CHIEF EXECUTIVES FOR CORPORATE PURPOSE - CECP

15th Annual Board of Boards and CEO Investor
Forum
Scott Stephenson, Verisk, Long-Term Plan
Presentation

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15th Annual Board of Boards and CEO Investor Forum

MS. BASAK: The next speaker we have is Scott Stephenson, the chairman, president, and CEO of Verisk Analytics. excited to present him because I covered his company when it was introduced to the S&P 500. It's a leading data and analytics provider that covers the insurance, energy, and other specialized markets and other financial firms as well. We welcome Scott Stephenson to the stage.

[Applause]

MR. SCOTT STEPHENSON: Good afternoon. Very pleased to be here to tell you the Verisk story on behalf of my roughly 9,500 colleagues around the world, and thank you very much to our friends and hosts here at CECP. Verisk Analytics is a largescale data analytics company. Now, there are quite a few companies in the world that are engaged with large-scale data analytics. We're the only company that does it, in my understanding, the way we do it for two reasons. one is that we are very focused on three vertical markets, and that's a very, very important dimension of what it is we do, and I'll develop this theme with you a little bit.

But basically by focusing on domains, it is our opportunity to basically understand our customers' issues. And it's by being close to our customers that we can always anticipate their next needs, not just meeting the current need but the next need. And the other thing that is so unique about what we do at Verisk is that much of the data that we have is contributed to us by our customers and on the explicit understanding that we will be pooling their data with date from their competitors. So those two features together, the fact that we're very vertically focused and the fact that we have so much of our data in the category of proprietary data from our customers, those are the two things that really power our business model.

Maybe just to dimension that for you a little bit, in the P&C space, if you were to file a claim on your homeowner's policy, your insurance company would abstract the data out of your claim, and everything I'm describing here is machines talking to machines, send it to us. We would analyze your claim in the context of about 1.5 billion other claims, send signals back to your insurance company about whether or not there's the potential for fraud.

In the energy vertical, if you happen to be the owner of an LNG plant or a large solar array, your company would be telling us the real-time change in the productivity of those assets, and in the banking vertical, if you use your credit card, your credit card issuer will provide us at the transaction level every transaction that occurs on your credit card product. Now, they do it in a completely deidentified way, so your name doesn't show up in our data set, but the transactions do. So that's just to give you a little bit of a sense of the kind of data that are a part of our business model.

Here are some of the facts and figures about our company. We were founded in 1971, and I'll tell you a little bit more about that story as we go forward here. We have become a much more global version of ourselves. The company that I joined 20 years ago essentially worked only in the United States. Our market cap has risen to the \$27, \$28 billion level. I talked about our 9,500-ish employees. And we are a very large data environment. It's a little hard to figure out how big are the data sets for for-profit entities. The largest data sets in the world actually belong to governments. If you collect an income tax, you have a lot of data. But among operating companies, our estimate is we probably have one of the 100 largest privately owned, even though we're publicly traded, privately owned data sets in the world, so a very large data environment.

Our purpose is to help our customers make better decisions that relate to managing risk or making investments, making their operations work better, and the ultimate impact of what we do is touching tens of thousands of companies and millions and millions of individuals around the globe. We intend to be the world's most effective and responsible data analytics company, working on our customers' most urgently felt issues.

One of the ways we try to make that real to all the teammates inside of our company is to say, well, okay, against that, what can each of us do every day? And the three things that any one of us can do, some of us can work on all three any day, but each one of us can do at least one of these things, serve someone else, so serve the customer or serve one of your colleagues inside of the company; add value, by which we mean observe the process that you're a part of, make it go faster, make it happen with less waste; or be innovative, invent something novel that is not out in the world today.

And as I say, some of us maybe touch all three of those things. Everybody can do one or more of those things every day.

We recently joined the UN Global Compact. As I'm sure you all know, it's the world's largest sustainability initiative. We're very proud to that, and as it happened, there were several parts of our company that were already collaborating with different work streams associated with the United Nations and the sustainable development goal, so it was a very natural and organic thing for us to become a member of the compact. Our board was extremely enthusiastic about our doing so.

So let me just tell you a little bit about the history of the company. I'll get the whole timeline up here, and I've had the privilege of being here for about 20 of the years of the journey, so I haven't been around for the entire progression, but this company actually has its roots in something that the property and casualty insurance industry did in 1971. In 1971, the insurance companies said, "We have this requirement to provide a fairly large amount of data to regulators in the United States." But not only that, but actually you may know that in the United States regulation occurs at the state level, so they had -- if you were going to write automobile coverage in 50 states, you had make 50 submissions per year to be approved to do your work.

So there was a cost associated with doing this. And for a long time, the regulators said, "I require your data, but I also require you to not give it to me directly. You have to give it to an intermediary who I will approve, and then they will give me the data." And the reason that the regulators wanted it that way were first, a check on the quality of the data, and secondly, to normalize the form of the reporting so every company sort of showed up looking maybe not the same way but in the same format as they were being reported.

There was a cost associated with doing this. In 1971, the insurance industry said, "Let's pull all of those activities together into one national organization." That was when our company got born. It was actually a not-for-profit. It was an association form of governance. And it remained in that state until you get to the blue bar in the middle. So there was a reorganization of the company that became effective January of 1997 which was basically aimed at putting the

governance of the company in hands, not the insurance companies' hands. So it was just an added layer of sort of security that there was nothing going on inside of this company that was observing on loss and talking about where rates maybe should be, that there was just nothing where the insurance industry had direct control over that. So that was the reorganization in 1997.

And then from that time, the company has continued to expand globally. Fundamentally there are three things that have been going on inside of the company across this timeframe. The first one is the company had to become significantly more analytically deep. What passed for analysis back in the year say 2000 when I joined the company, a lot of it was actually what we call actuarial science which is perfectly honorable and very helpful, but the methods have just advanced so strongly since then, and so the company really had to step forward. We always had unique data assets, but we needed to become more analytically deep.

The second things was to spread the business out, and so we have spread it out geographically. We have also spread it out with respect to verticals. So we were originally in just the P&C insurance industry, and now you know the additional verticals that we serve. And then the third movement which is the most recent movement has been to become a more software-intense version of ourselves because in the modern world, it is not enough with our sophisticated risk-bearing customers to simply provide them content, even insightful content. The requirement today is we have to deliver it in a way that it is easily digestible by their own systems.

And so we have moved into the direction providing what we call platformed analytic environments. We host them. They are integrated deeply into the work that our customers do, and essentially this is the way that they make use of what we provide and make decisions. And just to sort of highlight that for you, relative to eight years ago, we write about 12 times as much software as we used to, in addition to which we also consume third-party software, but that's been sort of the more recent movement. In the business. And one other milestone on this journey was in October of 2009. We took the company public. We became a component of the S&P 500 in 2015.

So we talk a lot about our distinctives. What is it that

permits us to add value to our customers hopefully in ways that are delightful to them and perhaps more than anybody else can, and we always talk about the same four distinctives. So the first is unique data assets, and there is no more unique data asset in the world than one that the customer that you're serving provides to you. And that is the basis and the foundation and the majority of the unique data that we've got inside of Verisk.

The second is deep domain expertise. I already talked about that. All of our customers, in fact almost all businesses in the world are trying to become more digital, better digital, and more deeply analytic versions of themselves. And in order to help our customers do that, it's not just about data analytic methodologies. It's also a real -- it hinges upon a real understanding of what is it that they're trying to do with their businesses. We deeply integrate into customer workflows which was something that I was just talking about, platformed analytic environments.

And lastly, we believe very much in being fast, in being the first mover. If what you do is to create an algorithm around data, then your algorithm is technically going to be better but also will be perceived as being better if you train it faster on more real data than anybody else. And so being first creates more data flow, and that leads to the improvement of the underlying algorithm. So speed is an important thing in our world.

So let's talk a little bit about our journey of creating shareholder value. So first of all, I just want to say that the thing that we're really focused on at Verisk, we talk about it all the time, in fact we say it to ourselves this way, the single greatest mark of our vitality as a company is our rate of organic revenue growth. So we are a company that has made a fair number of acquisitions, but actually the heart of what we're trying to do is to build and expand solutions via our own work that add increasing amounts of value to our customers. And the first three points up here all sort of relate to that journey.

So the first one is we look to increase the adoption and cross-selling of the solutions that we've already got. When you look at what we do in any of the verticals, we have many, many families of solutions, and it's virtually 100% the case that no customer uses everything that we provide today. Now,

they're all on a journey and the degree of adoption continues to go up, and that's probably the single most important factor inside of our growth as a company. So getting solutions adopted by our customers.

The second is because data is the oxygen inside of our bloodstream, we're always looking to develop new and proprietary forms of data. And the third is there's a lot of intellectual capital inside of the company which we try to make sure is working to the advantage of every business that we have inside of those verticals.

And this is one of the things that I think is particularly interesting about the moment that we live in and Verisk Analytics because they're investments that need to be made in things related to how do you aggregate data sets, how do you present them to the analytic layer, how do you migrate from premise computing into the cloud, et cetera. All of these things require investment. Most of the individual business units inside of our company would probably struggle to make the level of investment that we can make at the enterprise level and then provide the value from those investments to every part of what it is that we do.

And then lastly, we have made strategic acquisitions. We see them as another way of trying to accelerate us into the marketplace. When someone else has found a pathway that is meeting the needs of one of our customers, we are always holding those ideas to the test of whether or not we make it better or it makes us better by becoming a part of Verisk. That is the way that we believe that we can drive a return on capital from making acquisitions.

What do we do out in the world? The list is so long and even this is a highly sort of summarized and reduced version of it. I'm just going to touch on two of these real quick. So the one about building code assessment, I don't know if you can quite see the picture there real well, but there were some very famous photographs that came out of the Hurricane Andrew incident in 1992, and it's in that picture although it's maybe a little hard for you to see. But basically there is a road. There's a lot of houses. On one side of the road, the houses are standing and the roofs are on, and on the other side of the road, the roofs are off and the houses are knocked down. The same event, I mean literally they are feet away from one another. Why did the hurricane devastate

one and not the other?

The road was the dividing line between one county and another. One of the counties had very strong building codes and they were very strongly enforced, and the other county had weak building codes and they were weakly enforced. And so we come up -- based upon that observation, what we started to do was to actually analyze the building codes, both their strength and the effectiveness of their implementation across tens of thousands of municipalities, and those observations are now actually a fundamental part of the process of determining what will be the rate applied to an insurance policy on a home in the United States.

And the second one, community fire protection, so for a longer period of time, our company has scored about 43,000 communities based upon the strength of their -- the fire suppression available from the fire department. So this is where the hydrant's placed, what's the pressure in the water system, what's the quality of the rolling stock, et cetera. And so we again come up with a score. It's a standard, what's called a rating variable inside of the way that the -literally the price you're asked for for your homeowners insurance policy. It is a function of that score that we provide. It also provides an incentive to the fire departments to do well because the fire chief and the mayor know that if they can get a higher score from us, that insurance rates all else equal will go down in their community. And so it's very common that city councils and mayors are being provided with investment cases based upon the analysis that we do. So what we do actually encourages resilience.

So let's talk a little bit about a couple of the things that are going on inside of these verticals that we serve and three that we really want to call out for you. The first one is the increasing demand for data analytics, and we're all kind of aware of that, but it really is true. And in fact, if you look at our performance, meaning the growth of our company, we grow considerably faster than the marketplaces we serve. And why is that? It happens because almost all of our customers are moving their own budgets more in the direction of what might be called technology in the hopes that they can automate and find efficiencies in other places. But even beyond that, within what would be considered technology spending, they're rotating their budgets towards

data analytics. So what it is that they're trying to do with their companies is actually what we provide. And so we are swimming with a very strong current in the current economy.

But with respect to the move towards data analytics, there are quite a few benefits. Maybe just to give you a sense of why this is so powerful, just scanning the room here, I'm going to guess that on average we've been in the marketplace for 20 to 25 years, something like that, so if we were creating investment cases 20-plus years ago, so I'm using 1999 as my reference here, and let's say that you had a large digital project in mind that required you to try to aggregate a large amount of data, let's say a petabyte of data. years ago in 1999, it would have cost you about \$8 million to source a petabyte of raw storage capacity, and the human being that you would have turned to to try to help you exploit that tech would have probably have been a database administrator back in the day. And I'm just rounding here, but let's say that that person, she or he, was paid \$80,000, something like that.

So the overall cost of trying to get your project going was \$8,080,000, a lot. And the ratio of the tech to the human was 100 to 1. In today's world, you could go out on any of the public cloud providers today and you could source a petabyte of storage capacity for around \$50,000. Actually I haven't checked in about a month, and it's probably gone down because that's how dynamic the world is. And the human being today that's going to help you to exploit the tech, let's call her a data scientist, and I'm probably rounding up here a little bit, but let's say that that individual is getting paid something like \$500,000 a year.

So the total cost of trying to get going with your dataintense project has fallen by more than an order of magnitude, and now the cost of the human to the cost of the tech or the cost of the tech to the cost of the human is now 1 to 10. It used to be 100 to 1, now it's 1 to 10. And there are two implications of that, and we feel them both very strongly inside of our business.

The first one is it just doesn't cost as much as it used to, so be adventurous in terms of building data sets and exploring the relationships inside of the data. It's not as prohibitive as it was when the 25-year-old version of yourself was contemplating a data-rich kind of a project back

in the year 1999 or 2000. But even more than that, the real implication, and this is very meaningful for us at Verisk, is that for all the talk about tech and all the talk about scale, et cetera, et cetera, it's really about the human system. Your largest cost in trying to be effectively data analytic is talented people. It's not the cost of the tech. And so the human system is what really matters. And that has so much to do with how we think about our company and our 9,500 colleagues and what we need to do in order to be a successful business.

So just actually on that point and talking a little bit about our team, we have a lot of people inside of our company who are technically deep. Some of them are specifically given over to the science of data analytics. Others are expert in technical fields. It can be hydrology, seismology, because among the things we do, we anticipate catastrophic events like hurricanes and earthquakes and the damage they cause and what does it take to recover from them, and so we need a lot of disciplines inside of our company.

One of the really delightful things about having been a part of the company for the past 20 years has been to observe the progression in the demography of our company. We've basically become a lot younger, and that is consistent with the general nature of being technically oriented, but I would say specifically driving into ever-deeper levels of data analytic methodology and software development. So we've just gotten younger and younger and younger.

And we've taken the opportunity to observe that as our company has become more diverse from that angle in terms of the age of our folks, we've also observed diversity in a lot of other ways. And so one of the things that really makes our environment fun and active is asking folks to find ways to affiliate with other folks that they would find it to be supportive and helpful, et cetera. So we have a number of employee resource groups, and we've noted those for you on the bottom there.

When you're focused on the human system, when you're focused on the capability of your folks, you are naturally thinking in terms of what can you do to help them develop and to grow, and so what we're describing over on the left is we are trying -- not just trying but we are reaching every member of our organization with an opportunity to learn and to grow and

to develop. And it really is no exaggeration to say that the growth of our people as individuals today is the growth of our company tomorrow. Those two things just go together.

And so at the top, we take about 30 to 40 people every year into an intensive one-year development program, and at the bottom, we have lots of training programs which are essentially kind of an on-demand, if helpful for you, talk with your supervisor, figure out what would be good for you, but it is here for you. And lots of things in the intermediate stages where people are beginning to take on supervisory responsibility and then looking to grow and develop as they do so.

I'll call out a couple of the programs that I would say we are especially proud of. One is what we call our data science excellence program. So a few years ago, we just sort of stared at our growing need for technology talent, and we said, well, we can try to respond to that in two ways. One is we can go out into the world and try to hire talented people from other companies, or we can go as early into the talent pipeline as possible and develop people in the confidence that we will give them a great experience and that they will want to be a part of our company for a long period of time, and we made our bet on the latter.

So we have gone very early into the talent pipeline. is a new degree in the world that didn't exist, certainly didn't exist ten years ago, was not very present even five years ago, called the master of science in data science, or sometimes it's called master of science in data analytics. And so we bring in dozens of folks at that level every year, and we have them as a part of a four-year, three-stop rotation through our company, and then at the end of that, we move them into the line organization. And our goal explicitly is for them to become general managers. They may work as data scientists for a while, but at the end of the day, the person who can make the biggest difference in our company is somebody who the left ear is understanding all of the methods and the right ear is understanding the customer domain, and somebody that integrates all of that, that's somebody that makes a big difference in our company. So that's what we're trying to grow.

A couple of other things, there is a wonderful eight-module data analytics certification that's available. It's put on

by Hopkins, and it's available through Coursera. We've said to every employee of our company, "If you'd like to do that, please do that." And many, many have. Returnship program, we've gotten very excited about inviting people who took long breaks in their careers back into the company, and we started doing that about two years ago, and the early returns on that program are very, very good.

I'll just lastly point to lean six sigma training. another thing where we said to our whole organization, "If you would like to do this, it's available to you." And I think at this point of our 9,500 people, I think 5,000 have taken some steps in that direction. And I will tell you they They love it. They can feel themselves getting better at what they do, and it's just thoroughly encouraging. We have a Yammer site that we use across the company, and I just love looking into it multiple times a week because there are so many stories of people that are doing these things and the value that they're getting out of them is genuinely heartwarming.

Okay. So increasing demand for data analytics. The second one is automation. Let me just take one of our verticals real quick, insurers, and talk about why they're driving towards automation. First of all, there is evolution of the demography of the insurance buyer. Millennials now are the single largest customer segment. And they want an experience which is equivalent to the experiences they're having with a lot of other things that they buy out in the world.

Secondly the insurance workforce itself is aging and pretty rapidly, so the estimate is that something like about a third of the people who work full-time in the P&C insurance industry will be retiring in just the next couple of years. And so insurance companies are really worried about this loss of expertise of institutional memory. If you have good automated methods, presumably you have captured some of that wisdom and you've held onto it.

And then there are competitive forces here. You may have heard of companies like Hippo and Lemonade, et cetera. these are the new-form insurance companies. As it turns out, most of their innovation is with respect to distribution. They even sometimes actually write the risk on somebody else's paper, but they are making a dent, and so established insurers feel that. And then above all else, the insurance

companies are looking to make sure that they keep their costs in line. They are aware -- the United States is the most heavily insured marketplace in the world by a good margin, and there is a pretty high degree of competition actually, so the companies are aware that one of the things they need to do is to remain fit and thus the drive towards automation.

And we have solutions which help customers to get on with the automation journey, and so we've got one of our platformed analytic environments we call LightSpeed, and basically that is the place where you gather -- so the insurance company would license this from us. They gather very little information from the prospective insured and pop out a rate really fast and even with the ability to bind the policy on the same call, and our customers have found that their conversion rates have gone up dramatically as they've made use of this. And as we know, speed as well as precision is essentially what we're all looking for when we engage with a vendor in cyberspace. So we are having a lot of success with this, and this is an example of where more automation, deeper data analytic really does make a difference for our customers.

And then the last megatrend, so the energy transition, moving from a hydrocarbon-based ecosystem to one that is based on the renewables. So it's actually very difficult to predict exactly when the lines are going to cross with respect to the energy transition, but what it is clear is that the renewables will continue to take a more prominent place in the mix, and the load with respect to say electric vehicles is definitely going to go up, so sort of the timeframes are a little bit difficult to predict, but certainly by some point out there in the lives of almost everybody in the room, it will actually be substantially different than it is today.

And our job is to help our customers understand what the energy transition means. One of the reasons, in fact the primary reason we got interested in the energy transition is that we study the climate system a lot because we're trying to predict what is the climate system going to do in terms of loss where insurance companies are concerned. So we've been on this for a long time, and whatever rate it goes, basically what we are able to do is anybody that owns an asset, it could be a field that is being fracked, it could be an LNG plant, it could be a large solar array, any of those assets, basically we help our customers understand the real-time

productivity and the real-time change in the productivity of those assets, and that is fundamentally the basis for investment decisions, whether it's in the renewables or it's in the existing hydrocarbon ecosystem. And as far as we know, we're the only company that is looking at all of these modes across the energy ecosystem.

And we ourselves take environmental responsibility seriously, so for the last couple of years with all of our scope one and scope two and scope three business air travel, we have completely balanced our 27,000 metric tons of environmental carbon with renewable energy credits and carbon offsets, and we're very happy to do that, and we're also committed to actually shrinking our existing carbon footprint, and we do a lot in terms of office consolidations and upgrading the ways that the offices work.

So a couple things that we talk about a lot around our company, one is cloud migration. So our company today has put about a third of our total computing infrastructure into the cloud. Another one is data security. In fact the most deeply felt part of our commitment to the world actually is to keep our data secure. I'm not sure our customers would be as comfortable with contributing data if they felt that there was any risk to it. And there are levels you can go to in trying to keep data secure. Obviously there's the technical infrastructure, perimeter defense, things like that. is encryption. But you can go beyond all of that.

There are other data methods, particularly we're really focused on tokenization, and that's the method when your credit card transactions come into our data set, your name never lands inside of our data set because at the boundary between us and your credit card issuer, as the data hits that boundary, we hash it up through tokenization so the data lands in an indecipherable string, and then the key to retokenizing it is -- or detokenizing it is way over there. It's the gold standard of security, and we're committed to that. We talk about that a lot.

The regulatory environment is something that we think about a I think that this journey of digitization and companies becoming the best data analytic version of themselves, this is going to keep going on for a very long period of time. One of the things we observe about the environment is that the regulators have trouble keeping up. We can hire data

scientists. They struggle to hire data scientists. We and our customers come forward with these innovative methods. They have to work very hard to understand. To them it looks like a black box, and they're trying to figure out, well, is it responsible? Is it reliable? And so we've actually begun to take additional steps to help the regulators interpret what companies are bringing forward by way of data analytic innovation.

And lastly ethical machine learning. So I think you'll hear more about this in the world generally, but I mean it is just true that if you train a machine learning method on data derived from practices in the past, then what was ever causal in the decisions that were made in the past, all else equal, is going to propagate into the new rules. And we do not want to see that happen. We at Verisk do not want to see that happen. And so we are trying to make sure that our own house is in order, and we want to actually -- we want to really be proponents for an ethical approach to machine learning being generally a part of the world.

So let me go real quick then through just a summary of how we think about investment. Basically we're very focused on capital management and making sure that we put everything that we do, whether it's an internal investment, it's an acquisition, we put it to the test of capital efficiency and capital returns, and we have really amplified our focus on this over the last couple of years.

And one other comment about how we think about capital. way we're not going to make money for our shareholders is by taking our leverage up to unsustainable levels. debt as investment grade, and we will never bushwhack our debtholders by moving into a junk category. We just won't do that. And we have such confidence in our business model we don't need to do that.

So what we are looking to do, as I said before organic revenue growth is the single strongest mark of our performance as a company, our vitality. So for a company of our size to grow 7% to 8% organically year in and year out is actually kind of unusual, and we look for margin expansion because the nature of what we do, we are creating industrystandard solutions. They get implemented customer by customer, and they don't really require that much specific tailoring to the individual account, so make it once, sell it

a thousand times. It's very constructive where margins are concerned. So we expect an established solution to actually show margin expansion as it grows, and then we would expect ROIC to follow as we pay close attention to the deployment of capital, and ultimately we expect to be growing EPS in the double-digit rate.

Here's a little bit about one dimension of trying to make sure that we all have our eyes on the right prizes. is how we compensate ourselves. So with respect to the short-term incentive, the annual bonus, mine has been fully formulaic, 50% what is our rate of organic revenue growth, so I can't make that go up faster by buying companies in the measurement year, and 50% on the rate of organic EBITDA growth, so it really has nothing to do with acquisitions. The other named officers, I have a 20% discretionary contribution to their outcome, and then a couple of years ago with respect to our long-term investments, the currency that we use to give out long-term incentive, we moved to where 50% of it is now performance shares, measurement period of three years, and we could actually -- the award that we get at T minus three could actually be zero if we're at 25% of the total shareholder return of the S&P 500 or below. So that's how we pay ourselves.

When we went public in 2009, we had no women on our board. We now have four women on our board, and we've also been very serious about board refreshment. We've added four new directors in the past five years.

So just in terms of results overall, we have had a very long track record of producing good levels of organic revenue growth, so you can see sort of the progression here. you look at how our revenue breaks out, insurance remains our largest vertical on the bottom left. We're about a quarter non-US, and again, if you went back certainly 10, 15 years ago, it was very, very low back then. And most of what we do is sold as a subscription. And oftentimes they're multi-year subscriptions, and so customers will find one of our platformed analytic solutions. They'll subscribe to it for three years or five years. Each year there is a price escalator as you move from year to year.

And in terms of the growth of our profitability, you can see that we've always seen our EBITDA line growing, and traditionally it's been growing right around the 10% level,

sometimes a little bit more than that. The CAGR here is 12% on our EBITDA. And here's are margin profile. So you've got the adjusted EBITDA over there and the margins over here on the right. You can see from '16 to '19 one of the things that's been going on with the company has been we invest to try to keep the company growing, and you've got our free cash progression on the lower right. One of the things about our company is we have chosen to believe in our ability to build products. Most of what is cap-ex for us is the capitalized value of the software that we actually built. And here's how we've done in terms of the S&P 500 over the last several years, last decade.

So just by way of summary, so we're engaged in something that a lot of companies want to do. We go at it with some pretty substantial advantages in terms of these really unique data sets we've got inside of the verticals that we've chosen to focus on. The subscription model that we've got creates visibility, creates recurrence and steadiness and ultimately produces this nice margin profile that we've got. And we're being very careful about how we allocate capital. And I would just say that we are trying to help our customers with the decisioning that they feel most intensely about, whether it's managing risk or how to make investment or how to optimize their business model. We feel the privilege of where we sit, basically these very deep relationships with our customers.

So that is it. I know I went a little bit long. I don't know if we have any time for questions or not. Okay. Thank you.

[Applause]

- MS. BASAK: As a reminder for the people who are listening to the webcast, you can ask a question via Slido. While we wait for some to come in, is there anybody from the audience that would like to ask something? Okay.
- FEMALE VOICE: Good afternoon - you spoke a lot about the regulatory environment, and I thought it was really interesting. I was wondering if you guys - framework - public/private partnership where you can partner with the regulators to create a pipeline for data analysts. For example, Google has in their ESG model, they have like a - Google community partner initiative where they partner with

communities to build out - - close the gap around the digital divide.

MR. STEPHENSON: Right.

FEMALE VOICE: - - so I'm just curious - -

- MR. STEPHENSON: Very definitely. Very definitely. In fact, the way that we're trying to work on that is essentially to create analytics that would start with the regulator, something that they can own, they can understand, and they can apply as they try to respond to all this innovation that is coming at them. So that is where we're focused. you.
- MS. BASAK: So let's take one from Slido. Highly diverse and inclusive teams by race and ethnicity as well as gender can help reduce data bias issues. So how do you build a culture that supports that?
- MR. STEPHENSON: Yeah, well, I really think it starts with tone at the top, and then you just have to make sure that all of your processes are essentially aimed at that kind of an outcome, so you have to be metrics rich, and you have to observe on whether or not you're making progress. And, you know, it's really important for a company like ours because we do creative work, and so we need a lot of different perspectives. The thing that I would add to that is that much of our team is technical talent, is technically trained. We have an even bigger responsibility therefore because it's just the fact that the college and university level, when you look at the engineering schools, the systems engineering departments, data analytics, they're not that -- the student bodies are not that diverse. And so we actually have to amplify what we find at that level as we then try to steward people's careers through our company.
- This one is someone similar but about the data itself. MS. BASAK: That data analysis can be a black box and the risk of inadvertent bias is extremely high. How do you address that?
- MR. STEPHENSON: Yeah, and that was the point I was on before about ethical machine learning. So you fundamentally have to do two things. One is you have to look at the data sets that you're using to train the algorithm and say, do the data sets themselves contain bias? And then the second thing you have to do is, yeah, you let the machine do its first-order

transformation of the data, but you don't assume that that's the answer. So then you have to ask questions about what was the outcome, why was that the outcome, what is the effect of sort of assuming that that's the truth, and then not being satisfied with just the first-order product of machine learning.

- MS. BASAK: How will Verisk have to become analytically deeper going forward and how does it affect how you guide or manage human capital?
- MR. STEPHENSON: Yeah, so kind of in the analytics world there's sort of this basic difference between stochastics and heuristics. Heuristics are rule-based. Stochastics are probabilistic-based. The kinds of things that we're trying to deal with in the world today like the nature of the climate system and how is it changing and then how does that change for example the temperature and level of the surface of the planet's oceans, and then how does that affect the energy potential of a hurricane that forms in the Caribbean. I mean you can tell where I'm going which is it's this massive exercise in probabilistic thinking. So we need the stochastics to get stronger.
- MS. BASAK: Are there any more from our audience as well? Back over here.
- FEMALE VOICE: In December of last year, The Wall Street Journal wrote an article about major breaches to iCloud services by foreign nationals and foreign security -- government security officers.
- MR. STEPHENSON: Right.
- FEMALE VOICE: You said you transitioned quite a bit of your data into iCloud. How are you ensuring that that's not breached?
- MR. STEPHENSON: Right. So there's three things, and your question really goes to the third of them. So the first thing is that whatever software you're using, particularly if its somebody else's third-party software, you have got to make sure that it is patched on a very regular cadence. If you think about what happened, for example, in the case of Equifax, that was their failure point. They didn't patch third-party software as fast as they needed to. The second one is your data methods because you have to make sure that whatever is residing in your data set is not useful to

somebody. Even if the bad guys penetrate all the way to the center, they can't use, and that's where something like tokenization is so critical.

And then the third one is if you have your computing infrastructure in the cloud, essentially there are a set of doors that your application walks through as you access the compute power which is a part of a public cloud. You need to make sure that those doors are observed as well as closed and locked, both. And the particular episode that you're talking about, there was not enough observation about whether the door was open or closed, and it should have been locked. even if it's not locked and it gets opened, you need to know that, so you close it right away. That was the failure in that case.

MS. BASAK: We still have time one more. Do we have any more from in here? Take one from our viewers. In your view, how to ensure humane and ethical use of tech? Do we need to add D to ESG?

MR. STEPHENSON: Do we need to add?

MS. BASAK: D.

MR. STEPHENSON: D.

MS. BASAK: - - data.

MR. STEPHENSON: Oh yeah, definitely. I mean you can't -- so our call for ethical machine learning, it's half about the data, and it's half about the method by which the machine translate data into something else. So absolutely, if you start with a biased data set, you're going to get a biased answer, period. And so, yeah, so thank you for the question, yes, I agree, it has to be about D also, absolutely.

Thank you so for much. MS. BASAK:

MR. STEPHENSON: Thank you.

[Applause]

MS. BASAK: We have until 3:05 for a short break right outside. If you would be back at 3:05, then we'll start with our next speaker who is the CEO of Henry Schein. Thank you all so much. And for our folks listening in by webcast, you will be able to view some programming at dinner.