

The Zen of the Business-Aligned Safety Program

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Summary

The safety professional's role in a business organization can be integral and highly important; however, it is often marginalized and perceived as misaligned or counter to business goals, reducing the effectiveness of their efforts. Business processes impact the costs and benefits of a safety program. A balanced and considered approach to safety programs in the context of business goals and the application of the Five Pillars in evaluating an organization's capacity to be a high-functioning and safe organization can lead to extreme success. The considered and calculated steps a safety professional takes to review an organization's capability to improve enhances safety program success.

Business processes encountered by safety professionals can be influenced to enhance the safety process and business goals to reach the desired end-state.

Introduction

Safety professionals are often at the center of an age-old dilemma; "what is the desired end-state, and how do we get there?" Typically our core goals are to prevent injuries, illnesses, and accidents. However, even within these terms, depending on the business you are in, the answer to the question of a desired end-state varies. If you are a safety professional in an insurance industry, loss avoidance, prevention and control have different expressions of the desired end-state – which will be based on financial and customer loyalty risks and returns. In an industrial setting, the safety professional may have a desired end-state that is more fundamental (i.e., recordable incident rate, days away rate, experience modification rates). In the business of government, the desired end-state may be reduced injuries, illnesses and accidents in the public and industrial sectors; but it may also incorporate metrics related to civil penalties, citations, or prosecutions.

A component of this discussion gets us into the realm of values. For a safety professional, we talk about the value of human life, and often correlate ethics and morality into our common values. Ethics and morals are hard to measure, and often difficult to discuss in a common context in a business. For the purposes of our discussion here, we will avoid discussing values beyond financial metrics common in the business realm. This is not because these ethical and moral values discussions are not important (indeed they are fundamental to our profession); but rather, they are beyond the scope of our discussion about the business realm that safety professional must operate within every day. We do believe that if the business goals in your organization are not aligned with your professional ethical and moral goals as a safety professional, you have a fundamental problem. Ultimately, the desired end-state for your business that you seek as a safety professional may be in conflict with the end-state desired by the organization.

All safety professionals have to operate within a context of financial investment and expected return for their programs. In a broad sense, we call this the *business of safety*. Whether you work in government as a regulatory compliance specialist, in industry as a project or corporate safety manager, or in the insurance sector as a loss prevention specialist; the terminology and processes in business are something we have to understand if we are to succeed as safety professionals. *As safety professionals we must understand the business we are supporting.*

*A **business** (also known as **enterprise** or **firm**) is an organization designed to provide goods, services, or both to consumers. Businesses are predominant in capitalist economies, in which most of them are privately owned and formed to earn profit to increase the wealth of their owners. Businesses can also be formed not-for-profit or be state-owned. A business owned by more than one individual may be referred to as a company.¹*

What then is *Zen* in the context of a *Business-Aligned Safety Professional*? Simply stated, *Zen* implies a balanced and considered state of mind relative to your place in your business.² While we cannot fully define *Zen* as it is used in the common vernacular, for the purposes of this presentation, we are using the *balanced* and *considered* state of mind and practice in the context of your role as a safety manager in a business.

Balance is necessary because in business, risk in various forms is intrinsic to any activity. If the business is not performing well, the risk is that a poor-quality output will result, and that unintended consequences will be prevalent. Balance in this context is a reflection of the values of an organization. If balance is evident in an organization, then the output will be of high quality with few, if any, unintended consequences. In your role as a safety professional, you must understand what processes you have to focus on to achieve a high quality outcome, and the fundamental outcomes must include the values intrinsic in preventing injuries, illnesses and accidents. Without values built into a business, the outcome will be of low quality with undesired consequences. There will be a misalignment in values in the desired end-state versus the actual end-state.

The *considered* approach implies that you understand both the processes and the intrinsic incentives that affect behavior in your business; and that you can adjust your efforts to affect these processes and behaviors to attain your core goals of preventing injuries, illnesses and accidents.

A key attribute of the considered approach is understanding incentives and behaviors; which is the key component of economic studies. Intended and unintended consequences are often the result of incentives. Incentives are the results of behavioral changes that are the consequence of policies and incentives. A further understanding of incentives and behavior is found in *Freakonomics* and *Super Freakonomics* by Steven Levitt and Stephen Dubner (New York, Harper Collins), 2006 and 2009.

Business and Safety

In business, decisions are made relative to risks. These risks are expressed in terms of financial exposure (or potential financial losses). Risk has many expressions, many of which are directly and indirectly affected by the efforts of the safety professional. Some examples of risk are:

- injuries to workers or others caused by organization activities
- property damages caused by organization activities
- hazardous materials releases caused by organization activities
- failure to produce (manufacturing, construction, services)
- loss of public confidence (for public firms, private firms, and government entities)
- financial discontinuity (failure to be paid, failure to obtain loans, or other financial disruptions)
- civil unrest (resulting in some of the above expressions of risk)
- acts of crime/terrorism/war
- natural disasters

Many of these risks can be financially mitigated through insurance, contractual agreements, and expressions of liability limitation and transfer (whether by law or in contractual agreements). In a broad sense, a safety professional might view these risks and the measures to mitigate them in fairly sophisticated methods, and the expression of risk can be anticipated based on past results.

As a starting point in understanding business costs, you have to understand the risks your business faces.

Costs and Benefits

In the business of safety there are two expressions you must fully comprehend in working to attain your core goals of preventing injuries, illnesses, and accidents. These expressions are:

- What are your safety program's costs?
- What are your safety program's benefits?

Once you understand the costs and benefits, you then have to understand the processes behind how these costs and benefits are derived and managed. With a solid grasp on your programs costs and benefits, you can then endeavor to influence both.

Safety Program Costs

A safety program's costs are comprised of employee labor, fringe (benefits), and supporting costs (office space, travel, supplies, communications costs, professional development, etc.). How these costs are defined in the business model is very important if you are to understand how you and your safety program are funded.

Your safety program is funded one of four ways:

1. *Safety Program Support as an Overhead Cost.* The safety program is paid for as an overhead cost, where funding is drawn from the bottom line (profit) of your firm. Overhead costs are typically associated with a project or program level costs. A safety professional being funded through an overhead cost model will support the business operations at the project or program level and will be subjected to pressures as the business expands and contracts its revenue base. Overhead costs are usually expressed as an overhead rate; which is a multiplier on a base salary cost. In bidding a project, managers will estimate the labor expenses necessary to complete the task. They will then apply an overhead to the initial estimate (something like 1.8). This overhead rate of 1.8 means that every dollar of salary paid has to absorb 80 cents of overhead. Only after an operation absorbs all the overhead is profit being made. The higher the overhead rate, the less competitive a firm is. Overhead costs will often include insurance costs. In an overhead cost model, risks are expressed at the bottom line (profit). Any accident or injury with incurred costs (deductible, loss of production, civil penalties, legal fees) affects profit.
2. *Safety Program Support as a General and Administrative (G&A) cost.* The safety program is paid for as an embedded program supporting a business unit. G&A costs are a fixed cost which is visible and scrutinized. The costs for the safety program are subject to less variability as a result of the revenue base growing or contracting as the safety program is generally an embedded and stable cost. G&A rates are expressed as a total of revenue (i.e. 5.6% G&A means that 5.6% of the total revenue generated by the business goes to covering G&A costs). The higher the G&A costs, the less competitive a firm is in the marketplace. As with overhead costs, risks are expressed at the bottom line.
3. *Safety Program as a Cost Center.* The safety program is a revenue center, and your services are on a pay for fee basis; either internally in your organization, or paid for by an external customer. This is a consulting model where services are rendered for a fee. The services may have a profit applied to them, such that the safety programs costs are X, and the revenue generated is equal to X plus 10%. In this case, as a safety manager you have to maintain or grow business as your services provide profit. Risk is generally mitigated through insurance products, and accidents arising in the operations or businesses you support have a limited direct affect on your costs. In the case of a government agency or non-profit organization, the safety program is a cost center without a profit component.

4. *Safety Program as a Combination Cost.* The safety program is some combination of the above methods. This might be an example in a larger firm where the company Vice President of Safety is covered under G&A costs, the Safety Manager at the project level is covered in overhead costs; and the safety expert brought in for project expertise is from an internal or external cost center, either as a technical specialist on staff or as an external consultant.

Not surprisingly, determining how your safety program's costs are paid for may be difficult to assess if you haven't looked at the issue previously. There is no absolutely correct way to fund a safety program. Each of the above methods has its own strengths and weaknesses. The significant point is to understand each method of paying for the safety program, and understanding how that method of funding might be adjusted to achieve a desired end state. For example, if G&A costs are too high, move safety program costs to an overhead cost model that supports a project directly. If overhead costs are too high, shift costs to a G&A basis across the company; or fund safety services on a pay-as-needed basis.

Conversely, if the costs of operational failures (injuries, property damages) are too high, increase safety program support through the appropriate cost model depending upon the motivation and financial performance of the organization.

Safety Program Benefits

Measuring the results of a safety program is intrinsically subjective because the results will often be impacted by other factors. The 5-Pillars model of describing effective safety programs is a means of viewing high-end safety performance in an organization.³ This approach looks at characteristics of organizations and reflects a multidisciplinary approach to safety performance that is impacted by various management functions and leadership commitment. For purposes of elaborating on the benefits of a safety program, it is beneficial to look at a safety program through the paradigm of the 5-Pillars model.

- *First Pillar: A Value-Based Organization Culture.* The values of a successful organization will typically include values that are common in successful societies. The term "values" implies a belief that we are able to recognize and incentivize behaviors that are aligned with the goals and beliefs of the organization. Value-based decisions are a necessary component to an organization operating with excellent performance, and the values that are recognized as beneficial can be described and recognized in behavior; including the benefits of working (behaving) in such a way so as to minimize risk of injuries or accidents. This safety-value can be (and indeed is) integral to any high-performance organization. Although difficult to discuss in simple terms, where safety is a core value in an organization, it is a *felt value*. Safety as a felt value is evident in how people treat each other, how willing they are to look out for each other, and the demonstrated care they have in the context of a workplace. This is *always* a result of leadership commitment, and is integral to all the other values that engender a sense of self-esteem, contribution, and commitment to the organization.

Integral to this discussion of values and behaviors are the incentives expressed in the organization. A clear example that most safety professionals will recognize is when the incentives of an organization are misaligned with the values of the organization. As an example; an organization may say it values safety in the workplace, but incentivizes its

people to take risks and cut corners by rewarding schedule acceleration without understanding what was compromised to actually accelerate schedule. As safety professionals we must recognize when the resultant behaviors of the organization will conflict with safety as a core-value. Measuring a safety program's impact on values is difficult; but necessary if you are to understand the organizations' ability to conform behaviors to those values.

- *Second Pillar: Principle-Centered Leadership.* Committed leadership that will not tolerate deviation from core values, and inspires organization and personal performance in the context of the organization's values. Most safety professionals will agree that without committed and effective leadership, no safety program can achieve excellence.⁴ Often the difference between an average organization (with a recordable incident rate of more than 2.0, with an experience modification rate of more than 1); and an excellent organization (with a recordable incident rate of zero, and an experience modification rate of 0.5), is principled leadership. With principled leadership, first and foremost you have an expectation of zero incidents, and you have the commitment to attain those goals. This is absolutely essential for a safety professional; for without this level of commitment you will not have a core-value for safety performance; and you will not obtain the necessary resources to achieve the desired end state of zero injuries, illnesses and accidents.

Leadership is difficult to discuss and measure in any uniformly understood way. For the business aligned safety professional, this is the hardest and most important aspect of an organization's ability to perform safety and manage hazards intrinsic in the work. But you know good leadership when you see it... or perhaps more appropriately, you know when principle-centered leadership is inadequate in your organization. In these organizations, misalignment between personal and organizational values and objectives will be evident in work planning and execution. Personnel will be rewarded for inappropriate risk taking on the job.

- *Third Pillar: Business and Operational Integration.* For the business-aligned safety professional, this is the Pillar where safety processes add value to an organization's bottom line. Business and operational integration implies synergies across functions in an organization, ultimately intended to improve the execution of the project or program.⁵ Business is a term used to describe all the processes that relate to the primary purpose of the company. These business processes include all aspects of an organization's product – whether that is durable goods produced in manufacturing or construction activities, or a provided service. Business processes also include:
 - Insurance products to manage financial risk and volatility
 - Business-government interactions including paying taxes and the benefits of government efforts including subsidies and civil infrastructure that directly and indirectly support business activities.
 - *Operational integration* describes how safety processes are built cross-functionally into the operations of the organization. Operational processes that incorporate safety include:
 - Robust hazard recognition and management capabilities (i.e. Job Safety Analysis)
 - Risk mitigation through integrated work planning efforts
 - Redundancies in process review and execution

- Behavioral observation and management systems in the execution of the work
- *Fourth Pillar: Innovation, Growth, and Learning.* This Pillar is the one encompassing critical thinking skills in evaluating processes to find ways to improve performance.⁶ This is an extension of operational integration processes to include critical evaluations of both successes and failures from all levels of the operational process. Successes may include completion of activities on or ahead of schedule through enhanced planning and capturing efficiencies. Failures may include errors in planning, incidents or near miss events, and other undesired outcomes. This organizational capability brings team oriented problem solving, organizational reliance on continuous improvement, and the ability to think critically about what actually caused the desired or undesired outcome. The safety program is often the vehicle for growing an organization's critical thinking skills; but the benefits can be seen in work planning, quality processes, training programs, and the ability to anticipate and mitigate problems across all operations and management functions.
- *Fifth Pillar: Metrics.* Performance metrics quantify the organization's performance.⁷ Project metrics tell you whether the project is meeting its goals. Business metrics define the business' progress in measurable terms. Metrics for the business-aligned safety professional encompass the leading and lagging indicators in safety performance (behavioral observations, near misses, recordable incident rates, days away/ restricted /transfer rates, workers compensation losses, etc...). They also include metrics on insurance costs, premiums (experience modification rates), safety program costs, and workers compensation costs. Survey instruments can measure subjective areas including alignment between management and the workforce in the area of values, effectiveness of communication of objectives, work planning, training, and critical thinking.

Case Study

A scenario may be helpful to illustrate how a safety program's costs and benefits are evident on an organization's performance:

Xanadu Shipping is a specialty shipping company that moves very large pieces of machinery to wherever it is needed. They have a workforce of 80 permanent employees, and will often hire temporary workers to facilitate a project move. They move materials on the highway, over water, by rail, and by air. They typically endeavor to make 30% profit on their work, and in a year will perform ten large and complex movement projects (offshore platforms for oil production, power plant components on river barges and oversized loads on highway vehicles). In that same year, Xanadu Shipping will move another 100 smaller and less complex movements of machinery (large diesel generator sets, boilers, oversized construction equipment). Xanadu Shipping has several large specialty barges for river transport, rail cars, and several over the road trailers for road transport. They contract with tractors, crane and tug companies routinely. Insurance for their activities is complex, with coverage of various transportation modes, damages to equipment during handling, extensive use of cranes, as well as the typical workers compensation and property insurance policies. Despite the various insurance products they purchase and use to mitigate their risks, there are many scenarios where a loss suffered on a project will not be covered. Because of this, Xanadu Shipping's management works hard to retain high performers,

to assure that the ability and expertise necessary to anticipate and address problems is intrinsic to their business model.

The safety professional at Xanadu Shipping is Xavier. Xavier has been with the company since 2000, starting as assistant project manager when he finished college. He became the Safety Director for Xanadu a few years later after Xanadu Shipping suffered a job-related fatality of a subcontractor. He has a B.S. in industrial safety, and is a Board Certified Safety Professional. Xavier has a safety department that currently has two safety specialists. Xanadu currently has a solid safety program, but it wasn't always this way. In the early years, the President and Owner of Xanadu Shipping relied on intrinsic expertise to manage risk. As the company grew, external pressures to have a low recordable incident rate and experience modification rate became an issue periodically, especially as the company performed more work in the oil and gas energy sector. On the occasion when the company did work for an oil and gas sector client, they would incorporate subcontractor safety specialists for their projects as a stand-alone expertise only when the customer was willing to pay the additional costs for that support. This approach was not optimal, and the recordable incident rate for Xanadu was well over 5.0.

In 2002, a subcontractor employee was killed during the offloading of a piece of equipment when the rigging on a suspended load failed, dropping a 25-ton piece of mining equipment which struck and killed the worker on the ground. In another incident in 2003, a generator set was damaged during movement on the highway when the rig went under an overpass that was too low for the load. There were no injuries in this second incident. In both instances, direct financial losses as a direct result of the incidents were minimal due to insurance coverage and payouts; but indirect costs of the losses were very high. This was due to the loss of company prestige and reputation as the customer of these projects suffered production delays. As a result of the 2002 fatality, Xanadu Shipping lost a customer that provided more than 30% of their revenue annually. Over this same time period, Xanadu's experience modifier on their workers' compensation insurance climbed from .89 to 1.02 due to the number of internal injury claims. This change threatened Xanadu's ability to bid and maintain work as their customers typically demanded an experience modifier of less than 1.0 of all their vendors.

The Xanadu Shipping President took the lessons learned to heart, and increased the emphasis on the safety program. He promoted Xavier to the full time safety position with the mandate to prevent all injuries and losses for employees and subcontractors. Xavier looked at the historic funding for the safety programs (project based, overhead cost) and made a case to build safety into a fixed overhead cost model so that he could develop consistency in the program (G&A cost model). When larger and more complex jobs came along and additional expertise was needed, the projects' costs would incorporate additional fees for the needed expertise; but all projects were managed with a team that included an Xanadu safety specialist or safety manager. The expectation became one where zero incidents was demanded. Xanadu's project management and execution competence increased, and by 2006, the recordable incident rate for the company and subcontractors combined was 0.8; and days away, restricted or transfer rate of 0.05. By 2008, Xanadu had an experience modification rate of 0.80.

In this scenario, when Xavier took on the role of Safety Manager in 2002, he needed to know about what his organization was capable of in terms of safety performance. Using the 5-Pillars Model for evaluating his organization, Xavier concluded that:

- *Values Based Organizational Culture.* Xanadu Shipping leadership attained the beginning of a values based culture when it suffered a fatality in 2002. The President of Xanadu came to the realization that any fatality or serious injury was not acceptable as a part of his business. This realization was shared amongst the Xanadu managers, supervisors and workers. Xavier evaluated this Pillar as *High Alignment* throughout the organization.
- *Principle Centered Leadership.* Xavier felt that Xanadu Shipping had misalignment between the President and Owner, and the tiered leadership in the organizations. Although Supervisors and Managers heard the commitment in the President towards safety, they were not fully behind the belief that all work could, and would, be completed without incident. Xavier evaluated this Pillar as *Moderate Alignment* throughout the organization, and work was needed to improve.

To address this shortfall, Xavier asked the President to demonstrate his commitment to safety values frequently and visibly. The President started all meetings with a safety moment. He reviewed work plans and asked critical questions regarding safety. When Xavier had a conflict with a manager over a planned work activity that incorporated a high-risk activity with inadequate safety processes, the President weighed in and resolved the issue in Xavier's favor.

- *Business and Operational Integration.* Xavier evaluated the business model and the integration of safety into operations and planning. He evaluated this Pillar as *Low Alignment* throughout the organization. Xavier specifically found that:
 - Funding was built into the project for safety support, but that there was no overarching safety program in place that a new project had to comply with or could use as a step up from previous experience.
 - There were no real financial consequences to projects for failures to properly execute safety processes.
 - Personnel with expertise in safety processes were not formally trained. There was no formal hazard analysis process in the work planning, no use of Job Safety Analysis (JSA) as a tool for managing risks, and limited visibility to incidents (including near-miss incidents).

To address these shortfalls, Xavier established a safety program that was funded as a part of Xanadu Management (G&A costs) for himself and one safety specialist. With these resources, he built a corporate safety program comprised of safety standards, processes and tools. He established a means of funding safety programs integral to each project (overhead costs); and had one safety specialist assigned to each project during planning and operations for oversight and technical assistance. Xavier also established training minimums for supervisors in safety processes including JSAs, incident reporting, critical thinking, and continuous improvement processes.

- *Innovation, Growth and Learning.* Xavier evaluated the Xanadu Shipping workers and managers to evaluate their capability to think critically and improve as a learning organization. Xavier found that lessons learned on the various projects were not captured and communicated across the organization. While this was notably true for safety-related issues,

Xavier also found that it was true in quality, operational efficiency, operational effectiveness, and even workforce expertise for both permanent and job-hired staff. He evaluated this pillar as *Low Alignment*.

To address these shortfalls, Xavier developed a robust incident reporting and lessons-learned program. He also initiated a behavior based safety initiative to facilitate peer to peer accountability and cooperation across the Xanadu Shipping teams. He formalized the work planning activity to include hazard recognition and integration of lessons learned from other projects. He developed training on critical thinking skills for supervisors, and initiated an effort to obtain OSHA Voluntary Protection Program and International Standards Organization certification for ISO 9002. These effort helped document existing processes, and additionally formalized process improvement practices into the organization.

- *Metrics*. Xavier evaluated Xanadu Shipping's ability to measure safety performance. He evaluated this Pillar as *Low Alignment*, as Xanadu had limited visibility into the cost or safety related consequences.

To address these shortfalls, Xavier developed reporting processes to be able to show monthly recordable incident rates, lost work day rates, and other key safety metrics. He established training, safety observation and near miss reporting processes that were visible, and tied to employee performance goals.

The Business Aligned Safety Professional's Approach to Success:

Understanding the relationship between business and the traits of successful organizations in safety performance, we can identify the steps a new safety professional must take to evaluate and improve the organization.

- Identify goals for yourself and the organization.
 - Are they aligned with organization leadership's goals?
 - How about the customer (s) goals?
 - What about the goals of the employees?
- Understand how your safety program is funded in the business model. Take into account:
 - Overhead Costs vs. General and Administrative Costs
 - Benefits of the safety programs, including;
 - insurance premiums and deductibles,
 - non-compliance costs, personnel retention costs, and
 - other loss costs such as reputational and marketing hazards

Understand the benefits of the safety program on the organization. This must include all financial benefits (premium reduction through experience modification rate and underwriting credits), impacts to bottom line due to loss prevention, indirect improvements to efficiency, effectiveness associated with improved operational performance, opportunities associated with reputation and business development.

Understand your organization's 5-Pillars:

- What are the core values of the organization? Do they align with your goals and the organization's goals?
- Is leadership principled? Does it align with the core values that the organization espouses?
- Are safety processes integral to the business and operations?
- Does the organization learn continuously, and demonstrate critical thinking?
- Are metrics to evaluate safety processes in place, understood, and communicated?

Identify gaps between what is, and what should be, and develop an implementation plan. Think in terms of short-term objectives (months); and long-term objectives (years).

Conclusion

The balanced and considered approach to safety in business integrates an understanding of business processes, operational needs, and the leverage points that are possible within an organization. The business-aligned safety professional understands the company's goals, costs constraints, and the potential benefits of the safety program in terms that the Company President and Chief Financial Officer will understand. This allows for better and more supportive decision making.

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