

Interview with 2015 Old Guard Career Award Recipient, Twishansh Mehta

Interviewer: How did you become interested in engineering as a career?

Twishansh: Since I was in elementary school, I always had an aptitude and interest in the maths and sciences, and for the most part, excelled in those subjects throughout elementary and high school. It wasn't until I had the opportunity to participate in applied elective subjects in high school did engineering become more and more attractive to me. In the ninth grade, I took a course that integrated engineering drawings (i.e. hand sketches and CAD) with computer programming, graphic design, product design and construction (i.e. electronics and carpentry). The teacher selected me for a course award for that particular year, and while I did not realize this success could turn into a career, I did notice that I enjoyed particular aspects of that course. In later years, I continued with engineering and computer science related courses in addition to advanced mathematics and science courses. I particularly enjoyed creating new tools and "products" that I could use for myself in the future. The success I achieved in the ninth grade, translated into the tenth, eleventh, and twelfth grades as well. When it came time to select a university degree path, I chose engineering over the pure sciences and business as the engineering programs demonstrated the numerous and diverse opportunities in both the research sciences and in industry. My interest in engineering never really waned during my undergraduate career, but my involvement in ASME, the diversity in coursework, and my two internships made me more and more interested in a comprehensive career in industry that leveraged my technical abilities, my process-oriented personality, and my desire to do things the right way led me to a career in engineering, and in particular, the management of engineering related functions.

Interviewer: What is the biggest lesson learned in your career? What challenges did you have to overcome in your career? How did you solve this challenge?

Twishansh: I think the biggest lesson that I have learned in my career is the importance of numbers in business. That might sound counterintuitive for an engineer, but as an engineer, we become very used to numbers so that simple arithmetic operations become second nature to us. Yet, when it comes time for those calculated numbers to be presented or used for forecasting or decision making, a slight mistake could result in a decision or forecast that could be multiple orders of magnitude greater. Working in a retail environment, numbers are everything, from pricing changes at a store, to a savings realized by a project, to profit and loss

statements leveraged for establishing capital expenditures. An industry that may be, on the outside, appearing to be very qualitative and intuitive in nature, is actually very analytical and mathematical. I learned my lesson early on when I made an error in a computation that was presented to the senior leadership of our organization and used to make statements publicly. Luckily, those statements could, and were, revised when the error was discovered, but the consequences of revising such statements to my approach to numbers and calculations has been ingrained in my mind. Being in a non-technical industry also presents the challenge of working with a diverse group of individuals who have limited to no technical background, including individuals who have worked their way up through the organization since they worked in the stores in their teenage years. Sometimes, it is difficult to communicate arguments using a logical thought process, both written and orally, to individuals who use intuition to frame their understanding. I've learned to work through these challenges by recognizing our mutual differences and adjusting my approach when communicating with others and presenting my recognition of our differences to those I am working with. Other challenges include keeping up with the increasing volumes of work and responsibility, balancing individual priorities while supporting the team, and technical challenges in short time frames, but these challenges tend to be short term in nature, and are usually achieved by recognizing my talents, reaching out to my resources and connections, and emphasizing balance across everything I do.

Interviewer: **What has been the best part of your career thus far?**

Twishansh: A career as young as mine moves very quickly, and sometimes, you don't get to reflect on the good parts or the not so good parts to the level that I could say one great part was better than another great part. I must say I am grateful to have landed in a role that fits well with my engineering education, my interest in leadership and management, and my desire to diversify what I do for a living. I am also lucky enough to have had some very valuable and worthwhile internship experiences. I would be remiss if I did not mention that I am fortunate to have attended (and currently attending) my top choice for both university and graduate school. One of the top things that make up my short career is the experience of having been encouraged to run and be selected as an officer for a large international organization like ASME so early in my career, and the opportunity to lead a group of amazing young volunteers to share the opportunities that I was so fortunate to have from ASME with the next "generation", if you will. I am also incredibly grateful for the support that my friends, family, peers, colleagues, employers, professors, and school administrators have given me during all of these various

experiences that I've taken part in, and allowing me to balance the priorities that exist on a daily basis in my life. In short, I guess the best part of my career is my career itself, the people who have been a part of it, the experiences that I've had, the growth that I've experienced, the friends I've made, the lifestyle I've defined for myself, and the opportunities that have opened up for me and those I try to serve or take care of in the future.

Interview: Tell us about your day to day...In your work as a project manager do you handle any international projects or does your work only focused in the Canadian market? How does your job fit (transcends) into the global landscape?

Twishansh: Wow, I don't think there is any typical day for me. The responsibilities keep growing, the work is very diverse, and the people I work with come from all parts of the organization. I want to clarify that my role is not strictly that of a project manager. I am responsible for most aspects of refrigeration design, engineering, procurement, installation, maintenance, and process standards for the retail organization nationally. This includes supporting construction projects in verifying engineering schedules and drawings; ensuring that the refrigeration systems and display cases are specified, ordered, and manufactured to our business' technical, merchandising, and aesthetic requirements; verifying installation practices are in accordance with specifications; and addressing deficiencies with equipment and installation work. It also includes management of our refrigerant management and refrigeration maintenance programs, and establishing procedural standards for colleagues for maintenance and construction work, which tend to sometimes be related to ongoing operations, and sometimes are managed like individual projects.

The organization I work for is one that has, over the years, ventured into numerous service and product categories, which have allowed it to do business beyond its traditional Canadian marketplace. However, the food retailing industry is very unique to the Canadian marketplace. Over 50% of the country's population lives within 1% of the total land mass of the country, and populations in the rural areas of the country are well spread out in the second largest country in the world. The marketplace is comprised of three or four large, national chains, and international chains have found limited success (if not since exited) in the marketplace. As a result, the company does not own or build new food stores (where supermarket refrigeration is applicable) outside of the country. Having said this, the network that supports the execution of our projects transcends the global marketplace. Our flagship store, and the formats developed

from it, were designed by an Australian design firm, with whom I have worked with closely to establish refrigerated display case aesthetic specifications. Our largest equipment capital expenditure is in the area of refrigerated cases and systems, and our major supplier of these systems is based in the United States. Recent new technologies in refrigeration system design have been pioneered first in Europe, primarily due to the stringent regulatory environment surrounding the use of synthetic refrigerant, an environmentally potent greenhouse gas. This regulatory environment has caused increased activity in the same area in China, India, the United States, and Canada, and along with the European environment, with our partners; I monitor how governments are progressing with climate and refrigerant regulations to ensure our business is prepared for the same in our country. So, while our business activities do not physically take place outside of Canada, the political, regulatory, economic, and industry activity around the world impacts our business on a daily basis.

Interview: How did your internship experiences prepare you for your career in project management?

Twishansh: Both of my internship experiences were in project-related environments. The first internship I completed was for a medium-sized organization in the area of software quality assurance for integrated hardware systems for the bioengineering field. As is typical for the software development industry, I was part of an agile project team, which was my first exposure to project-based multidisciplinary teams. I was fascinated by the notion of a team of different individuals, focused on a singular objective, and I was impressed by how effective that model was. In fact, the project manager had a management style typical of a credentialed project manager, and I feel that I've picked up some of their methods of schedule and resource allocation methods. In hindsight, I think part of the reason I am a Project Management Professional today was simply because my project manager back then was one as well. Until then, I had never heard of a PMP. The second internship I completed was for a much larger organization, and the projects were more technically oriented and discipline specific. I think this experience shed light on just how complex some projects can actually become. The people I worked with were primarily teammates of a much larger project team that included field engineers, and other large teams working on other major technical aspects of the project. As an intern, I didn't know who the project manager was, but that just showed me how many people were actually working on this common goal. Both of these experiences, progressively, helped me become well equipped to manage small projects of high spend in my current position, in

addition to managing programs of numerous smaller projects with common aspects and an overarching end goal. I also feel that by understanding the project nature of technical analysis and product development work allowed me to integrate with the ongoing operational working methods that are common to the retail industry.

Interview: What initially drew you to volunteer for ASME?

Twishansh: I became involved with ASME as a member and volunteer on the University of Toronto Student Section at the end of my second year of university. For one reason or another, I seemingly had lost my interactions with extracurricular activities that I took part in in high school. As I was embarking on my first and year-long internship, I resolved to return to participating in such activities as I had more time on my hands. I knew that my passions did not lie in social, cultural, or advocacy-based activities, of which there were numerous at my University. I wanted to do something that helped me interact with my classmates, make a few friends, and help out with rewarding tasks. It seemed that the more successful students were also joining professional organizations, and one of those students was in a design project group of mine, and was an officer of the Student Section. I inquired about joining the Student Section, and my classmate encouraged me to join, implying that it would be a great fit. So, without knowing much about the organization, never having been a member, I decided to run for a position with the Student Section. While I did not get the position I ran for, I did get the chance to serve on the Executive Committee of the Student Section, and from there the rest is history. A subsequent Student Leadership Seminar motivated me to run for a Student District Operating Board position 2 years later, a later Leadership Training Conference motivated me to run for a Student Sections Committee position, and since then, my motivation to volunteer has become a given, taking any opportunity provided to me to contribute my thoughts or my action, or to just help out a friend.

Interview: How has volunteering at ASME helped your career?

Twishansh: I have to attribute most, if not all, of my leadership and soft skills development to my volunteer work in ASME. The opportunities ASME has provided me to lead teams, speak in front of many people, and work on strategic projects have directly improved my confidence and public speaking skills. At work, our groups' Vice President leverages this when asking me to present our group's activities on a regular basis to our peers within the organization. Moreover,

ASME has improved my written and oral communication ability, which has translated in to numerous opportunities to work with written documents, from development of specification and procurement contracts, communicating with inspectors, lawyers, and legal counsel, and reviewing technical and corporate presentations for various audiences. Surprisingly, a close mentor of mine in ASME also works in the same industry as I do (retail refrigeration), and I would have only met them through our mutual volunteering work in ASME. This connection, at a professional level, has allowed me to link with parts of the industry that I might not have visibility through my own job, and I have learned a lot about what is occurring in our industry in another part of the world, which has proved valuable on multiple occasions in my job. The opportunities to work with a diverse group of volunteers from around the world, different age groups, career paths, and walks of life has also prepared me for leadership capability within my organization and future career. My ASME volunteering has only solidified my personal career goals, and is one of the reasons why I felt confident to pursue engineering management and leadership as a focus of study in graduate school and to apply to top tier universities for this program.

Interview: How do you balance your work, volunteering, and home life?

Twishansh: Surprisingly, I don't think I've ever had to answer this question, and honestly, I'm glad, because I never know how to answer this! I guess I've always enjoyed "helping out" wherever I can, and that is how I approach my day job, and my volunteer work, whether that be through ASME, during charitable events, or my alma mater. I've been fortunate enough to have some solid peers and mentors in my career that I have never felt concerned about where my career would go. Because of this confidence, I've been able to manage my time and focus on what is most important or what deserves my time the most at any given time. As a result, for me, there is a very blurred boundary between my work, home, and volunteering lives. The people I have worked with, volunteered with, and live with have also been very accommodating with my day-to-day life. My managers at work have recognized the benefits associated with my volunteering activities, and have provided me with the time necessary to fulfill my responsibilities, even if that occurs during the typical work hours. My family has encouraged me to participate in these activities since high school, so volunteering is nothing new in my house, and their understanding of these blurred boundaries have also resulted in their accommodating any work obligations I need to fulfill during the evenings and weekends. Being mobile helps with keeping updated with work. The volunteers with whom I work with have been

accommodating and understanding with my work and family priorities, allowing me to schedule meetings at times that work best with my schedule, and leveraging tools that allow me to multitask on activities when necessary. At the end of the day, however, if I wasn't enjoying what I was doing, feeling relaxed and comfortable in everything I do, and if I wasn't motivated to complete the tasks necessary to achieve my short term and long term goals , it would be impossible to balance all of these priorities.

Interview: Is there any advice you wished someone gave you when starting out?

Twishansh: I think in this day and age, with so many channels of guidance and advice available to young people, whether that be through the internet, university and college career centers, government jobs and career development programs, non-profits and professional organizations, and guidance counsellors in high school, not to mention family, friends, and mentors, I think one thing that has become lost in this wealth of career advice is the importance to be yourself and be true to yourself. When you recognize who you are, you know your capabilities and you can seek resources and assistance to support you in your goal, whether that be to answer a question, complete a project, or fix an issue. In the workplace, performance is measured on success of completion, but efficiency is also key. Recognizing when you are spending your highly valued time (to both you and your employer) towards activities that you cannot bring value towards will not only allow you to achieve your result, but by leveraging other resources and relationships, you can achieve those results faster and cheaper, for both you and your company. We, as engineers, have been taught throughout our post-secondary careers on how to leverage resources to answer a question – through research, references, and team work. The engineering education system, through no fault of its own, has also emphasized continued excellence and, for some students, this translates to perfection. Perfection may not be efficient, and as leaders of society and industry, we need to be able to recognize and leverage the talents of our peers in the corporate world. By learning to remain true to ourselves, we can also avoid potential political situations that might put us in problematic situations when working with others in the corporate world. For graduates starting out in the workforce, this recognition will prove valuable for both personal and career reflection, and for success in the workforce or in the entrepreneurial world.