

EPISODE 339**[INTRODUCTION]**

[0:00:00.2] JM: Many countries in the developing world are undergoing a technological revolution which is shaping how they tackle problems around infrastructure and health and education and finance. Young people are at the forefront of developing solutions to the problems in this developing world and these young people are creating technology and businesses to foster innovation and growth.

Countries in the Middle East are no exception to this. Despite the difficulties that the region faces such as the wars in Syria and Yemen, its population are well-informed, they are plugged in, and they are using technology to build the future of their societies.

In the book, *Startup Rising*, published in 2013, Washington D.C. and New York City-based entrepreneur venture investor Chris Schrader wrote about how the rest of the world especially the West needed to wake up to what was happening in the Middle East. Into today's Chris talks Carl Mungazi about what he has seen through his travels in the Middle East. He discusses the successes and challenges faced by the entrepreneurs who shared their stories with him in what this means for those watching in the west.

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[0:01:23.2] JM: For more than 30 years, DNS has been one of the fundamental protocols of the internet. Yet, despite its accepted importance, it has never quite gotten the due that it deserves. Today's dynamic applications, hybrid clouds and volatile internet, demand that you rethink the strategic value and importance of your DNS choices.

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[INTERVIEW]

[0:03:22.9] CM: Chris, thanks you for joining us today on our SE Daily.

[0:03:26.3] CS: Great to be with you.

[0:03:27.6] CM: Now, you've written a book called *Startup Rising* which basically details what you called that evolution shaping the Middle East. As a starting point, could you give us a brief history of how the tech scene in the Middle East has to be where it is now.

[0:03:44.4] CS: It's wonderful to be with you today, so thank you for that. The tech scene came about in the Middle East as it's come about all across the world and I think this is one of the things prickly we in the West don't appreciate because we have such one narrative about the Middle East which obviously have this basis in truth, it's a tough neighborhood, there are many many difficult things going on and what this story really pushes us to think about is twofold. One; there's more than one story going on everywhere and so we need to be able to hold often conflicting truths at the same time as we really understand the complexity and the nuance of a place.

Secondly; the story of our time, and in some respects the story of the 21st-century is increasing near universal access to software and broadband capacity. I can tell you what Syria is going to look like in a year, but I can tell you with 100% certainty that by the end of this decade 70% of the people around the world and in the Middle East, and in fact it's even larger already in parts

of the Middle East, are going to have smart devices, and smart devices of course aren't just better feature phones. They are in fact computing capacity of unimaginable power in the hands of human beings everywhere in the world.

What that means is that you can everybody else, you can connect with everyone else, you can collaborate on all sides of things. You've got essentially all of human knowledge at your fingertips essentially and for free and you can innovate and solve problems bottom-up in the way that we could only talk about even four or five years ago.

In many respects the core answer to your question is why not the Middle East since we all know and accept its happening elsewhere. We know it's happening in China and India. Many of us who travel — Some know it's happening in Southeast Asia, in Latin America, and now Mark Zuckerberg visits Africa, so everyone talks about Africa as the digital continent. Why wouldn't be any different than the Middle East? I think that's something that we really need to grasp and understand because it's got very powerful and hopeful ramifications.

[0:05:32.9] CM: Now, you yourself had a company, I think that started and sold yourself, and you also are now investing at companies. As an investor, what things excite you about what is happening in the Middle East?

[0:05:46.9] CS: As an investor, with a hard-nosed analysis with the hopes of the asset would be successful and of course you make money overall. What excites me is something macro and something micro. The macro is what we just talked about; which is there is rising access to technology, which means people are innovating, solving big problems with greater efficacy and more cost-efficiently.

As you know, the cost of reaching customers now is a fraction of where it used to be. The cost of building a company requires often fewer people in the earlier stages that never did before. In these markets and in the Middle East is in particular you could get world-class software engineers that a 10th of the price or a third of the price of what it would be in, say, Silicon Valley.

You know that this isn't going back. You know there's going to be more technology, more people with it, more people with the skills to do amazing things with it.

With this has been coming subsequently and in parallel the greater rises of economies and middle-classes, and these are consumer classes. These are people who are looking to buy things now because they can they are looking to move things now because they can. They are looking to take friction out of their lives because they can look. You can sort of just look out 3 to 5 years and say there is a real convergence here of economic opportunity driven by these cost effective and powerful tools to solve problems that's a very exciting place to look at.

At the micro level, it really always is about particularly in the in the early stages of investing, is about the caliber and quality of the entrepreneurs. What I've seen from the beginning is just some astounding, hard-charging, steely-eyed entrepreneurs across the Middle East because entrepreneurship has been seeing [inaudible 0:07:20.2] in the Middle East for thousands of years. With these technological tools, they really are looking to solve problems which are not just local-local but could expand regionally and perhaps beyond.

Last week, Amazon bought Souq.com, which is the largest e-commerce player in the Arab world for almost \$700 million and they did that because they knew they had great market coming, great talent in the team that they require, unbelievable understanding of the regional dynamics. Amazon usually doesn't buy anybody, they usually just go in and build, but they made a decision here because of the talent and the market capabilities that was available to them.

As an investor, I realized that there's going to be going to be more but less than this that a company like Souq, by the way, which is successful, is going to spin off other great entrepreneurs and entrepreneur opportunities going forward. That were in a very interesting opportunity to look at the these entrepreneurs and investing them knowing that the next five years is going to be not only different, but more encouraging in this area than the last five years. That's the way I look at it.

[0:08:22.7] CM: In your book you travelled to Jordan, to Lebanon, to Iran, to Iraq and you really spoke to people there building things using technology and other things. I guess my question is

which country countries would you say are the leading lights in the tech scene? Which countries are pushing innovation and boundaries in the region?

[0:08:41.7] CS: There is an important lesson in my observation on your question which is, by definition, if technology is almost universally accessed, talent will rise anywhere because now it has access to education and tools to engage with people and to reach customers than ever before.

At one level, you can go to almost any country not only the Middle East but anywhere in the world and see bottom-up interesting and perhaps lucrative opportunities for companies that are rising this way. Having said that, and for all my enthusiasm of the rise of the bottom-up, top-down matters, rule of law matters, the ecosystem to be able to freely move goods, ideas, people, capital. To be able to make sure that if you invest, you can get that money out. That there is a framework by which entrepreneurship is really enthusiastically embraced.

It does not cease to amaze me that around the world not just in the Middle East how often government institutions, big businesses, and so on, look at this phenomenon as almost a cute sideshow. It's sort of the little thing to be kind of supported the young people seem enthusiastic about, let's do a ribbon cutting exercise, and not understand that very proactive activity can actually make a huge huge difference in making these phenomenon move faster.

Specifically, your question, I really don't believe there's anyone in the time zone yet, specifically in the Middle East, but maybe anywhere in the emerging growth markets than the UAE, and Dubai in particular. They have become very proactive in aggressively moving rule of law to make it easier to start companies. As importantly, they just passed the first bankruptcy law in the Middle East.

Entrepreneurs don't start the company because they've got bankruptcy laws, but for investors and for when things go south, the signal being sent that if a company doesn't work out you have a process by which to clean it up,0 take your learning and build and move a new one is a very very powerful thing.

The very week, or within a couple of weeks that the United States started pushing back on opening up more H-1B Visas, which are the Visas that help attract some of the best talent around the world to come to America, just as we looked like we are retrenching on being catcher's mitt effectively for talent, the UAE announced a talent Visa where they are literally encouraging any great scientist and technologists to be able to come and join that country in a very very powerful and quick and efficient way. They're effectively giving the signal, "We want the best of the best to come here to help build something not only interesting for the UAE but something that could be very powerful for the region," I think Africa and beyond.

This matters a ton, and I hope other people are following suit in their own way. It's not that they are going to replicate a model because every country and culture is different, but there are some basic understandings that if you get rule of law right, if you take the medium and long term investment to get education right, you can have something very powerful happening.

It's way too early to predict, and Saudi Arabia is very complicated country. I have to tell you, it is fascinating to watch the new generation rise there and have the government talk about ways of making business generally, but entrepreneurship and technology, in particular, better accessible. We'll have to see if that comes to fruition.

If you start talking about the gulf has really been open to this I believe that other countries will follow. Jordan historically had been pretty supportive to this. It's a small country, but they have outstanding software engineers. There really is a multiplier effect and success breeds success. I look at the UAE and Dubai as a great thing. I look at Saudi Arabia with hope. I respect Jordan, and I just hope that others begin to follow soon on the terms and in the only way because what they will unleash will be very powerful.

[0:12:17.4] CM: Against the backdrop we've kind of outlined for us now, if, let's say, I'm an engineer, a software engineer in the Middle East, what kind of opportunities have been opened up as a result of all these change happening?

[0:12:30.4] CM: Every company now, Carl, s becoming a software company. Sometimes it's hard to get our minds around this, but if you go buy a cup of coffee in a Starbucks or go look under the hood of your car — These are massive computing exercises over all. What is so

interesting is that the skills and capabilities that are required to do a tech-based startup in terms of what we in the States call STEAM, science, technology, engineering, arts, which is a very important in a sense of creativity and design, and mathematics, these are skills which are required not just for tech start-ups, but this is going to be required for almost anything in the 21st century at least in some regard.

The answer to question is the opportunities are everywhere. If your nature is not to be an entrepreneur, but you like to be in the more established enterprise, the big companies I know over there are looking all the time for software engineers. They're looking for now people who've got great understanding of machine learning, and data analysis, data scientists and that kind of thing. At the same time the early-stage companies are always looking for this.

One of the biggest challenges to find not only young people who have the skills from, say, a university setting, but have a good track record experience and pattern recognition of doing it the first time. That's another reason why I think Souq.com is such a big deal, because when Souq.com has all these wonderful software engineers and salespeople and total operation in e-commerce, now you've got a whole generation of people, like 3,000 people, who have seen how this is done and they see how they can apply technical skill in a way to build and scale a company. We'll just see more and more of that for people who want to seek it out and have the skills or are willing to develop the skills to be able to participate in it.

[0:14:13.2] CM: You mentioned that Jordan has a number of good and outstanding engineers what is the education like in the region? How are people learn to code and learning about tech? Are they doing it with the internet purely, or the schools or bootcamps that are kind of burgeoning there?

[0:14:29.1] CS: One has to be a little bit careful, and I do this all the time, of talking about the Middle East as if it is one thing in the same way we Americans have this proclivity of calling Africa one thing, which is over 50 countries with incredible diversity and so is the case in the Middle East. Different countries and different cities have different elements of what the wrestle in education and training in the kids.

What I can say a couple of observations from a general perspective there's actually a shocking amount of money spent on a per capita basis in aggregate across the Middle East for education and yet the results by almost any moderating organization; the World Bank, and whatever, show the outcomes are actually very very disturbing, frankly, and unfortunate.

Some of it is that often you'll find classrooms which are way too large, and literally in Cairo and Oman, I've been to schools where you'll have 60, 70 kids in a class, the teaching is very rote learning and taught to a test and it's not necessarily about application and what to do of it.

I think even more important — Teachers, by the way, are not necessarily well-paid. I think more important in a way is often, not always, but often in education systems, kids are not thought to be critical thinkers. One of the great things and full potentials in unleashing entrepreneurship and technology is the ability to do tinker. Is the ability to ask questions and not get stuck in a rigid way of thinking about them, but ask effectively, "What if? What if we did this instead of that, because it's different?"

That translates not only into a spirit of thinking new about your company. It's about how you think new about your country. It's about how you think new about problem-solving and what kinds of skills that you require. This is a challenge and it remains a challenge. On the face of it, it's a challenge that can take a lot of time, and particularly people my age and older think it's a generational problem thing.

The beauty though and which gives me hope is that technology can complement this in a way. To your question, because everyone has got effectively their hands on the entire world of the Internet, I run into kids all over the world who are taking courses from around the world online to better what they are doing. It can be anything from Khan Academy, to Coursera, taking course from an IT or what have you, or meeting young people like you in your backyard who are wrestling with issues, reading blogs that people writing in the backyard who are teaching each other.

It can become a powerful accrete of thing. All of a sudden you see a bunch of young kids who really are unbelievably talented in engineering and they're effectively self-taught. That's available to us in a way we couldn't talk about it. I'll give your minor example. There's a really

wonderful start-up that came out Cairo, Egypt called [Napham] [inaudible 0:17:07.2]. In Egypt, there's a very strict curriculum that is taught in regular schools but supplemental education, tutoring, and that kind of thing, is a big business because people want to get better education than what is offered often in the daily structure.

As you can imagine, as in most places in the world, the rich take care of their own. They're able to afford to afford tutors, but the vast majority of people have nowhere to turn. The founders of [Napham] [inaudible 0:17:30.3] said, "That's ridiculous, and everyone's got at least a mobile device. A lot of people have a smart device. We should be able to get supplemental education to them to help move their way forward."

They built what was similar a little bit to Khan Academy in Arabic, but really tied very specifically to the curriculum of the Egyptian schools; mathematics, reading, writing, that kind of stuff. Anyhow, within two years 30,000 or more videos were uploaded and over 80 million classes have been viewed. 80 million classes have been viewed mostly in Egypt, though obviously other places in the Arab-world and they are going to be turned into other curriculum in other countries.

Does that solve the problem? No. Of course, not, but is that offering something interesting and hopeful that we can talk about today that we could not talk about if you and I were together even three years ago? Absolutely.

Work has to happen at the traditional level, schools have to get better, and most countries also have a pretty good idea of what they need to do. It really is about political leadership and courage to make that happen. In the short term, the supplemental aspect in people teaching themselves is yet one more piece of evidence of how young people to simply aren't waiting for anyone to give them permission for anything. They're literally just doing what they can to get the skills and capabilities to build what it is that they want to build.

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[0:18:49.2] JM: Do you want the flexibility of a non-relational, key-value store, together with the query capabilities of SQL? Take a look at c-treeACE by FairCom. C-treeACE is a non-relational

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[INTERVIEW CONTINUED]

[0:20:29.3] CM: In your book, you said the ability to access the internet and connect with other people was helping to destroy things like wasta in the Middle East such as Lebanon. Can you explain to us what there is and how it's being disrupted by technology?

[0:20:43.3] CS: Yeah, I'm sitting in Washington, D.C., so everyone here should know what wasta is in their own form. Wasta is a Lebanese-Arabic word, and I'd really first heard it when I was writing the book and everyone laughed at me for not knowing it, because it's a very well-known concept, which is effectively who do you know? What does it take for you to get something done? It's because you know somebody who can help you get the thing done. That's life anywhere.

Where wasta becomes cancer is that it can take a lot of incentive about one's ability to really think they can succeed because effectively they think the system is rigged against you. Imagine

if you're working for a decent-sized company and you're working as hard as you possibly can. You're doing very well. You looking for that promotion, but there is some guy on top of you that his uncle's best friends with his CEO and so he's protected by "wasta" then you're not going to be able to move up because the system is going to keeping you structurally down. What ends up happening is a lot of time people, even young people sort of give up, "This is the way the game is played. I can't change it, so I'll find my own wasta." It becomes really like cancer it really is just sort of — It's a malignancy within an organization for it to reach the potential that it could reach.

Wonderful, remarkable, really hero in many ways of the Middle East is a man named Fadi Ghandour, and Fadi is actually a Jordanian-Lebanese. He's on the board of the AUB right now. He built one of the largest logistics company on earth and definitely the largest one in the Arab-world and Africa called Aramex, which actually went — It was the first Arab company to go public in the NASDAQ in America and really in a way you could say it was the first unicorn many years ago, because it was very successful and very large.

Fadi also has become really one of to-go-guys and a leader in the venture capital space and the mentoring space overall. He really understands both the old worlds and the new worlds profoundly and he was the one — He gives one of my two favorite quote in the book. He said, "There's no wasta in the internet."

What he meant was, I think, really two things, one is because of technology, you can move so quickly that by the time you've grown and been successful, you're there before wasta may come in and try to affect you, or slow you down in any ways. You just can actually outpace it.

Secondly, I think because so much information is online about people and their credentials and their criteria and the work that they've done, it's hard to hide. Either you perform or you don't. When I first came to the Middle East, LinkedIn didn't even have an office there or Ali Matar was just opening it and there were already something like six or 7 million Arabs on LinkedIn to be there. Now, it's many fold that.

The point is you can't cheat on — You can lie on LinkedIn, I suppose, which you'll get out of. In LinkedIn, you talk about who you are. There's no wasta in that. It's not who you know. It is who

you are and what you've done and this is your track record. That combination of phenomenon, again, I think is hopeful about how things can get better and sort of circumvent what is a human nature issue in wasta but need not be a dominant one.

[0:23:40.8] CM: One of the things I liked when I was looking into your work and your writings was that you gave so many examples from — Different parts of Middle East about companies and different things. Now, in terms of what has been created, would you say they are mostly clones of what's worked on the west, or are they creating things that are unique more in the Middle East?

[0:24:00.8] CS: The majority of word you often hear in America is what they call copycats, which effectively take something that's worked in the west and just do it maybe in language or something. I don't like that word, because I think it's pejorative and I think it misunderstands the dynamics of these markets. In fact, in the book, I call them improvisers, not nearly copycats or clones, because when a market is rising into technology and into new things, these are — One of these are very relatively early days. There are people who are unsure about it. They don't quite — They are in their early stage of adoption.

I remember one of the great entrepreneurs and now investors in the regions, Sami Toukan, who started a company called Maktoob which in many ways was like the Yahoo of the Middle East, though it was much more than that. It was highly sensitive, not just translation, but the very sensitive to a lot of cultural norms and how people interact and use things, and so it was much more than that.

In any event, his whose company was bought for over \$170 million by Yahoo itself in was a really lightning bolt in the ecosystem some years ago because it's one of the first exits to a tech company like that. He would point out to me, he said, "We talk about copycats being a bad thing," but imagine being in 2006 and a young college kid comes to his parents in say, "Mom, I'm dropping at the school. I have this great idea for a social network I'm going to call Facebook and it's going to be worth billions of dollars, and I'm just going to stop in my life and I'm going to do that."

His parents would have been, "What are you talking about?" His school would have mocked him. His other students would probably have thought he was crazy. You need evidence that these things work in order to make it have success breeds success. That's why Maktoob is so important, and that's why Souq.com which also you can make an argument, it's just simply an e-commerce player that they do many things which are highly focused and understood to the market. But all of a sudden, people look at these and they say, "This can really happen here, and therefore I want to take advantage of new technologies and make very powerful things happen beyond that."

I really think there are two important things to think about, which is, one; in rising markets, it is natural in the early days for people to take things which have been successful elsewhere and apply them in unique ways at home because the market opportunity is available to it. It can be very interesting. Investors were conservative can look at it and say, "Wow! I do get it. I really do like Yahoo when I'm in America. There's no reason on earth why I can't do e-mail and content here in the Arab world. I get the small investment. I bet you it could work on that success breeds success. You have that element of it."

The second thing is, it is effectively the foundation of what will happen with newer technologies. Today, as an instance, one of my favorite early-stage companies, very risky because of the nature of what she is doing, but Ola Doudin has what is one of the fastest moving Bitcoin companies in the Arab world. Some people say she's the coin base of the Arab world, and they completely miss the point. The miss that the entrepreneur is taking the technology, solving the problems for market that is hungry for efficacy and honesty and transparency and doing transactions and moving money and she's going to apply in that context.

From that, I have no doubt if it's successfully, other really interesting blockchain applications will come. I think over time were going to be looking at places like the Middle East as we look in other markets and say these are now global software competitors. We don't blanch at the idea that ways came from Israel, but employing a fact if we were having this conversation, 15 or 20 years ago, we never would have guessed that any other ecosystem was making globally competitive software.

It's the perfect staging. It makes perfect sense for the market. It's very remunerative for the entrepreneurs who are trying to reach the markets with economics and it's the foundation for leveraging new technologies to new applications for problem solving within one's region, perhaps emerging market to emerging market and then globally.

[0:27:49.6] CM: In your answer just now, you used the term improvisers, and in your new book you also use the term to describe different companies in the region. Can you explain the three terms that you used to kind of say this company is doing this, and that company is doing that?

[0:28:02.7] CS: Book publishers require you to bucket things, and so it takes a little bit of a nuance out and there's such a wide variation of what opportunities are kind of being creative. At the time of the book, and I would probably do it similarly with maybe a new bucket today. I did breakdown the kinds of companies I was seeing, as you describe them, improvisers, they are not unlike the companies we just been talking about, those first pioneers within an ecosystem for a leveraging capabilities from elsewhere and doing them in an application at home.

The global players suggest that because interactive technology is easily accessible, you can actually be global and international day one. I say this is America too, by the way, where young entrepreneurs who would have said four, five years, 10 years ago for sure, whose advisers would say, "Just focus on your newer market. Build a company in San Francisco and then you could figure out the rest of the country. Don't think about international," yadi-yada.

Now, you have a lot of entrepreneurs saying, "I can reach anybody anywhere right now. If I have a good product and service, and it's easy to monetize, I can think beyond Cairo. I can think about beyond Egypt. I can think to the entire Arabic speaking world, or I can think about the entire Islamic world," which of course is well over 1 billion people around the Earth, "or I just have something that's so good, people are going to find it."

One of the stories I told in the book was of a neat relatively small company that come up with HD weather apps. I remember when he pitched the company to me, I thought, "That's ridiculous. There were going to be 100 of these in the App Store and I'm not sure why he's doing this and everything else." I went to see what weather app I had on my tablet at the time and was stunned

to find that the weather app I had was his app. I had no idea that it was 18 engineers in Alexandria, Egypt. I had no idea that it came from anything other than some American start-up and yet I had founded it and I asked him about it. He said, “Yeah, 70% of our audience comes from around the world and 35% comes from America. We don't market it to anywhere. They just find it in the App Store or whatever it is.”

These are just early days of the ability to have a reach, and I'm not saying the geographic focus doesn't matter and that an entrepreneur early on should not be focused because they should be, but it does mean that they can become global players much faster and with greater efficacy than before.

The final bucket that I described there, I call the problem solvers, and these are people who really have it in the teeth to solve fundamental structural problems in the backyard that they don't think anybody is going to solve coming from the outside because they understand the backyard better than anyone. They really want to make real ramifications on anything from crime, to education, as I described in [Nephem] [inaudible 0:30:36.1] before. You see it in recycling and environmental issues.

I would argue that the Bitcoin company, BitOasis, is an example of this because they want more people to have access and they have fee ability to move value. There are people who really have a bit in the mouth to say, “I got to solve this problem, and by the way if they do it here, it can be expanded largely.”

If I were to add a fourth bucket today, and the book was written three years ago. The new edition came out a year ago, but if I were to write a fourth bucket today it would be about the leapfrogging of new technology. I touched on this in the book about how people are —

[0:31:09.1] CM: Yes, you did. Yeah.

[0:31:10.2] CS: They are leaving challenges to go faster. But since the first writing the book, the expense of things like AI and VR, blockchain, we have talked about, is happening so rapidly.

The tools of people can leapfrog problems to education, healthcare and whatever because of that. I think it's going to be very exciting to watch and going to be quite different in the next three years.

[0:31:32.7] CM: In your book you had a two chapters, one of which looking at the role of women in tech in the Middle East, as well as religion. Can you just explain a bit further about how those two things are working and how maybe people look at them in a different way to [inaudible 0:31:46.8] truth in the ground, what's happening there?

[0:31:49.7] CS: In terms of religion?

[0:31:50.8] CM: Yes, and women in tech as well.

[0:31:53.4] CS: It's a very interesting thing, and in some respects, my book was written for two fundamental audiences, it's for Western and American audience obviously published here and I was hoping it would be an inspiration in around the world.

There were a couple of things that I did in the book that had American audiences in mind because our narrative bias is so strong. Among the narrative bias, obviously, is the whole purpose of the book which is we just look at the Middle East as one thing and this book was — The goal of it is was really to help people realize that there are many other things going on generally, but very specifically something here that's quite hopeful and a place that can be mutually beneficial I think around the world.

As almost to the corollaries to that narrative, people assume that women are on the side here in the region and are not engaged in this. People confuse women's inability to drive in Saudi Arabia and I think happening across the Middle East, and the often look at it through a lens through to the kind of conflict and violence which is in inappropriately and I believe inaccurately associated with Islamic. Islam has nothing to do with what some people have coopted, and yet it does become a dominant part of because meme effectively of what's happening there.

I really dug in and I could not believe this. In fact, The Economist reported on this couple of years ago that across the Arab world, tech-enabled start-ups, somewhere between 25% and 30%

of these companies either run by, co-founded by, or helped lead by women, which we'll be talking about a larger number in the near future.

Today's standards, that's got to be two or three times what you would see in Silicon Valley and no one, I think, in America would understand that. I wanted to dig in and understand the women and understand what it meant to be in the ecosystem.

I had a very kind of funny, though, I think revealing experience in the that, that a lot of women that I spoke to were very open and very candid about challenges that are happening in the region by being a woman, that their, often, men investors treat them paternalistically. They are looking for them to come in with a man to pitch the business, like countless examples of women who showed up to raise money and the first words out of the VCs mouths were, "Where is your founder?" because they are expecting a man to be there.

In fact in Iran, which I don't think I touched on in this book. There was a wonderful woman entrepreneur who finally gave up fighting it and she literally — Her father knew nothing about computer software at all. She appointed him to be the CEO and he literally would show up at the meetings and say, "I'm very happy to be here. Our company is doing X, Y and Z and I'd now like to introduce you to this woman who can talk about the product more," and then he never said a word for the rest of the meeting. She just navigated around it.

You have stories about this and about many stories of women in America. Think of a lot about about how do you load balance family, how do you load balance issues with your husband? There are other things which are universal as well. It's not just about the region.

The second group of women I spoke to really got in my grid. They listened to me and why I was writing a book and what I wanted to dig in and they said, "Look, I'm not going to talk to you if you stick me in a woman's chapter. I'm just not going to do it. I'm an entrepreneur, first and foremost. If you want to talk about my company, I'm happy for you to talk about the company. I'll tell you everything you would want to know, but if you're going to do what Americans always do and stick me in some women's chapter, I'm not going to talk to you."

Long and behold, I had a very different conversation with women from that lens and it was really fascinating to see that duality and dynamic, and I think it's a very powerful flavor for the leadership that is developing among women in the Middle East generally. I think, by the way, we are seeing this progressively around the world and it will be a very, very positive thing.

I was deeply touched and impressed by how important in the sense of spirituality and impact were tied often with very personal and private views of faith in people's lives and there were so much that was said to me by entrepreneurs and investors there that if Americans understood that lens of Islam as supposed to the caricature of some extremists, there would be incredible empathy, incredible connectedness, and incredible understanding. I found great entrepreneurs in America who have their own faith or a sense of spirituality which has been profound for their ability to do the very difficult thing that it is to do a startup, and it's no different than the Middle East from a faith that we in America are not as familiar with, otherwise it's completely concurrent. Frankly, I found very inspiring and very moving

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[INTERVIEW CONTINUED]

[0:38:07.0] CM: With that in mind, one of the things I found surprising I think when I was looking into the region myself was that I read one of your articles that you wrote this January for reco.net about how tech gurus in Silicon Valley were going to Gaza to meet the start-up founders and they were doing so via the Gaza Sky Geeks incubator. What is happening in Gaza making these tech guys leave America to go there and help the founders there start their companies?

[0:38:35.8] CS: There are a small number but increasing number of — Many of them were friends of mine in Silicon Valley and elsewhere who are beginning to ask very powerful questions about how progressive universal access to technology and rising economies in growth markets generally speaking are coming back about and have a possibility of really changing the world. If you will, absolutely change the world in very profound ways.

It's early days of them coming as investors and relatively early days of some of them opening up operations, but I know right now of some very great companies there that I'm doing that. Facebook is an expanded operation there, LinkedIn as I mentioned is growing rapidly there. All the major tech players at least have some kind of at least sales operation if not more across the world and therefore that includes places like Dubai and the Middle East.

There is a greater curiosity. They are visiting more. They are listening to some of the stories that I share and other people who come to Silicon Valley. There is a, very, I would say soft nascent but important views of this.

There is one guy who really stands out, however, over there and this really is — I'm just deeply impressed by him and he really shows up and that's Dave McClure who's the founder of 500

Startups which of course is a very powerful ecosystem part of the Silicon Valley and one of the handful of really successful and well respected angel investing groups and his gone massively global. They've got now funds that are in Turkey. They've got funds in Latin America. They are just about to do fund in Africa, and he is been one of the early people to show up to the Middle East repeatedly to understand the market. He's got three people there, they are about to close a new fund there and they are deploying capital.

In fact, even before this fund was raised, they've been deploying capital for the last three years or more. I think he's in dozens, maybe, of companies from his primary fund. I think that when people come there, two things happen to them. They see there's economic opportunity, because talent and market, but I think they often become very moved by the impact that is being made overall.

Gaza Sky Geeks, which is this amazing — It's really the first accelerator program in Gaza, of all places that's been through every possible experience, war and conflict, that you can imagine, and keeps coming back and it keeps coming back because the young people keep coming back. They really want to build a future even if they are limited in the market reach of what they can build. They want to solve problems like everyone else. They are often self-taught and very good software engineers.

The stories the story so powerful, so surprising and so moving and the talent is so impressive that I think when people learn about it, they really want to do it. Iliana Montauk who's one of the second person to run really made an effort out of Silicon Valley. Mercy Corps has been a big kind of anchor, kind of the creator of this. They've done very well at pushing the message out across Silicon Valley and whatever.

I think all of these converged in opportunities that when people like Dave have been in region then they've had an ability to get in there and see it. They jumped on it and I think they found it just profoundly moving, because I realized that, bottom-up, young people are solving real problems. The companies may or may not be investible right now, because of the limits of market size for an outside investor, but they can be very successful internally, but more important it's just a new generation saying, "We're not going to take status quo. We're not going to figure out what the politicians are doing because there's nothing we can do about it, but we

can solve problems in our backyard.” I think that’s the reason why people have taken note of it and I know why I have been so impressed by it.

[0:42:08.7] CM: One thing I always found quite surprising was when you went to Iran and you spoke to young people there about what they’re doing and what they’re building, can you just tell us what is happening in Iran and its startup scene, because obviously you’ve got the whole issue of the political deal with Iran that Trump is looking at again. Then aside from that, what is actually happening in terms of the tech in Iran? Because I guess in West, we tend to have a view of Iran as being an enemy or a country where there are conflicts between the America and Iran. What other side of Iran is happening in terms of the tech and the young people there?

[0:42:46.7] CS: I had this funny experience when in Iran and a way as an American, particularly as an American and one of my first political memories was the taking of our embassy over there and obviously as kid. You almost go there looking to see anti-Americanism. If you look there you see it sometimes. There are historical places where there’s been vandalism associated with it. I actually visited our former embassy and there were some graffiti and whatever that was anti-American.

You’re startled about how little people are thinking about it anymore. You’re startled by how mind-bogglingly warmly you’re received by everyone of all generation. I literally was in the Tehran Stock Market and an old pensioner and came up and tapped me on the shoulder and said wonderful things about America, and I crossed the street once and someone drove by and rolled down their car window — I must have stuck up with a sore thumb, because they rolled down the windows and shouted, “We love Americans! Thank you for coming.”

I was a tourist site and a bunch of young school kids came running around and wanted to ask a hundred questions and it was very, very consistent of a warmth and respect given to us. Frankly, probably the best capturing of Sena, it’s worth finding online, is Anthony Bourdain who has this wonderful TV show about cultures through the lens of food and restaurants.

He did one on Iran roughly the same time I was there, the first time there, and I thought he captured magnificently what I had seen. Firstly, a beauty of the place. The expansive and remarkable culture and history of it. The working of so much of the infrastructure and the quality,

again, of young startups that I saw there would, I think, shock most Americans. At the same time, as we talked about earlier, the bottom-up is the story, but the top-down matters greatly. You're in a police state. There's no question about it. There's no doubt in my mind that my email is being checked. We were very prescribed in places we could go, which I think biases my lens a little bit what I saw about. The political tensions and things that we all see in the media are still very much there.

It's hard to predict how it will play out. What is not hard to predict is the mind-boggling caliber of the young people that I met there and some of the world's greatest engineers are there. Some of the most shocking number of them come to the west to study as well, but the engineering programs in Tehran were great. Over 50% of the engineering students are women, by the way. The entrepreneurs I met, they were like conversations you'd have with an entrepreneur anywhere. All they talked about was the same problems, the same opportunities, the same market sizing, and analysis, and should I raise money, when I raise money. The conversations were completely and utterly the same.

What was really intriguing to me was that everyone had access VPN or whatever. Everyone had access to pretty much everything on the internet. Every conversation I had was completely concurrent with conversations I'd have in Silicon Valley. Everyone reads the same things. Every young person I met with a smart device had Coursera app on their mobile device and were taking courses on marketing and computer science and that kind of a thing. Everybody was on Snap and Facebook and were connecting and engaging in that way.

It was just a very, very powerful experience. In a way, it was capturing. I was saying before when I was driving around looking for anti-American signs. I remember coming around one of the, the ring road in Tehran and I saw a big bright side of a building covered and I thought, "Okay. This is got to be something propaganda." I get closer, and it was a massive Apple logo and in Farsi, it said, "Think Different."

This was put up not by Apple. I think this was put up by local people because I was told I couldn't report it, but I was told there are over six and a half million iPhones in Iran, and obviously Apple doesn't sell there. What that means is people go to Dubai or they go to Istanbul and they a bunch of them, they sell them for a fortune and people want them because the

devices work and it opens up their world in very, very powerful ways. That helps build this sort of sense of connected and this belief that they're part of a bigger world which should bottom-up and certainly the new generation is massively so.

I must tell you, my experience was much more broader than just the new generation. It was just amazing people sort of read to go, ready to build the great economy. Ready to get back to work. There was real sense of that and I can only pray that government folks understand that top-down and the batting average and the evidence of it is mixed. You still put journalists in jail. You still do a lot of these others which are not good for an open ecosystem then you worry about what its potential is, but different people are doing things with different methodologies and we'll just have to see how it plays out.

[0:47:22.1] CM: I'm looking forward and you touched upon this briefly earlier. You said that the Middle East could now go from a place of developing to having leapfrog innovation in mobile, in solar power, and social networks. What made you say that?

[0:47:39.4] CS: One of the things that we all have to think about, and this is true, the Middle East is true of other rising emerging growth markets is for all intense of purposes, these are societies that never new land lives. They began leapfrog. They literally began only with mobile, other behaviors are mobile-based, all their expectations are mobile-based. Who are we to think that unbelievably sophisticated, well-educated, tenacious entrepreneurial societies who literally only know one form of technology aren't going to be innovating upon that platform? To me, it's crazy not to think that that will happen.

Some of it might be local and regional, but others or it could potentially be global. Ways was, as we described before, was acquired by Google. I think things like Mobile, I think now as many of the even oil producing countries, like Saudi Arabia, UAE has literally come out. The leader of Dubai has come out and said, "We will celebrate the last drop of oil." They're talking about revenue diversification in a very powerful way as well. They're going out there and effectively saying, "We need to be what we've been for oil, we've been for physical infrastructure, like the rise of the great city like Dubai." We need to be this for the knowledge economy, because this is the future. This is where we're going to have to be in order to be a great, not only nation, but a great player within our region and around the world.

It's crazy for us to think that in that kind of environment and that kind of understanding with behaviors that never knew the previous and therefore unencumbered by anything of the previous, we won't see exciting innovations. As you point out, I think mobile is going to be one place to look. Energy diversification — There's amazing projects that I see going on in areas like that and water desalinization. Water, generally speaking, which is very important to the region overall.

I think local content, because in the case of the Arab world, it's something like 14% of the world speak Arabic and less than half of the percent of all content online is in Arabic. I think you will see things like that, which are less about tech innovation and more about market penetration.

Take healthcare as a perfect example. You got millions of people who becomes very difficult to reach a doctor. There are millions of people who find health a very personal thing. They're not that comfortable talking about what they have and all of a sudden you could go anywhere in the world because of mobile technology and get eye tests and get all sorts of tests about cancer and everything else at your fingertips and get diagnosed as privately if you want to use it and try to take control of your health. We couldn't talk about that three years ago. With that, I suspect there is going to be local application and potentially global innovation in places that will surprise us. That, to me, also makes me hopeful.

[0:50:18.1] CM: In your mind, do you think that there are things which could derail or hinder all the progress being made so far by the ecosystem in the region, or do you think now —

[0:50:28.1] CS: Absolutely. Look, we're having a very hopeful conversation, which is I believe it and I feel it and it's because I'm hoping that people who listen to it at all will be jarred by it because the only thing in their mind is the negative and so that I want people to think that there are multiple parallel narratives going on in richly complex and unique societies that we need to process in order to really understand where the world is going. Having said this, this is a very very tough neighborhood.

I think in one level you look at Iraq, you look at Syria, you look at Libya, these are desperately failed states with unbelievable human suffering which often the technology has been brought to

bear to help out, but these are almost bigger than that. Not only are those tragedies in and off themselves, but they can have spreading effects obviously. We have so many refugees in Lebanon for example, and Jordan. This ways upon societies in multiple different ways with unpredictable ramifications. There is nothing to be put aside by that.

When I talk about the hopeful side, it's not that I'm saying that people who are worried about the hard things have it wrong, it means that there are more things going on and if we leverage a little bit more the things of potential, we can actually hopefully for the long term prevent or solve some of the harder things. It's a very tough neighborhood and it could spread.

I do think it's worth remembering that Libya, Iraq, Syria have been in ways failed states throughout my lifetime and it had been a disastrous police states and I've been very impressive with the people and they've always had tradeoffs. Therefore, have not had enormous impact within the regional economies which is why it's more encouraging to think that the remaining dozens countries in the Middle East that are trying to find their footing in very difficult times and different economic times and who are having now examples of leaders embracing this and plenty of examples of young people coming out of bottom-up means that there are scenarios that we can really work with that will be a different narrative overall. But you can't underestimate that there are difficulties there and they can't be brushed under the carpet or dismissed in anyway.

The second thing I would say is I think the clip of the top-down to really embrace this and unleash this is always problematic. Again, I said before, too many, I think, political leaders, particularly too many political leaders on a certain age just don't understand the multiplier impact that this will have in creating new economies, created better educated people, multiplier impact in job creation. They just don't look at it in that lens or anything.

Often, political leaders of the same generation look at technologies negative. They think that technology will only kill jobs or will open up transparency to a point where they're held accountable. I irony in that is if in fact they unleashed some of these problem solvers in things like education and health and criminal activities and what have you, they would actually be helping solve the very problems that they're held accountable for themselves.

If I were a leader there, when I talk to leaders on there, you have a choice of saying, “I’m going to wait a generation to fix education or I will wait a generation to fix education while in the meantime I want to leverage every possible, or open up every possible opportunity there is to make it better now. By the way, if more jobs are created here now, if there are better people prepare for the economy now, that’s to everyone’s benefit, that’s everyone’s benefited. From folks on the ground, to larger corporations who want to hire talented people, to governments who want to prove that they are actually a service to their countries.”

As you know, not just in the Middle East, but elsewhere, there are leadership who don’t care about it. You come to the conclusion, they’re not the visionary in that way. That can be a worry for me, but that worry is counterbalanced because we have this interesting model that is the UAE and Dubai and I’m very watching carefully what’s happening in places like Saudi and even Qatar, beginning to have conversations at Kuwait that they’ve not had before. Jordan has been there. Egypt could be there. We’re going to have to see.

It’s very hard to look into the future. In fact, is it possible to look in the future? I have people who know the Middle East, has spent more time in the Middle East than I who are nowhere near as hopeful than I. I was in fact with someone last night who said he thinks it’s the worst. He’s been in the Middle East in his lifetime. All I can say to him is I can’t assess. I’m not even sure how to weight something like that. What I can say is we have tools now universally in people’s hands that allows to look at circumstances so that the next five years will be different than the last five years. They’re in our hands.

What we can do to help unleash it is crystal clear. Whether we do that and understand it and how large the ramifications there will be, I can’t predict. Why wouldn’t we do this? Why would we not want to get on this and understand it so that there’s a chance in more cases than not to give a new generation great opportunities and give existing opportunity — Generations opportunities to transition and transform themselves to live better lives, and that’s why we’re all here, I would like to think in the end.

[0:55:18.0] CM: Right. An interview you gave to Bloomberg in 2013, you spoke about an entrepreneur who is building something in Damascus, Syria, even though at the time the war

was going on. Do you know if they're at all building something today and where they are based at the moment?

[0:55:37.1] CS: Syria is a tragic story at every level and every way. I can't tell you the caliber of talent that I met in Syria when I was there in 2011 and a lot of the young people now are elsewhere. Some have gone to Lebanon, some are in Dubai, some of them haven't been able to get out of course.

The hope of to still be able to do things predictably in the last couple of years has been all but squashed and that is a terrible lesson of not only what a brutal regime who makes a decision to contain its people in every level, first and foremost, physically and brutally in that way. Also trying to crack down on their spirit; their desire to problem solve and to innovate and just build better lives for themselves bottom-up is a terrible circumstance and one to be watched.

There are other regimes who have made this decision and there will be others who in the end are more interested in protecting themselves than they are absolutely building a great country for themselves and for their future or for their region and beyond.

That's why the trust position between the leadership because this takes leadership in the UAE and Dubai so profound because you have people there who literally — They have a minister of happiness. They are literally getting up in the morning, going to bed at night saying, "What can we do to attract great talent and allow people to learn very, very quickly and to innovate and capture imaginations and create better lives for people not only within their country but across the Middle East?" I think they're thinking very audaciously about Africa and beyond. They certainly are completely active in trade in places like China and India and Southeast Asia.

We're in the early days of this, but the lesson is leaders do make decisions. The top-down does matter. When leadership makes decisions to unleash this, we're going to see a huge multiplier effect where people are actually solving the very problems that leadership is held accountable for solving education, healthcare, that kind of a thing.

When leaders believe they need to play the 20th century game, they need to play the crackdown game. Maybe it will work for a time. Maybe it will work for too long of a time, but they're missing

an opportunity to enter the 21st century that could have benefits for everyone; from the people who are creating to the people who are making their lives better because they have access to new capabilities and new ways of thinking to the large corporations that are looking to hire the best talent to be in the 21st century, and the governments themselves who for the most part do want to have positive impact, I think, in their country and want to be held accountable for success. It's not obvious that that will happen everywhere. History has replete with examples of people making the opposite choice. Human nature has not changed.

I just believe in the end what we need to focus on is that there's this incredible series of tools and capacities and capabilities in people's hands to solve real problems quickly. Almost any problem as a software potential solution to it and we should do everything we can to support that and unleash it, and at the very least understand it, because if we understand it, we will realize that the next five years, we're very different than the last five years if it's proactively supported.

[0:58:46.8] CM: Since publishing your book, have you seen people in the West become more aware about what is happening in the Middle East?

[0:58:54.6] CS: I think it's mixed. I think that in Washington, D.C., very often when I speak to people, they look at me like I'm crazy and then there are other people who have either been there or spent some time with this, which are proactively trying to do everything that they can to support it and then that's exciting to see.

In Silicon Valley, which is for the most part a globally-minded group of people and immigrants play an enormous role there and people know what is happening in India and China, and they know that there's universal access to mobile and software, are asking a lot of new questions, but at the same time so much opportunity, so much talent is within 50 miles of their backyard that some of the best investors and the best entrepreneurs are leveraging that talent to do things maybe most domestic, which is fine by the way. There's a lot of argument to be made that's exactly what they should be doing.

I will say that I'm seeing questions more than I've seen before and I've seen many more of my friends begin to go over there or to meet with people when they come through and are quite

impressed and intrigued by the different narrative. Some of them make it part of their lives' mission to be supportive of it overall.

I think that, however, there's a much bigger macro trend at play which Americans in particular are having trouble navigating and this is particularly true in the tech sector, which is to make it in world global technology for the past 30 years had been fundamentally to make in the West, and frankly to make it in America. This was the largest market. This was some of the best talent in it. Even if you are a hardware player, like Sony in the 70s or 80s, you are trying to get your hardware here. If you became a software player, you were solving problems back at home but you were hoping that somehow rather you might be able to crack and do audiences here if you could do it.

I think when Alibaba went public, it is a lightning bolt in the shift that's happening in the world more broadly, because a lot of my friends thinks that Alibaba got very big because China is very big and the government supported it and it's just one story of the wealthy taking care of their own. I think they completely misunderstand the essence of what Alibaba is, which is it is one of the largest tech-enabled players on earth that succeeded massively, fundamentally without the West at all. Almost none of their revenue comes from the west. Their revenue of course comes greatly from China, but the revenue comes from Africa, it comes from Southeast Asia, it comes from Asia, it comes from India.

They realized that with technology rising in these newer markets with merging market middle-classes rising, there's now entirely massive new market in process that is allowing access that makes the question about making in the west not necessarily, because it's still a very powerful market, but meaning that there are alternatives out there that we need to understand. We understand it not just because it's important to be world citizens, but we need to understand it because there's opportunity for us, to co-author with incredible talent who understand things that we don't know, who can leverage some of the things that we know very well to build really, really sizeable opportunities in these markets.

There are lots of really amazing young people who are getting that in Silicon Valley and beginning to move towards it, but it's a secondary show and I think we risk as a country particularly now in our political situation where we're looking more internally that we're missing

what is going to be one of the most profound economic shifts in global history. It would be pity for us to do that.

[1:02:09.8] CM: With that in mind, are there any particular startups or individuals you think are worth watching out for in particular over the next few years?

[1:02:19.0] CS: Startup individuals in Middle East?

[1:02:21.6] CM: Yeah.

[1:02:23.9] CS: There are hundreds of them overall. When you look — One of the things that I think we often underestimate is we talk a lot about startups and we talk a lot about angel investing and acceleration, that's fine. The real impact on economies is the scale-up. It's when companies go from being small to really beginning to reach mass scale and have a huge impact and success economically and so on.

One of my favorite management teams, and I think they're fascinating to watch, are the guys who founded Careem. Careem was the first ride-sharing company in the Middle East before Uber. It's growing faster than Uber and it's a very dominant player from Saudi Arabia to Pakistan. They get up in the morning and going at bed at night with their captains, what they call their drivers are all captains. Encourage them to have the highest customer service and to engage as really entrepreneurs themselves in servicing people in these growing economies where getting to point A to point B is not easy and convenient often. A company like Careem just had multiple ramifications which are affordable for large swath of people as well as business executives.

Careem was valued last year by Global Venture Capitalist at over a billion dollars. I think people get too hyped up over this whole concept of unicorn, but it is a benchmark. It's important. Again, Careem, like Souq, will kickoff other entrepreneurs who prepare to do it. I think they're fantastic, but there dozens of companies across the Middle East many of whom now have moved at least business operations to Dubai to have greater efficacy to work that I think is very exciting.

I just went to the STEP conference, which is one of a few startup, but I think one of the greatest startup gatherings in the Middle East. It was just a massive collection of people from around the ecosystem who are there. There must have been 70 companies that I saw presenting or at booths or I've met that a year ago I had never even heard of. They are just thinking with a great level of sophistication and they're bringing together some of the best tools, and so I suspect it's going to be an interesting next three to five years.

[1:04:16.9] CM: Okay. Thank you so much for that Chris. It's really informative. If people want to get in touch with you, how best can they do so?

[1:04:24.7] CS: I think the best way, usually the easiest way is on LinkedIn. I'm very easily found there. People have reached out to me before and it's been quite helpful to me and I hope from time to time I'm helpful to them.

[1:04:33.6] CM: Okay. Thank you very much for that. Take care now.

[END OF INTERVIEW]

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