

Tyler Technologies

Analyst/Investor Session, Tyler Connect 2019

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CORPORATE PARTICIPANTS

Brian Miller – *Chief Financial Officer*

John Marr – *Executive Chairman*

Lynn Moore – *President and Chief Executive Officer*

Bruce Graham – *Chief Strategy Officer*

Jeff Green – *Chief Technology Officer*

Andy Teed – *President, Enterprise Group*

Dane Womble – *President, Local Government Division*

Chris Hepburn – *President, ERP and Schools Division*

Bret Dixon – *President, Justice Group*

Kevin Merritt – *Founder/Evangelist, Socrata*

Kris Collo – *President, MicroPact*

Mark Hawkins – *President, Appraisal and Tax*

Greg Sebastian – *President, Public Safety*

Franklin Williams – *President, Data and Insights*

PRESENTATION

Brian Miller

Good morning, everyone. We're going to go ahead and get started. I'm Brian Miller, chief financial officer of Tyler Technologies. I'd like to welcome you to Tyler Connect and our 2019 Investor Day Program.

First, I'm going to review the Safe Harbor Statement. During the course of this session, management may make statements that provide information other than historical information and may include projections concerning the company's future prospects, revenues, expenses, and profits. Such statements are considered forward-looking statements under the Private Securities Litigation Reform Act of 1995 and are subject to certain risks and uncertainties which could actual results to differ materially from these projections. We'd refer you to this slide and to our Form 10-K and other SEC filings for more information on those risks.

Also, I'd like to remind you that this session is being webcast today and recorded, April 8, 2019. An archived replay as well as the slide deck from today's presentation will be available in the Investor Relations section of our website under the presentations tab.

Here in the room, Wi-Fi is under the adolphusmeeting or tylerconnect network, and the password is tyler_19. That information should also be at your places.

We're pleased to welcome you to our corporate home here in Dallas in the birthplace of Tyler Technologies for our largest and most-attended Tyler Connect conference ever by a wide margin. We have nearly 6,000 Tyler clients in attendance representing users from all of our product groups along with almost 1,000 Tyler and partner personnel.

You know, Tyler is roughly the 75th-largest public company headquartered in Dallas with companies like ExxonMobil, American Airlines, Texas Instruments, and directly across the street from where we are today, AT&T's headquarters, but just for this week, Tyler's kind of a big deal here in Dallas, so we're happy that you joined us.

We appreciate you making the effort to be here for those of you who are here in person, and we encourage you to take the opportunity while you're here to interact with Tyler personnel, Tyler clients and to learn a lot more about our products and services. For those of you that are participating on the webcast or listening to a replay, we hope you can join us in person next year at Tyler Connect in Orlando.

We've put together a program today that we believe will provide greater insight into some topics that are of particular interest to investors today and that will allow you to hear from a broader group of our senior management team beyond that that regularly interacts with investors more often.

First, John Marr, our executive chairman, will have some brief introductory comments, and then Lynn Moore, our president and CEO, will provide an overview highlighting some of the more important aspects of our business model and recent developments. Then, our program is going to have seven sections.

Bruce Graham, our chief strategy officer, will provide an update on Tyler's Connected Communities Vision, which is at the core of our long-term growth strategy. Then, Jeff Green, our chief technology officer, will provide an update on our R&D and product development initiatives.

Then, we'll hear an update from the leaders of our two major product groups, Andy Teed, who leads our

enterprise group which includes our ERP and financial products as well as schools, community development, appraisal and tax, and land and vital records, and Bret Dixon, who runs our justice group, which includes our courts and justice and public safety products. Andy and Bret, along with some of their business unit leaders, will each provide a deeper dive into their groups highlighting some of our more recent acquisitions and our product visions.

We'll break for lunch in this room between the presentations. We'll then provide in-depth looks from the founders and leaders of our two largest acquisitions from the last year: Socrata, now our Data and Insights Division, and MicroPact. We hope that these presentations will give you a deeper understanding of how these businesses fit into Tyler's growth strategy and why we're so excited that they're now a part of Tyler.

Finally, we'll have a Q&A roundtable session with an extended group from our senior management team including business unit leaders as well as corporate management. We ask that you hold your questions, for the most part, until we get to this part of the program, and we'll also be able to take questions from the audience.

We appreciate your interest in Tyler Technologies, and we hope that you find the session valuable. If you need anything while you're here, please contact Patti Hall, our director of corporate communications, who's in the room or at the back, or one of our other staff members.

With that, I'd like to turn it over to John Marr, our executive chairman.

John Marr

Thanks, Brian. Good morning, everybody. Appreciate you being here with us. As you've heard this morning, I assume most of you went to the opening session. This is the biggest conference we've had, about 7,000 in the whole community between clients and partners and our own staff and you folks.

We appreciate you being here. It's a very efficient way for us to get our people in front of you and show you more about the company and get a little exposure to the team that runs the company day-in and day-out, so again, we appreciate you being here and look forward to the session. I think appropriately, Brian's put together a very robust schedule reflecting the interests and the people that we have here.

These are big deals for us. You'll hear some of the nostalgia in the sessions and the presentations. I sat through Munis. I heard Chris Hepburn say his first session was 26 years ago, and there were ten educational sessions for 20 clients there, and now we're talking about thousands of people and literally taking over a big city.

It's a little reflective of the whole evolution of the company. For all of us, it's an opportunity to look back and look at what we've achieved. What we've achieved has been challenging and probably against a lot of odds. Not only weren't there a lot of clients at those early conferences, but there wasn't a lot of financial visibility. Most of these divisions that were on their own weren't necessarily that strong and stable. They didn't have the kind of customer base and retention and visibility that we enjoy today, but they all had a lot of grit, and they all worked really hard.

I know when I got to the corporate level and was sent around to meet a lot of the different divisions and form relationships, kind of the first thing everyone would say to me is, "Well, the thing you need to understand about us is we're a lot different than the other divisions." That's what they were talking about, how gritty they were, how hard they worked, how they felt like family with their other employees and their other clients. The truth of the matter was, that was what was exactly the same about most of the companies we had acquired, certainly the companies that emerged to lead the whole Tyler story over the

next 15 years or so.

We're at a point now where we're kind of in transition, that we achieved a lot without a lot going for us, and now we have a lot going for us, but the challenges ahead of us are significant as well. We have all these clients. We have great retention. We have great recurring revenue, great financial visibility. As you've seen, the last couple years, we're in a position to when we choose to, invest and innovate at a higher level, and those are the things we're doing to be responsive to the marketplace out there, but there certainly are still a lot of challenges, and I think you'll hear that from the team today and learn a lot about the investments we're making that you folks have been supportive of.

We appreciate that the marketplace has been supportive of these investment decisions both organically as well as the acquisitions we've done and reinvestment in those companies as we've brought them online. So, I think you'll learn an awful lot about that.

Brian said I might want to mention the transition. Obviously, my role has changed over the last couple of years. It worked well for me and my family. I'm still very involved and very engaged in the important decisions of the company. Love it. Wouldn't want to be removed from that, and love working with the team and meeting the challenges ahead of us, but as I introduce Lynn, I want to say that this transition has gone really well.

Lynn's relationship with the people at the table and throughout the company is excellent. He's grasped all the operational side of the business that was a little further away from him in his earlier role, and I think the team couldn't be better organized and more supportive of each other, and I think that's a testament to Lynn's early leadership.

Lynn.

Lynn Moore

Good morning, everybody. As usual, John stole about half the stuff that I wanted to talk about, but that's kind of the way it's worked over the years. We tend to think a lot alike. I also want to welcome each of you all to the Tyler Investor Day, and I appreciate you all taking the time to come to Connect. It's a big event. It's months and months in planning, and our marketing team, our events team, they pull it off in a way that's just truly amazing, and I hope each of you all were able to be there at the opening session this morning.

Now, I realize many of you are pretty familiar with the Tyler story. Many of you spent time over the years with John and Brian and myself, but I think today is really a unique opportunity. We've done this before at Connect, but it's really a great opportunity to really get to know our management team a little bit better, take a deeper dive into certain parts of our business.

We have excellent operators up here, and not just up here, but throughout the whole business. I'd say we have the best in the business, so I'd encourage you on breaks, come up, ask questions. There will be questions and answers later, but really get to know these guys, get to know the businesses that they're running. They know it inside and out, and they're really what makes Tyler as great as it is today.

Sort of given that little backdrop, I'm going to be fairly brief in my remarks today because I want you to focus on the business that they're running. I'm going to give a slight high-level snapshot of sort of where we've been, what we've been doing over the last eight years. I'm going to talk a little bit about some of our recent investment decisions. Then, as Brian said, I'll turn it over to Bruce to talk about Connected Communities Vision, and we'll move forward with some of the management presentations.

So, a little bit about where we've been. We've had a fairly consistent history of strong revenue growth, and as John mentioned, it's been fueled by both organic and inorganic investments.

If you look at the middle part of this slide towards the top, it charts out our cumulative M&A, R&D, and capex spend going back to 2010. You can see M&A, we spent just under \$600 million on acquisitions in the last eight years, our R&D spend has been a little more than \$280 million, and our capex a little more than \$180 million. It's really all those investments that have fueled our growth. You drop down, you can see back in 2010, we were just under \$290 million in revenues; last year about \$935 million in revenues. We're about a 16% CAGR.

If you look to the left and the right of those charts, those pie charts, it breaks down those revenues by revenue lines. One of the things I want to point out, those that have been following us over the years, you know that what we're really in the business of is recurring revenues. That's why we get up every day. That's why we sell software licenses. That's why we do the services we do. We want to get customers on recurring revenues.

Back in 2010, our maintenance and subscriptions accounted for about 55% of our business. You can see when we fast forward to 2018, it's moved up to 65% of our business, and of course, that's on a lot bigger book of business. You drill down even a little bit deeper, we talk a lot about on our earnings calls about subscriptions.

Subscriptions are our fastest-growing revenue line. You see in 2010, it was about 8%, last year it was about 24%, but you step back from that, and you look at the absolute numbers, 8% of \$290 million, that was more about \$23 million in subscriptions. Last year, it was about \$225 million in subscriptions. So, you're looking at over an eight-year period, about a \$200 million increase or really a ten-fold.

Drop down a little bit, you see improvement in the operating margins over that last eight-year period, about 840 basis points or a little more than 100 basis points per year.

Next slide. We talk a lot about the scale and leverage in the business, I think this chart sort of exemplifies it. As revenues have been growing at about a 16% CAGR over the last eight-plus years, adjusted EBITDA has been growing at about 21%, non-GAAP EPS at 23%, and free cash flow at 27%. As a management team, as we look out into the future, we believe we can continue to achieve greater than 15% EPS growth on a long-term annual basis. That's really fueled by a couple things. It's fueled by good, solid, top-line revenue growth, low double-digits, which will be a combination of both organic and investments as well as operating leverage within the model.

Some of you who are maybe less familiar with the story may ask the question, what makes Tyler different. What separates us from others in our space or others in the market? I won't go through each of these in too much detail, but I thought I'd touch on some of them. Obviously, first and foremost, what we do, our singular focus day-in and day-out, is simply the public sector. What that means is literally we eat, drink, breathe, sleep the public sector.

We have about 32% of our employees have public sector experience, which means we really understand the unique needs of the public sector. I just showed from two slides ago, we're very consistent in reinvesting our capital back into R&D, so we have a very robust product development.

Our Evergreen model, also something that separates us. This basically means that our customers will get new releases, upgrades, the latest technology, as long as they stay current with our maintenance and our subscriptions. Really, what underpins the basis of our Evergreen model is we never want our customers to ever go out and have another purchasing decision. So, as long as we keep them current,

as long as we take that money, reinvest it back in the products, give them value for their dollars, they'll stay customers, and that's what we want is customers for life.

We have the broadest portfolio products with our space, best-of-breed products. There certainly may be some competitors out there. There may be a competitor, say for example, that has a competitive public safety solution, but they don't have a court solution, or they may have an ERP solution, but they don't have a really effective tax solution. We have really best-of-breed across all the major essential functional areas of local government.

We're flexible on how we deploy our software. We can deploy it on premise, we can host it in the cloud. That's important today. While it's certainly in the commercial world, there's more and more quicker adoption of the cloud, and we're starting to see it in our space. It's certainly not all the business, so having that flexibility allows us to be competitive with every offering opportunity that's out there.

Finally, and I think this one can't be overlooked, it's our history of excellent execution and reputation. You know, again, this just can't be overstated. Our business, being in the public sector, it's a little bit unique business. Our customers, unlike customers in the commercial world, they don't compete with one another. What that means is they share information with one another.

So, if you mess up an implementation, it's going to be known not in the jurisdiction next door, but the jurisdiction that may be five states away. Our business is subject to open records requests. So, everything we do has a spotlight on it, and that's really the secret sauce of our success.

Over our history, year after year, quarter after quarter, you listen to earnings calls, people talk about your bookings number, and they talk about your license fee growth, and they talk about your subscriptions, and that's all stuff that drives our growth. We never really talk about the successful implementations that we do. It's not quite as sexy, but without all those successful implementations, we wouldn't be where we are today.

It's really a testament to this team up here, this management team, their ability to execute, but not just that. It's all the teams, all the layers below there, and like I said, I've been in this business now 21 years, almost 21 years. We've done hundreds if not thousands and thousands of implementations, and the number of failed implementations on the Tyler side is very, very small. It's just truly a testament, and again, it's the secret sauce of what we do at Tyler.

So, for those of you who were at the opening session, you probably heard Bruce Graham talk about this Connected Communities Vision, and he talked about a lot of the older systems that are still in place in local government. He talked about mainframes. He talked about green screens and Cobalt [ph] and home grown systems, and when people come through our office, investors, they ask us a lot, is that really the landscape today. Is that still the landscape?

This is an article that came out last month by *Bloomberg*. As you can see, it says, "American Cities are Running on Software from the 80s." It talks about chicken wire and duct tape and how systems are based on software that predates the movies *War Games* and *Tron*. So, yes, it's very much a reality. It's the place where we compete in, but again, interesting article by *Bloomberg* that just came out last month.

So, one of the things that John, Brian, and I take very seriously as an executive management team is really what do we do with the cash that we generate for our shareholders. How do we decide to invest that capital? Typically we focus on three things. We focus on acquisitions, we focus on R&D, and we focus on stock repurchases. Each of these investments are really designed to drive future growth and provide better returns for our shareholders down the road.

This slide is a snapshot of some of our investments, more recent investments, in the last 12 months or so. As you can see, we've been fairly active. In the last 12 months, we've done seven acquisitions totaling about \$380 million. We've talked a lot about our internal, increased elevated investments in R&D, and last quarter—well, fourth quarter, not last quarter, we're in Q2 now—fourth quarter of last year, we repurchased about \$150 million worth of stock.

So, again, we've been actively investing over the last 12 months, and coming into this year, one of the mantras that we've had with the executive management team, things that we talk about it yes, we've made a lot of investments over the last 12-plus months. We have a lot on our plates, and the mantra right now is really focus and execution. That's what we do well. We have stuff going on all across Tyler, so really we want to put our heads down and execute on all these investments that we've been making over the last 12 months.

This is a little more detail into the acquisitions we've done in the last year. As I said, seven acquisitions totaling about \$380 million. I'm not going to go through each of these. You're going to hear a little bit more, both from the management presentations, but also the MicroPact and Socrata folks are going to come up and give a little more detail about their market and their strategy.

So, when we talk about acquisitions, generally what we're looking to do is we're looking to broaden our portfolio, strengthen our competitive position, and increase our TAM. This slide really highlights the impact of the recent MicroPact acquisition. The graphic on the left is a graphic that many of you have seen. It's generally in our standard investor presentation. The information comes from Gartner where they estimate that the state and local government market is about a \$16 billion market growing at about 6% per year.

Pre-MicroPact, the products and solutions, the suites that we offer really addressed about \$7 billion of that market, and of course, last year our revenues were just north of \$900 million. We believe after the MicroPact acquisition, which MicroPact you'll hear from Kris Collo a little bit later, they have a significant presence in the federal space, a significant presence at the state level, places where we did not really play, and so we believe the MicroPact acquisition added about \$2 billion to our TAM.

Finally, over the years, we've taken I'd say a fairly disciplined, yet active approach to share repurchases. So, what does that really mean? You're disciplined, but yet you're active. Really, what it means is that we, as a management team, when we believe there's a good market opportunity, we're certainly willing to jump in and invest in Tyler. I think this graphic shows that. As I said, we bought about \$150 million worth of stock last year.

If you go back to when our stock repurchase program started in the early 2000s, it actually started with an issuer tender offer. I think we bought about 5.1 million shares at \$4 a share, and the only regret is we didn't buy about \$200 million worth of shares at \$4 a share, but you can see we've been fairly proactive. I think if you look at our record, when you look at when there's been some pullbacks in the market, we certainly had a willingness to get in and buy our stock. You saw that in the fourth quarter.

We have a lot of people who come through the office, investors, they ask questions. They talk with Brian and I, and they all want to know what's your formula for buying stock, and that may be a question later today, but the answer's going to be we're not going to tell you our formula for buying stock. I will say our approach has changed a little bit over the last 12 to 15 years.

As John referenced in his opening comments, the business is a lot more stable today. It's a lot more predictable. We're in a lot better competitive position than we were twelve years ago, fourteen years

ago, and given that stability, given that runway, given our ability and our confidence to look out in the future, when we look at buying back stock, we're probably today willing to look a little farther down the road when we're trying to look at valuations as opposed to say, what we were doing ten years ago, twelve years ago. So, a slight, little change.

Again, this was just a really high-level snapshot of our business, where we've been the last eight years, how we invest our capital, the investments we've been making. Certainly be around on breaks for questions, and we'll be open for the Q&A later, but at this time, I'm going to turn it over to Bruce to talk about our Connected Communities Vision.

Bruce Graham

Thank you, all. It's good to be here. I see a lot of you as you come through Plano, so it's nice to have you here, and a lot of you have covered us for a long time, so thank you for that, and I hope that this is valuable to you.

Most of you I think were in the general session, so I'm going to keep my comments—do you mind just giving me a show of hands? How many were in the general session? Okay, and I know your hearts were racing when you were there, so I'm going to keep this brief, but I am going to go through the high points of that just so you can kind of get what was there.

One of the things just worth mentioning is the excellence awards is one of the things that we celebrate with our clients this week, and John mentioned the length of time that we've been working with these clients. I don't want to overstate this, but we look forward to this event. Our staff looks forward to it, our clients look forward to it. It's a chance to celebrate the good things that are happening with technology in local government, and we're leading a lot of that.

We think there's more to do that's ahead of us with this Connected Communities Vision, but when you look backwards, there's probably—I'd have to get the exact number—but, probably well over 100 excellence awards that were given out this week to different departments, different agencies, and you would be astonished if you heard some of the really cool things our clients are doing with our technology.

So, one of the key things though, and what we said in the main stage is that we still don't think we're all the way there because the bigger challenge that effects everything that we do in local government is this problem of silos that these agencies and these departments operate very independently with independently-elected officials often or independently-appointed heads, and that over time, creates real issues.

We showed you this in that group where you begin to move from a single department, and that department actually working with other departments in a city or in a county that begins to work up very often is very normal for one of our clients to be working across eight, ten different agencies that they have to interact with routinely.

If you take that up to a city, you may have scores of those agencies. If you take it up to a county, all of those cities within the county often are having to work with the county and with each other in some kind of a way. Over time, what that creates is this complexity of systems architecture, and Lynn mentioned the vintages of these technologies.

We just gave an award to Alameda, to their Alameda Supervision. The individual who accepted the award said, "I was not born when this system we replaced was put in." He said it was installed in 1973, and they had just moved this last year to CaseloadPRO. Alameda is Oakland County. It's a place with a lot of demands on the probation department there, and they've moved now to current technology. So,

the thing about this when you see this visual is all of those are different vintages. Those are mainframes and micro computers and mini computers. We've replaced an MS DOS system this year, and that's the challenge that those of us that work in this sector are dealing with every day and that our clients have to overcome.

So, we came at that and said we have to address this. We have 15,000 implementations of our software. This is something that we can't just look the other way and sell to all the individual departments. If we're going to solve a big problem, we have to begin to go at this. So, that's what we launched with this Connected Communities Vision, and we did that two years ago. We shared with you at that time we thought that was something like a ten-year vision.

I think we're two years into that vision, frankly, and I think it's going to take that time. That's okay. This market doesn't move fast. It's important to attack this and solve the big problems, and what we tried to do this time in that session that we just shared is go directly to our clients. We really shared an architecture two years ago that we framed up for you. All that's still in play for us.

This time what we wanted to do is go deeper on what does it mean for our clients. How do they begin to take this and take it back home to their community? That's what you saw us frame up in that session.

So, as we looked at that, we really grouped everything that we're going to talk about in this Connected Communities Vision, particularly with our clients, in one of these four areas: operations, data, partners, and the public. The operations areas—and, all of that by the way, is about empowering them to be able to actually transform their community.

So, operations is the core applications they use every day. These are the applications you think of when you think of Tyler. They're typically role-based, purpose-built, designed for a front line role or a back office role, and designed to be optimized in that way. That has been core to what we do. We're not shying away from that. We're not moving in some other direction.

These are the things that are on the RFP list that we have to answer. These are the checklists our clients expect from us, and then what we're also doing, and we showed main stage, was we want to leverage the most current technologies and bring that to bear directly to our clients. That was the example we showed you with ShieldForce in that video. That's the kind of thing that actually begins to bring current, mobile technology, brings that to the front line so a first responder has everything they need in the situation to respond. That's what we described there.

You'll see that happen. We're going to make this more efficient, more specialized. This doesn't change for us. This is job one. It's a big chunk of what this session this week is all about. If you went out to the different tracks that are there, some of you may attend some of those. I think you're welcome to see that. It's going to be all on this vein. That's what we're going to be showing you through the week, and that's what most of our clients are here to get trained on.

The second piece is around data, and this was—you know, there's a lot of people that were saying look, the next big thing you have to do in public sector is work on data. We looked at this, and the reason we were so excited about Socrata is they were actually doing something we thought that mattered. They were doing it at a level and scale that nobody else was able to play at.

Lynn spoke a bit about this acquisition. We look at that what they begin to allow us to do. We showed the video on Austin there and this whole challenge of beginning to deal with key questions. You can't work in public sector and just work in a single silo and begin to solve the biggest problems that face our clients. We have to be able to tap into the core data that's there, not only in our transaction systems, our

systems of record, but in everybody else's as well.

Now, the reason that this is such an exciting development and why our clients are so excited is our system is now out of the box. We will begin to enable to pump data into the Socrata data as a service cloud. That was the single biggest barrier for Socrata in the past was actually having to deal with all the different CMSs, in my case, or in all the other different systems of record. They had to go wire those up to pump that into their cloud to begin to find the patterns in that data.

With our purchase of them, now we actually are able to pull that data in automatically, and now all we have to work is on the other systems that are there. This is the thing that our clients are so excited and we're excited because it begins to let us go after the biggest challenges that face our communities.

Every state legislature is trying to say where should we spend more money in the public sector to make a difference in these communities. They don't want to waste money. They want to do the right thing. What they need is data, and that data is not going to reside in any one system of record. It's going to be pulled from multiple, different systems, and then you pull together to answer the hardest questions.

That's what we showed with Austin. That was a city, we see it at the state level, think about a county. In my world where you're trying to understand well, if you're dealing with something like the opioid crisis. You say well, should I invest more in specialty courts, or should I put them all in prison? Well, that's a pretty key question. You know, there's a lot of work going on in specialty courts. Wouldn't it be great to know what's working and what's not?

All that data doesn't reside in any one single system. We have to pull from several, and that's one of the reasons that the Socrata acquisition for us was game changing. It allowed us to not have to wait for all these systems to be tied to a particular suite but allow us to work across a heterogeneous set of systems and to accelerate that for all the communities that we serve.

The third area is partners, and you're going to hear a lot more about this from my colleagues as they go into these different areas. What you've seen us do here is actually begin to group this. So, this is a significant amount of the work, as I said, that our clients have to do in these adjacent agencies all within these long-running processes.

Everything I mentioned on stage, if you look at that, those are long-running processes from the time somebody is picked up, or the dispatch occurs, through disposition. It is very, very normal to be in a couple of years for them to go through the legal system on that.

We talk about land development, public administration. These are multi-years, maybe multi-decade processes, and working across city and county boundaries and a number of agencies that are there. So, that's what you've seen us do here. We've been pretty straight up with this. We're real straight up with our clients because the suite idea helps them understand the concept. They're glad to hear we want it to work like a suite even though these are purchased independently because they are. Whoever had the money or the budget went out to bid at the time that they did, but we want them to begin to do things and operate like a suite.

That's what you see here, these Connected Community suites. So, public administration, land development, justice and public safety, K through 12 education. Really, all of the solutions that we have, everything that makes up Tyler today, sorts into one of these different suites. Within those different suites, we want them to act as a coordinated team in some way that they're all working on a common, long-running process. That's the way that we would describe it to you, and you saw what we did with our clients.

Now, the video that we had about public administration, I thought was great and worthy of kind of going through again. As I said in the session or in the keynote, this looks easy. This video makes it look like oh yes, we just plan it, and then we permit, and then we do the regulatory planning. You have to realize you're tripping across all different kinds of agencies there, and it's very sophisticated in terms of what's being able to be provided and of great value to those that are doing this every day.

So, with that, I think we're going to roll the public administration suite.

[Video presentation].

I love that video. I think it tells the story in a very quick way of what we're trying to do. Think about what's being described there. We're talking about the major infrastructure of a city or a county and their ability to put that in, to plan it, to actually see it eventually spur development within that community, and that is what ultimately all the cities that we serve, they want to be a thriving community.

The way they appropriate tax dollars, the way they spend that money and account for it matters. It's what attracts developers to want to develop in their communities. All of that is what's behind us, and this is only two years into this vision. You'll see this only continue to grow through us, and that's what's so exciting for us to get to share with our clients, share with you all the progress we've made so far, but first step here, and you got to see kind of a preview of what's already beginning to happen.

Public administration, the public side of this, and what we showed main stage, is really transforming the way that people interact with government. Now, the one that we used there was MyCivic, which was an acquisition that we made. It begins to use mobile technologies to engage citizens, but if you go into any of the sessions that are here, all these general sessions that are here, every one of these groups is focused on how do they transform the public interaction.

In my world, it's Modria and what we're doing with online disputes. Every one of these individuals, and what you'll hear in the sessions to come, is all about how do I transform how a citizen interacts. What you saw there with MyCivic is how do we piggyback on the fact that every citizen pretty much has a smartphone. Why would I ignore that if we're trying to make our government more efficient and more effective? That's what you see.

So, the work with the smartphone that started with Steve Jobs in this consumerization of technology, that's what we're piggybacking on, and there's far more than that. Every element of what's there has really been what's driving us.

As I said, I was going to keep my remarks short. You're going to hear a lot more depth from my colleagues, and that's what's great is the chance to share with you what they're doing around making this Connected Communities Vision a reality today and going forward. Thank you.

Lynn Moore

Brian's helping out the chief technology—

Brian Miller

That's scary.

Jeff Green

Alright, good morning, everybody. I'm Jeff Green. I'm the CTO for Tyler, and I'm going to kind of drill in a little bit on some of the detailed projects that we have underway that kind of map out our Connected

Communities Vision that Bruce shared with you. Picture of me, big deal.

Before I get into this, I do want to say I think what we really need to be focused on is taking those marketing videos and figuring out how to compile them into a product. I think that's one of the projects we should start.

Alright, so I'm going to frame my remarks in kind of these same Connected Communities buckets that we've been talking about starting with operations, which for us, means kind of taking our best-of-breed products and continuing to add capabilities to those that we can win in individual deals that we face. As Bruce mentioned, we have individual buyers out there that are buying line of business applications, and we need to win those deals, so we need to have fully-featured, capable products that can beat our competition.

One of the things that we've really been focused on in the last year or so is starting to improve what we call the Tyler User Experience and spread that across our entire application suite. So, many of Tyler's products are from different vintages, and so on, and they look and behave differently. As we start talking to our customers about suites, it's important that all of those suites look and behave the same.

To use the analysis of Microsoft Office or G Suite, those all share a common UI that makes it easy for people to navigate between them, and we want to do that with Tyler products as well. So, I'm going to drill into that a little bit.

I'm going to focus, too, on this public-facing side, so we're starting to develop what I would call a comprehensive citizen experience strategy, and I want to share that with you. A big part of that is the MyCivic acquisition and taking more of what we do mobile and meeting citizens where they are, which typically is on a smartphone these days.

I'll talk about the data and what we've been doing with Socrata since we've acquired them, and that really is all about building the momentum around the Socrata Connected Government Cloud, what we call SCGC, and then taking that platform and building unique vertical applications that are really focused on a particular area of business whether it's courts or tax or finance or something like that.

Then, finally, I'll talk about what Bruce described and what we think of as partners, and this is how we're building integrations between Tyler products both within an agency and across agencies to really make them work better as a suite. So, when you buy multiple Tyler products, you get functionality that only Tyler can deliver.

So, let's start with this operations stuff. These are, again, building our best-of-breed applications. So, I'm going to focus on kind of three of the four product suites just because I'm familiar with what's been going on in those, and we often get questions from you all about hey, what are you guys spending all this R&D money on, so I just wanted to highlight a few of these things.

So, in the public administration area, we are working on a next-generation general ledger inside of our ERP applications that's going to make it more competitive with tier one offerings. We have a whole new employee service portal going on. We mentioned in the opening session the investments we've made in enterprise asset management, and just a handful of other things in this area that represent net new investment, additional functionality, and our levers for growth in the public administration suite of applications.

On the land development side, we continue to make progress with our EnerGov suite. If you manage to go to any of the EnerGov sessions this week, you'll see a lot of very great work that they've been doing

there. We're bringing all of our products together under something we call Tyler Hub which provides analytics, workflow, and a canvas to surface data and application processes to all Tyler applications that an organization might have.

We have all kinds of enhancements going on in the licensing and regulatory space, and then we talked about mobilize in the opening session. So, integrating that with our EnerGov product suite as well as the public safety side is something that we're focused on.

Then, finally, I'll highlight some of the things that we're doing in the justice and public safety space. So, Bruce mentioned the mobile and wearable. That is a big focus area for our public safety group. Again, bringing situational awareness, officer safety right into the field, into the devices that they use every day.

You're aware that we acquired SceneDoc, which is a mobile field and incident reporting application, so we're working on the integration of that into our entire public safety suite. We have some exciting enhancements in CAD around RapidSOS, and then on the Odyssey on the court side, some really exciting things on how to build workflows within Odyssey.

We continue to invest in our research service, a cloud-based service for attorneys, and then as you know, we also acquired CaseloadPRO, which we've rebranded Tyler Supervision, and we're integrating that into our overall justice suite. So, we're doing a lot of the necessary things that we need to do to win competitive deals in each of these applications, and we're making a lot of great strides there.

I did want to talk briefly about this Tyler User Experience because it's super important to me personally, but I also think that it's starting to resonate with our clients, and they're starting to see that yes, hey, if I learn one Tyler application, that knowledge can transfer across all of them, and it makes it easier, honestly, for us to sell our applications as a suite if they look like they all came from one company, and they all act and behave the same way.

So, we've really invested quite a bit in building both a design and research team that is driving this Tyler User Experience into all of our product teams. We use something called the user-centered design to be our guiding principle here, and we're making a lot of great headway in that.

Now, to kind of act as a force multiplier for this, we've built what we call a design system. We call it Tyler Forge [ph], and this is something that's available to all the developers across Tyler. Tyler Forge provides a bunch of best practices, actual components for building applications, guidance, patterns, all these kinds of things. It's an application that we built, and it's enabling us to take our small UX team and actually leverage it across the 1,200 or so product development professionals that are at Tyler.

What we're able to do, and this is actually what we have done just the last year, we are turning stuff that looks like this. You can see, these are Tyler applications. They all look really different, and what we have been able to do is kind of take that mish-mash of user interfaces and really turn it into something that looks more like this where we have a common design language across all of our applications, a beautiful and modern user experience that people actually like to use.

We get great feedback in demos. People say wow, that is software that I would really like to use, and once people start using it, they enjoy it, and they see how their interactions with the software easily translate from one application to the next. It kind of reinforces this suite approach that we want to take with our customers.

Okay, on the public side, on the citizen engagement side, again, we want to put citizens at the center of what we're doing. Citizens are the constituents. They're paying for all this stuff, but typically they've been

forgotten. We've really been focused on back office applications. That's what our customers are focused on, too. They want to get the best finance system or tax system or whatever.

Often, they kind of lose sight of the actual citizen experience and how they interact with their government, and citizens are starting to demand more and more online interaction. That's how they interact with every other company, the Amazons of the world, their banks, or whatever. Why shouldn't they interact with their local government in the same way?

So, that's what we've been focused on a lot. This is a quote from a Gartner researcher in the citizen experience space. The real key here is cities should act as a single entity to their citizens. If you've been on any local government website, you know that's not the case because those get assembled from a mish-mash of vendors using different technologies, different ways of doing things, and I can't have a unified experience with my city, my county, my school district. That's what we're trying to achieve, and this is something that I think is becoming more and more important to citizens as well as the governments.

So, some of the things that we're doing here, we've talked about this in the past, but we have a platform now for creating a shared citizen identity across all of our platforms. This is important. When I log in, I log in one time, and now the system knows who I am, so I can seamlessly move from application area to application area whether it's tax or business licensing or my park and rec system or whatever. I have one shared identity, and I don't have to authenticate the multiple, different systems.

We have a whole bunch of common services that the applications that we're building can run on so our developers don't have to reinvent the wheel every time. Again, we're trying to meet the citizens where they are with the technology which really is in their hand these days.

So, the way that we kind of think about this just to put it up on a graphic here, so we have our back office, the traditional Tyler solutions, and the shared services that I talked about really at the base here. We've opened up those applications using these open APIs, and on top of that, we are building out this complete citizen experience suite.

We think of this in kind of three different buckets. Digital services which are things like paying my utility bill, registering my kid for little league, seeing what my son's schedule is at school, paying my parking ticket. Those are the digital services. We have a number of applications in this area already, but what we're trying to do is bring them all together under one umbrella.

The second part of citizen experience is what we call community insights, and this is all about open government transparency, building solutions on top of the Socrata platform to make government more accessible and transparent to their citizens. So, we have the Socrata open data portal. We have purpose-built applications on top of that that show finance information, crime information, and so on.

Then, the third part of this citizen experience strategy is around civic engagement. So, things like Tyler Meeting Manager, Tyler Notify, Tyler 311, actually interacting with citizens. Then, at the top level here, we have the vehicles that we're delivering this experience. So, one is our web portal, Tyler Portico, so one, single web interface for doing all the stuff that you see there.

The second would be MyCivic. This is the handheld version of that. So, a single, mobile app for accessing all of the digital services, insights, and engagement capabilities that a city wants to deliver.

Then, coming soon, voice assistance, so that's one more place where we can meet citizens, so the Alexa, Hey Google, those kinds of things. We have this common technology stack that's enabled by all these APIs. It's pretty easy for us to deliver an experience like that.

So, anyway, this is the big citizen experience thing, and we're aligning all of our products and efforts under this kind of strategy here.

Alright. So, what are we doing with data? Data is super important. We're doing a lot of cool stuff here, so the first thing is we're actually extending and integrating the Socrata platform. Socrata launched SCGC last May. Since then, the expectations that they had in the marketplace have been exceeded. It's landing really, really well, but there's yet a lot to do. So, we're continuing to invest in the SCGS platform to make it even more exciting for customers.

You can see some of the things that we're doing there, data sharing between jurisdictions, which again, is a big part of the Connected Communities strategy, improvements to the dashboarding and performance management suite there, entity search, which is something that Bruce talked about in the opening session, so that we can actually distill out of these millions of data points specific entities like person or building, location, and being able to derive insight around those entities.

Finally, what we're trying to do is bring machine learning and things like Jupyter Notebook out of the box with the Socrata platform. This is kind of arcane data science to a lot of people, and a lot of municipal governments just don't have the resources to actually implement machine learning and derive insight out of it. We think that we can build and package tested machine learning models through the platform and kind of democratize the access to ML.

We're also doing a lot of work integrating the existing Socrata applications into the Tyler base. So, I mentioned those on the Community Insights page, Socrata had a lot of transparency products. So, we're hooking all those up to the various Tyler applications. You can see a list of them here and making those just work out of the box. We can implement these things in hours. They've already hooked up the Tyler data. It's very straightforward to do this.

Then, finally, what we're trying to do is built out-of-the-box analytics for internal users like government workers consuming the Socrata platform. How can they derive the most value out of it? Well, they can do this, particularly at the mid-tier and lower, by us kind of building these insights for them. So, out-of-the-box dashboards that really focus on best practices that we know of through our work with larger organizations on the Socrata platform.

So, we're building things like crime analytics, comp stat, appraisal insights. These are all specific, vertical applications built on top of the Socrata platform that provide out-of-the-box, immediate value to customers.

Then, finally on the partner side, so when we think about partners, we really are thinking about how we're integrating our applications, and we've talked about that with two different programs. One is Tyler Alliance, which focuses on our courts and justice and public safety suites, and the other is Tyler Nexus, which focuses on our civic services and public administration suite.

So, just to kind of look at some of the stuff that we're doing here, we think of these process communities in these four different suites, and what we're really trying to do is enable integration across these different suites and within the different suites so that people gain more value out of having multiple Tyler applications installed. This is something I think only we can do because of the breadth of our portfolio. We are leveraging a lot of the common application components that we've already built, so now we're starting to stitch these applications together.

I just want to point out a couple of different examples. When you decompose the public safety and justice

thread, Bruce talked about it in the opening session in the context of all these TV dramas, mine isn't all that exciting, but if you look at the different processes that are involved all the way from when a call for service goes out to where a possible criminal gets released, there's a lot of different things that happen. There's a lot of hand-offs that have to take place between the public safety organization, the courts, probation, and so on.

What we're doing is enabling all those hand-offs to be automated because typically, today, they are not. Those all are different systems controlled by different political entities, and doing the integration between them is technically complicated. It's also structurally difficult as well, and we're trying to get rid of that whole technical hurdle for that by building out these Tyler Alliance integrations.

The majority of these things are built and working. The ones that aren't yet, we're just going to continue to march down the path, but this brings together our New World Brazos, courts, really all of those portfolio applications that we have in the justice and public safety suite.

Then, I want to focus on one particular integration scenario on the Nexus side. Again, this is on the public administration and civic services side, and these are the long-running processes that kind of speak to the civic services story that Bruce showed in the video. That is around land development. Most of you probably know a little bit about this, but people need a lot of information when you're developing property starting from raw land to a building. A lot of business process happens starting with planning.

Planners need real-time access to property information, which is typically housed in a separate system. It's in a tax and appraisal system. It's not in the planning system. The recorder needs workflow that needs to be automatically triggered when certain events happen so that the recorder who's recording things like deeds and easements and all those kinds of things need to be part of this long-running workflow.

When property gets transferred, it gets bought by a developer and then transferred to somebody who's going to build and all that kind of stuff. We want to automate that process. Permitting needs real-time property data as well, and then finally on the appraisal side, as property gets improved and developed, well that feeds into the appraisal process, the tax process, and all that kind of stuff.

So, how can we look at this really, really long-running workflow which could take place over multiple years and stitch this thing together so that a lot of these processes happen automatically and that nobody has to re-enter data and all that kind of stuff? So, this is what we're envisioning, and actually this is what we're building this year.

So, it's really about putting together our property-focused applications like EnerGov, like Eagle Recorder, like our appraisal and tax systems into one land development suite where these processes are automated, and nobody else is doing this, by the way.

So, just kind of walking you through this, let's say there's a developer. They want to build something in a community. Well, they get a plan submitted. All these things have to happen, and these are all different systems in which they have to happen. We're linking these things together so that as parcels get created, things happen in the GIS so that zoning gets notified, so that the new parcels can be validated before they're entered into the tax system.

When the property transfers, we can share data between the recording system, the tax system, and the permitting system so this is completely seamless for the people that are operating the process. By the way, this process is typically cross-jurisdictional. So, I have a building in a city, but the land records and the tax typically at the county, and that's where those silos start to form. The data does not flow from the

city to the county in any way that you or I would think of as common sense. We can fix that. So, that's what we're trying to do with this scenario.

Finally, as the property gets built, gets appraised, that workflow starts, and that's how we're building out this kind of Nexus scenario.

So, that's just kind of a flavor of some of the stuff that we're doing as we build the integrations between Tyler products. Hopefully, that made sense to you. I just want to kind of close with some summaries here.

So, we're still investing in our best-of-breed products. We're going to win individual deals, so we're going to fight the feature function race, and we continue to do that, but we are adding unique capabilities to our products that customers will really realize when they deploy more than one Tyler product. We want there to be a benefit to them to buy more than one Tyler solution. They'll be able to do more because of these integrations that we're building.

Then, finally, these acquisitions of Socrata and MyCivic, like Socrata on the data side, MyCivic on the citizen experience side, these really reinforce and extend this Connected Communities Vision, I think, that we've been talking about for two years now.

Okay, that was all I had. Thank you.

Andy Teed

Hello, everyone. It's great to see such a large group. My name is Andy Teed. I'm responsible for our Enterprise Group. Today, with me helping deliver this segment of the presentation are Dane Womble and Chris Hepburn. They're going to talk about a few recent acquisitions that we've done that we either have integrated or are integrating into their respective operations as well as a couple of R&D initiatives that we've recently brought to market and began to sell.

These are 20, 25-year guys. Dane runs our second-largest P&L in Tyler, the LGD division. Chris runs our largest P&L in Tyler, the ERP division. They're both superstars in our organization, and I would encourage you, if you get an opportunity, to spend some one-on-one time with them either today or later in the conference. I think you'll find their answers to any questions you have pretty insightful.

So, I've been around since 2002, and I can tell you that one thing that I feel our organization has always done well is maintain a priority around the importance of growth as well as maintain discipline around executing that growth profitably. This ethic runs much deeper than just those of us that are on the stage today. It runs deep within our organizations, and I think organizationally, we appreciate that growth is that magical elixir that allows us organizationally to deliver at the highest level for all three of our constituents: our employees, our customers, and of course, you all, our shareholders. So, as you're listening to Chris, Dane, and I today, please consider our comments in the context of growth opportunities in the future.

I want to start with a few statistics. This slide represents market share for the three largest verticals in the Enterprise Group. We can look at market share any number of ways from total license fee equivalents to total recurring revenue opportunities. In the appraisal and tax market, we can look at total parcels that are under management within our applications.

Here, we're looking at it based on the number of clients we serve relative to the tiers within each of these verticals where we compete aggressively. The definitions are down at the bottom of the slide. You can see those later. My attempt on this slide isn't to focus on any particular percentage other than to highlight

that while we've done a great job for a number of years growing our market share, there remains a significant amount of share that's available to us to capture for many years into the future, so this is still a great growth opportunity for us to just continue to deliver on the core business.

The next slide, next set of data, represents our win rates in 2018. Now, in fairness, we call a win even if we have a sole source deal. We consider that a win, and we do have success particularly in the community development and financial space of winning deal where we're sole sourced.

We most likely are losing some deals, particularly in the lower tiers of these markets to competitors that we don't know about. That probably does happen from time to time. Again, most likely, in the lower segments of those markets, not necessarily in the higher segments, but the way we calculate a win is a win that we were awarded in 2018 divided by the total number of opportunities that we've pursued.

Each of these verticals are very competitive, and while these win rates are enviable, we don't look at this rates and say hey, we can't do better. We challenge ourselves every day to continue to improve, and we do believe that we can continue to improve these rates over time, which is certainly a growth driver.

I'll jump to the next slide. There are a number of things that we're doing to constantly improve our competitiveness, but one I want to highlight here and really be the lead-in to what Chris and Dane are going to talk to you about in a moment, that as we can build new products that we bring to market and sell, as we can buy applications that we can tightly integrate into our suite, we have a double benefit. We're not only growing our addressable market, which is certainly a growth driver, but we're also increasing the competitiveness of our suite.

I can't overestimate enough the value of the integrated nature of these tools within the suite. That smooth client experience definitely helps us in demo situations and definitely helps us with client retention.

So, some examples. We have a number of R&D initiatives right now underway to build new products to bring to market. A couple that we've recently brought to market are Tyler Enterprise asset management and the Tyler smart meters. Chris and Dane will talk about these in a moment, and then they'll also talk about a few recent acquisitions that we've done, ExecuTime, MyCivic, and Sage.

This slide is the same as the last except for the fact that it shows the Tyler branding around the recent acquisitions. I tend to think of us as a roll-up of sorts. Not a roll-up in the traditional sense where we're buying market share, buying clients. We're happy to compete for clients one at a time in the marketplace, but we are rolling up the industry functionally, and as I mentioned earlier, we had the dual benefit of growing our addressable market as we do that as well as increasing the competitiveness of our offerings and ultimately driving higher win rates over time.

Before I hand the baton to Dane to talk about a couple of these recent initiatives, I just wanted to highlight and emphasize a couple of the things that Jeff said around these broader Nexus and Alliance initiatives. I'll use the land development lifecycle as an example. As he said, we are selling here, or we are building here, across verticals. So, in this case, we're building integrations between three discrete operations that really do run autonomously in most communities. They're managed separately, they procure separately, and in this case, it's the recorder of deeds, it's the planning operation, and then of course, the property tax offices.

When we do build these integrations, we are adding a layer of value that really we're only in a position to do, and as Jeff said earlier—well, as this slide says, we're in the best position to do it in the marketplace, but as Jeff said earlier, we're really the only company in the market given the breadth of our product offerings to be able to deliver on this solution, and this is critical to us, too, because again, it'll have a

positive influence on win rates over the long term.

Thanks. Dane.

Dane Womble

My remarks will be around more of an operator's perspective, and I'll be a click down below what these guys have communicated so far this morning.

Alright. So, I want to talk about how we're looking to extend our market by really increasing our focus on the citizen, and one of those focuses in the smart meter investment, our internal R&D investment. Smart meters, otherwise known as AMI, advanced metering infrastructure, so smart meters today can provide real-time consumption data.

Our R&D investment is really integrating that data into our already existing billing and payment platforms. We're looking to provide the citizen in the palm of their hands real-time consumption data where they can create alerts and notifications, potentially breaching billing payment thresholds or potential early leak detection.

So, if you look at the smart meter market overall, in the US market alone, it's expected to spend over \$20 billion over the next decade in software, data, and analytics. According to Gartner, the smart meter market has grown about 9% to 11% per year, and if you look at the saturation levels, of all the water meters that are in the US, only 35% are smart today. Of all of the electric meters, only 50% are smart today, and of gas meters, about 40%. So, this market is still in the early stages, still emerging and developing, and we're uniquely positioned to capitalize on that market.

So, cities, districts, co-ops, the different entities that are buying these smart meters, they're having to replace their aging meter infrastructure, and they're replacing with smart meters. These smart meters provide real-time consumption data, help provide enhanced customer service, more accurate billings, help them manage their peak demands throughout their infrastructure, and then also promote energy conservation.

There's really a disconnect from these smart meters. The disconnect is that us, as citizens, we want just a single application. We want an application where we can leverage that smart meter data on our mobile phone. So, what we're doing is integrating the smart meter applications with the strategy and the focus around the citizen experience to capitalize on the citizen experience with the mobile applications.

So, now with one application and bringing this all together, now the citizen can get real-time billing alerts, notifications, can set their own alerts and notifications around thresholds, like I said, breaching those billing payment thresholds. Then, with the evolution of the smart meters, we're also looking at prepaid metering, which is basically pay as you go.

So, as we look to consolidate all of these point solutions into a single application, definitely create a competitive advantage and differentiation for us in the marketplace.

I wanted to kind of give you a view, too, of how we view this over time with our ARR. The initial estimates are that we're projecting to \$10 million of ARR in our smart meter investment over the next four years with an aggregate of \$10 million over this four years, and then a \$5 million ARR ending run rate. Then, with our existing customer base of about 2,200 utility billing accounts and our investments into the application and looking at our existing accounts, it's basically estimated about \$10 billion to \$20 billion ARR over the next several years.

So, billing consumption and meter information are just elements of transparency. That's not the only

element of transparency that the citizens are looking for. They're looking for citizen engagement.

So, governments are looking to engage with their local government agencies today through YouTube, Facebook pages, Twitter accounts, and then they're already putting the focus around this in dozens of applications that they're looking to provide.

With the MyCivic application, we're consolidating all this information to a single application. So, now we'll take a citizen application with Facebook pages and all of their social channels, and we'll consolidate it into a single application.

So, with the mobile applications, there's 70 million millennials who are getting anxiety with—sorry, 70% of millennials getting anxiety when they're away from their mobile phones, 77% would give up caffeine for a week as opposed to their mobile phones, and 28% would not use their smartphones—only using their smartphones for accessing internet. So, as the smartphone market grows, the most valuable real estate is really the screen real estate.

With MyCivic, we're really putting the City Hall in the citizen's hands, and there's already success stories and innovation awards given to cities that are using My Civic. So, Tyler, Texas is an example here where they received an innovation award for their use of MyCivic in increasing their transparency, and increasing their citizen engagement and interactive communication between the government and the agency.

Another example is, Temecula, California where they increased their citizen engagement by 400%. They had more people show up to groundbreaking, park openings, community events. They had more issues reported, and with their use of Tyler's back office applications they're able to resolve those issues more timely and more efficiently.

So, MyCivic doesn't sit just on top of ERP applications. It sits across all of the verticals that we have among Tyler. When I say MyCivic, it's City Hall in the citizens' hands, it's really putting all forms of local government in the citizens' hands. So, now with one app, one login, they can access their utility bill.

They can pay for their utility bill. They can look at projected consumption. They can check on their kids' grades. They can apply for a permit, renew a business license. They can make public safety requests. They can report a non-emergency crime all from within one application and one login.

So, to give you some numbers on a projected ARR for MyCivic as we have, if you look at the way we priced this application is by module. With over 20,000 installations of Tyler across the country, in its early estimates, a conservative and more aggressive number, from conservative numbers of \$1.5 million and ending run rate of three years to \$5 million, and then an aggregate ARR.

So, I view our business B2G2C, but I'd like to say it's more like B2², so we want to provide exponential benefits to the citizens when we're partnering with our clients, and as we focus on the citizen, we want to provide exponential benefits to the shareholders as well.

With our citizen focus, we want the citizens, not just the government agencies, but we want the citizens themselves to really feel and experience the Tyler difference through a Connected Community.

Chris.

Chris Hepburn

Good afternoon. Thanks for the opportunity to present to you today. I see a couple familiar faces, but I probably haven't met most of you, so if I could just take a second, I'll introduce myself. Chris Hepburn,

president of ERP and School division.

Within the ERP and School division, we have the following applications. For ERP, we have Munis, Eden, New World ERP, and our Dynamics relationship with Microsoft. For our School applications, we have Tyler Student Information system and our Tyler Student Transportation system, and we house a couple Tyler-wide applications, 311, Tyler Parks and Rec, Tyler Cashiering, EAM, ExecuTime, and Tyler Cybersecurity Solutions. It's those last three that I'm going to focus on today.

I probably should have advanced the slides a little earlier. I apologize about that.

So, Tyler EAM is an investment project. You heard Lynn mention our investments are either investment projects we build on our own or acquire. This was a space where the acquisition market just wasn't of interest or too pricey, quite honestly, so we went out and built the Tyler EAM application. It's been one of the largest investment projects within the ERP division over the past four years, and the video that Bruce showed was really impressive.

These are the products that you were seeing on the video. You were looking at Munis. You were looking at Utility Billing, 311, and EnerGov, and in the middle of that, what brings it all together is EAM. That's why that investment was so important to us is to bring those solutions together. It makes it much easier for our clients who are trying to get that data from Utilities or 311 or EnerGov back into their financial application.

On this particular slide, in terms of investments, Munis obviously is an investment. EAM is an investment. Utility Billing is an investment, 311 we built. EnerGov we acquired, so you can see how we seamlessly integrate regardless of whether we purchase or build.

The next one is Tyler Detect. You learned about this this morning in our opening session. This is an exciting new service that we can offer to our clients. We can offer services such as penetration tests or vulnerability scans, risk assessments, but also detection in monitoring. The key here is the human element.

Is this popular? Do our clients want this? We acquired this in May of last year, and we had some development work to do, so we kind of kept quiet and were investing quite heavily over the summer, but since September, we've offered webinars to our ERP clients, and you can see 110 clients have signed up for the webinar. Actually, one to two Tyler clients are impacted by malware weekly. We have 181 clients here at Connect registered for the first ever classes that Tyler's going to teach on cybersecurity, so this is a popular topic, one that's near and dear to a lot of our clients.

Just a quick visual, you can appreciate that almost every one of our clients has a firewall and antivirus software. Every client that's been impacted by malware has a firewall and antivirus software. So, what happened? Well, whether it's you're clicking on an email that you shouldn't click on, somehow a virus is getting inside your network, and—if I could go back one.

I'm sorry. I clicked when I shouldn't have. Thank you. No reverse on the clicker, by the way. No rearview mirrors up here.

When that malware resides on a PC, what it's trying to do is spread. It's trying to infect other PCs. The minute it goes from one PC to another, the log file on the PC has a record indicator, and that's what we're searching for. We're searching for those record indicators where a PC is trying to communicate, malware is trying to connect with the mothership, as it were.

Our analysts get a report daily, hourly, of suspicious communication activity amongst PCs or networks. They analyze that, eyes on glass, and make a determination whether they should call the client. It's that human interaction. It's not just a software product. It's both. It's software with the human interaction that our clients appreciate. Then, we can talk them through what to do, how to respond, and that's the key component is that relationship that we have with our clients.

Alright. ExecuTime, this was an acquisition that we made three years ago, and it highlights when we build we start from nothing, and you might say to yourself, geez, it must be a lot easier to acquire. In a lot of ways, the acquisition is good for the knowledge that we bring in for the company, but in terms of the effort, the integration effort is just as much as the build effort. So, when we acquired ExecuTime, we had a lot of work to do because our clients expect, or the minute we acquire them, they expect it to be as if it was homegrown by us.

So, that's what we've been doing for several years. We've been investing heavily, so this is kind of an acquisition with an investment, and the return on the investment has been terrific. We've doubled the clients since 2016. Less than 5% of Tyler clients own ExecuTime today, and revenues have grown to \$10 million. When we acquired ExecuTime, they were a \$4 million company who broke even. Today, it's a \$10 million revenue that earns money, profitable in '18.

We've completed integrations to Munis, New World, Incode, and Infinite Visions, and we're going to continue significant investments with our public safety group for advanced scheduling and our school group for teachers.

A highlight, as you heard earlier about recurring revenues, our 2019 recurring revenue growth is expected to be 28% at or about \$4 million. So, those last three products that I mentioned, EAM, ExecuTime, and cybersecurity, these are going to be our fastest-growing applications within the ERP division. They may not be our largest, but they're going to provide a lot of growth for us in the years to come, so we're very excited.

Alright. I'll turn it over to Bret Dixon.

M

Lunch

Chris Hepburn

Oh, lunch. I was between you and lunch? If I had known that, I would have gone quicker. I apologize.

Brian Miller

Okay, so at this point, we are going to break for lunch. Lunch is in the foyer out there, a buffet. We have about a half an hour. We're going to start back up in about 25 minutes. So, we're going to start at 12:55 back here. You can get your lunch, and bring it back in here to eat. Restrooms are out the doors to the right, and for the webcast, we'll resume the program at 12:55 central time. Thank you.

[Lunch break].

Brian Miller

We're going to go ahead and get started again with the presentations. So, next up will be Bret Dixon who runs our Justice Group. He's going to give us an overview of the Justice Group activities, and then we're going to hear from Kevin Merritt, founder and evangelist of Socrata, who joined the company last year through acquisition, and Kris Collo, from our most recent acquisition, MicroPact. So, feel free to carry on eating, and we'll go ahead and get started.

Bret Dixon

Welcome back from lunch. As Brian said, go ahead and continue if you're not finished. Feel free to step outside and get more if you need to. That won't distract me at all. I'm Bret Dixon. I'm the president of the Justice Group, and I just, like the others, want to extend my personal thanks for your time, not only today, but throughout the year for your interest in Tyler.

As we get started, that's me, by way of orientation, when we talk about the Justice Group, we're talking about two major divisions. One is public safety. That is the old New World company that we acquired in 2015. We have since put Incode public safety in under that public safety organization, and then we have our Courts and Justice division, which develops the Odyssey product suite and works with trial courts and the associated agencies around that community.

We have three smaller business units, the corrections business unit. That's our jail product. We do civil paper service. That's SoftCode. Then, e-citations is Brazos. Those three business units actually leverage the two major divisions, so we keep them separate, but they're embedded much of the time with the two major divisions, so that's what we're talking about when we talk about Justice Group.

So, with the time I have with you today, I want to talk about several things. First, we talk a lot about investment, and any time you talk with Lynn or Brian or John, any conversation they come up with what we're doing to reinvest back into the company, so I'm going to talk to you about some of the dynamics of an investment that we experience in Justice Group. Then, I'm going to spend the majority of the time on some of the investments that we're making back into the divisions and the company. I think you'll enjoy some of those. So, you have a little bit of what to expect.

I also echo, I think it was John that said it earlier. When we do talk about investments, I'm always impressed with your write-ups. I do read your write-ups, and you're always very supportive and almost optimistic when Tyler starts to invest, and in fact, I was reading some of the last write-ups, so this is William Blair. They said, "When the company last took this approach in 2010, investors were rewarded with higher win rates." Certainly, we think we are best at investing ahead of revenues, and we're excited about the investments that we have.

So, let's talk about some of those dynamics. Speaking of 2010, anybody remember the acquisition called WIZnet? Remember that? That is now Odyssey File and Serve. I want to call your attention to the first three, maybe four years, and when we bought that company, we had to bring them in. We had to work with their product to orient it towards our products and towards the justice space. Then, because it was a disruptive kind of technology, we had to work with our clients to figure out if we're doing e-filing, what kind of impact does e-filing have to their business processes? What kind of impact does it have to their policies or even their legislation?

If you know anything about our customers, they're really not quick adopters. They're usually pretty conservative. So, we had to wrestle with the impact of implementing e-filing into our justice ecosystem, and it usually is manifest with pilots, lots of pilots to see how it works, see how it starts. Then, you see about the fourth or fifth year you start to see an adoption curve that accelerates, and that's pretty common with our acquisitions. There's the investment of the acquisition itself, but then there's time that is taken to get the market to adopt that within our product suites.

Brazos was a more recent acquisition; 2015 we acquired Brazos. You see their revenue accelerated really quickly. It's not unsurprising since they're using our sales force now. They get broader coverage, but their operating margins, it took us four years to get their operating margins to the point that it was equal to Tyler's overall operating margins. Just the last few quarters were they accretive to Tyler's

margins. So, the point being, these acquisitions, these investments that we make, it takes time. It takes time for us to get those working like we want them to.

Another type of investment and the dynamics associated with this are internal, and this is when Lynn refers to R&D-type projects. They're internal, we use our people to do this, and in late 2016, we made a decision to rewrite the records system at New World, the RMS system. That project actually really kicked off in 2017, early 2017. We made the decision in 2016.

It's a huge project. It's a complete rewrite from the architecture to the UI. It's 150,000 developer hours, and we're real pleased with the progress that we're making. We're on track, and we're pretty close to budget, pretty close. We see our first go-live is going to be in late 2019, so that's a two and a half, three year kind of investment ahead of the benefit that we think we're going to see.

So, those are some of the dynamics we work with, and I want that context with you. You probably know that, but I thought it was worth mentioning.

So, I'm going to talk to you now. We'll continue to talk about some of the dynamics, but I'm going to you about some of the investments that we're making in the Justice Group. I'm going to talk to you in the context that Bruce laid out of how we see the business. We have investments in every one of those dimensions, and I'll use this as our tracker. There you go, those are the investments that I'll talk about. I'm not going to talk about all our investments because we have quite a few, but these are the ones I'm going to share with you today.

So, let's keep talking about CAD, RMS, and mobile. I think if you were in the session this morning, you heard Bruce say this, and this is what our clients are telling us. One of the dynamics in the public safety industry is an officer spends at least 50% of his or her time away from their car. Traditionally, the center of communications in public safety is that car. That's where routing is being shipped, that's where intelligence is being pushed, so if that officer is away from that car for any amount of time, they are on an island by themselves.

So, with the advance of network technology, with the advance of handhelds, tablets, wearables, what applications in the public safety business now are having to do is adopt this moniker called mobile first. The center of communications is moving away from the car and to the officer. So, that's where a lot of our investment has been in public safety. It's getting our systems to embrace that mobile first technology.

The two products that are available and are being purchased right now, you heard Bruce talk about ShieldForce and CrewForce. ShieldForce is for police officers; Crew is for fire. Did I get that right, Greg? Yes. So, those are the traditional dispatch type of products, but they're on the handheld devices. So, they dispatch what type of service is needed, the routing, the intelligence associated with that call.

Once a first responder is on scene, then one of the first things they have to start doing is feeding back to those systems of origin, the core systems in the agency. What's your status? What are you seeing? What are you finding? Every officer has a standard set of reports that they have to fill out while on scene, and then as you're on scene and with the advance of technology, now you have a phone. You have a tablet.

Well, guess what you can do with that. You can take pictures. You can talk. You can record. You can capture video. We have to know what to do with that information as it gets pushed back to our systems of origin.

So, we just made an acquisition in the fourth quarter called SceneDoc was the name of the company.

That technology is what we bought and are going to then enhance our scene field reporting and take us into the next wave of mobile first technology working back from the scene. So, that's one of our investments, SceneDoc, and I think the product is going to be called Scene Collect that extends beyond just field reporting.

So, keep that in mind when you think about CAD. So, if we're going mobile, then our dispatching technology has to keep up with that. We're continually investing in our CAD so that is has that advanced mobile capability. So, think about it. If your officer is away from the car, your CAD wants to know where that officer is so if that officer gives chase, for instance, our CAD system now is able to track that officer as he or she is mobile. If they enter a building in a chase, the CAD can know that, and they can send intelligence about that building or that neighborhood to that officer en route.

If I have a caller that's in distress, but they're calling on their cell phone, I have to know where that person is, and even if they're moving, I have to know where they are. So, that we had to update our CAD. We are doing that. We also update the CAD so we can play in bigger markets. We want to move up market from where New World participated, and these advances have allowed us to do that.

We have seen a warm reception from our CAD advancements. We're getting larger awards. We're participating in larger RFPs. Our average deal size is bigger than it was when New World was on its own, so we're pleased with the results of the investment we've made in CAD. Hopefully, that's makes sense to you.

This is the records project that we talked about. Really pleased with how this is being received by the market. This product is still under development, but as I said, we're going to deliver our first production client in late 2019, but think about that. We sold this thing. We have contracts for 20 of them, and we can't give them a reference yet. That's how powerful this product is and how warm the reception is in the marketplace for this.

So, we are limited. If RFP does require us to have a production-level company, then obviously we can't bid this product. So, we're looking forward to getting past the legacy product, new product transition, and when we do, we think this product is really solid, and early signs are that it's going to be a hit.

Let's talk about the public and how the public interacts with some of our products in Justice Group. I'm going to switch now over to the Courts and Justice side of the business, and we're going to talk about File and Serve, something called Research, and Modria.

I think you guys have been following us long enough, most you have been that you know now that the gateway to e-filing volume, which is what drives e-filing revenue is the CMS system. Odyssey case management is still very, very strong, and doing well. In fact, in our 2019 business plan, when you look at the implementations, some of them are ongoing. They're carryover from 2018, but we also have plans for new ones.

We'll have north of 50 different projects that are taking some case type live. As case types go live, then that gives us opportunity to turn e-filing on. So, case management is strong. It continues to be the biggest driver for e-filing volume that drives revenue growth.

Then, 28% of the population in the US is covered by mandatory e-filing, and if you follow us, the difference between permissive e-filing, if you're permissive e-filing, you're going to get about 15%, 20% of the filing volume. If you're mandatory, you get 100% of it. So, about 28% of the country is covered by mandatory e-filing.

What we're seeing now though is non-CMS jurisdictions are interested in our e-filing, and in fact, we have

several states that have acquired our e-filing product and are integrating it back into non-Tyler CMS. I'm not sure why anybody would not want a Tyler CMS, but there are some people out there that we've yet to bring over.

The State of Massachusetts has our e-filing product. The State of Illinois is not a unified state. They have our e-filing products. The State of Texas, as you all know, we have a lot of business in Texas. About 80 or so counties use Odyssey, which is a large percentage of the population, but there are 174 other counties that have different CMSs.

So, a lot of the investment we make to turn that recurring revenue stream on is integration back into those CMSs, those third-party CMSs. By the way, I said over a million registered users. Last time I was with you, we had about half a million, so we have 1.2 million registered users today. So, that continues to grow, and we anticipate that that will grow more, the standard offerings.

Now, I apologize for this slide. This is a really busy slide. Don't try to figure it out. It's just meant to represent the e-filing ecosystem. We started out with civil. We added criminal e-filing, which is that government filer all the way to your left, and then we added pro se, which is self-represented litigants. Continue to add value and push volume through e-filing, but the investment I want to bring to your attention is something that's called Research.

Research is targeted at usually states, but large jurisdictions that are driving mandatory e-filing through their e-filing manager. That's what the EFM is. In a state that has mandated e-filing, every initial filing, every subsequent filing, has to go through that EFM. Research sits on top of that EFM and can see copies of those filings. It has very important information in there for the attorney, the bar, that is actually doing the e-filings, but they may want to, again, I'll just use the State of Texas as an example.

I may have an attorney in the State of Texas. There's 254 counties with Research. That attorney can go and search for certain documents through all 254 counties through that Research engine. They can do party searches. I want to know every case that has this particular party in it, and that's very valuable, and that's working today.

We believe that there are services beyond that that attorney community would value, things like case alerts or certified mail or auto form fill out, redaction services that we believe that those attorneys would be willing to pay for that in a subscription-like manner. So, this is something we're working on. That's why I spent a little time talking about the nature of the investments, not just the product. We're pretty good at creating those services and building those products, but it is how we take that to market and how we take that market with our clients.

We will take these additional services to market with our clients, not leaving our clients behind. It will be a joint effort with our clerks, which is a little different than Westlaw or a LexisNexis. So, we will be with our clients. We'll work rev shares, revenue sharing capabilities with our clients, but it is a B2C kind of play with the number in the tens of thousands of attorneys in there. That's new to us. That's different to us, so it will take us a while to roll this out, but that's a big investment that we're making.

Okay, this is one of my favorite ones right here. Modria. This is the online dispute resolution platform. How many of you have heard us talk about Modria before? Let me just see—okay. Alright. So, bear with me if I'm a little bit redundant.

So, Modria is an online dispute resolution product that we acquired about two years ago, and we brought it in, and we are tailoring it now for the justice space. The idea here is that we would provide through Modria an alternative to the brick and mortar courtroom. Our clients are really fired up about this because

what they want is to reduce their dockets. They're crammed packed with caseloads. So, anything they can do to offload people coming to the courthouse and still provide access to justice is a big idea to them.

To the community, to the community at large, it's really dynamic because I can now work a dispute at my home. I'm not limited to 8:00 to 5:00 when the court's open. I don't have to necessarily take off work or find a babysitter. So, very, very progressive, very forward-thinking. This is what Modria does.

The case types that we are targeting are these that you see, so landlord/tenant, small claims, and yes, even parent custody. Our clients are, as I said, excited about this, but just like e-filing, this feels a lot like e-filing to me, it is disruptive to their business process. It's disruptive to their policies. So, we're having to work through that with our clients, and guess what they're wanting to do. Well, let's pilot it first. Let's see how it goes. That's fair, but that takes some time.

So, we have a number of pilots going. We actually do have contracts on this. We have revenue that's being generated by this, but it's early.

This is one I'm going to take you through a pilot that we did with one of our more progressive courts. It's Clark County, Nevada. That's Las Vegas. They have on their custody plans or the parenting plans that are contested custody fights for divorces, they have a mediation center that helps with that, and this mediation center participated in a trial with us.

I'll just call your attention to that middle bubble there where it says time. Typically 21 to 28 days for the first in-person mediation appointment. Keep that in the back of your mind, and let's talk about this pilot. The way the pilot worked is the court, a judge said look, if you have a dispute with your ex about your children, then you have to go through the mediation center. It's mandatory. Sound familiar? Like e-filing, it's mandatory that you go to this mediation center.

Now, during this pilot term, when they went to the mediation center and said we can do traditional mediation if you want to, or you can do this ODR through Modria, and we'll waive the fees or cut the fees if you participate in this pilot. It was a 60-day pilot. We had somewhere I think it was close to 150 cases that went through this. Here are the results. They're staggering.

Let this sink in for you. So, 46% completed parenting plans without even a mediator being involved. The tool, by the way, still asynchronous, but you can have a third-party mediate even though you're not face-to-face with that mediator. So, 8% of the parenting plans that got completed, did have mediator involvement, but that's 54% of the cases got resolved online, not going to the brick and mortar.

Then, what's more, the ones that it couldn't come to resolution, they may have had ten issues in their disagreements, but through Modria, they resolved seven of them, they resolved eight of them. So, when they did go to the brick and mortar court, they're only dealing with the two that they couldn't come to terms with. So, a resounding success in Clark County.

Now, remember that 21 to 28 days time to have your first meeting? Think about the dynamics on that. You have to figure out when you take off work. You have to make sure you're on the mediator's schedule. You're coordinating three schedules for three people. Check this out. The people that successfully completed their parenting agreements averaged 6 days, a week. It took you four weeks just to get into your first meeting if you're doing it face-to-face.

If you were in a non-mandated mediation court, it would take you two months to have your first hearing with a judge. Extremely impactful, extremely impactful. So, that's the kind of uptake and impact that we think this product is going to have, but those investment dynamics that I covered with you earlier, we're

two years into that, but we're excited about the growth that we're starting to see with this and the acceptance that we're starting to see in the market, so Modria is really, as I said, one of my favorite investments.

Alright, let's switch to the data side. Obviously, we're going to talk about Socrata. Everybody is talking about Socrata. I'll just give you my take on how I explain this. If I was explaining this to my wife, I would say look, once upon a time, there were these really smart people called Socrata. They are data engineers, and they built the platform that's outstanding at sitting on top of multiple data silos, extracting data out of those silos, cleansing that data, normalizing that data so normal human beings can actually look at it, make conclusions, and make decisions out of it. That's what they do.

Then, once upon a time, there was this company called Tyler who were domain experts in state and local government. They were subject matter experts there, and they happened to know a lot of the holes in decision making. They happened to know a lot of the application for having a data platform that sits on top of multiple data sources.

So, our idea with Socrata is that we're going to come in here, and we're going to engage them with our clients. We're going to engage them with our knowledge. They're going to engage us with their knowledge of data, and we're going to identify certain applications that can not only solve an agency's problem, but once we solve that problem, there's nothing that says I can't take it to multiple other agencies.

Like Lynn said earlier today, our clients are not competitors. So, if I solve a problem in one place, I can just take it and implement it over and over and over again. So, that's the platform coming together with domain expertise.

So, let me give you a couple of ideas that we have. All these ideas that we are working with clients today on it hasn't scaled yet, but it will. These are investments that we're making, remember, ahead of revenue. This is just a simple citizens' transparency application that a city council or a police chief could do.

It's nothing more than saying I'm going to let the citizens see what crimes are being tracked or committed and where they are happening, maybe what time of day, what have you. There may be more that you share, but certainly internally, you're going to want to know what are the trends from one period to next of crimes in a given geography.

Then, if I'm CNS, I need to do something in a certain area to try to curb the crime, maybe even get ahead of crime because I see the patterns growing, so I target an area, and I'm going to put programs in place. The program may be the way I deploy my officers. That may be a program. It may be a community education program. It may be I go to another agency, and I get an addiction program going in that particular area. So, now I'm starting to cut across multiple agencies.

As I put those together, I want to track the impact, the outcomes, of those programs, and I may have to cut across multiple systems to do that. I put this kind of education in place. We had this kind of curriculum, and it had these kind of effects, so you're tracking this, and you're making this available to learn and grow from. So, that's just a simple—we are working all those scenarios with customers today. It hasn't scaled, but we're working with them.

Go with me to the justice side. This is a little broader speaking, but the application is towards our state legislatures, our county commissioners, our city councils. These are men and women that are making weighty decisions on behalf of our country, on behalf of their community, and as I think Bruce said before, they're making it with not a whole lot of data.

In the example that we talked about, this may or may not be a real example, the whole marijuana legislation that's going on right now, every state legislature is trying to figure out what to do with this, but if our state legislature went to one of our customers, which we have relationships with state court administrators. They're people that look at courts across the whole state.

If the legislature came to a state court administrator and asked this question, how many defendants were tried last year for possession of small amounts of marijuana, I'm afraid that a state court administrator in Texas would have to go to 254 case management systems to figure that out, and they're not all the same. It's actually more difficult than this picture implies. That implies that they're all the same. They're not, and in Texas, even if it is the same product, some of their codes are not even the same because it's county by county.

So, by the time that a state court administrator would be able to get that answer back, the data would be irrelevant, it would be stale, and the legislature would be already on to their next. So, what we are proposing is beginning to work with these state court administrators at getting the Socrata platform embedded in their applications, with their partners, and you know what happens when they answer. They give that legislature the answer to the question, what happens? There's probably three or four additional questions that get asked because of the data that you return back.

So, you may wind up having to go into not only your CMS, you may have to go into your jails. You may have to go to your health department. You may have to go to prison, which is a federal system. It's a different system to get these answers.

So, getting the platform in and beginning to develop those connectors, those adaptors as they call them so that you can begin to make decisions on better data, that's what we're about on the data side, and we're making investments in that, not only in product development, but in how we go to market with these products.

Finally, we're going to talk briefly about—how am I doing on time? Doing okay? Do I need to slow it down? Okay, alright. Kevin's here. Okay, good. No, not yet. Not yet, Kevin. Brian told me don't end early. So, I told him that's usually not a problem for me.

So, partners. This is the Connected Communities. When we announced Connected Communities, our business units were fired up about that, and the things that they started doing is these point-to-point integrations, and that is certainly Connected Communities. One agency to another, one application to another.

I looked at a report the other day. I think we developed just in public safety, courts and justice, we developed 21 point-to-points, but when it gets really impactful, as Bruce calls it, multi-agency long business processes. It is a little more challenging, takes a little more time to string four or five agencies together in a long-running business process, but we're doing it. I'm going to give you three examples, probably two quickly.

So, this is something that this is available today. We have five clients that we're working with this on, that we have targeted for this, but on your far left is public safety. This is a patrol officer. He goes out to a site. Somebody has committed a crime. He apprehends the bad guy. What does he do? We already talked about this. He has to fill out reports, and he has to fill out reports.

Well, a lot of that data in those reports are necessary to book that prisoner into the corrections facility, into the jail. So, what if he could just forward that information ahead and prepopulates the booking

documents at jail? That would be great, and cuts the hand-off time in half, perhaps, and gets that officer back on the street. Corrections books the guy in. They have to send to send the case to the court and say we have a prisoner here. He's been accused of this crime. They have to open a file.

Okay, well guess what the court has to do. They have to schedule a hearing. We have three agencies that need to know about that hearing, and guess what else the question is going to be. Do you want to bond him out? Do you want to set bond? Yes, have to set it. Well, who needs to know? Corrections, the prosecutor.

So, that's a long-running business process that covers four different agencies. Here's another scenario for you. Same public safety, but a different role, by the way, a different role. This is an investigator. He's doing an investigation. He finally has enough evidence that says yes, I think I have a case. He has to refer that to the prosecutor.

The prosecutor says yes, I want to prosecute. He talks to the courts. These all can be done electronic. Then, the court has to do what? They have to file a case, and then what do they have to do? They have to issue an arrest warrant, and then I have to go up and get this patrol officer to go get him. Then, the e-booking process starts.

We have a third persona, which is the traffic police. I won't take you through that, but there are long-running processes that we've built here. Six different clients, I think there's five counties and one state that these are being applied towards.

So, those are some of the things that we are doing. Those are the investments that we're making. Hopefully, you got a little bit of feel about the dynamics that we have to work with in making these investments, but I'll tell you what.

Our enthusiasm around here, again, I'll close with this, with William Blair. When he's talking about investment, he says, certainly the shareholders are going to benefit, he believes, but I'll tell you what. There's really three things that are going to happen. One thing is our communities are going to be safer. Our communities are going to be safer for our citizens, and they're going to be safer for our first responders.

Another thing that's going to happen is there's going to be better access to justice, and those decisions around justice are going to be made with better information. That's what's going to happen, and if those two things happen, then I'm very confident with what William Blair says that these investments that we make will pay off for our shareholders.

Okay, Brian. That's what I have. Kevin, welcome. Glad you could join us. Kevin Merritt with Socrata.

Kevin Merritt

Thank you, Bret.

Bret Dixon

You bet.

Kevin Merritt

Good afternoon, everyone. Thanks for coming out. It sounds like you already got a little bit of exposure to Socrata, so that's great. I'm Kevin Merritt. I am the founder of Socrata, so I'm going to tell you a little bit about the company, both in its history before Tyler acquired us, and a little bit about what we've been doing for the last year and what we're excited about going forward.

I guess where I would start is maybe where Bret left off which is what excites all of us at Socrata is helping governments improve their program outcomes by using data strategically in the design and delivery of their programs. That's really what we've been focused on for the last 11 or 12 years, the last year of which, as part of Tyler as the Data and Insights Division. If you're not familiar with the history of Socrata, I founded the company in 2007. We were about 150 people at the time Tyler acquired us about a year ago today.

We're about 150 people, about 110 of which including all of engineering, is in Seattle. What probably makes Socrata more unique relative to the other divisions in Tyler is that we have really focused on some of the largest public sector institutions over the last decade. So, many of the largest cities, counties, states, many of the most data-rich federal agencies are clients of ours that have been using our platform to help get insights from their data.

So, I guess maybe where I would go next is giving you a little bit of the macro climate about what is driving the need for government to become data-driven. I like to say the data disruption is coming. It's inevitable, and the two probably most compelling reasons for it are that the citizens that government serves have all become digital, and the millennials who are coming into work for government all expect to have a great digital experience as employees in government.

So, there's just this environment where in the last five or ten years, government has gone from an environment where they have been data-scarce to where they are overloaded and inundated with data coming at them from sensors, coming at them from all sorts of machines, and they're just trying to figure out how to keep up with all that data.

So, in the Data and Insights Division, we work with a number of transportation agencies. There are a couple of quotes that I'll share with you that I think help cement or help you make concrete the dilemma that they're challenged with. So, here's Kirk Steudle, the CEO of the Michigan Department of Transportation where he says, "We're all a bunch of civil engineers, and our needs will be very different in the future, and it's all about data."

One of my favorite quotes is from the executive director, Carlos Braceras of the Utah Department of Transportation, and he says, "Data is the new asphalt," suggesting that they used to think about how they were going to pave roads, and now what they're thinking about is how are they going to analyze all of that information that they're working with.

So, what's driving the change for these government leaders? I already touched on it briefly. Frankly, citizen expectations have entirely changed. All of us are online. We're on our smartphones. We want to interact with our government in a digital way as well.

Then, the time that governments have to make decisions is compressing as well. It used to be that a government would have three or four weeks after quarter end to analyze quarterly results and figure out how they wanted to publish that information, and now they're dealing with real-time sensors, they're dealing with drones flying around airports, and they need to make decisions quickly. They need access to information at their fingertips.

So, we're going from analog to digital. If you think about every other industry, think about the retail industry or financial services where you all operate, over the last 20 or 30 years, those industries have gone from analog to digital, and that same transformation is taking place in government as well.

There is this concept called the Silver Tsunami in government, which basically means that something like

30% or 35% of all government employees are less than five years away from retirement, and so who's going to replace those employees? Well, it's going to be largely 20 and 25-year-olds and 30-year-olds coming in to the public sector for the first time with new expectations that millennials have about the ease of use of software, about the ability to get information that they need to analyze to do their jobs better.

So, we're seeing the rise of public and private partnerships as well. I happen to believe that a government cannot operate efficiently today without partnerships with the private sector, and I'm not suggesting a partnership between Tyler and the customer. I'm suggesting a third-party partnership, i.e., if you're running a transportation agency, you have to have partnerships with Uber and Lyft and Lime and Jump and all the other quasi-public transportation systems that effectively act as part or an extension of the government.

So, there are a number of trends that government CIOs are paying attention to. All of these align directly on the fairway for the Data and Insights Division. So, first is the migration to the cloud. Every government is moving to the cloud as quickly as they can. They're trying to replace monolithic enterprise applications with best-of-breed solutions. They want to figure out how to build digital services on top of a government platform.

Smart cities are top of mind for every CIO. They're trying to think about how do we keep track of all these sensors. What do we do with all this body-worn camera footage? They're trying to wrestle all of those smart city initiatives. Lastly, they're under enormous cyberthreat, and they're trying to figure out how do they manage all that risk.

So, we do have a unique point of view which I'll share with you in a minute. This is the point of view that drives pretty much everything we do in the Data and Insights Division, and that point of view is that the key to government success is to focus on the use of data in the design and delivery of their programs. We simply believe if governments are not data-driven, if they're not analyzing information to influence policy, they're no longer relevant and no longer effective as public sector institutions.

So, they will call this data-enabled innovation for government. We think that data is the fundamental enabler of this digital transformation, and that's what we've been focused on at Socrata, now the Data and Insights Division for more than a decade.

So, it's not just us who are thinking about this. I'm going to share a quote with you from Rick Howard who works for Gartner. He covers the public sector. He has been following Socrata for at least ten years, if not longer, and he says, "Digital transformation revolves around data. To be successful, public sector CIOs need to focus on expanding their data and analytics capabilities by creating a data-centric culture, by increasing the availability of open data and APIs both for internal use and public consumption."

So, you think okay, great. I buy it. Governments need to become data-driven. Well, not so fast. It's challenging. So, what are some of those challenges that they face? Well, it starts with the fact that when you think of a government, you think of the City of Dallas where we are, it's actually 40 autonomous departments that don't generally talk with each other. So, there's enormous access challenges.

There are enablement challenges where 95% of the employees need consumable information they can use. In other words, only 5% of them are data scientists or DBAs. The other 95% need a little help.

Now, there's an enormous choke point in most of these organizations where you have to call a DBA, or you have to call an analyst. You have to wait for four or five weeks to get a report, so their productivity suffers. Finally, when you think about collaboration in government, unfortunately the state-of-the-art in 2019 is largely emailing spreadsheets to each other, not sharing a common platform that they can use to

analyze information.

The problems that government face aren't only in the program level. They're at the IT level, cost, significant amount of shelfware, a significant amount of lock-in from other vendors, a number of unfunded mandates where the mayor says we're going to do X, but they didn't create appropriations for X. So, these are all the challenges that the IT department has, and so we at Socrata, the Data and Insights Division, have been thinking about how do bring these two worlds together, the worlds of the agency leader and the worlds of the IT leader in one environment where they can simply have access to the information that they need.

So, that's what we've been focusing on. We like to call it data as a service architecture. In simple laymen's terms, it's a data sharing and collaboration platform. It's a single place where any employee of the government can find their information and start to analyze it. It provides a number of benefits. It's a single place, up-to-date trusted information.

It offers self-service discovery. Well, what does that mean? It means you're not waiting in line for four or five weeks for the DBA to produce a report for you anymore. You're able to go online and use a consumer information product to find the information that you need. It's flexible, it's secure, it offers great sharing, not only within a department, but across departments. It's designed for humans.

We got started building this software ten years ago for citizens. These were not DBAs, these were not data scientists. These were senior citizens who wanted to understand how does government work.

So, we've taken the lessons learned from that heritage, and we've applied it inside government, and finally, if you want to be a modern government, and in fact, if you all have some time and interest tomorrow afternoon you should come and listen to the Dutch Transit Authority who has API-enabled everything that they do so that third parties can create applications on top of government data.

So, about a year ago, at Socrata Connect, which was in May of 2018, a month after Tyler Connect in April, we launched a brand new innovative product that we call the Socrata Connected Government Cloud. That acronym at the top of this slide, SCGC, stands for the Socrata Connected Government Cloud. It's being widely adopted both across our existing customer base but also among new clients. So, there's a number of clients there listed on the slide. I'll give you a couple of anecdotes.

The California Office of Emergency Services is dealing with all sorts of challenges related to climate change, fires at epidemic proportion, flooding that they hadn't seen before. So, they're using the SCGC platform to analyze that climate information and figure out how do they want to move forward.

I mentioned the Dutch Transit Authority. You can come hear more about them tomorrow. The State of Maryland has adopted it statewide basically to encourage agency-to-agency and department-to-department data sharing.

From a business perspective, we're seeing average selling prices double. So, the average contract for our open data software is about \$70,000 a year. We're now about \$140,000 a year for Socrata Connected Government Cloud, and that's going up. You have to appreciate that some of that is early adopter sales. We've offered some discounts for our early customers to adopt the platform. If I say looking at the last five or ten customers, it's probably closer to \$200,000 per year for that contract.

We think the size of the open data market where we have operated for most of the last ten years is about a \$900 million market. We think SCGC adds about \$5 billion to that TAM, so it's almost a \$6 billion addressable market when you think about all the analytical work that governments need to do over the

next decade.

So, I want to share a little bit about some of the successes that our customers are having, and to echo off Bret's comments, at the end of the day it doesn't matter what we do if governments are not improving their program outcomes with the software that we create for them to use. So, I want to share a couple of those successes.

The City of New Orleans, after Hurricane Katrina, many abandoned properties. This created an enormous blight problem for the city figuring out which properties should we renovate, which properties should we bulldoze and turn into a city park, costing the city significant money. Through a really creative analytical program in New Orleans, the decreased blight by 30%.

The City of Cincinnati, like many cities around the country is fighting a serious opioid epidemic. They're using our platform and open analytics first to tell the story about how severe and how acute this problem is in their region, but secondarily to start to analyze the information to try to identify some areas that they can apply some solutions to.

I mentioned the Dutch Transit Authority already. Utah Department of Transportation uses our platform for 1,200 transportation analysts to have self-service access to all of their data across about 16 different core mission-critical systems.

Now, I'll shift gears and talk a little bit about the past year. I think, and I apologize, I have not been able to attend this session, but I get the sense that many of my colleagues here have talked a little bit about the integration between their core line of business systems that are mission-critical that governments operate and the powers and the capabilities of the analytical platform that is Socrata.

So, if you think about what Socrata has been doing for the last ten years, I like to think of that as the system of engagement. It's how somebody finds data, it's how somebody visualizes data, it's how somebody uses data. If you think then what has Tyler been doing for the last 30 or 40 years, it is creating the systems of record, the computer-aided dispatch systems, the licensing and permitting systems. Those are the systems of record that operate government. When you combine the two together, what you get is the system of intelligence.

So, what we're now able to do between the data scientists and the engineers in the Data and Insights team paired up with the product managers and the subject matter experts in each of these divisions, were able to create new products that leveraged the capabilities of the Socrata platform and leveraged the subject matter expertise and the client footprint that the other Tyler division already has.

So, we're doing this in a number of stages. The first stage was last year, which was quite simply take the existing Socrata products, and offer those through the other Tyler channels. That's going exceptionally well. The second stage is looking for these opportunities for new vertical solutions. So, we'll figure out in each of these verticals that Tyler operates in other divisions, are there great solutions that we can create, and then we'll go one step further from there and offer vertically-focused analytics. Then, the final stage is can we bring that full Socrata Connected Government Cloud platform into that organization for enterprise-wide data analysis.

This is a super messy slide, and I'll tell you I did not make it, but hopefully what you will come away from this slide with is recognizing that we've put a lot of thought, energy, and effort into the integration and the synergies between the legacy of Socrata and the combination with Tyler. Lots of interesting products and new initiatives will come down the pipeline here before too long.

So, I want to talk a little bit about the future. If you think about it from the perspective of Socrata as a standalone company, if you think about the Holy Grail for us, it's like okay, can we apply machine learning and artificial intelligence to improve government outcomes? Even if you're not an ML or an AI expert, you probably have formed an opinion over the last five or ten years which is more data creates better results which creates better outcomes. Well, guess what, Tyler has more than 10,000 clients of all sorts of interesting data.

So, now from our perspective, what we think of as wow, between Tyler Alliance and Tyler Nexus, we have access to all sorts of information, and for us, one of the things that keeps us motivated is recognizing that as an industry, there's something that is incredibly unique about the public sector, and that's that the organizations that comprise the market are not competitors.

So, when you think about it through that context, you recognize hey, we can get an insight from this city. Hey, if we can help the City of Cincinnati solve this opioid problem, I think there are 100 other cities around the country that would love that solution, love that algorithm. So, that's what we think about. How can we do those things?

We're now starting to kind of roll up our sleeves and understand what kind of data do all these other Tyler divisions in these Tyler verticals have. What kind of information can we glean from it? What kind of insights can we glean from that, and how do we take those insights and turn them into algorithms that we can share across our customer base?

So, that kind of brings me to what I think of as our five-year strategic vision. I apologize, but I'm going to kind of read this for you real quick. Over the next five years, we envision Socrata will evolve from a platform focused on data as a service to a platform that also delivers repeatable mission and operation outcomes for programs in Tyler's core operating universe. This shift to insights as a service will be enabled by connecting the largest community of government users and their data to the cloud and applying domain-specific machine and human intelligence to the transformation of that data into program insights.

That's really what we're excited about. It's about helping our government clients get insights that they can act upon from the data that they already have, and if you think about it, that's a really compelling value proposition. We're not even saying go out and find more data to figure this out. We're saying you already have the data. It's a resource you have in abundance, and now we're going to be able to help you use that resource going forward.

So, one of the initiatives that we're working on is something that we call insights as a service. I'll try to accelerate this here just so you can see it, but basically, it's going in and not only figuring out what kind of software can we create to help these government clients do their jobs better, but what kind of insights can we figure out, and can we share one insight from one of our customers with another customer that has the same problem.

So, we're doing that in a number of domains. We're doing it in the land and property world. We're doing it in the public safety world. It's still early stage. It's still early days as we do this analysis, but I would say every division across Tyler that we've started this process with has fruit. There is potential, and there are going to be some exciting products and insights that come from that analysis.

In closing, what I'll share with you is our long-term vision is that some of this data is actually monetizable, and so if you just think about like an insurance company. They're writing an update to an insurance policy. Right now, the best that they can do is they can take a bunch of inputs and try to figure out how much should this homeowner's policy be. Could you imagine a day where we could take all of the data

that exists in Tyler and create effectively a national registry where we could say alright, give me an address, and I'll tell you what's the likelihood that there will be crime at that neighborhood? What's the probability that you'll suffer a fire incident in that neighborhood?

We'll do this not by giving you a giant file that you have to figure this out on your own. We'll create an API where we'll basically charge you—don't quote me on this—we'll charge you a dollar for every single time that you hit this API, and from an economic model standpoint, I think we can offer something to government that's really unique, which is a rev share. You know what, for every time one of these insurance companies hits this API for a dollar, we'll give you a quarter. We think that this helps create a funding model that is enduring where they can continue to license these products.

So, thank you for your time. I will now turn the floor over to my newest colleague, Kris Collo from MicroPact.

Kris Collo

Good afternoon, everybody. It's the last mile. Oh, sorry, the last mile. Alright. My name is Kris Collo. I am the president of MicroPact. I am the newest member of this management team. Really excited to be here with you all today.

We'll begin by talking about MicroPact, who we are, what we do, agencies that we serve and what differentiates us from the market. Then, we'll do a little bit deeper dive about the organization, talk about the business in a little bit more detail, and talk about the market overview. Then, I'll talk about our technology approach in regards to how we built out our Entellitrak platform, which is our flagship product that we sell to all the different agencies that we serve. Then, I'll round it out to talk about our clients and the partner impact, the partner ecosystem that we've developed and invested in the last several years.

Before we begin, I'll start off with this slide here. You know, the combination between these two organizations really has many advantages, one of them being able to expand new opportunities for the Tyler organization in both the federal and state markets. This is the area that MicroPact grew up in, and we expect to be able to bring Tyler into the federal and state markets.

In addition to that, we'll be able to bring our Entellitrak platform into the local markets. We don't have much of a footprint there but certainly feel like there's opportunities for us to be able to expand in that market. Be able to add key competencies with MicroPact's successful utilization of the partner network. This partner ecosystem is growing significantly and gaining a lot of momentum. I'll go into a lot more detail in the following slides.

We'll be able to leverage our strategic offshore operations in the Philippines. This is an area, again, that we've invested in the last few years. This really allows us to make our product development investments a lot more economical and also allows us to have a 24-hour dev center with our Philippine operations being 12 hours ahead of our east coast operations in Herndon, Virginia.

Last, but not least, we bring together a great, solid management team. My management team is extremely deep. We've been around each other for the last couple decades, and I can tell you when I visited the Tyler executives in their Plano offices, at the end of that presentation and meeting, I knew this was the company we wanted to be with. Really excited to be here, and really proud to be part of the Tyler organization.

I'll give you a quick, 10,000-foot view about the business and what we do. MicroPact is a company with a passion in technology that's transforming government. Our core focus is the public sector. As Lynn mentioned around Tyler, we eat, live, and breathe the public sector. Our company and our platform is

purpose-built to serve governments.

Our Entellitrak is our flagship product. It is a low code application development platform for case management. It allows organizations to rapidly develop and deploy case management applications very quickly.

Why do we win? We win because of the power of our platform and the configurability of our platform as well as coupling that with the domain expertise. Very similar to Tyler, we have people that have worked at these federal agencies and state agencies that truly understand the business requirements needed to be successful in these markets.

Let's go through our business overview with a little bit more detail. We have favorable market conditions with modernization efforts happening all across the federal and state markets. We have a total addressable market of approximately \$2 billion. We have industry-leading products that are number one in the markets that they serve, and of course, a very powerful, configurable platform called Entellitrak.

Our firm is established. Again, we grew up in the public sector, primarily in the federal government. As you all know, it's a tough barrier to entry to get into these agencies. We have over 350 customers—sorry, that's a little bit ahead, but 350 customers across both federal and state agencies, and 97% of the federal government with over 500 employees is utilizing a MicroPact product, and 98% of states are utilizing at least one MicroPact product.

We have ample growth opportunities. You all might wonder if you have 97% of the federal government and 98% of the state government, how could you possibly grow. Well, the way we think about it is there are the agencies, and then there are sub-agencies, and then within those sub-agencies, there's hundreds and hundreds of program offices. The way we think about it is those program offices are our prospects and potential customers. So, again, a lot of runway left in the market that we serve.

We have a partner program that's accelerating. Again, we made significant investments here, and we're really at an inflection point around our partner program.

One of the last things I'll mention is being able to expand in the international public sector markets. This is an area that we don't have a lot of penetration in, but we're already seeing a lot of multinationals wanting to be part of our partner network and to be able to take the Entellitrak product into their international customer base.

Let me give you a quick history about MicroPact. I founded this business back in 1997, completely bootstrapped the organization, and we've put all the profits back into the business wanting to build a product organization. We released our very first product in 2002. It was a case management product. We were third in the market, and in about three years, we were able to capture a significant amount of market share. Today, that software product called ICOMPLAINTS processes over 90% of all the EEO claims in the federal government.

We knew wanted to affect a much broader market, so got a lot of great feedback from our customers of other types of data that they would like to track, so rather than building these one-off point solutions, our chief technology officer, Mike Cerniglia, came up with a brilliant idea to develop an application platform, and that's where Entellitrak was born.

So, in 2004, we released our Entellitrak product. We started selling it into the federal marketplace. It sold like hotcakes. We grew the business with double-digit growth year-over-year up until 2015 when we decided to go out to market to try to expand our addressable market and take our Entellitrak product into

the state market.

So, we did that with a company called Iron Data. Iron Data was backed by a private equity firm called Arlington Capital Partners. The founders of Iron Data took a much different approach. They were founded in 2001, and they took an approach of mergers and acquisitions and did a lot of roll-ups of organizations and companies around the regulatory space, in particular. They brought together three companies, and those three companies, software products, are being utilized by over 50% of the state market, so number one in the market that they serve.

Those products really focus on streamlining occupational and professional licensing and also the enforcement of that. They also had a very powerful product called disability case manager or DCM. That product processes the Social Security disability claims across the United States. That product has been around for three decades. It's being used by 47 out of the 54 disability determination centers across the US. Again, number one in the market that it serves. Then, they also had a small courts business in the State of Georgia where they had an end-to-end court software product that was being used by nearly 50% of that market.

Today, we are a fully integrated organization with a suite of leading vertical-focused applications. We lead with our Entellitrak product, which our flagship product, having 98% of our new business bookings based on the Entellitrak product. Then, we organize ourselves into four different portfolios: justice and law enforcement, health and benefits, human capital, as well as regulatory. There's a fifth one that you see up there, which is called app dev, which is really a catchall for us of other applications that don't fit within the portfolio. We're positioned today to scale aggressively across all facets of our business.

This slide here really just talks to the corporate culture and the headcount that we have within our organization. We call our employees team members. We're 469 team members strong with office locations all over the United States, five locations across the US. We also have offices in Toronto, Canada, and as mentioned, in Manila.

The other thing that I'd mention on this slide is we've been named through numerous publications of being one of the top places to work, something that our management is extremely proud of. We try to create an awesome corporate culture, very similar to what Tyler does.

So, looking across the public sector, both the federal and the state markets, we've seen a high demand for case management applications with many of these applications really being the most strategic for many agencies and at the top of the agency's backlog.

For those of you not familiar with case management, this slide here is sort of how we think about it and really how that compares to a historical technology called BPM or business process management. Traditional BPM solutions really focused in on automating transactions through very fixed processes and rule-based decision making with minimal to no human interaction whereas case management really is based on applications that focus in on supporting knowledge workers that most case management applications are much more complex. It can't be fully automated because case-based applications, there's not really a fixed process associated with it that takes you from start to finish.

The outcome of the cases is really determined by analyzing the case data and then allowing determination of what is to happen to the case by the knowledge workers. These knowledge workers can be judges, attorneys, or a jury, as an example. What's important for case-based applications is the technology must be really flexible, especially in regards to the process and the data in order to support collaborative processing and knowledge-based decisions.

When you look at the public sector, these types of applications and patterns are all throughout. For the majority of the applications that we deliver for our customers, this is the sole technology they use to perform their work every single day.

As the demand continues to grow for these very strategic case management applications, our public sector customers are really having a big challenge of keeping up with this demand. Historically, what governments have done is they tried to build custom applications to meet the demand, but it caused a variety of challenges for them. These are some of the IT trends that we have been seeing that are moving governments away from building these homegrown, custom solutions and moving to more modern cost applications like our Entellitrak platform.

The first thing that I'll mention is the perpetual backlogs. The backlog of application needs is growing. It's not shrinking, and they're growing both with a need to modernize legacy applications as well as to create new applications to support better business efficiency. We're also seeing greater complexity and integration. Not only is the application backlog growing, but the features and the functions that users are demanding for these applications are growing as well.

Users are requiring the applications to go beyond just the back office. They're really looking to ensure that these applications work on a tablet as well as phones to support the mobile workforces as well as being able to integrate with the vast amount of data sources available both within an organization as well as publicly available data sources.

Skill shortage, a significant skill shortage across the public sector. They have to attract a lot of top talent, and there's a lot of competition to be able to attract that talent. There's also the brain drain where a lot of baby boomers are retiring from the public sector space, and it's becoming very difficult for our public sector customers.

Then, budgets. You know, public sector customers are not immune to budgets being cut. Nearly 80% of IT budgets by the public sector is utilized for operations and maintenance, really just keeping the lights on. Last, but not least, the time to deliver. In addition to the growing backlog, business users are expecting these applications yesterday.

So, given these challenges, we have seen a real clear shift away from custom development software and homegrown solutions as CIOs and CTOs look for new ways to meet these growing demands.

When, you look at the growing demand for these strategic case management applications coupled with the challenges by the public sector IT departments, we really see MicroPact as the way forward. Through our decades of working with the public sector, we've not only seen the technology trends, but understand the reasons for the shift our customers are having towards case management solutions.

Customers have used a variety of methods to solve their business application needs such as implementing vertical point solutions, as you can see on the top left hand corner there. Customers really like this because a lot of the business rules are built in, the specific business logic, the reports, all built in which really allows them to rapidly deploy these solutions.

However, there's a lot of challenges when it comes to that and limitations that customers ran into. The vertical point solutions were great, but they did one thing very well. So, what ended up happening is agencies started to buy up more vertical applications. Then, they were mired with a variety of software vendors and having to manage that as well as interfaces.

So, then, customers implemented BPM, ECM, CRM solutions. This was helpful for them, but it was not

purpose-built for case management, and again, case management applications are much more complex than some of the BPM applications and processes that are out there today. So, then, agencies moved to custom software development. Of course, this was very helpful. They had maximum flexibility to build anything they wanted, but that also came with a lot of risk and a lot of cost associated with it. Then, having to keep up with the regulations and the operations and maintenance of that application was really costly for them.

So, what we've done and the approach that we've taken is we've really focused on bringing the best of each of the different methodologies and options that our customers utilized, and we brought it into and integrated it into one platform providing our customers and IT partners really a way forward to meet the demand with a platform that can provide them with the flexibility of custom development but with the speed of vertical point solutions.

We've talked about some of the IT trends. These are some of the public sector trends that we feel are growth accelerators for MicroPact. I won't go through all of these, but I'll mention a few of them here.

The modernization cycle is pretty significant in the federal and state markets. The federal government in fiscal year 2018 released the Modernizing Government Technology Act, which really shows their commitment to modernizing applications within the federal government. We're seeing this exact same demand in the state governments as well.

Shared services, which is build it once, use it many times, this is the hallmark of our organization. We really look to build out repeatable solutions that can be utilized across many, many agencies. The last thing I'll mention is speed and cost to solution, which is really the sweet spot for our Entellitrak application. Being able to implement software products in a matter of weeks and months rather than years and do it in a cost-effective manner is the perfect sweet spot for our Entellitrak product.

So, let's quickly talk about the technology approach that we took when building out the Entellitrak product. When we built it, we wanted to be very flexible. We wanted the application to be open using open standards and making it and ensuring that it was independent of the operating system. We wanted to make sure it worked on that.

We also used industry standard technology. Entellitrak is written in Java. It also uses industry technology such as HTML, CSS, and JavaScript as well as numerous opensource technologies. Understanding that vendor lock-in was also an issue for our public sector customers, we wanted to ensure that we were transparent as much as possible with the underlying technology, so we didn't obfuscate any of our data tables or data schemas which made integration with our product much easier.

We wanted to build a product that was very agile, being able to see results working immediately and continually instead of years of trying to make things work. This is really powerful for the public sector, especially for those that have gone through many multimillion, multiyear project failures within their organization.

The other thing that we wanted around our platform was we wanted it to be modular. We built the platform with it being modular in mind. That included all the different modules that we have from document management to analytics to a report builder, etc.

Scalable. We do and implement products for small offices of five to ten users up to thousands and thousands of concurrent users for our Department of Defense customers.

We wanted to be portable. That means it can be hosted on premise at the government facility or in a

cloud environment, whether that be our cloud, whether it be the agency's cloud, whether it be AWS or Azure. Our platform is capable of being implemented in any cloud solution.

Then, secure. We have been through numerous certification and accreditations across many public sector customers as well as being FedRAMP certified. We were, in fact, one of the first companies to be FedRAMP certified, which is really accreditation from the federal government of ensuring you've met all the security standards that they set forth for the federal government.

The vision of the platform has always been for others to be able to build on top of it, to create components, and to create applications. This diagram here shows the layered and modular approach we've taking to facilitate this.

At the bottom, shown in red there is really the core Entellitrak platform as well as the optional modules. This is the piece built by the MicroPact product development team, and on top of that is what we call components. These components, which are really smaller pieces of reusable functionality, essentially you can consider them plug-ins, things like letter generation or as complex as interfaces to other business systems.

On top of that is what we call application accelerators. You can really think about these as application templates. As the name implies, these are really meant to accelerate the development and applications providing a robust starting point for our customers. It contains things such as our pre-configured data model, business logic, as well as reports. These components and application accelerators can be built by us, can be built by our partner community, or they can be built by our customers.

Then, finally, at the top of the stack here in light blue is really nirvana for us. This represents full-blown applications that are really ready to run with very minimal configuration. This essentially provides all the benefits of a point solution that I discussed earlier but built on top of the platform, so it really provides a lot of flexibility in order to be able to extend it and add additional applications or modules whenever desired.

So, how do we sell it? Our go-to-market messaging is to combine the power of the platform with our domain experts. We're organized into four domains: regulatory, human capital, healthcare, and justice and law enforcement. In each of these portfolios, we have a sales leader, a delivery leader, and domain expert who all work together for customer success. We really think about our sales leader and our delivery leader, and that's why we've put them together there in the box, really as business partners and really fully align their goals to ensure that they work together for each other's success and ultimately the customer's success.

Alright, so we sell our software to customers in four different ways. Going from left to right, we have what we call our turnkey applications. This is really focused down market. We offer these applications as SAS only, and there's not many configuration options for our customers with this application. They're really meant for customers to take it right out of the box and be up and running in a matter of days.

Moving to the right is our ETK enterprise applications. These are full-blown enterprise apps where customers can really configure the product to meet their very specific business process.

Entellitrak accelerators, I mentioned this in the previous slide. We have dozens and dozens of application accelerators where customers can begin configuring the solution to meet their business needs and specific to the agency as well as specific agency terminology. Some of those accelerators you see listed in the slide.

Then, lastly, we offer just our Entellitrak platform. This is really used when we don't have an accelerator or an application to provide to our customers. These are generally larger implementations, and once implemented can be the basis for future accelerators for our organization.

Okay, we'll go now into the client and partner impact to our organization. So, again, we have a loyal customer base of over 350 public sector customers, 97% of federal agencies where over 500 employees and 98% of US states are utilizing one of our products. We have extremely sticky software application with 97% retention rate, something that we're really, really proud of and really talks to the customer-centric focus our organization has.

The other thing that we're really proud of is 80% of clients utilize multiple MicroPact products. This really talks to our land and expanse strategy that we've employed and has worked very successfully with a variety of different agencies that we work with.

This slide gives you a few examples of the implementations that we've done and use cases where Entellitrak has been used. This has a couple examples from our JLE portfolio as well as a couple from our healthcare portfolio. Three of these are federal, and one is a state example.

Starting off at the bottom of the slide, you'll see information about what each customer paid for, the applications that we implemented in terms of license, maintenance, and professional services. The top half of the slide, you'll see some of the stats about the size and the scale of the use case, and it also includes information about the savings and efficiencies and return on investments that our customers have been able to realize implementing our software product.

I know Bruce showed the *NCIS* show. We've implemented the real NCIS. We call this Navy Justice Information System. This really serves the five communities, and we've brought together these five communities on a common platform. The five communities that used to be five disparate systems which was law enforcement which were the cops, the investigators, the command action which were the oversight and policy folks, the JAG which is the legal community for the Department of Navy, and then the corrections which are the jails.

Prior to this, as mentioned, they were five, different, disparate systems, and Navy wanted all the communities on a unified platform. We've since recently signed on the Department of Air Force as well who has a very similar requirement to the Department of Navy of wanting to consolidate their information on a common platform.

We've also implemented a system for the Department of Justice. We call it the JSTARS program which really processes all the background investigations for Department of Justice employees as well as all the contractors.

Then, we've done an appeal system both in the federal as well as the state market for the Department of Health and Human Services for the Medicare appeals, and then we've done it also for the California Department of Social Services, both very impressive implementations and both very satisfied customers.

Okay, I'll wrap up with our Global Alliance program here, our program that we've invested in for quite some time. We've been investing this for several years now focusing really on enabling our partners to sell and implement our Entellitrak software successfully to their customer base. We have formally released our Global Alliance program in 2018 with great reception from systems integrators.

Systems integrators are experiencing the trickle-down effect of IT budgets from our public sector customers, and they're really being pressured to reduce development costs and make them systems

operational more quickly. They're also looking for solutions like Entellitrak with an already established footprint within the federal and state markets and with a proven track record.

We've seen a strong demand from our channel partners who view MicroPact really as a strategic part of their business. We're seeing many partners that are building centers of excellence within their organizations centered around selling and implementing our Entellitrak platform.

As you can see from the charts on the slide here, our partner generated pipeline in terms of dollars, and in terms of the number of licenses opportunities continue to trend very nicely. In the early part of 2019, we're seeing that same trend continue.

So, we designed the partner program to have four different levels shown on the bottom right hand corner of this slide. Partners move through the different levels depending on the level of competence that they have to be able to successfully sell and implement our Entellitrak product. They must also achieve a minimum level license target every single year to be able to keep the level. As they move up the program, their software discounts, and the level of support from our organization increases.

We really view our partners as a force multiplier to our existing sales organization. As we really look into the future of the partner program, our expectation is our license revenue. We'll increase relative to our services revenue as these partners sell software licenses and do their own implementation work.

We're also seeing partners want to build their own products or their own IP on top of the Entellitrak platform so that they can go to market much quicker rather than building it from the ground up. Then, as I mentioned earlier, we're also expecting and seeing multinational systems integrators interested in taking our solutions internationally to serve the international public sector customers.

We really see our partner ecosystem a major growth driver for the future years to come. Alright, I think that's it. Thank you. We'll take—is it a ten-minute break?

Brian Miller

We'll take about five to seven minutes, a quick break, and then we'll reassemble and have our Q&A session.

QUESTIONS AND ANSWERS

Brian Miller

Okay, we're going to go ahead and start our Q&A session if you can go ahead and settle back in, and the rest of the team can come back up. In addition to the people you've already heard from today, there's two other people on our panel: Mark Hawkins, who's president of our Appraisal and Tax Division at the end, and Greg Sebastian who's president of our Public Safety business.

We have microphones on both sides. If you have a question, please raise your hand and wait for them to bring the microphone to you so that your question can be heard on the webcast, and with that, we'll open it up. If you have a question for a specific person, feel free to address it to them. Otherwise, we can figure out who is best to answer whatever you have for us.

So, ready to start.

Josh Reilly

Josh Reilly from Needham. So, with stepped up R&D efforts and expense over the last few years and so many opportunities to invest in different products, how are you prioritizing R&D investments over the

next couple years, and should we expect R&D to continue increasing as well?

Lynn Moore

I'm sorry. I heard part of that question. The question is how do we prioritize our R&D investments?

Josh Reilly

Yes.

Lynn Moore

Well, we look across our entire portfolio. We look at gaps in our offerings. We look at voids. We look at areas where we think we can have market opportunities. We do some pretty in-depth analysis. When talked earlier about our elevated R&D spend, it's really across our entire product suite. We do some internal ROI analysis. Bruce was just asking me about that out in the hall. So, we look at the market, we look at the opportunity, and we make our investment decisions accordingly.

Brian Miller

With regard to the question about how we expect R&D to trend, obviously we've had an extremely elevated level of spend last year and this year, both years greater than 30% increases. We have said, and I think we talked pretty clearly on the last earnings call, that we do expect to grow into that level. We'll certainly exit this year with a much higher spend that we believe that the growth in R&D will slow down quite a bit after this year and that going forward still retain the flexibility to address opportunities to continue to build out our product offerings but that we do believe that really starting in 2020, we'll be growing back into that and that over multiple years going forward that we would expect to see greater leverage from the R&D spend.

Lynn Moore

I think I would add that I think you saw it in some of the presentations today. Some of the acquisitions we've made in the last year, I characterize those as investment-type acquisitions, so a number of them product-based acquisitions. You saw that, generally speaking, we bring these companies in. We go into a little bit of an investment mode as we continue to build out those products, build out those integrations. It takes multiple years to get those up and running in the market. We have been pretty active in acquisition mode this last year, so that's also been part of our little bit elevated R&D spend.

Brian Miller

Before we move on, I did omit one member of the management team that's on the stage as well. Franklin Williams, president of the Data and Insights Division is also with us.

M

So, with the acquisitions and the integration of some of the applications, can you talk about how that's changing the sales force and how you segment your clients in terms of large, medium, small, and then by division, and if any of those changes might be impacting near-term bookings?

John Marr

What are you doing back there, Bret? You could answer this one for us.

We try to take advantage of the synergies that are there. So, if you take Data and Insights, for example, they'll maintain their direct sales force. Their market is a little bit different targeted than what we bring in terms of synergies, and then they basically spend a lot of time with our existing sales channels to try to enable them to sell the product as well and have the new business be incremental to what they were already doing.

That'd be similar to what we did with EnerGov years ago. They still have kind of a point system, enterprise sales channel on a direct basis that still sells people that are just looking for that suite of products, and yet, I guess probably half of their business now is sold through Munis, Incode, and our other divisions leveraging existing sales channels that were already there. It drives incremental revenue. It also makes those existing products more competitive, the core products themselves like Munis and Incode.

So, generally, it's a tandem approach to try to continue to leverage what they already had and then achieve some synergies through our own channels.

M

I just had a couple of questions on the organic growth rate. You guys talked about a lot of great, new products that you're launching across your different segments, and then you have the two relatively new acquisitions that you've done. How do you think these change your overall organic growth rates? Do you kind of expect them to accelerate what you've talked about historically as 8% to 10% organic growth rates? How do you think about the incremental revenue opportunities each of the key products that you guys talked about today? Thanks.

Lynn Moore

I think when we look at any investment whether it's an R&D investment or an acquisition, one of the things we're looking for is to see whether or not it's something that can increase or improve our internal organic growth rate. That's why we make those investments to begin with. Obviously, as we get larger and larger, and we have more and more revenues that are recurring, some that don't grow at the same rate, it's a drag on the organic growth rate, and you've seen that, and you've noted that.

As we look out over the near term, I'd expect us to still be able to achieve low double-digit growth rate, 10%, 12% where that's a combination of both organic and acquisitions, but the reality is over the years, I've been at Tyler now twenty and a half years, and we've done about 40 acquisitions. So, acquisitions are a part of our culture and probably always will be.

Brian Miller

I would say that following on from what Lynn said that when we acquire someone almost always we're acquiring someone that we believe that business can grow at a faster rate than Tyler's core organic growth rate. Sometimes that's not immediately. Sometimes that requires some level of investment, and part of that is leveraging our sales organization, leveraging our customer base, and that's certainly the case with each one of the acquisitions we've done in the last year. All of these are businesses like Socrata that's growing faster than Tyler's core growth rate prior to acquisition and others that we expect to accelerate to rates greater than Tyler's core organic growth rate, post acquisition.

John Marr

You know, it's not a black and white area either, which I think is kind of the hard part to understand this. So, everybody wants to segment organic and inorganic, and there's always almost anxiousness in terms of how quickly is someone going to contribute when we bring somebody into the company. A lot of the questions and interest here today understandably are about deals we've done literally in the last 12 months. Well, we don't buy those companies for what they're going to contribute this year. We're going to invest in them. We're going to Tylerize them, and it's going to take a while for them to become contributors.

Some of the slides that were done today had some good examples. Over on the ERP side, Chris is with ExecuTime. It was a little, teeny company. Nobody had a lot of interest in it because it was so small, but here it is now, four years after you do that deal, and it's contributing very nicely. It's growing very nicely. I think he said 28% recurring revenue growth annually now. It's making a Munis product that's a leader

for us, more competitive, so enhancing their win rates, and not a homerun kind of deal. It's just a singles kind of deal, but a real nice contributor.

Bret Dixon had up there the WIZnet deal. Unbelievable. We bought a deal for \$10 million quite a while ago now, not necessarily a big contributor right away, re-engineered the whole product, a lot of R&D spend, a lot of investment, a lot of things we're looking at today and scrutinizing today went on with that deal, and then it was four or five years later that that graph just started to accelerate tremendously.

So, those are the kind of deals we're looking for, and we're in a high investment cycle right now, and yet, it does take a number of years before they really contribute in a meaningful way. We're confident that the deals we did this past year, while they all need investment, and they'll all take time, will contribute like an ExecuTime, like a Brazos, like a WIZnet the deals of four or five years ago.

So, that's strategy that we think has been proven out, and those are the kind of deals we're looking for, and we'll invest. We're at a high investment cycle right now, but that's because we think these opportunities are compelling and they ought to be funded.

M

Hello. On capital allocation, you mentioned that the business—this questions for you, Lynn—has become more stable and predictable, and that's allowed you to look out further when contemplating buybacks. How has a more stable and predictable business changed the way you think about the leverage that your business can handle and what the right balance sheet is for the company?

John Marr

How has it changed the way we look at it? I think what Lynn was saying and the way we talk about it because all of us spend a lot of time together talking about this and updating models, I think we're still a buyer of our stock when it makes sense from an intrinsic standpoint, but the way we look at it differently is it's a higher-quality company. There's challenges that we talked about here. Nothing's automatic, but years ago when we were buying the stock, obviously at much lower multiples, it was just as risky as buying it at the prices we're buying it at today because the visibility wasn't there, the company wasn't nearly as stable, and it wasn't as high quality a company.

Today, we have this 98%, 99% retention rate, strong recurring revenues. The company is going to be profitable. The company is going to generate a lot of cash. We're going to not know until we find out what that growth rate is, but within certain parameters, we have a good idea how this company is going to perform over a lot of years. So, it gives us confidence to say it's a higher-quality company, and we'll put higher multiple against it, but probably more different is that we'll put that multiple against a few years out into the future whereas in the past, we almost didn't stop buying on next year's projection until fourth quarter of the current year.

I think whenever we're going to buy stock, and we like to buy our stock, if we look at things that way. So, the visibility makes us comfortable pricing it at a higher level based on the quality of the company and doing it out a number of years. Otherwise, that cash can be on the balance sheet, and if you're going to buy stock, you're going to buy it then for a price you could have bought it at today.

M

From a leverage perspective, we're very comfortable with not being highly-leveraged but with some debt on the balance sheet assuming we find the right opportunities to use that debt. I think you can look back at the past when we acquired New World three and a half years ago. That deal originally we would have preferred that it be an all-cash deal and that we would have had a more significant amount of debt than what we did borrow to do the deal with a stock component.

We also used some debt around that same time to buy stock back, the cash flow. The company since then certainly has been very strong, and we didn't have that debt for a long time. Today, we have net cash, but we do have a little bit of debt on the balance sheet. So, we're certainly comfortable and would definitely use leverage to execute the right opportunities.

Keith Housum

Keith Housum from Northcoast Research. A question for Kris from MicroPact, and then I'll throw it to the rest of the executives. Kris, you guys made a move to using the network of partners to help expand sales, the go-to-market strategy. So, your move to do that, was that to drive more sales? How effective was it overall compared to historical performance? Then, for the rest of the Tyler team, is that an opportunity to expand the go-to-market strategy by expanding to a network beyond the direct sales force?

Kris Collo

I would say that our partner ecosystem has certainly contributed to the growth of the organization. We approximately I think about 30% to 35% of our revenues are being derived from the partner ecosystem today. So, compare that to five years ago, which we didn't have very many sales coming from the partner program. So, pretty significant uptake and continue to see that trend continue.

Brian Miller

I think we have highlighted that, but that was one of the attractions of MicroPact was their experience with the partner network, and we're certainly interested in seeing how that may apply more broadly across certain opportunities within Tyler. So, they've created an impressive network, great experience there, and that's one of the competencies that MicroPact brought us that we're certainly interested in exploring more broadly in Tyler.

John Marr

You guys can jump in, but in terms of the rest of the company, I think MicroPact has some unique opportunities there. They're international in some ways. They reach a broad set of markets. We talk about federal a lot because that's new market for us, but they're in a lot of other spaces as well. It's just a really big marketplace with a product that has a lot of potential, and to reach all of that directly would be a real challenge, so they're leveraging a network of partners.

Tyler, we understand, is different. By the time we've gotten to be now a billion-dollar revenue company, software companies that size typically do a lot of business, we appreciate that, through partners. I know Chris Hepburn said, I think in the Munis opening session, that nearly half of his employees are professional service employees. That's a lot, and that's different.

Strictly from a financial standpoint, it doesn't make it easy for us to put out the kind of margins that a software company should look like, but we continue to believe that it's been a strategic benefit of ours.

We sell our own deals, we make our own commitments. That's the initiation of the relationship with our client. We generally deliver all the services to migrate the clients onto ours. We post implement that to support changes made in the process are absorbed, general releases, and it's just a really proven system there that drives the quality of our relationship with our clients.

I know it was mentioned in some of these presentations, I think Lynn said we do thousands of implementations, and we literally have hardly any failed implementations. Obviously, there's a variable on the other side of that sometimes when things don't go right.

So, that's something that makes us different, and I think we control the whole process, we have very high

quality in our sales channels and in our service channels, and it's something we're largely committed to, and I'll say it largely because there could be exceptions. There are partners, there are things we do out there, but generally, we'll continue to do most of our sales and most of our deployment on a direct basis.

M

Maybe just to add to that a little bit, and I don't know if this mic is working or not, but I think core applications like case management system, the bedrock of what makes up each of these businesses, you should expect us to do just exactly what John said. With our professional services, primarily we're the delivery vehicle for that, but in each case, there's edge applications that we begin to add onto that like Modria that Bret Dixon mentioned.

So, this is an application that's global. We've deployed it now in Brazil. We have two partners down there doing that with us there. That is a different kind of an app. It's more lightweight and something that we think can begin to build on that.

We're doing an effort to—we called it Open Odyssey, were we begin to open up through our APIs to a set of partners that can add onto Odyssey so that Odyssey kind of is the case management system, but beginning to extend that with other partners. So, that's kind of the edge idea versus the foundation. I think you'll see us keep kind of playing that out.

Scott Wilson

Hi. Scott Wilson from Piper Jaffray. Given that M&A has been a running theme for the analyst day, you updated your addressable TAM post the MicroPact acquisition. If you think about what the biggest and most interesting, and maybe those are two different things, biggest versus most interesting, of the addressable opportunity that you have remaining, what are you thinking about today? What would you point us to?

Lynn Moore

Well, when you're looking at the public sector, the areas that we're not really into right now are health and human service is a big field. MicroPact plays in that area to some degree. Things like high ed, but I think what I would go back to is my initial comments which is right now, we're not looking at necessarily, absent some compelling opportunity, to go into a new market right now. We have a lot on our plate. We've done a lot of investments over the last year-plus, and our mantra right now is focus and execute.

Now, that being said, we continue to look at opportunities. We'll always look at opportunities, and if the right compelling opportunity comes along, we'll certainly take a real hard look at it.

M

I just had a question on pricing. What's your philosophy on pricing in general, especially on the newer products like Socrata or MicroPact? Then, kind of related to what you see in a lot of other software companies where they're doing this on-prem to SAS transition, do you kind of see that as an opportunity to provide more value to the customers but also take on more incremental price? I know you've made comments around this in the past, but do you see anything on that in terms of how you price philosophically change with such transition? Thanks.

Lynn Moore

Who wants to talk pricing?

M

I can talk a little bit about how we look at it from Socrata, from the Data and Insights, and you can speak to MicroPact. On our side, what we're trying to do most is tie price into, like we want to be able to go in,

and whether it's through saving the customer time, whether it's through improving their processes, driving better outcomes. We're basically trying to put every single one of those levers straight into value.

So, right now, we look at that in terms of basically per usage and per site licensing, and then ultimately going into more of an enterprise style agreement, but the key conversation that we want to have with that customer every time is the value that we're driving and how they're becoming more efficient, their people are becoming more efficient, and then ultimately they're going to see a ton of value in what we're doing.

Kris Collo

On the MicroPact side, we do a lot of federal government work, and so what we have in the federal government as being a contractor there is a GSA schedule. So, we're sort of bound by the pricing that we have within our GSA schedule.

In the state market, it's a little bit more flexible for us. We've been able to increase our prices there in the state market. The way we license our software is by concurrent user, and we have a schedule again that's published out on GSA's schedule.

M

I would say, too, you see it across the board where we're not—a number of our offerings are not subscription based. With e-filing, Modria that Bret mentioned earlier is done on a transaction basis. That example he gave of Clark County, each party pays \$25 each to participate in a settlement in that way. So, the work he talked about with Research is done on a subscription basis to the bar, so it would be charged.

I think if you looked at every one of us, there are different solutions that we're offering that way that depending on what the right price point and the right approach is for that market, we're pursuing, so I don't think it's always license, or it's always on-prem, or it's always subscription. We really kind of look at the individual market and price accordingly.

John Marr

Pricing is one way to look at it. It's really the whole value proposition, so what you're hearing, and what you see across this whole table here, things Bruce was talking about, eight to ten years ago. Sorry. They didn't have a very good business model. It's all these big deals—

M

Yes, but we changed it.

John Marr

It's all these big deals, and because they were big, and they were very professional service weighted, maybe 20%, 30% of the contract was license, so even if they got 20% of that, that's only 4%, 6% of the total engagement that was post-implementation recurring revenue, so that was not a real good model, but they can't just raise that maintenance fee or subscription fee as you evolve to the cloud. So, what they've done is they've gone out, and they've added all these other recurring services like Research, like Modria, etc., and added incremental value that they can get compensated for.

So, grow the relationship, and Socrata or Data and Insights that's the same thing. You kind of capture and grow the thing where they start out light, and they add value and add value and add users, and they have it grow from there. We are probably up against simply increasing prices on a regular basis. A lot of our clients have been clients of ours for a lot of years. We've increased their prices modestly, but over a long period of time to a point where it's pretty fully priced. There is a market out there. There is competition, and getting greedy gets you a point where you could cause people to take a look.

So, incremental revenue the way we see it are all these other products and services or incremental value that we can add into the relationship and get compensated for. So, I think that's more the existing customer growth strategy.

M

Hi. The Connected Communities Vision certainly makes sense I think to a lot of people in the room, yet at the same time, it's difficult to ascertain the time as to when a municipality decides to go down that road for their citizens. They're not going to switch to another municipality that's already lived there. What's the tipping point in your opinion as to when the Connected Communities Vision takes off?

Bruce Graham

You know, somebody else asked that question at the break. I would argue that I think it's taking off now. We don't see it, but our market is never going to move where it's like Google or something where all of the sudden everybody starts buying Connected Communities, and that's the only deal. It's just that every transaction we compete in, we get stronger. We have a more competitive solution.

Our solution still will be largely purchased independently. These agencies operate. When they go to bid, they bid independently, but if, for example, if someone goes out to bid for an EnerGov-like solution, and it operates within a county that's already using IAS world, well, we're going to be able to have features there that we're uniquely able to deliver because it operates within that county.

So, there is, I think, more of a network effect over time. The more solutions that are deployed that are using Tyler and using it within Connected Communities, over time our solutions in their entirety get richer and stronger and more competitive. So, I don't think of it quite like a tipping point, but I do think that it continues to drive up our win rates overall.

One of the things that really happens is that when we introduce a new solution, like right now we're moving into corrections. We're at a 5% share in corrections. Well, because of what we have with New World, what we have with Odyssey and the court side, when we go into corrections and build out all these integrations, it's a much stronger offering, and we're able to begin to accelerate the growth there much more rapidly.

Every one of these, and anybody pitch in here if you have your own solutions, but those are examples.

Lynn Moore

I'd add to Bruce's comment about how it already is getting traction. You look at New World Public Safety as a good example. When we bought New World, they essentially didn't really have a presence in the State of Texas, and we've been out there with our Tyler Alliance story. Last year, they got their first Texas clients, and in part because we have such a strong presence there in courts. We've been out there telling the Alliance story. We've been showing the integrations. We can show what can happen.

They realize it's not going to happen overnight, but it has brought sales to New World Public Safety in the State of Texas simply by having the vision and knowing that we're making progress toward that vision.

M

It's certainly the same for us in Data and Insights as well, just simply being able to point to three, four different systems that we can pull in just from the Tyler family, let alone from the broader organization. We have some really neat reference customers that we're working with in the State of Georgia. Fulton County is one where we're able to pull together all these disparate systems and really showcase the power of Connected Communities in very, very concrete details, and it's something that I think you're

going to see more and more as we push this across all of our client base.

Lynn Moore

If you remember my discussion earlier on talking about it being a reference business, when you do get a county or a jurisdiction where we have multiple Tyler products, and you get a CIO who actually starts actively pursuing that, talking about it, you prop up a city. We sold Lubbock last year multiple, different products really understand the guise of the Connected Communities Vision, and as those things get up and running, and you see other jurisdictions take a look at them and say hey, this is a showcase. These are the things I'm getting out of this, these are the benefits, I think it will have that ripple effect, but again, like everything else in our market, it takes time to get there.

M

Sort of a follow-up to that point you made, is there a risk that Data and Insights makes it easier to integrate disparate systems that it sort of lessens the need to upgrade or move to a Connected Communities type of suite?

M

We don't think so. So, when we talk about those source systems, what we're providing is more optimization, more insight, but the source systems themselves are powering so much valuable workflow, so much valuable management of the processes behind the scenes that we think there's ample room for the rest of the Tyler suite to fit in there.

We hope, we have a vision that even in the places where perhaps Tyler doesn't have a presence in those source systems that we can bring in the analytic solution, and then bring the rest of the Tyler suite along with this. We really think it's more of a better-together story rather than a world in which we're cannibalizing those types of systems.

Kevin Merritt

I would say, too, we really think of the data and the process independently, and we bring the data together with the Socrata platform. We need to bring the processes together through our application integration that we have working. So, yes, the fact that we have Socrata and can bring all that great story around the data is just one part of the overall story. We still need to bring the applications together to stitch together all the various workflows, and we are going to continue to do that.

M

Can you talk about how federal mandated or federal funding for certain upgrade programs like computer-aided dispatch can affect purchase decisions in various parts of your business, and if there are any out there that we should be thinking about over the next two to three years?

M

Greg?

Greg Sebastian

Can you hear me? So, currently, a trend that's going on across the country is a switch from how states report up into their state and into the FBI, and that transition is taking place over a period of the next few years, so it's from what they call Uniform Crime Reporting to Incident-Based Reporting, and there are nuances to each state. There's a basic fundamental federal requirement, but each state has its own reporting system as well that that's based off of, and there is money flowing from the federal government, a lot of it in Texas that we've been taking advantage of.

So, one of the challenges in public safety is it's not like—I used to run the ERP division. I used to compete

with Tyler when I was with New World, and when cities couldn't find money, city managers always found a way to fund projects, and public safety officials don't know how to procure generally. They're cops. So, we've been in the process of teaching them how to look for these grants, how to write them, and then how to get the money in the most efficient way possible. So, there's a lot of that going on across the country, yes.

Brian Miller

Okay, any other questions out there? If not—

M

One more.

M

A question maybe related to the earlier questions on Connected Communities. Can you talk about how, before and after Connected Communities, how has that changed the R&D process within the company in terms of workflows? You have lots of disparate divisions. I'm sure you probably have engineers that work on similar functionalities and different products. Can you just talk about that?

M

I can speak to that. It has made it a little more complicated because structurally, Tyler was organized into these different divisions, and there wasn't a lot of collaboration between the development teams. We've had to do that now. So, the vision is really changing how we're working as product development teams. There's a lot more collaboration across the different divisions.

We have teams now that really kind of work outside of our corporate structure and span the entire organization. One of the things that we did to facilitate that type of collaboration is we created our own Tyler Developer Conference. So, we bring 300 at a time, Tyler developers, to a location teaching them new things, getting them to work better, and all those kinds of things. So, yes, it has changed a lot. It's changed our culture significantly, and I think that's going to continue, and then we're going to have to continue to do that to be successful.

CONCLUSION

Brian Miller

Okay, with that, we'll conclude our investor session. Again, we'd like to thank all of you for taking the time to join us here. I hope you'll feel free to go back over to Connect if you have the time to be able to interact with our clients and our customers, see more of our products.

If you have any further questions or need additional information, please feel free to reach out to me, [indiscernible], or really any member of our management team. Contact information is all on the website. Thank you again.