Prompt: Economic risks such as increased inflation rates, material availability, labor shortages, and mass resignations are increasingly affecting the design and construction industry. Describe how these issues have affected you and your firm and what measures have been taken to manage these risks. Have you made any changes to how you have traditionally done work? What additional challenges do you see emerging from larger market trends and how would you address them?

The key to continuing to thrive through all the current issues disrupting the industry, and to cultivating a business model that is well-suited to adapt to the future ones, is to develop a robust system of flexibility. Flexibility in work schedules, flexibility in design methodologies, in material specification, and in adapting 'the way it's always been done'. The 'way it's always been done' is the product of a bygone era and firms that cling to outdated standards of practice will go the same way.

In order to cultivate the most robust system of new ideas, it is critical to source ideas from places and people that have traditionally been excluded from the process. The same old people are going to have the same old solutions; branch out and seek ideas from young engineers. Hire and include in the planning process people from minoritized groups and the differently abled. Encourage design teams to include members of the community for whom the designs are being developed and who will be the most impacted by any shortcomings.

While turmoil in the markets and supply chain, with the incipient threat of a greater economic downturn, could be used by employers to justify lower pay and fewer new initiatives, it is important to remember the economic truth that a downturn is the time to invest more, not less. In the face of these challenges, employers must continue to invest in training, engaging, and retaining new and diverse talent. Investments in training and retention can also help employers cultivate loyalty in their employees, preventing resignations when tough times happen.

It is imperative for employers to recognize that 'new wave' ideas like Diversity, Equity, and Inclusion (DEI), sustainability, and resilient design are not passing trends but the future core of the industry. Brushing off the burgeoning importance of these discussions as 'touchy-feely', 'unnecessary', and 'not relevant to me- I just do math all day', as many older, traditional industry stalwarts continue to do, will become damaging and eventually crippling to their business models. The new generation of workers sees these issues and their treatment in the professional environment as paramount, and they are choosing to work for employers that enthusiastically embrace these initiatives and support the development of programs to address them.

The idea of a 'labor shortage' is a complete mischaracterization of the current state of the industry; it frames the problem as a lack of available workers, as opposed to the real problem of a lack of workers willing to accept unlivable wages and professional environments that utterly disregard their interests and the issues that matter to them. When employees are treated respectfully, paid well, and given the agency to determine how they can best provide their value to the company, they are in turn more likely to work harder, provide better product, and make a consistent effort to improve the company.

I was recently promoted to a managerial position in my midsize firm and given the agency to pursue initiatives that are valuable to me personally. As a younger woman in the industry, I have ideas and priorities that the previously all-older-male management board were either

unaware of or otherwise unmotivated to pursue. While they are notably open-minded and accepting of criticism and new ideas, they recognized the need for additional input and the necessity of providing avenues for that input to be acted upon.

In my new position, I have begun to develop several new programs and initiatives aimed at increasing employee satisfaction and retention at my firm. These programs are varied in their scope and level of complexity; one was as simple as furnishing a comfortable and attractive break area in the office, to give employees a place to step away from their desks and relax in comfortable chairs. Other simple undertakings have included providing a recycling and composting system at the office, group midday walking breaks, and small working-group meetings to check in with employee workloads, stress levels, and any personal issues that may warrant a modification to their work level or expectations.

Another, far more intense undertaking, was the development of an entirely new orientation and onboarding program for new employees. It is important to me that new hires be thoroughly supported as they enter the industry, and that they have a robust system of mentorship, training, and opportunities to provide feedback to company leadership in a safe and open environment. I recently implemented my program for the first time and will continue to follow up with the new employees as they progress, to obtain feedback and continually improve the program for future hires.

I recognize that I am lucky to work for a diverse company that pays me well, listens to feedback, and cultivates a supportive environment and healthy work-life balance. But I also acknowledge that there is always more work to do to develop my firm and the industry as a whole to be more diverse, more flexible, and more adaptive to changing industry standards and norms. In the future, I hope to develop a more robust in-house mentorship program, modify our design standards to incorporate resiliency and sustainability practices, and implement K-12 outreach to educate a diverse group of future engineers on the challenges and rewards of an engineering career.

Only companies with diverse, satisfied, and motivated workforces will be able to weather this and future industry upheavals. When the burden of worrying about employee retention is lifted, employers can focus on seeking new avenues of job procurement, invest in training and company infrastructure during downturns, and emerge ready to tackle the newest problems the industry faces.