Organisational Reliability

Dr Sean Brady
Brady Heywood

www.bradyheywood.com.au/publications/

Rethinking
Safety
Brady Heywood.

Questions...

- What do you believe causes fatalities?

- What is the role of human error in fatalities?

Queensland Government wraps up crisis talks with mining industry after sixth death

By Allyson Horn

Posted Mon 8 Jul 2019 at 12:35pm, updated Tue 9 Jul 2019 at 6:28am

47 Fatalities.

35,000 Incidents.

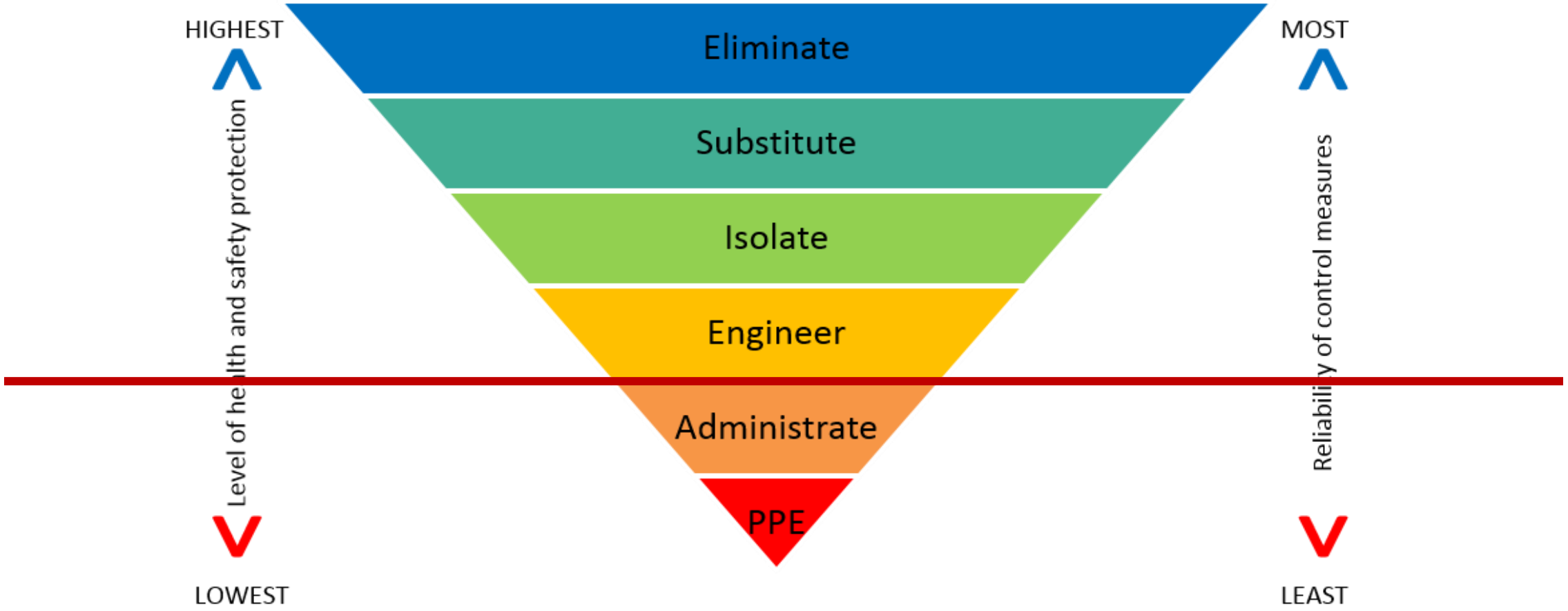
1,635,566,224 Hrs.

Key Findings.

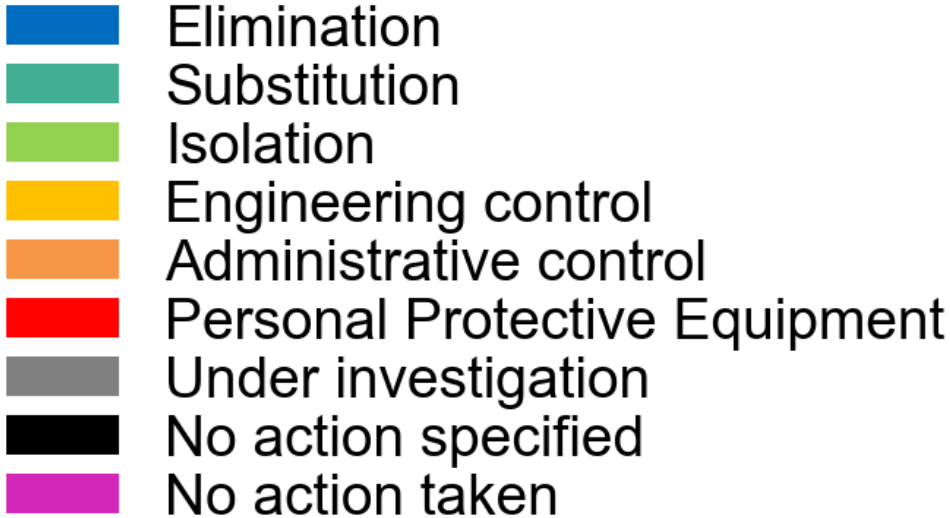
Serious Accidents.

Absent or Failed Controls found in Serious Accidents for All Mines

Hierarchy of Controls.



Highest Level of Corrective Action Applied after Serious Accidents for All Mines



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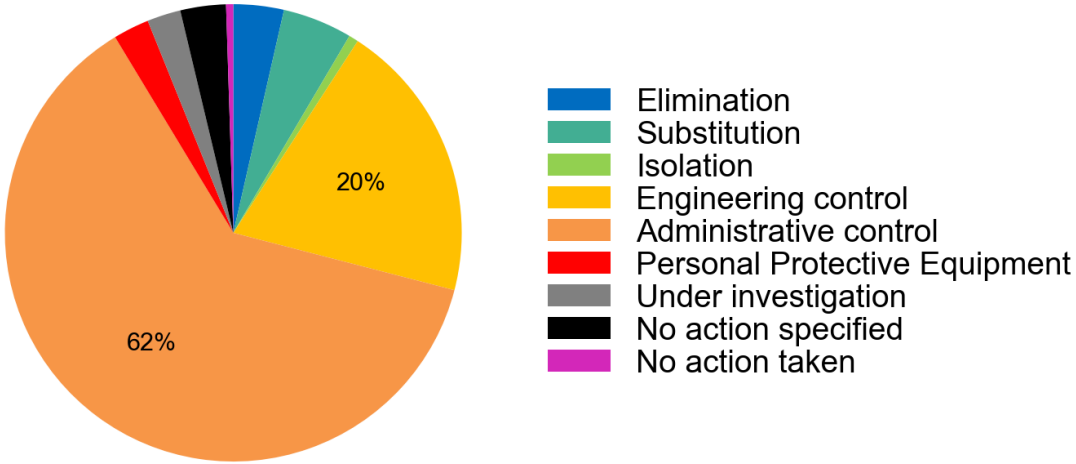

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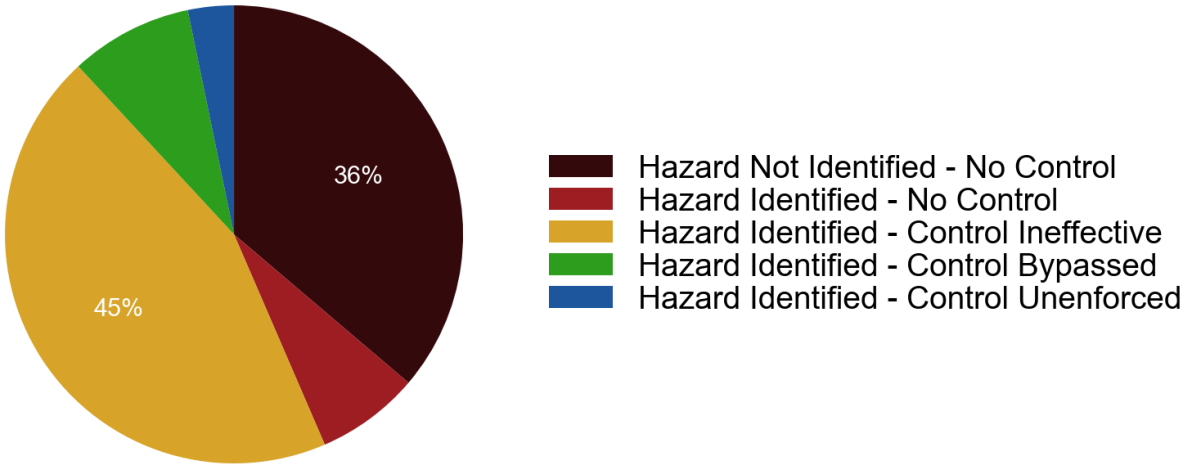


Serious Accidents Admin Controls Wordcloud.

Fatalities.

Physical causes.

15 Vehicle accidents

12 Machinery (entanglement, crushing)

10 Strata failures

4 Falls from height

4 Tyre failures

1 Fire

1 Irrespirable atmosphere

Physical	Individual	Supervision	Organisational
Worker receives fatal injuries after he is thrown from, and pinned under, the bus			

Role of Factors in Fatalities.

- Lack of specific training (17)
- Inadequate training (a further 9)
- Supervision (25 of 32)
- Ineffective Controls

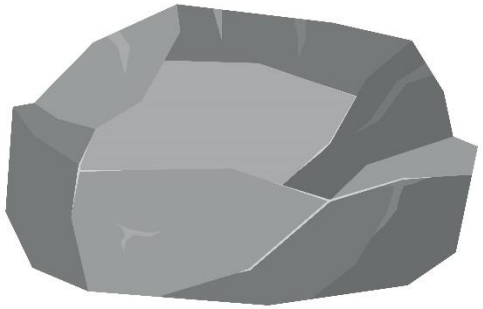
- Human error

The Fatalities.

- The causes of fatalities are typically a combination of banal, everyday, straightforward factors, such as a failure of controls, a lack of training, and/or absent or inadequate supervision.

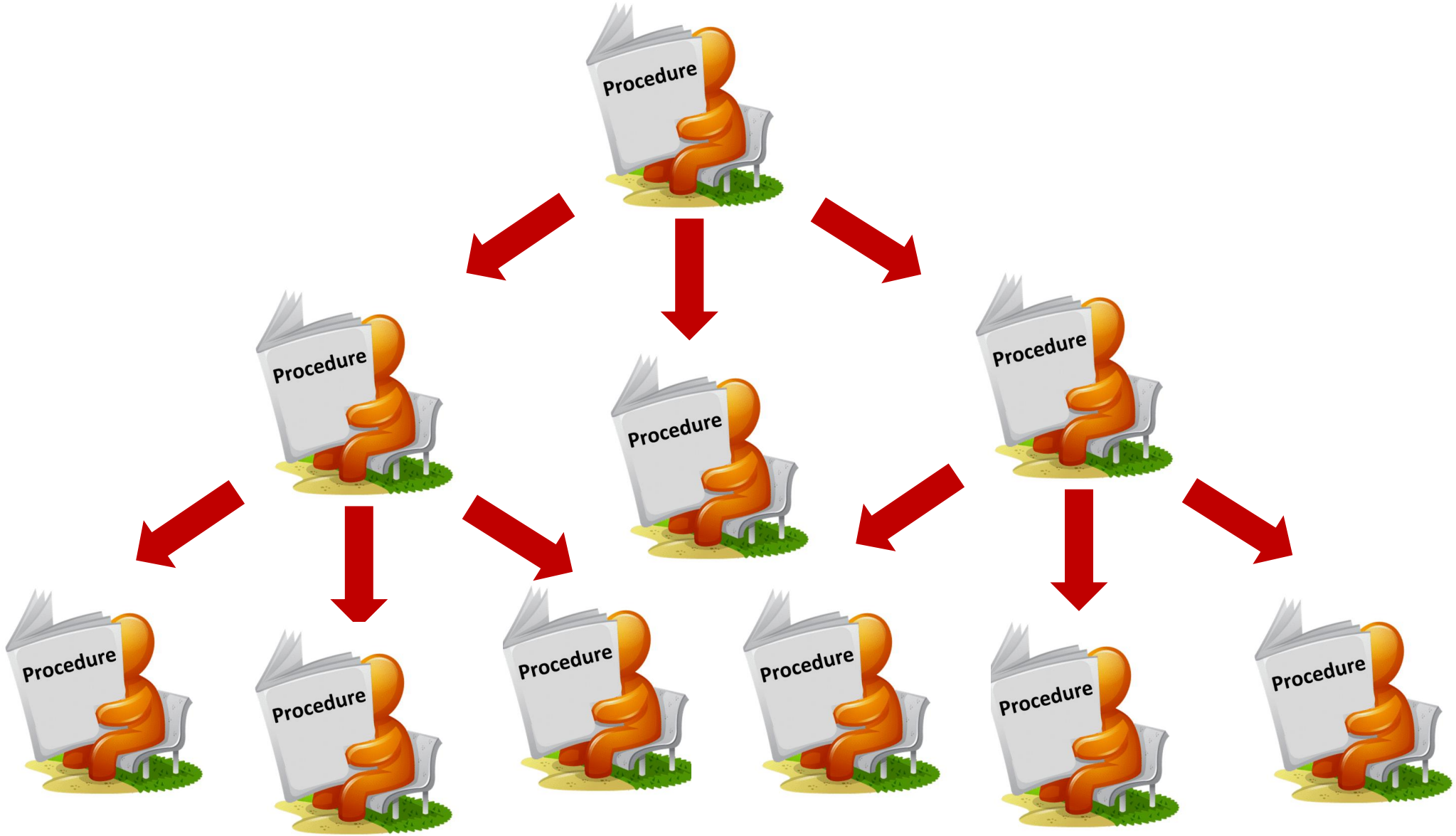
High Reliability Organisations.

Drift Into Failure.



SAFETY
FIRST

Procedure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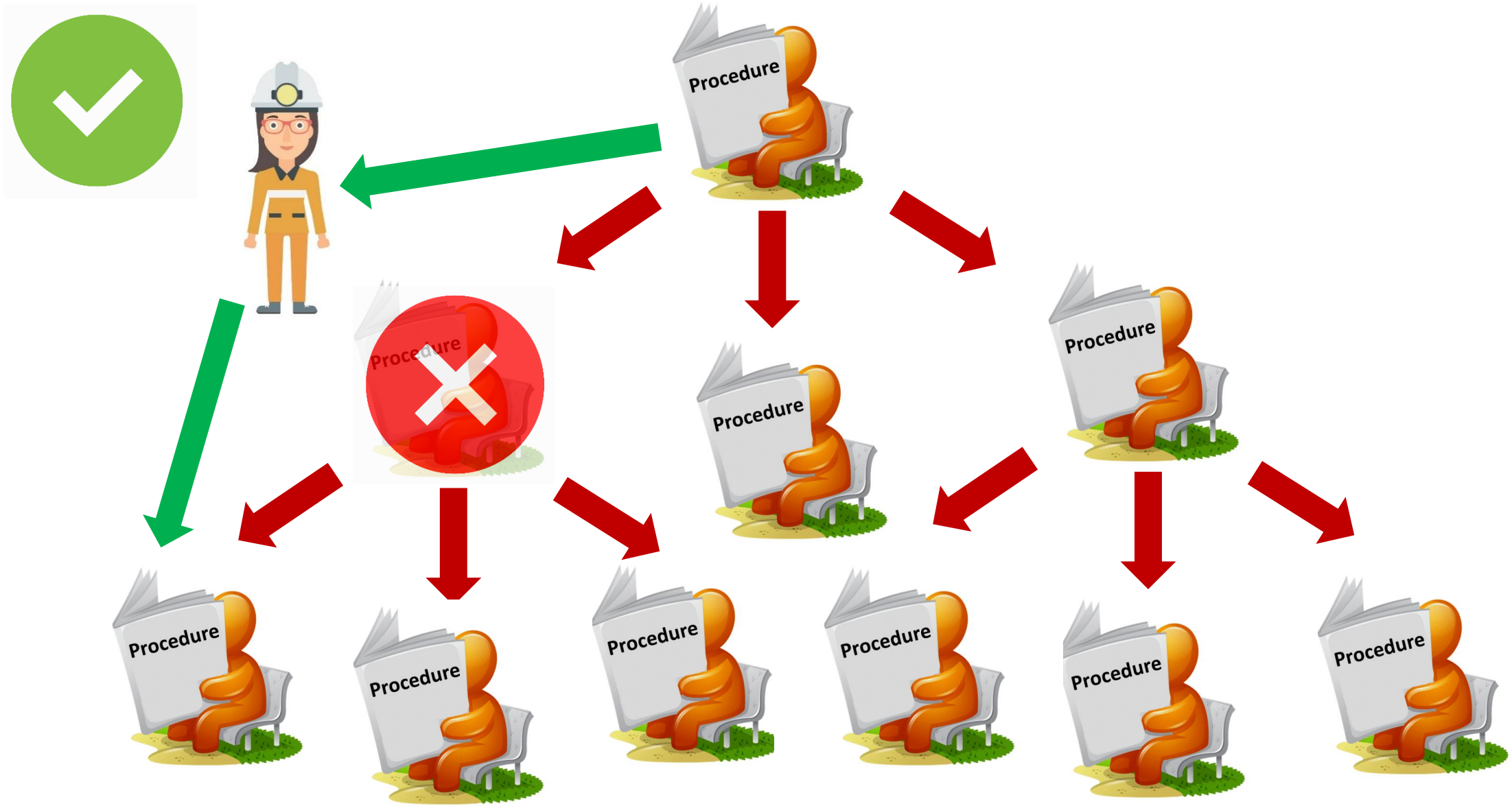
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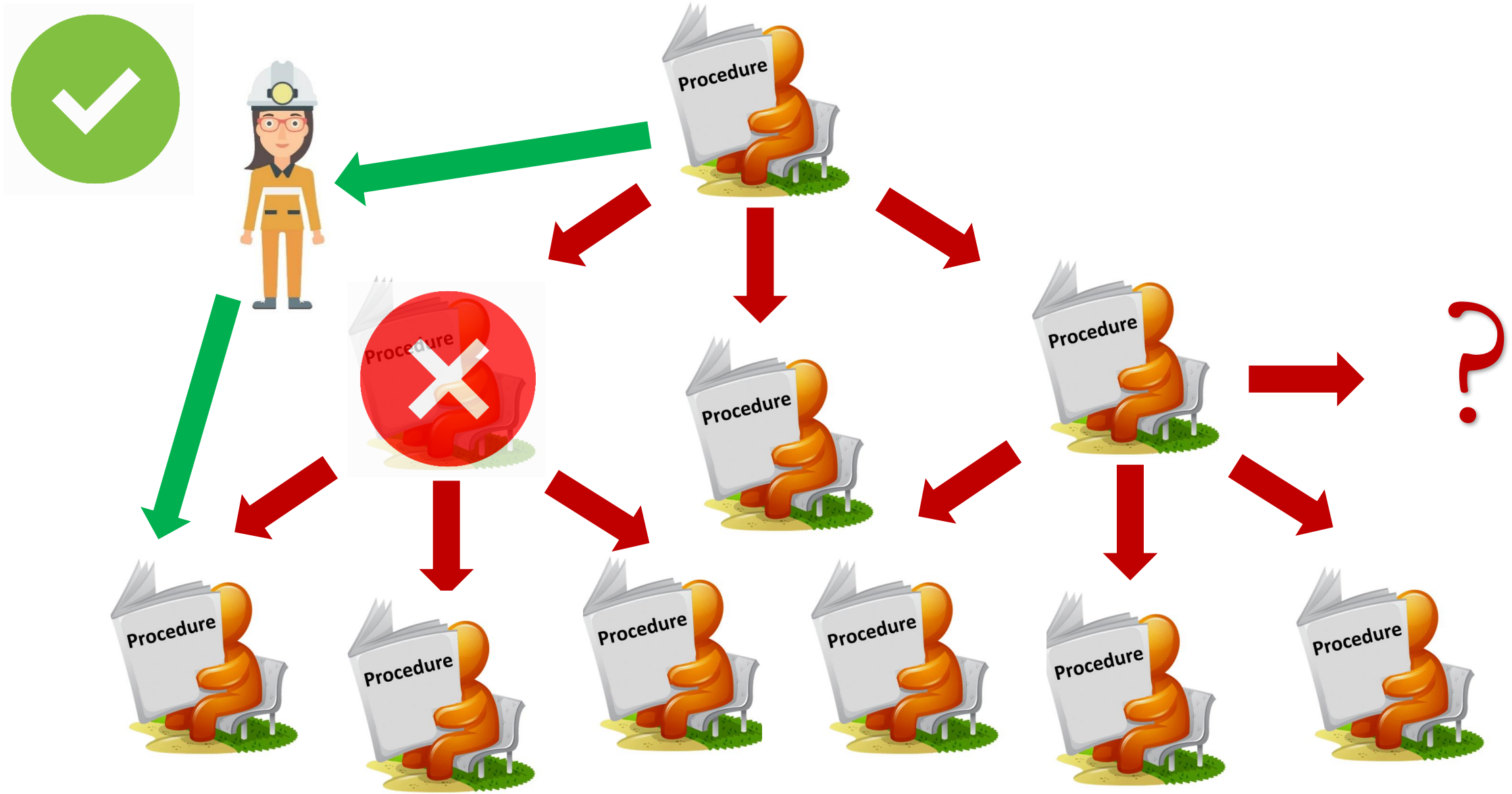
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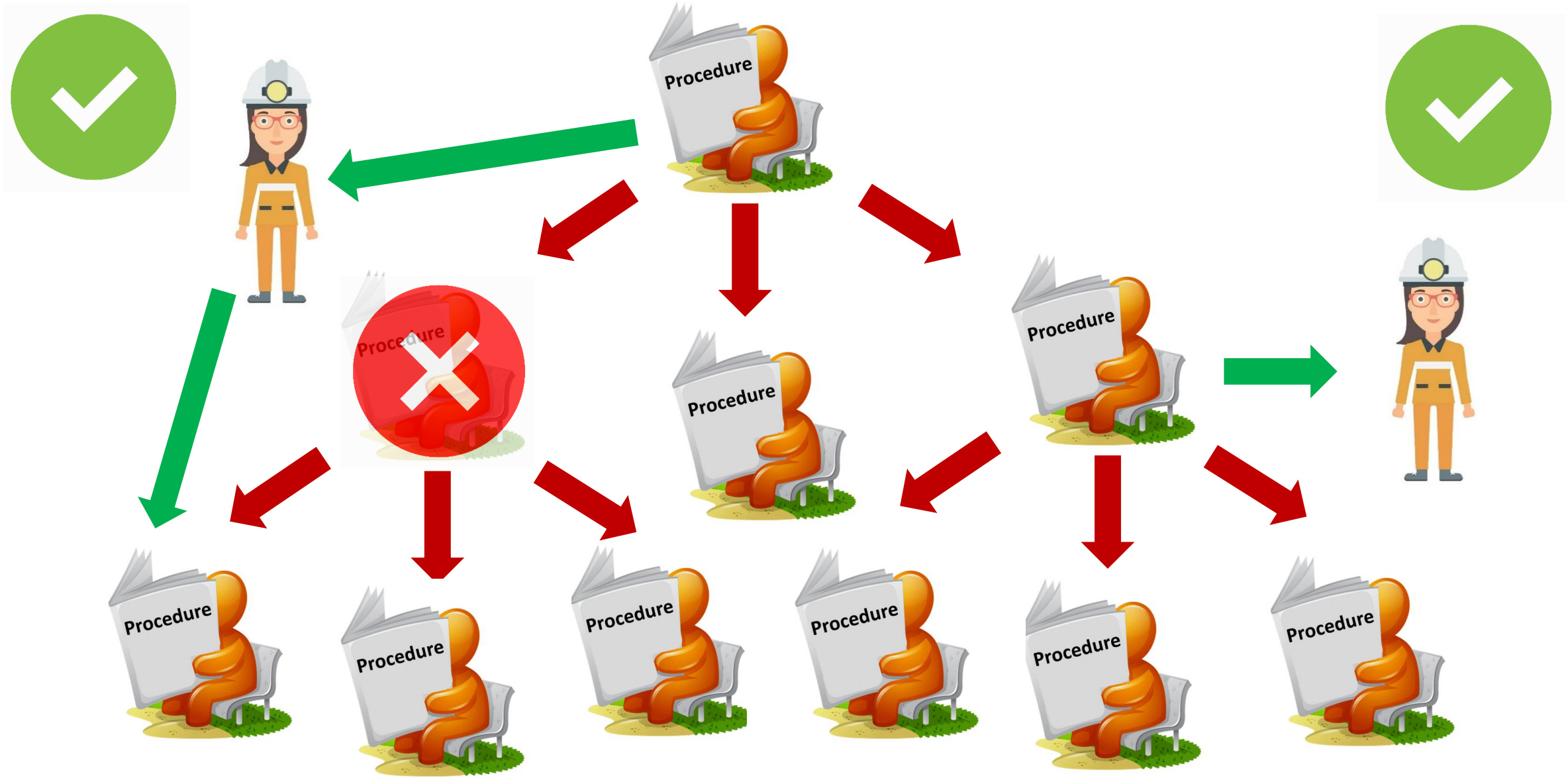
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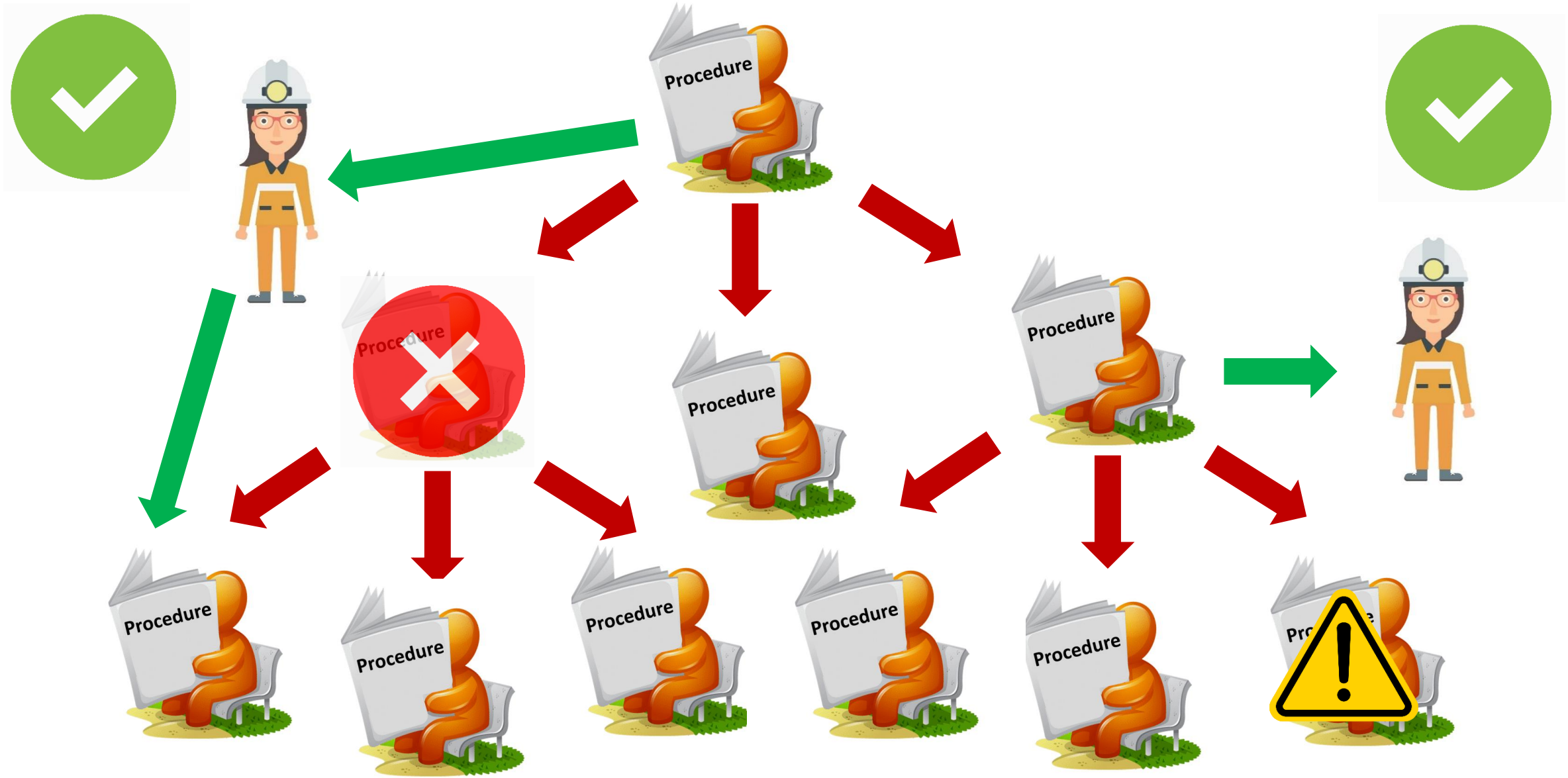
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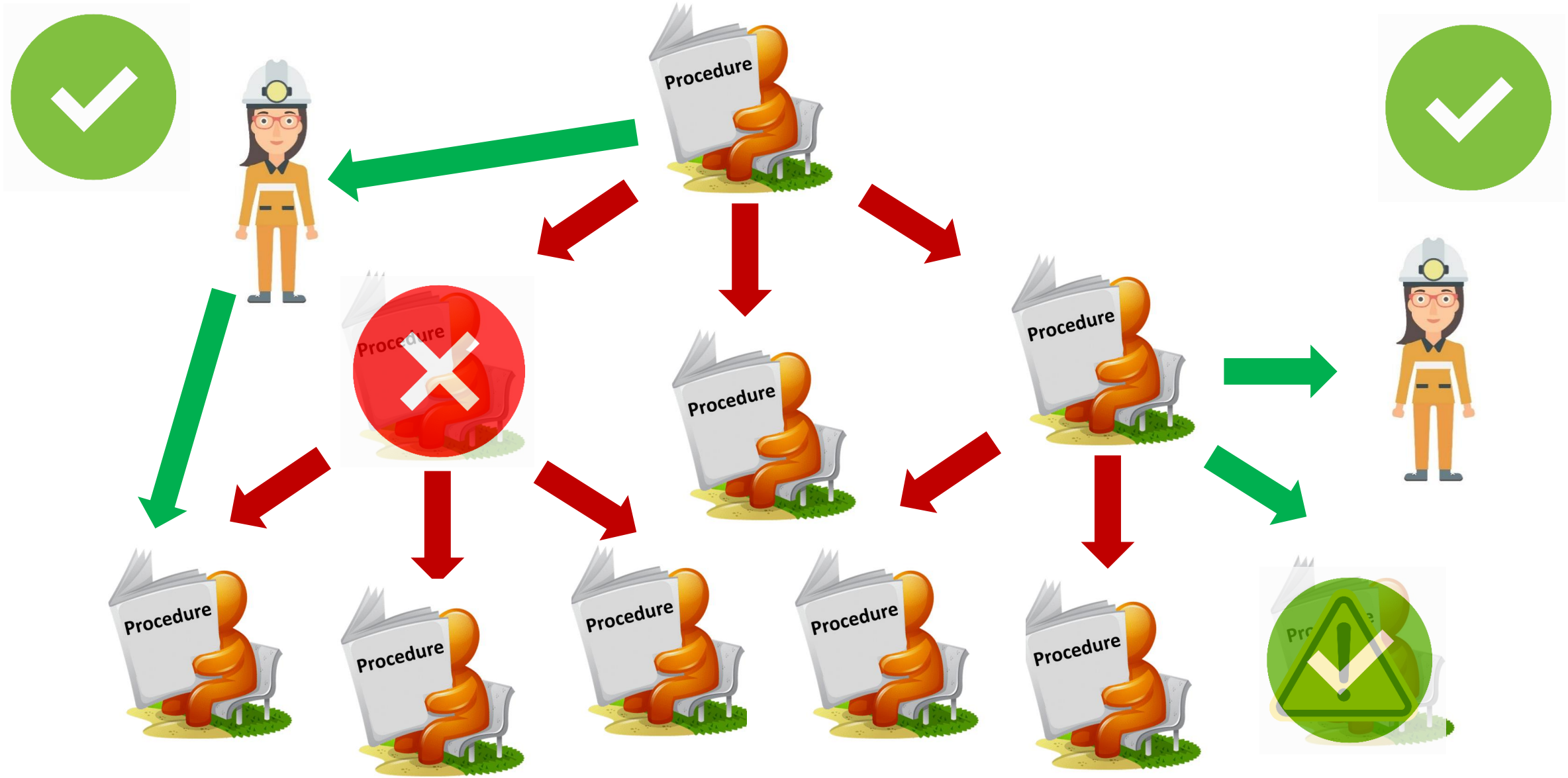
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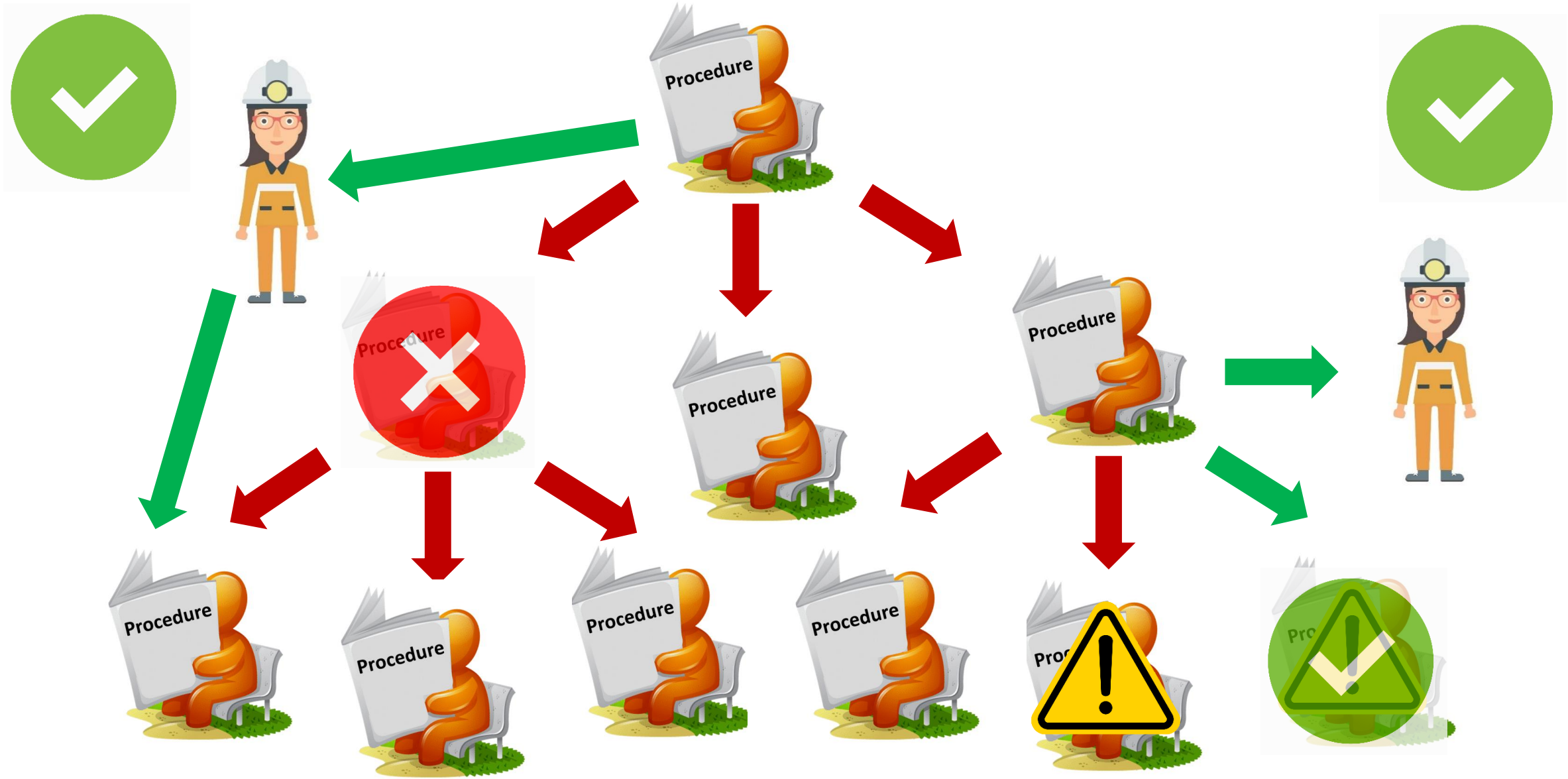
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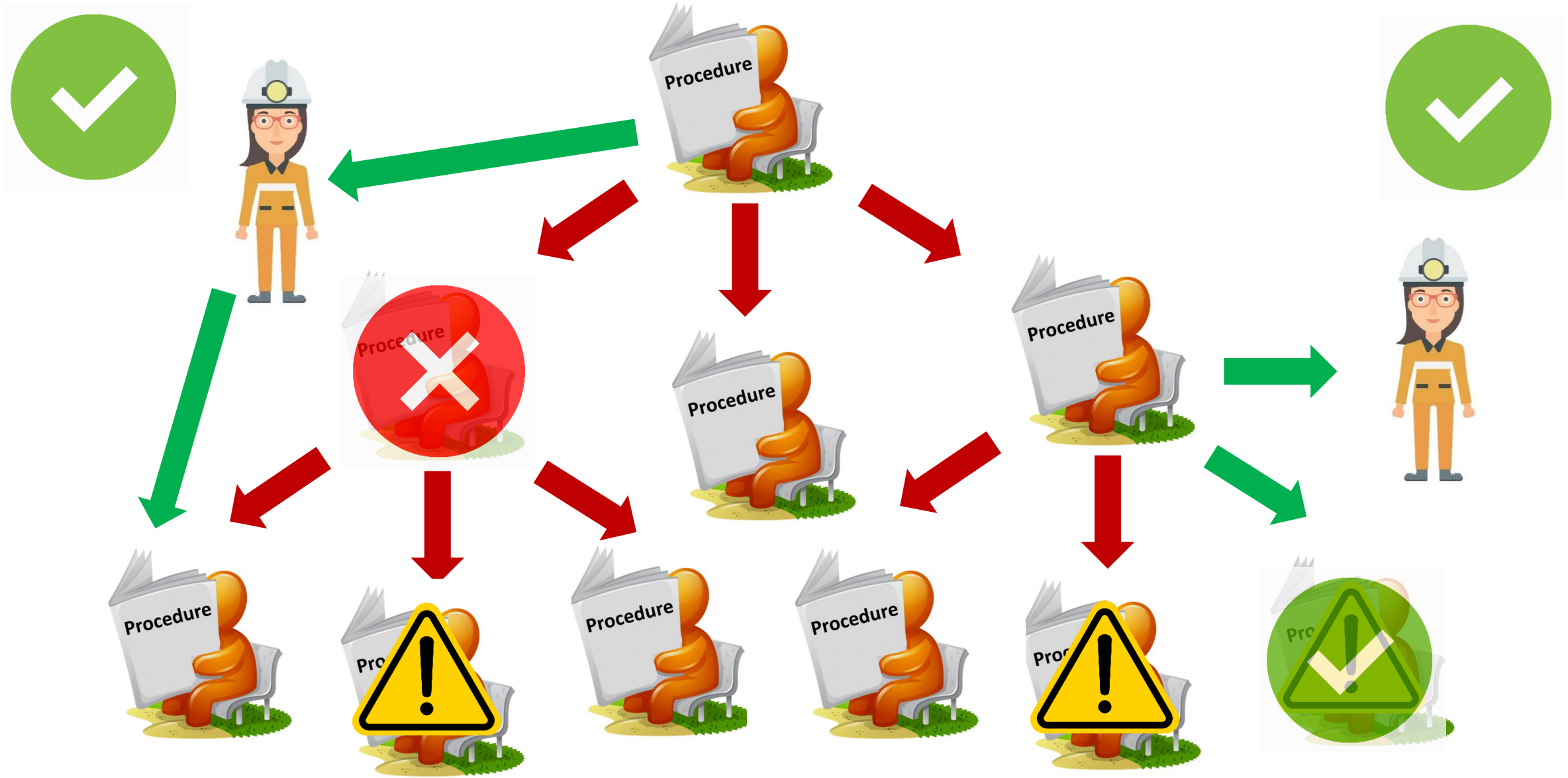
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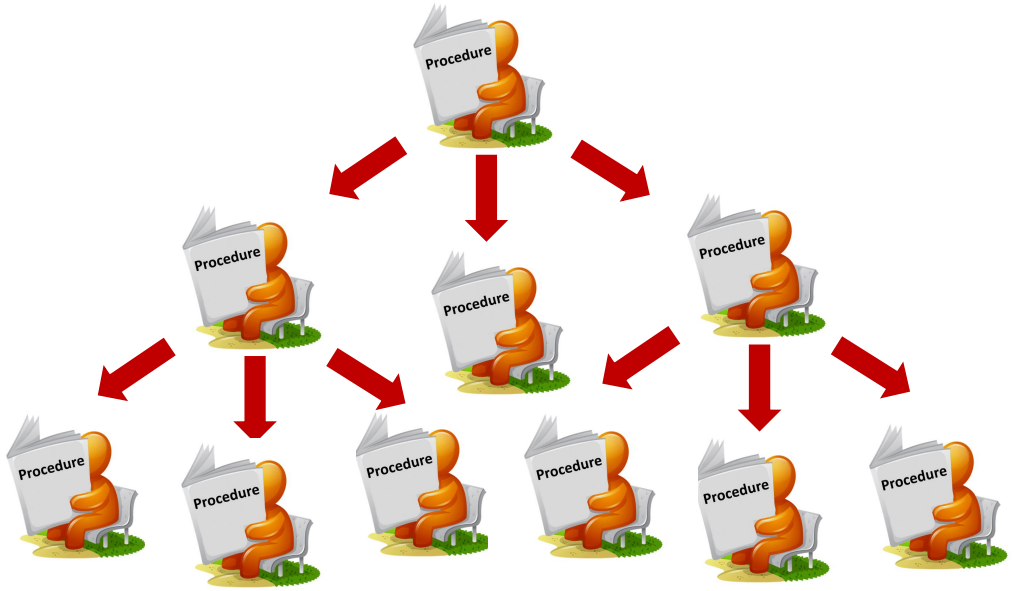

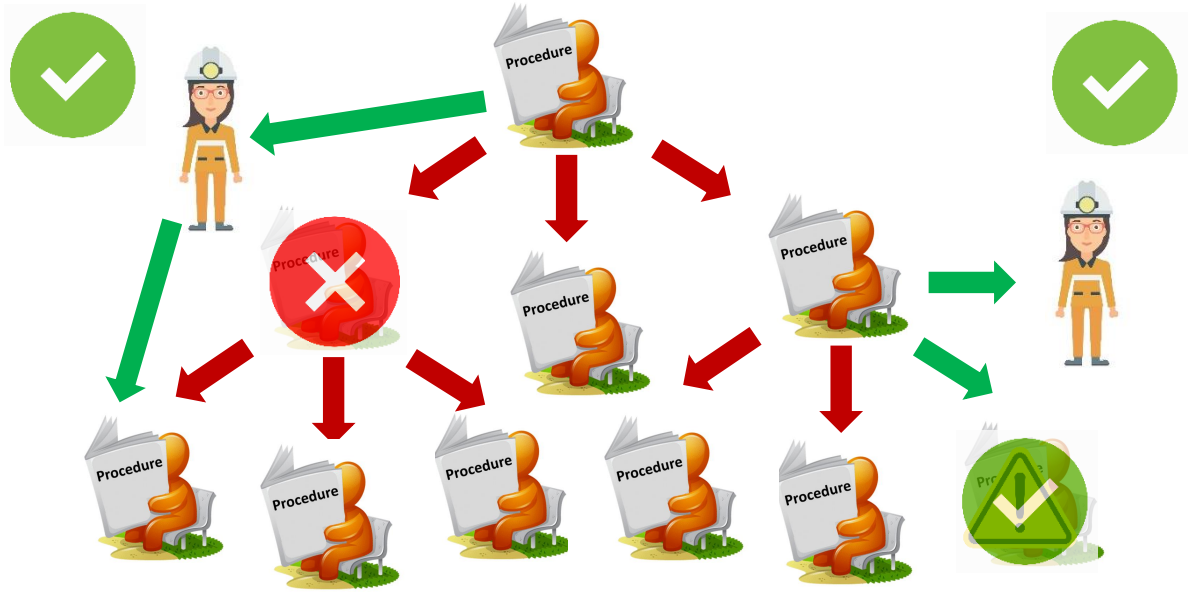

Work As Imagined

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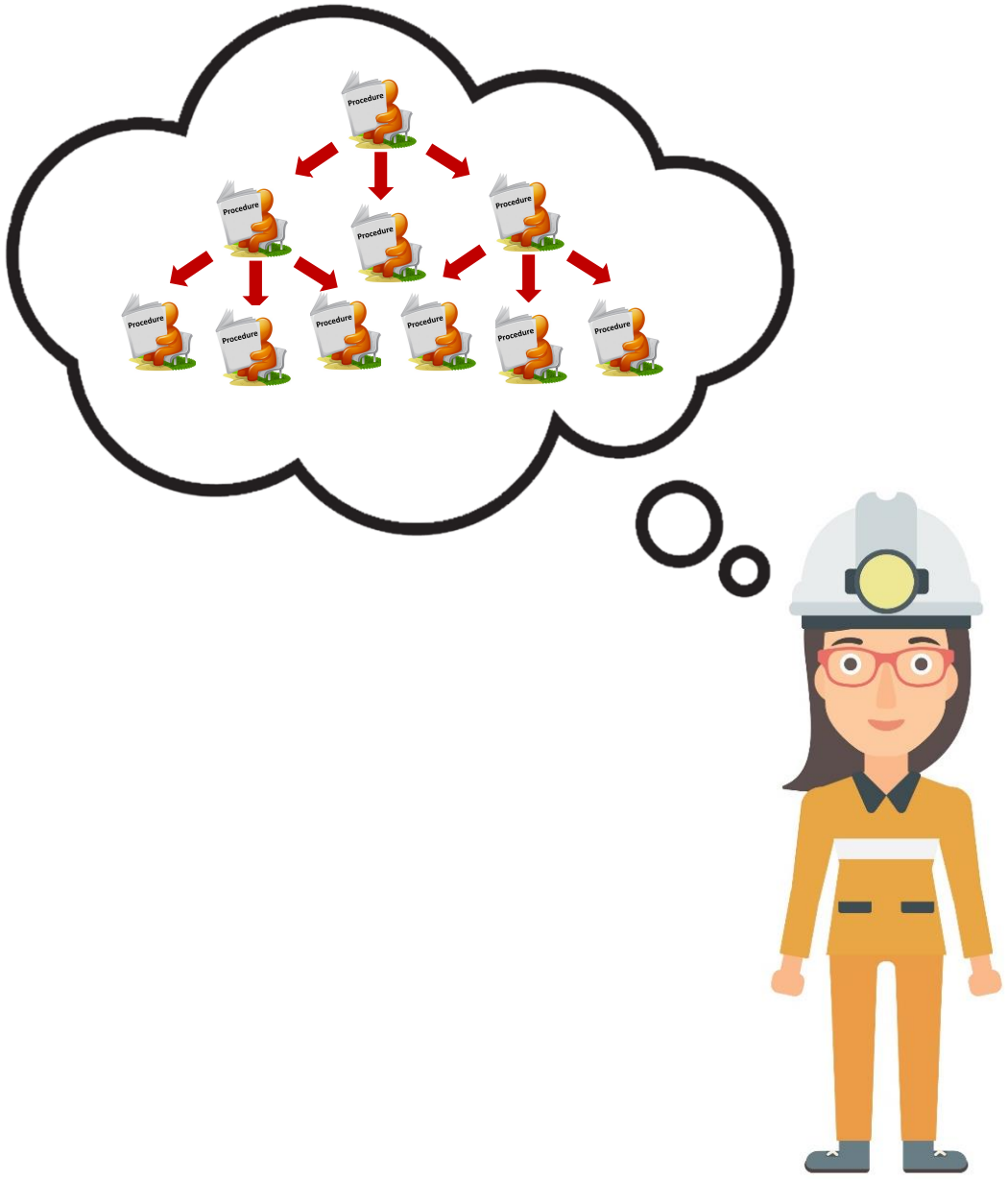
Work As Done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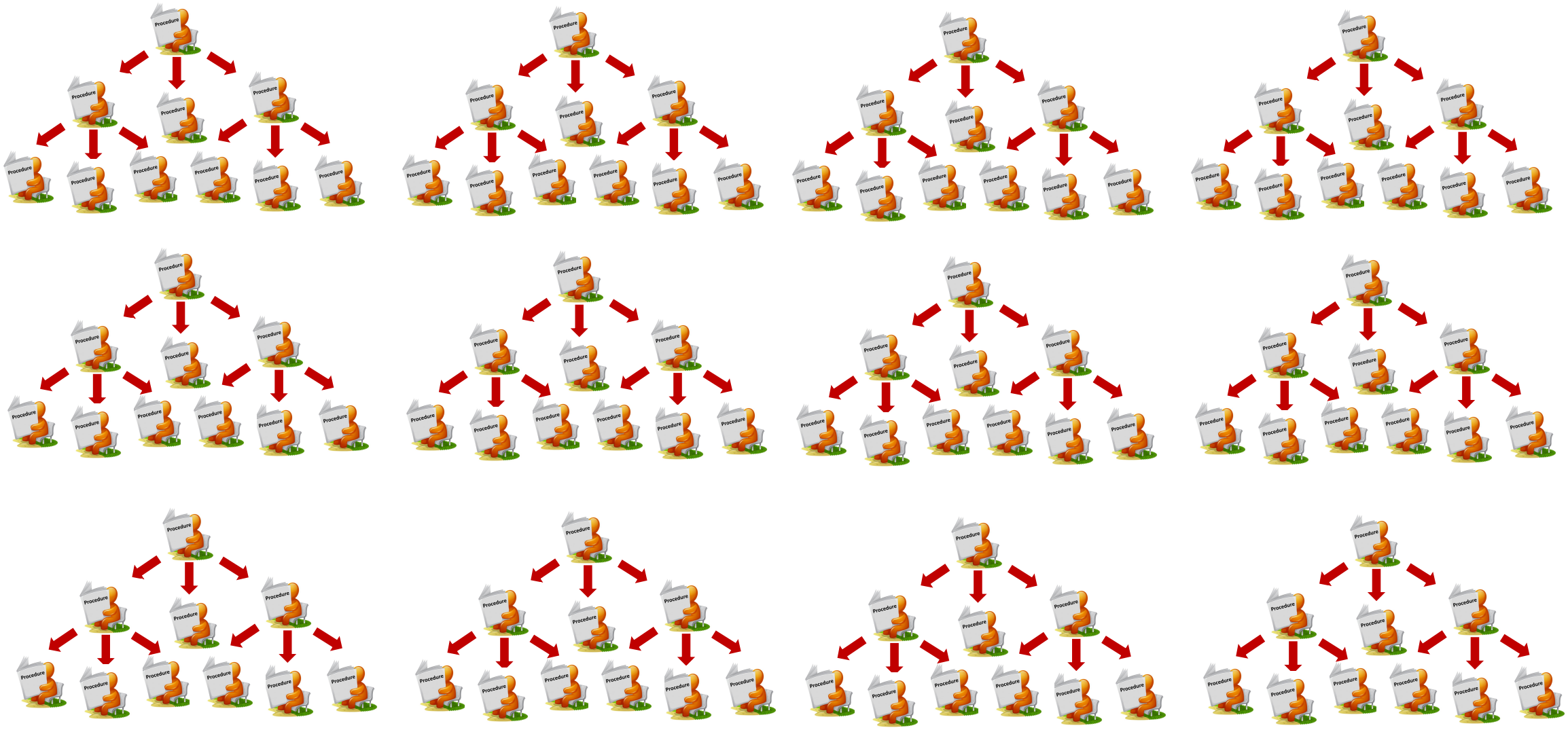
Procedure

Drift Into Failure.

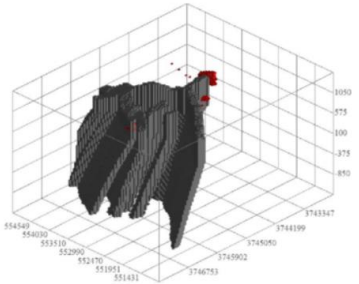

Procedure

Procedure

System components.

Company goals

Leaders

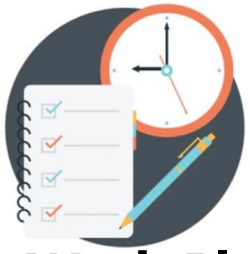


Geology

KPI & Rewards

Systems

Procedures



Work Plan

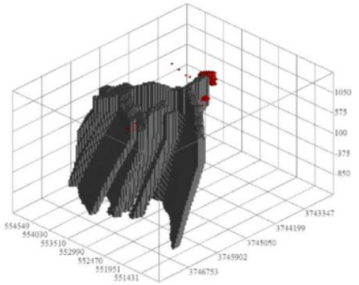
Plant & Equipment

Maintenance

Work teams

Company goals

Leaders



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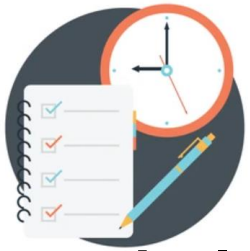

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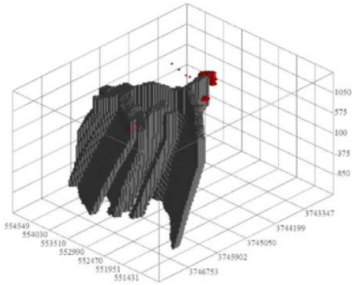

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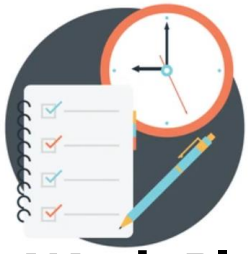

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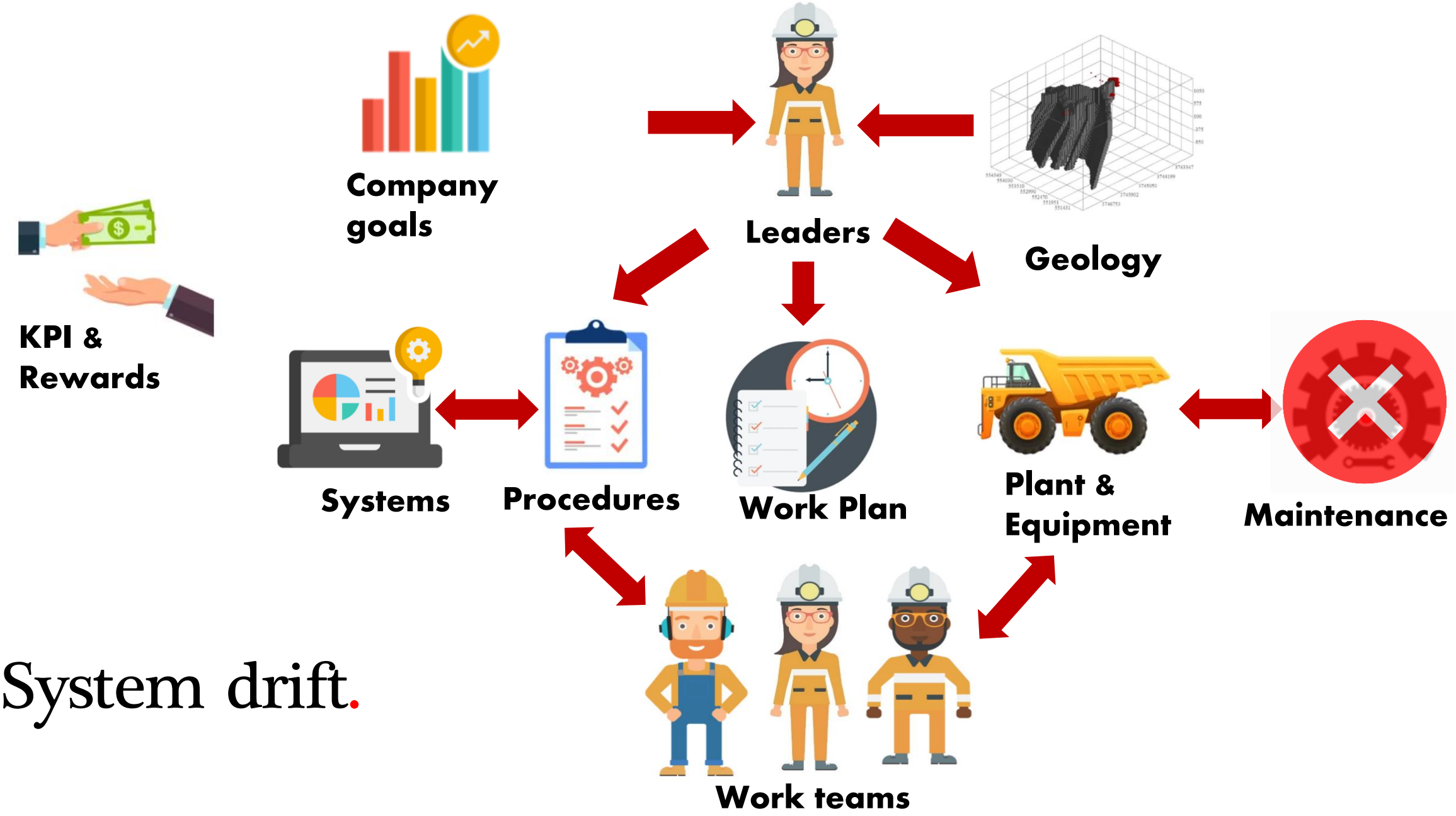

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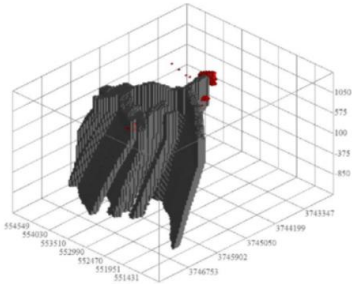

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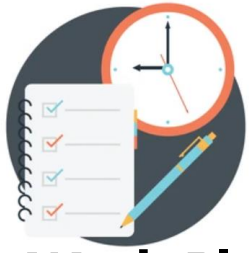

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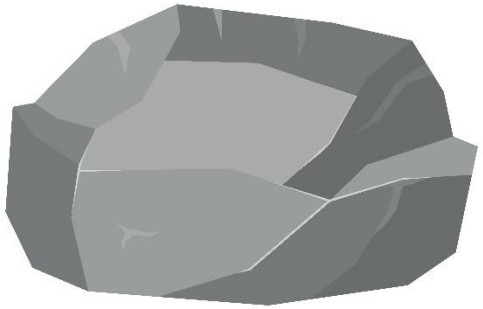
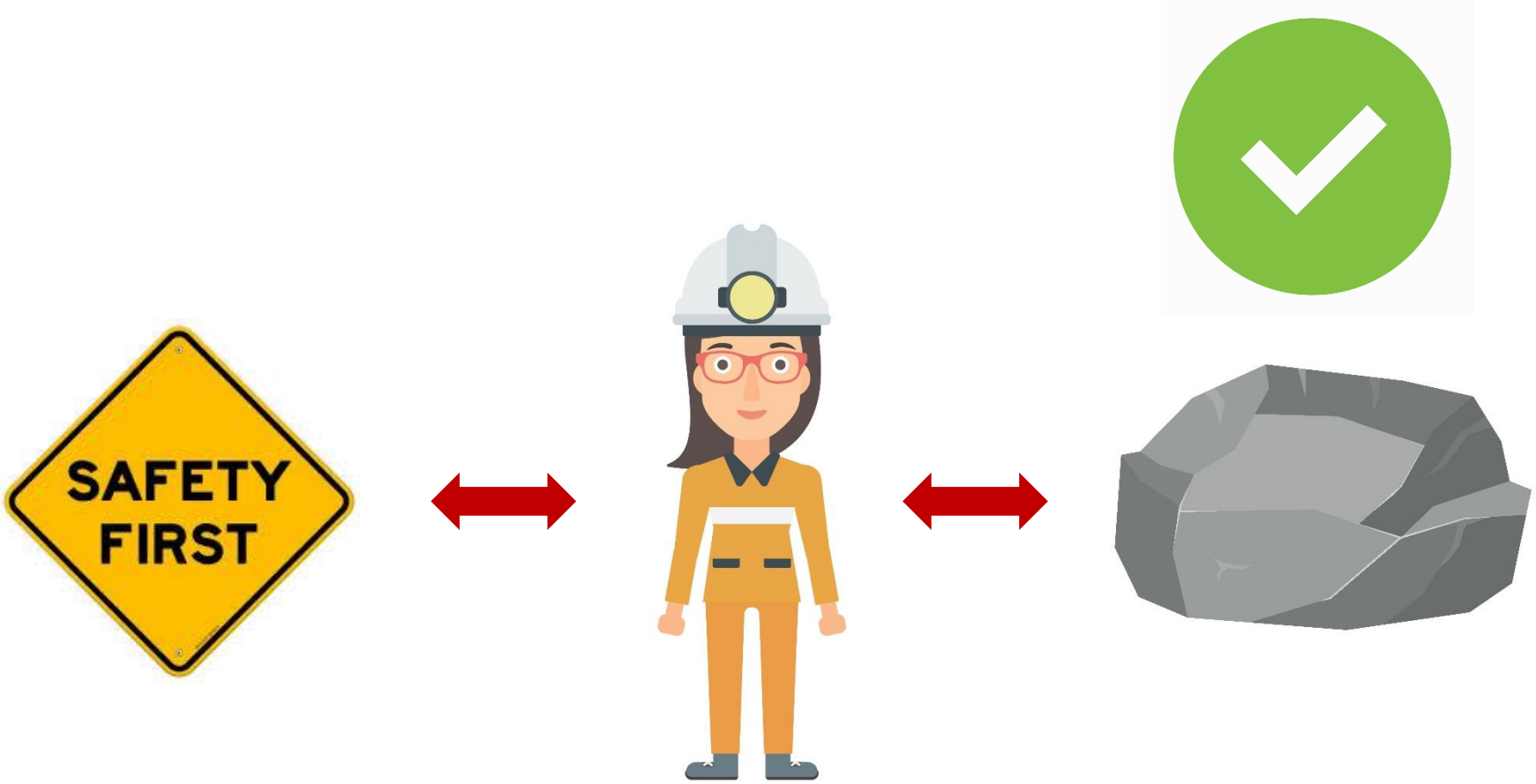
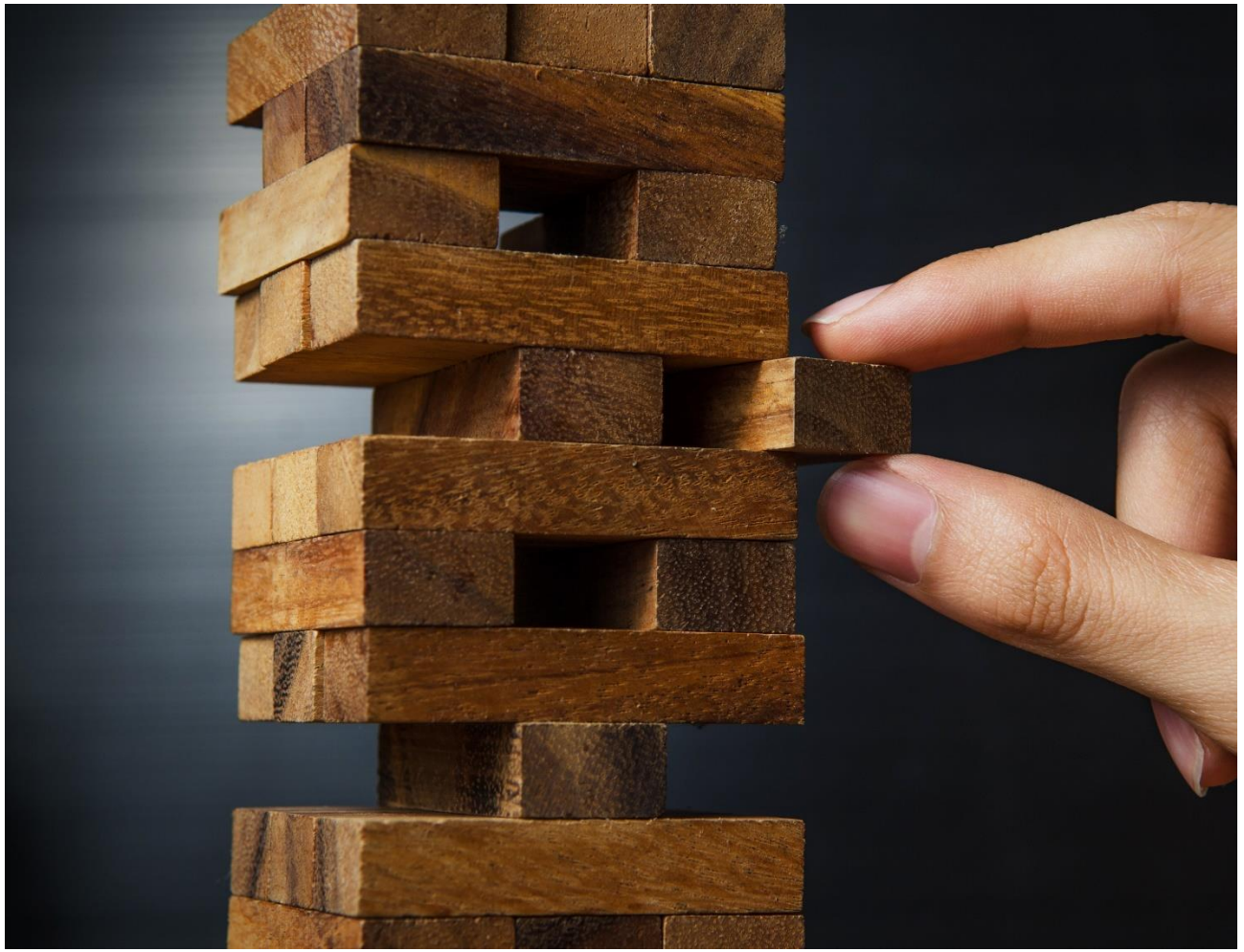




Incident

Jenga.



Jenga.

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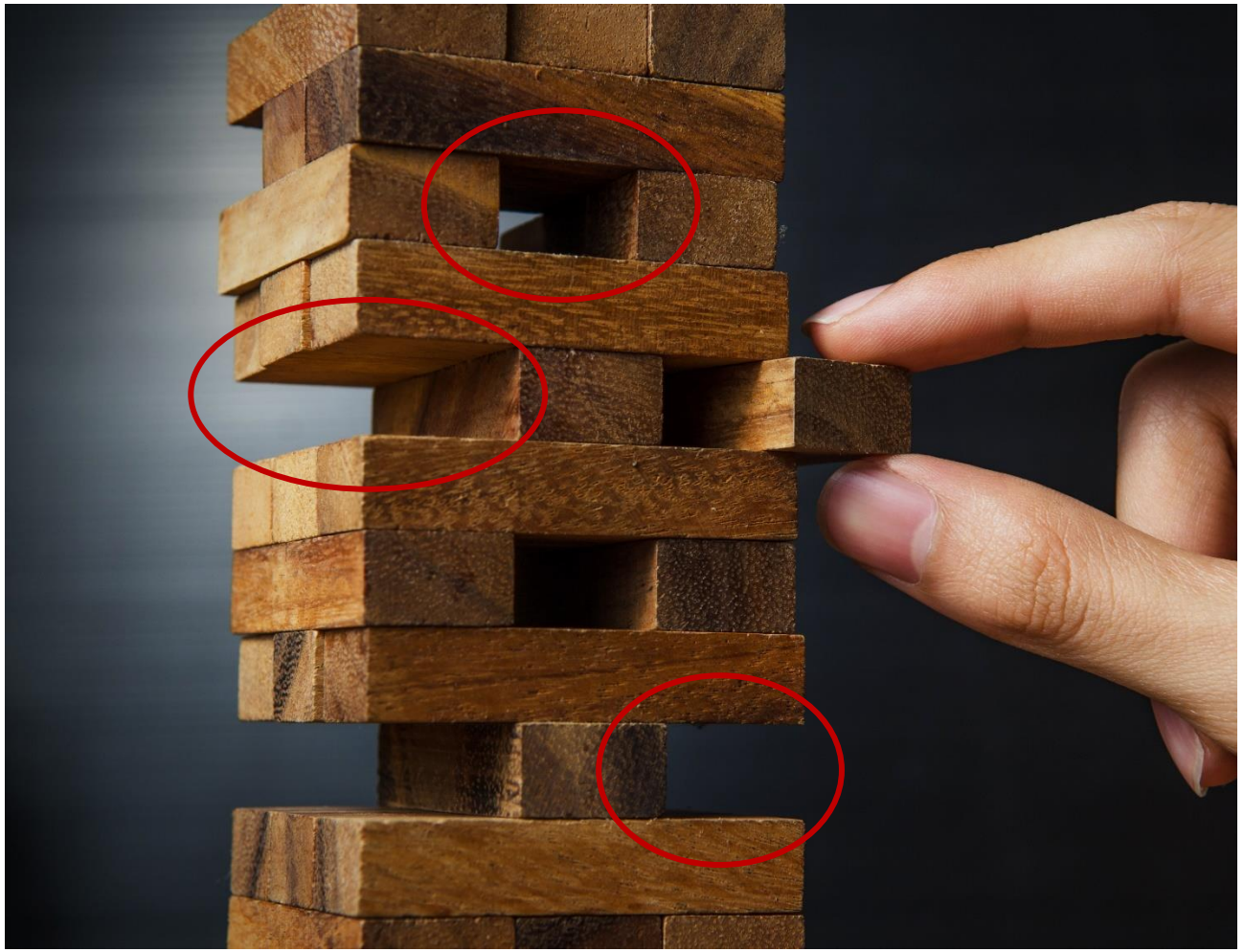
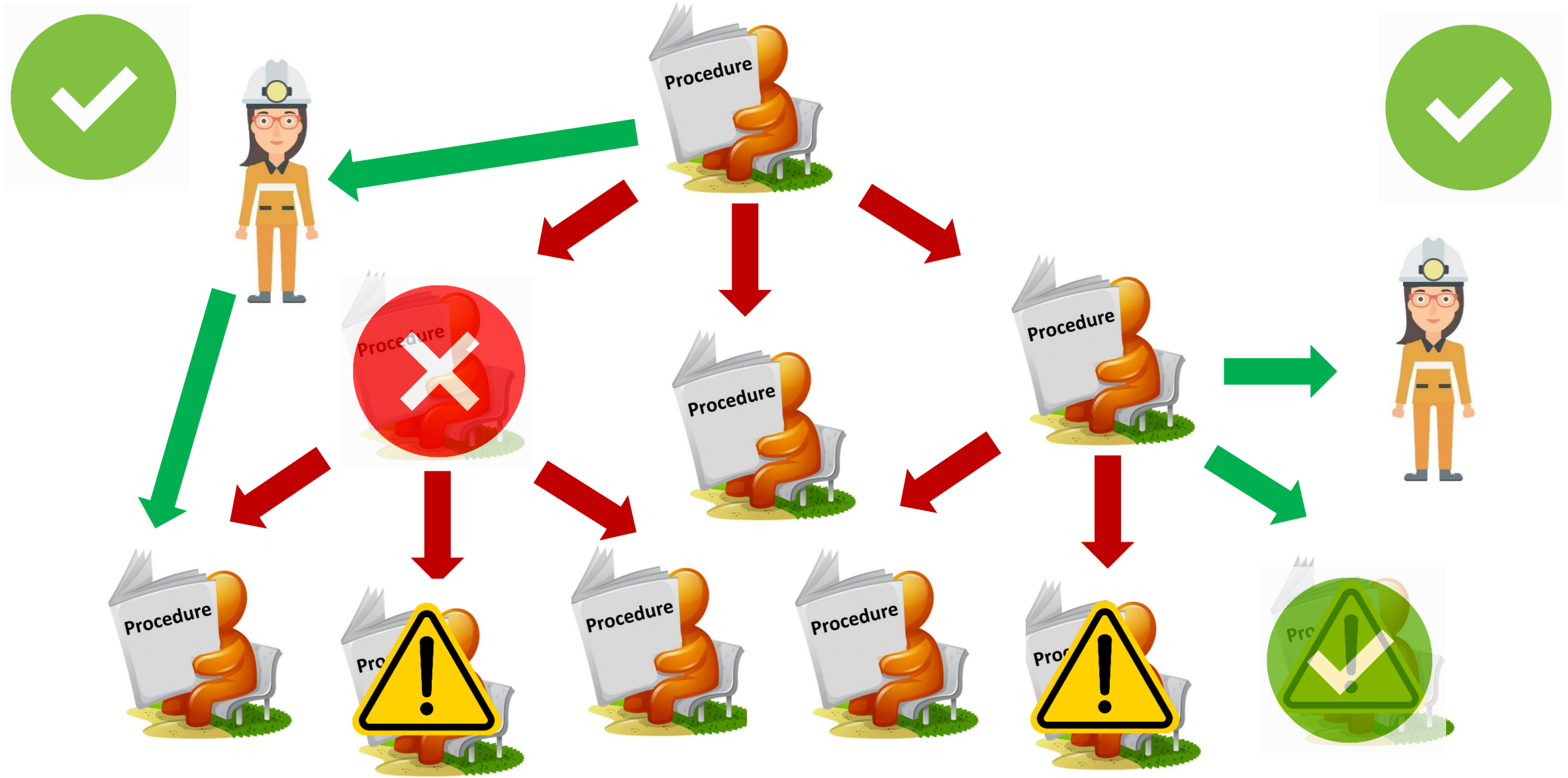


High Reliability Organisations.

Predictable Organisations.

Learning Organisations.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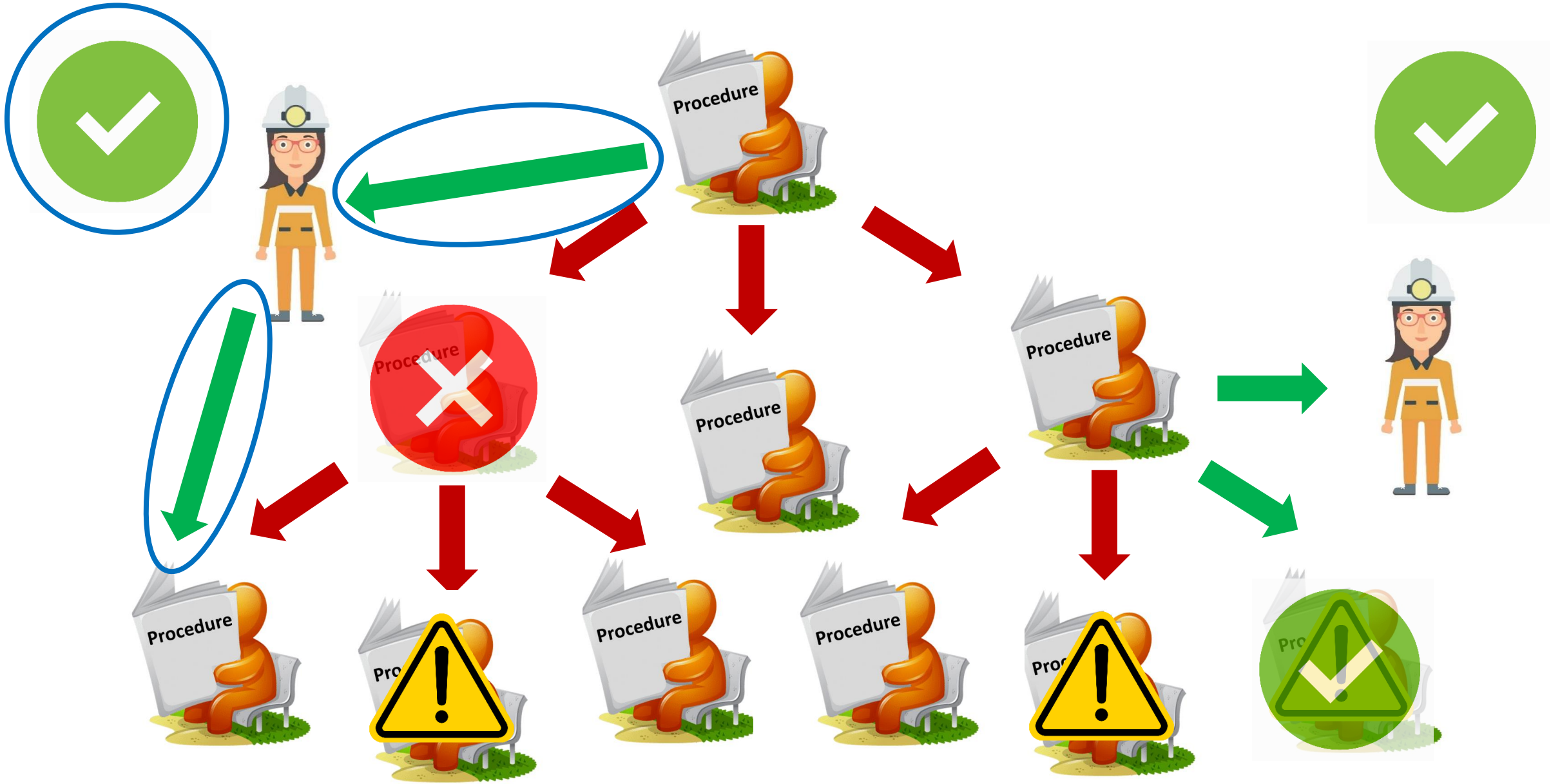
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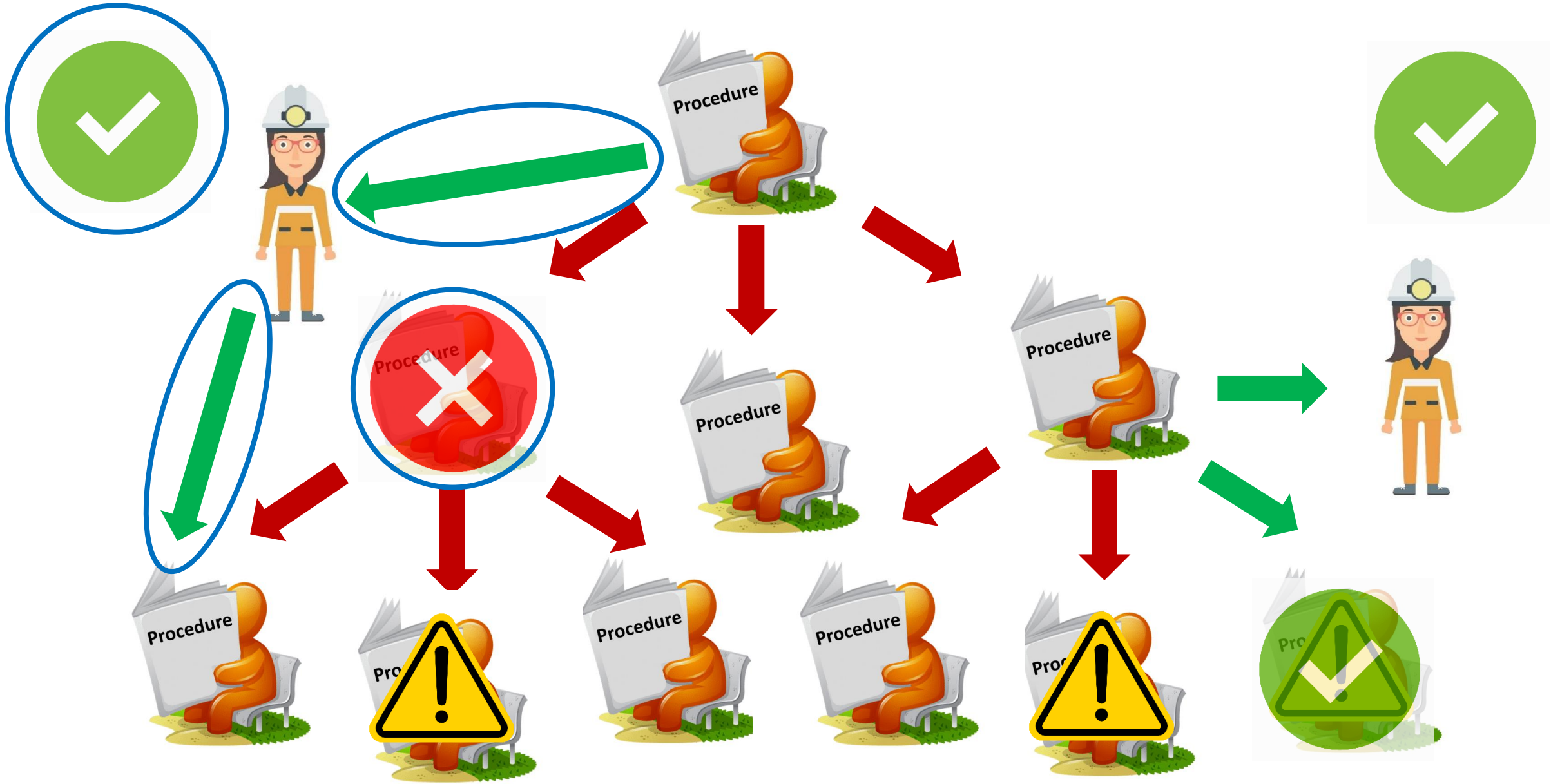
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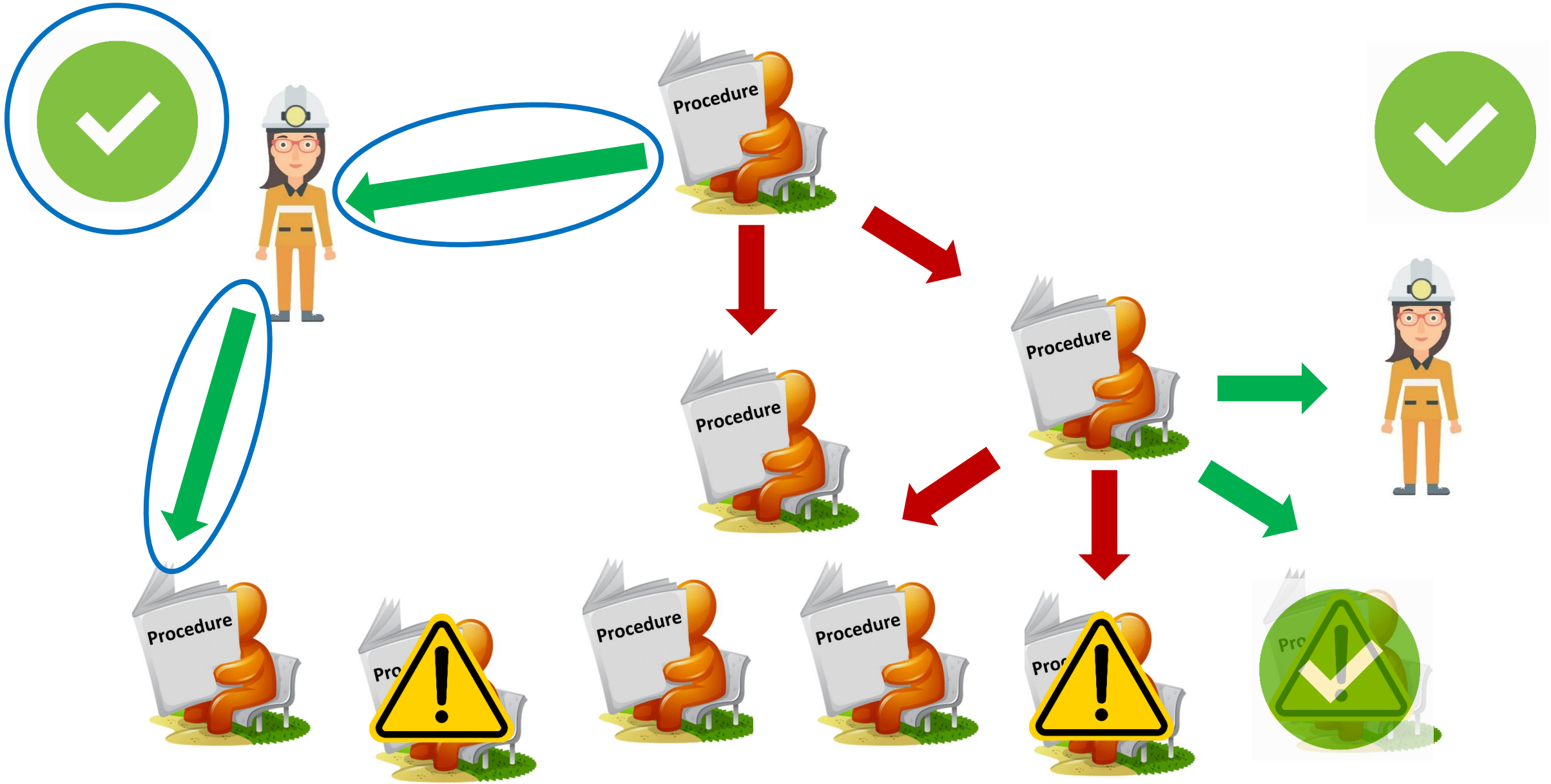
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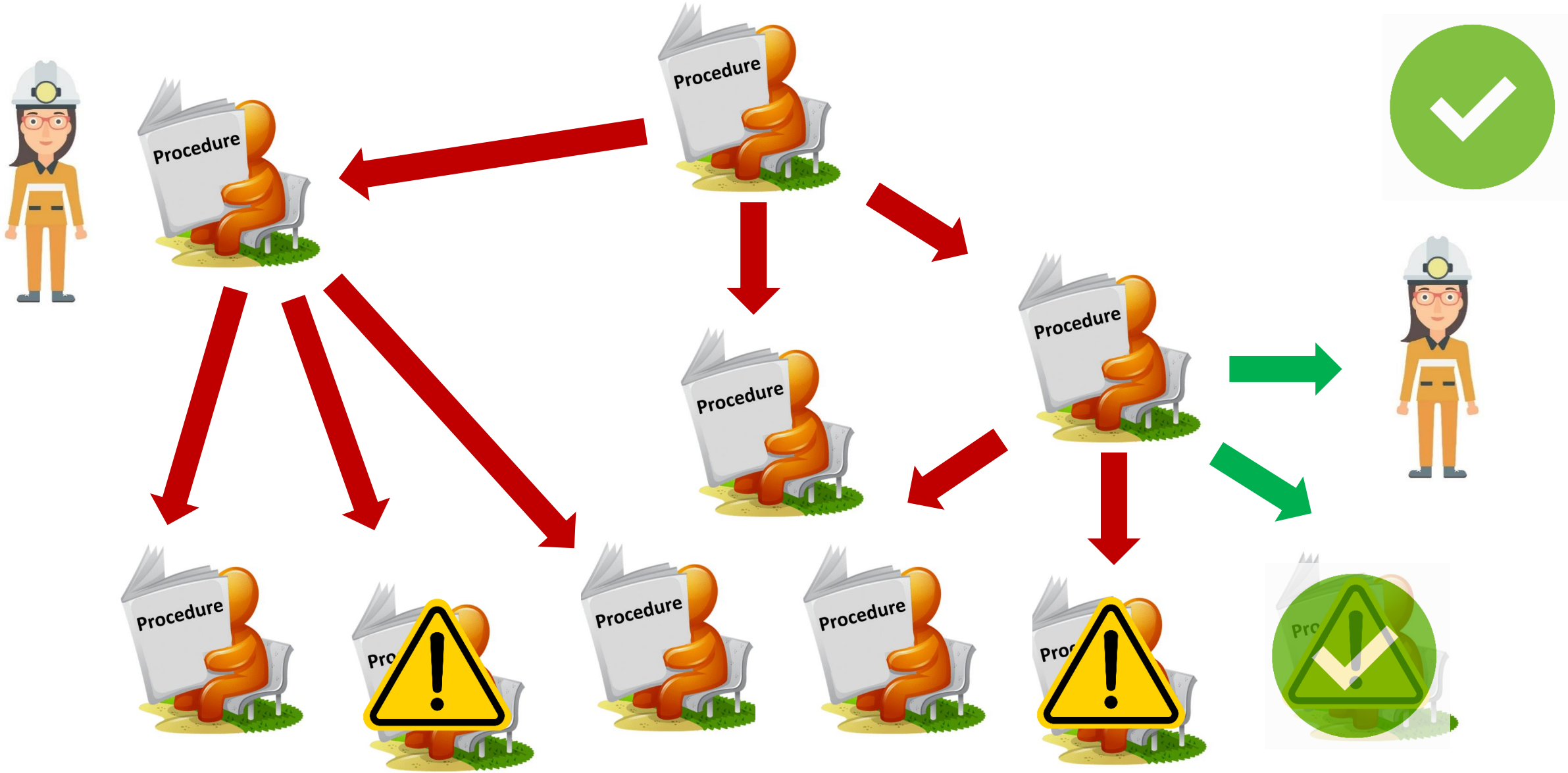
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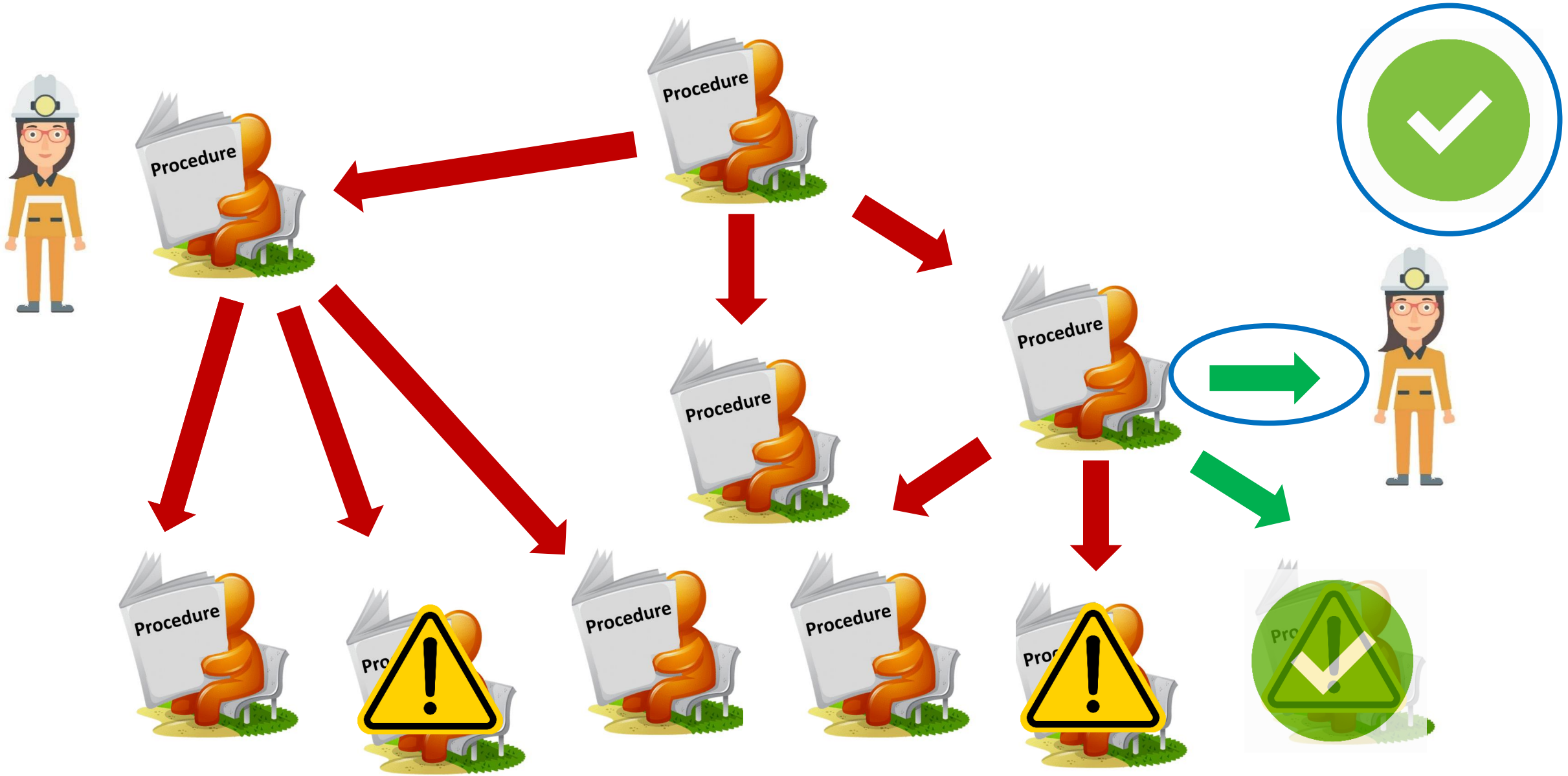
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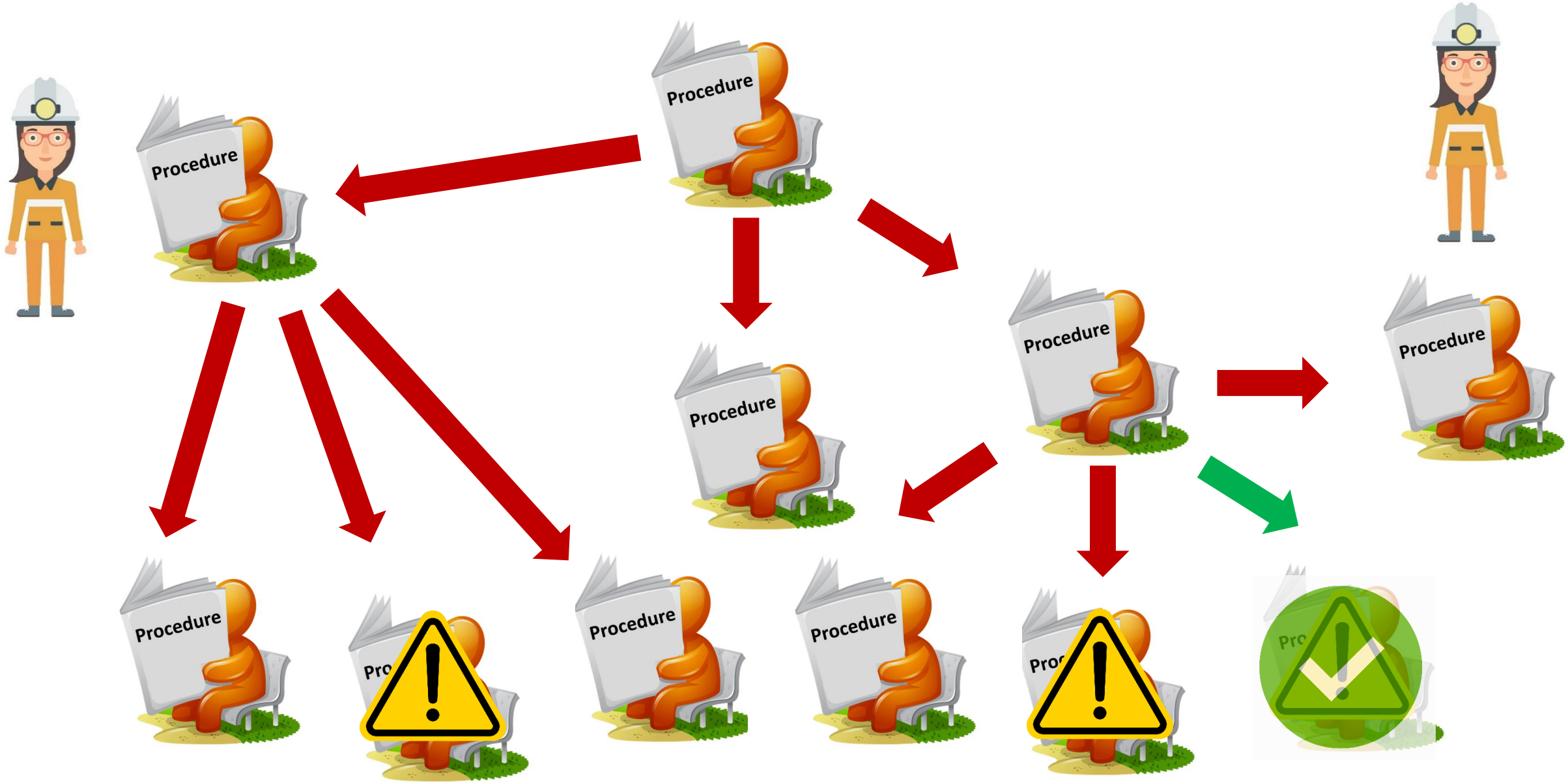
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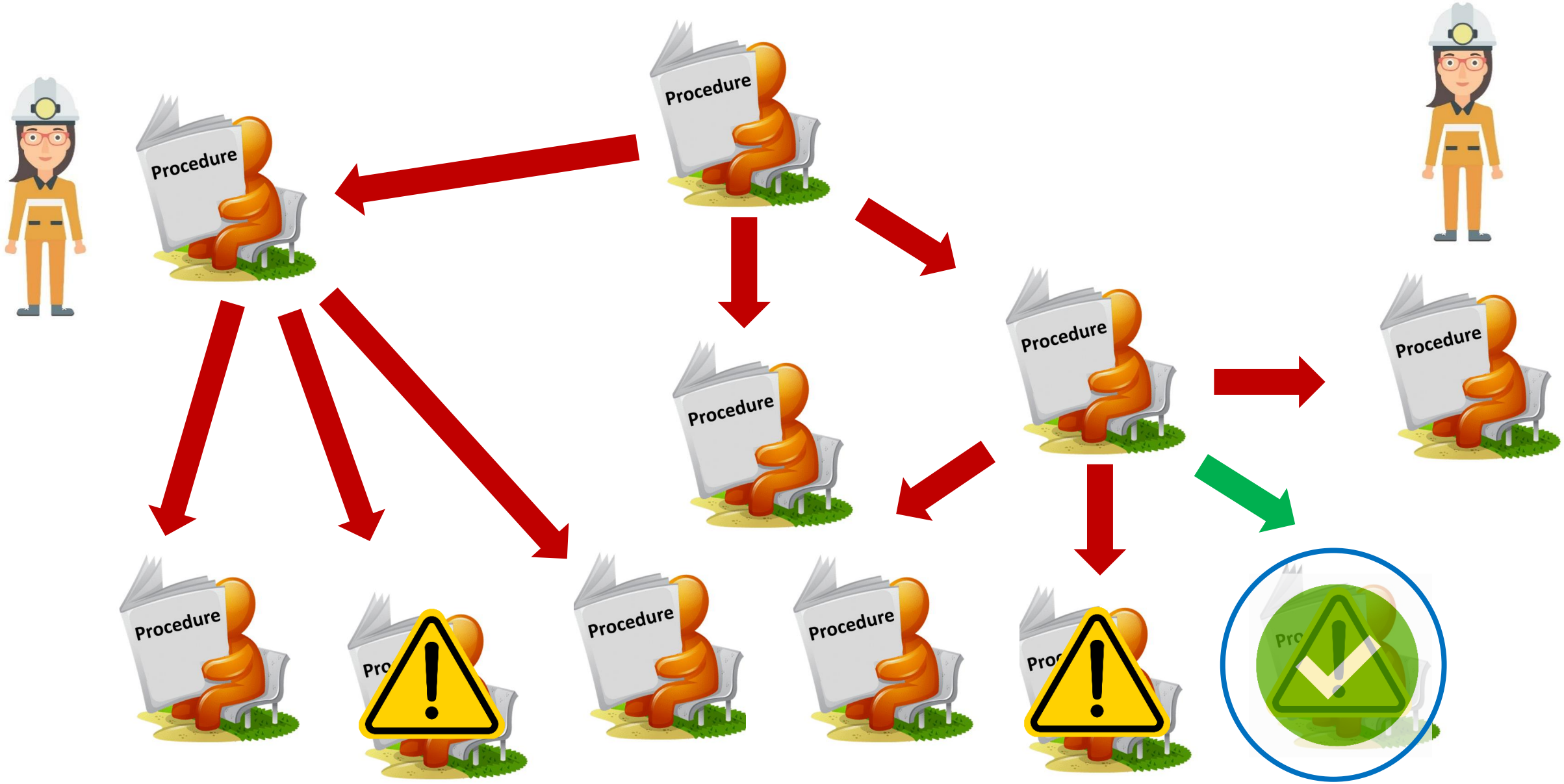
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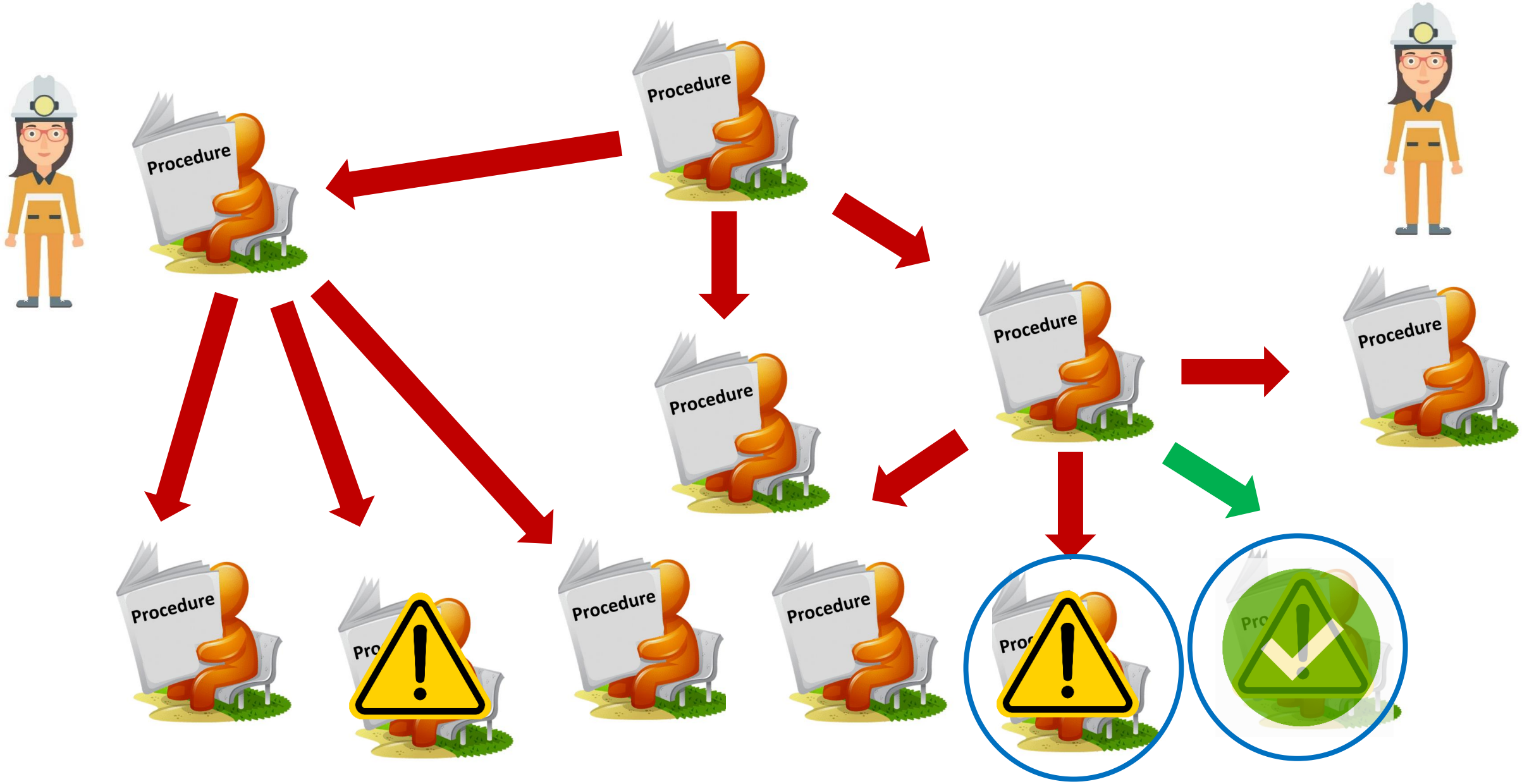
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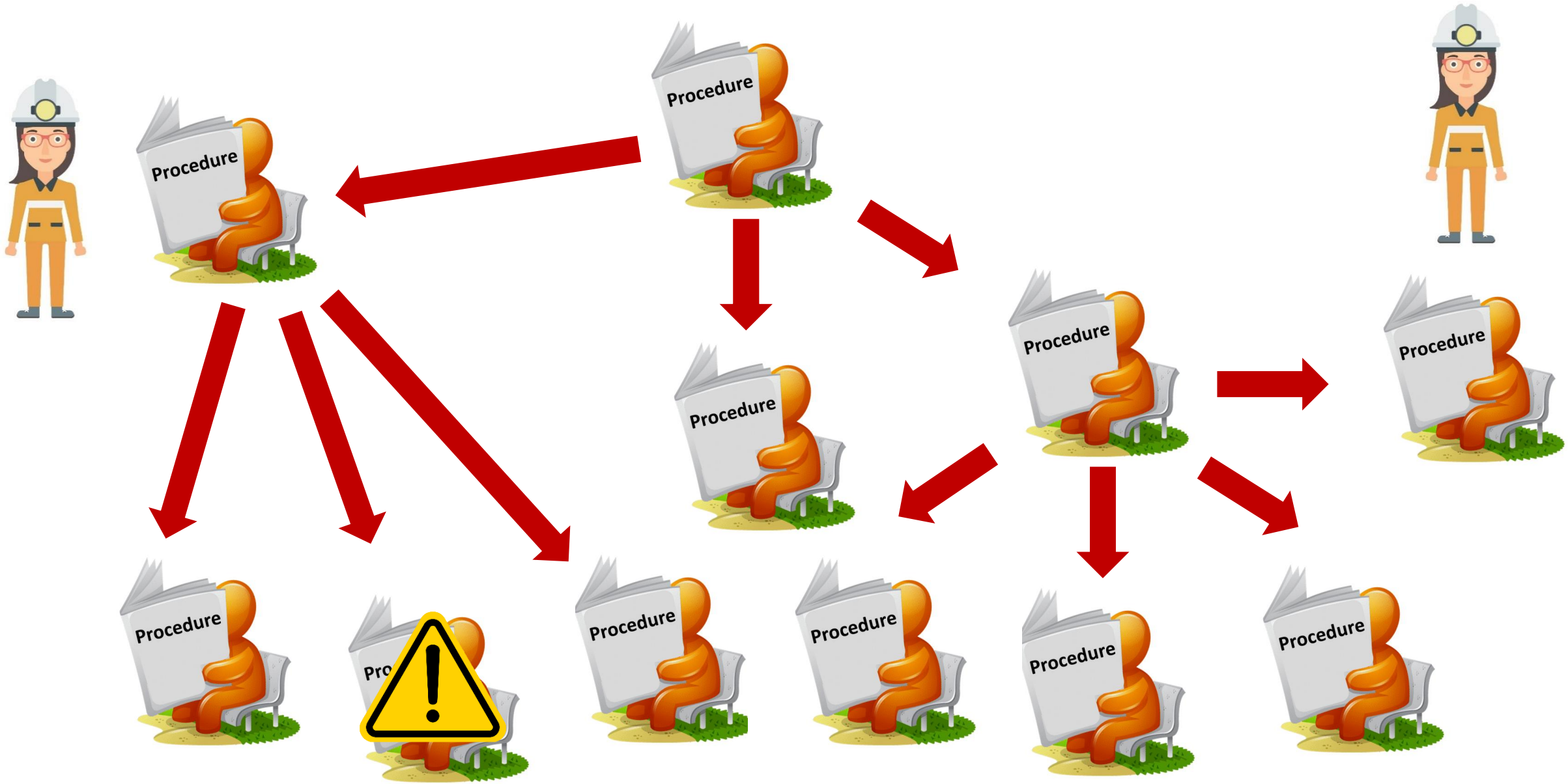
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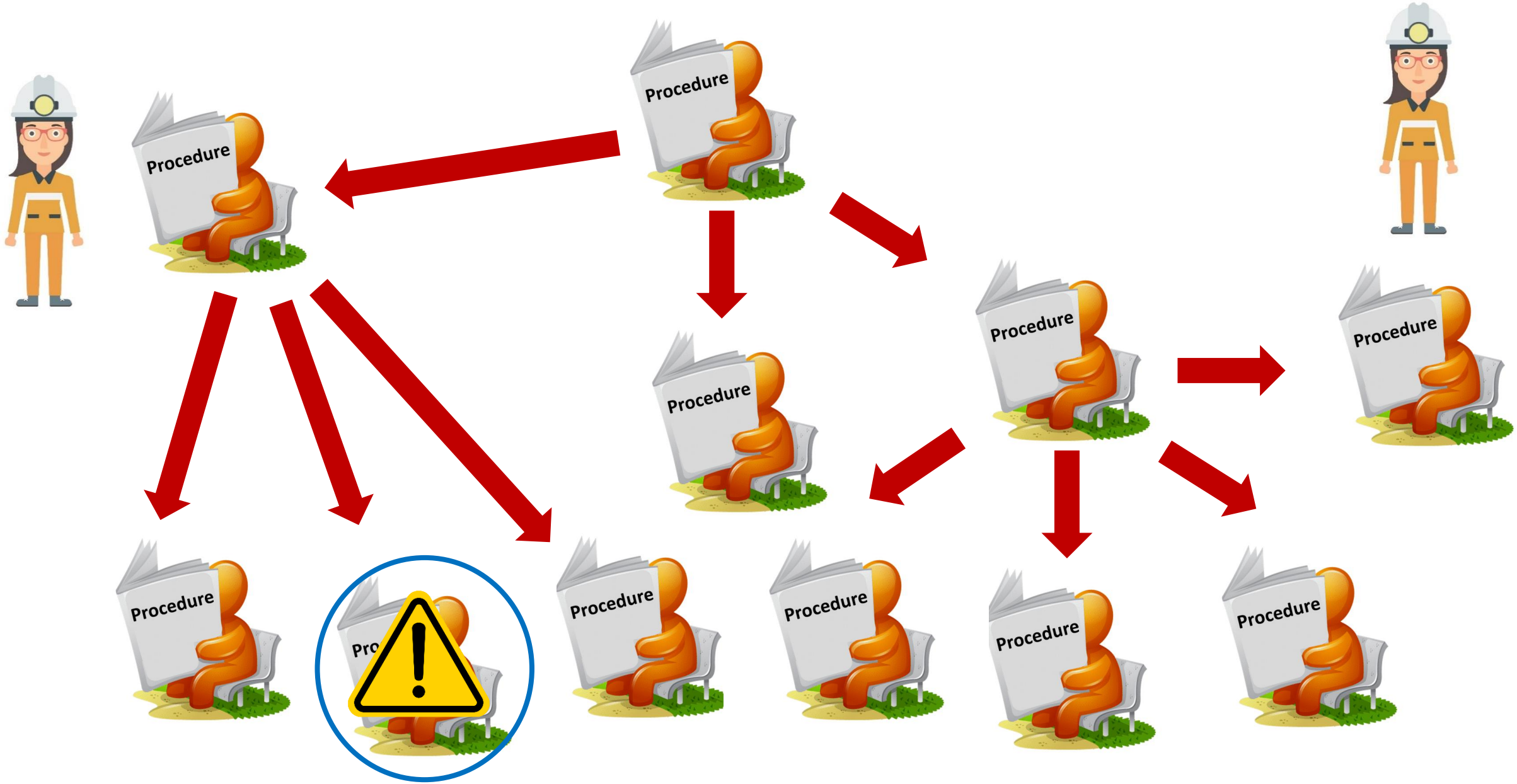
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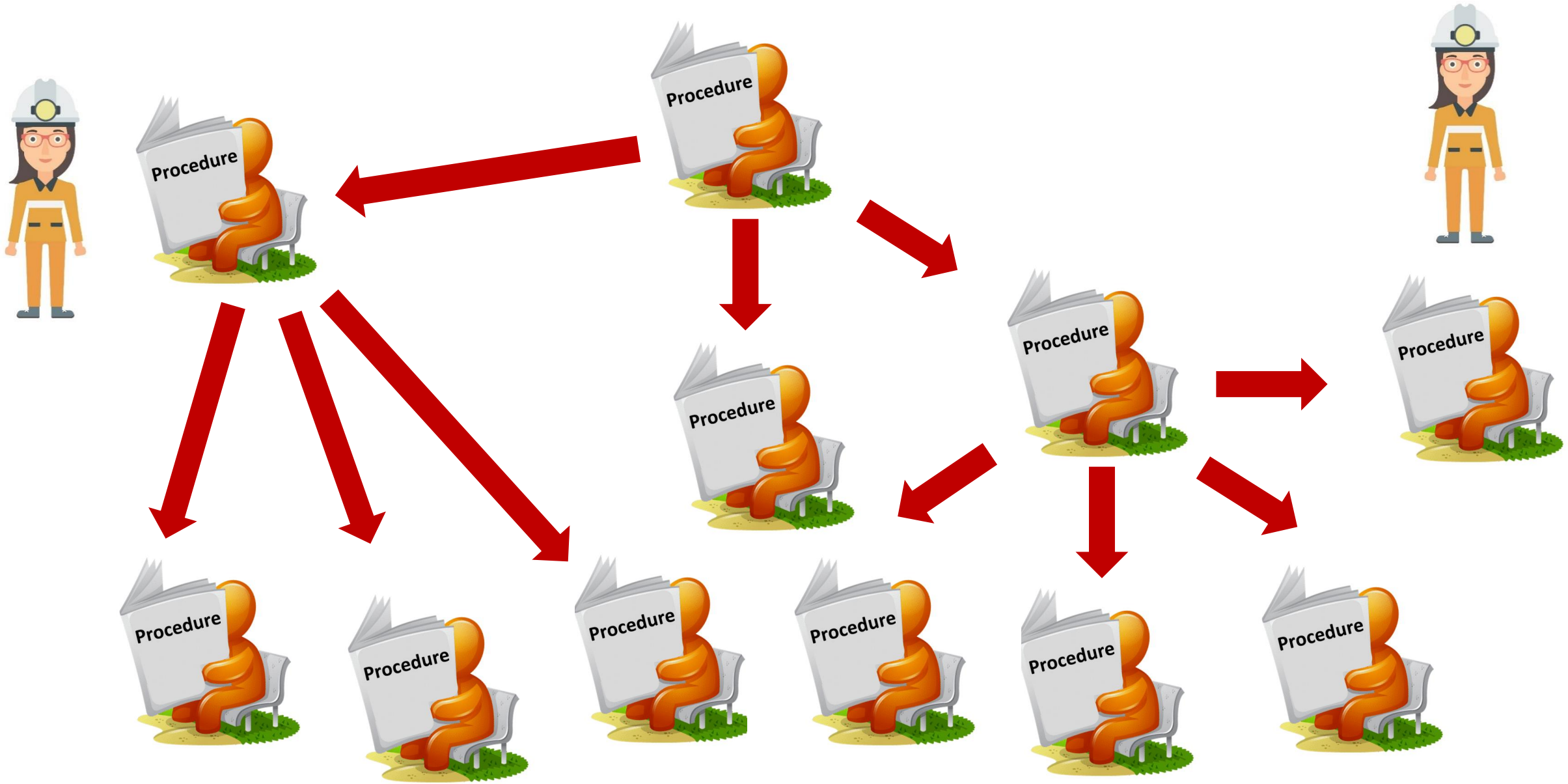
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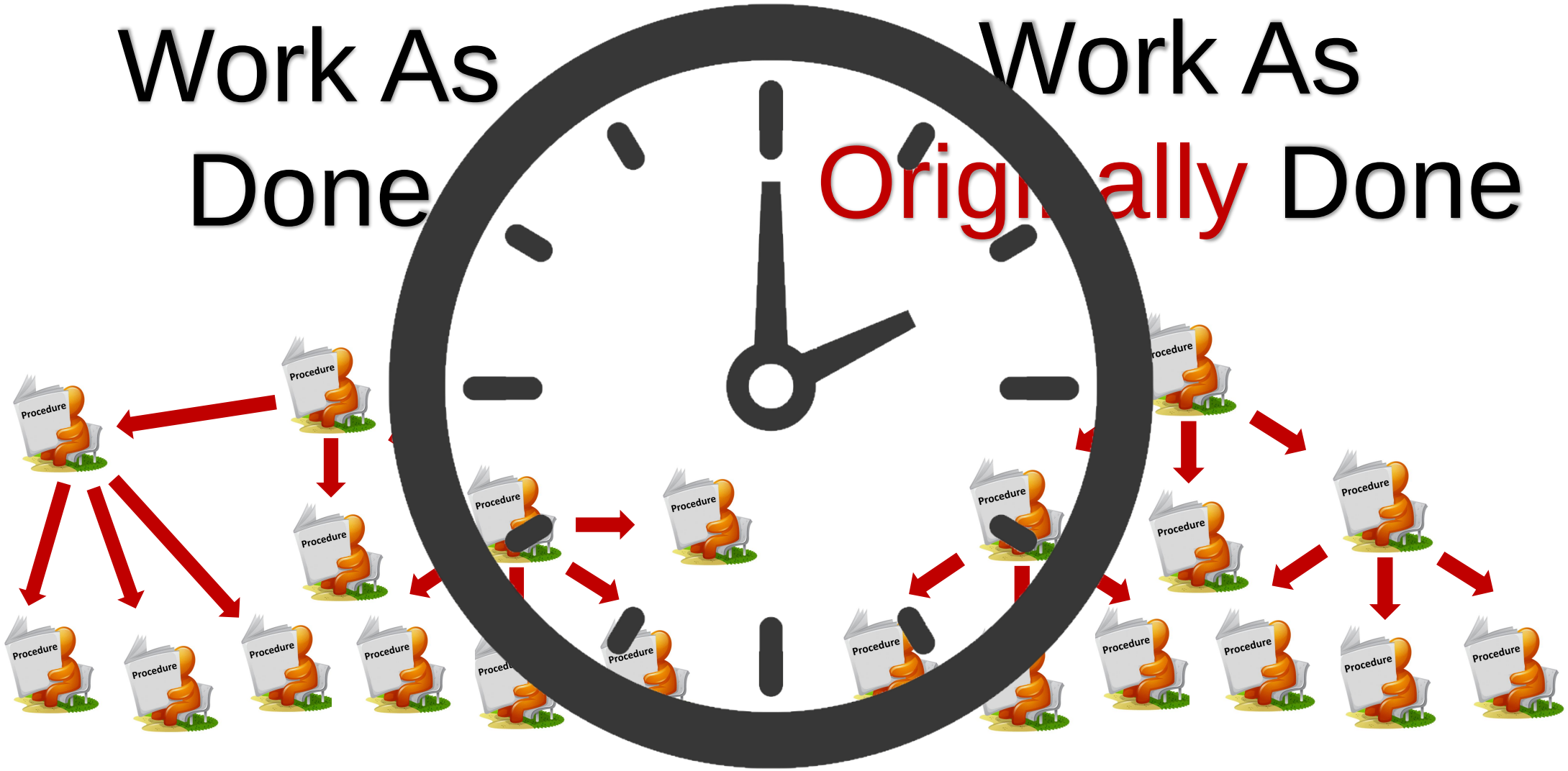
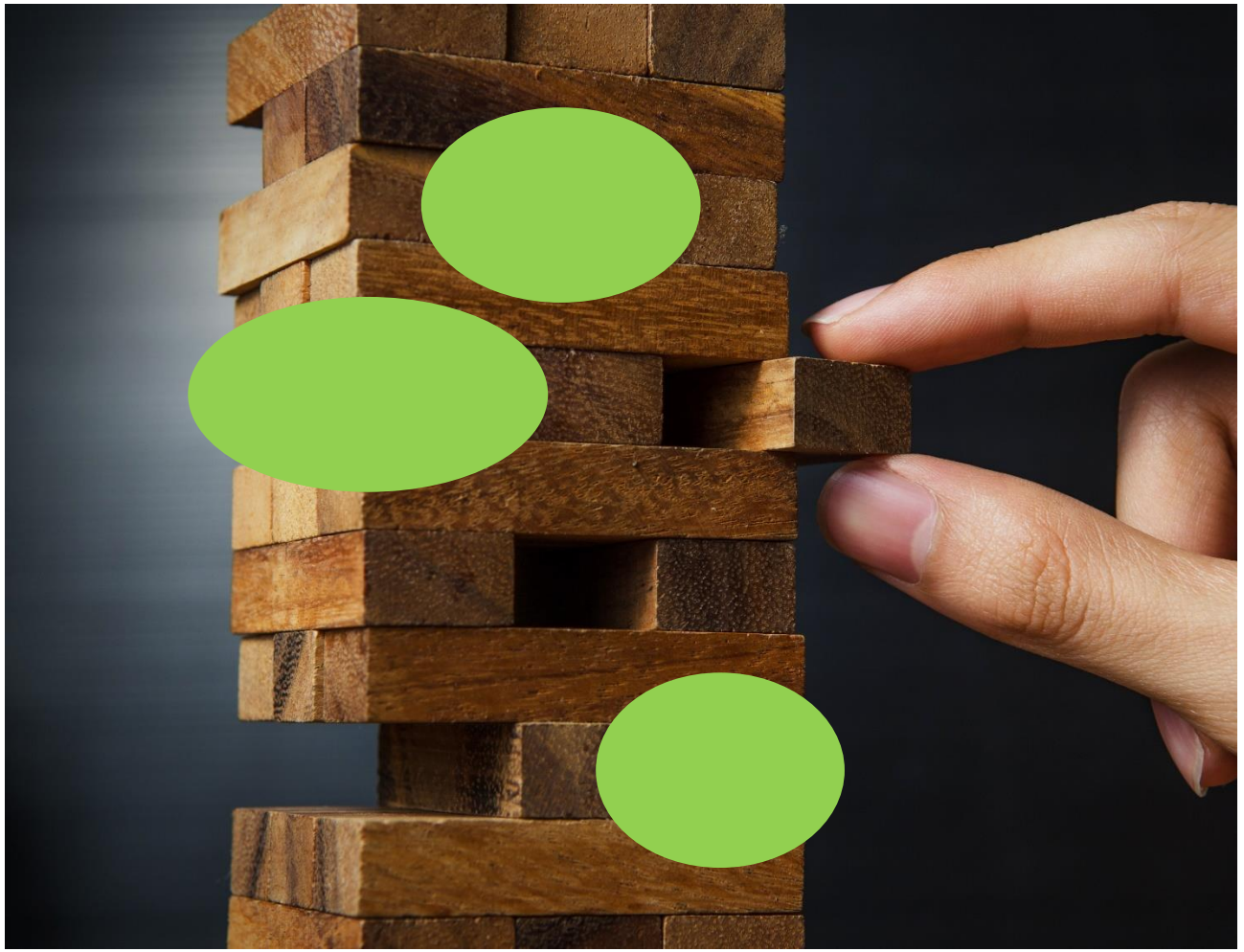
Work As Done

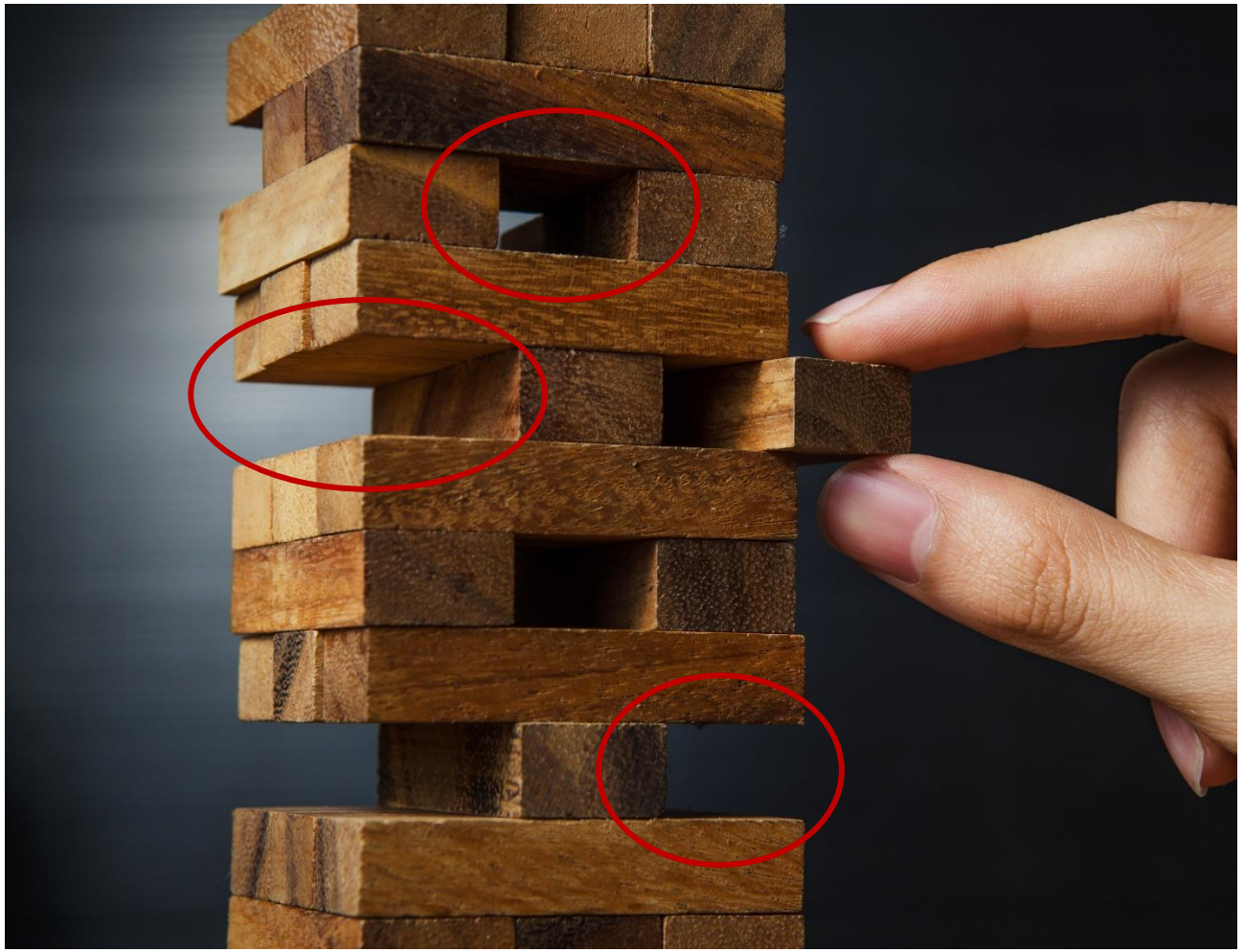
Work As Originally Done



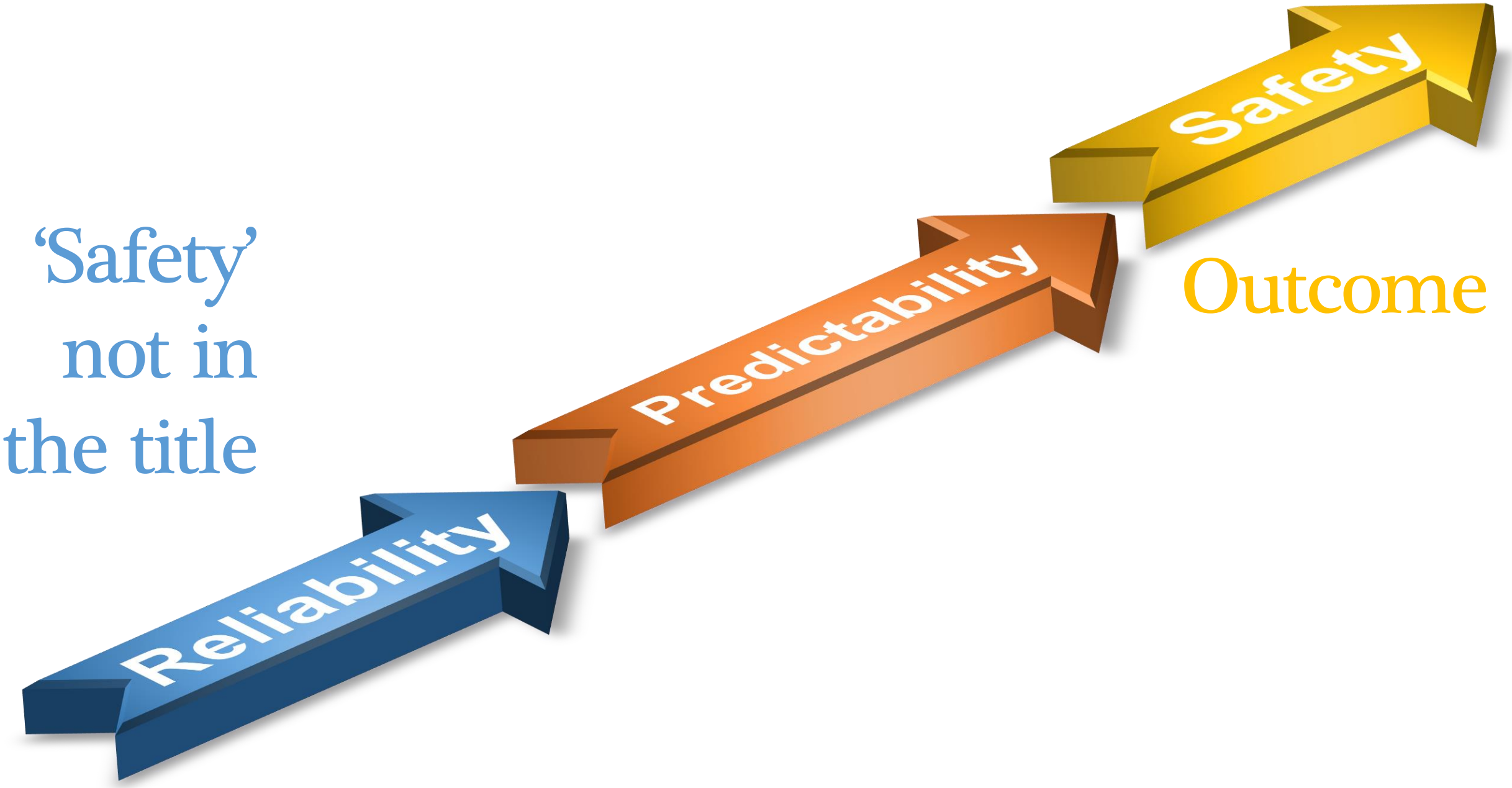
Going Badly: Hiding Holes.



Going Well: Identifying Holes.



‘Safety’ not in the title



Outcome

Rethinking
Safety
Brady Heywood.