THOMSON REUTERS STREETEVENTS

EDITED TRANSCRIPT

CMPR - Cimpress NV Investor Day

EVENT DATE/TIME: AUGUST 07, 2019 / 12:30PM GMT

CORPORATE PARTICIPANTS

Bryan Kranik *Build A Sign LLC - CEO*

Jenna Marvel

Maarten Wensveen *Cimpress N.V. - CTO & Executive VP*

Meredith Burns *Cimpress N.V. - VP of IR*

Paolo Roatta *Cimpress N.V. - SVP of Upload and Print*

Peter Kelly *Cimpress N.V. - Executive VP & CEO of National Pen*

Robert S. Keane *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Sean Edward Quinn *Cimpress N.V. - Executive VP & CFO*

CONFERENCE CALL PARTICIPANTS

Andrew V. McQuilling *UBS Investment Bank, Research Division*

Gary Mishuris *Silver Ring Value Partners Limited Partnership - MD & CIO*

PRESENTATION

Jenna Marvel

Good morning. Hello, and welcome to Cimpress's 2019 Investor Day. My name is Jenna Marvel, and I'm the Manager of Investor Relations. I'd like to welcome our guests in attendance here at our Waltham, Massachusetts office, as well as those joining us on the webcast who weren't able to make it in person. Our presentation will begin in just a few minutes after a few quick announcements.

First, I'd like to introduce today's presenters. Robert Keane is our Founder, Chairman and Chief Executive Officer of Cimpress, as well as CEO of Vistaprint. He founded the company in 1995, and has been the driving force behind our long track record of value creation. Maarten Wensveen is an Executive Vice President and Chief Technology Officer of Cimpress and CTO of Vistaprint. Maarten joined the company in 2011, along with our acquisition of albumprinter, and is primarily responsible for the creation of microservices and standards for our mass customization platform. Paolo Roatta is a Senior Vice President and the Chief Executive Officer of 1 of the 2 newly formed Upload and Print Groups called the Print Group. Paolo oversees the strategic direction and overall performance of these group of businesses. Prior to joining Cimpress, Paolo founded 2 startups, including one of the first mobile media companies in Europe and Latin America and was an Executive Director at Procter & Gamble and Bertelsmann in the United States and Europe. Peter Kelly is an Executive Vice President and the CEO of National Pen, and has had a strong operating track record there for 13 years, managing the business in Europe and Asia before becoming CEO in 2016. Bryan Kranik is a Senior Vice President and the CEO of BuildASign, an acquisition we completed in October 2018. He brings over 21 years of management experience and is responsible for the company's overall operations and long-term strategic direction. Brian joined BuildASign in 2015 as CMO. Prior to that, he spent 15 years at Dell in the Consumer and Small Business division, holding leadership roles in marketing, sales and general management. And Sean Quinn is our Executive Vice President and Chief Financial Officer of Cimpress and CFO of Vistaprint. He is responsible for central Cimpress services such as corporate finance, legal and procurement. He first joined Cimpress in 2009 and has held various financial and operating roles, including Global Controller and Chief Accounting Officer.

Now we received a number of presubmitted questions prior to the event, so thank you to everyone who took the time to send us those questions in advance. We will be addressing many of them in the prepared remarks of the presentation. But for the ones that we don't get to, we'll do our best to get to them at the end of the event. We will also leave time for live questions. So for those of you here in Waltham who would like to ask the presenters a question, please just hold off until the end.

Next I'd like to go through a few quick housekeeping items for those of you here in the room. First, there are 2 sets of restrooms. They're marked on the map in green and link the main lobby of the building where you entered this morning. We're going to have a brief break in the middle of the presentation to give you a chance to stretch your legs. Also please make sure you turn your mobile devices to silent mode, and the Wi-Fi instructions are on the back of your name tag in case you're interested.

Before we get started, I'd like to note that during today's event, we will make statements about our expectations for the future. Our actual results may differ materially from these statements due to risk factors that are outlined in detail in our SEC filings and also here on the slide. We invite you to read them.

With that, I'd like to turn the presentation over to Robert Keane. Robert?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Thanks, Jen. So thank you, Jenna, and welcome, everyone. I really appreciate you all coming up to Waltham today, and welcome to those of you who are joining via the webcast. So I'll be up on stage twice today, depending on the hat which I'm wearing right now, of course, wearing the Cimpress CEO hat and come back in a little bit on the Vistaprint -- from the Vistaprint perspective.

For today, let me start with 3 or 4 slides from Cimpress to talk, almost like peeling an onion at the top layer of the business over the long-term from a revenue perspective, from a cash flow perspective and from a value creation perspective. And I think that we, as a business, and I personally feel it's important to understand that there, in the end, that value creation, and we'll talk more about that quite a bit today, is really what we're trying to drive. And we're very much focused on that long-term valuation -- accretion.

So if I start at the top level, the superficial level, we certainly had a wonderful run of revenues. This shows from the first year after we went public, our fiscal year 2006, when we had $152 million in revenue to the -- just under $2.8 billion revenues we just completed in the last fiscal year, and this history actually stretches back to the left hit of the slide back to 1995, when I was very happy to double the business, and we moved from myself as an employee to the following year to having 2 employees. So it was a long decade to the left of this. But over the last roughly 20 years, we certainly have had a long track record of disrupting the market.

If you go one level below that, it's how much are we generating as a business in terms of cash flow. Now later on, we'll talk a lot about steady-state free cash flow, which we think is even more important. But if you look at just the cash flow generation of the business, here we're talking about unlevered free cash flow, so preservicing of our debt. And at the top, this chart is a little bit complicated. Let me walk you through it. On the left-hand side, you see when we were 5 years here; on the right where we are in the year we just finished up. And at the top part, where you see the bubbles, we show the relative cash generation of our businesses. It does -- the top half of this, the bubbles, do not include the central costs. But below, you see the 3 lines of numbers, those do include total central costs. Those bottom 3 rows will match numbers you'll see from Sean later on.

If I start at the top, however, you see that 5 years ago, we had Vistaprint generating quite a bit of cash. It's not an exact comparison to today because of what was in and out of the central costs. But broadly speaking, a cash-generative business, which, in the last 5 years, we've grown, not as much as we like, but certainly has grown. Upload and Print was a very small effort for us at the time. And today, you can see it's grown quite a bit. Albumprinter, we made an investment, which we're very happy to bring on Maarten and Kees, who runs part of our Upload and Print business. But we did decide for a number of different reasons we spoke about before to divest albumprinter. So you don't see that small dot, which is on the left, on the right-hand side. On the other hand, we did invest in National Pen and BuildASign. And you can see those are small, but we think, promising businesses in terms of cash generation.

The yellow-colored dots at the top half of the screen are actually negative numbers. These are what we lose or invest. And 5 years ago, we had moved into places like Japan, Brazil, India and China, we call that Most of World, recognizing that's where most of the world's population lives. It was a loss-making investment. We've talked quite a bit about how, unfortunately, we've not done well there. And particularly, the last fiscal year, in Brazil, you see Printi, we had a very significant loss. All the other businesses that are early stage investments fall into the dot in the bottom right.

If you look at the bottom, cash flow. We've gone from $78 million of total cash flow, inclusive of central cost 5 years ago, to $269 million. And if you break out, and you look at the businesses that are doing well and growing and profitable, you see that's gone from 84 -- I'm sorry, $94 million to $315 million. So the previous slide looks great over a long period of time, these numbers look pretty good. But if you go 1 layer down, we do really look at intrinsic value per share, which is our uppermost financial objective. And I certainly won't repeat how we calculate that and how we think about that, it's on the slide here. But we've often used this slide with our shareholders and debt partners to talk about that we are very willing to make investments. The negative cash flow you see on the left-hand side of the black and white sketch with the anticipation of making that back above our cost of capital and above our hurdle rates in the future. In theory, that's great, and we certainly look at that as a portfolio of investments over the long term.

Over the last 5 years, we've made a lot of those investments. And this is a 5-year capital allocation history. This does not include inflows that came from divestitures of, for instance, albumprinter, so it's just the outflow of capital allocation. And you see from 2015 to 2019, we've invested $2.1 billion in capital allocation. Now if you exclude the share purchases -- repurchases, it's still $1.7 billion, and you can see the components of that.

So as I wrote to you in the annual investor letter, we think there's a lot that's very strong about the company, about certainly Cimpress overall, about the constituent parts of Cimpress. But when we step back and look at something we've also spoken about for a long time is, how are we growing our intrinsic value per share over long periods of time, we do not believe we have done well enough for the last 5-plus -- 4, 5, 6 years. And we -- I want to reiterate that this calculation that we've talked about in the past, we do not see this, the product of this math as being intrinsic value per share because it doesn't include future value creation or value disruption from investments that aren't yet coming through our steady-state free cash flow. But it does, if you take this over a very long period of time, we have to grow the cash generation of our business divided by our WACC, take away our debt, figure out how much that is per share. If that value grows above our WACC, we believe we are creating a true economic value, and we'd certainly hope to do well above that. And the reality is, when we look at how we've done the last 5 years, we think there's a lot of good things we've done, but we do recognize this concern that we need to do better.

And we speak pretty frankly about this internally, and we'd like to speak about it externally, because we believe it creates a culture where people acknowledge issues and then attack those and correct them and learn from our mistakes. And so this comes from a book, which is year, probably almost as old as Cimpress, published 15, 20 years ago and Good To Great by Jim Collins, where he said that, "Every good-to-great company embraced what we came to call The Stockdale Paradox, that is you must maintain unwavering faith that you can and will prevail in the end, regardless of the difficulties, and at the same time, have the discipline to confront the most brutal facts of your current reality, whatever they may be." Now I really do not believe at all that Cimpress is struggling in the traditional sense of the word; you can see those top line numbers. We really say, how do we take -- can add a third decade to the 2 decades we already had, which is truly value creation. We've tried to step back and say, "What has prevented us from doing better in the value creation as we laid out for you 4 or 5 years ago in our uppermost financial objective?"

So in peeling down to the why of that underperformance, we asked a series of questions to understand what was the root cause of that "brutal fact," to use the Good To Great term. We started out by saying, first of all, is that the core premise that we've moved towards about 5 years ago, say, let's not just try to be Vistaprint, let's understand the core economics of what drives the financial value creation of Vistaprint and look for other opportunities to apply that, in other words, mass customization. And mass customization is this concept of producing goods that meet individual customer needs, but to have near mass production efficiency. It's something which has been an academic concept since the '80s. And we really do -- we've thought a lot about, we continue to see the value creation for customers being very significant. And it is real, and we would not be here today without that. And so we continue to believe in that as a core competence.

The next question we came to is, "Well, okay, even if in certain markets that works, is the actual market opportunity within mass customization as great as we thought it was?" And we actually still, again, having looked at this, again, we -- depending on how you measure and what markets you include, look at very large $30 billion-plus opportunity out there, and the vast majority of that remains in a traditional industry structure that if you just look at the printing industry, this is a slide we've shown in the past for our Upload and Print presentations. But you think of the whole printing industry, and there's a certain part, which is long run printing, which we don't think is applicable to mass customization, it's already high volume. But there's an enormous portion of printing which is becoming shorter and shorter runs and it's transitioning over that figurative wall you see on this slide here into mass customization. And we see both a Vistaprint approach for a template-based as well as the Upload and Print, and you'll hear a lot about it today.

And importantly, as much as the printing industry, we believe, has a long way to go to transition, we think there are many markets beyond printing, and we've moved into certainly the promotional products, the signage, the packaging markets testing into the textile markets. And so there are many different markets where that core competency, we believe, can continue to grow. Even though there's some printing component in often the processes, the actual end markets are not the traditional printing market, we see that as a very high potential over the long term.

The next question we asked as a competition. And whether or not there are significant competitors who are a threat to what we do as a business. And here, I think this is something we've seen some changes, and we've talked about this, you'll hear about this today, for instance, when Paolo is speaking about the European Upload and Print business, which we like, which we believe have a great future in front of us, which we think has historically, for us, been a good investment. But the markets that our businesses operate in are much more competitive, and that puts pressure on us on each of our businesses to serve our customers much better, faster, higher quality, lower cost. And the e-commerce norms that were typical in 1999 when we started this, even 2005, 2009 around our IPO has just continued to rise. And so we're all consumers, I assume this room of Amazon, where you literally can get on your phone, when you think of something and have it delivered to you 24 hours later in certain cities that afternoon. And that's just one example of this constant macro increase in the expectations of e-commerce norms. So we believe that we have not kept up with that as much as we can. And we're going to talk a lot about that in the coming slides and presentations today. But overall, we still see -- we feel we're gaining momentum and the pendulum that we -- I'll speak about it in a moment, has swung back to a point where we are feeling the gaining or the turning of the tide and the gaining of competitive capabilities across the businesses that comprise Cimpress.

That gets back to another question we asked is, "Okay, well, even if there are a lot of new markets, even if certain businesses, the smaller businesses of Cimpress or the bigger ones like Vistaprint can individually do well, is the core premise that we've set out for Cimpress, which is that the whole is greater than sum of the parts, accurate?" And again, the parts, which today constitute Cimpress are getting fairly diverse. These are the brands which we use. We go to market, not each one of these in a separate business per se, some of our businesses operate under multiple brands. But we do both, especially in Europe and in North America, cover quite a breadth of customer-facing brands. And we do, again, a lot of work that I personally did with our executive team with the leaders in the different businesses we have around Cimpress, and you'll hear about this today in the presentations from people like Paolo or Peter or Bryan, that we do believe that we are, through our shared strategic capabilities that we've been focusing on the last several years, driving true competitive advantage and true customer value through technology, through central procurement, through a talent infrastructure we've built in India and through knowledge sharing of how to go about this mass customization craft or science.

We did ask is the fact that we have decentralized working well? And we actually, this is one of the presubmitted questions we got in the February strategy investor call we had. And there, we actually feel very comfortable that -- and very confident that the strategy to invest in and build businesses, but to let those businesses operate in their own entrepreneurial focused way with really limiting the competitive advantaged areas as a group to those few select strategic areas, is working. We do think there's a lot of learning we've had to have there. But the -- and I'll speak about that later on, but in terms of -- when we look at the speed, the ownership mentality, the accountability for customer and investment -- customer satisfaction and investment returns and the reduction of cost that we've been able to take out of the corporate center and the direct perception of costs anywhere in the business because the leadership teams in each of the businesses are facing those costs more directly has been a significant success.

Where we feel besides the rising competitive areas, what we need to do much better, frankly, is in execution. And execution, first of all, I think has been hindered or hampered by decisions I and we made to, first of all, swing the pendulum of centralization very central. If you look at, internally often, and I think I've talked about this externally. I use the sense -- the analogy of going through an adolescence period as an organization when we went from 0 to $1 billion, we had to make a lot of changes to go through that. We went from $1 billion to $1.5 billion revenue and then beyond we started to say, "Well, the way to be effective as a larger organization was to -- it made a lot of sense in spreadsheets and PowerPoints to drive kind of a Volkswagen-esque back end of manufacturing and engineering and central services, central finance and human resources and then have a layer of brands across the top." It clearly worked for decades for Volkswagen. But for us, for reasons we've talked about, that did not work. So we pulled that pendulum, or we let the pendulum swing over to decentralization. And I think that, that initial investment in centralization and demantling it took a lot of time, focus and capital. And then we do feel like we swung, frankly, too far the other way. And before we come back to where we, today, believe we're at the right balance. Examples of going too far to the decentralized approach can be large, but relatively speaking, small examples of what happened in our investment in Brazil. In Printi, we just feel like we should have been closer to that. We should have had more guardrails around it. But it could be very large examples like I and Sean will be talking about in terms of the financial approach we took in Vistaprint, which we intentionally decentralized. And again, in no way am I saying this to take responsibility anywhere other than to myself, but we did allow a lot of decisions to be made without the -- whether it's the small businesses or the biggest business, Vistaprint, to have the central guardrails and accountability. But today, we speak a lot about, and we do an annual launch meeting for the top 50 or so executives across Cimpress. And that need to balance the kind of the tensions between decentralization, yet still have guardrails and accountability, was the core focus of what we've focused on in the last launch meeting, which we did in June this year, about 2 months ago.

Importantly, we've also evolved in this pendulum -- the swinging pendulum how we think about long-term incentive compensation. So for the team members who are in the corporate center, we are giving a major portion of their compensation in performance share units, which hopefully you're all familiar with, but based on the long-term evolution and value creation of our share price, 100% of my compensation comes from those PSUs, I should say, other than the Massachusetts minimum wage, which is required. But for the other leaders in the center, Sean, his team, Maarten and the like, the majority of their wealth creation opportunity is tied to how we drive long-term value creation through the share price.

For people who are leading our businesses, and that could be -- some of the people who coming up to speak today like Paolo, Peter and Bryan as well as others throughout the organization, we are primarily moving to a long-term incentive compensation, which is tied to the value creation of the businesses they lead. And that's been a big -- we've been able to move to that because of the decentralization and because of the, literally, the balance sheets which we didn't have when we're centralized to the cash flow statements. The clear control of all the decision to go into improving customer value or financial returns or business culture are in the hands of our leaders, and therefore, we can tie their value creation to something which one is, I think, good for everyone here, but also from -- in terms of recruitment and retention, we seek to create long-term incentive packages that are truly competitive with -- if they were to go and work for a private equity firm, where they can share in the value creation for the organization.

So that's my introduction. It's high level of the kind of history we've come through. I'm excited to turn it over to the team members, and we'll start with Maarten. If you can come up and talk about our investments in Cimpress technology.

Maarten Wensveen - *Cimpress N.V. - CTO & Executive VP*

Thank you. Thank you, Robert. Hello, everybody. Thank you for the opportunity to update you all about mass customization platform, our platform approach. First off, I've shown this slide a couple of times before. It's where we are in this journey in building our platform, our NCP mass customization platform. I'm pretty happy to say that I'm probably not sharing this particular slide anymore in the future because we're really seeing some significant synergies spinning off of this, and the business we will talk about it today, and I will show a little bit about that. But we really start to see some returns coming out of this.

So where are we on this journey? We're there. I mean, we'll forever be work, we will forever keep investing, and we will see more things coming into it. But there is no build the foundation and nobody's using it yet phase anymore. We're actually now full in swing and everybody is on this thing.

So let me ground ourselves for a second. What is the mass customization platform and what those platform mean to us in the industry? You will see many terms of using a platform, and for us, it basically means our internal (inaudible), right? So for us as a service to the rest of the businesses. We take an approach where we have a lot of processes, APIs, technologies out there that are very specific to mass customization, and that our businesses can use. And while we started building these even in the early MCP days where Robert just talked about, very much the foundation of all that work of technology is now being used throughout all of Cimpress's portfolio, and it's been growing ever since. Today, there's an extra reputation -- representation of anonymized set of APIs and some of our services out there. And all of our businesses in some form or another are using them. Some of them are early adopters and take everything; some of them take the basics. But I'm very happy to see this adoption.

And also, we started with the process to then come up with, what does this really do for you? I will show this slide a little bit later, but also last time, I showed that we take every piece of software that we create along an access of what does this do in terms of cost saving or efficiency for your business? Or what does this particular software or process help you in terms of revenue growth or that faster serve your customers? And when we started calculating these individual business cases, we actually came to great returning annual returns on these particular pieces of software. And we're seeing some really -- we're really feeling comfortable that the investments that we're actually making are actually giving great returns at the moment. So for me, that's a little bit of a victory thing also because that's very important to get this momentum in the business. And that momentum is growing. We're seeing more and more of these things in production, like actual customers get touched by all of these processes throughout all of the Cimpress businesses. And there is actually an accelerated pace in the new business of software being explored, implemented AB tested but different businesses to see what kind of gains can they get out of that.

A big subset, not all, but definitely a big part of it, is actually a thing that we call marketplace. So all of these pieces of software together enable our businesses to actually sell and buy products over what we call our platform, but our marketplace part of the platform. And this has been growing a lot, which is great. And what we're basically doing here, just to give you an example, is to make it easy to set up a contract between a buyer and fulfiller. What is the actual price? What are the price curvatures? What do we do when these particular products are that we produced or damaged in shipping, who picks up the bill? All that stuff is automated. So it makes it really frictionless for 2 businesses to start interacting on these products, and it saves capital investments on these businesses to start building up their own factory lines for it. It makes them also extremely easy because we are integrating at an, I would almost say, alarming rate, also third-party manufacturers into this network, which get driven by the businesses. They themselves find suppliers and say, "I prefer you hook yourself up to NCP because that's the path of least resistance for me to do this, and it just hooks up into all my systems," so that's great. And then what you then especially see, for instance, in a place like Europe, where there's a lot of businesses concentrated together. We really have like a lot of growth on this. We're starting to see that now a little bit in North America. But this time, we talked a little bit about that, too, which is great. But you will see the more buyers and sellers there are in a concentrated area, the more business vertically starts happening. So that's very exciting.

When we were finding proof, we even accelerated faster. And a thing that has really also hold us a little bit back with some of the businesses is just we didn't always have our e-commerce stack that's front-end part, which MCP or traditionally didn't release supply in order. And if you have looked at any of our businesses at our sites, some of them are great, and some of them, parts of it could use a little bit of updating on that. And so what we've been starting to do is also to come up with a best-of-breed e-commerce experience. Now don't worry, we're not building everything from scratch there. Actually, it's basically a recipe of best-in-breed SaaS providers already out there for the things that are not differentiating to us at all. And then mixing that in with MCP and making sure that these are the differentiating things for mass customization. And so we sort of have like a best-in-breed recipe, which were actually, a lot of our business are actually rolling out to rejuvenate their front-end experience, which will make it a lot easier to really use all of that, which is sitting inside of MCP. And this is really starting to pick up a little bit of the pace throughout all of our businesses to get to this more, I would say, modern front-end tech stacks and also allows them to innovate faster. Exciting start for me. But this is not a goal in itself, right? A great tech stack doesn't make a great business in itself per se. So what is really the full end goal on that? And that is to really enable the analytical power and the data power that comes after this.

So we're starting to really start to take a deep look and now that we are gathering lots of interesting data throughout all of Cimpress, where are we on this journey? So let me take a second to walk you through what I would say is the more important thing once all of this tech stack is there.

So we are basically, here, I would say, somewhere in this vicinity as a company. Now that's either scary or that's actually the opportunity. And I'd say it's fully the opportunity because I think most of our industry is actually in this place. What you will see here is basically, all the way on the left, you got operational reporting. All of our businesses have operational reporting, they have data, they look at a dashboard, and they got some second part, basic KPIs on it, right, that they talk about on their meetings and cadence to say, "Hey, how did we perform against our targets?" This is very common through most companies. But then, do you hire some analysts to actually look at that data and say, "Can we do things smarter, right?" Is advanced data visualization, are there more optimum shipping methodologies to ship these products? Should we actually go a little bit more third party network? Should we have a hybrid between our own factories and the mix of third-party suppliers for these more heavier products, right? You're talking about shipping optimization. Or should we think about, and then we go all the way further to really understand our customers on a data-driven approach, right? Really do the segmentation by understanding our customers deeply. And then even going all the way through predictive modeling, saying, "What would we predict their behavior would be in certain weather patterns, certain seasonal festivals local to that country and could we change our marketing campaigns automatically on that?" Where, of course, the ultimate goal would be doing that forward neural network machine learning kind of algorithms and start testing that in like multi-arm pendants reader, lots of these different marketing techniques out there to really go deep in what kind of things can we do there. And we're just starting to [start]. And we're experimenting, for sure, even a little bit higher on this sort of stairs. But I would say the majority of our activities are taking place in these other things. And so that's very exciting that we're now getting to a point where this data starts to become available for us and actually start utilizing that.

That's all very great, but let's get back to the point where we are today. We're still building this foundation, and we're still doing that mostly on the axises of we should invest in, how can we have cost saving and efficiencies and how can we actually accelerate growth throughout these businesses, and that will be most of the presentation, not all of the data on these kind of things, when I talk about that with the Vistaprint hat later.

For now, thank you very much. Give it back to Robert.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Great. So thank you, Maarten. So Sean and I are -- Sean and Maarten and I are going to tag team on the Vistaprint presentation. And let me step back once again and give the context of a longer-term view by starting about the Vistaprint evolution from the beginning through where we are today, get a little bit into the market dynamics, specifically to Vistaprint, where we see our strengths and where we see our weaknesses. Internally, we speak about a multiyear transformation journey, so talk about what that means to us and where we're focusing in the next 1.5 years and where we see ourselves on maybe the next 2 to 3 years. Let's speak about areas where we've made improvements and then look ahead. And so again, as I said, we'll be coming up back and forth on the stage to go into different parts of this between the 3 of us.

So if you look at the evolution, I do think, hey, of course, I did start the company in '95, but it was in '98 that we actually said, "How do we transfer what was an off-line desktop publishing small business graphic design software business to the Internet?" And that concept was late '98. By '99 -- in June '99, we changed our name to Vistaprint. We started really getting a lot of investment in technology, we had only 15, 20 software engineers we've hired that -- in that time of our history. And of course, that was the height of the dot-com frenzy. We were able to raise a lot of money. And we then crashed into the dot-com funding crash. But nonetheless, by 2001, we had come up with a -- really 2 core technologies, which have been proven out, and we were only doing $3 million or so in revenues that year. But we had a revenue -- a business model that was founded on the left with what we called a bridge or Vista bridge to take -- a bridge the huge chasm which existed between the economics of high-volume industrial printings, we had a photo of a magazine or consumer goods packaging where the unit cost per square inch was a fraction of the unit cost per square inch of higher volume. And as we talked about all the technologies we do. Today, that's a core part of how every one of the mass customization businesses that are online are doing this, but especially Vistaprint, where we take 50 million, 100 million unique custom orders a year, and that couldn't be done without that core technology.

Likewise, we, at the time, I use the term webtop publishing, we invented desktop publishing. And this was the idea that we could build a desktop publisher which would run in the browser as the application platform. And so those 2 components, today, you still recognize as being Vistaprint, and they worked very well organically. The other slide I showed before had some M&A in it. This is the organic growth of Vistaprint since that. And you see that 2001 slide, we were all excited about the opportunity, but we're just a blip on their screen. And we've grown to just finishing the last fiscal year, just under $1.5 billion.

So today, Vistaprint is most renowned for helping small business owners live their dreams, dreams through all types of marketing materials and whether it's signage or print or promotional products and the like. And we have an impressive list of capabilities. Certainly, the 20-year history that got us to our current size. We have strong profits and cash flow. We are really the leader in the market, bar none, in terms of integrating the graphic design components in the templates. So the Vistaprint customer, as we'll talk about later today, is very different from the Upload and Print customers who have graphic arts skill sets; the Vistaprint customer typically does not. And we're global with 20 different country sites, 15 million customers a year, 6,500 team members and very -- some of you have been to our facilities, very, very efficient, high-volume computer integrated manufacturing or software-driven manufacturing operations. So we're in a strong place. But obviously, we've been slowing down as a business. And so I would like -- I talked about what we did in the Cimpress level, we've really stepped back and said, "What are our strengths and what our weaknesses at Vistaprint?"

Our strength, certainly, a lot of the work of the teams in Vistaprint did over the last 4 or 5 years have helped position the brand Vistaprint in a better place than it ever has been before. We believe we can go much further. But if you look at between 2016 and 2018, some of the core perceptions of Vistaprint from our noncustomers were that we were quite behind the market, be it offline or online in terms of quality and their ability to trust in the Vistaprint brand. We've rectified those and we've held those strength, and we maintained the value image and reality for our customers. But we also addressed the fact we needed more product selection. And so you see that we've improved our perceptions, we believe that we can continue to make improvements in the quality and trust so that we really can be an across-the-board value -- differentiated value for our customers.

We also have the strength of what I spoke about before. There is this ongoing secular tailwind of everything in the world, but including all the marketing materials that small businesses use moving online and the -- especially, the younger generation just thinks first of going online not in not first of going off-line. So we think that over the coming years, that will be a positive and continue to be a positive. And serving these micro businesses, and our average customers have about 2 employees or less in the size of the business, is very hard to do. You have to be able to combine advertising and automation and huge service operations. There's a lot of capital involved. But manufacturing is not easy to do in those small orders. And so there's a lot of competitive barriers to go straight into the Vistaprint market.

For all our strengths, we certainly see that we have weaknesses. And I mentioned before, we talk about the need to reinforce our foundational basics. So we definitely see cracks in our foundations, and I'll speak about that. We also see competition has increased. We will see this across the board where a lot of people are willing -- in today's world, there's a lot of private equity and venture capital to go in and be in almost any industry. And as I mentioned before, the raising bar of e-commerce standards, which all of Cimpress needs to compete against, is certainly impacting Vistaprint.

My last talk, 10 minutes ago, I spoke about, starting with the high level revenue numbers and started driving down several layers into things like cash flow. Let me do something similar here, which is a chart which we've shown before. And let me walk through, first of all, what we see on the left-hand side. You have the cumulative bookings of a cohort of customers. Each of those different colored lines is a cohort based on all the customers we acquired in any given fiscal year. So the blue long line that goes out 8 years following the first orders from fiscal year 2012, and then you see the fiscal year as they get shorter and shorter lines go back to FY '19. And on the right, it's the cash flow -- I'm sorry, the gross profit, which was the cash flow, but the gross profit per customer that we have been able to generate.

Now when you first look at it, we would love to do better. But in general, the left-hand chart looks pretty good, both the Y intercept and the point in which we start on the vertical axis has been growing over time. And the slope has been getting steeper, which means we're able to deliver more value, and our customers are willing to spend more money as we go through that. And you -- it's been slowing down in growth, but at least it's been still growing.

If you look to the right, however, you'll see that from FY '12 to FY '16, and I can tell you that we've done charts like this back from 2001, we've been able to significantly increase the cash flow per customer. So if you, for instance, were to look at the year 4, which is right in the middle of the right-hand graph, and you see in FY '16, we generated about $80 of cash flow per customer, and you were to go down vertically towards the #4 into the x-axis, and you see that, that's gone up from about $50 in 2012. So there is continued progression in the value we're able to deliver and the value our -- we are able to extract from that value delivered to our customers. Then you see, starting in '16, '17, '18, '19 are, frankly, on the exact same line. I mean, there's some pluses and minuses here. And that means we've stalled in the ability to continue to improve that. So I think that is a numerical representation of our need to do better in terms of delivering better value for our customers.

So in the end, for us to really move that line or any other line that really drives value for customers, or value for shareholders, we need to deliver what we've often called jaw dropping customer value. And certainly, when we go back to the slide from 2001, what we were offering just didn't exist anywhere and that drove this growth. We don't think we'll get back to the growth we had in 2004, 2010, but we certainly think we can get back to healthy growth, if we can give truly jaw dropping competitive value -- customer value. The problem is we need to go through a phase before we get there, which I called rebuilding our foundational basics.

So this is a slide taken directly from an internal presentation I've been using at Vistaprint for the last 4, 5 months. So when you think of what we are doing as a business, take a 3-year view, these happen to be calendar years, and the vast majority of our focus in the near-term is on foundational basics. I'll talk about what they are in a second. And if we get those right, we can then build on top of that jaw dropping customer value. And those foundational basics are becoming customer-obsessed. So really understanding what drives customer satisfaction. Being more cost competitive, being more data-driven, being more execution-oriented, being more financially rigorous, being magnetic to talent, so we can attract the best talent. And I would say, every one of those, with the exception of customer-obsessed, which, unfortunately, even 10 years ago, we were not customer obsessed. We were cost-competitive, data-driven, execution-oriented, financially rigorous and magnetic to talent. We need to do -- and those are kind of motherhood and apple pie building blocks to any great company who wants to succeed in today's e-commerce environment. So that's where we're focusing most of our time.

In the letter that I wrote to you in the end of January this year, just when I stepped in at Vistaprint, I laid out 5 of the core objectives we had set for the near term at Vistaprint. And we are using a quarterly objective setting methodology. So we're going to use these 5 objectives, which we've talked about 6 months ago, to go through the rest of the presentation.

And what I'd like to do is turn it over to Sean to go through the first 2 or 3 and then to Maarten to go over the last few.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Great. Thanks a lot, Robert, and good morning, everyone. So I'm going to cover these first 2 areas of improvement, as Robert just mentioned, that were outlined in our January earnings letter. So the first one is decision-making frameworks to ensure valid ROI criteria. And unfortunately, this is an area where, as Robert just talked about, we had some of our foundational basics that deteriorated. This is one of those areas that had some deterioration.

And before I go into the details here, I think that there are a number of root causes for why that was the case, and let me just mention a few of them. The first one is that the Vistaprint business has increased in complexity over the last 3 or 4 years. There's been quite a dramatic expansion in product selection, in range of product profitability. And so that has increased the complexity of the business. But the other one that's really important here as it applies to these decision-making frameworks is what Robert talked about earlier in terms of the swinging of the pendulum. Having moved towards a very centralized organization across Cimpress, inclusive of Vistaprint, and then to a decentralized organization through that process, we lost some of the visibility and accuracy of data that existed in the past. And some of the tightness of feedback loops were severed, and that has had an impact in this area. So the area that I want to spend the most time on here is our advertising spend. And before I go through what's in this slide, as we've talked about in this forum in past years, about 8-or-so years ago, we changed to use a lifetime value-based framework for our advertising spend decisions. And that is something that most e-commerce companies use. That framework itself is completely valid and will continue to be used. That said, I do think there's a few areas within that framework that we fell victim to.

The first one is that lifetime value spend itself is not a competitive advantage. And I think in some ways, it became an easy way to justify top line growth with an expectation that profitability from that spend would happen in future periods. Well, most notably, and as it relates to decision-making frameworks, we were in these decisions, in some cases, applying average assumptions to bookings, and through that, missing some of the variable or semi-variable costs that were needed to be able to understand the marginal cash contribution from the spend. And that was, by far, the biggest area of impact.

And so let me get to the slide here. On the left, I want to talk about some of the things we've done in terms of spend reductions. We spent a lot of time in this area, the team at Vistaprint has spent a lot of time in this area. And starting in Q3, we used what I'll call a brute force approach to reduce the spend that we did not feel comfortable with meeting our return thresholds. And so we use proxies for costs that needed to be included, adjusted models. And through that, we reduced or put in more constraints for the teams that are making these frontline decisions and reduced the payback criteria through which they make those decisions every day on the front lines.

We are, as we get into this first quarter of fiscal 2020 and beyond, taking all those things that we've worked on and making them more systematized such that we can get more surgical in the way these decisions get made, be more systematic in the way those decisions get made. And I think through that likely have an opportunity to actually spend more, but we need to be comfortable that, that spend all meets the return thresholds that we've set.

A few other items to note here. We're also hiring additional talent to support more programmatic spend and also multiple parallel editor of testing, and some of the executive hires will play a role in here, and that was outlined in our earnings letter and Robert's letter to investors.

On the right-hand side, you can see that not only have we reduced spend, but we've been able to improve the efficiency of spend. We've reinvested in some of the most efficient channels that we have. We've improved landing pages and page search image improvements. And then there's a variety of areas where we've tested either alternative channels or methods within existing channels to improve return, and we've seen good outcomes there.

So that's what we've done. And let me talk about, in our fourth quarter, the one that we've just reported, what the outcome of that was.

On the left-hand side, let me first just orient you to what this slide shows, which is a comparison of our fourth quarter 2009 -- or '19 to our fourth quarter of 2018. And here, you can see the distribution of our advertising spend, broken out by payback period.

This left-hand part of the slide, frankly, is a really painful chart to have to show. This is the information sort of re-casted for our updated methodologies and cost assumptions. And you can see here, in Q4 of last year, there was an overwhelming majority of the spend that was far less efficient than we had expected at the time. And with this knowledge, we would have made different choices at the time. There is 51% of that spend last year that had a payback period of 48 months or greater. And so that is a new insight based on all the work that we've done.

Take that into Q4 of this past year. Again, the earnings that we just reported last week, and you could see that our spend was far more efficient with 60% returning within the first 2 years and a large part of that in the first year based on the spend reductions and improvements that I outlined on the prior slide.

From a financial perspective, if you think about this, how this through -- flows through the P&L. We reduced our spend year-over-year by $25 million. That's 32% reduction. Our gross profit in reported terms was down -- for Vistaprint, down $5 million year-over-year. About $3 million of that is currency. And so operationally speaking, our gross profit remained roughly flat despite these advertising spend reductions. And so when you look at that from a contribution profit perspective, there's about $20 million of flow-through from this reduced advertising spend in the fourth quarter. And that, of course, had a big impact on our fourth quarter results.

In terms of the outlook for advertising spend for fiscal 2020. Let me just highlight a few things here. One is that these year-over-year reductions, we expect to continue for the next 2 quarters as we lap last year's quarters when we were spending at that higher level. After that, the trajectory of our spend is going to depend on a number of things, including the conversion rate and lifetime value impact of all the other changes that we're making in Vistaprint; improvements that we're making in Vistaprint, some of which you'll hear about today; the relative performance of the variety of new tests that we're doing; and other investment opportunities. So it's too early to predict right now what that long-term trend of advertising spend will be. That said, I do not expect that in the near term and certainly, for this fiscal year, we would be approaching those recent historical levels in the 22%, 23% of revenue. And whatever the direction is, there's certainly a heightened awareness of the need to make sure that we are rigorous and have an analytical approach here, and like I said, with some of the new executives that will be joining the team, they will carry that torch forward.

In terms of the overall P&L impact for these advertising spend reductions, let me first just orient you to what's on the slide here. You see on the left revenue, segment profit, adjusted EBITDA and our cash flow. The left-hand side of these charts show a comparison of our last 3 fiscal years. And if you look at last fiscal year, fiscal 2019, you can see that revenue was up a little bit. Our adjusted EBITDA was up about 10% year-over-year, and then that flowed through for the most part, to unlever free cash flow. The majority of that increase happened in our fourth quarter, and a lot of that's driven by the advertising spend reductions.

On the right-hand side here, you can see that comparison of kind of the full set of P&L metrics and cash flow metrics for our fourth quarter. Revenue down a little bit in reported terms, about flat in constant currency. You can see adjusted EBITDA, which grew significantly about 30% year-over-year, and that flowed through to our unlevered free cash flow, which led to quite a significant year-over-year increase.

A few other things just to highlight from a cash flow perspective. In addition to the impact of these advertising spend reductions on our EBITDA, our cash taxes in Vistaprint were flat year-over-year despite the expanded profitability. Because of our revised growth expectations, we've been very rigorous in terms of CapEx and making sure that we're only spending CapEx for maintenance or strategic products, where there's a very clear and objective return that is above our thresholds.

And then lastly, the team has been very focused on working capital efficiency. That remains in focus. And from a working capital perspective, we saw great improvements over the year and in the fourth quarter, which all helped to lead to the strong growth in unlevered free cash flow.

Okay. So the second one, which is deliver attractive returns on past investments. I just wanted to provide a few examples here. The best way that we can deliver returns on past investments is to make sure that we are focused on optimizing the operations that we have today. And there was much of the team that was focused on new product introduction or other growth initiatives, and we have refocused the team on making sure we're optimizing what we have today.

Let me just provide a few tangible examples. This is certainly not an exhaustive list, but I just wanted to make it tangible, some of the things that we are doing and the impact that they have.

The first one on the top left is a direct material savings project. This is an example where we've changed out a key input material in our plants based on the learnings from some of our Upload and Print businesses, which Paolo oversees. And with a $4 million investment in year 1, this will have less than a 24-month payback and is expected to deliver incremental cash flow of over $6 million over that 5-year period.

The next one on the top right is a manufacturing optimization project. Again, the folks working on this would have otherwise been working on new product introduction and other growth initiatives. And with a focus here on process flow redesign that was previously deprioritized and with some minimal CapEx investment, we'll see here annual savings of nearly $1 million, making the payback here very quick and will lead to good returns on that effort.

The next one is leveraging the Cimpress network. And in just the last 6 months, the team has identified a variety of opportunities to leverage the network through the Mass Customization platform that Maarten has taken you through. And this will lead to nearly $2 million of annualized savings that we'll start to benefit from now.

The next is leveraging our central procurement capabilities. This is one of the shared strategic capabilities we have for all of Cimpress that Robert talked about earlier, and the team has been brought in to help Vistaprint with a professional negotiation and process around the key area of spend. This will deliver $3 million to $4 million of annualized hard savings through that process, and those benefits are starting in the next month.

And then finally, working capital improvements, and I mentioned this on the prior slide. We've been able to negotiate with 200-or-more suppliers, with a focus on working capital improvement and specifically payment terms to yield a $25 million improvement, which is a onetime improvement in our working capital leading to an increase in average days payable of 9 days. And so again, not an exhaustive list, but it gives you a sense of the types of things that the team is focused on and the financial impact of each of those.

With that, I'm going to turn it over to Maarten.

Maarten Wensveen - *Cimpress N.V. - CTO & Executive VP*

Thanks, Jon. So besides our bigger investment in some of these foundations and really getting to the core of our technology stack, and I will talk about it in a second, that doesn't mean we're not investing in just, I would say, almost obvious, but like very important things that are on the front end of our website in our current tech stack. And let me get you to a few things that we started doing.

We had a process originally where we had to have time and extract the dollar numbers and value in order to prioritize a buck or improve something on the website, which is a good process in itself to have and it's certainly not doing away with it, but we did have a long backlog of sort of like stuff that was hard to value or should we really invest in it. And we -- and yet, it's just -- if you're truly customer-centric, we should just do anyway. So we've really been upping these team members that are focused on this in the last time, and just do these simple things; a broken link, yes, it's deep in the page and that only get hit a few hundred times on what -- on the size that we are as a company, but just fix it. That's just our obligation. And just getting better at page navigation and making sure our merchandising really represents the products that make it easier for a customer to understand the products.

So let's go to a few examples that we immediately started doing and swarming around to just make it easier for our customers right now in our website.

I'll go from not-so-tech sophisticated to a little bit more tech sophisticated or actually MCP is starting to come in with some sources. And this is just using data to understand loading bags and promo is not a category how customers think about it. They think about it in clothing and bags and they think about it in promotional products. So you make a navigation split, and it immediately makes it easier for customers to navigate. Simple, basic, but like things that we immediately and you really start interpreting the data, go into those things.

Then you go into booklets. It's a complicated product to make. And so you need a little bit of instructions how that really works. And just doing better by copy, doesn't even need an engineer, just a little bit of love to really understand this product and really writing down some imagery around it and just get better on these things.

And then you go to, okay, we're going to use a little bit of technology here. We, of course, didn't use customer images. So my team was so helpful to create a couple of products in that were faulty, but like look at the top example here, where we are detecting these errors based by machines, but then bring them immediately to care agents to help them correct them for customers. So that looks very logical, right? I want my picture and the name and I put the logo on the bottom. But the end result is when you fold that flap over for this brochure, that is upside down. This happens all the time, right? In our particular industry. Can we prevent it for a customer because it's a disappointed customer. It's either a reprint or a refund, and we need to prevent these things. So just having it to detect, bring it immediate to a care agent, and in some cases, we're even going to auto correct. Let's go to those kind of things.

But before we go to auto correction, there's another example where we, for instance, are helping customers to better understand all of our apps, so an upgrade. So for already a few years, we had the picture where we show the business card being sort of curved. But when you really go to different types of papers and substrates, and this is already live for a little bit, but we're continuously improving and expand it throughout our product category, is the 3D rendering of products, which we go into earlier for tech -- technology. And I'll just show a little bit of a screen cast where you have a business card, for instance, in this particular case, and you want to see what is the effect really when I want to see it get metallic. And then you get this lightning effect on the side on the corners to really show what this product is. And we do this on all of our millions of templates immediately, right? That have all this meta data behind it so that we can generate this on the slide. I want to see that with different things, do it with rounded corners. So you really get an effect and an understanding what you're buying here as a customer, which is just hard to see if you keep that in 2D. These are the things that really help conversion, but also just better for the customer to understand what they're doing here.

Also, there are just these things in production processes when you want true black on a T-shirt, and I'm quite a T-shirt fan. I'm printing things on T-shirt, is that we're doing all of these automatic things to make sure that even working on the machines. So for instance, if you want true black on it, making sure you put a base layer on the back of that product and then print on it just to get a much more deeper, richer black. And these are the things that are -- we're doing automatically in artwork that doesn't include these things, and we're starting to get throughout more of our products to just get a higher quality output on these different things, where, again, automization can help just automate this on the fly.

And this just bring, for instance, not even live, but a percentage of our customers is actually an Upload and Print customer. They actually come with full-blown artwork with cut marks and everything on it. And then they still expect that in our particular case, we will catch that, and we will cut that off. And actually, that also leads to disappointed customers because then, we, in our particular case, with Vistaprint template base we will send them this product with the cut mark and everything on it, even though they thought, hey, I'm doing you favor. I give you a print-ready image. So this is actually wasn't -- was a hard problem. But since Upload and Print, we have been helping to optimize their pre-press efficiency there. A lot of people are actually doing these kind of correction works for their customers. We've automated a lot of that, and now we're bringing back those technologies into Vistaprint to just do it on the fly. So this is, again, a little screen cast, not let live, but what it basically happens, somebody uploads something with cut marks, and in the future, more of these kind of print-ready things in the background, it goes into our machine learning optimization. Boom, we automatically cut it, optimize it, white spaces, all of that stuff gets removed. The end result is happy customer, and we don't get any refunds or care takes on it. And at our skill, this stuff matters. This -- I'm very excited about bringing those kind of things for it in just our current website across the world.

But it doesn't mean that there is still a lot of -- in our core infrastructure going on with Vistaprint that just needs a little bit of modernization. And so we started a project where we're really getting to the heart of where Vistaprint is and really starting where our orders live, how all of our infrastructure connects to each other and modernizing it out.

And so this is like a 2-, 2.5-year journey, where we're basically you're -- are current are already building it and starting to get -- or basically got started, and we're busy with this proof-of-concept and start deploying that in the next fiscal year. We're going to do this mostly based on speed. We're going to do this as fast as possible, but that brings risk, of course, with it. So we're starting to deploy those first on a per country basis, and we're going to start with some smaller countries in terms of revenue impact and in terms of the product amount of impact that we would make. So that reduces the risk to that extent again.

We're just going to take a country-and-country approach all the way until that we eventually deploy this in the U.S. and Canada. With that, it's going to be good to also see with all the other work that's going on in Vistaprint that we actually will then start tapping into this data thing that I referred to in MCP, right? Where we have all of this flurry of extra data events in this new platforms coming in, all instead of batched-based overnight, all near build time event-based driven, that is the stuff that really helps data lakes, modern data methodologies for data science and analytical things to really capture these kind of possibilities what we can get out of Vistaprint.

And so a little bit of the delta, what is really there, right? We are going to -- we have -- when we did a lot of the work already, which is great because it's basically unlocking the jam jar already a little bit for it is that we have expanded in this really rapid expansion of products, right? It's NPI or new product introduction. That's really good, but to really get to the data part of it is something that is new platform or a new bottom and core infrastructure will unlock.

Also, I think the commitments to micro service is definitely there for all the periphery and all the extra vendors we integrate to, but the very heart of it was still a little, I would say, monolithic, and that is just not possible anymore. The whole core of that is we're going to get to the heart of it, and that is the goal in itself. So we're not going to waiver off that.

That will also unlock a lot of things that today we have done ourselves, which I deem as not differentiating for Vistaprint, just things that we need to do, every company needs to do. And you either build it yourself. You have the whole tech team around it or you use the SaaS vendor and you negotiate it correctly with central procurement. And these kind of things and actually, now these engineers are available to do the differentiating things for the organization.

A big part of this is also a SKU-based model, think indeed your article number and your serial number. If you sell it, it's definitely a good thing, but when you explode products, and especially we learned this a little bit in Upload and Print, you need to think about the amount of permutations that the product actually could be and how that attaches to the price curves and all the other things that like the amount of places that you can actually apply either embroidery or pet printing or all these things to it, it gets big really quick. And with a SKU-based model, you come into all kind of sorts of problems.

And the very foundation of Vistaprint was SKU-based model, and we're going fully away from it, which I think is extremely exciting. And we're going for speed. So instead of U.S. first, these kind of things, we're going to go with small markets first and then ramp it up real quick. So pretty excited about this secondary track for what we can unlock on that with Vistaprint.

And then, again, the core of it, let's get the data on it. And that's also a thing that I just want to stand out that not only in this new platform, as I talked about. Also today, we can already do things. We are really upping our game in this thing even with our current data set. There are things that we can pluck in on our current tech stack. And we're actually building it right now to make sure there are more data sends out of our current stack. So we're actually increasing our analytical blend strength. So we're hiring more people. Great people actually are coming in on this. And we are updating our core infrastructure to make sure that our current data warehousing becomes more data lake and actually we will have much more possibilities to look at the data and interpret it in different ways.

And then even with that, we are building bypasses on some of our marketing channel techniques that are somewhat old here and there, but there are all kinds of possibilities for us to just up the game a little bit in that, too. So there are some exciting things on that going on to really -- and I'm not going go again to this slide, to really bring Vistaprint up this ladder and does really get to the upper right on these things over the next coming years. Thank you.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Thank you. Thank you, Maarten, and thank you, Sean. So as I start to wrap up the Vistaprint section, we've talked a lot today about what we're doing. I want to a little bit about how we are doing that. And we, in the last 6 months, have done 2 things. One is to be very explicit in the objectives, setting a lot of -- you may have read the book on the left, Measure What Matters by John Doerr, speaks about a process he learned at Intel years ago, used by Google and many others. It's certainly not the only way to set objectives, but we think is an excellent way to have a real clarity and definition of what we're trying to achieve. We limit ourselves to a maximum of 5 objectives for any given period. We do this on a quarterly basis. And then we cascade or allow teams throughout the organization to look up at the Vistaprint why top level objectives and say, given that is the objective and the way we are going to measure ourselves against any 1 of those 4 or 5 objectives are key results, 1, 2, 3 or 4. They can then align their own personal objectives and their key objectives to that top level objective. And it's been very helpful for driving us forward.

Secondly, we are working a lot, and we internally call The Ways of Working. So how do we organize ourselves structurally to, although we will never, in Vistaprint, which is a single entity, get to the type of division that we have, for instance, between BuildASign versus National Pen, which are 2 different businesses. Vistaprint still is $1.5 billion business, and our organizational structure up to today has been very siloed. We have -- for rational reasons, we said let's be very focused on marketing or on pricing or our technology or finance. And all of the decisions would often roll up of any given function to the either the top of the organizational structure or near the top where decisions would be made. And we've learned that there's huge value in having end-to-end accountability deeper in the organization, where we were creating lines of business that are either focused on customer types, like what we've done in Vistaprint Corporate Solutions, which was outside of Vistaprint for a while, but it's coming back in. It could be for geographies. I mentioned France versus Germany. And then within the United States or a very large market, certainly starting with the geography then going to customer type, let's call it, enterprise versus consumer versus small business. But then we still have a large small business group to subdivide it further, so that we have cross-functional teams who are, in any one of those permutations of end-to-end accountability where you have customer satisfaction, financial results, they're leading cross-functional teams. So they have the ability to make decisions on the front lines. They can understand and improve their processes on the front line, and they can measure and react to that.

So the clarification objectives and the structuring trend and accountability are the key ways we're changing the how of going about Vistaprint over the coming years. And that, I think, will be a big asset to achieving the what of what we're trying to achieve that Maarten and Sean spoke about.

I want -- I've had a number of different questions from some of you in the room about how we're doing on the executive recruiting process at Vistaprint. We have recruited and have acceptances with 3 very high-caliber executives who are joining us: President of North America, President of International and our Chief Marketing Officer. We have a very strong pipeline for Chief Data Officer, and we hope to be -- offer an acceptance stage there in the coming weeks. And we certainly continue to -- we expect to continue to recruit additional talent as we go, not only at the top level of the house, but deeper in the organization, everything from data scientists to engineers to marketing teams. And we're -- certainly, we have a lot of great talent inside Vistaprint, and a lot of the lines of business or central functions that we're filling in at Vistaprint are being filled with long-term veterans of Vistaprint, but we are complementing that with outside recruiting. And so we do see that over the coming quarters, we will, not just for headhunters, but as we're doing organizational consulting or outside consulting fees, we'll see an increase in those fees. But that's, we think, a temporary relatively minor blip in our cost structure to move forward to where we need to be in the future.

We are not announcing the names of these executives for several reasons. Several of them have not yet resigned. I think they've resigned, and it's been accepted by their boss or by the human resources teams, but have not communicated it to their teams, and so we're trying to respect that process. And also, we just want to avoid them getting an influx of contacts from either team members inside Vistaprint saying what am I supposed to be doing now you're my new boss or from well intentioned shareholders trying to understand things when they haven't even come to their first day of orientation.

So I'll close by -- the Vistaprint section by looking forward operationally, what are we doing? We are going to remain hyper-focused on the foundational basics that I spoke about. We are -- a key part of that is a technology investment, which Maarten spoke about. We do want to emphasize that is a 2-year journey, and we don't see that in fiscal year '20, there will be any material upside from that. We will continue the advertising reductions that Sean spoke about. The culture, the organizational change management activities and the recruiting is definitely something that's going to be an important part of this year. And we expect, as we've said in the letter last week, flat to negative revenue growth for FY '20, we would not be making these investments in technology and talent in the customer value proposition if we didn't believe on the other side of that, we could come back to growth. But getting all the things above on this slide, the first 5 or 6 bullet points, right? We'll lay the foundations for that future possibility of growth.

So with that, thank you very much for the Vistaprint section. I want to turn this over to Paolo, who is going to come up and speak about Upload and Print.

Paolo Roatta - *Cimpress N.V. - SVP of Upload and Print*

Great. Thank you, Robert. Good morning, everybody. My name is Paolo Roatta, and I'm the CEO of the Print group, that together with Print Brothers, constitutes the Upload and Print portfolio of Cimpress.

Today, I would like to talk with you about the key points of the Upload and Print portfolio, and that is the market; the reorganization of our business, what we have achieved in the past fiscal year that we just closed; then the numbers; and finally, an overview on the expectations for the year ahead.

These are our customers. They are the professionals of the graphic arts. As you can imagine, their skill set in terms of graphic design is more sophisticated than that of the Vistaprint customers that are more the micro businesses customers. These are printers, resellers, communication agencies, freelance, graphic designers, businesses. And their demand is more elaborate, more sophisticated in terms of custom sizes, in terms of variety of substrates, in terms of options. And at the same time, the average value of the order is higher. And also the frequency of the order is higher than the equivalent in Vistaprint.

We serve them through our 7 business units across Europe and our 10 production plants that we have in Europe. And we produce for them and we sell to them small format, large-format, packaging, labels, bags, promotional products, et cetera.

Now when we look at the market, the market has been pretty dynamic in the past year, and we've seen a multiplication of players, and this has caused an increase in the supply. And that means more pressure on prices and more pressure on us in delivering better service, faster service, higher quality. So the market is indeed more competitive, and this is true across all of Europe.

But the good thing is that we see that our numbers are growing at a high single-digit rate, and we are continuing to delivering significant profits. And we believe that we can continue to outperform the market and outlast our competitors in the long term for a number of reasons.

Number one, our size that allows us to have consistent budget that we dedicate to innovation in terms of technology. And our size allows for economies of scales, not only in the procurement area, where we're able to negotiate better terms with our suppliers of raw materials, for example, but also with our partners and our suppliers of equipment, where we are able to structure deals that our competitors are not able to. And in many cases, we are the largest customer for these suppliers of technology. And as we were talking earlier before the meeting -- this meeting, this is a moment where the technology suppliers, the environment where they operate is very competitive, too. And therefore, every 6 months, we see some new releases, some new features in the technology that we use. And the competition among different players allows us to extract the best value from the market.

Also, the fact that we're able to invest in innovation makes it possible for us to have a very vast selection of products. We introduced new products every week. And so our portfolio is probably the largest on the market, and this is also an asset for us that we believe is a point that differentiates us from competition.

Also, our geographic diversity. We have 7 business units across the continent, make it possible -- makes it possible for us to have proximity to our customers, and therefore, have a more dedicated and better customer service.

And finally, there is a big element of distinction versus our customers. And that is what Maarten has been illustrating before, our mass customized platform that allows us to share data and to unleash all the power of the analytics sophistication. So this is a market that is very competitive, and we recognize that we need to continue working hard on investing in technology, in innovation, in service in order to deliver the highest value for our customers.

And this is my favorite picture of the whole presentation. When you consider our activity, at the core of our activity, our heart is not made of 1 part, it's made of 2 parts. So on one hand, we have the technology, the manufacturing. And on the other hand, we have the creativity, the marketing, the knowledge of the customer. So all our business is based on knowing the production and knowing the customer. And when we put the 2 of them together, you have what we do in the Upload the Print portfolio.

So with 10 plants across Europe, we believe that owning the manufacturing or controlling the manufacturing or knowing to a level where we're able to influence the production flow is a strategic asset to serve our customers and to deliver more value. And how do we do that? I was saying that we introduce new products every week. And when we introduce a new product, we try to do that by considering the way a product is manufactured. So we don't go around looking for a manufacturer that could sell it to us at the cheapest price, but we try to influence the process by which the product is produced. We try to identify advantages in the production chain and transform them into benefits for the customers, so that we are able, by changing the way we produce, to deliver the same product at a lower cost, therefore, a lower price to the customer, more value to them, or for the same price, deliver a richer product. And this is what makes us different from competition.

I believe that in our DNA, when I look at the different plants where we operate, especially in some of them, there are no single equipment that is used in the same way that equipment was conceived for the market. Very often, we have beta test in our own plants, and the suppliers work with us in order to achieve that level of efficiencies that we need to achieve in order to serve our customers and get ahead of competition. So every time we're able to connect the 2 parts of our heart, this puts us in front of competition until the next technology advancement.

Now as I was saying, we have realigned, we have reorganized our portfolio by dividing it into 2 sub groups. One is the Print Brothers group that is led by [Case Aarons]. And that is a group that rotates around 1 bigger unit -- business unit that is WIRmachenDRUCK in Germany. And part of this Print Brothers is DRUCK in Austria and [Trupadeal], or Print Deal, in the Netherlands and Belgium. The other division that is the one led by myself is the print group, where we have Pixartprinting as the largest organization that is based in Italy and serves all of Europe with 17 different languages and over 20 different other portions of the site for the different European markets; and Exaprint in France, with a plant also in Spain, (inaudible), Easyflyer in France as well and Tradeprint in Dundee.

So by reorganizing the group in these 2 divisions, we also realigned the incentives, and this allows us to move faster and to improve our competitiveness. And therefore, we are able to put the different units closer to each other and create more exchanges and leverage on the different assets and the different capabilities. Now we have done this change at the beginning of this calendar year, January 1, and we are already seeing the first benefits and some major advantages that we're able to reap from these changes.

And for example, the fact that this picture reflects a little bit the concept of how we are reorganizing it. If you look at the organization before, we had a set of 7 companies that were like 7 cogwheels. Now by putting them together and by fostering cooperation and by enabling sharing of capabilities and know-how and expertise on one hand and also leveraging on the common assets, we're able to make them work together like a mechanism inside the clock, and this unleash more value. So actually being part of this group is a competitive advantage. Of course, this requires a change of mindset because we still want to preserve autonomy. We still believe in decentralization. We, of course, believe that being closer to the customer allows for better decisions. But at the same time, we want every single one of these cogwheels, every single one of these business units to think across the portfolio of assets, not just their own businesses. And by doing this, we are able to leverage, as I was saying on the assets, the plans and other capabilities, the know-how and the expertise. And here are some examples, concrete examples of how we do it.

This is a picture of the [Kamori] fleet we have in Quarto d'Altino Pixartprinting, Venice, Italy, and this is the largest Kamori fleet in Europe. As I was saying, for many of our suppliers, we're the biggest customers on a European level or actually on a world level.

Now by regrouping activities, we are able to allocate production in a smarter way. For example, in this very moment, that is a low seasonality moment in the Upload and Print market in Europe, we are able now to shift volume from outside sources and suppliers into inside to Quarto d'Altino. So Exaprint is a player that outsources a good portion of the business. And in this season, we are now shifting from third-party fulfillers into in-house production that is Quarto d'Altino in this plant that you see the picture here. And this means bringing profit home.

Also, at the same time, we moved production around the different plants. And conversely, Pixartprinting is now producing all the business cards that are sold in U.K. We are producing them in Dundee, Scotland. So that by being closer to our customers, we have savings in costs and also better service.

This is something that we were not able to do before when we were managed more as autonomous and individual companies. By regrouping them and removing a layer, creating more efficiency and having our senior management closure to the front end enables this kind of leveraging of assets. But as I was saying, not only we leverage assets, we also leverage capabilities, know-how and experience. So again, in this very moment, the Chief Manufacturing Officer of Pixartprinting, and if you can say, (inaudible), to discuss and assess with the local organization of Easyflyer, how to implement improvements coming from innovation that we've been doing in Quarto d'Altino in the large pharma sector. And we know that we can leverage this and gain efficiency in the [gaining] area and in the finishing area.

At the same time, from a commercial point of view, by exchanging experience among the different units within a subgroup, we're able to understand how to better serve our customers. For example, another example from the U.K. market, Pixartprinting now in U.K. is changing the offer to the customers and realigning to the specific of this very specific market, which is the U.K., but for example, by introducing products that are not sold in the rest of Europe. And this comes from the interaction that we have with the local organization of Tradeprint.

So we try to leverage on the assets we have, on the know-how we have, not only within the Upload and Print division, but also leveraging on the assets that are present in the Cimpress organization.

Now being part of Cimpress is actually a competitive advantage. And this is an example that I would like to illustrate to you from different angles. And I want to talk again about the MCP. The MCP is something that allows us to reach the full spectrum of the analytics sophistication, and I really like the slide that was shown twice before by Maarten. And I would like to show you, in our case and in Upload and Print, in 4 different examples from 4 different angles: the front end, the back end, from the customer point of view and from the supply point of view.

This is from the front end is the same commerce platform. As you can see, the 2 pictures represent, the one on the top, the Tradeprint side that is 100% based on the new e-commerce stack, developed centrally by Cimpress Technology. The one on the bottom is Exaprint in France, where we're offering our PPAG, as we call it, or the promotional products apparel and gifts through the new Cimpress Technology front end.

Now this allows us to integrate our different services with a faster speed. In Pixartprinting, for example, we are migrating to the new technology and abandoning our legacy system. And we can do this in the course of a number of months. That is probably half of the time that will be required if we didn't have the opportunity to leverage on this.

Also, if we want to look at from the back-end perspective, this is how we produce within the Upload and Print. This picture represents one of the products that are produced inside of the plants we saw before, Quarto d'Altino, and it is labels and stickers. And you can see that the one plant in Quarto d'Altino is able to serve the different business units across the network. So the moment that we onboard the product on MCP, that is an enabler, then every single business unit is able to merchandise it. And in this case, labels are sold in Austria through DRUCK; in France through Exaprint and Easy Flyer; in U.K. through Tradeprint; in Holland, the Netherlands and in Belgium through Printdeal; and as of this week, also through Vistaprint across all of Europe. And of course, this enables more volume to flow through our plants. So more economies of scales, more possibility to innovate, more possibility to improve and achieve efficiency, and on the other hand, allows all the other vendors within the group to have a pace of new product introduction that is much higher.

When we see -- we look at MCP from the customer point of view, this is an example. It's the 5 check microservice, one of the legal block that you saw in the picture that we've shown before, that allows our customers to self-serve their own upload and correct where there is a mistake. This eliminates the need to have the frustrating interaction with the customer service. So less frustration for the customer, less cost on our side and also eliminates pre-press work to correct mistakes that a customer now is able to fix immediately. So this is a way to drive customer value by serving better our clientele.

From a supply point of view, I wanted to bring an example, tangible example, referring to the MCP shipping suite. This is something that enables any provider, any business unit to connect to the suite and immediately been connected to a number of carriers across Europe. That means that the moment when new carrier is integrated in the MCP suite, everybody else can benefit from this system. And of course, this takes into account the invoicing, the service, et cetera. This is a very interesting example for us because very recently, at Pixartprinting, we were able to connect to a new supplier, a new carrier in France, DPD, and we were able to leverage on the same quality of service that Exaprint has negotiated in the course of the years with the supplier through the MCP suite, shipping suite.

Okay. Now I would like to show you the numbers. This slide represent the combined financial results for the Upload and Print for the last 3 years.

When you look at the growth, at constant currency, you see a growth rate of 10% in year 2019. Even though this is slightly decelerated versus the 13% we have -- we had in 2018, it is still a good result, especially if we consider the competition and the pressure we had on the pricing. Now the profit has been growing steadily as our businesses have continued to grow. And the profit margin has been maintained at 11% for the past 3 years, despite competitive pricing pressures and the increase in the cost of raw materials like paper.

This picture shows the benefits of being part of Cimpress. And at the end of 2018 in the second half, by pooling together the resources within the Upload and Print portfolio, we were able to innovate to drive costs or to achieve more efficiency and to keep the same level of profit margin that we had the year before.

And this picture outlines the information that is already included in the annual letter to investors, but it is worth repeating it here because it shows the good investment returns that we have on the acquisitions that we did within this group, where you see there the different -- the 7 different companies and the date that we invested in them.

Now the unleveraged free cash flow of EUR 66 million is a yield on the EUR 494 million of total consideration paid, of 13% -- about 13% in fiscal year 2019, which is well above our cost of -- weighted average cost of capital. Now if you take into consideration that we have EUR 7 million to EUR 8 million what we call growth investment, so not required to maintain the steady state, the actual rate -- the actual yield of the steady state free cash flow goes up to 15%.

Finally on my last slide, I want to have an overview on the 4 main priorities that we have for the year that we just started, for 2020. And of course, number one, we want to continue to bring value to our customer through innovation, innovation in technology, innovation in production and a new product offering, innovation in our commercial model. We believe that innovation is part of our DNA. And this innovation, of course, will deliver more speed, more efficiency, lower cost, new products and new services. Point number two, we want to continue to leverage on our assets and on our know-how and capabilities in order to deliver synergies and operational improvements so that we can deliver higher cash flow. Number three, we want to continue to leverage on the mass customization platform because we believe this is a differentiating factor that allows a company like us to be ahead of competition in the game in a market that is highly technological. And finally, we want to underline our long-term commitment to maintain and accelerate our leadership in the market. And in order to achieve this, we're willing to invest in the short-term and face price competition and price pressure because we're here for the long term.

Okay. That's it. Thank you.

Jenna Marvel

Thank you very much, Paolo. For everybody here in the room, we are going to take a 10-minute break. It is 10:10 a.m. right now. Please be back in your seats and ready to listen at 10:20 a.m. For those of you on the webcast, please sit tight. Stretch your legs. There's drinks and snacks out in the room out here outside the room. Thanks very much.

(Break)

Jenna Marvel

Okay, everybody. If you could take your seats, please. We're going to get started again. And our next presenter is Peter Kelly from National Pen.

Peter Kelly - *Cimpress N.V. - Executive VP & CEO of National Pen*

Good afternoon, everybody. I'm Peter Kelly, I'm the CEO of National Pen. During today's presentation, I'll provide you with a brief overview of who National Pen is, what the industry trends are for promotional products, our strategy to drive long-term success, why Cimpress remains excited to count National Pen amongst the companies in its portfolio, and how we at National Pen are benefiting from being part of Cimpress. Given this is the third year in a row, I'll presenting on behalf of National Pen, I will only touch briefly on who we are, so that I can spend more time talking about some of the challenges we experienced in fiscal year 2019 and the steps we're taking to get back on track. Then I'll discuss the financial returns we've already delivered since Cimpress acquired us. And finally, I'll talk about our key areas of focus for fiscal year 2020.

So let's get started. So National Pen is the largest provider of customized writing instruments in B2B space. Our revenue in fiscal year was $348 million, and roughly 70% of that came from writing instruments. Our customers are predominantly small and medium-sized businesses. Through a multichannel approach of direct mail marketing, telemarketing and a rapidly growing online marketing, we were able to serve 1.5 million customers last year in 23 countries.

National Pen offers one of the lowest minimum order quantities in the industry offering a low entry price point and an extensive product selection. Our scale has allowed vertical integration in a globally integrated value chain, leading to significant customer value advantages. At present, we offer more than 30,000 customized SKUs.

Now I'll talk about -- a little bit about the industry dynamics of the promotional products, apparel and gift space. The PPAG space is roughly $30 billion in North America and Europe alone. And today, the majority of the market is still served by a fragmented, less-efficient traditional business models. Since promotional products have been served via less-efficient offline models for longer, they have only recently begun to benefit from mass customization, meaning competitive capabilities for small order sizes are less mature. This evolution towards mass customization puts pressure on price, speed, customer expectations and quality. And we believe we will benefit -- we will continue to benefit from this dynamic over time.

The PPAG space overall is growing at around 5% per year. So despite our weaker revenue growth in fiscal year 2019, we are continuing to gain market share, growing at 7% in constant currency last year. At the same time, there are more and more competitors entering the market each year, which increases paid search costs. So we have to continue to be relentless about driving down costs and exploiting every advantage we have. On the other hand, the increased online competitive dynamics is part of the reason why we think our multichannel marketing approach is the right one, which I will discuss later in the presentation.

Our strategy to drive long-term success remains the same despite a disappointing fiscal year 2019. We must continue to exploit and extend every advantage we have by understanding our customer needs and delivering against those requirements, continuing to progress and to modernize -- continue to modernize on our e-commerce technology, leveraging data to improve the customer experience and our financial results, relentless in driving down the cost of production in innovative ways, and continue to drive efficiencies in operating expense. At the same time, we have the advantage of leveraging Cimpress' shared strategic capabilities. And I'll dive deeper into some specific examples how we're doing this shortly.

Now let's move to our most recent financial results. First, I'd like to draw your attention to the segment profit on the right-hand side of the slide. And note that 2017 represents the year of our acquisition by Cimpress and only the last 2 quarters. As most of our profits are generated in the first 2 quarters, this number is not reflective of the full year.

In relation to our growth on the left-hand side of the slide, you can see here that our constant currency revenue CAGR from fiscal year 2017 to fiscal year 2019 was 13%. Yes, fiscal year 2019 was a particularly tough year for us.

Let me walk you through how we got there. We were coming off fiscal year 2018, which was the most successful year we've had in the 53-year history of the company. Top line growth was 20%, and we had solid profitability. So we were feeling pretty confident entering fiscal year 2019 coming off a year where everything seemed to click and response rates were at all-time highs in Europe and North America.

Due to that strong performance, we ramped up our prospecting activities even more in the first half of fiscal year 2019. However, when response rates started to come in, they were well below our expectations. With mail order, think of it as an online business in slow motion. There's a long buildup to get a campaign out there. You're buying inventory, personalized samples and customer list months ahead of time. And when you have such a high seasonal peak like we do, you make those investments ahead of the curve, and you don't see those results coming in until after the peak. So your reaction time to unwind all of that can take a couple of months if the response rates aren't what you expected. And it's not just investments in mail campaigns themselves, it's also the infrastructure you build to support the expected order volume and response rate increases like seasonal employees, CapEx in the plants, et cetera. So when you have a miss of that magnitude, it has a significant impact on the business and the full year results.

And this is an overview of the primary factors contributing to our miss in fiscal year 2019 and what we're doing better in fiscal year 2020. We already talked about our aggressive prospecting. We've dialed that back globally, eliminating low-performing lists and thereby reducing risk. Our highest performance rates are obtained in the period for mid-October to early December, but that puts a lot of stress on the operations to really go after that seasonal peak. To address this, we have smoothed out our campaigns to reduce this concentration and are willing to accept slightly lower response rates by balancing our campaigns more throughout the year, but with less risk.

In addition to the prospecting, we also attempted to take advantage of having launched our new low-cost contact centers by going deeper into our customer plan. In fiscal year 2020, we will regard to a more normal customer contact strategy, focusing on higher-return on investment activities.

Lastly, we had mail delivery issues. We have historically manufactured all of our mail campaigns in our factory in Tijuana, Mexico, even though it's for Europe. In fiscal year 2019, we experienced significant delays in shipments due to uncontrollable factors like hurricanes, port strikes, et cetera. To address this, we are currently relocating the manufacture of a significant volume of our mailings for Europe to a facility in Germany to reduce risk there.

Now let me talk about why we are confident that our multichannel marketing approach is the right one for our business. While the majority of our revenue is still derived from traditional mail order campaigns, we have invested deeply in improving, modernizing and modularizing our e-commerce technology stack. We believe that our e-commerce business can continue to grow substantially in the future, which will give our teams more options to return through channel diversification as a complement to our direct mail activities. While we are very excited about the potential of our e-commerce investments, we still believe that mailings will be a significant marketing channel for us in the future as well. Even with the lower-than-expected returns in mailings in the first half of fiscal year 2019, we expect to have a payback of an average of 18 months and deliver returns above our hurdle rates.

Mailings also helped to negate the growing cost per click of Google Ads Keywords. In fact, due to the scale advantages we have built up over the years in our mailing operations, it is oftentimes cheaper to send out a customized product in the mail than it is to pay per click.

On this slide, you can see over the past 5 years, our acquisition of new customers online has grown 3x faster than those originating from mail order campaigns. We are excited about this trend and expect it to continue as we launch additional sites and continue to make investments in online growth in the future. Of course, 11% CAGR for first-time buyers via mail order is a nice growth rate, too. And you can see here how much the increase we've made since joining Cimpress in fiscal year 2017.

Now I'll highlight the progress we've made during fiscal year 2019 in a number of key areas. We have several strategic initiatives for the company, but one -- what our #1 initiative is growth in e-commerce. With the history of low levels of growth online, our redefining of the strategy to focus on 5 key areas has been a big difference in our trajectory to success online. Internally, we refer to the balanced view of focus on 5 Ps: people, products, price, platform and promotion. In the past 3 years and continuing this focus in fiscal year 2019, we have really increased the skill set of our team members and expanded those teams globally, done a lot of work on merchandising and on pricing and launched a new online platform seamlessly in 6 existing markets. We are continuing to learn from these pilot launches and are iterating and testing before continuing to roll out in additional larger markets throughout fiscal years -- fiscal year 2020. In fiscal year 2019, we experienced 18% growth in our online business, and we expect this to continue in the future.

Another strategic initiative for us is to build the infrastructure needed for future growth. In fiscal year 2019, we launched a continuous improvement program to focus on an improved customer experience. We also increased customer service levels, technology infrastructure and graphic services by leveraging teams in low-cost, high-perform geographies.

Lastly, I mentioned earlier, we sourced local production capabilities for mail campaigns in Europe to mitigate risk and lower costs and expanded product offering in decoration technologies. We have also continued to take advantage of being part of the Cimpress family. There are numerous opportunities we've been able to leverage at National Pen by being part of Cimpress. We've mentioned this before, but soon after joining the Cimpress family, we were able to recognize significant savings from freight cost reductions, either through tapping into Cimpress' frame contracts with shipping carriers or by leveraging Cimpress' larger scale in our own negotiations. We've also worked closely with the team in Japan to fulfill product for us. It's one of their fastest-growing markets, and we are really pleased with how that's gone. Selling products through Vistaprint and other Cimpress businesses has also gone well with more than 1,000 National Pen products now active on other Cimpress business websites.

We've also achieved material procurement savings in most of the smaller areas and continue to leverage this benefit. Over the past year, we set up 2 offshore service centers in Tunisia and Jamaica with significant help from Cimpress. The speed at which we completed set up was significantly helped as a result of being part of the bigger group already existing in these locations. Funding our e-commerce platform so quickly is something we would never have been able to do in the past. And of course, leveraging Cimpress India for both graphic services team members as well as technology resources has also been the benefit to our business. I'm proud that National Pen is the single largest team leveraging Cimpress India. Additionally, the system support from the Cimpress technology team that we've been able to leverage in order to automate some of our order management and manufacturing has been fantastic. We think there's more opportunities here as well as we look to the future. Even with acquisition, National Pen was able to take advantage of tax synergies by being part of the bigger group of companies.

National Pen has also some capabilities that other Cimpress businesses have been able to leverage. For example, accessing our broad product portfolio, our Vistaprint upgrading their pen technology in the plants resulting in lower cost and higher quality pens with higher throughputs as well as capacity absorption in our Cimpress Japan facility. There are potential future opportunities that we have yet to tap into, such as National Pen skills in China sourcing and other businesses learning from our direct mail capabilities.

Overall, our experience has been very positive. Cimpress has helped us move faster in so many areas because we can leverage experience, technology and talent of others in the business. Not to mention that we have new distribution channels for our products in many of Cimpress businesses.

Now I'll provide you with some more concrete examples of how we've been able to leverage the Cimpress technology teams. Let's start with prepress development. Until recently, the steps to gather each identity or brand and transform that into a manufacturing-ready file were extremely high touch. The process required a large number of people skilled in expensive design tools like Adobe Illustrator or Photoshop. Often, each shape had to be traced at, the design had to be converted to a single color and then fit to the product surface. The whole process could take more than 20 minutes for complex logos. And after all that work was done, it still wasn't manufacturing-ready.

Working with Cimpress technology, we were able to automate the whole experience down to minutes using their adaptive technology. The logo was created through a series of technology steps to create a production-ready file ready for manufacturing a significant reduction in cost and turnaround time to our customers. Prepress automation allows for 10x the output of designs per day and reduces the cost per design by 90% for certain design categories.

Now to scene maker. A scene maker allows for the easy addition of previews of the customers' content on the product they are previewing. This improves the customer experience and response rates. This will be further developed and used extensively with the launch of our new website.

Finally, in the area of production automation through technology, we are able to automate direct shop floor or workflows and reduce process variances to yield higher and smoother throughput. This production technology automatically prioritizes the order flow on the plant floor and provides everyone with greater visibility of order status, ultimately improving service to our customers. We are 20% through rollout of the technology, but believe it will be transformative to mass customization through setup reduction and to customer responsiveness over time.

Now I'll provide you with an update on our investment returns to date. First, you see the unlevered free cash flow from fiscal year 2019 was $11 million compared to $24 million in fiscal year 2018, which clearly depicts the strong year we had in fiscal year 2018, but also the disappointing year we had in fiscal year 2019. In fiscal year 2019, that was a yield of 5% relative to the investment consideration of $211 million and again substantially lower -- below our yield of 11% last year. When you take into account the $13 million of nonsteady state investments we made in fiscal year 2019, that can take longer than 12 months to pay back, including some of the poor prospecting investments. The steady state free cash flow of National

Pen was $24 million in fiscal year 2019 or a yield of about 11%, closer to where we were last year. This does not include any National Pen-dependent synergies recognized in other Cimpress businesses.

Given the disappointing year we had in fiscal year '19, we know we have a lot more work to do to capture the returns on our past investments. But we still believe it's possible with great execution to reach and then grow beyond the point where we can generally -- generating annual steady state free cash flow returns in excess of 15% of the consideration Cimpress paid.

Moving on to our plans for fiscal year 2020. I'll close with a glimpse of what we are looking at -- on and investing in, in fiscal year 2020. Given the tough year we just exited, our expectations in fiscal year '20 are for lower revenue growth and higher profits as a result of our efforts to take a step back and really focus on execution. We plan to continue with expansion of our new e-commerce platform to larger markets, while also focus on improving our customer intelligence and modeling competencies and increasing our focus on higher levels of personalization.

From an operational perspective, as mentioned earlier, we will be expanding our local mail preparation in Europe to negate some of the operational supply chain delays we experienced in fiscal year 2019. We will also be focusing on expanding our products and decoration technology, vertical integration and operational excellence and production automation.

Finally, we will adopt the continuous improvement program I mentioned earlier in key areas of the business in order to drive an improved customer journey with National Pen. This is a key to increase in customer annual spend with us and customer retention.

We know we have a lot of work ahead in the year ahead, but the teams are hyper-focused on what needs to be done in fiscal year 2020. With good execution, we feel that we can get back on track to delivering high returns.

I'd like to thank you for your time today. I've enjoyed sharing more about our business and how we can both benefit from and contribute to Cimpress.

Now I'll hand you over to Bryan.

Bryan Kranik - *Build A Sign LLC - CEO*

Good morning, everybody. As Peter said, my name is Bryan Kranik, and I'm the CEO of BuildASign. And I can confidently speak for the entire BuildASign team in saying that we're absolutely thrilled to be part of the Cimpress family.

So being that it's my first time talking to you about BuildASign, I'm definitely going to take you through a quick overview of the company, talk a little bit about the market dynamics of the key categories that we compete in, the competitive advantages, the benefits of joining Cimpress already and those that we plan to capture in the very near future, the final -- or financial returns to date and as well as our go-forward plan.

So who is BuildASign? On the highest level, similar to the other businesses you heard from today, BuildASign is a vertically integrated web-to-print company that builds customized -- or I'm sorry, markets, sells and manufactures custom-printed products primarily in the signage, home decor and apparel industries, but not limited to that. We market and sell through multiple e-commerce brands as well as an enterprise sales team that targets the small and medium business sector. As you can see from the graphic on the slide, we have a relatively diverse product set, everything from yard signs to retractable banners to canvas prints, feather flags and car wraps, and the list goes on.

Also notable is we have a very diverse customer set, so from the traditional consumer to election candidates to churches and religious affiliations and countless examples of small and medium-sized businesses. Obviously, real estate agents is huge for us as well as retail and general.

We pride ourselves in the experience that we provide our customers. Our Net Promoter Score is in the 70s. And we very much -- we've won many awards on the customer experience side, especially within the Austin market.

And then for perspective, our pro forma revenue for last year was $140 million and $22 million in adjusted EBITDA. And we currently have 430 employees and over 100 temp workers. And then finally, we were founded in 2005 in Austin, Texas and still located there. And it's been a tremendous entrepreneurial success story within the Austin market.

So the market dynamics that we see somewhat differ based on the large categories that we play in. For example, in the signage market, it still is a highly fragmented market. And actually the majority of transactions still occur offline in the more traditional retail competitors. But with that said, there's been a migration that started several years ago to more online and mass customization players. And we fully expect that to continue into the future years.

Conversely, on the photo upload business, it is largely online already, but growing at a faster rate than that of the sign business. And then there is a commonality for all the markets that we participate in, in that mass customization, which is a theme that you've heard here over and over again, is bringing price points down and making it more accessible for customers and harder for traditional players to compete.

So I'd like to think that we're doing a lot of things well as a company. But if I had to prioritize the top few things, it would be the 4 listed on the left. So first, marketing. This has been one of our core competencies and strengths, especially on the digital side. We have a -- I'm very fortunate to have a very, very strong team of marketers that -- where every one of our vehicles is managed in-house. And we follow all proprietary strategies in how we manage those and follow a very data-driven approach that has afforded us a very attractive unit economics and has actually allowed us to acquire more total customers every single year sequentially or consecutively since the start of the business back in 2005.

Production is also a huge strength for us. We've created proprietary software that we leverage end-to-end web to print and manage the entire process through very complicated -- oftentimes, complicated algorithms that have enabled us to maintain a 99% on-time delivery rate to our customers as well as actually double the total throughput of our production facility over the past 5 years while in the same 86,000 square feet. We also leverage a lot of robotics and custom-engineered equipment. So that's definitely been a strength as well, and we tie it all together through data and technology, right? And so the data allows us to follow a very disciplined approach and avoid any guess work as well as leverage technology to make it very scalable and sustainable for the entire team.

So all those items work together to help us achieve our goal of maximizing the value equation for both our customers and our shareholders. And we define the customer value equation as the value or benefit that they receive from our product, minus the price they pay. And from our experience, our sweet spot is when we are one of the most aggressive or close to the most aggressive price products in the market, at equal or better quality than competitors. And we make it as easy and simple as possible to purchase from us. Obviously, it's extremely difficult to know if we're ever optimized in terms of that value equation. But we think we're on the right side of the equation based on the fact that our NPS scores, as I mentioned earlier, are in the 70s and the strength we've seen in our P&L.

So benefits from joining Cimpress. First on the Cimpress side, in addition to obviously acquiring the company itself, there's been some immediate benefits. So first, on the signage category alone, we've obviously added step function scale for that category, which has already translated into a handful of material procurement savings through the increased buying power. Second, we've added new and lower-cost capabilities to the sister companies within Cimpress across several products, most notably in yard signs and canvas prints, which I'll show you some examples in a minute that the Vistaprint team is already taking advantage of. And then third, I won't go into this too much, but there were significant tax synergies and savings, not only for the BuildASign, but for companies outside of BuildASign within the Cimpress umbrella that this transaction enabled. And then finally, we -- the entire leadership team or management team stayed on as part of the transaction. And as an illustration of our commitment to the business and future of BuildASign, especially to BuildASign with Cimpress, every single individual in the management team rolled a very material portion of their equity, some as many as 100%, so just further evidence of how committed we are to the future.

And then from the BuildASign perspective, we knew immediately that we were joining a company that very well shared values in terms of how they treat their customers and how they run their business which has made the transition under the Cimpress umbrella extremely smooth. And we're also extremely excited about the potential growth opportunities. So I'd like to say we have a whole new sandbox of growth opportunities to play in, and we're already starting to capitalize on that. Most notably, the central procurement team has already worked with us to drive multiple synergies on both the shipping side and the material side, very, very material for our business.

The MCP platform over all our marketplace is a huge opportunity for us. Obviously, as everyone is pretty aware in this room, the first opportunity is for us to fulfill for other companies under the Cimpress umbrella, which I'm proud to say we've already captured some of that benefit already, and I'll show you some of those examples in a second. But we're even more excited about the fact that the MCP marketplace enables us to add a tremendous amount of new products.

So to give you a perspective of how this used to work for us pre being part of Cimpress, if there were ever product that didn't make sense for us to manufacture ourselves, there was a very laborious and long cumbersome process to essentially first go out and search the market and find partners that could potentially contract manufacturer for us. Contact all those partners, get pricing from them, get samples and quality checks from them, negotiate, setup APIs to these individual partners. And oftentimes, this would all happen just for one individual product. Essentially, the MCP marketplace enables us to do this once and have access to hundreds of products. So we are extremely, extremely excited for that. As well as the MCP micro services, we're already leveraging the Cimpress design tool on some of our brands and plan to leverage a lot more. And then finally, expanded talent pool. We launched our first development team in India through the help of the Cimpress India team to supplement our resources within Austin. And it's something that we've been talking about for a very long time. And just -- it's very hard to do for a small company like ourselves and the Cimpress central team made it extremely easy for us. And then finally, the best practice sharing. So Paolo and the Pixartprinting team are probably the business within the Cimpress umbrella, most simple -- or I'm sorry, most similar to what we do in terms of the products we manufacture and the customers we target. And so the team has already spent several sessions and visits to Italy and candidly, has realized several opportunities that weren't currently on our radar that we are now in the process of working towards capturing, thanks to the benefit of that knowledge sharing.

Here's just a quick look. If you go to vistaprint.com right now, both yard signs are all filled through BuildASign as well as canvas prints. So we're very excited about that and plan to continue to grow that partnership. So from a pro forma free cash flow yield, obviously, we're early. The deal, to refresh everyone's memory, closed October 1 last year, although these are pro forma results for FY '29 (sic) [FY '2019]. So you can see 7% unlevered free cash flow yield versus the consideration. And then, nonsteady state -- or excluding the nonsteady state, it's 8%.

So the big call out that I want to reiterate similar to some of my peers is that first, we're obviously in the first year, so we fully intent for things to get better. Second, this does not include any of the Cimpress-related synergies that we already talked about, especially the tax savings, which is a material swing to a lot of these numbers.

And then finally, the go-forward for FY '20. So first, we continue to take advantage of the MCP platform and micro services to the greatest degree possible. Obviously, we'll continue to work with the Vistaprint team to expand our fulfillment. And -- but probably most excited about sourcing new products from Vistaprint and National Pen that our customers have been asking us for a very long time, paper, promotional products, you name it. And so we will definitely give our customers a one-stop shop, and we will continue to look at other opportunities to leverage the micro services.

Second is customer acquisition has always been and will continue to be a huge focus area for us. I won't go into too many details here, but we will continue to -- and already started to find new ways of vehicles, routes to market and channels to continue to ensure that we're acquiring more and more customers every single year.

And then complete our production capacity expansion. So after close to 7 years in the same 86,000 square feet and essentially bursting at the seams, we took on new space a couple of miles down the road to essentially double our capacity. And over the past few months, we went through that painstaking process to move some of our processes over there. And what this has really enabled is, obviously, increased throughput, also a much stronger ability to handle some of our very peak periods for our seasonal periods.

And then finally, there's just been a list of new product adds that we just haven't been able to do because of the lack of space. So we're very excited about what this provides us for the future.

And with that, I will hand it back to Sean.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Thank you, Bryan. Great. So this is our last section here before we get into Q&A, just everyone's aware of that.

And first, let me just start out -- I jumped into the middle of that Vistaprint session earlier. I just wanted to start off by also saying thank you to everyone that's taken the time to join us here in our Waltham office and traveled to get here. We're fortunate to have folks like yourselves to partner with, and I guess the benefit of speaking to many of you throughout the year. So thank you very much, and thank you, everyone, who's joined on the webcast as well.

So in this last section, we're going to cover capital allocation and specifically the topics that are listed here. I'm going to go through, at the start, some financial highlights over the last decade. And we do have some newer folks -- folks that are newer to the Cimpress story that are here today or on the webcast. So I'll highlight what's happened over the last decade and go through some of our investment returns, talk about our steady-state free cash flow analysis and capital allocation philosophy, and then get into sources of value creation, both looking backwards and looking forwards. And then a few housekeeping items that might be helpful for you as we enter the new fiscal year.

So I'll start off here. This first slide, this is revenue. And again our financial results over the last decade. These are all publicly available, so I'm not going to go through these in detail. But you can see reported revenue on the left and our reported revenue growth, and on the right, our organic constant currency revenue growth. And as Robert indicated earlier, we have a long track record of market disruption as indicated here.

The next is our cash flow. On the left, our cash flow from operations, and on the right, our adjusted free cash flow. And if you look at the gray bars there, we show the cash interest related to our borrowings, so that you could get back to our unlevered free cash flow. If you so desire, our unleveraged free cash flow is the metric that we use internally when we think about our budgeting or performance management, although it's not our end goal, and we'll talk more about our steady-state free cash flow later, which we feel is the more important indicator. And as you can see here, our reported cash flow is volatile year-to-year. And a lot of that depends on the level of investment that we're making in a given year. That said, in 2019 no matter which of these cash flow metrics you're looking at, it was the highest year ever of cash flow generation for Cimpress.

Next is our profitability. On the left, our GAAP operating income, and on the right, our adjusted EBITDA. Our GAAP operating income, especially over the last 5 years, includes a number of impacts from acquisitions. It includes various restructuring actions. And it does not include our currency hedging gains and losses, which can be material. And so I think the right side of this chart is a little bit of a cleaner indicator of the progress that we've made in terms of our operational profitability. Again, here you can see, in 2019, if you look at either on the left or the right, it was our highest year ever from a profitability perspective for Cimpress. On the right, our adjusted EBITDA for 2019 was $387 million. And if you exclude our early-stage investments, that number is then well over $400 million.

This breaks down the prior 2 slides by our either business segments or individual businesses or essential operating units. These are all again publicly available. These are outlined in Robert's letter to investors, so I won't go through them in detail, but you can see whether it's EBITDA or unlevered free cash flow, clearly Vistaprint is the single biggest contributor. And you can also see Upload and Print now becoming also a bigger contributor to the whole here as Paolo outlined in his presentation earlier.

And then lastly is our net debt and our share count. On the left, you can see starting in 2009 here, we were in a net cash position. And that persisted for the following few years. And then as we started to invest more materially organically in M&A and then share repurchases, as Robert outlined in his session at the beginning of the morning, you can see how that invested capital then impacted our net debt position increasing over this last decade. On the right-hand side, you can see the progress in our diluted shares outstanding over the last decade. We've reduced our diluted share count by nearly 30%, and I'll talk more about that later.

The increase in the net debt is definitely a reflection of the significant capital that we've invested. And so in this next slide, let me just outline our return on that invested capital over time and speak specifically about the drivers of fiscal 2019. Both those have had a positive impact and those that had a negative impact. You can see on the left-hand side that our return on invested capital did increase slightly when you look at it excluding share-based compensation. It increased more inclusive of share-based compensation. And so it's progressing in the right direction. But as Robert outlined in his letter and talked about earlier, we're not satisfied with the progress that we've made, and we think that we need to be doing better.

Let me outline a few other things that underpin this 2019 number. First, the things that weigh on our return on invested capital. One of the single biggest is our early-stage investments, and I'll talk more about that in a moment. But in 2019, we had about $33 million of EBITDA investment, $46 million of cash flow investment that weighs on the numerator in this calculation. We also have a very significant cumulative investment we've made over the last years in these early-stage investments that also weighs on the calculation.

We have our past Vistaprint advertising and other organic investments. And I went through in the Vistaprint presentation, some of the insights that we've learned in our advertising spend. We now as you'll see in a moment, start to get the benefit of that in this calculation.

We have the reduced National Pen profitability in 2019 that Peter just went through. And then as Bryan just indicated, we have our BuildASign acquisition, which we get the benefit of, but the full invested capital is included here without a full benefit in the numerator. And next year, we'll have a full year of profitability from BuildASign included.

Now in terms of what's driving the improvement, there's a few things. The first thing, and again as you could see in Paolo's presentation is the growth of the Upload and Print profitability relative to the investment consideration. The next one is the improved Vistaprint results in the back half of the year as I went through in the Vistaprint slides. Next is the reduced costs through our various decentralization and restructuring efforts. And that's been a reduction of approximately $80 million of cash costs that's come out, and we're now seeing the full benefit of that impacting our profitability and our cash flow.

2019 was a year where we experienced pretty material favorability from a currency perspective. That favorability was over $20 million whether looking at that from an EBITDA perspective or unlevered free cash flow.

And then lastly, we've had lower cash taxes in 2019, which has been aided by some of the acquisitions, and in particular the BuildASign acquisition in 2019 that provides pretty material tax synergies that are reflected outside of those BuildASign results that Bryan showed.

So that's a view into 2019. Let me shift now and go into our intrinsic value per share. Robert used this slide in the first session of the morning. It is our uppermost financial objective to maximize our intrinsic value per share. And I won't go through how this is calculated. That's very clearly articulated both on the slide, but in more detail in Robert's letter to investors, and we've talked about it at this event in past years. There's a subset of that which Robert showed earlier as well, which doesn't seek to make estimates about the future value creation attached to our past investments and our future investments, but rather takes as a base our steady-state free cash flow divided by our cost of capital, subtracts our net debt, and then divided by our number of shares, to come up with the first part of this equation of our intrinsic value per share. And we think that over time tracking that equation is an indication of the progress that we're making.

And if you think about the 4 components of that equation, there are 3 that are fairly notable -- 2 that are very notable, our net debt and our number of shares outstanding. Our cost of capital, we provide an estimate, you can make your own estimates, but I think we would get to a fairly narrow range.

And so the last thing in that equation that impacts it is our steady-state free cash flow. So let me now dive into that and go through our steady-state free cash flow calculations, first conceptually and then our actual calculations for 2019. First is that we define steady state as it's said on the slide here, as having a sustainable and defensible business that's capable of growing after-tax free cash flow at the rate of U.S. inflation over the long term. I think we're still learning a lot about this process. But having done it now for 4 or 5 years, I can confidently say that we've learned a lot. We've improved it a lot. And I think those learnings, you can see reflected in the letter this year from Robert in particular as it relates to our advertising spend. So we've made significant progress. And I also feel comfortable that we've been able to sufficiently narrow the range of precision here. And you'll see that reflected in the letter and also the subsequent slides.

So as it relates to our actual estimates of steady-state free cash flow for 2019, let me just walk through the components. The first is our adjusted free cash flow as it was reported for the year, $212 million. We next add back any of our cash interest expense for borrowings, which is $57 million. We then make certain adjustments to pro forma, our cash flows to be reflective of the go-forward business. And so we've made certain adjustments to pro forma the impact of any restructuring that we did in '19. We make adjustments to eliminate the nonsteady state working capital that we have. We had significant inflows from working capital this year. And there's an assumption here that if we're not growing, we wouldn't be able to achieve that.

And then lastly, we make some adjustments for M&A and the pro forma impact of some noncontrolling interest, which is relatively immaterial. That gets us to a number here, which is a pro forma unlevered free cash flow of $257 million. We then from there add back the range estimate of investments that we believe are not needed for our steady state -- to maintain our steady state. We used to have another step in here, which was the first add back all investments that we believe don't pay back within 1 year. And then from that, we took a subset, which was those not needed for steady state. We now skip for external purposes right to this, which we think provides increasing clarity and simplifies this a bit. Here, again, are all the investments that we believe are not needed to maintain our steady state. And that gets us to a range of steady-state free cash flow for 2019 as it was reflected in Robert's letter to investors, which is $400 million to $430 million.

Let's put that in perspective of where we've been on this journey. You can see that in 2019, this range estimate has gone up quite a bit, and I'll talk about some of the drivers of that. First, let me just say that, as I indicated before, I think the precision of these estimates is certainly increasing as we gain more experience. One thing that we don't do as we gain that experience is attempt to go back and reflect any learnings we have back into past estimates. One other thing to note when you look at these multiyear trends is that in 2015, because it was the first year we were talking about this externally and the first year we were going through this process internally, we said the full range or the full extent of our investments that don't pay back within 1 year is the range that we're going to use. And so the top end of that range is kind of artificially high as it was clearly articulated in that way at the time we disclosed that.

So let me talk about some of the drivers of this increase from 2018 and really all these past years into 2019. The first one and a very material impact is the impact of the insights we've gotten and the changes we've made to advertising spend in Vistaprint. We mentioned some of this in the letter, and I talked a little bit about this earlier as well. When we included all the variable costs that are needed to assess the net investment from that advertising spend, we get to a result which is that more of that spend is taking longer to pay back than we had previously assumed. There's also a larger portion of that spend that we previously thought was needed to maintain steady state that we no longer think is needed to maintain steady state. And you can see that sort of conceptually from the slide I presented earlier where the payback period on that prior spend was far longer than we had expected once we applied these current methodologies and all the appropriate costs. And we also, in the back half of the year, as I showed earlier, reduced a lot of that spend, and so that comes through in our actual cash flow. So the combination of those 3 things leads to a material increase, which is less than half of this increase but a material component of the increase as well as some other things in Vistaprint.

A few other components to call out in terms of this increase. One is currency. I said that before. Currency in 2019 was favorable. It's about $20 million favorable or over $20 million favorable from a cash flow perspective, so that's reflected here. For the first time, we included our BuildASign results, and those are pro forma-ed in here, so we get the benefit of that. And there was some expansion in our Upload and Print businesses as well.

So it's good to see this increase. We think that this is a real increase despite the fact that some of it comes from changing methodologies based on the learnings that we've gotten in Vistaprint. Nonetheless, and as Robert clearly articulated in his letter to investors, we're disappointed with the progress that we've made here, both in our steady-state free cash flow growth and also the growth of our intrinsic value per share. And we're very focused on making sure that, that growth is there in the future, leveraging all the past investments that we've made.

So we have all the steady-state free cash flow. And then the next question is where do we allocate that steady-state free cash flow in the future. This is our capital allocation philosophy. There is nothing that's changed about this slide for, I think, the last 5 years. And so let me just run through this quickly. We endeavor to invest large amounts of capital at returns materially above our cost of capital. Any cash that is expected to take longer than a year to pay back, at least for internal purposes, we call that an allocation of capital, and that means it goes through a certain process. Now externally, for all of you, we outlined the portion of that investment that doesn't pay back within 1 year. That is the portion that is not required to maintain our steady state. We continue to see a lot of opportunities for investment that meet our return hurdles, which results in this portfolio of investments that we've talked about throughout today and you see reflected through the various sessions. We have varying profiles of risk and returns for the investments that we make. And based on those risks, we differentiate the payback periods and returns that we expect. And all of that is balanced by the debt guardrails we have by execution bandwidth and desire for dry powder. And as it relates to debt, as we've said very consistently over time, we take our debt covenants extremely seriously, and we've been fortunate to attract very valuable debt investors, some of which are here today, alongside our long-term shareholders.

So let me now go through the opportunities we have in terms of future value creation and the areas that we can allocate our capital. And there's nothing new on this slide itself, which is we have 4 opportunities to allocate our capital because we don't expect to pay dividends anytime soon. And so that is our organic investments, investments in M&A, share repurchases and the pay-down of debt. So I'm just going to walk through each of these, in turn, talk a little bit about what we've done in the past and importantly, talk about what we expect to do in 2020.

So the first is organic investments. You can see on the chart on the right a breakdown of our organic investments from a free cash flow perspective. And these, here are the investments that we believe are not needed to maintain our steady state. These are reflected in Robert's letter as well. And you could see, from year-to-year, the level of intensity of these investments has changed. 2019 was a year of significant investment. 2020 will still be a year of significant investment, although we expect it to be down from the levels that we are investing at in 2019. Part of that is the reduction in advertising investment that I outlined earlier. We certainly hope to not repeat the poor-return advertising in National Pen, which Peter clearly articulated what the team there is doing to have that not repeat. And then all of that is offset by some increase in CapEx within the Upload and Print portfolio, and we're excited about some of the opportunities there as well as some of the increased technology spend in Vistaprint for the reasons that Maarten outlined earlier. So that's a picture of our organic investment looking backwards but also what we expect for 2020.

A significant reason for the increase in 2019 for our organic investments is our investments in -- early-stage investments. And here, you can see our history as it relates to early-stage investments. On the left is our revenue over -- since 2011 from all these early-stage investments. And on the right is both our cash burn as well as our equity investment for these early-stage investments. The sum total, this is a large number, $306 million over this time frame. And again, as Robert noted in the letter, as a portfolio, this has been a real drag on the growth in our intrinsic value per share, in some of the return on invested capital calculations I showed earlier. We do expect that the cash burn for these investments will decrease quite dramatically as we go into fiscal 2020, and a big part of that is our investments in Printi in Brazil. And we've worked with the team there and the other shareholders there to restructure the operations, make it more focused, and that will have the impact of less cash burn as well.

Here, you can see our organic investments by segment. I'm not going to go through these in detail, but there might be a helpful reference for you. And you can see where -- we do expect in all other businesses where there's early-stage investments that decrease, and you can also see in Upload and Print where, with that additional CapEx, you see the increase.

The next category is M&A. And you can see, as the picture denotes on the left, we do expect to take a break from any material M&A in 2020. That doesn't mean we won't do any. I think there will continue to be opportunities for some smaller tuck-in acquisitions led by our businesses where those have clear returns. But we want to make sure that we're spending our time where it's going to be most valuable, especially with Vistaprint. And as outlined earlier, with Robert spending a lot of his time there and myself as well, we would otherwise need to play a significant role in any material M&A. So we expect to hit the pause button there. That doesn't mean that we won't go back to it, just means that for now, we don't expect there to be any.

The next section here is debt, and then I'll come to share repurchases as well. But if you think about it, before I go through these 2 sections, I already outlined our organic investments that we expect to make. I just said that we don't expect material M&A in 2020. And so with the cash flow that we generate, there's really 2 options left, one of which is to pay down debt, and the other one is to repurchase our shares. So now let me talk about each of those.

Here on the slide, you can see our historical leverage ratio. We have a history of, at moments in time, increasing our leverage for certain investment opportunities, and then we also have a history of going through a deleveraging process. And you can see where -- earlier this fiscal year, our leverage went up to 3.2x with the acquisition of BuildASign and then has come back down as we've generated cash flow throughout the business without another material acquisition. We're very comfortable with these debt levels and leverage levels. We have a diverse business as was demonstrated throughout today. We have a lot of discretionary spend that can be ramped up and down as is indicated in some of the changes in Vistaprint. As I said, we have a proven ability to delever. And very importantly, we have about 40% of our equity that is in any Board discussions when we're talking about increasing debt levels as we've done at some points in our history.

The next one is just a summary. The next slide here just shows the summary of our capital structure. On the left, you can see the capital that remains available to us on our credit facility. And on the right, you can see the various tiers of our debt coming to a net debt of $1 billion, an even $1 billion, and then our market equity as of a few days ago coming to an enterprise value of $4.1 billion. I think this capital structure leaves us well positioned for the long term. It gives us certainly access to the capital that we need as we continue to expand our profitability. We have the capital to deploy if we see good opportunities for high returns. We will remain disciplined. As you heard throughout today, we will remain disciplined in our investment approach. And importantly, this structure leaves us with the flexibility to pay down debt on our credit facility if that's so desired.

And then this last category of capital allocation and share repurchases, this has been a good use of capital for us over the years. As you can see demonstrated on the slide, we bought back a material amount of our shares. 20.9 million shares have been repurchased since 2009, so it's been significant. We continue to think that this represents an attractive opportunity for capital allocation and future value creation. And it also takes up little management bandwidth as well, referring back to the alternative in M&A that I talked about earlier.

Lastly, a few slides on housekeeping just as you think about sort of modeling for 2020 and the year ahead of us. First is our revenue outlook. There's nothing here that wasn't also in Robert's letter to investors, but let me just step through this. As you heard earlier, for Vistaprint, we expect flat to negative growth in 2020. As is indicated in both our earnings document and the letter to investors, we are moving our Vistaprint Corporate Solutions business, our Vistaprint India business and Vistaprint Japan back into Vistaprint for a number of good reasons. And so this guidance here is also inclusive of that. For Upload and Print, we expect roughly the growth that we've experienced over the last 2 years, which was 13% 2 years ago and 10% this past year. You should interpret that to mean high single digits to low double-digit growth for the foreseeable future. In National Pen, for the reasons that Peter outlined, we expect flat to low single-digit growth in 2020. For BuildASign, high single digits to low double-digit growth for the foreseeable future. And then in our early-stage businesses, with the removal of the 3 businesses I mentioned coming into Vistaprint, that leaves Printi, our investment in China and our investment in VIDA in these early-stage businesses, those are -- any changes in revenue there, we do not expect to be material to Cimpress in 2020. The growth there will remain volatile. And so we haven't provided any specific guidance for those businesses that remain there.

A few other items in terms of organic growth. Because VIDA and BuildASign were brought into Cimpress partway through fiscal 2019, we'll have the benefit of those for the full year. And so VIDA will come into the organic growth in Q1 and BuildASign in Q2. We will be adopting, as we're required to do, a new leasing standard in the first quarter of the year, which will bring on balance sheet some of our leases. And you can see here the impact that, that will have on the balance sheet. This, we don't expect to have a material impact on our income statement, and importantly, it will not have any impact on how we calculate leverage for debt covenant purposes. Many of the things that do impact the income statement, we've actually previously adjusted out and treated as an operating cost when we reported adjusted EBITDA or segment profit and other metrics. And so we don't expect this to have any material impact there.

And then lastly, currency. I mentioned before, the net impact of currency in 2019 was greater than $20 million on EBITDA and cash flow. In 2020, based on the rates that are available today, we do expect to continue to have significant realized gains on our currency hedging. That said, we do expect that the net impact of currency year-over-year will be slightly unfavorable. So we want to have that repeat of '19.

And with that, I think we're ready for Q&A. So if you give us a moment, we're going to get some chairs up on the stage. And Meredith, we'll turn it over to you.

Meredith Burns - *Cimpress N.V. - VP of IR*

Okay. So I am going to invite all of our presenters to grab a chair, bring it up onto the stage. We're doing it ourselves over here. And then we're going to get into the Q&A. We're going to have about 0.5 hour for Q&A. We do have presubmitted questions, and of course, we want to take live questions in the room. I'll probably start out with one presubmitted question while you guys gather your thoughts. And then we'll take it out to the audience, and we'll sort of flip flop back and forth.

QUESTIONS AND ANSWERS

Meredith Burns - *Cimpress N.V. - VP of IR*

Okay. So our first presubmitted question, I'm going to throw it to Robert. The annual letter is mostly focused on the positive and negative consequences of things we did as a company, i.e., benefits/sins of commission. What do you think are the most positive or negative things we haven't done over the past few years, i.e., the benefits or sins of omission?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

So great question, and the benefit, I've seen this beforehand. I would say in terms of what we have not done, which I think we should have done, is very much an investment into the technology in Vistaprint in the way we're doing it today. So we -- those of you who've followed us know that we have built an upgrade to the Vistaprint platform, but we didn't say we must go to a fully cloud-based, fully microservices-based architecture. It sounds theoretical, but actually, in today's world where there's so much third-party SaaS capabilities out there in marketing technologies and many other areas, I think the Vistaprint DNA of having started to build a lot of these technologies for ourselves in 1999 through 2008 when those things didn't exist, we didn't recognize the need to change that and switch to an architecture that was designed for 2020, not 2010.

And I think that the most positive thing we did not do was we had multiple conversations with multiple material M&A opportunities over the last 12 months. Some of them you're probably all aware of. There's 4 or 5 opportunities, although we looked at it and seriously considered it, and then we just said, we have too many things we want to keep focused on internally, other uses of capital, and we chose to walk away.

Meredith Burns - *Cimpress N.V. - VP of IR*

Excellent. Does anybody in the audience have a question?

Gary Mishuris - *Silver Ring Value Partners Limited Partnership - MD & CIO*

Gary Mishuris from Silver Ring Value Partners. In your annual letter, Robert, you mentioned that your return on investment on organic investments over the last 5 years has been inferior to your return on investments on M&A, although both have been more than acceptable. My observation has been that for most companies, it's the opposite that M&A causes the most trouble and the most disappointing returns, while organic investments usually work out pretty well. So maybe without getting into numbers, but at a high level, can you talk about what caused that kind of flip from the usual outcome?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Yes. I think there are 2 major components, and Sean, jump in as well. I'd say, one is the investment in emerging market opportunities and startup businesses, which just didn't pan out, and that's a pretty heavy amount. But an even greater amount is the amount we were -- I think in retrospect, despite what we thought at the time were good investments in Vistaprint, not really having the type of ROI we would have expected.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. I think that's right. And Gary, the only thing I would add is the -- I mean, I think there's 3 things, 3 pockets of organic investment that have weighed. Robert just mentioned 2, Vistaprint past -- some of the Vistaprint investments; two, early-stage investments, and you just saw on the slide I presented how significant that is. And then the third one, which Robert talked about in the morning, was that swing in the pendulum. And there was a lot of costs that went into the buildup and, in retrospect, the over-buildup of centralized teams, but then, of course, there's a cost to undo that as well. And so that's the kind of the capital cost, but then there's also the cost of distraction. And so I think those are the 3 things. And so despite a lot of good things in our organic investment, those 3 things weigh quite heavily.

Meredith Burns - *Cimpress N.V. - VP of IR*

No other questions from the audience? Okay.

Unidentified Participant

Last year, you provided a very useful slide with customer metrics. I think it was repeat customers. New customers have progressed over time. It seems it will be helpful to kind of gain an update on that as we think about Vistaprint's growth for next year.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Yes. So in terms of the value, we are giving less information we have in the past about those specific metrics. But I can say that the value per customer continues to grow, especially in our repeat business. We are pulling down materially in the customer acquisition spend with an impact on new customers.

Meredith Burns - *Cimpress N.V. - VP of IR*

Okay. We'll flip to the next presubmitted question, which is a question on investment returns. Why use the threshold for acquisition success of UFCF greater than 15% of acquisition consideration? Shouldn't the measure be a greater than 15% IRR from the investment?

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. I'll take this one. This is a good question. And in reality, the measure that we ultimately do use is what's suggested, which is a 15% IRR. And when we hit -- when we provide that hurdle rate, it's based on the IRR. When we have the benefit of many years past the acquisition, we can then look back and use the estimates of what we think going forward and come up with a reasonable estimate of that. The problem with that is when you're 1 year, 2 years, 3 years from the acquisition date, so much of that IRR is dependent on whatever the future value is and the terminal value, of which you all don't have an estimate of, we make an estimate of, but we could be wrong. And so our view is if we look at the cash flow generation relative to what we paid and then we combine that -- and let's say, you get to a 15%, and you combine that with a business that's growing still, then you're probably on a path to an IRR that's going to be quite a bit higher than 15%. So -- but agree with the premise, and we just use this as essentially a proxy to are we on the right track.

Meredith Burns - *Cimpress N.V. - VP of IR*

Great. Thank you. We'll go to the next presubmitted question, which was in light of the 15% hurdle, lots of 15% hurdles, we've established 4 -- established businesses in developed geographies. Do you think the Upload and Print acquisitions as a whole have been a success? Or have they resulted in diworsification? Why or why not?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

Yes. So I would absolutely say they've been a success financially for the reasons you just talked about. These are growing businesses with a -- even if you did the terminal value today, it would financially make sense. And I think very importantly, though, we as a group understand much better the power of a vast and deep product line that is in the Upload and Print markets that Vistaprint had knocked on over the application of mass customization to that long tail of products, which our Upload and Print businesses do very well.

Importantly, for a lot of reasons, historical and otherwise, in Europe, that is a more intensive -- that market is more intensive towards serving graphic professionals. It's not as direct that was pre-Internet and post-Internet. And so if you look at the Cimpress market share in Europe, order of magnitude, we have $800 million in revenue there in Upload and Print and roughly $400-ish million in Vistaprint, and then you got the National Pen on the side. But just in that printing space, we're -- we certainly have the leading market share, bar none, so we've been able to get to economies of scale that are very significant. So I think between the financial results, the competitive insights we've built and the market leadership we've been able to build in Europe, which is more resounding than it is even in the United States, I'd say they were definitely successes.

Meredith Burns - *Cimpress N.V. - VP of IR*

Questions from the room?

Unidentified Participant

[Eric Lascelles] with [Regions]. I'm just trying to get a better flavor for when you talk about capital investment needed to maintain steady state versus not needed to maintain steady-state cash flow -- free cash flow. The businesses are subject to competition, and you're having to constantly invest in them. But sometimes the capital purchases can be very lumpy, and they could have multiyear paybacks. Or I mean how do you actually get to the actual number that says, okay, this is not required to maintain steady state versus this is? Is there a lengthy process? Or is it just the 12-month payback rule? Or...

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. So there's a process that we go through every year. And the first step of that is to understand the things that don't pay back within 1 year, right? So we start with that cut. And then from there, I think that there are some that we would all be able to very quickly agree are objectively not needed for steady state. And so let me start on that end of the spectrum. Our early-stage investments, right, that's a choice. We don't need to do that, and we could stop doing that. Even things like MCP. That's a choice. We could stop doing that. And so I put them in the category of things that are very clearly and objectively growth investments not needed for steady state.

As you inch towards the other end of the spectrum, there is required more judgment. And so there's some things like growth CapEx, which, as you mentioned, can be lumpy. And there, we have pretty clear distinctions of what is maintenance and growth CapEx, and so that's not so hard. LTV advertising, for example, starts to get into more judgment in terms of where that -- what is the net investment, what's the impact of that spend, how much is truly needed to maintain steady state. And that's where there's a bit more judgment. So we recognize that on the kind of that latter part of the spectrum, there is judgment. That's why we provide a range, and we'll continue to provide a range.

But actually, if you look at the growth investments that we disclosed in Robert's letter, I think it's actually -- most of that is quite objective because there's these categories where there are clear choices not needed to maintain steady state. And the part that is more judgmental is now, I think, by far, the minority of that calculation. So it's certainly subject to change as we've seen over the years, and we're getting better at it, but that's the process that we go through.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

And to emphasize something you said, these are ranges and we're explicit that these ranges are imprecise internal estimates, but we think it's -- the best way to really think about the biggest component of the intrinsic value of a business is to put in money and how much cash comes out before you decide to invest or something else.

Meredith Burns - *Cimpress N.V. - VP of IR*

Great. Other questions in the room?

Unidentified Participant

Sorry, one more. I guess on Vistaprint. I guess what I'm trying to understand is it makes total sense to pull back on negative NPV advertising investments. No argument. The question then is what's the structural change that happened in the business, whether it's competitive pressure or if it's the moat of the business that somehow got eroded, that we somehow went from a high single-digit growth business structurally, presumably with positive NPV advertising investments, to a business that for the time being, or the foreseeable future as you put them on the letters, isn't growing? So is it competitors got better? Something changed? Like what changed structurally?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

I think that, one, underneath, we changed structures. We made a lot of new product interactions. We got more complex as a business. We went through the centralization, decentralization. We didn't invest in technology and analytics. And those all deteriorated the ability to have relative precision in estimating future cash flows. We then also became more and more, I'll say, addicted to advertising as a driver of revenue growth.

And so the divergence of what we, in retrospect, believe is correct estimates of future cash flows led us to make investments that we thought were at or above our hurdle rate investments, and they weren't. So frankly, if the revenue started declining now, we would still accept declining revenues rather than throw good money after bad. We don't think that needs to be the case. So I think that's the underlying change.

So -- and also I think to give out a financial theory and precision into just the culture of an organization, I think we've all seen in the last 4 or 5 months is when we take the crutch of just spending 22% of revenues on advertising away, we have to get to things like fixing program links on our site and improving upload methodologies, improving customer service, investing into new technology, learning to be marketing in a world of data sciences. And it forces an innovation in favor of the customer that we weren't doing before. And so I think that, that ultimately is that you have to get to that jaw-dropping customer value, that's what drives growth.

I think -- and also if I go why did we believe we should continue to do this, and mea culpa that we allowed -- I and others allowed this to happen. But I think we came from a world where in the formative days of Vistaprint when we were growing 40%, 50%, spending on new customer acquisition made sense because -- but when we get into a world where the number of new customers relative to repeat customers has come down, we should see some leverage there.

Unidentified Participant

What specifically is jaw-dropping customer value? What do you aspire the Vistaprint product or customer value prop to be a couple of years from now?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

I mean it's just like -- I think jaw-dropping is when your jaw figuratively drops, like, my God, this is really good. I think most in this room have had that sensation at Amazon. I mean, literally, like you're walking down the stairs on your mobile, and the toilet paper arrives today -- a day later because you ran -- I mean just like insanely easy and good value. You see that across when FedEx was created 30 years ago, and suddenly, you can send a package or a letter across the country next day for $12. And I think that, that -- it's just a figure of speech to saying compared to alternatives out there, this is just a differentiated value, and that in almost any business that aspires to really grow in a differentiated way, it has to come down to that type of value delivery. And I think startups innately get that. They don't go in and try -- most startups don't go ahead and try to do incremental improvements on what the market leader does. They just try to make the market leader irrelevant. And I think we need to -- we're in a large market, and there's still a lot of ways to innovate. We don't have specific -- we have some specific ideas we're not talking about, but I think we need to have that mentality that we can just change the rules of the game. Bryan mentioned this or whoever it is, it might have been Paolo. But both Pixartprinting and BuildASign are very good at going in and saying, let's not look at how suppliers supply something for a given price and delivery time. Let's actually reengineer the entire process and do something that is just better, faster and cheaper. And that leads to that figure of speech of being jaw-dropping customer value.

Unidentified Participant

How do you get comfortable just with the notion that some of this advertising spending that you're cutting now might not have a negative impact now but there's a lagged effect, and if you don't spend it in 3 to 5 years, there's a hit to the brand from not doing it?

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. So I think -- and we've said this in various places. I mean there will be -- the advertising spend that we would have otherwise spent if we didn't make these changes would have had some future revenue impact. Exactly how much, I'm not sure. And it's something that we monitor very closely even as we've made these changes in the near term, making sure that we fully understand that. But the reality is that we don't fully know what the future impact is from a revenue perspective. That said, when -- and Robert mentioned this before, when we look at this with updated models with full costs and our best reflection of those costs, we're going to make logical ROI-based decisions. And so if it means that, that revenue doesn't exist in the future, that's okay because we're not going to spend the money to generate that revenue if it doesn't hit our return thresholds.

That said, I think that there's a lot of other things that are going to impact the future revenue when you go 3 years out, 5 years out in terms of repeat, in terms of conversion rate and ultimately the returns on that future advertising spend. And that's going to be in large part driven by some of the work that Maarten outlined or Robert outlined in terms of the other improvements that are being made in the business, this notion of jaw-dropping customer value, improvements in the site to make it really easy, better use of data, better personalization and that could go on. And so I think that those are going to have a bigger impact on that trajectory 3 to 5 years from now, then the spend reductions that we've made recently.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

And we built -- I know today is different than 10 years ago. We built $1 billion business, not going beyond 6- or 12-month lifetime payback. And I think we certainly -- we're perfectly happy to go to 24 months or whatever if it's a good ROI. But it doesn't need to go hand-in-hand, and growth doesn't only need to come from large ad budgets. And we don't have a small ad budget even after the reductions.

I think the other thing I'd emphasize is that philosophically, we are 100% aligned with the idea of a discounted cash flow for anything, including advertising and brand advertising included. We are making a lot of investments now to build the system for the talent to be able to use today's era of data sciences in attribution sciences. We -- just because we have a very old tech stack and we haven't invested in that, the best-in-class e-commerce companies out there, the Wayfairs or Amazons or Zalandos of the world, they have a much more data-driven approach to attribution sciences. And then they can say this $10 million you spent here, whether it's in channel A, B or C, had this type of incremental return on the margin. We need to build that muscle up as opposed to, I hate to say it, in the past, recent past, we've used averages, which is an insane way to spend $100 million. You should look at the last $10 million and $20 million on the margin.

Meredith Burns - *Cimpress N.V. - VP of IR*

Great. I've got a question back here.

Unidentified Participant

A couple of questions. You had a great slide on #60 where you talked about the improving efficiency of ad spend. And it gives comfort to see less risk taken on some of that spending today and getting a better return versus Q4 a year ago. But I guess the question is when I look back at this, when you were planning Q4 of '18, were you assuming 51% of that spend was a 2-year payback? Or did you recognize throughout the year that spending wasn't done appropriately? And what's changed between then and now so that we know you'll achieve these paybacks that you spent this year?

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. Yes, good question. So let me start off with just making sure it's clear that, that bar of Q4 of 2018 is an updated reflection based on our current methodologies and new estimates. And so that was not the expectation at the time. At the time, the teams would have been spending to either a 2-year payback or a 3-year payback. And so in any case, the result of that, again, updated for current methodologies and full costs, was far less efficient than what was expected at the time. So we now have reset that criteria. The models that are used to underpin those decisions have changed. But again, it's kind of through that brute force mechanism, and we're very actively in the process of systematizing that.

So I feel comfortable that now those models do reflect the full set of variable -- semi-variable costs that we can look at the marginal cash contribution of that spend. And I do think that as we get more systematic, as I said earlier, I do think that we likely will have an opportunity to spend more than we were in recent months because we'll be able to more precisely understand that payback and sort of relax, not in the sense of relaxing the criteria, but push out the payback periods because we'll know that they're accurate calculations.

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

One thing I want to add is that is a pretty dramatic slide of saying, oh, my god, we were spending that much of 5 years payback. And again, we are changing that. That was an error. We shouldn't have done it. But I think one of the things that you -- a lot of people look at LTV analysis from the lens -- or intuitively from the lens of subscription models. Imagine a mobile telephone service where you have a monthly recurring cost. And before discounting the cash flow, it's largely the same for multiple years in the future. If you actually look at our cohort data, we -- I showed you the gross profit, we -- and you would chart the incremental cash flow per year, it actually -- of a cohort starts coming down and gets as methodic at a point, but there's a lot of the value early on. So that fourth and fifth year, there's not a huge amount of cash flow delta between that relative to the first 2. So the sensitivity of are you -- 5 years to 3 years is not as crazy at first blush as you might be in a -- someone who's paying $30 a month on a subscription basis for 5 years. That being said, we think we were overspending, but it's not quite as dramatic as that chart looks.

Meredith Burns - *Cimpress N.V. - VP of IR*

Okay. We're going to quickly knock out a couple of presubmitted questions. What is the time horizon that you consider when making share repurchases? That is for share repurchases made in the last fiscal year. When do you think it's appropriate to evaluate the success or lack thereof of buying back shares?

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. So when we make share repurchase decisions, we're doing that, looking at the current share price relative to our estimates of intrinsic value per share, which takes some of the stuff I showed earlier and forecast that forward with the full picture. And we use a range estimate, and then we back off that with the margin of safety and would do it if we think the result of that is a good return. And so we're able to use that to evaluate what we think the return on that is when we're making those repurchases. And so we're able to also then evaluate the share repurchases that we made in the last fiscal year based on that same criteria. And of course, our estimates of intrinsic value per share will continue to change every time we do those updates. And so each year, we can evaluate the returns that we think we got on those buybacks as it relates to how it impacted our free cash flow per share.

Meredith Burns - *Cimpress N.V. - VP of IR*

Great. And the next presubmitted question is going to be a question on incentives. Why did you sell a part of PrintBrothers to management? Will we see more transactions like this?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

All right. Well, let me start with the -- one of the slides I showed today when I was going through the self interrogation of what could have been better about our execution, we -- and I brought up the incentive slide with the carrot. Across the businesses of Cimpress as opposed to the central teams, we like the idea of being co-owners with the management. And for instance, Bryan mentioned the rollover of management, which is private equity backed before the management team rolling their equity into the Cimpress ownership. Likewise, before I'll come to PrintBrothers specifically, but we're setting up similar things for Peter's team, for Paolo's team and across Cimpress.

Now specifically to PrintBrothers, the founders of WIRmachenDRUCK, the largest part of that group, as you've seen publicly, we purchased that business for EUR 140 million in cash several years ago. The founders of that business were interested in staying, and they felt it was a very good place for them to put their capital. They've invested money back in. And we are very happy to have them as shareholders. Paolo's counterpart, Kees, invested personally into this. And we just felt it was great if the executive teams, be it through a private equity rollover or through cash they have someplace else, are willing to be co-owners with us. We're very happy to have them.

Unidentified Participant

For Robert, and maybe Sean wants to jump in as well. As you reflect on what you've learned about Cimpress' advertising approaches over the past 6 months and you think about kind of the journey over the next few years to make it more efficient, be more data-driven, what do you feel like are some of the low-hanging fruit, the things that will be kind of easy wins? And what do you feel like are some of the things that are necessary but are going to be more difficult to do to get where you want to be?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

And I would tag team between the 3 of us here. I'd say a very low-hanging fruit is what -- in the analysis we were doing in January, February, March where we -- look, let's just do possibility checks of different triangulations and can they all be true, and if not, what must not be true. And so -- and that led to what Sean characterized as brute force adjustments.

Now we're in this middle layer where we have been investing in trying to improve our attribution and our measurement systems. And we are -- and we can use third parties for some of that, and we are making progress. I think the higher up on the tree, the fruit that I think is most valuable is to do things in our core technology and data systems which our existing technology stack does not allow for but that modern mar tech, marketing technology, is designed for. And that gets into everything from how you take data events across the entire experience of the customer, how you put into common data pools. And so maybe I can let the experts on maybe the financial modeling in the near term and the longer term go into a little more detail on that.

Maarten Wensveen - *Cimpress N.V. - CTO & Executive VP*

Okay. I'll go. First of all, you already cut it there a little bit, but like deeper segmentations of customers, really understanding the patterns of product behavior and then upgrading all the different channels, be it an e-mail channel, be it an adwords buying channel, be it organic, and really playing into these things is just the market has moved in the last 5 years, 10 years for sure. But the last 5 years has been accelerating. Mar tech, you've already used the acronym, marketing technology is just exploding. And there's really, really significant things going on when you really start thinking about the different underlying data structures that make this possible, right, event based-driven and all the different data lake technologies. As you can -- there's some large swats of data and you can really bring them together much quicker than used to be possible, what's possible, but it took a lot of effort. Today, you only get it out of the box in some of these things and to really get us to start working in our organization and also distributing some of the decision power that comes with what Robert talked about, having more GMs within the countries or product specialists having straight decisions on these channels and how they want to optimize them, I think, is really -- those 2 go hand-in-hand. So platformatizing the data and the infrastructure and then also having people empowered to immediately act upon it, I think, are really the next opportunities.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. I'm not sure I have anything else to add.

Meredith Burns - *Cimpress N.V. - VP of IR*

Andrew, do you have a question?

Andrew V. McQuilling - *UBS Investment Bank, Research Division*

Yes. I just wanted to ask a question, a follow-up to the question on the screen. Why did you include a 2-year put option for the incentives for that equity? And then are there any put/call options for the BuildASign equity of the minority?

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

The put option was really just enticing the team to stay. I think they have many, many opportunities to do other things. And I think when they sold the business to be -- I don't think they would have expected 3, 4 years later to be putting a big chunk away back into the business. I think they like where it's going. They like -- I think like Paolo's team like the move we've done organizationally to put Kees and them on the front lines of the business as Paolo is as opposed to kind of a corporate office. But that being said, we wanted -- they wanted the flexibility of what if it doesn't work out, can they put back us at evaluation, which we think will be perfectly fair.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

I think the only thing I'd add to that is the -- I mean that's there contractually and so, of course, they can get out. They would only want to stay, and we would only want to have them remain if it's going well and we still feel like our interests are aligned. And so that's there contractually. I think that they'll stay for as long as their interests remain aligned, and they're excited about the opportunity.

As it relates to -- you asked about BuildASign. There is a put/call arrangement around that, which I think starts 4 years after the transaction. But it's designed in similar ways to how we design these in general, which is, basically, if the holder of that equity wants to stay as part of Cimpress and continue to deliver value and our interests are aligned, we'd like them to stay for as long as they like. And so that's generally with the equity holder to determine. And if they want to stay, they can stay. And our put only kicks in at some point in the future if certain things happen.

Meredith Burns - *Cimpress N.V. - VP of IR*

Great. We are about out of time. Robert, I don't know if you would like to share any last thoughts or...

Robert S. Keane - *Cimpress N.V. - Founder, Chairman, CEO & Interim CEO of Vistaprint*

I would just like to say thank you again for your time and your attention today. I really appreciate it. And I know a lot of you traveled to get here, so thank you for making the effort.

Sean Edward Quinn - *Cimpress N.V. - Executive VP & CFO*

Yes. Thank you, everyone.

Maarten Wensveen - *Cimpress N.V. - CTO & Executive VP*

Thank you.