

The Future of Work podcast is a weekly show where Jacob has in-depth conversations with senior level executives, business leaders, and bestselling authors around the world on the future of work and the future in general. Topics cover everything from AI and automation to the gig economy to big data to the future of learning and everything in between. Each episode explores a new topic and features a special guest.

You can listen to past episodes at www.TheFutureOrganization.com/future-work-podcast/. To learn more about Jacob and the work he is doing please visit www.TheFutureOrganization.com. You can also subscribe to Jacob's [YouTube](#) channel, follow him on [Twitter](#), or visit him on [Facebook](#).

Jacob Morgan: Hello, everyone, and welcome to another episode of The Future of Work podcast. My guest today is Heather McGowan. She's the Co-founder, Author, and Adviser of Work to Learn.

Heather, thank you for joining me.

Heather McGowan: Thank you for having me. It's an honor to be here, Jacob.

Jacob Morgan: Yeah, we've been connected on LinkedIn for a little while and ...

Heather McGowan: Yup.

Jacob Morgan: The whole topic of education and learning is getting a ton of traction lately and you published an article on LinkedIn fairly recently, October 25th and this article just went bananas. I don't know if you've had articles go this crazy on LinkedIn before. I never have, but it got thousands of likes, a thousand shares, 140 comment and somebody posted this in the Future If Community that I run, where there's around a thousand people now.

We started a discussion about it and I got three emails that said, "Oh, my god, you've got to have Heather on the podcast. She's awesome. She's talking about all this cool stuff," so, hey, now here we are.

Heather McGowan: Awesome.

Jacob Morgan: Your article was called "Preparing Students to Lose their Jobs." Now I know we're going to talk about all sorts of stuff related to that but before we jump into any of those things, maybe you can give people some background information about you, how did you get involved with all this stuff, childhood, anything you want to share, so people can get a good sense of who you are?

Heather McGowan: I think this might be helpful for folks out there. I am making it up as I go along. I think I might be ... I just had a meeting with someone and I said, "I might be the

future of work. I just might be ahead of other people." Cause I think the way that I work is the way a lot of people are going to work.

I wrote my first article on LinkedIn in 2015, my second article a week later which was actually the second part of a four part series, went crazy viral and hit a 100,000 views in three or four days and I got contacted by Annalie Killian from AMP in Australia and said, "Would you come to Australia and speak about the future of work?"and it just took off from there.

My articles on LinkedIn tend to hit 10, 20, 30,000. One of them this year hit over a half a million. LinkedIn has been a really important platform for me as a way of meeting other people from whom I learn, as well as putting ideas out there and getting reactions, sometimes great, sometimes scorned, but very helpful in my learning process.

Jacob Morgan: Yeah, I mean, LinkedIn is huge and then just for people to get some background info about you. You're currently in New York. I mean what'd you study in school? What's a day in the life of Heather these days?

Heather McGowan: Sure. I got my undergrad in Industrials and I'm from RISD, Rhode Island School of Design, which is really Design Thinking before there was a word for it. I worked my way through Product Design in a variety of industries and I started asking questions about the business aspects of the products and service I was designing for and a lot of people said, "You know, you should go get your MBA."

I went to Babson College and got my MBA in Entrepreneurship, worked in Finance for a while and then somebody from my alma mater said, "Hey, they're looking at creating a center for design in business back at RISD. You're a graduate with an MBA. They want to talk to you." I went to lunch with someone who said, "Hey, can you help me come figure this out," and that started an accidental journey in education, looking at any combination of education and corporate looking at the future of work, finding out how many institutions of higher learning are still preparing people for 1975 at best.

I went from there to a professor of mine from Babson, became president of another institution, Philadelphia University, and he said, "Will you come here and help me blow this place up and re-imagine it?" We took it from six schools to three integrated colleges. We built a college focused on innovation that brought together design engineering and business disciplines.

Then after that, by a series of happy accidents, I met the president of Becker College, Robert Johnson who's now the chancellor at UMass Dartmouth and he said, "I'm hearing a lot about the future of work," and by chance we met. He said, "Would you come here and help me figure some things out," and that ended up being about a four year stint and then along the way, I started writing and speaking and meeting fantastic folks like Jacob to learn from.

Jacob Morgan: Ahahaha, flattery gets you lots of bonus points on this podcast, and today where is all of your time spent? Is it between speaking, advising academic institutions, or is every day just totally different?

Heather McGowan: Every day is totally different. I usually have an academic client. I usually have corporate clients that come in and go. I usually have sprinkling of speakers engagements, maybe one or two a month, and then I'm always writing, working on writing. I'm always trying to learn.

Jacob Morgan: These days, do you have a fixed routine? Up at five or six in the morning and working till the wee hours of the evening, commuting to an office? I know these are weird questions but people love to know the personal ... "How does somebody like Heather operate? Does she meditate every morning? Is she going to the gym? Is she up at four AM?" What is your day like?

Heather McGowan: Every day's a little different. I'm probably not a good routine person. I do go to offices sometimes, depending on who my clients are but every time I have a client and they want to give me an office, I say, "Don't, because if I sit in my office, I'm not talking to your people. I want to be out in the coffee shop on campus or in the corporate cafeteria running into people and having more serendipitous conversations." I do sometimes go to an office, usually working at home or residence or an Airbnb, depending on where I am in the world.

I'm not a good sleeper so I wake up all night long and I have a lot of connections in different parts of the world so I wake up and I read an email from somebody. I read an article. I fall back to sleep. I wake up again. I consume an enormous amount of content and try to think about it and trying to think about how to connect the dots and how to explain it to people who don't have the time to think about it.

That's probably the bulk of my day and after I've read a bunch of stuff, I either try to go for a walk, go to the gym, walk my dog, cause you have to get away from consuming the content to let it percolate and draw the connections to help and explain it to other people.

Jacob Morgan: There's so much information out there that it's easy to get overwhelmed with everything that's coming your way.

Heather McGowan: Yeah.

Jacob Morgan: I was intrigued with one of the articles that you wrote and I think this one, it was from earlier this year and let me just see the date. This one was on May 10th and it was called, "Stop Asking What." You made three points in the article where you said, "Stop asking young people what they want to do when they grow up. Stop asking university students, 'What is your major?' and stop asking people, 'What do you do for a living?'" Why should we stop asking these things?

Heather McGowan: That is a personal pet peeve of mine because I think ... For a few reasons, one, it's difficult for me to answer the question, "What do I do?" but that's the least of it. The most of it is that we ask young people what they want to be when they grow up when 60 some odd percentage of the jobs that they may have have not even been created yet.

We ask students what their major's going to be when less than a third of them may ever work on their undergraduate major. We ask each other what we do and that's an application of skills and knowledge at a moment in time. Because you start asking a kid at the age of three, four, five, what they want to be when they grow up and then we start asking university students, we all start defining ourselves by that application of skills and knowledge.

It's not about what's your passion. It's not about what's your purpose. It's not about what interests you. It's about "How do I label you so I have a conversation with you?" I think that sets an individual up in a trap because if you look at the Future of Work, the research by the Foundation for Young Australians which works off of McKinsey Global Institute information and World Economic Forum information, so it's really applicable to not just Australia but any part of the developed world.

Is that students graduating today are going to have 17 jobs across five different industries. If they define themselves by that first job, they're going to have trouble getting to that second job, let alone that second industry. We have to think differently about having these conversations.

I think it connects well with your thinking about the employee experience is how do I bring my whole self to work if you're just asking me what it says on my business card or what my undergraduate major was or what are the only things I can imagine at the age of five.

I have niece who's five and they asked her, it was career day, and they said, "What are you going to be?" She said, "I want to be a unicorn." They said, "You can't." When you're telling a five year old they can't be something or they can't imagine something, that's sad to me.

Jacob Morgan: Yeah, that's never a good thing to tell a five year old.

Heather McGowan: Yeah.

Jacob Morgan: One of the things that I get a little ... I guess one of my pet peeves inside of companies is we're very obsessed with just looking at employees as workers not as individuals. We are very focused on like, the only things that you can do that benefit the company, but we don't understand or we don't do a very good job of understanding these workers as individuals, right.

They have houses. They have mortgages. They have families. They have sick kids. They're not just worker bees that work for you from nine to five. Everything that we've designed inside of our companies from the employee life cycle to the ... Just everything is all about just assuming that the worker is a worker from nine to five. I think that's another mass evolution that we're starting to see as well around that theme.

Now you talk a lot about the future of work and a lot of companies have used the term and the phrase and sometimes people say future of work as it relates to technology. Sometimes people use it as far as it relates to education and training. When you say future of work or when you hear future of work, what pops into your mind? What do you associate the future of work with?

Heather McGowan: That's a great question and it's a really great point. I think that we should step back and say, "Okay, we created work. We created government. We created healthcare. We created politics." We created all these structures around us and we created work really modeled after the factory. Certain machine in the factory takes one part from one unfinished state to a slightly more finished state or an assembled state.

We look at workers as you point out in the very same way, but when the world's changing so quickly that we can't fix people into that value creation process, that set value creation process, we need to understand what drives the human. Humans are complex. What is it they care about? How are they contributing to your culture? What is it, the things that machines can do better than humans? What are the things that humans can do better than machines?

When I think about the future of work, I think about all of those things. I don't think about the robots are coming for our jobs. I think more, we're going to unleash the capacity of humans in a way that's never been seen before and we need ... We're focusing on all the wrong metrics for that because we're measuring what we know how to measure from the past. When really one of the greatest predictors, I think, of a company's success is the success of their culture and that's bringing your whole self to work.

Jacob Morgan: Very well said. Now you created a graphic in one of your articles and, by the way, one of the things that I really like is that you also bring in the discussions of AI and the Fourth Industrial Revolution and technology. You're not just talking about education and training and skills, you bring in a lot of these other very, very relevant themes in there, which I think is fantastic. You had this graphic that you created, I don't know if you remember, it was around the Fourth Industrial Revolution and you had these ...

The explanation of each one of these Industrial Revolutions and then on the right hand side, you had the talent that matches with each one of those progressions. Do you remember that graphic that I'm talking about?

Heather McGowan: Yes, cause before I write, I draw. I draw all the pictures and then when I write, my writing partner, Chris Shipley, who always makes things sound so much better and so much more eloquent, she's the one who really puts the polish on the ideas we come up with. I start with those pictures. They help me really understand the complexity I'm trying to explain.

Jacob Morgan: Yeah. By way, where do you create all these diagrams? Are these ... Do you design all these images yourself?

Heather McGowan: Yeah.

Jacob Morgan: Okay, nice. Are they in some special software you use when you put them up?

Heather McGowan: I push PowerPoint to its outer limits only cause it allows me to collaborate well with other people, but I also use Illustrator and Photoshop and a variety of tools like that.

Jacob Morgan: Cool. Hey, I had to ask.

Can you walk through that graphic, the Fourth Industrial Revolution and then the four different stages of talent that map into that because I think that that is a fantastic explanation of how we need to think differently about just skills and jobs and talent and people in general?

Heather McGowan: Sure. I'm going to pull it up so then I make sure I have it in front of me and I don't skip anything cause I made it weeks ago.

Yes, one of the things that marks the different Industrial Revolutions is not only the technology but as you point out, how we value talent. I think the most important thing about us moving from one Industrial Revolution to the other, to the third, to the fourth, is what the people of the World Economic Forum thinks. Jeremy Rifkin, the Economist, thinks we're moving from the second to the third, but it doesn't matter, we're moving into the next Industrial Revolution is in the first Industrial Revolution it was the steam engine.

We had physical relief of labor and so the talent we valued were the people who had the physical labor to work with machines, basic understanding of engineering, and you learned a skill, one, two skills to last you a lifetime.

Second Industrial Revolution, we had electricity and mass production, we had the division of labor which sort of started us down this path of real specialization. That's when business became one of the most popular majors for those people who went to higher education. It was a focus on reducing risks, standardization, certainty.

Then as we moved into the Third Industrial Revolution which just started in the '70s, it was all about the computer, the automation of manufacturing and sort

of removing the human from the assembly line altogether. Then it became about deep expertise, disciplinarity, STEM skills. We started thinking about T shaped thinkers at the end of this so you had your deep expertise where you could collaborate with others.

Now that we're looking into the Fourth Industrial Revolution which really is built on the foundation of the internet that came out of the Third Industrial Revolution, we are seeing this merger of cyber physical systems and the internet of things where everything around you has some form of intelligence. Anything mentally routine or predictable can be achieved by an algorithm and it's no longer just the physical labor that gets replaced by non-biological intelligence but it's cognitive labor as well.

We move from this hyper focus on deep expertise and disciplinarity, which is I think where the, "What do you want to do when you grow up? What's your major? What do you do?" comes from to learning agility. How do you adapt? How do you bring empathy? How do you have, how do you look at things from a trans-disciplinary perspective?

You have a problem not just broken down into silos where work is done in isolation, but learning is a social act and I think that the Fourth Industrial Revolution's going to all be all about learning agility and adaptability to complement what the machines can do

Jacob Morgan: It actually ties very well into the next point that you make in that same article which is around learning uncertainty and why that's so crucial.

Heather McGowan: Yeah.

Jacob Morgan: Can you talk maybe a minute or two about learning uncertainty and what that is and actually what do we do in a world where there is learning uncertainty?

Heather McGowan: We're taught as students, particularly coming out of the No Child Left Behind fiasco in the US is, "Will it be on the test? I only need to know when I need the answer to move through this gate and get to the next one." When really we need to start thinking about if you know the answer, so does a machine. If you know ahead of time you didn't learn anything, so how do we deal with learning to manage uncertainty and learning to deal with ambiguity is looking for questions instead of answers, framing problems instead of just solving them.

That is a whole new realm. My background in Design Thinking, I think, has a lot to say about that, understanding the problem better so you're not just solving the symptom of the problem. Learning uncertainty is having the ability to say, "I don't know but I'm going to find out," or "I think this is important," or "Here's a question I think we should be looking at," rather than saying, "I know this problem, here's the answer."

Jacob Morgan: Fair enough. I think that's a pretty simple way to look at that and I think one of the interesting things with learning uncertainty, we're seeing the rise of open courseware, people are learning things on Youtube. They're going to Udemy, Coursera, all of these different types of places and the CEO of AT&T actually, I don't know if you remember seeing this in the news, but he made an announcement not that long ago, I think it was this year. Where he basically said that, "If you're not willing to take more accountability over your own learning and development then you shouldn't work for AT&T."

He was basically blatant in saying that, "We as a company can't teach you everything you need to know to be successful. We'll support you. We'll give you the tools and the resources but you as an individual have to take more accountability over the things that you've learned and over the success that you're going to have within the company."

That's kind of a pretty bold thing for a CEO to do. Do you think we're going to see more of those types of initiatives come forward?

Heather McGowan: It would be a welcome relief from what we're seeing today. We're seeing today Company X will say ... Cause I don't want to name names ... but Company X is laying off 25,000 people but Company X is hiring 20,000. Somewhere in that 25,000 is maybe 10 or 20,000 that you could have re-skilled. Instead of shedding and hiring new people AT&T is trying to give their people a chance to learn and adapt with them.

As Marina Gorbis says from the Institute from the Future Work, we're past the digital divide now. Now we're at the motivational divide. If you don't have the motivation to become a self learner, it's going to be difficult in this next economy, but the companies that are saying, "If you're motivated, we're going to support you. That's our social contract with you," I think that's a welcome relief.

Jacob Morgan: Okay, good. Yeah, I definitely think we need to see more companies doing that. You wrote an article fairly recently called, "Preparing Students to Lose their Jobs," and that got a lot of traction. You got a lot of comments, a lot of attention on that. Can you talk about what you mean when you say, "Preparing students to lose their jobs?"

Heather McGowan: I made it an intentionally provocative title because I wanted to engage people in this discussion. What's happened in the field of higher education and in the workforce in general is this notion that when you get a job, you're going to have it for life, like it's a marriage you can't get out of. When in reality, your skills may be relevant to the experiences that accompany your aptitudes, whatever they may be, maybe be appropriate for three to five years and then you should go do something else.

We enter sort of the Reid Hoffman's concept of the tours of duty, where we go in, we do something, we learn from it, we positively infect the environment we're in. Then we go on to learn somewhere else, whether it's within the same company or a different one entirely is a notion that we just haven't even paid attention to as being relevant and I think it's an important one to consider.

In higher ed, for example, we ask students to declare their major before they step foot on campus in so many instances so they have no exposure to what their skills and aptitudes are, what their interests are. They start getting put in this factory production where at the end of it they come out with skills and experience relevant to probably a decade ago. Then they start a job in that and then somewhere along the lines something's going to change.

The company's going to change, they're going to change, they're not going to change with the company, and they're going to either lose their job or the experience is going to change. It's really about adaptation. We give students, we do not give students any ability to deal with change. We don't say to them, "Okay, the job may not be there when you get out. The industry may not look the way it does today. Once you get in it, it may change, and there's a process you need to go through."

I worked with a woman once who said, "I can't work with anyone who's never been fired." I thought about it and I thought there was some brilliance in that because what she's saying is, "I can't work with anybody who's never been through a loss, who doesn't know how to pick themselves up and make themselves relevant again, who thinks they're invincible."

There's a certain humbleness with most people who have gone through some form of loss where they've had to reinvent themselves. They've had to march back to relevance and I think that the future workforce needs to know that that's going to happen and have that as an expectation.

Jacob Morgan: What do you do though? Because you're right, I mean we don't teach that, but how ... I mean how would you teach that? If you were running a university, for example, how would you bring about that kind of mindset or teach that sort of a curriculum? Any advice for what we should be doing?

Heather McGowan: Sure. At Becker College which is a place I'm consulting right now, we've created a curriculum we call The Agile Mindset or I call it more broadly, The Agile Learning Mindset. One of the things that the first course that students go through is called Managing Transitions, Change as a Norm.

We talk about the industry they think they're going into, what it looked like five or 10 years ago, what it's going to look like possibly in five or 10 years or the possible futures it may have, how their skills may need to change, whether they're going to stay with it. What is it about that field that they picked, we try to get them to understand a sense of purpose and passion.

That takes a while to get to and it changes but to get a sense of, "Well, you said you wanted to be an X. What is it about that field? Look at how that field's changing. What if it changes in a way that doesn't fit with your skill sets anymore? What are you going to do?" I think preparing them in that way, with an expectation of impermanence and an expectation of continuous learning is one way to do it.

Jacob Morgan: It actually sounds a lot like futurists when they go through a foresight certification. They're taught to think in that exact scenario. You think in terms of scenarios, different time horizons, embracing change. It almost sounds like students need to do a better job of thinking like futurists, just understanding that things can happen. That's a really actually a cool way to think about education and careers. Has that program been implemented? It's actually going on right now?

Heather McGowan: Yup, yup. It's going to scale the first ... It's a series of five courses and the first three are at scale. They go through Managing Transitions, Change the Norm, Dealing with Unstructured Problems, Need Finding, Creating and Capturing Value, and then an Integrated Capstone. They learn adaptation, learning agility, empathy, social-emotional intelligence, learning a lot about self-awareness.

That's one of the biggest complaints of employers, people don't seem to have, know how to communicate, know much about themselves, and how they work on teams. I spent a lot of time working on that.

Jacob Morgan: Very cool, and that is if people want to look up that program or find that, where can they find that?

Heather McGowan: Becker.edu.

Jacob Morgan: Becker.edu. Okay, cool. Since you've been doing some work with some academic institutions, clearly, I think you'd be hard pressed to find anybody nowadays that thinks the academic institutions are good, especially in the US. I mean it seems like everybody knows that the way that we teach is outdated. The way that we learn is outdated. Yet for some reason, like nothing's happening, at least at scale.

What do you think is going to happen to a lot of these educational institutions? Is Harvard going to be Harvard in 20 years or all these universities and colleges still going to be even around?

Heather McGowan: Yeah, I think you've got to separate, they're not all the same. The elites are separated by a [inaudible 00:25:16] called endowment that allows them to keep a business model in place even if it doesn't make sense anymore financially. What they do is really a sorting process and a networking process.

I remember speaking to somebody who's on the board of Harvard Business School and the individual said to me, "We could take the people we select for Harvard Business School and send them to a Caribbean Island for two years, they will still do exactly what they're going to do when they get out of Harvard." It's about deciding who should be in the club and getting them to learn from each other.

Jacob Morgan: It's crazy.

Heather McGowan: It is crazy and I think in some ways the financial pressures of higher ed is a bit of a blessing in disguise although it's painful. Because that's going to cause institutions that are irrelevant to collapse and I think the ones that will emerge are going to emerge with really different value propositions. Cause I don't think that higher ed needs to be a residential four year situation for everybody.

I think we need to think about education more like a gym membership and you may go for a boot camp that may last a year or year and a half where you learn learning agility and adaptability and becoming a grown up because you go from a dependent to an independent human. Then being on learning tours of duty in organizations where it may take you 12 years to get what is the equivalent of an undergraduate degree but you're going to be working and learning along the way.

We can't relegate education for the first third of your life and then have this thing called work that's separate from that. They're the same thing.

Jacob Morgan: Yeah, I mean it seems kind of crazy. I went to UC Santa Cruz and studied Economics and Psychology and I mean to be honest, I don't know if I've used any of the stuff that I've learned at UC Santa Cruz in my day to day that I do. I think that's the same for a lot of people. I mean my brother learned how to do videography, cinematography, photography by watching Youtube videos and looking at discussion forums.

Meanwhile, he's going to a university in Southern California to study Business just so that a company will hire him so that it shows that he has that diploma, that degree.

Heather McGowan: Yeah.

Jacob Morgan: That to me seems so weird and the situation I always pose is let's say tomorrow the Fortune 100 companies all woke up and said, "You know what, you don't need a college degree to work here anymore." I really wonder what would happen to all these universities all over the place if they would just vanish overnight.

Heather McGowan: I think there's a very good chance many of them will. Would or will. Some companies are starting to do that, so it's an artificial credential. They need

something to help them with the sorting process but I think as Artificial Intelligence gets better at picking up things in individuals and in profiles and in psychometrics, that sort of thing, I think we'll have better ways of screening and sorting.

Right now, we throw this artificial idea of a degree and not all degrees do the same, as a gating factor to try to sort but I think it's outlived its usefulness.

Jacob Morgan: What do you think about the difference between jobs and skills? I actually posted the, just a couple of paragraphs on LinkedIn a few days ago and at least from what I see, we used to be very obsessed with the jobs that we got. Like, "I'm going to work at Apple. I'm going to work at GE." We were so tied to this job but now it seems like what is becoming more valuable isn't the job that you have but the skills that you can possess.

Heather McGowan: Mm-hmmm. (affirmative)

Jacob Morgan: There seems to be a little bit of a tension because individuals know that they need to embrace ... or I think a lot of individuals know that they need to embrace learning uncertainty. They're trying to build up their skills, but meanwhile, when you apply for a job, everything is still done, key word searches that look through your resume. "Does this person have a college degree?" It doesn't match up, if that makes sense.

Heather McGowan: Yeah, and if you look at it even from a different perspective, I was going through the average amount of time it took to fill jobs in certain companies and so say you're in an organization and you decide in September of 2017 that you need someone else in your team. Then you get to mid-October, maybe November before you get budget approval and how that's going to work. Then holidays aside, you start a search process that can last a 120 or longer days. Then the person accepts, they start, you get them up to speed.

You're looking at, depending on the organization and the industry, anywhere from six months to if you're in academia, it could be 12, 18 months from the time you have need to the time you get need relief. With the rate of change we're going to go through, and how businesses are going to have to adapt, unbelievably that need is going to change from the time you start, identified it to the time you get need relief.

The whole idea of screening based on past skills and experience is an idea that's going away. I think we're going to be screening a lot more the way Amazon and other companies do on cultural fit. "Do you have cultural fit? Do you have learning agility? Do you align with our leadership principles? Because whatever we're screening for you for today, we know it's going to change tomorrow, so you need to fit and contribute to our culture."

Jacob Morgan: Yeah, meanwhile you can ... Yeah, I mean I have a small team that I work with and I've hired several freelancers over the past few years and literally within like ... I don't know ... 24 to 72 hours, I put up a job posting, I get around a dozen, if not more qualified candidates. Jump on the phone, have some phone calls and that same week, that person is up and running and helping me out with various projects that I need.

Heather McGowan: Yeah.

Jacob Morgan: It's so different. Like I can't imagine if I needed help with something having to wait six months, three months, a year to get help.

Heather McGowan: Right.

Jacob Morgan: That is just nuts to me and I suppose it transitions very well into you talk about three interlocking factors that are transforming work. Can you talk about those three?

Heather McGowan: Yeah, so Chris Shipley and I, my co-author who I write with on these things, we call them the three A's. That's Atomization, Automation, and Augmentation.

Atomization is a job being broken into job components. Jacob, you just said, you put a post out there and you're on the phone with people the next day. You're not hiring those people as employees. You're not bringing them into your company with the expectation they're going to be there for life the way they do in other organizations. You're saying, "Here's the thing I need done."

I do that as well in my business so I may hire somebody who may be on the other side of the world. They can get work done while I'm sleeping. When I get up, I can continue working so you get a 24 hour cycle there, but we call that the Atomization of work. Research by Lawrence Katz and Alan Krueger at Princeton and Harvard found that between 2005 and 2015, 94% of our net new work ... so that's new above the existing labor force, was in the alternative category. Essentially gig work, the kind of stuff we're talking about.

The Atomization of work is exploding and a lot of implications for it, your competition is all over the world. They're working 24/7 and in the US and other developed countries, we need to unbundle health insurance and other benefits from employment because not everybody's working in that container of work anymore. Jobs have become bundled from companies and work has become unbundled from jobs. That's Atomization.

Jacob Morgan: One question on that, really quick.

Heather McGowan: Sure.

Jacob Morgan: I remember reading that study as well and I know the gig economy, there are all sorts of crazy numbers that are floating around. Some people say 40% of jobs will be in gig work by 2020. I remember reading ... I think he did a few studies actually ... and I think the one that you're referring to, it was around the ... Yeah, the alternate work category and they said that that was the largest growth category in the United States and that ... I think he largely attributed that to ...

These are contractors who might work with like a Kelly Services or a Manpower or just non-full time employees, but I think he found that with the gig economy ... What was it like? 0.05% of the workforce? It was a lot smaller than a lot of people thought. I can't remember if that was another study that he did, but if I'm not mistaking, I think he said that a lot of the gig work as we know it, through online platforms like uber or Lift or Upwork.com, that he said, I think was a tiny percentage but the alternate work category in general was very huge.

Do you remember that? Am I like totally crazy on that?

Heather McGowan: No, I think you're right and a lot of people have pushed back on that and they have said, "That's actually people doing second jobs."

Jacob Morgan: Yeah, yeah.

Heather McGowan: There was another study that looked at the size of companies and the largest category and the fastest growing categories is companies with no employees, which is essentially what we call Me Inc. It's me by myself, without any employees finding my own work every day. That's the fastest growing segment of work.

People have looked at it from a couple of different perspectives and when we look at economic indicators and where we subsidize and where we push for policies that incentivize economic activity, we don't even consider that a small business. Although, it's the biggest part of our economy. I think we need to think differently about how we do work because I think a lot more of it is being done by Me Inc. type people.

Jacob Morgan: Yeah, I mean, hey, I'm a Me Inc-er ...

Heather McGowan: I'm a Me Inc-er.

Jacob Morgan: Yeah, so think there's a lot of people in that space. All right, so let's jump into the second one that you talked about, the second A.

Heather McGowan: The second A is Automation. That's work done entirely by non-biological intelligence or machines. For example, there's a platform called the Automated Insights that's run on Watson where you can give it an Excel file of financial data or baseball scores and it can generate a narrative that explains that data. There are things like Artificial Intelligent assistants who you can email.

I was working for one client which is an academic institution and I said to the people I was working with, "I have somebody doing some scheduling for me. It's a friend of mine who needs to pick up some work. Her name's Clara, you guys just talk with Clara if you need to get an appointment with me." They were conversing back and forth, "Have a nice weekend." It was passing the turning test and I told them after a month, "You guys have been talking to software." They couldn't believe it.

There are different types of ... and then there's robo-advising happening in the financial services ...

Jacob Morgan: Yeah, that's a huge space.

Heather McGowan: Yup, intelligence being used to read and decipher legal briefs. There's a whole, huge area of cognitive work that's been routine, that's being replaced by some form of automation.

Jacob Morgan: What's the third one?

Heather McGowan: The third one is Augmentation. That is using something to extend human potential. 10, 15 years ago, I think is when the Da Vinci robots came out that helped a surgeon do more precise laproscopies and other types of surgery. IBM's Watsons been used to tutor college assistant, college students or help clinicians read MRIs. We're going to see more and more that there are exoskeleton robotic systems that people can wear to work in factories.

We need to do work that it needs to be done by humans but they need extra strength or stamina. It's cognitive based, it's also physically based. That's Augmentation. I think almost every job's going to be augmented in some form or fashion.

Jacob Morgan: What do you think about the whole technology, AI debate? There are some people who are very pessimistic and think that we're creating something that's just going to kill billions of jobs and we're all going to be in trouble. There are others that are very optimistic and that say everything will be fine, new jobs will be created. I'm curious, which side of the fence are you on? Are you on the optimistic side or are you on the more pessimistic side?

Heather McGowan: I'm actually on both. I am optimistic by nature, cause I think we created all these structures around us and we need to create new ones when they are no longer working. I think the approach that, "The robots are coming, the robots are coming and we just need to give everybody universal basic income and that'll take care of that 60 to 70% of the workforce is doing something mentally routine or predictable," is really lazy.

I think that we need to think about how can we extend human potential? How can we create [inaudible 00:37:56] utopian society? How can we connect to

individual's purpose? Certainly, let's get machines to do things that humans didn't want to do anyway, that's safer than humans don't do, whether it's physically dangerous or mentally boring. Let's unleash our collective human potential but it's going to require that we think differently about the systems we have around us certainly the policies.

Jacob Morgan: Yeah, no, I totally agree and I know there are some studies that show ... Was it, 47% of jobs could be automated and 75%, I think was kind of by the end of the century ...

One of the really weird things that I see is there's a big disconnect between I think what research shows and versus what businesses are seeing. Good example, right, a lot of the research shows that if you're in accounting, in auditing, that is one of the jobs that is you're for sure gone. When I speak with Accenture and EY, that is comprised of thousands and thousands of employees who do exactly that, they tell me they're heavily investing in automation but they're not losing any people.

They are instead up skilling them, re-skilling them, training them to be more strategic advisers instead of number crunchers. Part of me wonders, is the academic research aligned with what businesses are actually doing? Because you would expect to talk to a company like Accenture and have them say, "Oh, my god, yeah, we're letting thousands of people go."

On LinkedIn and on various other places, I put up a question and I said, "Can anybody give me an example of a company that has invested in AI and automation and technology that has publicly said that they are letting go of thousands of employees as a result?" There's one example that I can personally think of, but I'm curious, I mean do any examples pop into mind for you on that?

Heather McGowan: A study, yes. MIT and BU, 1992-2007, they said that if we're adding one robot per thousand workers led to the unemployment of six workers and a decrease in wages by a half a percent. There's one study, but to your point, what the businesses are experiencing ... What they're doing is taking advantage of unleashing that human potential, because as you said, they didn't keep those people in the same roles. They up skilled them. They made them more strategic. They let humans focus on what humans do best which is sense making, making meaning, translation.

In order to do that, we need a system of education, a system of learning, that's lifelong that teaches individuals that expectation that you're going to have to learn. You're going to have to adapt. You're going to have to focus on the things that are uniquely human. We don't want you to compete with the machine.

Jacob Morgan: Yeah, nobody wants to compete with a machine. That's not fun for anybody.

Heather McGowan: Right, to your point, I heard you say in one of the talks is the machines are not taking the human's jobs, the humans have been taking the machine's jobs because the machines weren't there yet.

Jacob Morgan: Yeah, I always look at it as we design companies that were great for software and robots but we didn't have them at the time, so we stuck humans there.

Heather McGowan: Right.

Jacob Morgan: Now we finally have the tools and technologies that are able to do the things that they were designed for. Not everybody always likes when I say that but I think it's totally true and I still stand by it.

Heather McGowan: No, I think it's a great point and it leads us to say, "Okay, if that's true," and I agree with you, "What should the humans be doing and are we preparing them for that? Are we preparing them socially, emotionally, cognitively? Are we creating the systems that would allow them to augment the non-biological intelligence that's finally here?"

Jacob Morgan: Yeah, yeah, totally agree. All right, so I have a couple of questions that people online wanted me to ask you and these are through various social channels. I told people that I was going to be speaking with you and got several questions to come in.

One of them is from Jamie B. and she said, "Work forces and students are normally sent to horrible learning management systems to learn with material that is often out of date. Business leaders and educational institutions won't be able to continue developing courses the same way as they have in the past because of the speed of change. Instead work forces and students end up on Google and Youtube which also has its fair share of problems."

"Continuous learning is spoken about how to keep pace with the future of work change. How do you see business leaders and educational institutions responding?" It sounds like learning management systems aren't that fantastic, which totally agree. If anybody has seen one, they're disastrous, but Google and Youtube also have its fair share of problems, so what do we do?

Heather McGowan: Yeah, I think that what we should step back in an analogy. I've been having trouble explaining this with analogy. I found it works is we all have Smartphones and if you look at your Smartphone, you probably have added an application in the past week, day, month. You've added a new app because something's come out that's got better value in it. It does things better than one in the past or something new that the phone couldn't do before or you're using it differently and then if you run out of space, you may delete that, an app that you're no longer using.

In the work force prep world, in the education world, we focused on applications. We taught people applications, whether it was in an institution of higher education or it was one of those crappy, work force development things they made you go through. They were focused on downloading some skill into you to make you a deployable worker.

We need to step back from that and get out of the applications business. Applications are things that people will add when they need them, delete when they don't anymore. We need to focus on developing better operating systems in humans, so that's the ability to learn. The also important skill to unlearn and the ability to re-learn and that's going to be on the individual.

I think those tours of duty that Reid Hoffman talked about in his book The Alliance is the way to do it. We're social beings, we learn better with each other. I don't think putting people in a darkened room for X number of hours and then say, "Oh, they have the skills now. Let's go deploy them was ever a good idea." I think we need to focus more on in an organization, to focus on what are you learning.

If you look at a company like Amazon, what they do as an entity, they don't sell you their speaker, Alexa, who's probably going to start talking to me now. They don't sell you an Alexa speaker because they want to compete with Sony or Bose. They sell you that speaker because they want to learn more about you. As an individual, when you take a job, it shouldn't be about just the salary, the benefits, and the association with the brand, it's "What am I going to learn here?"

That links back to your comment about jobs and skills. I think as individuals, we have to look at the constant pursuit of increasing our capabilities.

Jacob Morgan: To go back to your analogy. it's instead of downloading a new app ... As Apple frequently does, you're upgrading the entire operating system and sort of redesigning, instead of just plugging in a new app into it.

Heather McGowan: Right. You will ...

Jacob Morgan: Okay

Heather McGowan: Add and delete apps. You can use Youtube and you can use ... There are other better ways of finding those skills. You'll acquire some of them on the job in your experiences, but we really need to focus on developing the underlying operating system that makes you more efficient in adding and deleting those apps.

Jacob Morgan: Yeah, I think also we need to accept and acknowledge that it's going to be messy and chaotic. It's not super clean cut and easy and like, "Here's the one

destination you can go to to completely future proof yourself and everything will be fine." It's a little ... It almost feels like you have to grind it out a little bit.

Heather McGowan: Right.

Jacob Morgan: You've got to go to different places. You've got to be entrepreneurial and scrappy. You've got to meet with people. You've got to listen to podcasts. It's not so traditional education based as it used to be.

Heather McGowan: Right. Honest, Jacob, today, it's 6:20 on the East Coast. I think you're on the West Coast so maybe it's 3:20 there. Undoubtedly, you learned more than one thing today.

Jacob Morgan: Yes, I did.

Heather McGowan: You had a conversation with somebody who made you think differently about something. You read something, you listened to something, we have to focus more on what did I learn today, not what did I do today and it's going to be messy. Our environment should be less like factories and more like labs.

Jacob Morgan: Hey, I know that quote. I've heard that quote. I have a funny image that I use where I say the exact same thing. That's my favorite analogy always. I always say, "Think like a laboratory, less like a factory."

Heather McGowan: Yup.

Jacob Morgan: All right, next question from you is ... Oh, man, I might butcher this name. I'm going to say it anyway, Niten Deutska. "Which skills and competencies will offer the greatest potential for future proofing learners and educators?" Wow, that is a short question but not an easy one.

Heather McGowan: Yeah, it's not an easy one and it's one I get all the time. "What should my kid major in? What should they study? What major's going to get them a good job? What field should they go into?" Answer to that is I don't know.

That's one of the questions I don't know but what I do know is that if you can hone your ability to learn and adapt and ask questions, develop your uniquely human skills, have understanding of how technology works, whether or not you work in technology, have an understanding of the importance of data and how it's used whether or not you work with data and then that would be you're going to.

Really focus on those uniquely human skills to learn and adapt, I think that's future proofing. I don't think it's any one application you can download. I think it's the operating system.

Jacob Morgan: I mean what I always tell people is you have to think like a taste tester.

Heather McGowan: Yeah.

Jacob Morgan: When you're younger, how do you figure out what foods you like? Nobody can ... You don't know what you like. You try different things and some of the things you're like, "Oh, god, that's terrible," and some of the things you like.

Heather McGowan: Right.

Jacob Morgan: I always believe that the more you can think like a taste tester, where you just try and sample a lot of different things all the time. That to me seems like the best way to future proof your career cause you're always out there, just seeing what's going on and seeing what you like and what makes sense.

Heather McGowan: Yeah, you're always being curious and you're always looking for the next thing.

Jacob Morgan: Yeah, totally. All right, next question from you is from Gene Kady, I think that's how you say her last name, and she says, "In the future everything will be clear and students will be happy. Let's get back to now, which is the most future proof ..." and this is actually like the other question, "The most future proof education field to pursue?" Is there, maybe not a specific skill but is there a general category of things that you think makes sense for us to pursue?

Heather McGowan: There's a book called Neo Generalist and I think they're onto something where we moved away from the whole liberal arts field and there's a lot to learn from History. There's a lot to learn from Ethnography. There's a lot to learn from Literature because we saw that it didn't have a direct application to today, in this moment, what I could deploy and we became hyper specialists.

Often times competing with what machines can now do and non-biological intelligence software, I put those all under the category of machines. I think we need to return to generalists. I have an expression for a piece I'm working on that we used to be shaped like an I. Pick a specialization and go deep into it. Then we had this concept of T shaped thinkers. We have deep expertise but have the ability to work with the person to the right or the left of you and maybe a little further out so you can collaborate.

Now I think we need to think like an X. Where can you sit at the intersection of a series of disciplines? Historical context, understanding ethnicity, understanding business, understanding technology, where you can take that trans disciplinary lens and adapt to a variety of different situations.

Jacob Morgan: Right, that to me sounds like an awesome article, sort of like, [crosstalk 00:50:20] the I worker or the T worker, the rise of the X worker.

Heather McGowan: That's right.

Jacob Morgan: All right, if I see it on LinkedIn, I get a little, tiny bit of credit for saying you should do an article about that. I think that would be awesome, so if you ever do write an article, let me know and I'll make sure to share that as well, cause I think that's a fantastic topic to explore.

All right next question from you is from Johnny, Johnny Bastrom. He says, "Has the shift to the new economy already happened or when will it happen, according to Heather? For those that still rely on the old model, how do you get them onboard to start reconditioning and if one are to hire ... or if someone is to hire new team members in the new model, what should be the level of education from the start or how should we evaluate and select those to hire. ie, how do you know if they are adaptable and willing to learn new things later on?"

It's actually a very good question.

Heather McGowan: Yup.

Jacob Morgan: How would you answer that?

Heather McGowan: I don't have like January 4th, 2020. I don't have a date in which we shift from one to the other. I think different fields are in different places. McKinsey estimates we've digitized less than 20% of the economy so more have gone through changes in media and information and telecommunications than in fields like healthcare and education. It's different based upon the fields you're in.

In terms of how you'd screen for it, I wouldn't take a surgeon and say, "You've got learning agility. You don't have an MD but go ahead and cut me open." I don't think we're going to do that yet but I have seen for really critically important hiring decisions, actors be hired and scenarios be taking place and take people through a day long simulation to see how they react in different circumstances ...

Jacob Morgan: Interesting.

Heather McGowan: As a means of screening ... Yeah, high level leaders ... I've seen it and I think that's fascinating. I wonder if we'll get into [inaudible 00:52:22] reality games and other ways to bring the cost down of having those simulations because you know that person you meet on the interview and they check the boxes cause they've been at different places and they seem so charming. Then they get there and they were so great in that last job they had but they absolutely unable to adapt to this next one.

We've all seen that and ... To delve into politics for a second, my greatest concern about Rex Tillerson being Secretary of State is that guy only had one job. He got out of undergrad, started working for Exxon and worked his way up

to CEO and now we want him flying all over the country creating culture and creating teams, when he's only had one culture and one experience? I think in the future, we're going to value people more who've been at multiple places rather than the value we had in the last Industrial Revolution where we valued people for staying with one organization.

Jacob Morgan: Yeah, I mean, the changes seem to be pretty crazy just in general. Like, everything just seems to be ... I don't know if I would say chaotic, but just very dynamic.

Heather McGowan: Yeah.

Jacob Morgan: We're hearing about people that are using games now during the recruiting process to measure soft skills. We have things like Amazon's Alexa being used inside of companies, we have AIN. It just seems like just everything is totally going bonkers. How do you deal with this? I imagine that a lot of business leaders and educational institutions around the world are just like, "Ah, I don't know what to do. There's just too much happening for me to even know where to begin to do anything."

How do you advise people or universities or institutions to even ... Where do you begin?

Heather McGowan: I think that ... I don't know if your question is about how you help people in preparing for this world or how do you help people who are in this world? I think either way, sitting down and thinking about, "Okay, what do I do?" That question, how would I answer that in a way that really gets at what I care about, what skills and abilities I think I have that align with what I care about, how that fits into emerging market realities and define yourself in that way, it allows you to adapt to a variety of different situations.

It sets you up to go into that scenario, whether it's with actors and actresses or it's a virtual reality game, because you know yourself. I think getting to know yourself a lot better is going to be a big key to the future, whether you're preparing for your work or you're in your work right now.

Jacob Morgan: When you say knowing yourself, I know you touched on self-awareness earlier and that seems to be a bit topic, it just seems in general like these soft skills are becoming super crucial.

Heather McGowan: Yup.

Jacob Morgan: How do you ... I mean is there a place that you recommend going to? How do you become more self-aware? How do you become more empathetic? Are these just things that you need to figure out on your own?

Heather McGowan: Some of them are things you need to figure out on your own. Some of them, you can take Gallup Strength Finder. You can take Myers Briggs, a whole bunch of tools out there that can give you feedback about things you may not be aware of. There's like the Johari Window which looks at, so what are the skills I think I have and then I give this thing to other people and have them tell me what skills I have and you realize that "I'm aware of five of the 10 skills that I have. I'm completely unaware of three deficiencies that I have."

There are lots of different tools out there to try to work on it, but the first step is to say, "I want to do this. I want to know what kind of thinker am I. How do I work on a team? How do I deal with conflict? How do I adapt to change? Where am I most comfortable?"

I think there's a lot of different ways to do it and I think having the motivational drive to do it is a huge first step.

Jacob Morgan: Yeah, totally agree. All right, so I know we're nearing the end of the podcast. Is there anything that I didn't ask you that you wanted to touch on or anything that you wanted to mention about these themes or topics that we didn't address?

Heather McGowan: Just a couple of mantras that I use. The reason the organization Chris and I have started is called Work to Learn is that we used to learn to do something in order to get a job and work, but now we're going to have to work in order to learn continuously. Work to Learn is that nod to businesses that think academics and education is over here in this first life block and then you'll go through the work life block and then you'll retire.

Those blocks have all turned on their head. You're going to work and learn continuously and retirement's going to be more like retooling and re-adapting. Those things that just ... We need to tear down the kind of artificial wall that education is this thing that takes place over here and work is this thing that takes place over there. It just as you talk about in your book Integrating Our Lives into Our Work, I think we have to integrate learning into our work as well.

Jacob Morgan: Very well said. Any last parting words of wisdom or advice? People that have been listening to us talk for the past hour are probably ... I don't know, maybe they're a little overwhelmed, maybe they're a little shocked and they're like, "Oh, my god, what do I do? Where do I begin?" How can people take some of this information that we've been exploring and is there any actionable steps that you think they can take after listening to this? Maybe tomorrow, anything they can do?

Heather McGowan: I think that some of the first steps is to integrate yourself into a community like LinkedIn or your group on Facebook or you can find a group of people on Twitter. If you don't have people in your physical area, I've ... Jacob, I know you've created and I've created on my own this learning community. There are

people in India, in Australia, and China and all over the US, many of whom I've never met in person. Jacob and I have never met in person and we learn a lot from each other.

The first step is to decide that you want to learn, create a learning community by following something that somebody wrote, connect to them, watch podcasts, watch TedTalks. Just make a commitment every day to do something that sheds light on a part of the world you may not be in yet.

Jacob Morgan: I like it. Simple, practical, something that we can all do.

Heather, where can people go to learn more about you and connect with some of the work that you're doing, read your articles, and find out about Work to Learn?

Heather McGowan: I'm on LinkedIn, my network's open. I post articles. I don't know, I always aim to post them once a month, it may be longer. Depends on the topic. I now have committed to doing the I to the T to the X, so I will do that.

Jacob Morgan: Excellent.

Heather McGowan: Shout out, Jacob.

Jacob Morgan: I already know that article's going to be super popular.

Heather McGowan: Thanks. I'm on HeatherMcGowan.com and Chris Shipley and I, my favorite collaborator, we on our Work to Learn site is called Future is Learning.

Jacob Morgan: All right, and then so to wrap up, I just have some fun quick rapid fire questions for you, if you're open to it.

Heather McGowan: Sure, yeah. Let's go.

Jacob Morgan: All right, what's the most embarrassing moment you've ever had at work?

Heather McGowan: I was ... I stood up and stepped on my skirt, flipped over a chair in the middle of an investment meeting.

Jacob Morgan: Oh, wow, that's a good one. That's a good one.

Heather McGowan: Yeah.

Jacob Morgan: If you were a superhero, who would you be?

Heather McGowan: Right now, I'd be Wonder Woman. There's just too much sexual harassment going on.

Jacob Morgan: Yeah.

Heather McGowan: I think I want to live on that Wonder Woman island.

Jacob Morgan: Yeah. What's a book that you recommend, could be a business book or a non-business book?

Heather McGowan: Business book, in explaining the world around us, Tom Friedman's one of my favorite people and favorite authors. His latest book Thank You for Being Late, I think has a lot of really practical advice to explain the changing world around us. The book Legacy of Luna, which is going to sound weird, about the Julia Butterfield that climbed up the redwood tree in California and stayed up there for a year and a half, her epiphanies about our connections to nature and what's really important was a really fascinating book to read.

Jacob Morgan: Very cool. I actually spoke with Thomas Friedman in Mexico fairly recently so great guy.

Heather McGowan: Yeah.

Jacob Morgan: A lot of useful information and you've mentioned a book earlier, called Neo-Generalists, right?

Heather McGowan: Yup.

Jacob Morgan: Okay, I'm going to make sure I look that one up. If you were doing a different career, what do you think you would have ended up doing?

Heather McGowan: Might have been a film maker cause I like to explain things and I like to tell stories and I use visuals a lot.

Jacob Morgan: Okay. If you could live anywhere in the world, where would it be?

Heather McGowan: Is it any time or anywhere?

Jacob Morgan: Anywhere, but actually, any time is also a good twist, so why don't we do anywhere or any time, you can pick.

Heather McGowan: I'm lucky to live now because I'm geographically really GPS dependent. I think if I lived in any other time, I would have wandered away from my tribe and been killed, so I'm happy that I live now.

Jacob Morgan: You're just going to like, "Oh, what's over there?" and then, "Has anybody seen Heather?"

Heather McGowan: Yeah, right, exactly. Anywhere in the world, anywhere I can get to a beach quickly.

Jacob Morgan: All right, and last three for you, if you could have dinner with anyone alive or dead, who would it be?

Heather McGowan: I think that's ... Alive or dead. I think Lincoln. I think Lincoln might be interesting right now.

Jacob Morgan: Okay, and last two questions for you. If you could get rid of one workplace practice tomorrow, what would it be?

Heather McGowan: Oh, the entire hiring process.

Jacob Morgan: Yes, [inaudible 01:02:06]. All right, I like it. If you could implement one workplace practice, what would it be?

Heather McGowan: Nobody working more than seven and a half hours a day because I think that people have this pride about lack of sleep and hours spent in the office that ends up making poor decisions, lots of mistakes, low value, and unhappy humans. I think we ... There's no need for that.

Jacob Morgan: Yeah, the hustle culture and mentality of like, "Oh, I worked 60 hours this week," and you're like, "Whoa, that sucks for you, buddy." I agree, I think that'll be a great one.

Heather, thank you so much for taking time out of your day to speak with me. I really appreciate it.

Heather McGowan: Thank you. It's been my pleasure.

Jacob Morgan: Thanks, everyone, for tuning into this week's episode of the podcast. My guest again has been Heather McGowan, Co-Founder, Author, and Adviser at Work to Learn. Make sure to check out all of her stuff and her LinkedIn articles, they are fantastic. I'll see you guys next week.