

To See is to Understand Exploring a 3-Dimensional Safety Model

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Introduction

Take a moment to imagine the following; you are a safety manager responsible for multiple worksites along the West Coast of the United States, ranging from Southern California to the Pacific Northwest. These worksites, known as marine terminals, vary in size, ranging from fifty to four hundred acres. The stevedoring industry, at times, has been defined as high-hazard with a heavy man/machine interface. This is a twenty-four-hour operation composed of three working shifts. As the sun breaks the Eastern horizon, today is just like every other day on a marine terminal; you have no idea who's coming to work to move cargo; IWLU membership will fill the jobs. However, who precisely will be determined as that shifts' workforce arrives through the terminal turnstiles. Welcome to the world of stevedoring and marine terminal operations.

This document provides a brief overview of West Coast containerized cargo operations and the unique safety challenges presented with a transient workforce. I will share my prior experience in the role as a West Coast safety manager and the solutions generated by reducing not only the traditional incident frequency rate, but also, the quantity of severe injuries sustained within the workplace. The most meaningful solution developed was a visual three-dimensional model relating two traditionally non-relatable spheres of safety: regulatory requirements and critical safety "to-do's" with the concept of workplace culture. The design is meaningful as all individuals within the work environment can visualize the components required of an effective safety management system. To see is to understand, and with understanding comes forward momentum.

© This presentation will examine the fundamental building blocks of the model, the structure they support, and the resulting culture. Exploration of the model, in its current state, can be applied to most work environments. I will share a few particular "wins" impacting both the company's resulting culture as well as the industry.

The ILWU

The International Longshore and Warehouse Union (ILWU) is a labor union which primarily represents dock workers on the west coast of the United States and in Hawaii, Alaska, and British Columbia, Canada.¹ The core of the union, historically, has been the Longshore Division, which established the Union through its victory in the 1934 West Coast maritime strike. The Longshore Division is made up of approximately 30 locals, divided among longshore workers, clerks, and foremen. The larger locals are in Los Angeles/Long Beach, San Francisco/Oakland, Seattle, Tacoma, and Portland.² More than 14,200 ILWU workers are employed at West Coast ports.³

These men and women, known as Longshoremen, are dispatched daily to marine terminals across the West Coast to move cargo. Longshore workers primarily handle the loading and unloading of cargo and containers, but also, control vessel lines, and maintain stevedoring gear and equipment. Cargo on the West Coast is a combination of both containerization, bulk, and breakbulk. In addition to the longshoremen, another set of workers within the ILWU, known as Clerks, process cargo information for delivery and shipment. The Walking Bosses, also known as Foremen, are direct supervisory representatives in charge of loading and unloading operations and report directly to the stevedoring management.

Work on the waterfront, both loading and unloading of ships and barges in marine terminals, has historically been performed by a workforce employed on a daily basis.⁴ Longshoremen are hired for single work shifts and may be asked to return the following shift to complete work. This daily work assignment can be described as transient in nature as the work at one particular marine terminal lasts for a short time. On a daily basis, employers order a specific number of longshoremen, clerks, and foremen to fill jobs and perform all the activities related to cargo handling. Be aware that not every position is reopened daily as there are specific steady jobs, but the majority of the longshore work is completed shift by shift.

The waterfront and everything within it are significant. Vessels are massive in size; container handling equipment is immense; container terminals are hundreds of acres in size. In Southern California alone, ILWU membership numbers are just over nine thousand. Those men and women are dispatched to work in the ports of Los Angeles and Long Beach at over a dozen employers. In 2016, the Port of Los Angeles handled more than 8.8 million units of cargo, setting an all-time record for all ports in the Western Hemisphere.⁵ The magnitude of the stevedoring and maritime environment is impressive. However, with this greatness comes unique safety challenges. The skill sets and understanding of risk among these workers are not consistent and fluctuate with on-the-job experience. The Pacific Maritime Association, a representative of employers on the West Coast, works on behalf of member companies to administer contracts and provide general

¹ "International Longshore and Warehouse Union." *Wikipedia*. Wikimedia Foundation, 22. Feb. 2017. Web. 28 Feb. 2017 (https://en.wikipedia.org/wiki/International_Longshore_and_Warehouse_Union)

² *How the Union Works*. Atlanta: Textile Workers of America, CIO, n.d. Web. 28 Feb. 2017. (<https://www.ilwu.org/about/how-our-union-works/>. Web.)

³ "The ILWU Workforce." *PMA Pacific Maritime Association*. N.p., n.d. Web. 28 Feb. 2017. (<http://www.pmanet.org/the-ilwu-workforce>)

⁴ "Pacific Maritime Association – PMA Annual Report 2015." Pacific Maritime Association – PMA Annual Report 2015. n.d. Web. 28 Feb. 2017. (<http://pma.uberflip.com/t/44932-pacific-maritime-association>)

⁵ Angeles, Port of Los. "Port of Los Angeles: America's Port®." Port of Los Angeles: America's Port®. N.p., n.d. Web. 01 Mar. 2017.

safety training to the ILWU membership. However, daily management, implementation, and ultimate responsibility for safety fall to each of the individual employer companies. Every day, based on bargaining agreements, longshoremen, clerks, and foreman move cargo.

Within a marine terminal, the working relationship between the ILWU and waterfront employers can be contentious. Historically, the union fought hard and sacrificed much to hold the jurisdiction of work on the West Coast. At that time, the longshore industry was notorious for its corrupt hiring practices, brutally long shifts with no overtime pay, speed-ups or dangerously fast-paced work sessions, and callous ship owner disregard for job safety.⁶ Cargo was expected to be moved fast, described as "not letting the hook hang." The ILWU's official slogan, adopted and used from initial organization efforts is "an injury to one is an injury to all."

Within today's work environment, the pressures of high-paced work remain and can be wearying on both union and management. Tensions and strife are often experienced, particularly around contract negotiations. Two master contracts govern the industry: the Pacific Coast Longshore Contract Document and the Pacific Coast Marine Safety Code. These contracts are negotiated at agreed-to intervals, the most recent negotiation occurring in 2014. The Pacific Coast Marine Safety Code is a well developed, evolved document which has been a part of the industry since 1929. For many years it was considered a voluntary code, until it was included in the November 1946 return-to-work agreement in the Longshore Contract between the Waterfront Employers Association of the Pacific Coast and the ILWU.⁷ In addition to Federal and State regulations, it is the primary safety standard, contractually agreed to for the industry. However, as so many safety professionals can attest to, just because there is a set of well-defined regulations or standards, it does not ensure workers will abide by those standards. Moreover, if they do work according to the standards, it is not guaranteed it will be one hundred percent right, one hundred percent of the time.

Therefore, the safety challenge is set: have a well-functioning safety management system aimed at preventing injuries with heavy man/machine interfaces applied to a daily revolving workforce of about fourteen thousand people. Simple, right? Not exactly. Grand resolutions demand nonconventional thought.

Safety and my Experience on the Waterfront

I am a graduate of the California Maritime Academy. In 2005, I started work as a superintendent at a container facility in Long Beach, California. I cut my teeth within the industry at that terminal. New-hire safety training consisted of hanging out with the safety guy, shadowing him at an industry safety meeting, going to the local shoe store for new boots, and having a copy of the Pacific Coast Marine Safety Code tossed your way with the instructions of "read this." After working as a superintendent for two years, a safety position was posted for hire within the organization. Having zero formal training in safety, yet having encouragement and support from coworkers, I applied for

⁶ Schwartz, Harvey. *Solidarity Stories: An Oral History of the ILWU*. Seattle: U of Washington, 2009. 10. Print.

⁷ *Pacific Coast Marine Safety Code: 2014 Revision*. Place of Publication Not Identified: International Longshoremen's and Warehousemen's Union, 2014. Print.

the job. My colleagues said, "You write excellent injury reports... go for it." Soon after applying for the job, my company issued phone rang. "Congratulations and welcome to the safety team."

It was the most exciting and terrifying day. Excitement because I just signed my offer letter and was given a new title, assistant safety manager. I was terrified because I had no idea how to be a safety manager, nor was I given the "How to Be a Safety Manager" manual. Let me show you a snapshot of what safety looked like for the organization at that time. The program was entirely ISO (International Organization for Standardization) driven. On my new desk lay a large three-ring binder containing all the safety documents for the enterprise. That binder was the safety program. Fresh off the front, I clearly remember never seeing or knowing any of those documents contained within that three-ring binder, the point being that safety people did safety and operational staff moved cargo.

Communication about safety was exclusively related to injury prevention. The goal consisted of making safety our number-one priority, but there was never an explanation given on how to achieve that goal. There was also the safety versus production debate, and the management was terrified regarding the loss of production. I was sent to a general industry OSHA class and returned more confused than when I left. Within the industry, there's a contractually mandated joint accident prevention committee that meets once a month. Both representations from labor and management attend, but after the first few months, I was living in the movie, *Groundhog's Day*. Each sides' position and response to various concerns became predictable. It was a stalemate event I soon dreaded attending. The only safety measurement tracked and shared with senior management was the (LTIFR) Lost Time Incident Frequency Rate and if a worker's compensation claim from the previous week had changed status from non-lost time to lost time.

As I was brand new to the safety game, I kept low, worked hard, and tried to make sense of it all. The primary focus and directive from senior management was to prevent injuries and keep costs down. From a geographical position, the safety staff was divided regionally. Two folks in SoCal, two in NorCal, and two in the Pacific Northwest; one of which was the West Coast director. Most of those managers were seasoned in their roles and felt content with the program. The two folks in SoCal were the boss and me, and our responsibilities included breakbulk in Port Hueneme, in San Diego, three container terminals in Los Angeles/Long Beach, an auto dock, and a cement and paper dock. In June 2009, an announcement was made that my organization was merging with a much larger stevedoring outfit. When the merger was completed, that remaining structure would be the nation's largest stevedore and terminal operator.

Our hearts stood still in fear as this merger brought forward uncertainty. The unanswered question remained: what did this mean for the safety department and the current safety program? My company had a defined ISO-based program. In hindsight, the program was basic and a far cry from a management system. It was, however, what we knew and thought best at the time. The other company, too, had a well-defined safety program, deeply entrenched in behavior based safety. The two were complete opposites. The merger identified the vast differences between East and West Coast programs. An internal safety committee was developed to review both existing programs and make recommendations on what to keep and what to scrap. After several months of discussions and meetings, it was decided the behavior based safety methods would remain, and everything else was to go. Goodbye ISO safety program. Now, let me introduce you to your new safety goal. Zero harm.

The West Coast was angered and lost. Not only had we lost a program which we believed in, but the West Coast safety director was also unexpectedly released from service. Oh, captain, my captain, but our safety captain was gone. An east coast safety manager then became the director of the organization, but the safety restructuring did not stop there. I vividly remember my manager walking into my office, "We need to go see HR." I gulped and felt sick to my stomach. As we sat in HR's office, I was informed, "Your current position has been eliminated." I thought I might throw up right then and there. Sliding a letter across the table, HR then said, "We have an opportunity we would like to offer you." With the restructure, additional safety headcount had been added to the organization. For me, this meant I would now have the responsibility to manage one large container facility and would report directly to the vice president for that line of business.

Accepting the offer before me, my shaking hand signed the dotted line. Turning to my left, I shook hands with the vice president sitting at the table. "Welcome to the team." All of this monumental change created heaps of operational staff emotion, particularly around the safety program. I quickly transitioned into my new role on terminal accepting the title of Operations Manager Health, Safety, and Environment. At the time, the management headcount was around 62 on a 300-acre facility. Business was good, with high weekly volumes. The primary challenge set forth by my new senior management was: reduce injuries and create an environment of zero harm for all who work at the facility. Through the written word, supporting the safety program had always been outlined as part of the front-line superintendent's job responsibility. However, the attitude towards zero harm was anger. It was a drastic change in concept for the front-line staff, one they resented. Superintendents and managers would come into my office frustrated beyond belief and ask, "How can I be responsible for zero harm?" My initial response was, "I do not know, but we will figure this out together."

These superintendents were cast in fighting a battle, one they would surely lose. Additional anger stemmed from zero harm being tied into their annual personal goals. Behavior based safety made the claim that all could be made right in the world through positive interaction and correction. Now, I clearly want to state my position on the matter. I believe that in the correct setting, with the right leadership, behavior-based safety can be effective. It should be thought of as one tool contributing to an overall safety system. For this industry, with the transient workforce, behavior-based safety was a poor misstep. The program was currently successful on the East Coast, but the labor structure was significantly different with alternative senior leadership, creating a positive outcome for success. The culture and labor between East and West Coast operating environments should have never been brought under one program.

The tool to be used in this behavior-based, zero-harm endeavor was the walkabout. The concept was simple; a conversation was to be had when a union member was observed performing an unsafe act. The interaction would start with something along the lines of, "thanks for wearing your safety vest" or "I appreciate what you are trying to accomplish," followed by a conversation about the observed unsafe act. Questions were asked in a non-threatening way to understand why the person was choosing to work unsafely. The person who did the unsafe act would then identify any issues they were experiencing in the workplace, followed by a commitment of not repeating the dangerous act. Once the walkabout was complete, and before the end of the shift, the manager would then go back to the office and record the walkabout within the system. Each terminal within the organization was given a required weekly walkabout target to meet. The notion of the walkabout was genuine; creating a conversation between management and membership to understand why unsafe choices were made.

For many front-line managers, the role as a superintendent, is an entry-level management position obtained post-college. Walking into the role, most have little to no real-world experience. Those that do come to this industry from others are thrown for a loop as to the actual culture of the waterfront. In the eyes of a superintendent, safety is often considered a chore instead of an opportunity for change. At times, operational communication is challenging enough. During a walkabout, and for a superintendent, anxiety levels are in a constant state of elevation. With the mandate of the walkabout, safety is now despised, as this program has forced superintendents to interact with a confrontational workforce. It was soon discovered a portion of superintendents were creating false walkabouts or recycling previously entered walkabouts. The power of copy and paste was active. The response to those who honestly attempted the walkabout were often negative. The union was suspicious as to why these safety conversations were happening, and some foreman felt their jurisdiction was being threatened. At times, the walkabout resulted in a small win or feeling of success, but those successes were not happening enough. The result was most superintendents and front-line managers were turned off from the program altogether.

Adding to the confusion, superintendents were not given a direction or an area where to conduct the walkabout. The scope was too broad and unspecified. Superintendents needed guidance, but instead, it was a scattered free-for-all. However, as long as the site met its weekly target, all was well in the eyes of senior management. Lastly, the system which collected the walkabout information was a total and complete black hole. Once the information was put in, data could not be taken out. As data could not be extracted, there was no way to analyze or share any of these findings in a meaningful way. The safety struggle was real. There's a silver lining in most situations. Mine was my boss. He was energetic, motivated, and eager to do the right thing. The behavior based safety method hung its hat on the walkabout method, but I was living the madness and was not a believer. From its inception, the concept of zero harm for our workplace was nothing more than a fairytale. It is a beautiful story, but Prince Charming is never going to ride into town on his horse named zero harm.

Knowing alternative concepts, ideas, and programs that exist, I searched to find the right mixture for our workplace. I took a deep dive into other safety theories and philosophies, I read Geller and Manuele, I joined the American Society of Safety Engineers, and I searched for solutions within similar high-hazard industries with transient workforces. Unfortunately, the Longshore and Stevedoring industry are the only industries built as such. Looking back, it is not behavior based safety's method I found upsetting, but rather, the poor decisions made by senior management to introduce a program that should have never been accepted in this workplace.

Within several months, I abandoned behavior based safety's principles and created our own. After much thought, I drafted a plan and called a meeting with the Vice President and General Manager. I said, "we are going to do things our way," and the revisions began. Replacement started with clearly-defined expectations for those who chose to work at the facility. I wanted to abandon walkabouts altogether, but we could not because they were corporate mandated weekly targets. Instead, based on injury history and predesignated categories of work, the staff audited basic safety compliance and days away without injury. Knowing what I know now, I would have chosen to express a different metric other than days away, but the positive part was that the site was talking. The program continued to thrive when a commitment was made to labor in the form of an all hands on terminal safety meeting. The first several sessions were raw, honest, and emotional because the labor had a lot to say. We stood in front of them as if we were on the receiving end of a firing squad.

We held to our commitment of quarterly meetings, and the tone evolved. Action item lists were created to address concerns between meetings. The site would work to resolve open issues and outcomes, and the topics were shared during each session. The issues that could not be addressed were discussed and explained. The site senior leadership committed to attending these meetings, and the known contention between management and membership decreased drastically. In a five-year period, the LTIFR rate dropped from over 4 to 1.89, the lowest in the company's history. I am fully aware the LTIFR is a lagging indicator, but at the time, that was how success was measured.

After much hard work by all parties involved, the concept of safety started to evolve. The culture of the terminal progressed because of genuine commitments to safety and each other. A moment I will always remember occurred early one morning at check. I was at the equipment corral saying morning hellos when I saw something that made my world stand still because, at that moment, I knew we were doing something right. A senior-ranked UTR longshore operator was having a conversation with a casual UTR longshore operator about her lack of proper footwear. I overheard the senior UTR operator explain to the casual operator that safety at this terminal is real. You follow the rules, and here we wear our safety shoes. At that moment, the glorious safety gates of heaven opened. Angels sang a safety song and unicorns danced in my heart. The significance of this time was the self-monitoring between union members. A small victory had just been experienced. However, as the program progressed, anxiety resided within me as I knew much work still needed to be done. PPE compliance was low-hanging fruit. I needed to develop a plan to pick the fruit at the top of the tree.

However, for continued sustainment of the current culture, this could not just be any plan. This had to be a plan that superintendents who were tasked with doing the work could believe in. They needed to understand their exact role in the program and how they could accomplish it day in and day out. In all reality, the plan was as much for them as for me. As we were making great strides with our program and the result in culture, I needed a system of organization to keep on top of everything: training, communication, messaging, regulatory review, compliance, auditing, the dreaded walkabouts, and incident investigation. Then there was this word of "culture" appearing in safety articles and books describing its need to be excellent.

I needed to sort and organize by priority everything that is a safety program. Most importantly, this plan required to be readily understood by all who were accountable to it. I am grateful for my time as a superintendent because it kept me grounded in understanding their daily capacities. The question had to be asked. Was the organization supporting the superintendents for safety success? Were correct tools for the desired outcome provided? What I needed but lacked was a visual image; one in which all the moving pieces of the program could be visually seen, communicated, and understood. I needed to integrate two traditionally non-relatable spheres of safety; regulatory requirements and critical safety "to-do's" with the concept of safety culture. Little that I know; inspiration will be found in the most unlikely of places.

Safety in the City of Lights

“A walk about Paris will provide lessons in history, beauty and in the point of life.”
– Thomas Jefferson

In March of 2013, I had the great pleasure of traveling to Paris, France with my mom. It was our first visit to the City of Lights. Our itinerary consisted of the must-sees: the Eiffel Tower, the

Louvre, a dinner cruise on the Seine, and; of course, Notre Dame. The weather was fresh and crisp. Enchanting city streets beckoned walking, for it is a city best enjoyed on foot. Our hotel was comfortably seated on the right bank; minutes from so much of the city's great offerings. When traveling in a new city, I am a big believer in tours. Yes, they can be called touristy, but I always develop a better understanding or new perspective of the destination. The tour guides at Discovery Walks are fabulous. Alec, a guide for several of our tours and a local Parisian, was a phenomenal guide. We booked several tours with Discovery Walks, including a walking tour of Notre Dame.

Here's a quick history lesson. Notre Dame de Paris, meaning Our Lady of Paris, also known as Notre Dame Cathedral, or simply Notre Dame, is a medieval Catholic cathedral located on one of two remaining natural islands on the Seine.⁸ Built in 1163, it's located in the center of Paris, and it is widely considered to be one of the finest examples of French Gothic architecture. Most pictures of Notre Dame depict the western façade, showing the two towers. On this tour, our guide, Alec, walked the entire grounds of Notre Dame, describing how the architecture creates the magic surrounding the cathedral. We observed the spire and the east side of the cathedral. Notre Dame was among the first buildings in the world to use flying buttresses.⁹ A buttress is an architectural structure built to support or reinforce a wall. The cathedral was not originally designed to include the flying buttresses, but they were added as a necessity to support the walls of the cathedral. Notre Dame is a sanctuary of masterful architecture and a sacred destination.

Forty-five minutes later, we thanked Alec for the grand tour and parted ways with au revoir. Our tour ended where we started, at the West end of the cathedral, in front of Notre Dame's two distinct towers. As we had already visited the exterior of the cathedral, the interior walk was a must. We crossed the threshold of the cathedral and entered a sacred space. The weight of the air was heavy, and respect was demanded for this place of distinct spirituality. I was humbled to be in a domicile of enormous history and master craftsmanship; to put it plainly, you knew you were somewhere special. The Western rose window at Notre Dame is 10 meters in diameter and exceptionally beautiful. The central theme of the West rose is human life and depicts the laborers of the months. While absorbing the greatness of Notre Dame, a thought entered my mind, hitting me like a ton of bricks. I internally cried, "Eureka!" and sighed in relief. On the other side of the world, in a cathedral built eight centuries prior, I solved my safety dilemma. This idea, with such clarity, filled my mind and it has not left since.

That evening, back at the hotel, I sketched out my eureka moment, a small drawing that, in layman's terms, made sense of it all, meaning everything that is safety. Notre Dame, as it stood, provided the visual inspiration I needed to structure my thoughts. The flying buttresses provided a visible support structure to the feelings contained and fostered within the cathedral. My required and necessary components of safety no longer floated randomly in space. They now created my structure and were the foundational building blocks critical to safety success.

Strategically placed, the foundational safety building blocks serve the same purpose for me as the flying buttresses serve Our Lady of Paris. They provide a visible support. The void space beneath the visible support is the resulting culture experienced in that environment. For Notre

⁸ "Notre Dame De Paris." *Wikipedia*. Wikimedia Foundation, 19 Feb. 2017. Web. 02 Mar. 2017.

⁹ "Notre Dame De Paris." *Wikipedia*. Wikimedia Foundation, 19 Feb. 2017. Web. 02 Mar. 2017.

Dame, it is a holy place of sanctity. For me, it is the site's resulting safety culture. Small unicorns once again danced in my heart.

A 3-Dimensional Safety Model

This is my eureka moment, a three-dimensional safety image. It is referred to as a three-dimensional model because when used in the workplace, it is a three-dimensional environment. For this text, it is represented as a two-dimensional image.

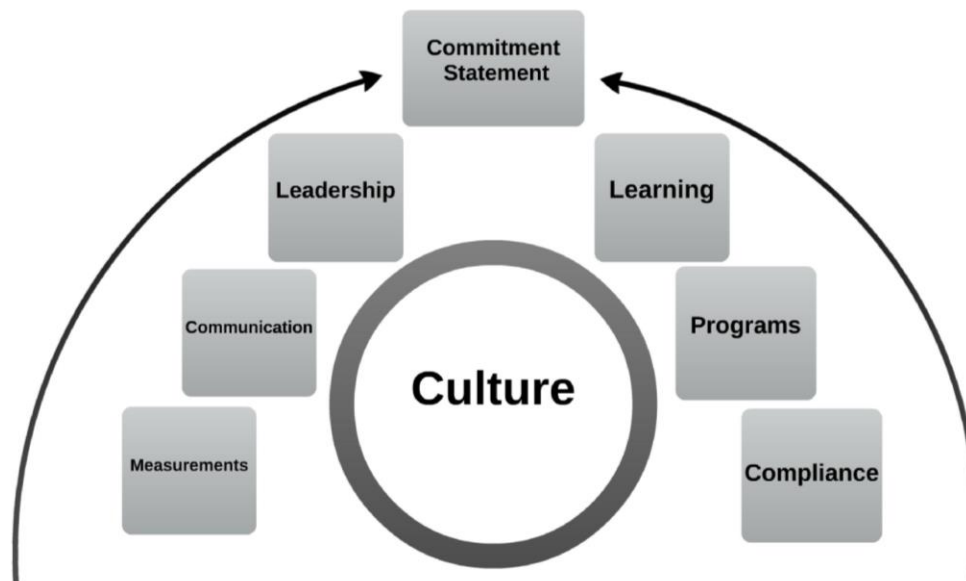


Exhibit 1. Image of three-dimensional safety model

The model overlaid on top of a workplace picture is representative of the same powerful feelings inspired by Notre Dame. One can view the external support functions, and in this case, the fundamental building blocks are shaped like an arch. The components are visible and well defined. The concept is that when a person enters the workplace, or walks into Notre Dame, a distinct feeling arises. On a marine terminal, the culture is known by observing those working in it. Notre Dame was a place of holy sanctity, and visitors acted accordingly. The culture within a container terminal or work environment can be understood by observing those performing the work and the behaviors exhibited. In exploring the model, each building block is strategically placed. Blocks represent a significant portion or component of a safety management system. This model correlates critical program functions with the worksite's culture, creating one visible image. When viewed, the model shows the worksite's safety status, and, if necessary, the work to be completed for the advancement of the system.



Exhibit. 2 Image of three-dimensional model in a workplace

The building blocks are constructed based on my experience and needs of a safety management system within a marine terminal. Other safety professionals, when viewing the model, might feel rearrangement of the blocks necessary to meet the demands or needs of their workplace. I have also recognized that between components, one idea might seem appropriate or fit well into multiple blocks. The concept with the blocks is to categorize necessary elements of a safety management system so all who see can understand what must be accomplished in the name of safety and how what is done or not done directly affects the culture. Within safety, at times, redundancy can be positive, and the same holds true for this model. If an idea, topic or program needs repeating or morphing between blocks, the concept and strength behind the model remain.

The two functional blocks at the base of the model are regulations and measurements. Regulations include all protective workplace safety and health standards for a working environment. For a marine terminal located in the state of California, those regulations would be both federal and state OSHA regulations and well as the Pacific Coast Marine Safety Code.

Safety activities and their results must be measured. Safety performance management programs consist of determining what to measure, identifying data collection methods, and

collecting the data.¹⁰ Measurements within this building block include both leading and lagging indicators.

Moving up one level within the model identifies programs and communication. The building blocks of programs are where plans of preparation are acted upon, and where the rubber meets the road for worksite staff. The contents of the programs' building block can be vast. In the lower level of the model, the regulations' block identifies minimum necessary standards for a workplace. The programs' block spells out how those standards are acted upon within the workplace. The identification and assignment of what needs to be done, and to whom, is executed within the said program. In addition to the meeting of standards, programs are developed to industry needs or through the identification of hazards. Within a marine terminal, examples of programs would be:

- Auditing, observations and risk assessments
- Incident investigations
- Committees, meeting commitment and frequencies
- Reasonable suspicion assessment™ program
- Hazard communication program
- Fall prevention program
- Lockout/Tagout program

Note: The above list is not all-inclusive, and was provided merely as an example.

Communication is what is given to receive understanding. The communication building block identifies who delivers what message, how it is delivered, and the frequency of delivery. As communication is a two-way process, this block also defines how communication is received within the organization.

Moving to the third level of the model, learning and leadership blocks are identified. Learning is the acquisition of knowledge or skills through experience, study, or being taught.¹¹ Training is a significant component of the learning building block. Most regulatory requirements and programs identify a training need to develop competencies and demonstrate effectiveness. As technology now surrounds us, training may be completed through traditional class sessions or eLearning scenarios.

Senior managerial leadership sets the tone and direction for the organization's safety beliefs as well as providing resources for accomplishing the said program. However, the act of leadership can be demonstrated by any individual within the organization. Based on experience, senior leaders of the organization have the ultimate power to make or break a management system. Although these senior ranking officials within the organization usually understand business, they do not understand the complexities of safety. This model can be used as a tool to demonstrate those complexities and interworkings. The safety professional also provides leadership within the organization. The safety professional often serves as a pivot piece, guiding and educating senior

¹⁰ Janicak, Christopher A. *Safety Metrics: Tools and Techniques for Measuring Safety Performance*. Lanham, MD: Bernan, 2015. Print.

¹¹ "Google." *Google*. N.p., n.d. Web. 03 Mar. 2017.

leadership in the ways of safety, as well as lower-level management and front-line workers. The safety professional is a resource to all.

At the top of the arch is the organization's commitment statement. This top building block could also be the company's' mission, vision, and value statements or their core working beliefs. It is important that these written words be clear and easily understood by all, as this block represents the keystone of the arch. In architectural terms, a keystone is a central stone at the summit of an arch, locking the whole together.¹² It also can be thought of as the central principle or part of a policy or system which all else depends.¹³ This keystone is critical, as it holds the blocks of the structure together; without it, the blocks would collapse on themselves and the system would fail. The ILWU's slogan is, "an injury to one is an injury to all." The union has lived by those words for many years, residing in the memberships' belief system. The power and effectiveness of those nine words are in the simplicity in which they are written. When development or revision is needed within an organization's commitment statement, look to organizations or groups experiencing long-term success. They believe in the work, and the words merely capture their beliefs.

Residing under this visual arch is the organization's resulting culture. Culture is defined as the values, practices, and beliefs shared by the members of the group.¹⁴ As a young safety person, I contemplated my organization's culture and racked my brain with how to improve it. Looking back to my days of site safety management, I recognized when I convinced senior leadership to move away from the exclusive use of behavior-based safety and focus on building strong fundamental concepts; the culture demonstrated we had made a right pivot. In a relatively short time, word had spread throughout the waterfront that at our terminal, safety was real. It was not a gimmick or a quick fix. It was a genuine commitment to the idea that whoever worked at that facility for the day morphed into our way of operations. It was never about "Follow the rules or you are fired." It was about moments of coaching which came with the explanation "I understand that other facilities do not operate in this fashion, but we do here." Those who chose not to work safe eventually migrated to other facilities. Those who continue to work at that facility expressed their gratitude in leadership's commitment to providing a safe work environment.

Conclusion

This paper was written for several reasons. The first serves as an introduction to the stevedoring industry and the unique safety challenges presented with a transient workforce. The second and primary reason is to share the three-dimensional safety model. The concept of the model was explained, detailing the reasoning of the arched blocks and the ideas within each of them. Safety, at times, can be a complicated endeavor. The model can serve as a visual guide regardless of what stage of safety you or your organization are currently in. Contents of the blocks can remain simple, providing a general high-level reference. Alternatively, the arch can be filled with detailed interworkings, metric results, and documents. The standard of detail remains with the users.

¹² "Google." Google. N.p., n.d. Web. 03.2007.

¹³ "Google." Google. N.p., n.d. Web. 03.2007.

¹⁴ Reh, F. John. "7 Ideas to Help Drive Change by Leveraging a Company's Culture." *The Balance*. N.p., n.d. Web. 03. 2017.

After working as a safety person for almost ten years, I believe strongly in the power of human connection. Throughout the years, some of my most meaningful and enlightening moments came through simple conversation. In all of that talking and listening, I have learned and experienced that people want to be heard. They want to know that what they are saying matters. Human connection gives much meaning to life. If we, as safety people, can help facilitate that connection, we are fulfilling part of a greater purpose. My hope is this model can be a part of that.

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