

Factors Influencing the Implementation of RPE Programmes in the Workplace

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from HSL and HSE

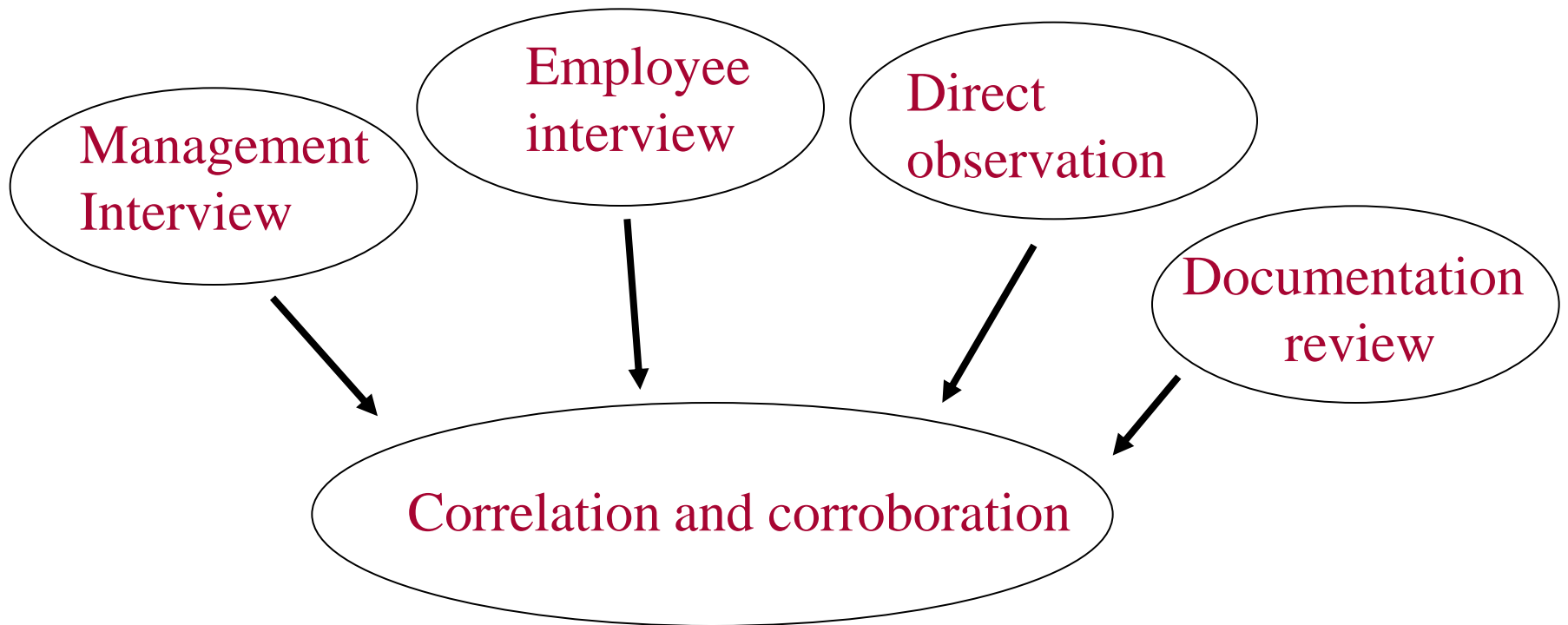
Recruitment

- Companies that had interaction with HSE
- They had made a decision to use RPE
- Volunteers
- Mainly small companies

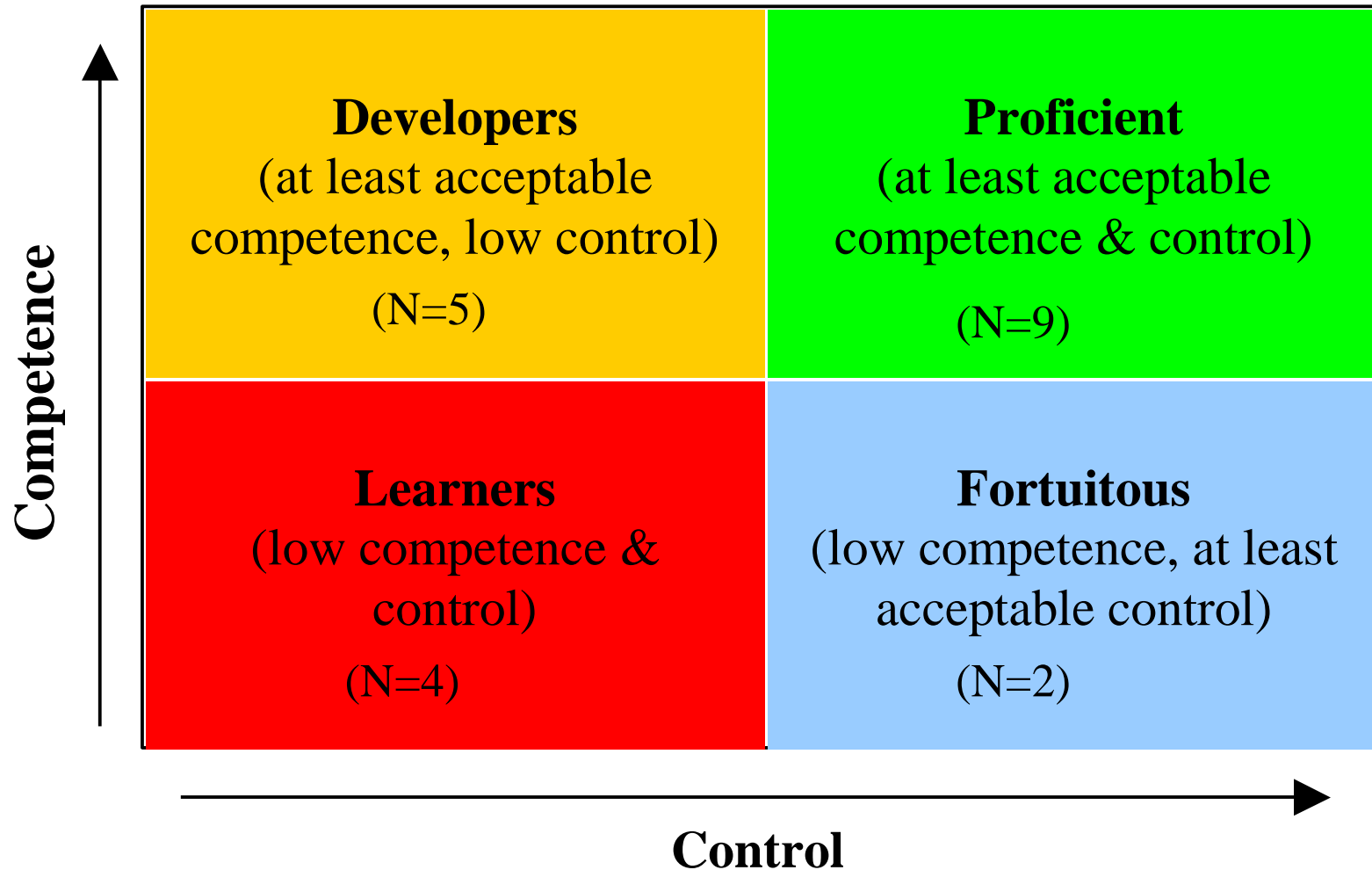
Sample characteristics

- 20 companies
- 40 Managers
- 63 employees

Methodology



Company Groupings



Sites and sectors

	Learners	Developers	Fortuitous	Proficient
Brick making		2(S)		1(S)
Quarries	1(M)	1(M)		1(S)
Metal fabrication		1(S)		3(2L, 1M)
Stone mason	1(S)			1(S)
Foundry			1(S)	1(M)
Construction			1(M)	1(M)
Composites	2(S)			
Other		1(M)		1(S)

S<50

M = 50 - 250

L>250

Types of RPE used

FFP	Half mask	Full mask	Hood
 A photograph of a man with short blonde hair wearing a white FFP respirator. The respirator has a white filter and is secured with black straps around his head.	 A photograph of a man wearing a blue half mask. The mask covers his nose and mouth and has a large circular filter at the bottom. It is secured with orange straps.	 A photograph of a man wearing a yellow full mask. The mask covers his entire face and has a large circular filter on the side. It is secured with yellow straps.	 A photograph of a man wearing a blue hood. The hood covers his entire head and face, with a clear visor in front. It is secured with black straps.
25	16	7	18

Air supply to RPE

Negative pressure 	Powered 	Air fed 
42	19	5

How do companies make decisions – Mental Models



The image of the world around us, which we carry in our head, is just a model. Nobody in his head imagines all the world, government or country. He has only selected concepts, and relationships between them, and uses those to represent the real system .

Prof J.W. Forrester



Managers decision making process

HSE Enforcement

Legislation

Company Philosophy

MOTIVATION

External Audits

Moral Duty

Organisational Change

Workforce Health

Commerce

Managers decision making process



Managers decision making process

MOTIVATION



SEEK ADVICE

Worker Views/Trials

Availability/History

Machine Suppliers

**SELECT CONTROLS AND
DEVELOP PROCEDURE**

Own Research

Physical Layout

**Management Knowledge
and Experience**

Competitors

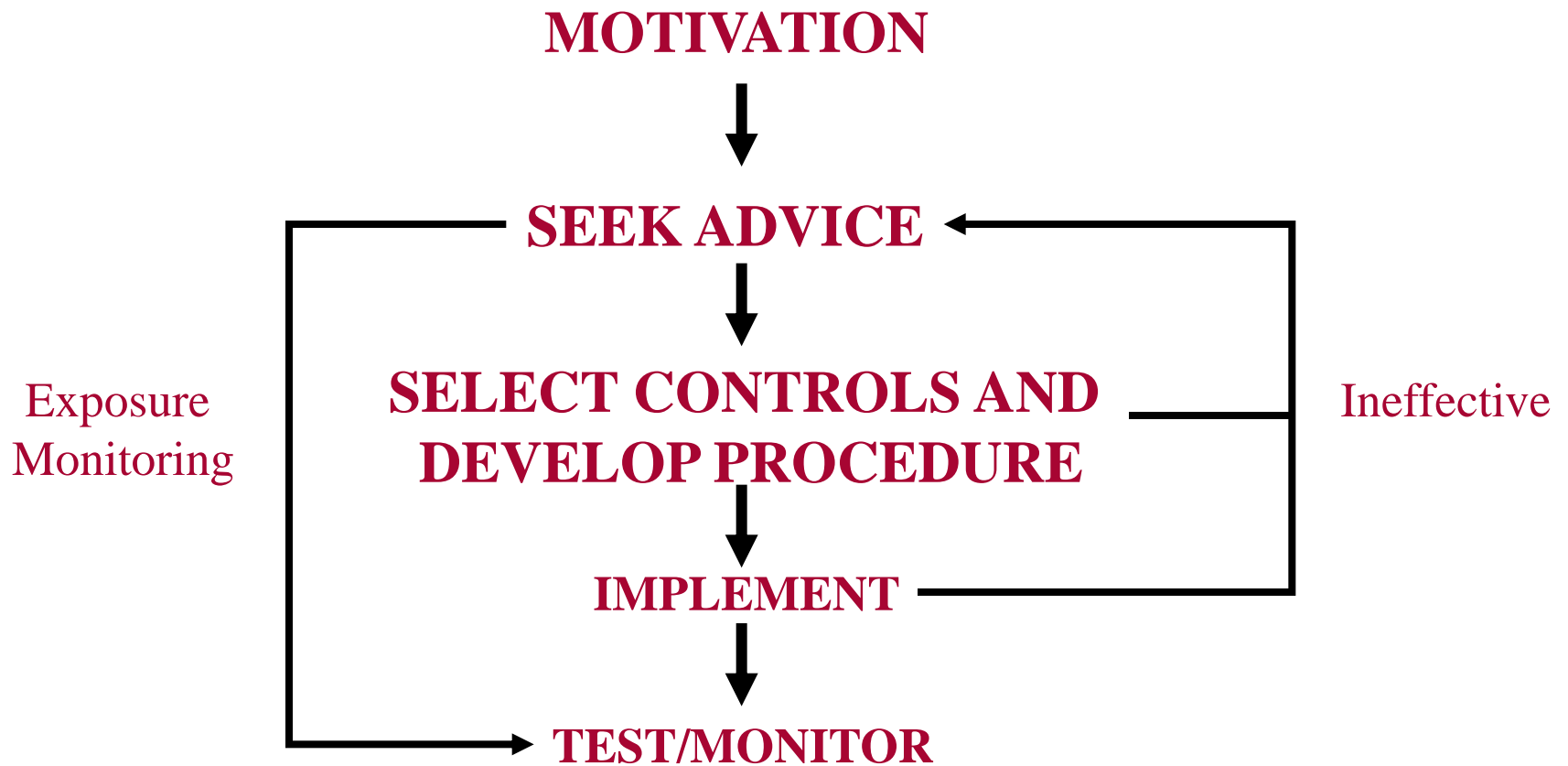
Cost

Internet Searches

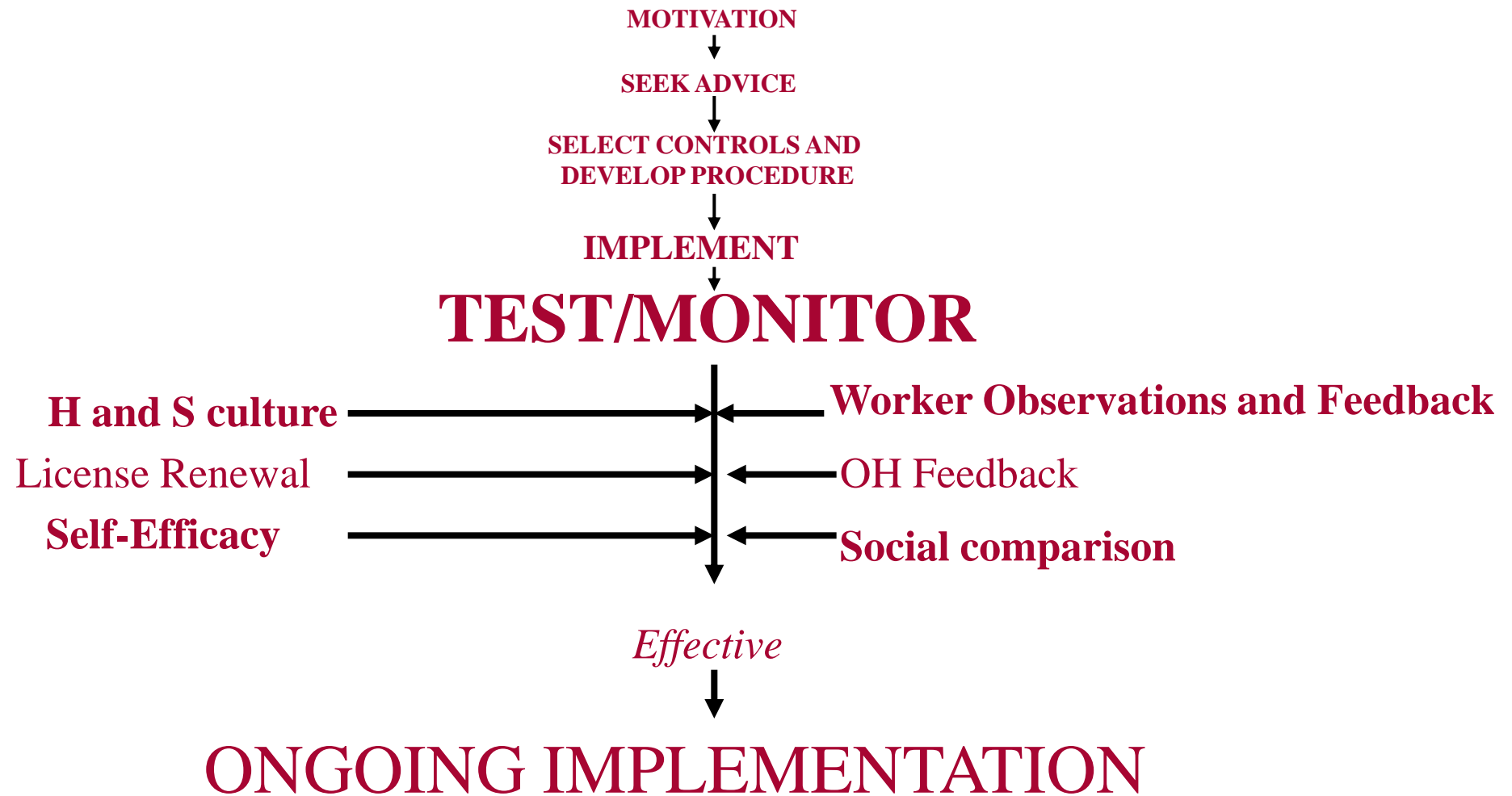
Simple solutions

Job Practicalities/Outputs

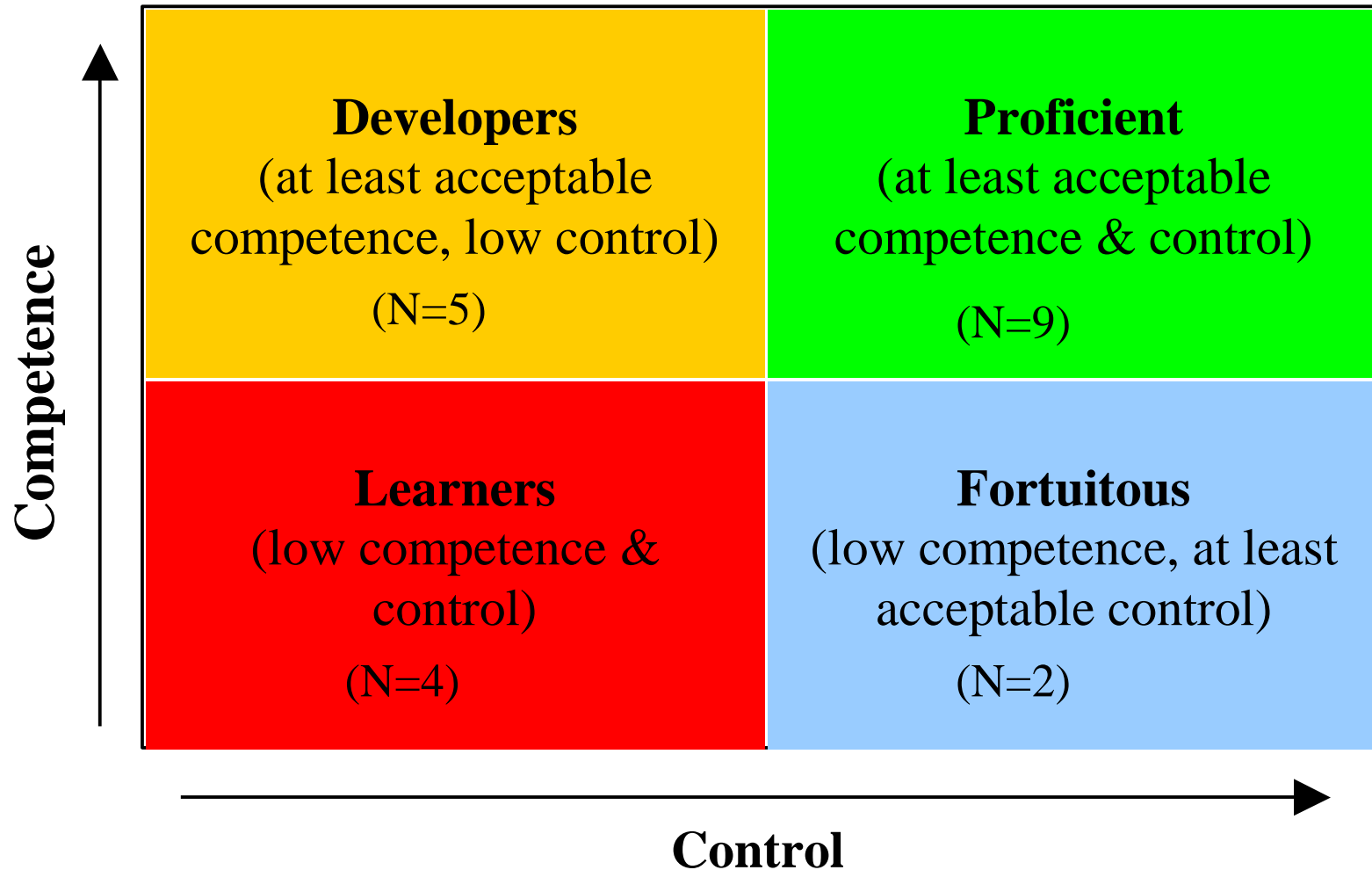
Managers decision making process



Managers decision making process



Company Groupings



Mental Model - Learners

- Little effort
- Overconfident – Don't know what they don't know
- RPE misuse rests with the wearer
- Communication gap between managers and employees

Mental Model - Developers

- Look for simple solutions and guidance
- Attempt to educate employees
- Use HSE guidance
- ‘Soft’ approach to RPE use
- Provide initial training but no refresher or monitoring

Mental Model - Fortuitous

- Knowledge gaps
- Lack management commitment
- Little consideration of technical data
- No training
- Ad hoc information transfer

Mental Model - Proficient

- Management and employees have good risk perception
- Committed management
- Some knowledge of HSE guidance
- Follow COSHH hierarchy
- Wide contact base for information
- Use a variety of communication methods

Mental Model – Proficient (cont)

- Have dedicated Health and Safety resource
- Have employee training and training refresher system.

Question for HSE

How do we move employers from the mental model of a *Learner* to the mental model of a *Proficient* company?