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DECLUTTERING SAFETY

REPORT

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EXECUTIVE SUMMARY

This report presents a diagnostic model designed to help safety professionals and operational leaders identify, classify, and remove safety clutter. The model was developed by a Construction Safety Research Alliance (CSRA) team that included academic researchers and 28 safety professionals with a combined 445 years of experience. The model is based on input from in-depth interviews and focus groups, discussions with frontline workers, and field experiments at eleven construction sites. The model was independently validated by 16 safety professionals who applied the model to diagnose safety clutter in real safety activities within their own companies.

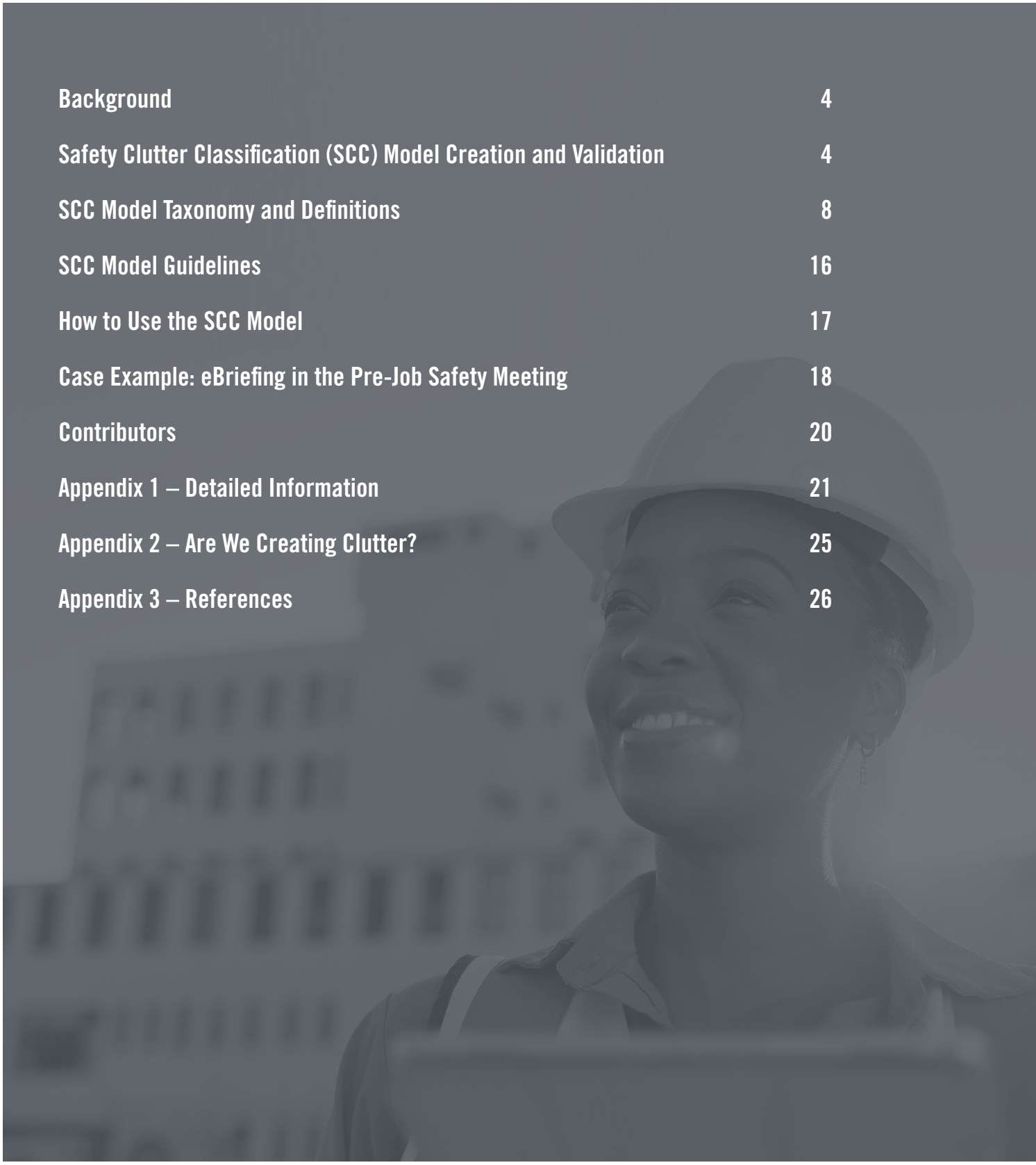
The Safety Clutter Classification (SCC) Model is grounded in the principles of Lean Production that focus on removing non-value-adding features of work and its structure mimics the logic of James Reason's human error model by pairing the type of clutter with its countermeasure.

The central aim of the SCC Model is not to remove activities; it is to remove the fundamental *features* of safety activities that waste time, attention, and resources that can be redirected to more value-adding efforts proven to prevent serious injuries and fatalities (SIFs).

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BACKGROUND

Safety clutter was originally defined by Rae et al. (2018) as "the accumulation of safety procedures, documents, roles and activities that are performed in the name of safety, but do not contribute to the safety of operational work." They argue that safety systems expand because new burdens are continually added while little is ever removed. The result is a thickening safety system that consumes increasing resources without delivering equal value to frontline operations (Lim et al. 2025).

At its core, safety clutter is not the activity itself but the way it is carried out. For example, safety orientations, pre-job briefs, and safety walks are critical activities but may become cluttered if they are repetitive, outdated, or noisy. Therefore, an activity in one firm may be cluttered because it is overcomplicated and messy, while in another it may add significant value because it is simple and streamlined.

Safety clutter can stunt progress in SIF prevention. Outdated tasks, inefficient processes, and overcomplicated procedures consume time and energy that pull attention from critical priorities. Clutter also generates frustration, which increases the risk of non-compliance and complacency. In the worst case, workers disengage from safety altogether, seeing it as an obstacle to their work rather than a protection against life-threatening harm. Removing waste in the safety system improves efficiency and allows people to focus on SIF prevention.

The concept of safety clutter can be understood through the following principles:

1

Safety clutter is an adjective, not a noun – it is a description or attribute of a safety activity, not the activity itself.

2

What seems like clutter in one organization may deliver value in another—the difference lies in how the activity is implemented.

3

Today's clutter was often yesterday's safety solution.

4

Safety clutter is easy to add, and difficult to remove.

5

The legacy of a SIF can be clutter when corrective actions yield blanket safety requirements.

SAFETY CLUTTER CLASSIFICATION (SCC) MODEL CREATION AND VALIDATION

To address safety clutter, we must first define how it manifests and explain how it can be diagnosed. To this end, we created the Safety Clutter Classification (SCC) Model.

The foundation of the SCC Model rests on two frames. First, Lean Principles from Ohno (2019) were leveraged to identify non-value-adding features of safety work. Second, the structure of James Reason's human error model (Reason 1990) was applied to ensure each diagnostic outcome is distinct and paired with a clear countermeasure.

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The SCC model was co-created by a team of academic researchers and 28 safety professionals with a combined 445 years of experience. A series of research steps were employed to create the model, as summarized in Figure 1 and discussed below.

First, structured brainstorming, interviews, focus groups, and Q-sort methodology were used to identify and organize common types of clutter that exist across industry sectors. The results provided an inventory of clutter from the perspective of safety leaders.

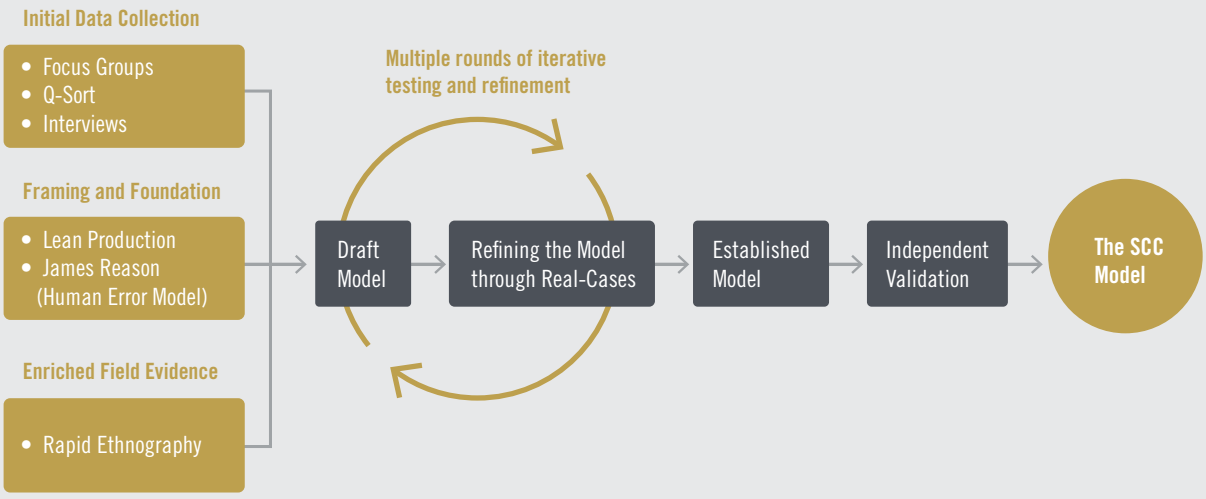
Second, to secure a rich evidence base from real worksites, rapid ethnography was undertaken at 11 construction sites. Field observation and informal interviews with front-line workers were deployed to identify sources of waste based on how safety activities are implemented in practice. These yielded tangible examples of clutter based on voices from the field.

Third, the research team used the data to draft the SCC Model and subjected it to multiple rounds of iterative testing and refinement. As real examples were passed through the model, the wording was clarified and clutter categories were added, removed, and reorganized. In each iteration of this test-and-revise process, the SCC Model stabilized in structure and language.

Finally, once the SCC Model was created and refined, observer-led validation was conducted where 16 safety professionals used the SCC Model to diagnose clutter in their safety activities. Since these reviewers were not involved in the creation of the SCC Model, their experiences were representative of the broader safety community. To ensure comparability, each reviewer examined clutter in one of four common safety activities: pre-job meetings, safety walks, incident reporting, or onboarding. While being observed by the lead researcher, the reviewers used the SCC Model to identify, classify, and respond to safety clutter. The researcher recorded the themes in these discussions and collected feedback on effectiveness and practicality of the Model. Overall, the reviewers reported confidence using the tool, stated that it surfaced the underlying problem, and helped them to identify at least one actionable countermeasure. This independent testing confirmed the SCC Model's usability and reliability.

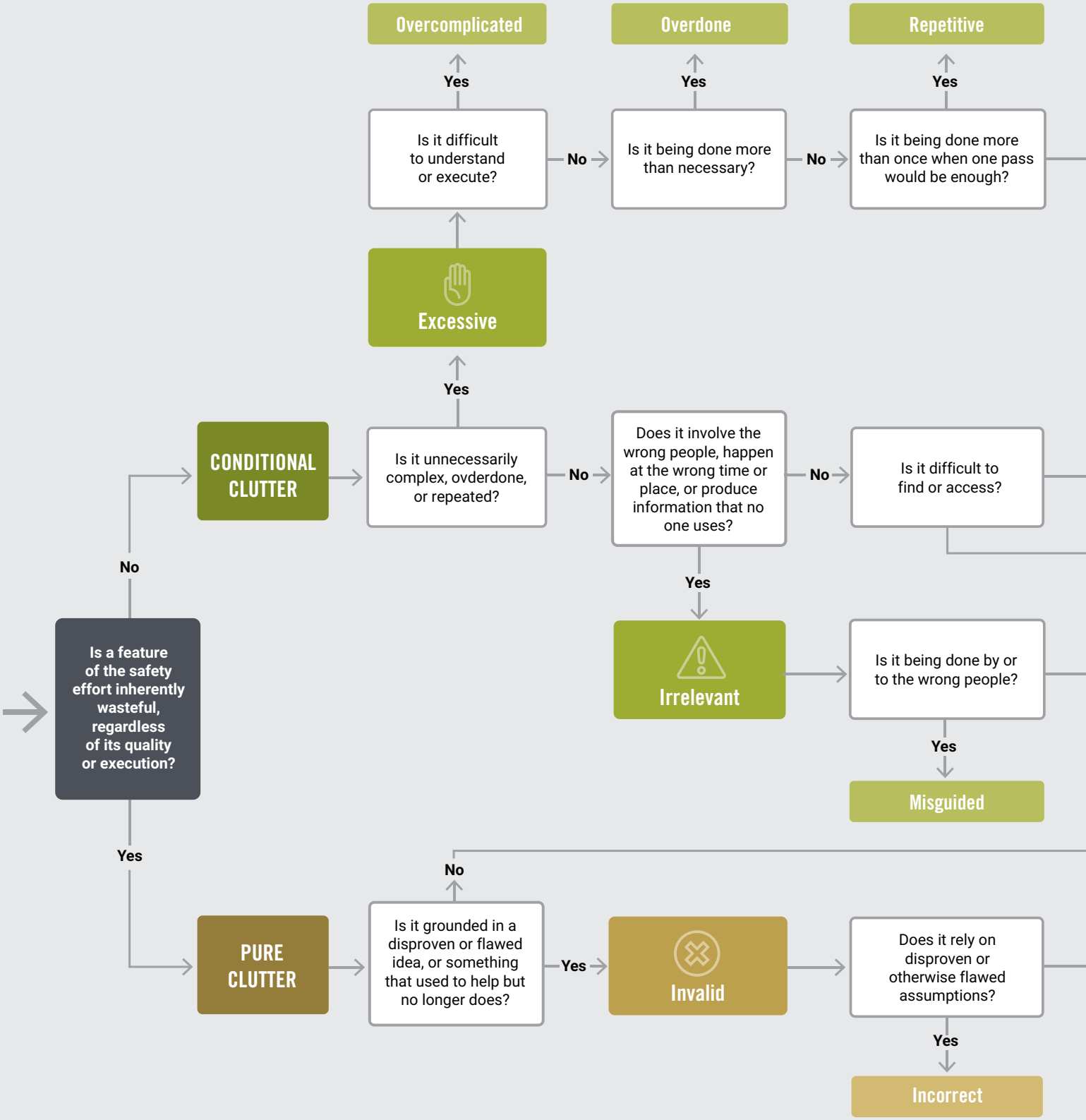
The final version of the model is shown in Figure 2. For each clutter type, a definition and case example is provided in Appendix 1. As part of the model's development, Appendix 2 was also created as a pre-implementation screening tool to evaluate new or proposed safety activities before they are introduced or rolled out.

Figure 1 | Model Creation, Refinement, and Testing Process

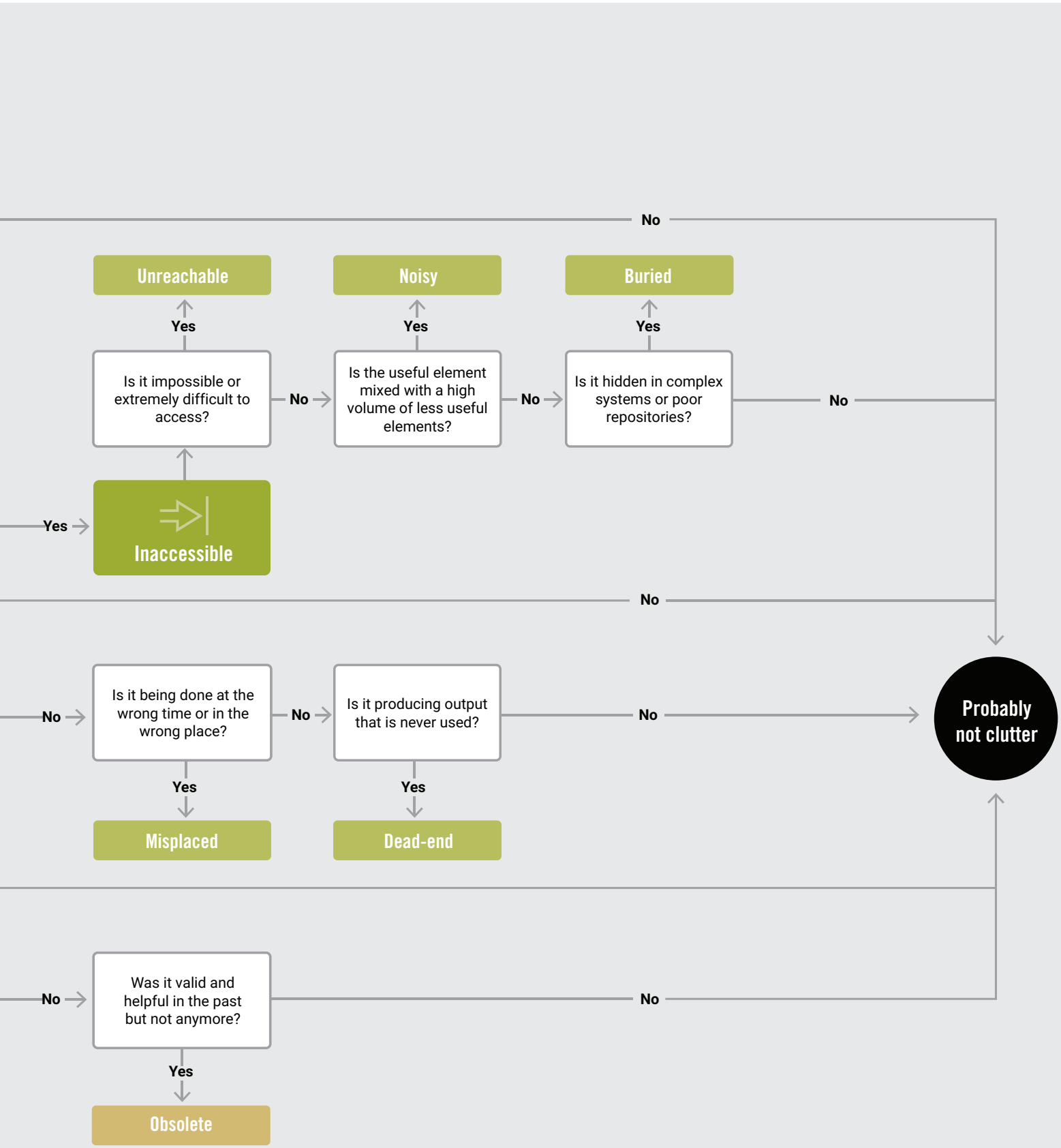


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Figure 2 | Safety Clutter Classification (SCC) Model



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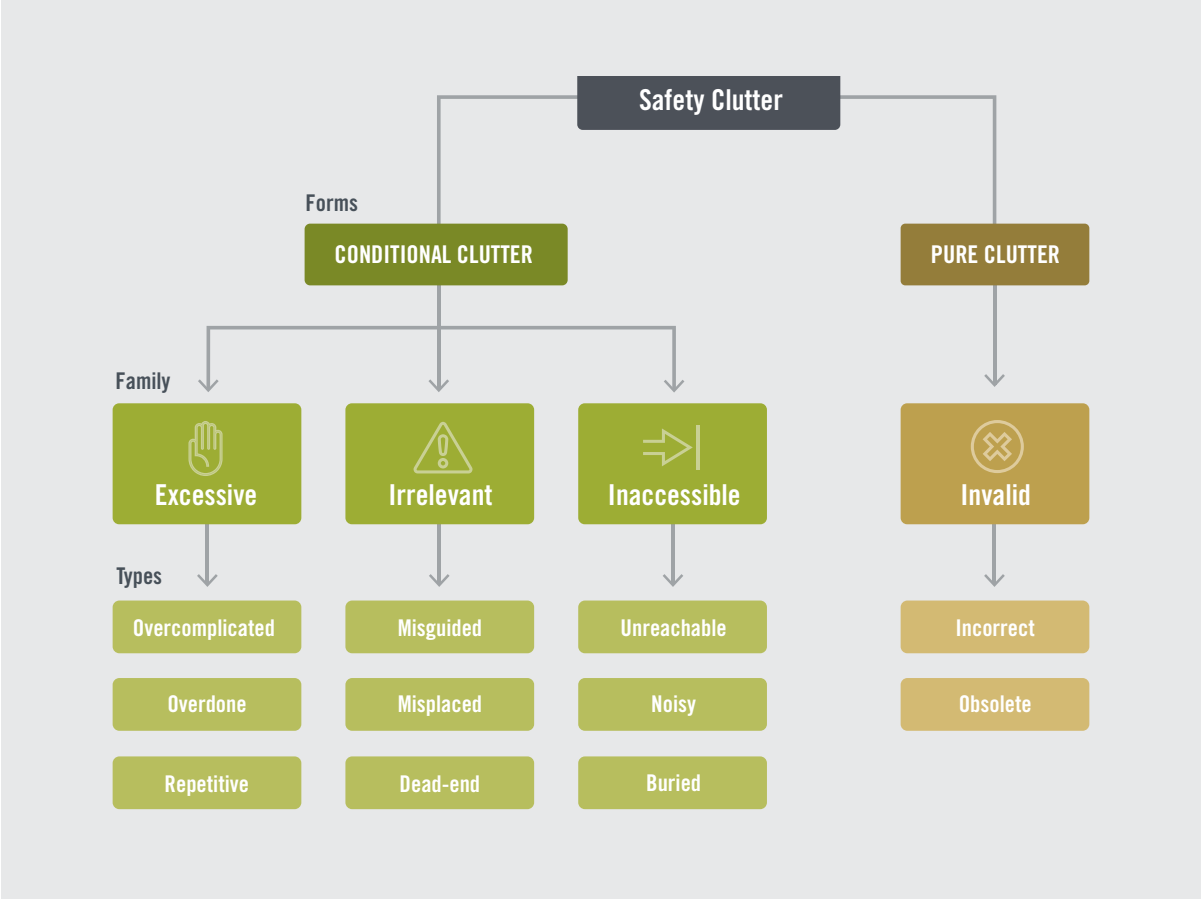


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SCC MODEL TAXONOMY AND DEFINITIONS

Within the SCC Model, safety clutter is a feature of a safety activity that consumes attention, effort, or resources without improving the safety of work. Safety clutter falls into two forms: features that are inherently irredeemable and should be removed, or those that can be corrected to restore value. Each of these forms has its own family and types. Figure 3 presents the classification scheme for safety clutter.

Figure 3 | SCC Taxonomy



The following section defines the forms, families, and types of clutter in the SCC Model. Each section includes a definition, an example from the field, a probing question aligned with the SCC Model (shown in Figure 2), and the relevant countermeasure.

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CONDITIONAL CLUTTER

1

Conditional clutter includes flaws in design, execution, timing, targeting, access, or output that render an otherwise useful activity unattractive or impractical. When those attributes are corrected, the same activity may shift from clutter to a state that adds greater value. Conditional clutter has three families: *Excessive*, which includes the types *Overcomplicated, Overdone*, and *Repetitive; Irrelevant*, which includes *Misguided, Misplaced*, and *Dead-end*; and *Inaccessible*, which includes *Unreachable, Noisy*, and *Buried*.

The following sections explain each family of Conditional Clutter and how it is represented in the SCC Model.

1.1. EXCESSIVE

The Excessive clutter family includes features that make an activity overcomplicated, overdone, or repetitive. Put simply, activities that are excessive feel more difficult than necessary and go beyond what is needed to be effective.

To determine if an activity may be in the **Excessive** family, ask:
Is it unnecessarily complex, overdone, or repeated?

The Excessive family is divided into the following three types:

1.1.1. Overcomplicated

An activity is overcomplicated when it has features that make it unnecessarily difficult to understand, follow, or carry out. This can include complex wording or jargon, confusing workflows, numerous branching steps, and multi-screen navigation. For example, an online Job Hazard Analysis (JHA) may require multiple logins, include repeated details across screens, or force users through long dropdown lists.

To determine if an activity may be **Overcomplicated**, ask: *Is it difficult to understand or execute?*

COUNTERMEASURE: Activities should be simplified and streamlined. Remove unnecessary steps, consolidate forms or screens, use plain language, and apply user-centered design principles. Pilot the process with frontline workers to ensure that it is intuitive and practical.

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1.1.2. Overdone

An activity is overdone when it is carried out or produced in excess, where each additional step or output yields little or no benefit. This can mean doing something too often (frequency) or producing too much output (volume). Examples include extra approvals, fields, narratives, or outputs that do not improve outcomes. For example, a hot-work permit may be routed to four departments for signatures even though only the area owner has relevant oversight. As a result, permits queue for hours and supervisors chase confirmations that never affect the go/no-go decision.

To determine if an activity may be **Overdone**, ask: *Is it being done more than necessary?*

COUNTERMEASURE: Activities should be reduced in frequency and/or volume. Eliminate extraneous approvals, reduce unnecessary reporting, set thresholds for when review or documentation is truly needed, and automate routine checks that add little insight.

1.1.3. Repetitive

An activity is repetitive when work is done more than once unnecessarily, either on its own or as part of another activity, after full value has already been delivered. This often shows up as duplicate data entry across systems, parallel reports that restate identical facts, or meetings that cover the same ground. For example, the same near miss may be recorded twice in different templates (client and contractor). Another example is completing a dropped-object planning form and then a separate harness-use form, even though both are already documented in the JHA.

To determine if an activity may be **Repetitive**, ask: *Is it being done more than once when one pass would be enough?*

COUNTERMEASURE: Activities should be integrated and centralized. Combine duplicate systems or forms, enable single data entry with automatic propagation across platforms, and coordinate client–contractor reporting so the same information is not collected twice.

1.2. IRRELEVANT

The Irrelevant clutter family arises when the context, delivery, use, or flow makes a safety activity meaningless or disconnected from its purpose. This occurs when the wrong people are involved, the activity happens at the wrong time or place, or it produces information no one uses.

To determine if an activity may be in the **Irrelevant** family, ask:
Does it involve the wrong people, happen at the wrong time or place, or produce information no one uses?

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The Irrelevant family is divided into the following three types:

1.2.1. Misguided

An activity is misguided when safety information or tasks are assigned to the wrong people or delivered by the wrong people. For example, a general orientation might include rigging and lifting content for office administrators who will never perform those tasks, or toolbox talks may be led by someone who has never done the task themselves.

To determine if an activity may be **Misguided**, ask: *Is it being done by or delivered to the wrong people?*

COUNTERMEASURE: Activities should be reassigned and tailored to those who perform or supervise the task. Align safety content with the work performed, ensure facilitators have relevant experience, and adapt materials to each audience.

1.2.2. Misplaced

An activity is misplaced when it is carried out at the wrong time or in the wrong place. For example, training may be delivered too early to retain, too late to influence a decision, or confined to a subject that is not relevant to the work. Another common example is completing a pre-job meeting in the trailer, away from the work area, long before the work begins.

To determine if an activity may be **Misplaced**, ask: *Is it being done at the wrong time or in the wrong place?*

COUNTERMEASURE: Activities should be relocated and retimed to occur where and when they add the most value. Deliver activities at the point of use (on site, before key decisions, or within active workflows) so that information influences action.



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1.2.3. Dead-end

An activity has a dead-end when production effort has no consumer or when the results are not read, discussed, or used to inform action. For example, near-miss reports may be submitted in high volume each quarter, yet dashboards go unopened, entries are never reviewed, and no corrective actions are logged. Another example is a generic safety plan that sits in the system but is rarely used in planning or supervision.

To determine if an activity may be a **Dead-End**, ask: *Is it producing output that is never used?*

COUNTERMEASURE: Activities should be linked to consumption and feedback loops that generate insight. Identify who uses the outputs and how they inform decisions, remove unused reporting streams, and automate summaries that trigger review, discussion, and corrective action.

1.3. INACCESSIBLE

Inaccessible clutter occurs when a safety activity has relevant information that is unreachable, in a noisy environment, or is buried in complex systems. Waste arises in the process of reaching information in the activity rather than in the activity itself.

To determine if an activity may be in the **Inaccessible** family, ask: *Is it difficult to find or access?*

The Inaccessible family is divided into the following three types:

1.3.1. Unreachable

An activity is unreachable when obstacles make its value extremely difficult to access. Practical barriers include broken links, restricted permissions, weak connectivity, or lack of an offline mode. For example, a safety observation system may sit behind application permissions where weak internet connectivity causes links to fail and limits access on site. Another example is a system that frequently fails to upload documents or reports, forcing users to repeat the entire process.

To determine if an activity may be **Unreachable**, ask: *Is it impossible or extremely difficult to access?*

COUNTERMEASURE: Activities should be made accessible through improved pathways. Fix broken links, widen permissions, add offline functionality, and test accessibility under real field conditions before rollout.

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1.3.2. Noisy

An activity is noisy when useful information is crowded by too much irrelevant information, making it harder to notice, prioritize, or act upon what is important. For example, a pre-job form may contain dozens of low-value fields and checkboxes that drown out attention to serious risks or meaningful inputs. Another example is a weekly safety update filled with generic corporate information that crowds important safety content.

To determine if an activity may be **Noisy**, ask: *Is a useful element mixed with far less useful information?*

COUNTERMEASURE: Activities should prioritize and distinguish high-value content from less valuable information. Limit low-impact fields and checkboxes, highlight serious hazards, and ensure that essential information stands out from the background noise

1.3.3. Buried

An activity is buried when its output is hidden deep within a complex or poorly organized system, making it difficult to find or use. This often happens when indexing, structure, or search functions are weak. For example, lessons learned may be stored as quarterly PDF compilations without bookmarks or tags, where searches return hundreds of hits and users often abandon the task. Another example is when a good catch is submitted through an online system, but the responsible person is never notified.

To determine if an activity may be **Buried**, ask: *Is it hidden in complex systems or poor repositories?*

COUNTERMEASURE: Activities should be corrected by reorganizing and surfacing critical information. Improve indexing and search functions, apply consistent tagging and categorization, and create dashboards or notifications that direct users to the most relevant content.

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2 PURE CLUTTER

Pure Clutter is inherently wasteful and does not add value under any circumstance; regardless of how it is delivered or executed. In the SCC Model, Pure Clutter has one family (*Invalid*) with two types: *Incorrect* and *Obsolete*.

2.1. INVALID

The Invalid clutter family refers to features that are incorrect or obsolete because they lack foundation in fact, logic, or law. This family arises when a safety effort rests on disproven or flawed assumptions that render it incorrect, or when it consists of practices that were once effective but are now outdated.

To determine if an activity may be in the **Invalid** family, ask: *Is it grounded in a disproven or flawed idea, or once a useful practice that no longer helps?*

This family of clutter is divided into the following types:

2.1.1. Incorrect: Relies on disproven or otherwise flawed assumptions.

An activity is incorrect when it is based on incorrect assumptions that have been disproven with evidence. For example, many companies continue to use Total Recordable Injury Rate (TRIR) to represent safety performance, yet research shows that TRIR is not predictive and has no statistical association with fatality rates (Hallowell et al., 2021). Thus, using TRIR to make business decisions such as contractor pre-qualification is clutter because it rests on a faulty assumption. Other examples of incorrect clutter include one-size-fits-all corrective actions, using the "Accident Pyramid" to design safety programs, and punitive safety stand-downs.

To determine if an activity may be **Incorrect**, ask: *Does it rely on disproven or otherwise flawed assumptions?*

COUNTERMEASURE: Activities based on incorrect assumptions must be eliminated and replaced with evidence-based practices.

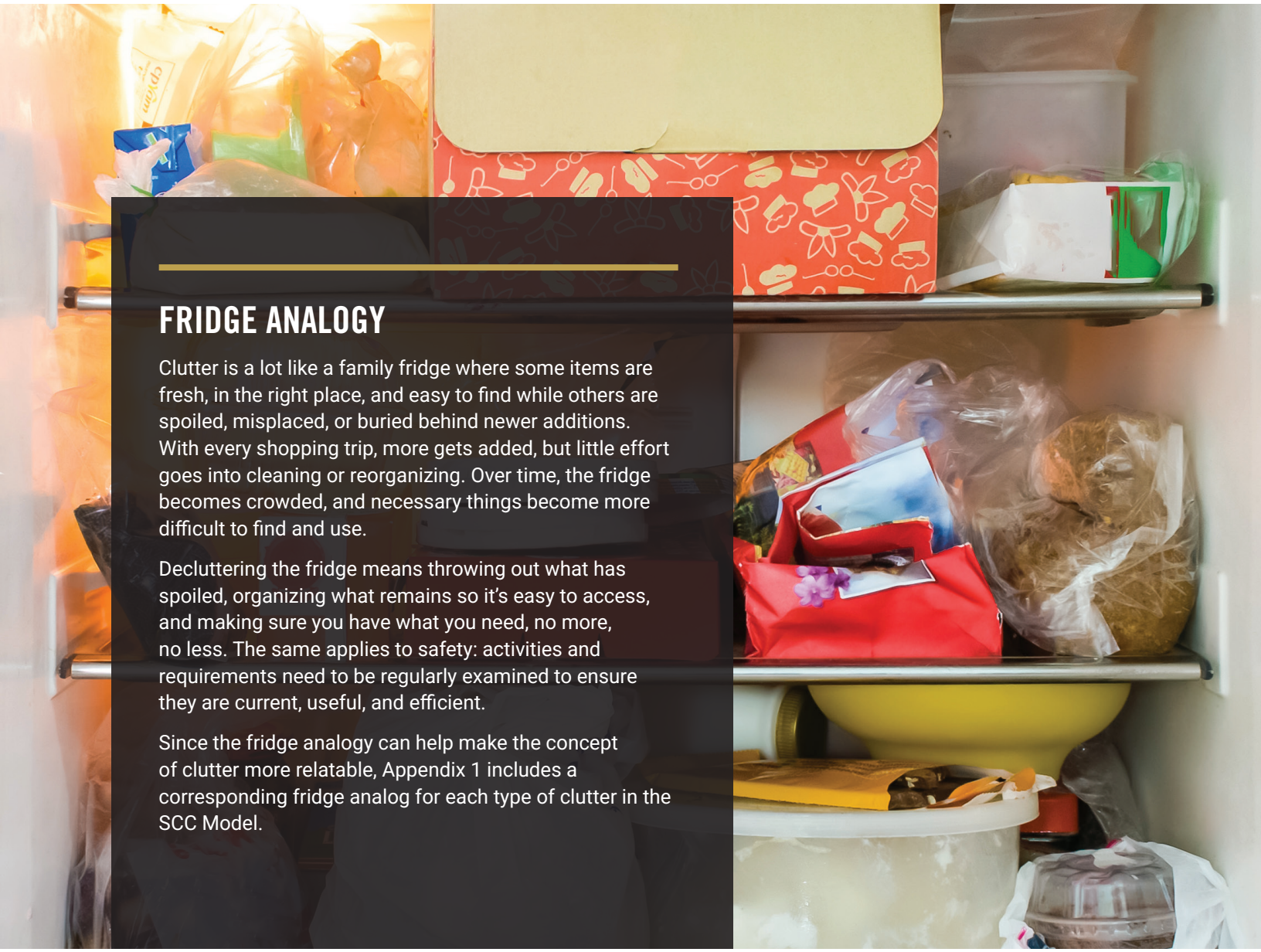
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2.1.2. Obsolete

An activity is obsolete when it reflects legacy practices that persist out of habit even after the context, technology, or methods have moved on. For example, onboarding training may include content that is no longer relevant to current roles, tasks, or risks but is still delivered out of routine.

> To determine if an activity may be **Obsolete**, ask: *Was it valid and helpful in the past but not anymore?*

COUNTERMEASURE: Activities must be modernized and refreshed. Review legacy practices regularly, retire outdated content, and redesign training, checklists, or procedures to reflect current work conditions, technologies, and risks.



FRIDGE ANALOGY

Clutter is a lot like a family fridge where some items are fresh, in the right place, and easy to find while others are spoiled, misplaced, or buried behind newer additions. With every shopping trip, more gets added, but little effort goes into cleaning or reorganizing. Over time, the fridge becomes crowded, and necessary things become more difficult to find and use.

Decluttering the fridge means throwing out what has spoiled, organizing what remains so it's easy to access, and making sure you have what you need, no more, no less. The same applies to safety: activities and requirements need to be regularly examined to ensure they are current, useful, and efficient.

Since the fridge analogy can help make the concept of clutter more relatable, Appendix 1 includes a corresponding fridge analog for each type of clutter in the SCC Model.

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SCC MODEL GUIDELINES

To govern use of the SCC Model, the team established a set of guidelines that ensure consistent classifications and practical actions.



1 Operate within regulatory requirements

This initial study did not seek to challenge regulatory requirements. Although regulations can certainly create clutter, compliance was considered non-negotiable, which maintained focus on clutter under the control of clients and contractors. When multiple compliant options exist, the approach that meets the obligation with the greatest effectiveness and least safety clutter should be selected. The team recommends verifying precise requirements first and reducing clutter within those constraints.

2 Distinguish clutter from performance issues

The SCC Model evaluates the fundamental features of a safety activity such as design, placement, timing, targeting, and accessibility. By contrast, performance issues such as delivery quality, facilitation skill, tone, or enforcement style fall outside the scope of the model. For example, a safety meeting that is well-designed but poorly facilitated reflects a performance issue, not clutter. In the SCC Model, "misguided" refers to targeting the wrong audience or delivery by the wrong person. It does not refer to weak or ineffective delivery by a qualified person. Further guidance on this distinction is provided in the *How to Use the SCC Model* and *Taxonomy* sections of this report.

3 Distinguish clutter from the inherent value of an activity

This study focused on safety clutter but did not examine the inherent value of safety activities themselves. Even perfectly "decluttered" activities would deliver different value toward SIF prevention. Therefore, the SCC Model does not assess whether an activity is inherently valuable; it evaluates whether specific features such as design, timing, or placement create waste. Assessing the return on investment (ROI) of an activity is recommended once it is decluttered, so the assessment of inherent value is based on the most efficient possible version.

4 Consider context when evaluating clutter

Clutter is context dependent. The same element may be clutter in one setting and not clutter in another. Furthermore, different stakeholders may experience different forms of waste from the same element. For example, a field team may spend excessive time submitting observations due to a complex application (clutter for the data submitters), while the receiving team may experience clutter from repetition, low-value entries, or poorly organized repositories (clutter for the data users). Classification should begin by defining the specific context under review, such as who uses the element, where and when it runs, and relevant constraints. Documenting context makes clear why an element may be "clutter" in one case and "not clutter" in another.

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HOW TO USE THE SCC MODEL

Using the SCC Model begins by clarifying the exact features of a safety activity that feel wasteful. Signs of waste might include someone losing time, something taking up excessive space, or a process that causes frustration. For example, a form may feel extraordinarily cumbersome and challenging, which may prompt application of the SCC Model.



Step 1: Define the activity and its features

Analyze safety activities at the feature level, not as a single unit. Decompose the activity into functional parts (for example: preparation, discussion, documentation, outputs). Then, for each activity, list the specific features that may be wasteful and briefly note the mechanism of waste (for example, duplication, low information value, misalignment with risk, usability burden). This produces the input needed to diagnose clutter.

Step 2: Determine whether the feature is Pure or Conditional clutter

Evaluate one feature at a time, using the prompts in Figure 2 from left to right. If the answer to the first question is yes, follow the Pure branch and plan for removal. If the answer is no, follow the Conditional branch and prepare to revise the activity.

Step 3: Classify the clutter type

For the same single feature, proceed through the remaining questions until you reach a clear classification. When you reach a decision other than "not clutter," stop and record it. Refer to the SCC Model taxonomy for definitions.

Step 4: Apply a targeted countermeasure to remove the clutter feature

Implement a countermeasure that eliminates or reduces the mechanism of waste for the diagnosed feature. For Pure clutter, remove or retire the activity and replace it with an evidence-based alternative. For Conditional clutter, select a focused fix such as simplifying steps, right-sizing frequency, integrating duplicate inputs, retiming or relocating to the point of use, assigning to the correct role, improving access, reducing noise, or surfacing buried outputs. Record the owner, success criteria, and due date of the decluttering action.

Step 5: Iterate within the same activity

Assume the countermeasure for the first feature is in place and return to Step 2 to evaluate the next feature of the activity. Repeat Steps 2 through 4 until all features of that activity have been examined and addressed.

Step 6: Move to the next activity

When all features of the safety activity have been diagnosed and countermeasures identified, proceed to the next activity identified in Step 1 and repeat Steps 2 through 5. Continue until every activity has been assessed and addressed.

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CASE EXAMPLE:

eBriefing in the Pre-Job Safety Meeting



Below is a description of a safety activity as observed in practice before any decluttering was performed. The case illustrates the decluttering process described above.

The eBriefing is part of the daily pre-job safety meeting. Its purpose is to review the planned work, identify hazards, agree on controls, and address relevant issues before the task begins. All workers involved in the job attend, and the crew leader completes the eBrief on behalf of the team, obtains signatures, and submits the form electronically. The meeting occurs once per day, immediately before work begins.

The eBrief is delivered through an online application that structures the discussion and records outcomes. However, several design and functional issues have reduced its efficiency and perceived value. Some sections are irrelevant to certain tasks but must be completed to progress, and the system lacks a save function, requiring the form to be finished in a single session. The application also depends on a strong Wi-Fi connection and often fails to upload, forcing users to re-enter data. These issues create frustration and rework, which are clear indications of waste that justify analysis using the SCC Model.

Step 1: Define the activity and its features

Rather than analyzing the entire pre-job process, focus on the elements that reduce value.

From the description, two distinct features are identified for analysis, each treated as an independent iteration through the SCC Model:

1. Content/Design — irrelevant mandatory fields, lack of save-and-resume, forced progression through non-applicable sections.
2. Delivery/Accessibility — unreliable connectivity and failed uploads that require repeated entry.

Step 2: Determine whether the feature is Pure or Conditional clutter

The eBrief is not inherently wasteful; it supports the control of high-energy hazards. The problems arise from its current implementation. Since none of the features are inherently invalid, the features are classified as Conditional clutter, where value depends on execution.

Step 3: Classify the clutter type (first iteration)

Begin with the first feature, Content/Design, and pass it through the SCC Model. Within the Conditional branch, the relevant family is Excessive clutter, which includes activities that are overcomplicated, overdone, or repetitive.

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Evidence indicates that this feature is **Overcomplicated** because:

- Mandatory fields irrelevant to the task add cognitive load and frustration.
- The absence of a save-progress function causes rework after upload failures.
- Completion time exceeds the prior paper-based process, delaying work.



Step 4: Apply a targeted countermeasure to remove the clutter feature

For the Overcomplicated feature, simplify and streamline the eBrief. Remove non-essential or task-irrelevant fields, enable save-and-resume capability, and pilot revisions with field personnel. Use plain language, intuitive navigation, and role-specific forms to reduce cognitive effort and improve usability.

Step 5: Iterate within the same activity (second feature)

Assume the countermeasures for the Content/Design feature is in place, then move to the next feature of the same activity, Delivery/Accessibility. Passing this feature through the model identifies the relevant family as Inaccessible clutter.

Evidence indicates that this feature is **Unreachable** because:

- The application requires a strong Wi-Fi signal and is incompatible with portable hotspots.
- Uploads fail even under good conditions, forcing repeated entry and wasted time.



Countermeasure: Improve access pathways by adding offline data capture with local caching and automatic upload once connectivity resumes. Optimize the application for low-bandwidth environments and verify performance under field conditions before deployment.

Step 6: Move to the next activity

After implementing countermeasures for the eBriefing, proceed to the next activity in the pre-job process and repeat Steps 2–5. Subsequent analyses could include signature collection, meeting facilitation, or the downstream use of completed briefs.

Contextual considerations

This case demonstrates that each clutter feature should be analyzed independently, as each has unique causes and countermeasures. The analysis presented reflects the crew leader's experience during field use. Other stakeholders such as supervisors or analysts reviewing completed eBriefs may encounter different clutter characteristics or none. Decluttering should therefore involve all user groups to ensure balanced improvement and sustainable system design.

Summary of Findings

The eBriefing activity displayed two forms of Conditional clutter from the crew leader's perspective: Overcomplicated design and Unreachable access. The corresponding countermeasures, simplifying the form structure, removing nonessential fields, adding save-and-resume functionality, and enabling offline access, directly address the mechanisms of waste. After decluttering, the eBriefing is likely to be faster, more intuitive, and less prone to connectivity failures. Field personnel will complete the briefing with minimal frustration, allowing the discussion to focus on hazards and controls rather than on navigating technology.

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*Team leaders

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APPENDIX 1 – DETAILED INFORMATION

Table 1A | Excessive Clutter Family

Excessive — *"going beyond what is necessary to be effective"*	
Overcomplicated	**Definition:** Unnecessarily difficult to understand, follow, or carry out. **Empirical Example:** Online JHA takes 45 minutes to complete because of a complex technological design. **Fridge Analogy:** A grocery list taped to the fridge, crammed with fine print, footnotes, color codes, and arrows—so complex no one wants to use it. **Cues / Notes:** Activity that contains complex attributes such as complicated wording or jargon, difficult flow, or numerous branching steps that waste time. **Countermeasure:** Activities should be simplified and streamlined. Remove unnecessary steps, consolidate forms or screens, use plain language, and apply user-centered design principles. Pilot the process with frontline workers to ensure that it is intuitive and practical.
Overdone	**Definition:** Carried out or produced in excess, where each additional occurrence provides little or no benefit. **Empirical Example:** A single work permit requires four signatures from different departments—even when only one has relevant oversight. **Fridge Analogy:** A **s**andwich wrapped in foil, then plastic, and placed in a Tupperware container. **Cues / Notes:** Excessive in volume or frequency: details, steps, or outputs that are wasteful and add no value. **Countermeasure:** Activities should be reduced in frequency and/or volume. Eliminate extraneous approvals, reduce unnecessary reporting, set thresholds for when review or documentation is truly needed, and automate routine checks that add no insight.
Repetitive	**Definition:** Done more than once unnecessarily, by itself or through another action, after full value has already been delivered. Empirical Example: A crew attends a weekly safety meeting, a daily briefing, and a start-of-shift huddle that all cover the same key points. **Fridge Analogy:** Three large bottles of ketchup in the fridge when one would suffice. **Cues / Notes:** Performed or produced more than once, with the second iteration entirely redundant. **Countermeasure:** Activities should be integrated and centralized. Combine duplicate systems or forms, enable single data entry with automatic propagation across platforms, and coordinate client–contractor reporting so the same information is not collected twice.

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Table 1B | Irrelevant Clutter Family

Irrelevant — *"not having anything to do with the matter at hand"*	
Misguided	**Definition:** Carried out by the wrong people or delivered to the wrong people. **Empirical Example:** Safety orientations that include content unrelated to the attendee's role. **Fridge Analogy:** A gluten-free pizza stored in the fridge, even though nobody in the house needs a gluten-free diet. **Cues / Notes:** Led by, or delivered to, people outside the intended scope. **Countermeasure:** Activities should be reassigned and tailored to those who perform or supervise the task. Align safety content with the work performed, ensure facilitators have relevant experience, and adapt materials to each audience.
Misplaced	**Definition:** Carried out in the wrong place or at the wrong time. **Empirical Example:** Onboarding includes advanced training on the first day, long before it is needed. **Fridge Analogy:** Ice cream in the crisper drawer or eggs in the freezer. **Cues / Notes:** Wrong time: Performed at an unsuitable time. Wrong place: Delivered in an unsuitable location. **Countermeasure:** Activities should be relocated and retimed to occur where and when they add the most value. Deliver activities at the point of use (on site, before key decisions, or within active workflows) so that information influences action.
Dead-end	**Definition:** Performed correctly but goes unused—producing minimal decisions, learning, or value. **Empirical Example:** Submitting hundreds of near-miss reports that no one reviews, discusses, or acts upon. **Fridge Analogy:** Leftovers placed in the fridge, never eaten—just taking up space until they're thrown out. **Cues / Notes:** Rarely or never used, read, or referenced in any way. **Countermeasure:** Activities should be linked to consumption and feedback loops. Identify who uses the outputs and how they inform decisions, remove unused reporting streams, and automate summaries that trigger review, discussion, and corrective action.

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Table 1C | Inaccessible Clutter Family

Inaccessible — *"difficult to obtain, have, or use"*	
Unreachable	**Definition:** Burdened by obstacles that make it (or its value) extremely hard to access or realize. **Empirical Example:** Critical safety procedures or lessons learned stored in a SharePoint folder with broken links, restricted access, or buried five layers deep in subfolders. **Fridge Analogy:** Juice hidden behind a giant watermelon; technically there, but you have to remove a bunch of things to get to it. **Cues / Notes:** There is a stubborn barrier such as technological, procedural, or situational that makes an element difficult to deliver or access. **Countermeasure:** Activities should be made accessible through improved pathways. Fix broken links, widen permissions, add offline functionality, and test accessibility under real field conditions before rollout.
Noisy	**Definition:** Shares space with too much irrelevant information, making it harder to notice, prioritize, or act upon. **Empirical Example:** Pre-job briefs or observation forms overloaded with low-value fields and checkboxes, making it harder to focus on serious risks or meaningful input. **Fridge Analogy:** Butter tucked behind jars of rarely used condiments. **Cues / Notes:** Safety content mixed with other items. Or, critical safety element flooded with non-critical ones. **Countermeasure:** Activities should be decluttered by prioritizing high-value content and removing distractions. Limit low-impact fields and checkboxes, highlight serious hazards, and ensure that essential information stands out from the background noise.
Buried	**Definition:** Hidden deep within a complex or poorly organized system, making it hard to find or use. **Empirical Example:** Lessons learned stored in long PDFs with no indexing or search functions. **Fridge Analogy:** Coffee creamer you use for daily coffee tucked in the far-right corner. **Cues / Notes:** The item lives in the system, but nothing points to it and retrieving it is painfully slow. **Countermeasure:** Activities should be corrected by reorganizing and surfacing critical information. Improve indexing and search functions, apply consistent tagging and categorization, and create dashboards or notifications that direct users to the most relevant content.

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Table 1D | Invalid Clutter Family

Invalid — *"not valid: being without foundation or force in fact, truth, or law"*	
Obsolete	**Definition:** Previously effective but now outdated and still used despite being replaced by better options. **Empirical Example:** Onboarding training includes outdated content no longer relevant to current roles, tasks, or risks—but is still delivered out of habit. **Fridge Analogy:** Expired milk. **Cues / Notes:** Retired or replaced items retained in the system. **Countermeasure:** Activities must be modernized and refreshed. Review legacy practices regularly, retire outdated content, and redesign training, checklists, or procedures to reflect current work conditions, technologies, and risks.
Incorrect	**Definition:** Relies on disproven or otherwise flawed assumptions to justify its effectiveness. **Empirical Examples:** Using TRIR to measure and communicate the safety performance of a project. **Fridge Analogy:** Putting raw onions or bread in the fridge (people do it to preserve it, but it actually makes it spoil or go stale even faster). **Cues / Notes:** No recognized evidence or standard backs the activity. Built on assumptions now known to be false. **Countermeasure:** Activities must be eliminated and replaced with evidence-based practices. Discontinue efforts grounded in disproven assumptions such as using TRIR as a performance indicator and replace them with validated, predictive measures.

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APPENDIX 2 – ARE WE CREATING CLUTTER?

How to Use This Tool

Before implementing or revising any safety process, spend a few minutes running through these questions. If you answer yes to any of them, reconsider the design, purpose, or frequency of the activity. Decluttering early prevents frustration, saves time, and keeps attention focused where it matters most: controlling high energy and preventing SIFs.

Quick Questions to Keep Your Safety System Lean and Effective

Every new safety form, meeting, or process adds to the system. Some additions strengthen safety, while others unintentionally create clutter that consumes time without adding value. The questions below, drawn from the Safety Clutter Classification (SCC) Model, are designed to help teams identify potential clutter before it enters the system.

Ask these questions whenever you are designing, revising, or approving a safety activity.



Excessive Clutter – Doing More Than Necessary

- **Overcomplicated:** Will it be difficult to understand, navigate, or execute?
- **Overdone:** Will it be carried out more often or in greater detail than necessary?
- **Repetitive:** Will people end up doing the same thing twice in different places or formats?



Irrelevant Clutter – Missing the Mark

- **Misguided:** Will the wrong people create, receive, or lead it?
- **Misplaced:** Will it occur at a time or place where it will not be effective?
- **Dead-end:** Will it produce outputs that no one will read, review, or use to make decisions?



Inaccessible Clutter – Hard to Reach or Use

- **Unreachable:** Will access to it be hindered by broken links, permissions, or connectivity issues?
- **Noisy:** Will it be buried among irrelevant details?
- **Buried:** Will it be hidden deep within systems or repositories where it would not be found?



Pure Clutter – No Longer Valid or Never Was

- **Incorrect:** Will it be based on assumptions that are flawed or disproven?
- **Obsolete:** Will it be outdated or lose its relevance at rollout due to new methods, technology, or context?

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APPENDIX 3 – REFERENCES

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