



RETHINKING HAND SAFETY

NUDGE THEORY AND HAND SAFETY CHAPTER
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NUDGE THEORY AND HAND SAFETY

Ever found yourself wondering why people have absent minded accidents?

Nudge Theory, a concept we delved into with Silje Krukow, a renowned nudge and behavioral design expert and founder of Krukow—a leading global behavioral design and nudging company that works with top international brands and governments—gives us intriguing insights. This theory suggests most of our decisions aren't the result of careful, rational thought. Instead, they're driven by our lizard brain, a notion we introduced in the previous chapter. The environment and context in which we're making safety decisions thus play a tremendous role in shaping our actions.

Our brains are engineered to optimize efficiency and respond swiftly. While this might be beneficial in saving time or effort, it doesn't always result in the wisest decisions regarding our safety. Therein lies the rub—the ease of following instincts versus the importance of safety.

Now that we know our instincts play such a big role in decision-making, we can see the value in creating an environment that supports making safe choices. Imagine designing surroundings in a way that nudges us toward safety. We'd be less likely to make lousy decisions based on instincts alone, right?

That's where Nudge Theory swoops in. It's a powerful tool that helps shape our behavior and pushes us to make better decisions when it comes to hand safety.

WHAT'S THE DEAL WITH NUDGE THEORY?

So, you might be wondering, what's this nudge theory all about?

It's about making those tiny tweaks in our surroundings—"nudges" that can sway decisions and spark positive behavior.

Contrary to what we'd like to believe about our perfectly rational selves, most of our choices are not thought-driven, not based on information or what we've been taught is the correct course of action. Instead, we're often guided by

a system that's all about instinct, all about our reaction to the design of our surroundings.

Our environment, filled with subtle cues and triggers, dictates our responses. It's in the way we use colors, images, icons, sounds, textures, materials. These little things determine 90% of our decisions on a daily basis.

Now, you might be thinking, "How does this nudge thing work for hand safety?" With a few well-placed nudges, you can inspire workers to embrace safety practices without bossing them around or spelling it out for them. You see, when folks feel like they've made the safe choice themselves, they're way more likely to stick with it than if they were just following orders.

BUZZWORTHY BATHROOM BEHAVIOR: THE NUDGE THEORY AND THE URINAL FLY

If you're searching for a prime example of nudge theory in action, consider the case of the urinal fly. This unusual yet effective instance took place at Amsterdam's Schiphol Airport in the early 1990s. The challenge at hand was reducing the amount of, um, "spillage" around urinals, an issue that was causing cleanliness problems and adding to maintenance costs.

In response, the airport's cleaning manager introduced an innovative solution. He etched small, photorealistic images of flies near the urinals' drains. The idea was simple: give people a target to aim at. The fly was a carefully chosen symbol—small, slightly repugnant but not frightening like, say, a spider, which might deter usage of the urinal altogether.

The result was impressive, with an 80 percent reduction in urinal spillage reported after the introduction of the flies. This translated into an estimated 8 percent drop in total bathroom cleaning costs at the airport. Following this success, the practice of featuring urinal flies spread to restrooms across the globe.

The key aspect of nudges is that they are not mandates. They don't make it impossible to do the wrong thing. Instead, they subtly make it easier to do the right thing.

In the urinal case, for instance, an alternative approach to reduce spillage could have been to implement a policy against bad aim, complete with attendants enforcing the policy and issuing fines to violators. However, this would likely be costly, contentious, and intrusive.

The urinal flies, in contrast, serve the same purpose as an overbearing restroom attendant but without any coercion. They naturally guide individuals to make the right choice, without any pressure.

NEIGHBORLY NUDGES: ENERGY CONSERVATION AND THE POWER OF PEER PRESSURE

If you're after a bright example where nudge theory lights up, look no further than the case of Opower and its energy usage comparisons. The problem at hand was rampant energy consumption, a hurdle contributing to environmental degradation and draining the wallets of consumers.

In a move towards the solution, Opower employed a method as genius as it was simple. They included an additional piece of information in their utility bills, illustrating how a customer's energy usage stacked up against their neighbors. The underlying idea was straightforward: leverage the potent human desire to keep up with the Joneses. The comparison acted as a subtle signal - suggestive, yet not overbearing like, say, an explicit call to cut back on energy use, which could cause consumers to recoil.

The outcome was a significant reduction in energy usage documented following the introduction of this social comparison. This reduction also translated into substantial savings on utility bills for consumers. Following this success, this practice of offering neighborly comparisons in energy usage expanded across utility companies worldwide.

The magic of nudges lies in their suggestive nature. They don't dictate or force a particular behavior. Instead, they softly guide towards a beneficial choice. They subtly lead individuals to make eco-friendly choices, minus any pressure.

BEHAVIOR CHANGE STRATEGIES AND PRINCIPLES

VISUAL DIRECTION

Often, the most effective method of communication isn't through written words—it's through visual direction. In the world of hand safety, this means using icons, symbols, and other visual cues to guide behavior.

Visual direction is a powerful tool. Think of it like this: you're entering an unfamiliar environment, perhaps even one where language barriers exist. Suddenly, words on a sign or a manual aren't as helpful as you'd hoped. But a clear, universally understood symbol? That's an entirely different story. It's a nudge that guides you, offering a sense of ease and direction.



THE POWER OF FEEDBACK

Now, imagine coupling these visual directives with another type of nudge—feedback. Feedback is a fundamental, ingrained part of our behavioral systems, and it's especially powerful in the manufacturing and construction world.

Consider the simplicity of a traffic light—a green light means go, a red light means stop. These are visual feedback mechanisms, and they're absolutely vital. Not only do they guide our actions, but they also serve as a constant reminder, nudging us in the right direction.

Or imagine you're at the controls of a complex piece of machinery. Suddenly, a light starts blinking, or a buzzer goes off. That's feedback in action, telling you in no uncertain terms, that you need to adjust your behavior.



There is a vast potential for these feedback mechanisms in the workplace. They can be as straightforward as a noise alerting a worker when they've done something wrong or a light guiding them on what they can do.

We humans are forgetful creatures. And in the bustle of a hectic workplace, it's all too easy to forget safety protocols. That's where these feedback mechanisms shine. They're our reminders, our nudges, constantly prompting us to prioritize safety.

The combination of visual direction and feedback is, in essence, a powerful nudge system that can help transform our workplaces into safer, more conscious environments. We simply need to harness it.

THE POWER OF SOCIAL PROOFING

Let's say you're attending a formal event where everyone is dressed in a black tuxedo or a glamorous gown. You walk in, only to realize you're clad in casual attire. This is an instant visual cue—an unconscious realization that perhaps you should have opted for more formal wear instead. You stand out like a sore thumb, attracting attention in a manner you'd rather avoid.

Just like this socially-driven urge to conform to the norm at a formal event, similar cues work subtly within the workplace. For instance, when you step into a bustling factory, you notice all workers wearing the same type of gloves, indicating the standard safety norm in place. This situation compels you to switch from your current gloves to the ones everyone else is using, just like the urge to dress up appropriately for the formal event.

This, in essence, is social feedback, a crucial type of nudge in our pursuit of hand safety. It's a subtle pressure that pushes you to conform to the group, to follow the norm. It's why safety signs often feature a fully kitted-out worker, demonstrating the correct use of personal protective equipment (PPE). That image is a form of social proof, indicating the norm and encouraging you to mirror that behavior.

These signs often serve multiple purposes. Not only are they social norm activators, but they also provide what we call a human presence. Think about it—you're driving your truck onto a construction site, or you're stepping into a manufacturing site. Often, these are solitary



moments, devoid of an immediate human connection.

Human beings are inherently social creatures, pack animals, if you will. We tend to let our guard down when we think no one's watching. A restroom is a perfect example of this. If the sinks are placed in a shared space, we're more likely to wash our hands than if the sinks are within individual cubicles. We are less likely to follow norms if we believe we're not being observed.

But here's where the magic happens. Place a sign featuring a worker properly dressed in PPE in these solitary spaces, and we fool our brain into thinking we're being watched. Suddenly, we're more likely to wear the correct PPE. These signs not only trigger a sense of human presence but also provide clear feedback, showing us exactly what we should be wearing—a hard hat, gloves, safety glasses, coveralls.

And thus, through a clever combination of principles, we can nudge workers towards safety, even when they're alone.

TIMING IS EVERYTHING: THE RIGHT INFORMATION AT THE RIGHT TIME

While the power of social feedback is undeniably potent, it can't stand alone. It needs the support of other nudges. If we solely rely on social proof without visual direction, we're setting ourselves up for potential failure. After all, social proof only works if everyone is following the correct safety measures to begin with.



But when we blend visual direction with social proof, we unlock a potent combination.

You see, safety isn't just about doing the right thing—it's about doing the right thing at the right time. Providing workers with the right information at the right time, via visual direction and social proof, empowers them to make safer decisions, fostering a culture of hand safety.

Imagine you're driving along an unfamiliar route to visit a friend. Suddenly, your phone pings and a pop-up notification from your navigation

app warns you of heavy traffic on the upcoming route, suggesting an alternate path instead.

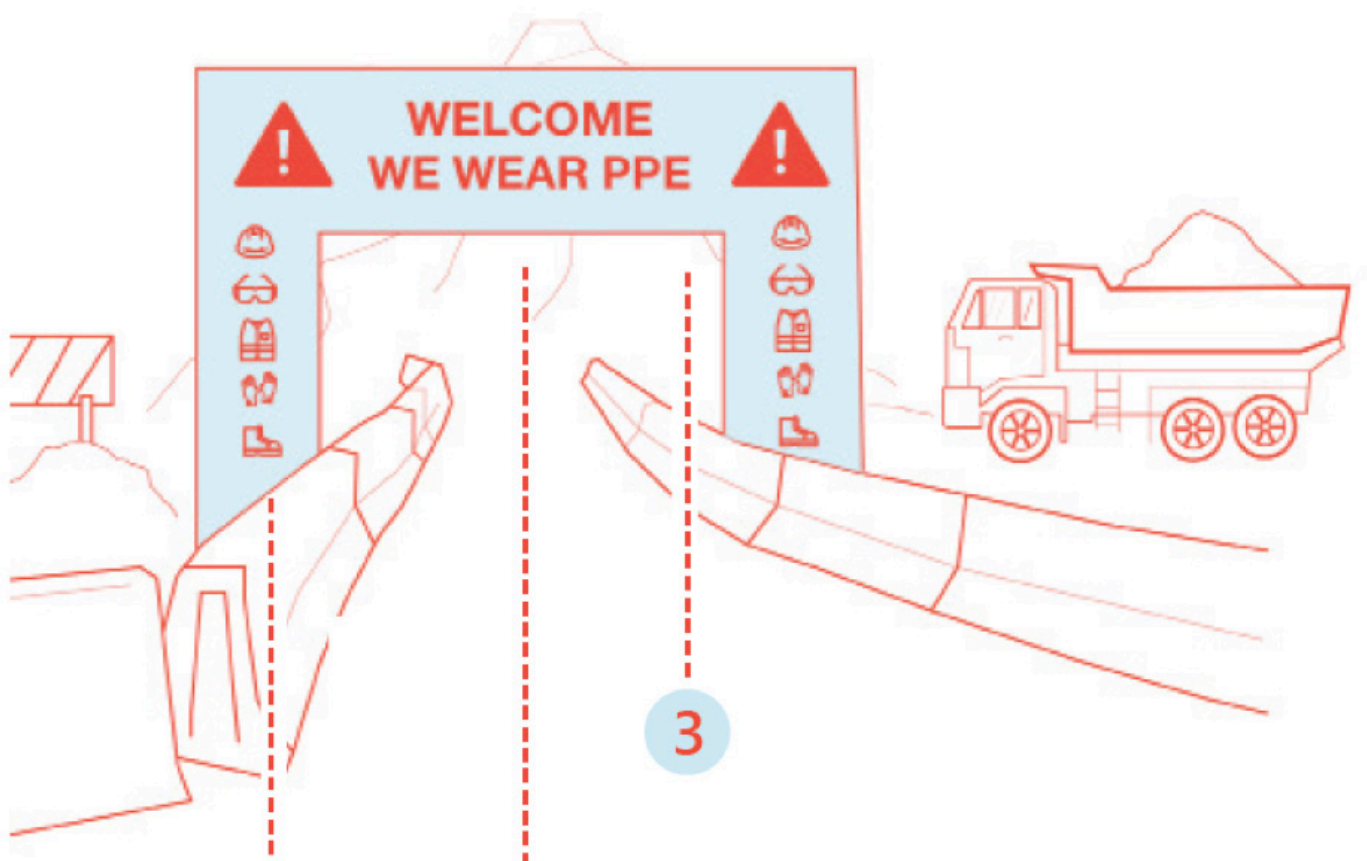
The crux of this situation lies in the timing. Imagine receiving that notification five minutes later when you're already stuck in a bumper-to-bumper traffic jam. Or worse, imagine receiving a traffic report for every single route in the city at the same time. By receiving the information about your route just as you're about to embark, you're able to reroute and avoid the

traffic, arriving at your friend's house without undue delay.

In the same way, the importance of timing applies in a hand safety context. Imagine a worker about to operate a piece of machinery. A timely visual cue, perhaps a safety sticker with an image of a particular glove they should wear when operating the machine reminds them to put on their safety gloves.

PRACTICAL EXAMPLES

The real value of nudge theory lies in its applicability. Let's explore some practical, nudge-based solutions that could significantly enhance hand safety in the workplace.



VISUAL GUIDES AT SITE ENTRANCES

A prominent feature at work sites should be compelling illustrations of all the necessary personal protective equipment (PPE), including the right gloves for the tasks at hand. Each piece of PPE is highlighted with a checkmark, serving as an immediate and eye-catching reminder of its necessity for safety.

Located strategically at site entrances, these

illustrations act as notice and prompts.

As soon as anyone steps into the site, the visual guide reinforces the importance of wearing appropriate PPE. The strategic placement of this visual prompt makes it a constant and effective nudge, fostering worker compliance, and encouraging consistent safety measures. This cue can drive a culture of safety from the point of entry.

DEFAULT GLOVES IN TOOL BAGS AND KITS

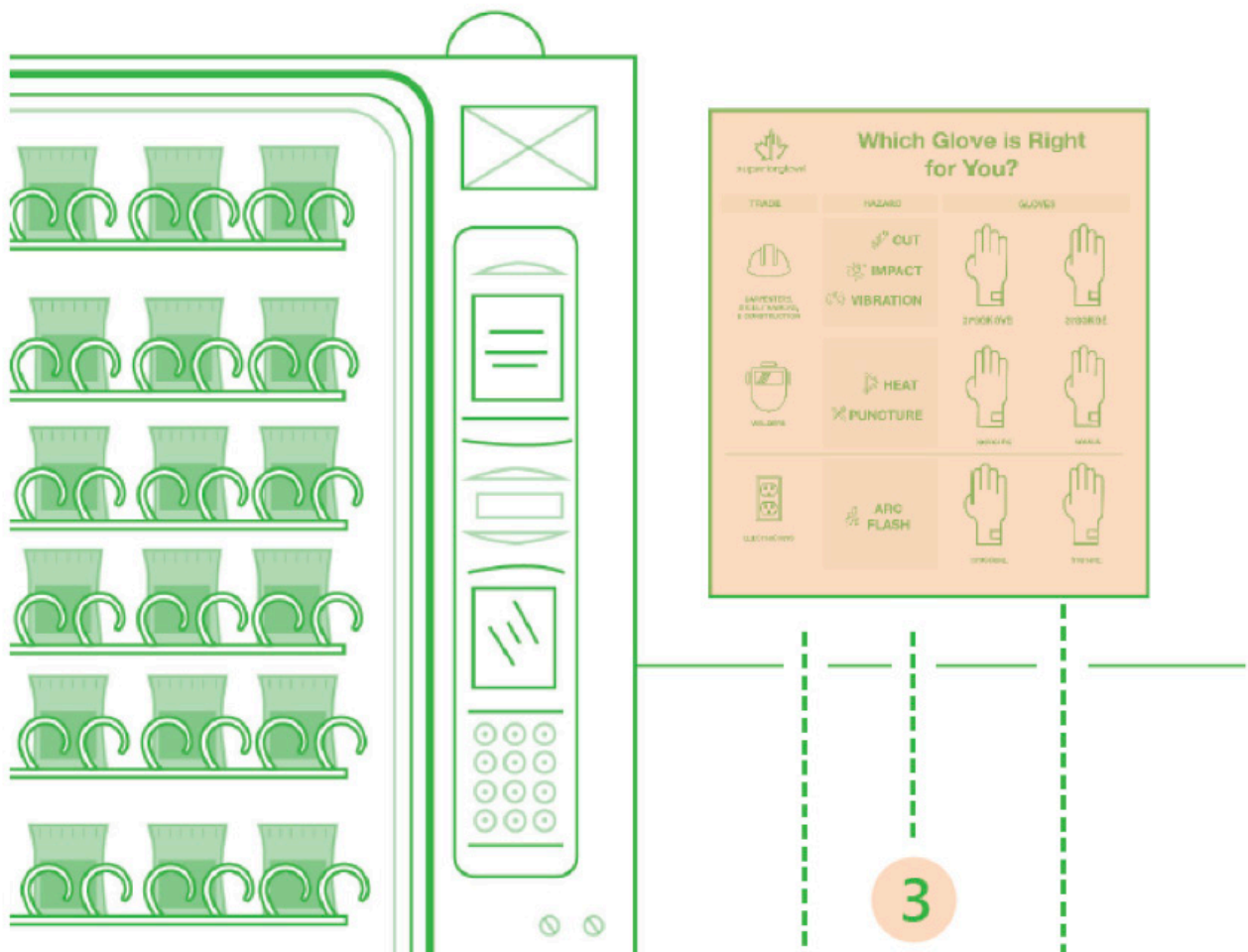


Tool bags and kits can become potent mediums of safety nudges. The conventional design of these kits can be modified to include a dedicated pocket for storing gloves. To make it more effective, an image of gloves is printed on the toolkit along with a clear question: "Do you have the right gloves?"

The integration of a glove pocket coupled with the image and reminder serves as a constant

nudge for workers to reassess their preparedness. It aims to minimize the risk of workers packing the wrong gloves—or worse, no gloves at all—and ensures that workers have the right gloves for their tasks. The convenience of this design could help to establish a new safety-first norm. This modification serves as a powerful, daily reminder before workers commence their work.

VISUAL GUIDE FOR GLOVE SELECTION NEXT TO VENDING MACHINES



Glove vending machines, a common feature in many workplaces, can be accompanied by a visual guide to help workers select the correct gloves. This guide should not be a complicated chart filled with jargon, but rather a simple, visual matrix that depicts workers from various trades along with corresponding hazard icons, and a range of appropriate PPE options.

The guide acts as a straightforward resource for workers to identify their roles and understand the associated hazards. Next to each role, a simplified glove matrix presents the appropriate PPE options. Each glove option is depicted with a hazard icon, creating a clear link between the hazard and its mitigation. This visual guide provides a timely nudge at the point of glove selection, enabling workers to make safer decisions regarding hand protection.

GIVING SAFETY A GENTLE PUSH

Let's get down to the brass tacks: how do we actually put nudge theory to work in the workplace? It's about spotting trouble, getting everyone on board, and crafting clever nudges that steer people towards making safer choices. Ready to dive in? Let's go!

WALKING THROUGH A WORKER'S DAY: Daily Routines and Crucial Decision Moments

We've already spotted the problem behaviors. Now it's time to dig deeper into those daily routines. We'll map them out, hunting for those crucial decision moments when something can jump in with a well-timed intervention.

Imagine standing on the shop floor, watching workers handle tools, materials, and machines.

You'll want to ask yourself, "Where in their workday are they most likely to slip up?" You're searching for those moments when they're most likely to forget their gloves or when their hands are at risk because they're tired or distracted. Maybe you notice they're rushing through a task, and that's when accidents happen. Time for a nudge to slow them down and focus on hand safety. Once you've pinpointed those moments, you can design nudges tailored to these specific situations.

Now, you might be thinking, "How do I map out their day and identify those decision points?" One way is to use photos and user journey maps—a visual way to document their entire process, capturing those critical moments that could lead to danger. And don't forget to involve the workers; they know their routines best and can help you spot the challenges they face.

As you create your user journey map, look for those golden opportunities for intervention—the points where a well-placed nudge could make all the difference in keeping hands safe. Maybe there's a spot

where they often switch tasks and forget to gear up with the right protection. By swooping in with a nudge at that crucial moment, you can help prevent accidents and save hands from harm.

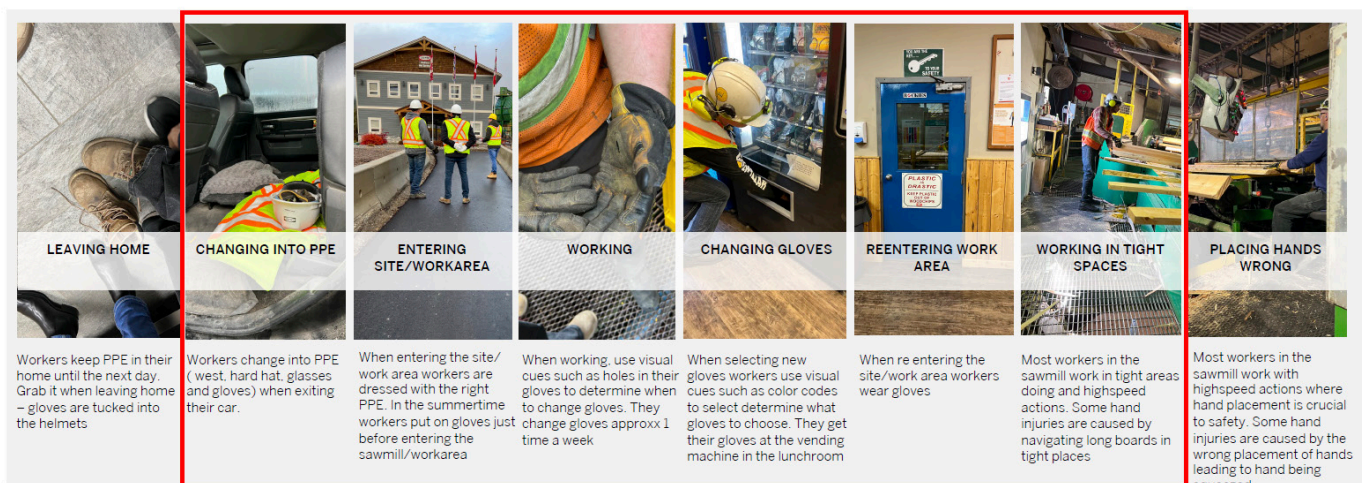
BECOMING A TOURIST IN YOUR OWN COMPANY

Sounds a bit quirky? Let me explain.

Imagine walking into your workplace as if you're seeing it for the first time. You're not there to manage, or supervise, or complete your usual tasks. Instead, you're there to observe, absorb, and see the day-to-day routines that make up the life of the company. You're there to understand the everyday lives of the workers whose hands are on the line.

To truly get a sense of their natural habits, you need to step into their shoes. How does a day unfold for a benchman? What's a typical shift like for a trimmer? Follow them around, watch their every move. Become a silent observer, an invisible companion. Take note of where they sit, what tasks they perform, and how they interact with their environment.

Key decision moments in focus for sawmills



Moments where SG can offer supporting nudges

This might feel a bit strange. Maybe even a bit intrusive. But remember, you're not there to judge or interfere. You're there to understand.

And don't forget your camera. It's easy to forget details, no matter how observant we are. We're only human, after all. So, take tons of photos. Photos of workers performing their tasks, photos of their

workstations, photos of their gloves and tools. These photos help me remember and analyze what I've seen, long after I've left the shop floor.

Once you've completed this exercise, map out the worker journey for each group of employees. Each journey is a visual representation of their daily routines, captured in photographs and notes.

Sometimes, you'll notice similar routines among different workers so cluster them together.

By becoming a tourist in your own company, you get a chance to view your workplace from an entirely new perspective. And from this vantage point, you might just spot the opportunities and challenges that could make the difference in hand safety. You'd be surprised at the insights this fresh set of eyes can provide.

HOMEMADE SIGNS: EVIDENCE OF A SYSTEM IN TROUBLE

When you're mapping the worker journey, keep an eye out for homemade signs. Scraps of paper taped to a wall, hastily scribbled messages, these are not just signs; they're distress signals. They're a clear indication that the current system isn't supporting the workers as it should. They point to failure points in the system, places where things are falling apart.

Believe it or not, these impromptu scrawls can be valuable indicators of safety issues, as they tend to pop up when workers feel the official guidance isn't cutting it or is just plain confusing. By keeping an eye on these homemade signs, you can uncover areas that need a little TLC, and ultimately make the work environment safer for everyone.

When you stumble upon homemade signs, take a moment to analyze them for patterns. Look for common themes or issues these signs are addressing and figure out if there are any systemic failures or gaps in safety protocols. Evaluating how well existing safety measures and communication channels are working is also a key step in this process.

TRUST THE ENVIRONMENT, NOT THE SURVEYS

Never put your faith in surveys. I know it might sound counterintuitive, but hear me out.

People—well-intentioned as they may be—often don't know what they need. When asked about what they think would be the best solution to their safety issues, they're likely to give answers that sound reasonable to their conscious, analytical brains. But here's the kicker: a lot of our behavior isn't governed by that analytical part of our brains. It's driven by our subconscious. And trying to get our conscious brain to explain why we do something subconsciously is

like trying to explain a dream upon waking—fuzzy, fragmented, and often, just plain wrong.

Don't only look at surveys or analytical reasoning for your answers. Instead, look to the design of the surroundings, the environment where the work actually happens. Look at the worn-out gloves, the positioning of the tools, the arrangement of the workstations. Look for the subtle signs of habits and routines, the little quirks, and shortcuts that workers take.

The truth is, we humans often don't have a clue why we do what we do. We're creatures of habit, influenced by our environment in ways we often don't fully understand. So instead of asking workers to dissect their subconscious behaviors, study their environment. The layout of the shop floor, the state of their equipment, the rhythm of their day—it's all there, waiting to tell you its story.

You'd be amazed at the insights you can glean from just observing and analyzing the physical context of work. These insights, drawn from the real world rather than surveys or interviews, are the ones that can truly inform effective hand safety strategies. And that's the essence of applying nudge theory to hand safety. It's all about understanding the subtle influences of the environment and then tweaking them to nudge people towards safer behaviors.

SETTING THE TARGET: DEFINING THE DESIRED BEHAVIOR

Next, we need to get specific about what we want to change. It's not enough to say, "We want our workers to be safer." We need to be clear and precise about the problem behavior we're trying to address.

Is it the way the assembly line workers hold and transport components? Or perhaps it's how the technicians interact with machinery? Whatever it is, it needs to be clearly defined. For instance, we might decide that we want all operators to always wear a specific type of safety gloves when handling any type of equipment. That's our target behavior.

PITFALLS TO AVOID

Creating a nudge system is more than just a process of adding new elements—it's also about identifying and eliminating factors that might be counterproductive to our goal. Missteps can inadvertently lead to confusion, detract from the key safety messages, or even encourage unwanted behaviors.

So let's delve into some of the common pitfalls in nudge design and learn how to avoid them, setting the stage for an effective, intuitive, and impactful hand safety strategy. From avoiding the trap of clutter and confusion to reconsidering how safety information is communicated, we will explore the dos and don'ts that are crucial for the success of our nudge-based hand safety strategy.

A TALE OF CLUTTER AND CONFUSION

Ever walked into a room so cluttered it made your head spin? Imagine working in a place like that, trying to focus on keeping your hands safe. It isn't easy. So let's talk about cutting through that clutter and confusion.

First off, don't drown your workers in a sea of details. Stick to the key messages and clear-cut steps

they need for their safety. Make sure they can get their hands on that info when they need it, using visuals, diagrams, and whatever else it takes to keep things crystal clear.

Now, let's move on to the actual work environment. Kick that unnecessary clutter to the curb and make the place more intuitive. Get those tools and equipment organized, slap on some labels, and put up helpful signs.

DON'T SAY DON'T AND IMAGES OVER WORDS

A crucial part of implementing a nudge-based approach involves moving the key elements to the precise moments when they can be processed and acted upon effectively. This goes hand in hand with reformulating how safety information is presented.

Traditional safety signs often use bans and directives—don't do this, don't go beyond this point, and so on. However, with nudge theory, we approach communication differently. Bans tend to be counterproductive.

Watch: don't think about a pink elephant.



Did you think about a pink elephant?

Often, banning something results in workers fixating on that very concept. Therefore, we choose to frame our instructions differently.

Another significant shift is in the choice of words versus images. The human brain tends to process visual information faster than textual data. Therefore, we lean heavily on the use of images and tactile communication. While this might seem overly simplistic from the outside, it is, in fact, far more effective than traditional safety signs.

Essentially, we're striving to transpose the well-intentioned principles behind safety training into real-life scenarios and key decision moments. However, we also ensure that the information is conveyed in a manner that can be intuitively perceived and responded to, minimizing the need for extensive mental effort.

This approach acknowledges a crucial reality: our mental resources are finite. We must be mindful of this and avoid overtaxing each other. Instead, we should aim to simplify and remove cognitive burdens. For instance, miners working deep below the surface should not have to expend their mental resources on deciphering overly complex safety information.

IKEA: THE CHOICE ARCHITECTURE MASTER

We can take a page from a seemingly unrelated field to better understand the power of intuitive guidance: the design strategy employed by IKEA. IKEA is a global brand, known as much for its labyrinthine store layouts as its flat-pack furniture. Their mastery in creating an efficient choice architecture offers valuable lessons for workplace safety.

When you enter an IKEA store, you're greeted with visual directions that guide your journey through the premises. These signs subtly maneuver you along a serpentine path, ensuring you encounter each section of their vast inventory. You might realize later that there were shortcuts available—paths that would have allowed you to bypass entire sections—but these are not immediately apparent. IKEA never places signs saying, "Don't take the shortcut"; instead, they gently guide you with their interior layout and clear directional signs on the floor, making you feel as though you're following the natural path.

This strategy of intuitive guidance can be ingeniously adapted to enhance hand safety in the workplace. If workspaces started incorporating more of these visual cues relating to safety, workers would feel naturally directed toward correct behaviors, reducing the cognitive load of constantly trying to remember safety protocols.

For example, the right gloves could be strategically placed with visual guides pointing toward them. Similarly, clearly marked labels could indicate where to position your hands during various tasks. If each step in a process is visually directed and guided, it simplifies the safety process, making it intuitive rather than something that requires constant conscious thought.

SMALL STEPS TO A BIG CULTURE SHIFT

A common misconception is that changing a workplace's culture is about altering mindsets but culture is, in actuality, an outcome of behavior. By focusing on promoting the correct behavior and minimizing unnecessary assumptions about individuals or groups, we can naturally influence the culture.

There's a pervasive tendency to attribute behavior to character traits or stereotypes. For instance, one might hear, "This group doesn't want to work hard," or "Those older workers are set in their ways."

People might also argue that different work cultures could clash and thus resist integration. These assumptions about people and culture can create barriers to progress.

The key to cultural change is not to directly aim for it but to focus on mapping out precise target behaviors and then ensuring the environment supports those behaviors. Once the right behaviors feel natural and easy to adopt—possibly without the individuals even realizing they're doing something new—a new culture naturally emerges. It's this effortless evolution towards safer practices that ultimately fosters a robust culture of hand safety.

Which brings us to the next chapter, in which we try and figure out how to get everyone in a company to take responsibility every single day.