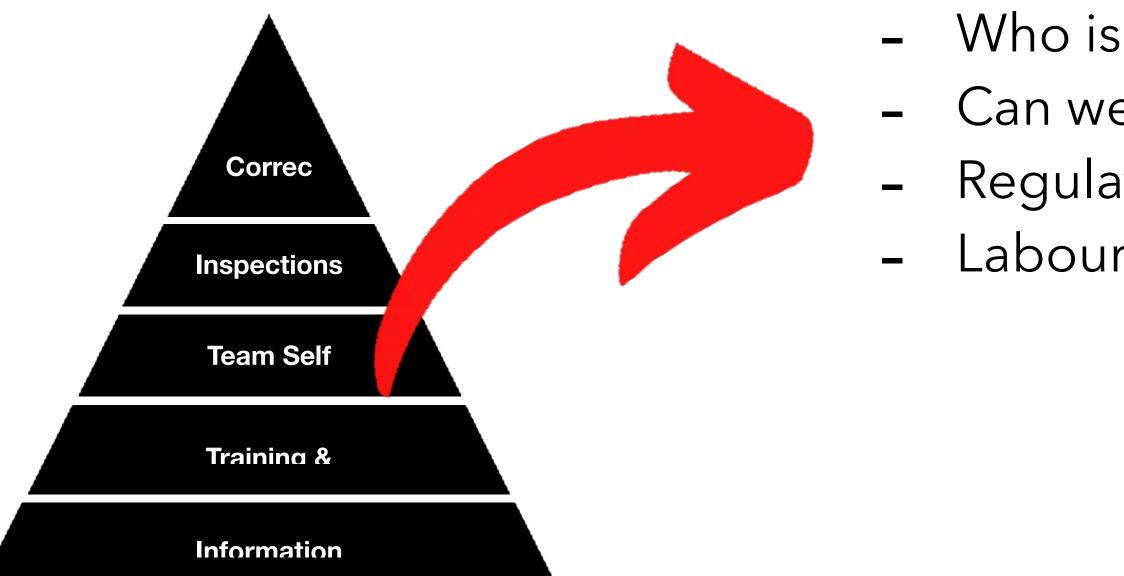


# Part 3: Applying the Acumen Safety Model Labour Welfare & Site Visibility



## Visibility of Compliance to Labour & Welfare Laws

- Huge work force from local and overseas
- Fast moving construction and development across the region
- Strict labour and welfare laws in most countries
- Penalties for not complying to labour and welfare laws
- Government documentation is extensive and difficult to use



- Who is checking compliance
- Can we get real-time 'eyes' on issues
- Regulations are written as regulations & laws
- Labour & welfare requirements are widespread



## Visibility of Compliance to Labour & Welfare Laws

