

## **Elegant Adaptability and the Ancient Japanese Repair Method of Kintsugi**

What materializes in my mind when thinking about resiliency and how to respond to a crisis is Ernest Hemingway's quote, "Courage is grace under pressure." I also think of homeostasis. A resilient organism quickly returns to its normal state. While homeostatic equilibrium maintains balance and is important for organisms to function properly, in the context of society it is important to reconsider the return to normal conditions – the status quo.

When encountering difficulties, it is desirable to not only meet the moment but also flourish instead of scraping by. Being in solution mode instead of survival mode means one must solve and thrive, not just survive. In navigating a crisis and trying to return things to normal, it is worth considering that the normal conditions weren't ideal for one to flourish to begin with. A new homeostatic equilibrium, a new normal – a better normal than before – needs to be created. To condense and distill the aforementioned ideas in a Hemingwayesque manner, I believe *elegant adaptability* encapsulates the idea of resiliency and flourishing after encountering difficulties.

Elegant adaptability also applies to kintsugi. Kintsugi is the ancient Japanese method of repairing beloved broken pottery with lacquer and painting over the flaws and imperfections with silver, platinum or more traditionally gold powder.<sup>1,2</sup> Such imperfections transform into charming, sophisticated gleams of gold that look like bolts of lightning or golden flowing water effortlessly merging into streams and rivers. There are three primary methods of kintsugi, and similarly there are three primary methods that I have found are critical for elegant adaptability. As I discuss elegant adaptability, I will also examine Peter Drucker's work which seamlessly intertwines with this idea.

When the COVID-19 pandemic first arrived on the scene, my heart ached for the loss of lives and livelihoods around the world. The fear and keen awareness of our vulnerability was palpable in the air. My most poignant thoughts were for those with COVID-19 and other devastating diseases, the healthcare workers working tirelessly for their patients, and the unimaginable immeasurable loss of loved ones.

It felt like we were at war battling COVID-19, and it was winning. It was not just the patients that needed help but also the healthcare workers themselves. There was a disastrous lack of personal protective equipment (PPE). Healthcare workers who were fighting against COVID-19 were ill equipped to deal with it. They needed additional support. Something had to be done, and my reflexive response was, “It’s my generation’s turn to fight.”

## **Purpose**

I had no idea how to obtain PPE, but in wanting to serve in whatever way I could, I resolved to aid healthcare workers and vulnerable communities. I bought groceries for my neighbors so they wouldn’t have to venture outside, which they were particularly scared of since they were an octogenarian couple and the husband was recently recovering from lymphoma. I joined virtual mutual aid groups and spearheaded the creation and donation of surgical caps for hospital workers in need of them. I wrote and posted about resources for small businesses, domestic violence victims, victims of natural disasters, and free and confidential mental health services for nurses. As part of the Calendar Club, I biked over 490 miles in April 2020 to provide 10,000 meals to healthcare workers.

Every day I poured over newspaper, medical, and scientific articles, occasionally crying as I pondered the state of the world. I knew I was playing a small part in trying to serve my country and that countless others were doing whatever they could to help as well. I was also saddened and frustrated in reading about the PPE situation. I couldn’t shake the desire to obtain PPE for healthcare workers even though I had no connections or any idea how to go about it.

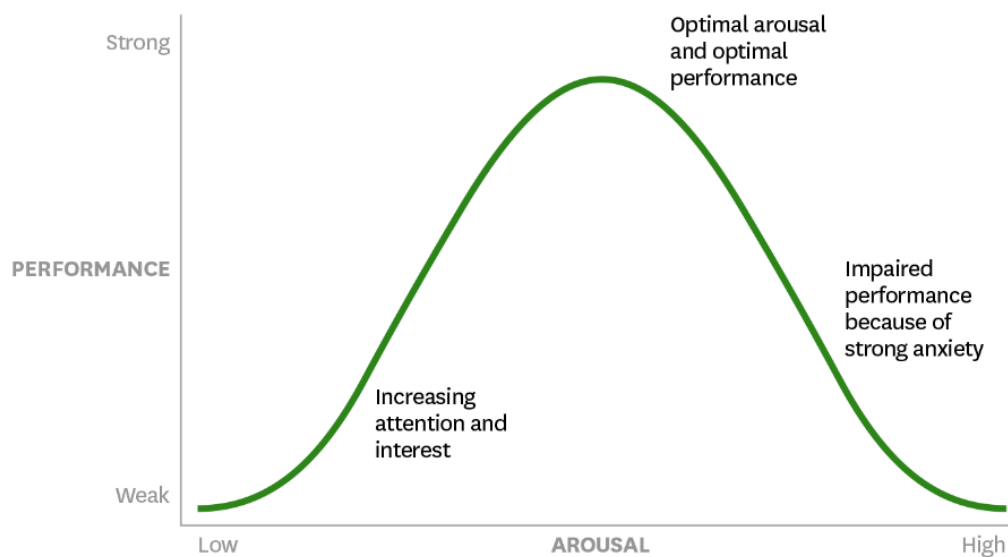
A glimpse into the future would have provided comforting reassurance that I would get PPE and distribute it to healthcare workers, but in lacking prescient powers, staying firm and resolute in my purpose allowed me to soldier on despite all the obstacles.

## Granularity

The strange notion, “This is in my wheelhouse” continuously came to mind followed quickly by an avalanche of doubts. How could I get funding or address any of the other challenges? Why do I think I can do this when I have never done this before?

In order to address such challenges, I imagined Peter Drucker would have intoned, “Cultivate a deep understanding of yourself – not only what your strengths and weaknesses are but also how you learn, how you work with others, what your values are, and where you can make the greatest contribution.”<sup>3</sup>

In accordance with this, I believe that a granular assessment of oneself is imperative, including emotional granularity which is an essential ingredient for resilience. In the case of performance, for example, the Yerkes-Dodson Law as determined by psychologists states that performance level rises with a rise in mental or physical stress and that there is an optimal amount of stress or arousal necessary for optimal performance, but past a certain point if there is too much stress (whether mental or physiological) then performance decreases.<sup>4</sup>



**The Yerkes-Dodson Law**

The adrenaline rush I felt in racing to find a solution was not overwhelming, but rather a boon in providing laser sharp focus. Furthermore, even though I was gripped by uncertainty, I also had faith that I could learn how to obtain PPE based on my own granular assessment of myself and that obtaining PPE was a great need I could contribute toward.

My startup and entrepreneurial training at UC Berkeley as well as additional university accelerator programs and competitions had prepared me for this moment. It was the culmination of starting from the seed of an idea to creating a medical device for disadvantaged populations, literally bleeding and burning in building it as I soldered and worked on wires. Once accepted into the programs after an application and interview process, I drove 13-14 hours to attend two-hour meetings within a 24-hour time period for a total of 15,200 miles, usually arriving home after a long night of driving to sleep for a few hours before going to work or class. During the long drives, I would spend hours practicing my pitch or mulling over the training I had undergone. I had no idea, however, that the skills I learned would come in handy during the pandemic.

Yet it is not enough to only know oneself. A granular assessment of a business or the task at hand is also crucial. According to *The Art of War* by Sun Tzu, “If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle.”<sup>5</sup> I felt like Drucker would approve of Sun Tzu’s advice. Armed with Drucker and Tzu’s wisdom, I surveyed the PPE battlefield.

I have a background in healthcare and clinical research but I didn’t know anyone who dealt with the PPE supply chain. I knew that there was fraudulent PPE flooding the market which was dangerous for those using it. In thinking that they were using PPE that specifically safeguards against COVID-19, healthcare workers will act accordingly but end up being even more vulnerable and susceptible to getting COVID-19. If I were to obtain PPE, I would have to find a way to make sure they were authentic. Moreover, the prices for PPE had skyrocketed due to the surging demand and since I didn’t want to negatively affect the supply chain for healthcare

workers I would have to do research to make sure I would buy it at market price or lower. There was also the issue of funding to buy PPE.

I called upon my startup skills, never envisioning that I would go through my own PPE version of the Wild Wild West by cold calling factories and suppliers, examining fluctuating market prices, discovering fake FDA certificates, and cold calling university labs to collaborate with them to further authenticate PPE. After establishing a reliable PPE supply chain, I sought to obtain funding for my nonprofit. In recalling what I learned from an engineering class, I wanted to avoid a single point of failure which I have tried to apply to numerous aspects of my life. My nonprofit couldn't have one source of funding so we sought funding from donors and received a university grant for aiding the underserved.

With our limited funds, and Drucker looking over our shoulder, the “strategy is to apply scarce resources to greatest opportunities.”<sup>6</sup> “But most specially in times of crisis, to analyze what to discontinue is exceedingly important.”<sup>7,8</sup> As a grassroots nonprofit, it was necessary to think about how to do the greatest good with what we had. I knew how much underserved populations were hurting especially since the pandemic exacerbated preexisting problems at all levels of society and not just from a healthcare standpoint. Moreover, they were being overlooked even as they cried out for help. In wanting to make the most effective contribution in helping those in need, we decided to solely focus on underserved areas. Drucker's teachings hammered the importance of what to “discontinue,” or in my nonprofit's case, what *not* to do. I was considering sending PPE to the opposite side of the country where COVID was spreading like wildfire, but the shipping costs would've drained a large amount of funding. It would've been an ineffective and irresponsible use of donor and grant funding. Furthermore, there were disadvantaged communities who needed the PPE in the local area.

Using census data, public health data, and a government tool I found that identifies medically underserved areas (MUA), we were able to determine and strategically distribute PPE to healthcare workers in various MUA so different communities would be aided. We ended up donating to over 20 hospitals in MUA that aided Native American, Black, brown, Native Hawaiian and Pacific Islander, elderly, disabled, memory impaired, homeless, and low-income

communities. By partnering with organizations that took care of shipping, we not only donated PPE within our country but also distributed PPE to Micronesia, the Northern Mariana Islands, and Palau.

## **Perspective**

It would not have been possible to persevere without a third method of elegant adaptability: perspective. In psychology, changing one's point of view is known as reframing and is a healthy technique to deal with obstacles.<sup>9</sup> Drucker writes, "'The glass is half full' and 'The glass is half empty' are descriptions of the same phenomenon but have vastly different meanings. Changing a manager's perception of a glass from half full to half empty opens up big innovation opportunities."<sup>10</sup> Drucker, whether he realized it or not, was talking about managerial reframing. Simply shifting one's perspective changes one's mindset from despair to that of possibilities and problem solving. The kinds of perspectives that personally helped me during the pandemic include thinking of others, gratitude, and storytelling.

Nothing was easy for my nonprofit, but we were empowered to contribute in whatever capacity we could to assist healthcare workers and underserved communities. I personally distributed the majority of the PPE, sometimes researching areas I was visiting to make sure I avoided wearing certain colors associated with particular gangs. Wanting to do more for others also led us to partnerships that allowed us to aid people in other countries, though we faced obstacles like the 45 blazing fires throughout the area that prevented us from meeting earlier than intended. Despite obtaining funding via a grant and donors, there were still times my nonprofit was dangerously low on funds. I would be up late at night brainstorming how to procure more money and when a source of funding from another organization miraculously came through or donors generously contributed, I cried out of relief and gratitude. I used various methods to advocate for my nonprofit and to receive recognition and funding from another organization was a lifesaver. Similarly, it meant so much that people believed in my nonprofit and our mission. The appreciation I had for donors and organizations that funded us to aid underserved communities helped me feel connected to humanity even though so much of the world had become virtual. Throughout the pandemic, I was also thankful for being healthy as well as my loved ones and

their good health, being able to still work online, and for having basic necessities like food and shelter.

Whenever I felt despondent, I turned to the stories of others to inform and inspire me. I did this when I was driving late at night for my startup training, gazing at the night sky full of stars and thinking of entrepreneurs like Melanie Perkins who revised her pitch hundreds of times and Sara Blakely who drove across state lines to different factories to create her product. The COVID-19 pandemic and the simultaneous interconnected crises seemed like echoes of previous epidemics, pandemics, wars, and social justice movements. I thought of civil rights leaders like Rosa Parks, Martin Luther King, Jr., and Monseñor Oscar A. Romero of San Salvador, gaining strength from their leadership. I had previously organized protests against healthcare inequality and the nonprofit work I was doing felt like another form of activism. I thought of my nonprofit storytelling platform in which I relayed information to donors about the people we were aiding. While I highlighted the healthcare and environmental challenges that were worsened by the pandemic and climate change, I also emphasized the strength and quiet dignity of the individuals and communities we were serving through their stories.

### **Organizations and Elegant Adaptability**

The same methods of purpose, granularity, and perspective that are indispensable for elegant adaptability can also be applied to organizations. Drucker's pearls of wisdom during the pandemic would have been, "Predicting the future can only get you in trouble. The task is to *manage* what is there and to work to create what could and should be."<sup>11</sup>

The Partnership for Health Advancement in Vietnam (HAIVN) exemplifies elegant adaptability. The organization is a collaboration between Harvard and the Vietnam Ministry of Health focusing on medical education, research, and training to strengthen Vietnam's healthcare system.<sup>12</sup> HAIVN adhered to their purpose while COVID-19 affected Vietnam. The twenty-year granular assessment that HAIVN had conducted initially started with HIV clinics but then came to encompass the wider healthcare system.<sup>12</sup> This level of understanding allowed HAIVN to successfully problem solve and control the pandemic. Furthermore, HAIVN maintained the perspective of gratitude and the importance of learning from each other. Several years before the

pandemic, primary care doctors in rural areas of Vietnam were set up with telehealth and clinical training to help HIV/AIDS patients.<sup>12</sup> When the pandemic occurred, rural areas in the U.S. modeled their primary care support after the system created in Vietnam.<sup>12</sup> Drucker would have applauded the management of this situation. Medical students were also able to graduate from the new six-year medical curriculum in 2022 and the HAIVN partnership has grown to include Cambodia, Laos, and the Philippines.<sup>12</sup> HAIVN certainly thrived.

Success can also be found in Singapore and El Salvador. Singapore's Integrated Health Information Systems (IHIS) is the nation's healthtech agency for the general public.<sup>13</sup> When the pandemic hit, IHIS worked as if following Drucker's instructions, rapidly increasing their telehealth services.<sup>13</sup> The expansion of the services increased the number of patients self-monitoring their health like blood pressure, allowed for easier monitoring of the patients by healthcare workers, and freed up healthcare workers to focus on more complex conditions.<sup>13</sup> El Salvador rose to meet the moment and navigated the pandemic with aplomb. In addition to using telemedicine, genetically sequencing SARS-CoV-2, and building a hospital with 1,200 intensive care beds, El Salvador was the first country in Central America to be malaria free in early 2021.<sup>14</sup> The Birth with Love program based on the World Health Organization's scientific recommendations was created in early 2022 to improve maternal and child health.<sup>14, 15</sup> Singapore and El Salvador serve as shining examples of what Drucker would have advised them to do in taking stock of what was available, innovating and improving their healthcare systems, and avoiding management that is myopic and sclerotic.

Prior to the pandemic, I had created the first biomedical program of its kind at one of the top three universities in Asia. I was set to teach there again with a larger class size and 12 teaching assistants. Yet with the pandemic occurring and the uncertainty of when it would end, I coordinated with the university to create an online program. We could not predict the future or control the pandemic, but Drucker would've approved of us managing what we could and doing the best with what we had. My purpose was to teach biomedical sciences to the students and an analysis of the tools and resources available allowed me to still create an interactive learning experience with lab kits being sent to students' homes. Reframing the situation allowed me to set aside my initial disappointment in not being there in person because the students were still going



to learn in a safe environment. I was also aware of far bigger problems the world was facing during this unprecedented time. I carried these experiences and lessons with me to another university when I virtually taught the first ever hybrid biomedical class for a program in Qatar and an online biomedical class for the United Arab Emirates which included a visit from the UAE Minister of Youth.

### **Conclusion and Golden Glints of Kintsugi**

Kintsugi shows us there is beauty in the broken. Broken pieces shine bright and vulnerable like newly formed scars, but are also signs of healing and strength in having been healed.

If we, individually and collectively, pick up the broken pieces of humanity and glue them back together with lacquer and shimmering gold powder, we become whole again and create something new, something better. Drucker and kintsugi remind us that when we elegantly adapt to the challenges at hand, we all succeed in a triumphant golden flourish.

## References

1. “Kintsugi: The Healing Power of Pottery Repair: August 2020: Highlighting Japan.” Kintsugi: The Healing Power of Pottery Repair | August 2020 | Highlighting Japan. Accessed May 20, 2023. [https://www.gov-online.go.jp/eng/publicity/book/hlj/html/202008/202008\\_07\\_en.html#:~:text=Kintsugi%20\(literally%2C%20gold%20seams\),with%20gold%20or%20silver%20powder](https://www.gov-online.go.jp/eng/publicity/book/hlj/html/202008/202008_07_en.html#:~:text=Kintsugi%20(literally%2C%20gold%20seams),with%20gold%20or%20silver%20powder).
2. Richman-Abdou, Kelly. “Kintsugi: The Centuries-Old Art of Repairing Broken Pottery with Gold.” My Modern Met, April 27, 2022. <https://mymodernmet.com/kintsugi-kintsukuroi/>.
3. Drucker, Peter. “Classic Drucker: Essential Wisdom of Peter Drucker from the Pages of Harvard Business Review.” *Harvard Business Press* 43, no. 11 (2006): 3.
4. Gino, Francesca. “Are You Too Stressed to Be Productive? Or Not Stressed Enough?” Harvard Business Review, April 8, 2022. <https://hbr.org/2016/04/are-you-too-stressed-to-be-productive-or-not-stressed-enough>.
5. Tzu, Sun. *The Art of War*. 17th ed. Chichester, England: Capstone Publishing, 2010.
6. Drucker, Peter. *Managing in the Next Society*. New York, NY: Truman Talley, 2002.
7. Drucker, Peter. *Managing in a Time of Great Change*. New York, NY: Truman Talley/ E.P. Dutton, 1995.
8. Drucker, Peter. *Management Challenges for the 21st Century*. New York, NY: Harper Collins, 1999.
9. Bloom, Linda, and Charlie Bloom. “Reframing.” Psychology Today, December 14, 2017. <https://www.psychologytoday.com/us/blog/stronger-the-broken-places/201712/reframing>.
10. Drucker, Peter. “The Discipline of Innovation.” Harvard Business Review, August 2002. <https://hbr.org/2002/08/the-discipline-of-innovation>.
11. Drucker, Peter, and Joseph Maciariello. *The Daily Drucker: 366 days of Insight and Motivation for Getting the Right Things Done*. New York: HarperBusiness, 2004.
12. Buckley, M.R.F. “Trust and Global Partnerships.” Trust and Global Partnerships | Harvard Medical School, May 5, 2023. [https://hms.harvard.edu/news/trust-global-partnerships?utm\\_source=miragenews&utm\\_medium=miragenews&utm\\_campaign=news](https://hms.harvard.edu/news/trust-global-partnerships?utm_source=miragenews&utm_medium=miragenews&utm_campaign=news).
13. “Singapore’s National Healthtech Agency, IHIS, Empowers Patients to Take Ownership of Their Health with Health Discovery+ on Azure.” Microsoft Customers Stories, November 25,

2022. <https://customers.microsoft.com/en-us/story/1574352454896056138-integrated-health-information-systems-national-government-azure-en-singapore>.

14. “Health Authorities of the Americas Discuss Their Response to the ... - Paho.” Health authorities of the Americas discuss their response to the COVID-19 pandemic at the 75th World Health Assembly, May 24, 2022. <https://www.paho.org/en/news/24-5-2022-health-authorities-americas-discuss-their-response-covid-19-pandemic-75th-world>.

15. “The First Lady, Gabriela de Bukele, Announced the Creation of the Nacer Con Cariño ‘El Nido’ (the Nest) Maternity Center.” El Salvador in English, March 4, 2022.

<https://elsalvadorinenglish.com/2022/03/04/the-first-lady-gabriela-de-bukele-announced-the-creation-of-the-nacer-con-carino-el-nido-the-nest-maternity-center/>.