

The Governance of Value(s)

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Abstract Based on excerpts from *Governance Reimagined - Organizational Design, Risk and Value Creation*, published by John Wiley & Sons, May 2012, the author explores the relationship between value and the pursuit of values with a specific focus on the role that resiliency plays in our ability to be successful in creating value. Psychological influences like loss avoidance are greatly underappreciated and forms of corporate governance like Network Governance can play an important role in minimizing the impact of these factors, along with enhancing the ability of organizations to create value.

INTRODUCTION

The reason that any organization exists is to create value. Whether serving the needs of the clients of a non-profit charity, or generating market or intrinsic value for the owners of a company, the creation of value is the primary objective that all volunteer groups, management committees, and supervisory bodies necessarily pursue. Most organizations, however, don't fully recognize the differences or the connections between value, their values, and the elements that drive value creation. Further, they don't focus their governance initiatives on the structures and activities that create the most value given the risk-taking constraints that every organization faces. Among these activities is a focus on ensuring the ability of the organization to continue to deliver its services and meeting the expectations of its network members far into the future - its *resiliency*.

In the end "governance" is about creating the environment in which the present value of activities taken in pursuit of values is maximized relative to the risk-taking capacity provided to the organization.

VALUE, VALUES AND THE VALUE EQUATION

Most typically, we measure value in financial or economic terms. Hence, most businesses understand the notion that their products and services, marketed and sold or utilized successfully, will generate value. However, the story only begins there.

We all encounter simple situations in our daily lives that demonstrate where value has been defined. For example, I'm hungry, so, my brain decides that I should walk two blocks to the local co-op for some food. As I enter the store, I'm greeted by a beautiful display of various fruits, including kiwis, nectarines, oranges, and apples. But, how should I choose?

I've decided, or someone has convinced me, that I should prefer something healthy to eat. After all, it's better for my body and carries the promise of lower health costs and longer life (so I have been told.) Therefore, my brain decides to opt for fruit. Since the fruit on display is organic, my brain tells me it's even better. For some reason, I'm drawn to the apples. Red Delicious, Braeburn, Gala, and Honey Crisp are all on offer. What colorful names! My brain jumps into action.

I check the prices and see that Honey Crisp are on sale, but still cost about 10 cents more per pound than my old standard, Red Delicious. I remember just how good Honey Crisp apples are and that they normally cost almost one dollar per pound more. I am thinking that this could be the right time to buy, but then wonder what is the cost of the same apple at the grocery store down the road? Another person enters the store, politely excuses himself, reaches past me, and confidently grabs a Honey Crisp. I buy one too. Delicious! Hunger satisfied, I march on in my day.

At this very moment and in this very situation, I found the value of the Honey Crisp to be high enough to justify whatever price the store charged. At that moment, the Honey Crisp apple which I chose had a certain value to me, which was at least as much as the amount of money I paid for it. The same is true for the person who selected Honey Crisp before me and for any others who purchased Honey Crisp that day. But what determined that value? Why didn't my brain tell me that it was too expensive? Why wouldn't everyone agree to buy Honey Crisp in the same situation? Some purchase Gala apples, while others go past all of the apples and choose kiwis or oranges instead. Why?

The answers to these questions are not simple; actually, they are very complicated and even *complex*. The decision I made, and decisions we all make every day, are a result of our current desires, the influence that others have on us, as well as our values and the intersection of opportunity with all of these factors.

Think through your most recent purchases. What made them valuable enough to you that you were willing to part with your money?

This question is also considered by the other side in the transaction. What is it that makes a product sell? What drives the perception of value and what is the value of a good or service that a company offers to end-users or consumers of that product or service?

To begin to understand how value is determined, we have to start with some basics. If you have something I want and I have something you want, we can possibly agree on an exchange – some amount of what I have for some amount of what you have. If we are successful in our negotiation, this barter of physical goods or services determines their value to each of us at that very specific point in time. Or, in the presence of money in the economy, currency can act as a medium to facilitate exchange as well. (Note: its value is also influenced by perception and the presence of a long-term buyer of that currency, ala a government accepting it for tax payments).

Value and *values* are different, though. The former is an attempt to quantify the worth of something and the latter is more frequently associated with intangible concepts like principles and beliefs. An organization's values, therefore, often go beyond monetary measures and are described by its board of directors, or organizing body, as part of its business planning process or its foundational documents. These may be simple mission statements, which reflect general beliefs, or they may be elaborately developed business plans and conduct policies that describe the objectives of the organization and boundaries of behavior that are allowed in pursuit of those objectives. In any case, the extent to which an organization can fulfill its values may be a more appropriate measure of value. When a company has return on shareholder equity as its only value, then we have no problem reconciling value and values in a monetary fashion. But, rarely is it so simple. Still, the objective is the same – to turn the degree to which we fulfill our values into some kind of measurable and positive value.

As individuals, our values are what we believe to be good; to phrase it differently, what is good is often seen by us as being valuable. In other words, it is what forms our belief system. In effect, we use our values to determine the value of a choice. We decide to support a charity by making the decision to part with our time or wealth in support of its mission. Similarly, if the enjoyment I get from eating good-tasting fruit is one of my values, it may have signaled my brain to make me walk to the local co-op and buy something tasty (and healthy). As individuals, we might even have negative influences on our perception of value when we believe that other values are bad, which then impacts our actions in determining how to use our resources to get things of value to us.

Again, our belief systems influence our perception of value when we make a choice. Whether that choice is to substitute charity for consumption of goods or services, investing or saving, our values collectively determine the value that we ascribe to something. Case closed, right?

Well, it turns out that our values are not quite as constant or pure as we might think them to be. In fact, our values may even change just because of what we see others doing. Professor John Darley of Princeton University has studied how people behave in groups versus how they behave as individuals. One of his findings is that when we see others in a group to which we belong doing things that we might individually find to be against our values, we are more likely to engage in similar bad behaviors, even failing to recognize that those actions are inconsistent with our values.ⁱ On a more positive side of our changing values, if we hear that one of our friends is supporting a particular charity, that piece of information may influence our choice to support it as well. There is an amplification of actions when we see others doing something, good or bad, and that amplification can change our behaviors and perceptions of value, sometimes radically.

THE CAPACITY TO PURSUE OUR VALUES

To pursue value and our values, we have to take risk. So, where does an organization get its “risk-taking capacity?” To pursue objectives, every organization needs resources like cash, people, connections, or even goodwill (not the accounting kind), all of which can be used in pursuit of our values - capital. Capital can be described in financial terms like cash, debt or equity, or we use common business vernacular like human capital or political capital.

As Economics is the study of how people use their limited resources in an attempt to satisfy unlimited wants, these forms of capital are often grouped under the umbrella of economic capital – a label that tries to capture the simultaneous condition of limited availability and desirability of these resources.

Economic capital, like most resources, is scarce. In other words, those who want it have to compete to get it and if they do not use it well, it can go away, often very quickly. Quite infamously, and over a matter of days, companies like Bear Stearns and Lehman Brothers, once among the venerable leaders of Wall Street, effectively disappeared in terms of ongoing operations when key parties to their successful pursuit of corporate values denied them their needed economic capital. Still others in the same business were recipients of additional economic capital from the same key parties. Something made these successful firms different from those that failed.

Without economic capital, the fulfillment of our organization’s values cannot be pursued. How one decides whether to exchange something of value with us, like economic capital, for something our organization offers and how to best govern the factors that affect this evaluation is clearly important information.

The equation below is a present value equation, or simply the *Value Equation*

$$Value = U_0 + \frac{U_1}{DR_1} + \frac{U_2}{DR_2} + \frac{U_3}{DR_3} + \dots$$

Our present value equation has three components that matter. First, the numerator is the amount of something we get at some point in time (the U’s, with each separate time you get something denoted by a sequential number). It may be a series of “somethings”, like coupon payments or dividends or benefits from a service, but they come to us at some point in the future. If we change nothing else in the equation, the more we get at each point in time, the higher is their present value today.

$$Value \uparrow = U_0 + \frac{\textcircled{U_1} \uparrow}{DR_1} + \frac{\textcircled{U_2} \uparrow}{DR_2} + \frac{\textcircled{U_3} \uparrow}{DR_3} + \dots$$

Similarly, if the “somethings” we get will happen more often, then we will usually be willing to assign a higher value to them. The three dots suggest that you continue to receive the “somethings” into the future. The more times you expect to receive these, the higher the value of this equation today.

$$Value \uparrow = U_0 + \frac{U_1}{DR_1} + \frac{U_2}{DR_2} + \frac{U_3}{DR_3} + \overset{\longrightarrow}{\textcircled{\dots}}$$

These first two parts are relatively simple. You get more and so you are usually willing to give more in exchange.

One other aspect of this part of the equation is that perceived risk is in the denominator. The DR's, or discount rates, can be different in each time period, so each is denoted with a sequential number to identify them with the timing of the "somethings." So, if the risk of something goes down, its value will go up and vice versa. If something is without risk (and there is no inflation), then each DR is equal to one and today's value is just the sum of the value of each "something" received in the future. If the perceived risk is large enough (approaching infinite risk), the value today will be close to zero.

$$\text{Value} \uparrow = U_0 + \frac{U_1}{\text{DR}_1 \downarrow} + \frac{U_2}{\text{DR}_2 \downarrow} + \frac{U_3}{\text{DR}_3 \downarrow} + \dots$$

Value need not be just a monetary measure. In fact, the U 's stand for a concept called "utility" which describes something that makes us feel good or gives us something that is valuable to us. Overall, we're looking to understand the extent to which we effectively fulfill our organization's values, which this equation will also allow us to do. Value can gauge both how effectively we use capital – usually a monetary measure – as well as the extent to which we are able to fulfill our beliefs in a measurable way - to deliver utility.

In simple terms, remember these three things about the Value Equation:

1. When the amount of the "somethings" you receive grows, the value today increases.
2. When the number of times you receive the "somethings" is expected to grow, the value today increases.
3. When the risk that you won't receive the "somethings" in the equation shrinks, the value today increases.

Effective governance of our human organizations is about making these three things happen.

THE ROLE OF RESILIENCY IN CREATING VALUE

In this paper, we focus on the stochastic nature of the relationship between capital demander and capital provider, and in particular the role that resiliency plays in aligning the perceived value of a transaction between the two parties. This is only one part of the governance of value, but since it has an under-appreciated impact on the cost of capital, primarily through drivers of risk perception and human emotion, it is highly relevant.

The Value Equation increases when the utility we provide to others goes up and when others perceive a decrease in the risk that we might not provide that utility. The third factor has to do with the endurance

of our ability to generate utility for those who transact with us. How we structure, or govern, our organizations will greatly affect this value.

Let's consider a simple service as an example. If someone offered to clean your house each week for a year, if you paid up-front, they might offer you a discounted price. Part of your risk assessment in determining the fair value of that payment would be a consideration of whether the cleaning company would be around for the whole year to fulfill its obligation. If it went bankrupt six months into the term of your agreement, you would have vastly overpaid for the services you received.

$$Value \downarrow = U_0 + \frac{U_1}{DR_1} + \frac{U_2}{DR_2} + \frac{U_3}{DR_3} + \left(\overset{\leftarrow}{\circ} \dots \right)$$

When you invest in a government bond or corporate note, you are promised interest payments on a regular schedule and a return of your investment – which is really a loan – at the end of the agreed upon time period. But, if that company or government goes away before they pay you back, you will realize substantial losses. Cleaning services and bonds are valued using the same concepts, but with different forms of utility provided in exchange for an up-front payment.

Someone in your business network who is considering whether to be a customer of yours, or to partner with you in some contractual way will think about you in the same way as you did about the cleaning company and the government or corporation that issued the note for your investment. He wants you to be around for as long as you could possibly provide him with something of value – something that gives him utility.

But, no organization operates without an occasional hiccup. The goal is to successfully manage these missteps – to be *resilient*. This means having the ability to spring back; rebound; return to the original form or position after being bent, compressed, or stretched; or recover readily from illness, depression, or adversity; buoyant.ⁱⁱ It's just what we need to avoid letting people down!

A resilient organization might secure back-up lines of credit, diversify its donor base or study what other organizations have done when faced with specific challenges so that they can be prepared to manage a similar situation. In short, a resilient organization is ready to bounce back in the event of an unexpected problem.

The opposite of resiliency is *brittleness* – a not so nice sounding word. If someone is described as “brittle,” it means that person has hardness and rigidity but little tensile strength; breaking readily with a comparatively smooth fracture (like glass), easily damaged or destroyed; fragile; frail; lacking warmth, sensitivity, or compassion; aloof; self-centered.ⁱⁱⁱ Needless to say, we don't want our organization to be like that.

In the fall of 2002, *The Atlantic Monthly* carried an article entitled Homeland Insecurity, which helpfully illustrates the importance of resiliency and the downfalls of brittleness.^{iv} The article's protagonist is Bruce Schneier, known worldwide for his work in cryptography and cyber security.

Cryptography is one element of the science of information security, allowing for data to be safely stored or transmitted across public media like the Internet in a manner that only the owner or the intended receiver is able to decipher. Schneier was so good in his work at cryptography that the FBI and the U.S. Congress wanted to ban it for fear that his technologies could be used by terrorists, criminals, and other assorted bad guys. If his work were allowed to go on, they argued, the authorities would find it nearly impossible to gather important evidence for prosecutions or to be able to interdict planned terrorist attacks. They were right, at least on the first point.

Schneier no longer believes that super-encryption is totally secure and neither do many criminals. It turns out that there is a critical flaw in this process, making this technology extremely vulnerable to very large negative consequences with one simple failure occurring. At the sending and receiving end of encrypted messages are human beings. They encrypt and decipher messages using technologies that are password-protected. Most people cannot remember complicated passwords. So, they will encrypt and decipher messages using relatively simple passwords and, once someone figures out what that password is, the encryption protection is broken and the message's secrets revealed.

This kind of vulnerability is called a *Single Point of Failure*. It describes complicated and complex systems that come undone because one thing went wrong. When they break, they break badly.

According to the Atlantic story, the FBI was trying to gather evidence on a suspected Mafia figure named Nicodemo Scarfo. When the FBI searched his office, they discovered that he was indeed using strong encryption on his documents and email communications. They simply but ingeniously installed a keyboard logger on his machine, captured the password to the public key software he used, and very shortly thereafter Scarfo was in court, pleading guilty to charges of running an illegal gambling business. For Scarfo, his security system broke badly. His system and the entire enterprise were surprisingly brittle.

In a far more serious – and by now notorious – case, a bunch of terrorists got past airline security on September 11, 2001 – one check at each airport they used. Once accomplished, they had no other serious impediments to their plans to hijack planes and crash them into buildings in New York and Washington, D.C. Airport security at that time had a single point of failure and the impact of that weakness in the system was catastrophic. This system's failure cost the lives of thousands of innocent people and continues to bring changes – such as tougher airport security, political conflict and follow-on attacks – even all these years later.

But not all failures are criminal. Companies with single products, like emerging bio-technology firms that have yet to receive full regulatory approval, have single points of failure, which, if realized, could be catastrophic for their investors. Or, businesses that have over-reliance on one customer or depend on short-term funding (which, in turn, is dependent on credit ratings issued by a few like-minded, like-

acting companies), are subject to quick and dramatic ends to their existence if these keystone parties fail or walk away.

Sony, Citigroup, and the U.S. government are just a few of many organizations which have discovered that storing large amounts of sensitive data on single networks or in single databases makes them highly desirable targets for cyber-thieves. If the security protecting them has a single point of failure, the personal or embarrassing information in those files may find its way to criminals, public websites, or other places where it could cause great harm. These may not be fatal events for those organizations, but they are bound to be costly and affect their ability to achieve corporate goals for quite some time.

As Bruce Schneier notes in The Atlantic Monthly article, we should expect all systems to fail at some point in time. For those seeking to better govern their organizations, the focus must therefore be on creating systems that responds well to problems – ones that break well.

THE PATH OF A PROBLEM

Every problem that emerges at a company, in technology, political economies, or other parts of our lives, has two characteristics. First, the problem has a potential impact. Second, the problem needs time to develop and to reach its potential impact.

A fire on the stove in a kitchen, for example, has the potential to burn down the entire house if not stopped in time. If that house is a row house, the fire has the potential to burn down the entire block. Further, if the block of homes is large enough and the external conditions are right, the fire could spread from block to block and become quite catastrophic. The City of Chicago had a famous fire in 1871 that, legend has it, was started when “Mrs. O’Leary’s cow” kicked over a lantern in a barn. The fire consumed roughly four square miles of the city before it extinguished itself at the shores of Lake Michigan. It went down in United States’ history as one of that century’s worst disasters.

Or, consider a calculation error in a spreadsheet that assigns an incorrectly high value to an investment product that a company has the opportunity to buy. If that spreadsheet misleads the company into believing that the market price of these securities is too low, it may begin to amass “undervalued” securities, even booking unrealized profits and reporting them in their earnings reports to investors. Over time, the company may even accumulate so much of these securities that, if forced to sell, it will discover an error of such magnitude that it leads to its demise, or, in the very least, to very large losses. Many of the losses incurred during the subprime crisis were the result of inaccurately calculated risks and overvaluation of the originated assets.

Figure 1 shows the “path of a problem,” with the bottom axis representing time and the left axis representing the impact of the problem. If left unchecked as time progresses, over seconds or even years, the problem will cause its full potential impact. That impact may be very small or it may be large enough to break the system within which the problem is emerging. Unchecked, all problems will eventually reach their potential impact.

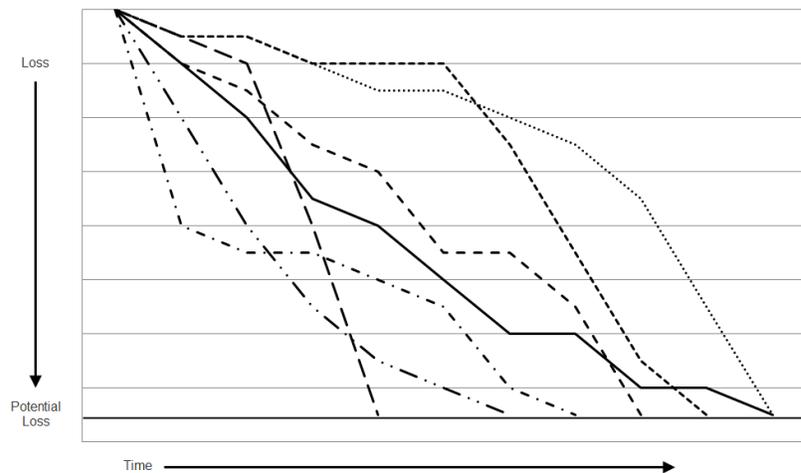


Figure 1 The Path of a Problem

Every organization is taking a walk of sorts across time, encountering potential opportunities and dangers, meeting new customers and prospective partners, and being exposed to internal and external elements that might cause it problems.

The value of that organization today is determined in the same manner as any relationship with stochastic outcomes - by looking at all of the possible outcomes, their value, and the probability that they will be realized. These can be represented using a probability distribution.

Problems result in negative values or losses for that organization and also, potentially, for those who are part of its network. The larger the potential impact of a problem, the larger its potential to reduce the value of the company to those in its network. And, as the likelihood of problems increases, so do the chances that losses could ensue.

When looking at possible outcomes for the journey that most companies make, the probability distribution, with problems left unchecked, actually looks a bit more like that of Figure 2. Note that in this distribution, some very large losses – huge negative values – are possible.

In fact, with uninterrupted problems, the distribution has a rather strange shape to it, because possibilities for gain are disproportionately small compared to the possibilities for loss. This is called a negatively skewed distribution and, all else equal, an organization with this distribution as opposed to the normal distribution, will be worth less.

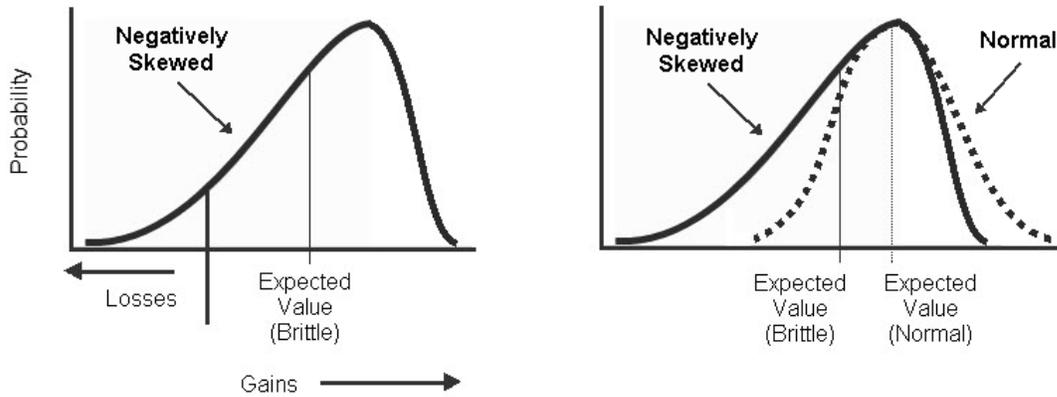


Figure 2 Negatively Skewed Distribution When Problems Go Uninterrupted

Now, a resilient organization will find a way to interrupt large problems before they reach their potential impact, even those that threaten the life of the system. Figure 3 shows the path of problems that have been intercepted by agents within a resilient system.

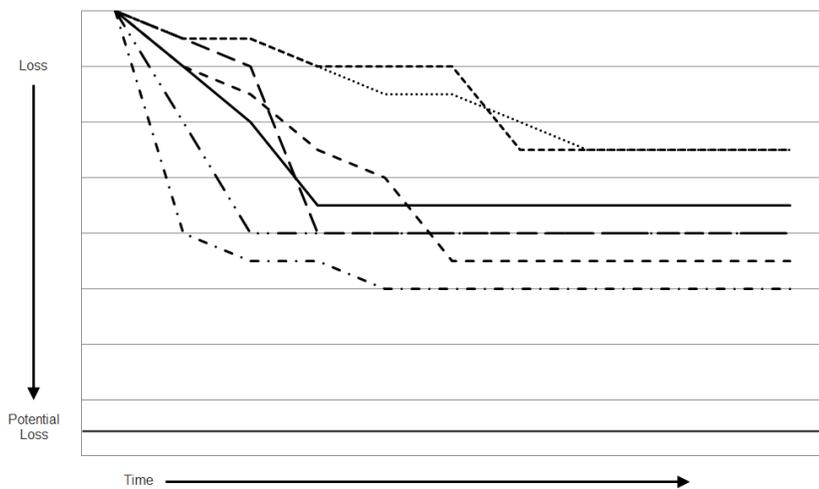


Figure 3 The Path of a Problem Interrupted

When growing problems can be intercepted and managed so that they never reach their potential impact, organizations are able to truncate the losses in the distribution. These cases are represented by the point at which each line in Figure 3 goes horizontally and never reaches its full potential loss. This is the point at which the problem was stopped. Truncating the left side, or loss side, of the distribution of possible outcomes alone will increase the value of the organization.

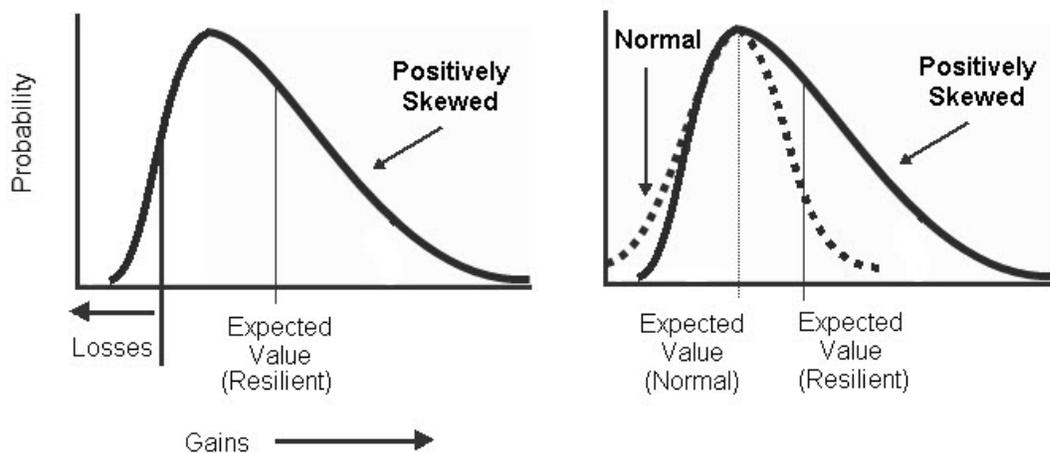


Figure 4 Positively Skewed Distribution in Well-Governed, Resilient Organizations

However, well-governed organizations are both resilient and structured so that positive ideas are more likely to be engendered and positive value created. In this case, the distribution is a mirror opposite of the brittle distribution, with the possibilities for gain being disproportionately large compared to the possibilities for loss. This is called a positively skewed distribution, which is shown in Figure 4. All else equal, an organization with this distribution, as opposed to either a normal distribution or a negatively skewed distribution, will be worth more.

THREATS TO THE SYSTEM

An organization seeking to establish practices internally that enhance resiliency would do well to develop a list of critical risks and to look for examples of where emergent problems have developed into larger issues. For example, and just a small subset of the possibilities, potential problems can develop from factors such as:

1. Changing technology or innovation by competitors
2. Loss of a high value client or supporter
3. Product recalls or liability
4. Regulatory changes or enforcement actions
5. Weather
6. Malfeasance
7. War
8. Terrorism
9. Loss of liquidity
10. Human error
11. Loss of key people
12. Supply chain disruption
13. Keystone third party failure

And we have seen results from these exact causes. For example, IBM famously missed the innovation in technology that moved computers from the mainframe to the desktop models in the 1980s. Innovators like Dell Computers took advantage of the rigidity in the IBM legacy sales infrastructure to sell directly to consumers, a change that IBM would have found very difficult to implement. Between 1988 and the end of 1993, IBM stock fell by more than 50 percent while the NASDAQ index of technology stocks more than doubled and the stock of Dell rose by over 700 percent.

Capital One Financial, one of the largest issuers of credit cards and other loans to individuals was the subject of a regulatory review in 2002 that resulted in a supervisory action against the company. The day after Capital One issued a press release announcing the action its stock price plummeted by 40 percent. The loss in market capitalization realized over the ensuing weeks was more than \$7 billion.

Even political economies are not immune from emerging issues of massive scale. Economic crises in various Latin American countries in 1982, in Mexico in 1994, in some Asian countries in 1997 and 1998, and in Russia during 1998, caused significant economic disruptions therein and losses for external members of their networks as well. Liquidity crises in these regions led to massive outflows of foreign capital, increased cost of capital, and lower standard of living for people working or residing in those countries.

And as we know, the reliance on human beings virtually assures some error, sometimes on a horrific scale. In 1984, a massive toxic gas leak at the Union Carbide plant in Bhopal, India killed thousands of people and injured hundreds of thousands of residents near the plant. Among the causes of the disaster were the failure of an employee to close a critical isolation valve which led to excessive pressurization of the tank containing the gas; the shutdown of a flare which would have neutralized escaping gas; staffing at a critical unit that was less than half of what was recommended; the elimination of a key maintenance supervisory position just weeks before the disaster; the lack of evacuation plans for the area surrounding the plant, and the government's classification of the plant as a "general industry" and not a "hazardous industry," which allowed the construction of residences close to the source of the leak.^v

These problems take time to emerge, but are always reaching for their full potential impact. Even this short list of sources and cases gives us a sense that both internal and external developments can create problems for organizations. If left unchecked, these problems can substantially limit an organization's ability to achieve its goals or even put an end to its existence.

LOSS AVOIDANCE

Potential losses loom large in the overall valuation of any relationship and most of us underappreciate this impact. When presented with the possibility of both large gains and large losses in a game of chance, people will usually demand between two and three times the compensation in terms of possible large gains as what is presented to them in terms of possible large losses. Otherwise, they will not feel that the game is attractive.

This is known in Behavioral Finance as *loss avoidance* - a critical bias that impact our organization's valuation by others as it relates to the discounting of future expected "somethings", or utility, that a person would get from partnering with us as a customer, employee, donor, investor, etc.

This term refers to people's strong tendency to prefer to avoid losses versus acquiring gains. As investors, if we thought there was a chance that we'd lose half of our money, we'd only make an investment if we felt there was an equal chance of gaining more than 125 percent. Otherwise, we wouldn't feel adequately compensated for our negative risk. This is the behavior of an average individual and is not true for every individual. Some people love risk, while others have an even greater aversion to loss than is described above. But, the average person is of high importance to us and the work of our organizations.

For small losses the effect is not present. If someone asked you to play a game where you might lose one dollar when a fair coin is tossed, in exchange for making one dollar if the coin toss went your way, you might play the game just for the fun of it. But, if the game changed in such a way that you could lose one million dollars on the toss of a coin, if you are like most people, you wouldn't agree to play unless you could earn between two and three million dollars on a favorable toss.

$$\text{Value} \downarrow = U_0 + \frac{U_1}{DR_1} + \frac{U_2}{DR_2} + \frac{U_3}{DR_3} + \dots$$

The corollary to this is that any partner or potential partner outside of your organization will assess your organization's possible negative outcomes, looking for the possibility of large losses, and, if finding them, demand ever-greater possibilities of large gain from working with you or being your customer. The way in which they attain those large gains is by greatly increasing the risk premium they require, making it more expensive for you to interact with them. They increase the cost to you of acquiring their economic capital and, as you recall, an increased risk premium lowers the Value Equation.

An example of this effect is the demand for higher compensation if the organization's governance presents an individual with greater reputational risk, especially for high-profile, or highly-desirable employees. Borrowing long-term, or signing long-term contracts will be more expensive if there is a greater perceived risk that your organization might not fulfill its obligations at some point in the future due to some element of brittleness that is perceived.

BECOMING RESILIENT

Resilient organizations can greatly reduce the possibilities of large loss for those who become part of their network. As noted, this has the effect of lowering required risk premiums and raising the value of the organization. It is less expensive for your organization to acquire economic capital when it is perceived as being, or even better, actually is, resilient.

What if Mrs. O’Leary and her neighbor agreed to keep an eye on each other’s barns? What if the cockpit doors of commercial airlines had been reinforced with locks before 2001? Today, access to sensitive facilities often requires multiple forms of validation, from pass codes to secret questions, and even biometrics like retinal scans or fingerprint readers. These high-security checks must all be sequentially passed before access is granted. We refer to such systems as requiring *Multiple Points of Failure* before they break.

Interrupting problems before they reach their potential is one form of resiliency. What we are driving for in this case is a kind of attenuation or the gradual loss in intensity of any kind of negative disturbance in our systems. For instance, sunlight is attenuated by dark glasses, or sound by walls. We’d like our organization’s problems to be lessened in much the same way, giving us corporate agility to respond to emerging risks.

$$Value \uparrow = U_0 + \frac{U_1}{DR_1} + \frac{U_2}{DR_2} + \frac{U_3}{DR_3} + \text{⋯} \rightarrow$$

We’re looking for ways to make the most of our network; bringing in ideas, as well as detecting and halting emerging problems. We’re striving for a high degree of return on our economic capital, while not allowing any single activity we undertake to have sufficiently large negative risks to impair or end our ability to live our values and to meet our organizational or personal objectives.

Through governance, we are working to reshape our organizations – reshaping the distribution of possible outcomes – so that our organizations have a positive skew and are more valuable to others, thereby making better use of our scarce economic capital.

The numerator and denominator of our value equation are determined by the members of our organization’s business network, including employees, creditors, suppliers, regulators, retirees, customers and anyone else who has something at stake by engaging with us. They decide how much utility they derive from interacting with us and they decide how much risk they perceive from interacting with us. Our internal actions, in a large part, affect those perceptions, but not completely. Nevertheless, our internal actions will most certainly determine our ability to be resilient and to affect the negative influence of loss avoidance on the perception of risk.

It is a critical failing of most governance structures today that the members of our network, who have such an enormous influence on our value, are not included in our formal governance structures. This is not simply remedied by giving shareholders more say in how a company is governed from the top, although that is a subset of the concept of networked governance (it is only a small part and it receives vastly too much attention relative to the impact that keystone members of our network can have).

From systems theory we know that closed systems tend toward entropy or disorganization. Entropy is only combated through information flowing in from outside of our organizations, especially if they contain influential, yet, relatively closed systems like boards of directors. Boards set the tone for the

resiliency of the organization and their actions will have an influence on how the rest of the organization behaves. Remember the work of John Darley and the influence of corrupting behavior on others in the organization.

Shann Turnbull, the founder of the International Institute for Self-Governance, was awarded the prize for “best paper” at the Loyola University’s Graduate School of Business Center for Integrated Risk Management and Corporate Governance symposium in Chicago in 2008. His paper, “Mitigating the Exposure of Corporate Boards to Risk and Unethical Conflicts,” examines substantial conflicts of interest that are present in the model of corporate governance where an organization is governed by one Board of Directors, or a unitary board, and articulates a model to address them.^{vi}

In some countries, publicly traded companies are required to have two boards, one a management board and the other a supervisory board. Turnbull’s guidance for us goes well beyond that to address numerous potential conflicts which are present in this closed system, including:

- Directors have the power to obtain private benefits for themselves (and/or control groups who appoint them) by determining their own remuneration and payments to associates, directing business to interests associated with themselves, issuing shares or options at a discounted value to themselves and/or associates, selling assets of the firm to one or more directors or their associates at a discount, acquiring assets from one or more directors or their associates at inflated values, trading on favored terms with parties who provide directors with private benefits, for example.
- They also can abuse their power by reporting on their own performance, selecting auditors and other “independent” advisers (while also determining their fees and whether they get re-hired), controlling the process by which auditors are appointed by shareholders, determining the terms of reference on which “independent” advice is provided, determining the level of profit reported to shareholders by selecting the basis for valuing or writing off trading and fixed assets, the cost of depreciation, recognition of revenues and costs in long-term contracts, defining accounting policies and selecting those who will value assets.
- They may not disclose full pecuniary or non-pecuniary benefits even if required to do so, but they are charged with determining how any conflicts of interest are managed, filling casual board vacancies with people who support their own positions, nominating new directors who support them at shareholder meetings, controlling the nomination and election procedures and processes, controlling the conduct of shareholder meetings, appointing pension fund managers for the firm who also provide them proxies, voting uncommitted proxies to support their own election, and other powers that often surprise the retail investor.

Anyone in our network who is presently engaged with us has a desire to see us do well. They'd rather not see any of these potential abuses be realized because each abuse makes it more likely that they will realize utility from us that is below their expectations.

Turnbull suggests we engage these stakeholders through various committees that are part of our formal governance structure - to strengthen ties to important people and systems in our network and to bring information in for positive benefit on both numerator and denominator of the value equation.

At the organization level, Turnbull envisions consultative committees of customers, suppliers, and other key stakeholders. They may meet annually or quarterly. Their objective is to discuss what the organization is doing from their perspective, what is working and what is not. They share what their future needs are likely to be and how the organization of today may or may not fit that need, giving the organization time to adapt and evolve. These kinds of stakeholder committees provide the Board of Directors an independent source of validation for the information that their sole executive report, the chief executive, is giving them.

Turnbull further advocates the creation of two more committees at the enterprise level – one with supervisory powers and the other with actual veto powers over actions of the Board of Directors where conflicts of interest exist. This notion tends to make unitary board members uncomfortable. But, note that venture capital firms commonly require just this kind of oversight of a unitary board when they provide financing - economic capital. This is part of their nurturing process that gives their investment portfolio a greater chance of being positively skewed.

The veto board, which Turnbull calls a Watchdog Board, is given the authority to appoint the auditor of the organization, as well as other independent advisors to the Board of Directors. Consider that they may wish for an outside entity to evaluate the risk governance structure independently and report their findings to the board. They would hire the independent valuation firms and have the ability to veto any board actions that are subject to a clear conflict of interest.

But, Turnbull recognizes that this veto power is among the most discomfiting. So, he argues that representatives from various stakeholder committees form a Supervisory Board that could over-rule the veto of the Watchdog Board if it felt the actions of the Board of Directors were in the best interests of the organization as a whole. The concept is for checks and balances, mixed with a separation of powers, and information from inside the organization and "outside."

A basic law of the science of corporate governance is that complexity can only be regulated with matching complexity, or as it is known to others, Ashby's Law or the "Law of Requisite Variety." In a very general sense, the governance of an organization must be complex and flexible or malleable enough to withstand shocks from its environment - to enhance resiliency. Turnbull believes that moving towards a form of self-regulation, which is quite different from a laissez-faire "no regulation" model, is the only way to create organizations that meet the test of this law, allowing a system to find a natural form of requisite complexity that grants the freedom and confidence to take risks more effectively - to make better use of the scarce resource called economic capital. Network Governance is a form of self-regulation.

But, the concept of Network Governance need not only be in place at the board level. In fact, the model can be cascaded throughout subdivisions of an organization. The definition of stakeholders changes at each level, but they are likely to include representatives of subdivisions within the same organization who are impacted by the subdivision's changes in focus. Or, they may be critical suppliers like IT or human resources services.

When we engage these people who care about our success, they will help us intercept problems before they reach their full potential (re-shaping the left side of the distribution). They will "feed forward" information that helps our governors identify strategic opportunities. They are one of the strongest checks on the principal-agent problem that we see whenever an owner of economic capital grants freedom to a user of the owner's capital, particularly at the board level, but throughout the organization.

Turnbull provides several examples of this model working in practice, one being the John Lewis Partnership, a collection of over 76,500 partners who own the leading UK retail businesses, John Lewis and Waitrose. According to the John Lewis Partnership website, their "founder's vision of a successful business powered by its people and its principles defines our unique company today."^{vii} Further, "The Partnership aims to ensure that everyone who works for it enjoys the experience of ownership, by sharing in the profits, by having access to information and by sharing in decision making through influencing and making recommendations to the Chairman on any subject." In the 2010/11 fiscal year, all of their partners earned an 18 percent bonus based on organization-wide profits. In 2009/2010, the profit share bonus was 15 percent. In the middle of the financial crisis, partners received a bonus of 13 percent, based on organization-wide profits. The year before that, the bonus was 20 percent and the preceding year, before that 18 percent.^{viii}

The Mondragon Cooperative Corporation in Spain is another enterprise, which Turnbull cites as an example. It began in 1956 with 24 workers in one industrial cooperative and by 1979 had grown to 135 cooperatives with nearly 16,000 jobs.^{ix} A study of its first two decades by Professors Henk Thomas and Chris Logan showed this cooperative's productivity, growth in sales, exposure and employment, in both favorable and unfavorable economic conditions, had been superior to traditional business structures.^x As of 2010, the organization had nearly 84,000 employees, total assets of over 33 billion Euros and 2.2 billion Euros of "stakeholding capital of worker-members."^{xi}

These are neither accidents nor anomalies, excepting the notion that they employ network governance concepts and have remained highly resilient.

CONCLUSION

Resiliency helps to address one of the most under-appreciated influences on the value of our organizations - the risk that we will not be there to perform or will greatly under-deliver on the expectations of us. This is only one part of successful governing, but it is one in which a change in our governance structures can have an immediate and positive impact on value.

It is also one of the most under-appreciated positive influences of sound risk governance of our pursuit of value and our values.

ⁱ J. M. Darley, D. M. Messick, and T. R. Tyler, eds., *Social Influences on Ethical Behavior in Organizations* (Mahwah, NJ: Erlbaum, 2001).

ⁱⁱ Source: Dictionary.com, see <http://dictionary.reference.com/browse/resilient>.

ⁱⁱⁱ Source: Dictionary.com, see <http://dictionary.reference.com/browse/brittle>

^{iv} Charles C. Mann, "Homeland Insecurity," *The Atlantic Monthly* 290 no. 2 (September 2002): 81–102.

^v Case Study: The Bhopal Plant Disaster, see www.umass.edu/sts/pdfs/Bhopal_Slides.ppt.

^{vi} Shann Turnbull, "Mitigating the Exposure of Corporate Board to Risk and Unethical Conflicts," in Robert Kolb and Donald Schwarz, eds., *Corporate Boards: Managers of Risk, Sources of Risk* (Wiley Blackwell, 2010).

^{vii} <http://www.johnlewispartnership.co.uk/>

^{viii} <http://www.johnlewispartnership.co.uk/financials/financial-reports/annual-reports.html>

^{ix} Henk Thomas and Chris Logan, *Mondragon: An Economic Analysis* (New York: Harper Collins, 1982).

^x *Ibid*

^{xi} Mondragon web site as of July 29, 2011, www.mcc.es/language/en-US/ENG/Economic-Data/Most-relevant-data.aspx.