Those Present at Interview:

James Magee founder of *Increased Economic Opportunities* (IEO), Christiana Magee employee of TechBox, and James Jr. Joseph Meyer (Allegheny Graduate) Emma Weissenfels (Allegheny Student)

James: Hello, my name's James Magee.

Christina: And I'm Christina Magee.

Emma: Uh, I'm Emma.

Joe: And I'm Joe.

Emma: Okay, do you want to start? Where ever you'd like

Joe: Sure, so um, I guess to provide some context for the record, um what we're doing is gathering information and stories and experiences from civilians of Meadville from different facets of life and then um from there we're gonna, I'll wait till he's done [chuckle] . Yeah, so yeah I was just explaining the context a little so we can have it on record. So basically what we're doing is we're getting stories and experiences from different facets and different perspectives of Meadville and then from there we're going to quantify that along with coding and data so that we can see like the numbers of what people really want to see with Meadville. For example, people wanted a coffee shop so we have Tarot Bean here. So um yeah, that's basically the context, um this is kind of a model that's been built on before and we're kind of taking it where we go and um like Emma said before we're kind of trying to focus a little more on technology than the past *My Meadville* type things and you guys are obviously tech oriented with your business and with your, uh job so we're gonna go from there.

Joe: So um, for the first question um, we can either go like back and forth from you guys or um just one at a time, either one works, we're pretty flexible. So for the first question, um, are you guys originally from Meadville?

Christina: I am.

James: I'm from Adamsville.

Joe: Adamsville?

James: It's out towards Greenville.

Joe: Yeah, yeah I saw that on a map.

Christina: It's closer to the Ohio border.

James: Still fairly local.

Emma: Well in that case, what brought you to Meadville or like why do you stay here?

Christina: I stayed for family.

James: Um well, in Adamsville there's nothing, uh I think that we had a post office and it burnt down.

[chuckles]

Joe: Sorry, that's funny. So what matters most to you about living here?

James: Um well it is family oriented. My mom's close, her [Christina's] family's close, uh so that's good. More than that, I think that's what basically draws us to the area. I know that I like that it's the trees, the rural kind of setting even in the city, um it still has kind of a rural feel to it because of all the greenery and stuff. Um, I don't know other than that, it just seemed to be that way that life played out.

Emma: [mutterings] Oh yeah this one, in that case, um what were your experiences, whether where you were living before or here, what have been your experiences and interactions with technology growing up? How did you get into your kind of field...

Christina: Well, we'll start with yours since yours is shorter than mine.

[chuckles]

James: Um, well I've always seen technology and its usefulness. Uh growing up I didn't have a whole lot of interaction or use with it but I saw the advantages that it did give people. Um, even as far as personal computers and things I, as a child, didn't have access to those other than the library which still is pretty limited. Uh, but it was, there was a clear advantage that the people that had this technology readily available, have had over the people who didn't and I saw it even as a young child.

Christina: Are you done?

James: Yeah, you can tell them...

Christina: Alright, I know I grew up with technology, I mean at three years old my mom had me loading up the commodore sixty-four to play games and stuff so uh... in school I was always getting in trouble for freezing the computers so... And I chose my career, uh technically I got my associates in networking administration and security but uh, I just like fixing stuff for the most part. I work next door so...

Emma: Yeah, could you tell us a little bit more about about um, *Techbox* and what it's like working there?

Christina: Uh, I love working there, it's, I've learned a lot actually in the aspect of repairing cell phones and tablets. I found out it's a lot easier than I thought it would be um... I've got an angry baby.

[chuckles]

Emma: It's alright [chuckles], James Jr.

Emma: That is totally alright. And actually, I was gonna say we could take this opportunity, we can jump back to Techbox, but you were...

Joe: So um, so we're going to ask you a different question pertaining to like your business basically, so um what experiences do you have with technology in Meadville? And if you could like tie that in to what you're doing with your business.

James: Um well, technology in general is everywhere. I mean you see it everyday, we see cell phones and TV's, we even have electronic billboards and things. Um so like we interact with technology everyday whether or not we're realizing it, the lights come on, everything works but more personally I've been trying to get involved with solar technology and um, upgrading the technical aspect of our interior. Uh, because though technology has advanced greatly over the years, our interior has been left in the sixties. Um, we still use materials that have been outdated, we still use technologies for energy collection and transporting that have been, they've been, they've invented new and better technologies, they need toreplace the older technologies. Um, originally our interior was built under defense contracts, um but since it had been established people no longer considered the interior a national defense asset uh, and I believe that that's grossly inaccurate, especially with the age of technology as it is, um as a, technology applies to everything.

Um, now as far as my life I learn as much as I can but my understanding of uh, the function of your most common technology is like cell phones and personal computers is limited. I have spent a good amount of time learning about photovoltaics and the history of solar energy, thing of that nature. Um, and as far as the actual function of it goes I think that it's one of those things people don't know how to, how it works. They don't need to know how it works to see it work and to know that it does. Uh, because it is a fairly complicated process involving uh, electromagnetic fluctuations and photons and a lot of people are like "I don't understand" or even care to understand. Um, and I do believe that that's where there's a gap between public and technology is because there's a lot times people don't understand the function and it can be frightening or off putting to people who have not seen it or experienced it before. I mean imagine somebody from the eighteen hundreds seeing a flat screen TV, that would blow their mind and they would burn you at the stake, witchcraft.

[chuckles]

But I'm not exactly sure what kind of answer you're expecting but that was...

Emma: No that's perfect, yeah there is no exact answer.

Joe: So what first sparked your interest in solar technology?

James: Uh well, personally, first it was personal gain. I saw the technology as a way to improve my life and my family's life. Um, but as I started to work on my personal project I realized that there are a lot of limitations uh, mostly involved with funding and property allotment for the technology. Uh, I don't own a home so right there it was I can't own solar panels. Uh, it's basically that simple most of the time. Uh and then also once you get the funding your average homeowner doesn't have the extra thousands of dollars to invest in it because they have property maintenance, taxes, a large list of other expenses that, you know, we don't necessarily have to cover, everybody lives day to day and knows it's not free. Um but, my interest was started because the potential for personal gain I'd seen.

Joe: So could you speak a little more on those limitations that you've seen maybe with um, getting funding yourself with your project and maybe how you went about getting that funding?

James: Well, funding for renewable energy projects is actually very difficult. Uh, the government has lots of different programs in place to try to help this. Uh, some of them work well, some of them not so well. We're actually participating in a grant competition which, its direct goal is to enable the ability for low-income and middle-class Americans to have access to this technology um, and find a way to overcome this barrier. Um, the way that we are trying to overcome this barrier is crowdsourcing, getting people to work together uh, obviously there are other financial options that have been presented to us, but uh, we've declined borrowing money for any reason from anyone just because if we can do it without borrowing money, the numbers look way better.

Christina: I like to say it's against his religion to borrow money.

James: Yeah, I don't borrow money from people. So uh, basically we're going to do it on our own and if we can't do it on our own then it just doesn't get done. But uh, when you get into the banking systems, you get like that, you actually have other people who basically own

your project cause all the money you make has to be funneled back to them. Uh, if you want to make anything, like expand anything, you're going to have to borrow more money from them again and it becomes a detrimental cycle, so the financial system is a little bit unfair, uh, especially when you're looking at long term projects to improve large groups, uh because almost any project as far as finances, they want to see a three to five year return on, on you know any kind of project. Renewable energy technology doesn't really allow for that kind of turn, they allow for a steady return over long periods of time, ten, twenty years, you'll make lot's of money. But you measure it three to five years, it looks like the worst investment you can make, because you'll probably have less than you started with at that point still, when people will be well that's not what you want to do when you invest. Well when you look at the twenty year mark, the number are exponentially better, like you make significant amounts of funding. So that's a large issue I've seen with funding for renewable energy technology, is that people want to see short term gains and the technology by itself doesn't allow for the programs to facilitate that.

Joe: So going along with that um, do you believe that technology has been efficient in initiating and expediting your social movement um, with in reference to the funding?

James: Oh yeah, technology has been used every step of the way. One we're raising money to buy technology but two, we've used technology to get people to help raise the funding. Our average people have contributed less than twenty dollars, somewhere around there. Uh so, at twenty dollars a person we've been able to install six hundred watts on one low-income home to start helping them with reused detailings. I mean most of us are like we don't have a lot of extra money but when we look at the long term ramifications of our decisions, how it's improving our community, uh people will be like "I can afford five dollars" "I can afford ten dollars" and most of these people who have given around twenty dollars didn't give it at one time, it's actually been broken up in single dollar increments, five dollar increments, and it has, over the last year they've been able to give twenty dollars. Um, so it's not like it's, we have to have it done in a month either, it's we have as long as it takes but the sooner the better. Um, but yeah, technology is how we're actually doing it, the internet, Facebook, social media, uh we built a website and...

Joe: What's you're website?

James: ieoinvest.org

Emma: And have you seen a lot of activity on the website? Have people had good access to it?

James: ehhhhh, we've had a lot of people that have looked at it, which is good, you know, but I think that still its being a new program people are still like let's wait and see. Um, there have been a few people who have gotten involved, um unlike the crowdsourcing fund I've noticed that locally we get a much larger number of investors but they are much smaller investments. When we've gotten investments from, we've gotten investments from out of state, like New York, they usually send upwards of fifty to a hundred dollars at a time, uh but they only do it once, whereas local people are like, well I got a dollar, you know, I'll come back and give you a dollar next week if I got it, if I have it. So as far as crowdsourcing funding goes, that's a trend that I've noticed.

Christina: I know your one friend invested a couple days in a row.

James: Yeah. Yeah but he travels around the country so I don't, he won't be back for a while, I don't know.

Joe: So how much have you guys raised so far?

James: Um, about two and a half grand. Which you know it's not a lot but it's more than I would have been able to raise by myself in a year.

Christina: A little less than a year.

James: Little less than a year, August will make it a year.

Christina: I thought it was actually more toward the end of August.

James: Ah, well technically the paperwork was dated for the 1st.

Christina: Alright, okay...

James: Though it took us till the end of the month to get started, [chuckle] the paperwork was started on the 1st.

Emma: What would you say your goal with *Increased Economic Opportunities* is? Whether social goals or...

James: Um well, if I was going to describe that to you, *Increased Economic Opportunities* does a number of things. We improve the economy, the environment, and national security while reducing inequity. I could describe to you how we effectively reduce each one of those points if you like...

Emma: Yeah

James: But that is in short our goal.

Emma: No that'd be great, if you'd like to elaborate on those.

James: Um, well we improve the economy in two measurable ways. The first is by directly helping citizens, increasing their budgets, they will have more money to spend on consumer goods, uh local restaurants, businesses, services. Uh this is, by helping average citizens you can see exponential growth in the economy because your average citizens are now spending money, it just functions that way. Another way we affect the economy and improve it is the argument of domestic energy versus foreign energy. The more energy we produce domestically the less we have to by from foreign countries, Canada, Saudi Arabia, who ever else, um which provides us more economic stability in the country.

We effect the environment, both the natural environment and the social environment. The natural environment is improved by the use of renewable energy technologies to reduce the impact of the fossil fuel industries. If we start reducing the need, the consumption will start to decrease as well. We improve the social environment by helping under-served demographics. By helping the impoverished, by helping the elderly, um, they will have more opportunities in their own lives to participate in building an active community that is progressive and moving forward.

We help national security in three ways. The first, foreign energy vs. domestic energy, obviously we're safer if we can produce our own. We no longer are drawn into international conflicts over resources as frequently because we don't need them. We also increase national security by diffusing energy production. Without energy production being centralized to one location it's harder to effectively attack such [inaudible] electrical systems. Both useful in any type of foreign invasion scenario or natural disaster scenario. It's a lot less likely that hundreds and hundreds of acres will be destroyed versus a couple acres that the natural gas plant sits on. That increases our security nationally and locally for response. A third way that is a little less direct is by helping the impoverished and under-served demographics which often includes the veterans of our country. Um, they will be more prepared and be more able to facilitate response and militia if the need was ever to arise. And these are the civilian demographic that will facilitate this effort, because they have the experience, the training, and the drive to do so if crisis was to strike. I'd like to emphasize that this isn't something we ask these men and women to do, it's just who they are.

But that's uh, and then we also affect inequity by helping under-served demographics by giving them more financial abilities in their lives. More entrepreneurs will start following their dreams, more impoverished will have the means to buy the basic goods that they need to survive uh, helping to produce economy, improving everybody's life from the most impoverished person to the wealthiest person. So that in a nutshell is our goal.

Joe: Sure, so what would the ideal Meadville look like to you in ten years from now and how does your entrepreneurial venture play into that? So what's your vision of Meadville in the future and how can you help that vision?

James: Um well, my vision includes us being, having locally sourced energy, being more economically independent with more proactive citizens that not only have the drive to participate but the means to participate um, because there are lots of people who want to help but they don't have the funding or the transportation to get back and forth or any number of reasons that just make it impossible for them to participate. But I would see pretty much every south facing roof would have solar panels, every peak would have windmills, we would be exporting energy so we would have more money for local projects, uh anything from youth education and to elder benefits of different sorts. Uh, when we're talking about the amount of money that's here, it's hard to say what we could do. Crawford County alone spends over three million dollars a month on residential electric. That's just houses, alright, we didn't help a single business, we didn't help a single factory, just homes, we'd be saving over three million dollars a month and I don't know what we could do with three million dollars a month but something. I know the roads would probably not be as big of an issue, the fire stations would have more funding, like, my ideal Meadville, I don't know, we could do it in ten years but it would take the eighty thousand that live here to say I want, not just the hundred of us that have said it so far. Uh, but that's my ideal scenario. And I don't know...

Christina: My ideal Meadville in ten years would be that it be as hustling and bustling as it was, uh, as it appeared in the pictures I see on my boss's computer, like back in the 50's and 60's when there was lots of businesses up and down Chestnut st. and you know along, like, Market st. and stuff and every house has solar panels for the business and just like the entire city is like, it's just all tied in and flourishing. Because I know like Meadville seems to be dwindling a little since like the fall of the industrial stuff and like cool shops are moving away and it's, a lot of people used to work in cool shops and mmmh, it doesn't seem as much anymore. I know my Mom used to, um but... yeah. Something, something way more flourishing than we are now.

Emma: I was wondering if you would mind,uh, if this is a good time to go back to the Techbox a little bit cause you were starting to just talk about the experience of fixing them saying that it's a lot simpler than you thought and if you want to talk about your experience but also add on a bit, I don't know if you notice what your customers' experience when they come in, what's kind of their attitude with the technology they bring in or...

Christina: Uh, I know we have a lot of older clients, um they do, it actually surprises me how many older people actually do well with working, like doing their stuff on computers, figuring out their online banking, at least checking their email, and it's like I'm really happy to see it, but a lot of people do get flustered um dealing with malware or pop-ups. It really scares them because they don't quite fully understand it so they're always like "what do I do, what do I do?" You know we have to reassure them that it's okay, just you know close it or shut it off and turn it back on, don't let people remote into your computer. But um, you know, I'm sorry my brain's gone a little flustered.

Emma: Oh, you're fine... yeah no worries.

Christina: But no, it's actually very rewarding, um, to help people, to teach people about how to use their technology, to fix stuff for them. I feel it's better to fix something than to just throw it away. Uh, I mean I went to LTI and they taught us "oh it's easier to just throw a mother board away" than to swap out a couple capacitors. Capacitors are really cheap, the soldering is really easy if you have the patience for it, so to me it's more cost effective, it's better for our environment, and our wallets and everything. If you just fix the little components on it and put it back into use anyway that you can like, we don't need to be throwing this stuff away if it's that easy. But it's been, I really enjoy it over there. I like sitting in the back away from people [Joe/Emma chuckle] just fixing stuff, love seeing people happy when their stuff comes back to life. Um, well I don't know, I keep, my mind keeps going blank and I'm really sorry about that...

Emma: No it's fine, that's great. That's mostly, most ones... but um, I don't know, is there anything in particular too, this is your chance to bring up, if there us anything particular you think we should look into or be interested in, in Meadville?

James: Um, I know that there are lot's of programs that are underway. I'm sure that you guys are aware of the majority of them than I am so...

Emma: Not necessarily, [chuckle] but yeah

James: Well most of my information comes from Facebook, so and um the Meadville calendar.

Christina: Oh and Julie and Autumn, uh, Jason Sach.

James: Uh yeah, but they share their stuff on the Meadville calendar and uh, through facebook so, uh [chuckle].

Christina: It makes me really happy to see people trying to do stuff for their community, like Dan Hunter, Lee and Autumn, like it's amazing cause...

James: There are lot's of people who are unaware that these things are even happening, as much as people are trying to promote them and raise awareness. I know in our personal lives we have met lot's of people who are just convinced that there is nothing positive happening in town um...

Christina: Yeah, it's really sad, there's a lot of people that can't see the good in Meadville or the good that people are trying to do and they, they're just so negative about it.

James: So I do think that us just talking about it, getting it out there, public awareness is a major thing that will help any effort that comes from this, whether it be technological or otherwise. Obviously public awareness helps this whole thing happen, I mean we wouldn't be sitting here today without it I don't, in my understanding, um I mean we might have but it would have been a little bit more difficult for them uh. Now I know that uh as far as my personal things go, I want to try to get everybody involved with programs that are important to them and if any of things that IEO addresses are important to them, I'd love to see them get involved with us. Um, you guys are welcome to come to the annual shareholders meeting if you want [Emma: Oh cool]. It's Saturday if you're free, everybody's invited.

Christina (overlapped): Bicentennial Park

Emma: Oh that's great, yeah

James: It's a potluck picnic, everybody's just supposed to go and hang out. We should have bocce and frisbees and I don't know if anything else, I'll have chicken [chuckles]

Christina (mumbled): 1:00pm to 4:00

James: 1:00 to 4:00 but I figure if you guys, you know everybody's welcome

Joe: Where's that at?

James: Bicentennial Park

Emma: Oh cool

Joe: That's fifth ward right?

Christina: No...

James: Well close...

Christina: Over by Meedock [spelling?] across the street from Lincoln Recycling.

Joe: Yeah, okay, I was just there yesterday.

Christina: Yeah, I didn't realize, I've actually, I've met people who have never been there and I think it's

Joe: Right by Velonia Industries?

Christina: Um

Joe: It's like right by the river

Christina: Yeah, it's like right over by French Creek, they've actually got a little boat launch there and everything.

Joe: Yeah, the boat launch, I was there yesterday... for the first time.

Christina: Yeah, cute little cabins where the restrooms are.

James: Yeah, we try to do most of our things, like anything public we do in a public place so anybody who wants to come can, we want to do more public meeting but it's hard to, uh, get everybody to show up. What was that dear?

Christina: I feel like a lot of people forgot about the park because the bridge was closed for so long.

Emma: Mm hm, I haven't been there, someone was just mentioning it to me the other day, yeah.

James: But yeah, um so that's about it. I know if you guys have any interest in helping IEO, I'm always looking for people.

Emma: Oh cool, what kind of opportunities are there to help out?

James: Uh, well at this point it's pretty much as much as you are willing to do, uh cause we're still in the early start-up stages of IEO. We gave ourselves a ten year start-up window, uh because it's not, we looked at the math on it and we knew that we couldn't get it done in short order, I mean to do Crawford County alone for renewable energy, it would cost us over 300 Million dollars. Uh, we're not going to get 300 million dollars in a couple months or a couple years. We said we're going to try in the next ten years [chuckles] Uh, but so if you're interested in helping, there's anything from helping us being a representative where you can go out and get people to sign up their properties and invest independently uh to one dollar and never think about it again. Uh so, anywhere from volunteering your free time and labor for, hopefully a reward, to here's a dollar and leave me alone [group chuckle]

Christina: Or even just telling people about it.

James: Now as far as actually if you wanted to help us with being a representative there's still opportunities as far as founding shares which haven't been claimed. Like we set aside ten percent of the ownership of the company to be distributed to people to help us get it started and 4.1 percent has been claimed by all of the founders and people who've helped so far. So there's still a large amount of opportunity available for people who want to get in on this as it get's started. Now if you look at the mathematical principles of it, you won't make money for at least ten years so, we tell people, that's something you know, we could fail and you won't make money for at least ten years, so don't just go all in and be like "now I need you guys to snap, snap get to it" [chuckle] cause it just doesn't work that way. Um, cause you know, being honest and upfront with how the technology itself works is a big part of how we're going to have to build this. And the only way that we are allowed to provide the discount utilities is because we actually pay to build it, it's ours so we can charge whatever we want for our product, it's that simple. And we have something that manufactures the product with no maintenance for years and years. Twenty years at like ninety five percent efficiency, factory warrantied, so like, and even after that it decreases but we'll still have more land to put up new ones so we'll still be able to use them till the they're well past their prime and then they can be recycled. Um but yeah, if you guys are interested, I know that there's uh, if there are any questions you have I'm always free to answer them.

Emma: That's wonderful, that was actually one of my questions too, was if you'd be alright with us contacting you at any point with other additional questions or possibly a follow up...

James: Oh yeah, well this as crowd sourcing effort, I have to be as open and as fluent with talking to people as I can be because uh, like I, it's early on, I realize that nobody can do this alone I mean, Bill Gates might be able to [Emma chuckles] but why would he? You know?

Christina: Well, why did he vaccinate an entire country against polio?

James: Well cause he's a nice guy. But my, that's another thing, he could afford to do something like that, and you know, people are like why don't rich people do this stuff? Well there's, other than being nice, they don't have a reason to. When you're talking about investing 300 million dollars to invest into one small town to help 80 thousand people, they're like "ehhh". His best bet [Bill Gates] was to probably do something else somewhere else, cause once you have finances like that you can effect global things a lot easier. Money makes things move. We're all aware of that. I'm sure if you guys were offering hundred dollar bills, you'd have lines out around the corner waiting to do these interviews.

[Laughter]

Emma: You actually made me think of another question, um could you see this possibly, I mean I know it's a lot farther down the line, but thinking long term could you see um, your business and project efforts here as being a possible model for other, either small communities or...?

James: Um that's actually, especially [Christina: The contest] for you guys and the contest, we have to prove scalability. [Christina: and replicability] Uh, I mean you're from Slippery Rock, which I don't believe is in Crawford County, is it?

Emma: No uh...

Joe: Butler County

James: Butler County? Uh well, we haven't expanded our service area as of yet but we do have a few programs and we'd like to try to get people organized, let's say you know somebody who owns a home in Butler County, if they just get their name on the list it helps us prove that we can expand to another area, uh just like if you know anybody in Maine who owns a home and is just like "hey uh we'd like wind mills or solar panels, ur, something, we just get their names and their properties on the list, it doesn't cost them anything and it proves that our project has the viability to grow and spread to other areas. Um, plus let's say you get you're own home on the list you might be a little more interested in throwing in five dollars here and there because you know eventually they're going to do your house and in those five dollar increments you would have paid significantly less than it would have cost you to do it by yourself. And then once you're saving money you might not feel as hard up to share or to contribute more because you're like" well they're saving me a bunch of money every month so I feel like I can help out" and like, if you look at what it actually costs to do the transition and what the shares are now, if you get in on the ground level, there's a *chance* you could make a significant amount of money for every dollar invested. Um, cause like we said, it's 300 million dollars to do Crawford County, we move to Butler County, we're going to estimate at least another 300 million dollars. Alright we're going to get to that billion dollar mark before we reach Pennsylvania which means that we going, anybody who got in now will be getting double returns compared to people who get in when we're trying to reach two billion dollars. Um and the scalability of crowd sourcing is unlimited. With the grant competition we have an opportunity to get national and international recognition as far as like news stations and, it would be, I'm sure it would get us a lot of funding if we were just on the BBC for five minutes. I mean we hit the Meadville Tribune and we got several hundred dollars the next day and that's just one local paper. The Meadville Tribune did their article, we got people from Texas calling us because they saw it. Um, you know I don't know exactly how this all works.

Christina: There's all those people that like to interview you on Facebook too and stuff.

James: Yeah, we've done Facebook interviews and things like that. We've got a little bit of success there but I think that the online platform has a lot of trust issues because so many people have abused it.

Christina: Like that Nigerian prince that wants to send you money, you know

[Laughter]

James: You know and I believe that that has made the ability to used the online crowd sourcing a little bit more difficult but it is still viable, uh, once you can prove that you mean what you said.

Joe: Anything else?

James: Um, not really, I know that if uh, as far as like my stuff, I just want everybody to help. Uh, and that also goes, we have special interest projects we can start. Let's say you guys are involved with something else, uh a local charity or local organization or even a local business, they're not our priority but we could start fundraising some random events to put solar panels on any given property if they wanted us to help facilitate that. Um, like we've talked to random places but we haven't got anything in stone. Like I had talked to some people who have worked at the Arc but they, there's board of directors and a lot of things so nothing official happened. There's also all of the local museums and random things that I haven't talked to anybody from but we could use all of their auxiliary buildings to produce supplemental energy to help support the museums and their, you know, preserving history and with that. I feel like that 's a, personally that's something I feel like we should be using the technology for. I mean like we can use the technology of tomorrow to preserve the history that we have learned to use all of this stuff. I mean, that's something that I think that people over look as far as applications of technology. One of the greatest applications is preserving knowledge and history and people just seem to think "aw this is what it does" that's where it ends. Energy and technologies they are connected to every industry, every field, every idea, uses energy of some sort. Um people use the technology of some sort, I mean we've had technology as far as simple tools for as far as well can tell 5 thousand plus years, but hose were still inventions that changed man's life. The wedge, the lever, these are things that right now we're like "uhhh I don't know" but without it you wouldn't have running water, you wouldn't have electricity, you wouldn't have any of the things that you have, that you, that these technologies built. Uh and people, most people are like "oh I invented this or I made this". In my opinion, no man has done anything on his own in the last several thousand years. He, everything we do is built on the shoulders of our ancestors. I mean the one man who's like " I did it on my own" no you didn't, [chuckles]. That's how I feel anyway and I feel like the more we realize that we rely on each other and our ancestors and our histories, the better off we'll be as a collective. I mean many of us don't grow our own food but we still eat everyday. Many of us don't have generators but we still turn on lights. You're using other people's energy, other people's intelligence, other people's efforts, time, experience, to improve your life. And to discredit those men and women seems to have a certain level of ignorance to me.Uh, but it is also hard to stay mindful of how everything works and where it comes from.

Joe: Well said.

Emma: I don't know if there are any other questions but I think that was a great place to, that was a wonderful wrap up actually.

Joe: Yeah, anything else we missed, do you think?

Emma: I think we actually covered absolutely everything I could think of at the moment. And yeah, like I said if you are willing to have me or Joe contact you through Facebook or something with follow up questions or if we can update with where you guys are at with any of your efforts.

Joe: Well thanks for your guys' time.

James: Oh yeah, [Christina: No problem] I'm happy to share.

Emma: No, this was really wonderful, thank you so much.