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Professional Service Project

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Introduction

Entering Carnegie Mellon University as a freshman, it was important for me to incorporate myself into the CMU community as much as possible in order to further supplement my academic studies and interests. Integrating service projects through student organizations and key speaker lectures in different areas of interest would help round out my education as a business student.

The class, 70-201, organizes the goals of service in four ways:

- Using business skills and knowledge in practical results driven non-academic experiences.
- Developing leadership.
- Developing professional networks.
- Community involvement and social responsibility.

Through this paper, I will denote the accomplishments I've made in order to substantively address each of the four goals of this course through my involvement in campus organizations and key speaker lectures.

South Asian Student Alliance

One of the first clubs I joined at Carnegie Mellon was the South Asian Student Alliance (SASA). They reached out to me as soon as I entered campus. From the start, the organization created an environment for students with south-asian heritage to feel welcomed in an unfamiliar place. SASA's mission was to educate and spread the influence of South Asian culture amongst the campus community. I quickly fell in love with the idea of the organization, and entered the organization as a Freshman Representative. As a freshman representative, it was imperative to learn the ropes and catch on quickly in order to make an impact on the organization. I had the responsibility of listening attentively and taking an active role in preparing events, community service projects, and club promotion. Since the organization was well run, I was able to soak in and understand what made a club successful. This enabled me early on to recognize one way to create an environment to have a motivated group of people working together to come together to accomplish daunting events.

One of the impactful events that I helped organize was the Tsunami Relief-Fund. This was an excellent way for me to take leadership of an important project that would promote South Asian culture and make for an excellent way to help the Tsunami victims that many of us on campus were related to. We organized a promotional campaign to raise awareness of the issue by creating pamphlets describing the situation abroad, why they need our help, and how we can make a difference. It was an extremely emotional event, but it was an absolutely necessary one. Promoting, organizing, and researching the event was a good translation of a lot of the same business skills I learned in class. Being able to relate to people, appealing to their emotions, and successfully executing to make sure everyone in the community had an opportunity to participate and learn about the crisis.

Another important initiative that I helped push my first year was reaching out to UPitt campus and revitalizing the relationship with Pitt's Indian Student association. Our goal was to reach out to both UPitt campus and our campus. We believed this would help increase our exposure to the greater Oakland area and try and gain new innovative ideas from our UPitt counterpart. This worked very well. Both organizations were quickly able to come together and we pressed to motivate each other to make the best inter-university campus event possible. I advocated having a social event at The Melting Pot and having an after-party at one of the nightclubs in the Strip District. Students really enjoyed having the chance to meet people from UPitt, Duquesne, and Carlow College.

There was a lot to learn from collaborating with UPitt ISA. I was able to see the type of time and work it takes to manage a relationship amongst two separate entities who are passionate about their group. It requires a lot of listening, compromising, and patience. It was a good experience for me because I was able to learn a little bit more about negotiating for favorable terms, how to effectively manage a larger group of people to make a more efficient work group.

The next year I participated, I was elected to be Vice President. My comfort zone with the club was high, and I was ready to take on a lot more responsibility. My primary responsibility was to manage the money matters of the club. I had to manage the planning of events, their estimated costs, and construct a forecasted budget. Also, I had to manage the current expenses of the club and get any receipts to submit in order to get funding for any of the tools we used for the club. This helped me practice budget management and also gave me a picture for how in the long term finances could be reduced to make the club as efficient as possible.

As Vice President, as I took on more responsibility, it required me to be a major leader within the group. With one year of experience in hand, I was able to make an even larger impact. In this role, I was able to exclusively suggest and execute on projects. I distributed and placed people in projects in which they were passionate, giving them the best chance to succeed and communicate effectively. This was a great learning experience because of the nature of SASA. It was a very collaborative environment, so when it came time to lead, you could not forcibly tell people what to do. I had to expand my definition of what it was to lead and expand on what I learned in my business curriculum. Instead, I led more by example than by direction. It was important for me to demonstrate my hard work approach to taking on projects. This worked especially well because it helped me filter out where members were most comfortable and interested in doing because they would show their passions for a variety of the projects we would assign them to.

I pushed hard to incorporate more philanthropic activities to our organization as a great way to promote our message. We took part in a variety of charity events, including organizing movies and information packets on the problem of child blindness in India, the growing AIDS problem, and deepening poverty. We were able to donate over 600 dollars to the Asha organization including the Pittsburgh affiliate. It was really important for me to infuse the south-asian population with a sense of being involved with the community for a higher purpose and also to add a level of social responsibility for this organization.

Organizing this event was especially challenging for me because I did not know the amount of time it would require in order to book different places to hold an event. It took a lot

of the same business skills to apply to speaking with managers of companies. You needed to know the “pitch” before you were to make any call. At first I struggled a great deal selling our group’s goal for holding the event and why it would be beneficial to their company. It took me time to understand this concept, but with the help of classes such as business communications, I learned how to effectively sell my idea, and it came down to the age-old mantra, “what can you do for me?” Finally, as I started to improve, I would be able to get more favorable terms for the costs of the event and even able to make professional contacts in many of the locations in the Pittsburgh area whom could help me get the best deal possible to make the event as fiscally sound as possible.

The last thing I helped set up was the merging of the two main South Asian organizations, Mayur and SASA. There was a lot of feedback amongst the two organizations members that Mayur and SASA were overlapping in what they were able to provide to students of South Asian decent. Although I did not agree with it at first, it made sense that if the combined organization was able to execute properly, the combined budget could help build something great for the campus and everyone could benefit from it. I took on the project to draft the new constitution, the new voting process, and the mission statement for the new organization called Mayur-SASA. It was a lot of fun developing the new organization because it was a way to bring up all the good things that you saw in well run organizations that I saw in the past and also it was a way to bring up the strengths of both organizations.

This experience helped me a great deal as I matured as a business student. I began to understand what was required to be an impactful member of any organization, and probably further into my career, the same skills will be applied. The best part of all of this was I was working on projects that I really enjoyed at the end of the day. I especially liked when the socials we would plan and organize went according to plan because as they were occurring, I would think that it was absolutely rewarding to be able to enjoy your own work.

Students in Free Enterprise

The Students in Free Enterprise organization was an excellent opportunity to explore a variety of business interests. I began my membership in SIFE my junior year and took part in both BYOB and Immigrant Outreach. BYOB stands for Build Your Own Business and was an amazing opportunity because it had just been founded the same year. I was seeking out entrepreneurship opportunities both academically and outside of the classroom. BYOB was an especially exciting opportunity because of the way it was structured. Members of the group basically formed an entry-level investment vehicle to help students start the process of bringing business ideas into real businesses on campus.

It was an excellent idea for both students in the organization, and students on campus. For students looking to use the help of SIFE's BYOB team, they had full access to the entire group's think tank, SIFE grant funding (based on business proposals handed in), and the BYOB marketing team to advertise and gain marketing feedback for their ideas, was extremely beneficial. For BYOB members, the project was an incredible way to get an inside look into what entrepreneurs must go through to bring an innovative idea to life. What I liked was that I could take the ride from developing business plans, to getting marketing feedback, and finally running the business, and of course learning about their mistakes in the process - all for free.

Joining the BYOB project from day one was great chance to take an organization through the birth stages and call it your own. I along with our team helped build BYOB from the ground up. This meant that we had to first promote the mission of BYOB to the campus community. This meant constant tabling by Doherty Hall and the UC lobby. We would hand out fliers telling people who walked by to make sure to mention the program to as many people as possible. Once in a while, a few brave souls would come and discuss with us their ideas and what we thought of their feasibility. It was a lot of fun discussing ideas because you get to see the creativity of your peers and it gets you excited about CMU's ability to harbor so much talent in its students all in one place. The next step, which is what I took a lot of the responsibility for was making phone calls to local Pittsburgh companies to consider sponsoring our entrepreneurship grants. I looked to think tanks like the Idea Foundry and other smaller startups to other corporations in the greater Pittsburgh area. The most important thing when making these calls were to sell to them the idea that it would benefit their company with the exposure of sponsoring a worthy cause, but also to sell to them our passion for the project. I had to convince executives that I believed in what we were working on and that there would be exposure and growth in this organization for a long time to come.

As BYOB began to settle in, we had a startup competition to get ideas to start flowing in to BYOB. The competition was to have each entrepreneur submit a business plan of their idea.

The criteria of a good business plan was that it was convincing, conceivable, and finally, profitable. As a member, I was able to read through all of the business plans. I saw a great number of innovative ideas. One business plan that comes to mind was moving and storage company that dedicated its services to the Carnegie Mellon campus. It was an excellent idea; the company would offer to box up and move student's possessions and move them to a storage area. This was a great idea because it solved the problem of students not having anywhere to move their stuff. Dormitories were full by the second or third move day, and moving companies were abnormally expensive. The advantage that this idea had was that it was run by students who could move the boxes wherever they like or they could choose to move it to storage facilities near campus.

I also submitted an idea to the competition. My friend and I were previously involved in talking about running a website that showcased CMU art and projects and would double as a medium of exchange for CMU art students who wanted to make an extra buck. The project was called Ingenuity, and it was a lot of fun to work on. A lot of the work that was required to start the website had nothing to do with the actual website. Instead, we spent a large majority of the time looking for funding, surveying our target audience to gauge demand, and getting as much feedback as possible from the CMU art students as well. They were going to be the lifeline of the website, and if they didn't like the deal they were getting, the website would not attract the top art talent and projects. The problem we wanted to solve with this idea was that we believed CFA students did not get enough exposure to the rest of campus and this was a great way to showcase the great things these students have accomplished with all of their hard work, and also monetize it to a certain extent. The premise and business plan was good enough to get 3rd place in the competition earnings us \$250 toward any business expenses.

This project was a great way to accomplish the four goals outlined in the course. In terms of linking my interests to the business skills learned in the classroom, there was no better place to apply them. I got to work on over 15 business plans in BYOB, and I learned how to hone them down to make them as effective as possible. I helped market many of these ideas, including BYOB and Ingenuity by doing market research, surveying, interviews, and good old fashioned "flyering". Another goal of the service project was to develop professional networks. BYOB gave me a great chance to showcase to the local organizations my ability to sell our project but also to give them a liaison to the university in case they do want to become more involved on campus. I developed good relationships with people in the venture capital firms in Pittsburgh which should benefit me greatly as I continue in my career.

Another important aspect of networking was being able to get to know the resources as well as possible including professors in the business school, the dean, and pretty much anyone

who will listen. These resources could help with funding, giving guidance to our organization in terms of finding the right sponsors for our entrepreneurs, and most importantly connecting our entrepreneurs with talented individuals who could bring their ideas to fruition in terms of the technology side or the implementation side. That was one of the most important aspects of BYOB's value-add. One of the themes we learned as time went on was that many entrepreneurs who had great ideas needed a partner or a group to help implement the idea. This is why it was imperative that we helped link entrepreneurs to people with a particular skill set and make something happen.

Another way I achieved a goal set by the course was by developing my leadership ability. Although I wasn't the founder of BYOB, I had the responsibility of overseeing the sponsorship committee. I had to make sure we were making as much progress as possible. I helped organize our general body meetings, the table schedules for advertising, and finally preparing our pitches to the local Pittsburgh companies to solicit funds for our organization. Finally, BYOB and Ingenuity have been great platform to give back to the CMU community. In many ways BYOB brings out the creativity in CMU students. Students here are notorious for having extremely good math skills and are academically gifted, but BYOB could be a bridge to making a lot of smart people have an outlet to do something special with their talents that the entire community can benefit from.

Immigrant Outreach was the second SIFE group that I joined my junior year. The mandate for Immigrant Outreach was to help immigrants, who recently have moved to the Pittsburgh area, with anything we could provide. When Immigrant Outreach began, it was started with certain sensitivity to the fact that many immigrant families need help with the little things. For instance, we have heard from community centers in this area that parents of these families need help with English translations, minor legal matters, finding and securing jobs, credit, mortgages, etc. This was something that I wanted to help with as soon as I had heard about it. The idea that I could help families as a student was very appealing. The project also especially touched me because my parents are first generation immigrants as well, and they struggled with a lot of the same issues any first generation immigrant deals with.

As a member we had a bevy of options of how we wanted to help. One of the first things we had to do, however, was when we learned of a task one of our clients needed our services for, was that we had to reach out to them prior to the job. We as a group had the task of overcoming the potential trust issue we would have as students at CMU and immigrants who had never met us before. In order to massage the relationship, they would like to speak to us in person and get to know us better. Generally I would take another member with me and we would go (mixed sexes) and meet with them and discuss their current living arrangements and

how else we could help. This was a particularly rewarding experience because we could touch someone's life based on the amount of effort we wanted to put in the relationship. I got to see right away the type of impact I could be making, which made it easier to put in the effort of the sometimes more difficult tasks.

I decided I wanted to use my talents in Finance and Economics to help with the program. Our main contact at the local community center notified us that they wanted SIFE to make a presentation about the topic of debt and credit. I volunteered to help with the presentation by covering mortgage topics and escrow. This required me to do research of my own as I have never owned a house or taken out a mortgage loan. Right away, I got to marry my financial knowledge of credit along with the real world banking institutions, mortgage facilities, and homeowners themselves with the process of financing or refinancing loans to make it the most appropriate for the homeowner.

One of the best parts of this project, as I had mentioned earlier was the way I could make an immediate impact on people's lives as a student! This falls right in line with one of the most important goals of the service course, that is, to promote social responsibility and become involved with the greater Pittsburgh community. One regret I have as an undergraduate business student was that I didn't take more opportunities to give back to the community. After reviewing and assessing the work I've done the last four years, I believe I will make it an extremely high priority that I become heavily involved with community organizations wherever my career may lead me. Being able to have that sense of giving back, living in another person's shoes; that truly is the only way to be a genuinely well-rounded and most importantly, informed human being in today's society.

University Consulting Club

Although I was always pegged to be a Finance track business student, at the time I signed up with the University Consulting Club, I wanted to make sure I learned a little bit about the consulting industry before leaving CMU. I knew a job in consulting gave you an excellent skill set necessary for being a leader in any industry, so I wanted to expose myself to it through this club. When I first entered, I was elected as Corporate Relations Chair. My responsibilities were to work with the Treasurer to maximize the club's budget, to constantly look for ways to partner our name and events to local corporate consulting firms, and to work closely with the Vice President of Affairs to help fund classic events and new events to help grow interest of the club.

The club's mission was simple, bring students together with top consulting firms and educate the CMU community about the consulting industry. To that end, I felt it was important, as the corporate relations chair, to overhaul the current relationships made in the club and push further out to not just top 5 firms, but more local consulting firms in order to bring a wider perspective. I used the career center to gain as many names as possible to develop a contact base and network of corporations and people who would be interested in recruiting at CMU and developing a presence on campus. Again, anytime I've tried to build any professional networks, it required patience, consistency of message, and conviction of what you're trying to sell to them.

I was in constant conversations with McKinsey & co., Accenture, Deloitte, IBM, and others in an effort to come up with new ideas and events that could help build up the knowledge base of the CMU students and their ability to interview and impress recruiters. On their end, we wanted to combine their name with our events to raise extra money to help grow the type of scale of audience our club could reach out to. Deloitte and UCC have a good report together and have made the Deloitte Case Competition an annual staple of the UCC. An initiative that I started and believed was extremely important was to address an issue McKinsey & co. raised about our students. They said that we were woefully unprepared for the case study, the case interview, and about consulting in general. I raised this to the board after conversing with them about this issue and we pushed for more information sessions like the Elevator Pitch, case study preparations with McKinsey, and mock case interviews.

Another event that the UCC always hosts is the Spring Reception which is held during Carnival. This is a great event because it matches up alumni in the area who are in consulting with prospective students who are interested in entering the industry. My responsibility was organizing the event, gathering as many alumni as possible by calling them through alumni relations and word of mouth, and to bring executives from top consulting firms to add their

input. The reception is always an excellent time to be frank about the industry, clarify what consulting really is all about, get the inside track on landing a job with the best firms, and networking with fellow alumni to build relationships for the future.

The club gave me a great opportunity to again use my business skills in a setting to proliferate the message of the UCC, help manage and maximize the budget, solicit funds from outside sources, and finally learn about consulting and what makes a successful consultant. The professional network I developed through this experience will be unparalleled as I enter the workforce next year at Booz Allen Hamilton. I hope that after this experience I will realize the value of developing the student-alumni relationship and follow up on it as I make the transition from student to alumni. Next year I definitely plan to come back for carnival and share my experiences at Booz Allen Hamilton and hear what students are saying and thinking as they enter the job market.

Carnegie Mellon Capital Management

Carnegie Mellon Capital Management was started this year as an initiative to finally get Carnegie Mellon undergraduate business program an investment management fund that one day would hope to gain a large grant from CMU to invest for the endowment. For now however, although the club hasn't been granted money yet, the fund's performance is tracked through a virtual stock exchange online. CMCM was an amazing opportunity for me because I majored in Finance, yet new very little about investing. My father had invested for quite a while, but I'm pretty sure his investing approach was generally not fundamentally sound. This was also a perfect time to start for me because I had just come off of two very influential classes this fall semester. I had taken Corporate Finance, Investment Analysis, Corporate Financial Reporting, and finally Financial Statement Analysis. All of these classes were extremely time consuming, but gave me a great framework for what Finance was and how to understand the fundamentals of a company, their debt and equity, and future trends.

I took this learning to heart and jumped into the club with a lot of curiosity and I was ready to try things that I learned in class and apply it to my equities picks and overall investment strategy. The fund was structured similar to any fund in the real world. Each sector, be it energy, consumer, financials, etc., had one lead analyst, and associate analysts assisting with the research of their sectors. The lead analyst sets up internal meetings throughout the semester to come up with ideas to pitch to the entire CMCM group. When pitched, the members of the organization must decide by voting whether or not they believe it's a strong buy or sell and consequently will add it or subtract it from the portfolio.

I volunteered to work with the energy sector and went right to work on Exxon Mobil. Our original reason we wanted to do research on Exxon Mobil was that we wanted a company that could withstand the bears of the market. A lot of fears of short term credit being a problem meant, if there was any investing to be done, the company had to have an extremely strong cash position, access to short term credit, and a market leader in its industry. As we did more research we also liked Exxon for its diversified revenue streams and its history of performing well in economic recessions. Its revenue streams are well diversified among many countries and industries and resource materials.

My responsibilities included researching the balance sheet fundamentals with the help of my Financial Statement and Analysis professor, Professor Liang, and the valuation techniques that I learned from my Corporate Finance and Corporate Financial Reporting classes. IT was a lot of fun developing these slides and the research because I was able to use the material learned from these classes and make real live valuations that had a huge impact on whether or not the CMCM fund was going to make or lose money.

Randy Pausch

When applying the four goals framework to Achieving Your Childhood Dreams, I really wanted to narrow it down to the goals that Professor Pausch had stood for. How do you apply what you learn and how do you use those skills to achieve your dreams. The other goal that Professor Pausch strived for was how you use your talents to give back to the community and help other people achieve their dreams. These are the themes that made this lecture so impactful to me and many of my peers.

One story that I particularly liked was about his experiences playing football. His old football coach would dedicate practices to developing fundamentals and would criticize Pausch as much as possible to help him improve. Pausch then makes a great point in that the criticism was difficult to take but ultimately very helpful in making him a better player. It's when your critics do not bother to criticize you anymore is when you should be nervous about what you're doing. I think this is an awesome point. Critics, although difficult to face, are the ones who care enough about you that they want to point out things you maybe need to improve. Fundamentals are something my father preaches to this day. I believe that if I continue to work on my academic fundamentals and develop a good knowledge base, I can eventually leverage my experiences into a great career. I want to continue to have something to offer and put on the table in order to achieve my dreams and my career aspirations.

Another great few quotes; "Experience is what you get when you didn't get what you wanted", "most of what we learn, we learn indirectly." These quotes hit me like a brick because of their meaning to me and what I've gone through in my academic career. Entering CMU, I was an economics student for the simple fact that I was pretty good at math and economics classes. I did not know what I wanted to do, nor did I know where to look to find out what I wanted to do. I switched into the finance program my sophomore year. I thought I would love the business core classes and finance electives, but I realized they were just OK, and not particularly memorable for me. I convinced myself that classes in general are uninteresting anyway, and that I was set for investment banking regardless. I joined Citigroup Investment Banking my junior summer for an internship. Although I prepared for the long hours and the sometimes monotonous work, I had no way to prepare for neither my boss nor the subject material that did not appeal to me in the least. That summer was a true experience for me. Each day I labored 14 to 15 hours a day with little to no appreciation from my boss. I felt as though I were just another cog in the wheel and most of the time I felt he had no interest in keeping me there.

That's where this quote makes a lot of sense: "Brick walls are there for a reason, to give us a chance to show how badly we want something" from Pausch. I fought even harder to

impress my boss to little avail. But it didn't matter what he thought of me, as long as I proved to myself that I had the consistent, hard-work attitude, there was nothing my boss could take away from me. I learned that investment banking was not necessarily what's best for me. Eventually I began to find classes that I really loved, such as Corporate Finance and International Money and Finance which were much more grounded in economics. Hopefully this change of thinking will lead me towards a career that will be fulfilling and rewarding.

The second part of Pausch's lecture was especially rewarding. The topic was how can he transfer his energy into realizing other people's dreams. Pausch gives the story about how he had given a class called Building Virtual Worlds, where teams of students in the class were assigned to develop virtual reality models in two weeks. Pausch was blown away by their progress in only the first assignment, and decided with the help of his mentor, to tell the students that they did an OK job, but he's looking for more from them in the next projects. This was such a great way to approach my life and career. Any time you settle and don't actively try to achieve, I believe its giving up potential I have to help myself, my family, and the people around me that I could be affecting. This story has a lot of lasting impact for me, because I constantly want to strive to be better than I was yesterday.

Another quote I'd like to put out there, "You are such a great salesman, that any company you work for is going to use you. If you're going to sell something, why not let it be something worthwhile like education." – Andy van Dam. This was the quote that inspired Professor Pausch to seek out graduate school instead of looking for a job. Inherently, this is an extremely talented person who instead of going into the private sector, will choose to do something inherently good for society. I think this is inspirational to me because its something I believe I should constantly be considering as I progress in my career. I believe that I also am a good person at heart. The rule in my family has always been think of your family first by providing for them financially. I'm ok with that, but I want to keep in the back of my head that I have the ability to make a substantial difference in this world with my energy, talent, and will to improve people's lives. These are the things that I believe separate people and its something that I want to live up to one day. Finally, how do we best conclude Professor Pausch's message? I like to take this excerpt from his slide show. "How to get people to help you; you can't get there alone, and I believe in Karma, tell the truth, be earnest, apologize when you screw up, focus on others, not yourself." This is what I want to live my life by. Tell the truth and be honest with people because in the end, that is how I want to make my network of people around me, and that's how I want to make a difference, it requires the help of the people all around you. The respect that I give to the people around me and the work I do with my colleagues will allow me to follow my childhood dreams and realize the dreams of the people I come in contact with.

Global Climate Change

For my final university lecture I want to include, I decided to bring in a very different subject matter from the themes that I have been discussing. That is, using what I've learned in the classroom, my experiences in my extracurricular and entrepreneurial activities, and lectures from people who have excelled in their trade. With the global climate change panel, I went a little out of my comfort zone and listen in on a topic that CMU has spent a lot of money and time researching the green initiative.

A New York Times article cited an experience from writer Thomas Friedman who wrote about a city council member in New York who partnered with an entrepreneur to begin to convert the New York taxi fleet to hybrid cars. They bought 500 taxis that were hybrids and got great support from Mayor Bloomberg. Taxi drivers like the plan because it saves them money from gas. Friedman made the point that New York can be the flagship city to develop interest for the American people to start switching to hybrid cars. The major theme of this panel is that they want to encourage each person in their own community to use the power they wield to make a difference, be it in schools, local organizations, etc., and make real changes.

Dr. Granger Morgan starts off the panel with an overview of the basic science that goes with global climate change. The main consequences of burning fossil fuels are that the fuels combine with oxygen in the air and energy is released and carbon dioxide is created. The planet warms due to this effect. Carbon dioxide lives in the atmosphere for over 100 years, thus when it comes to stabilizing atmospheric concentrations, the world would need to reduce emissions by at least 80%. U.S. is a leader in contributions to carbon dioxide concentrations, and thus they should be the first to make a large effort to stabilizing carbon emissions. Science is unsure of the effects of global warming on intensities of hurricanes, and if weather patterns are sharply altered.

Dr. Edward Rubin, Professor in Engineering and Public Policy, discusses the utility sector. Where does carbon dioxide come from? The main industries are residential, commercial, industrial and transportation. Coal alone contributes to about a third of U.S. CO₂ emissions. Coal from power and oil from vehicles are the two main problems that need to be assessed. Currently, if everything were left untouched for carbon emissions policy, emissions would grow in each industry by an alarming rate, especially the electricity sector since coal demand will increase as coal is still the least expensive power source. He suggests changes in community planning and development, changes in personal lifestyle, transportation systems and infrastructure can be more efficient, and changes in agricultural practices and products can help reduce carbon emissions.

What was especially alarming about this discussion was the type of scale of deployment needed to make real change. In the U.S. alone, hundreds of millions of buildings would need to be replaced or fixed. Tens of millions of new automobiles per year and hundreds of power plants around the country would need replacement. This means solving this issue will take a lot of time and investment from the private and public sector. One process that has been suggested was that capturing and transporting away carbon emissions was the best method because fossil fuels will likely be used for decades to come because they are so easy to access and are cheap. The process could help make the transition to a greener world.

Technically, Dr. Lester Lave, Co-Director of Carnegie Mellon Electrical Industry Center, believes that reducing carbon emissions is possible, but the public fears that it will be too expensive for it to be plausible. The era of cheap energy is over according to Dr. Lave, and as such, this staggering statistic came up. There are over 1.17 cars attributed to each licensed driver. Cars bought by American consumers over the last 35 years have gotten less fuel efficient, and instead, much faster and heavier. Dr. Lave targets reachable goals; we can improve building efficiency by 80%, can improve car fuel economy by 50% through hybrids, and can improve lighting energy by 50%. The reason these goals aren't being achieved is because energy is far too cheap in America as compared to Europe. In order for hybrids that are ultra energy efficient, there would have to be price floors enacted on the price of oil to make the substitution costs higher.

As I watched the lecture and digested all of the points, the main conflict that arrives is the battle of environmental awareness and responsibility and maintaining continuity of the American economy. The question really comes down to how we balance the two sides and come up with the most efficient solution to this issue. The panel seems to believe the first thing we must do is change our habits and become environmentally friendly citizens. I see this as a troubling notion. It doesn't seem likely that with an ad campaign we can change people's behaviors. What it comes down to is how we incentivize the American consumer to "go green". One of the things I liked from the presentations was that there was a lot of optimism about reaching those goals. The technology is there, but it requires a transition period to really stabilize our carbon emissions. I took away something else though. As a business student, we were taught to look at trends and ideas constantly. Entrepreneurially, I like to think of how I can monetize on America making the nation greener. I think hybrid vehicles, as they begin to improve their performance and reliability, will create a completely new industry for new entrepreneurs to enter. Consultants can enter this market as well to make buildings all over the world to become more energy efficient and save costs. This is the next great transition America must make. The last great transition we made was the industrial age. The transition in the new millennium must come down to marrying the monetization of the internet and its

services and then revolutionizing the new green economy. All of these things are extremely exciting topics that already has the large attention of the president as it is on his top three list of priorities for this country. Companies like Exxon Mobil, IBM, and other flagship American companies will fight for talent to be the first to make revolutionary steps.

Conclusion

Writing this paper and documenting all of the ways I have tried to develop my knowledge base, my practical applications to my academic curriculum, leadership skills, and new networks, has been a great reminder of the type of work I've done over the last four years. I've learned a lot of things at this school in order to become a better, well rounded person that can take the experiences I've had and use them for the rest of my life. One thing I want to make sure I do is to keep in mind my childhood dreams and interests wherever my career takes me. Giving back in today's world has never been more important, and with the education and degree I will obtain from Carnegie Mellon, I believe I have the ability and now the responsibility to take what I've learned and make a difference in my life, the lives of people around me, and hopefully one day make an impact on the world I can be proud of.