

## Introduction

Thank you. This is Patricia Murphy, Vice President of Investor Relations for IBM, and I'd like to welcome you to our fourth quarter earnings presentation. I'm here today with Jim Kavanaugh, who was announced last week as IBM's Senior Vice President and Chief Financial Officer. With Jim is Martin Schroeter, who is now Senior Vice President, Global Markets.

The prepared remarks will be available within a couple of hours, and a replay of the webcast will be posted by this time tomorrow.

I'll remind you that certain comments made in this presentation may be characterized as forward looking under the Private Securities Litigation Reform Act of 1995. Those statements involve a number of factors that could cause actual results to differ materially. Additional information concerning these factors is contained in the company's filings with the SEC. Copies are available from the SEC, from the IBM web site, or from us in Investor Relations.

Our presentation also includes certain non-GAAP financial measures, in an effort to provide additional information to investors. All non-GAAP measures have been reconciled to their related GAAP measures in accordance with SEC rules. You will find reconciliation charts at the end of the presentation, and in the Form 8-K submitted to the SEC.

So with that, I'll turn the call over to Jim Kavanaugh to start us off.

## Overview

Thanks Patricia, and hello to everyone on the call today.

As a quick introduction, I've been with IBM for 21 years. I was the IBM controller from 2008 through January of 2015 when I became the Senior Vice President of Transformation and Operations, where I've been focused on driving IBM's operating model transformation. In October of last year, I came back to be Senior Vice President of Finance and Operations. I've participated in IBM's annual investor briefings for the last 10 years, and have met many of you. I'm now looking forward to working more closely with the investment community as IBM's CFO. Given I'm a week into the new role, Martin is going to cover the fourth quarter, and then I'll put into context our 2017 performance and how that positions us for 2018. We'll then take the Q&A together. So for now, I'll turn it over to Martin.

Thanks Jim. Back in July we planted the flag for our businesses, and we pointed to an improved trajectory in the second half. Now as we look back on the year, we did in fact significantly improve the trajectory in our revenue and our gross margin performance. We did this by ramping our cloud and as-a-service offerings, by continuing to reinvent our systems brands, by driving a higher level of software transactional revenue, and by improving consulting performance.

In the fourth quarter, we returned to revenue growth. Our revenue of twenty-two-and-a-half billion dollars is up about three-and-a-half percent, and up one percent without the currency tailwind.

We also grew our operating net income and our operating earnings per share. As you saw in our press release, our operating net income and EPS exclude a one-time charge associated with the enactment of tax reform, because of the unique nature, and to provide comparability to the operating expectations we've been providing for 2017.

For the year, we delivered \$79 billion of revenue, \$13.80 of operating earnings per share, and free cash flow of \$13 billion, which is up over a billion dollars year to year.

Looking at some of the revenue dynamics of the fourth quarter, our Systems results were terrific across IBM Z, Power and storage. This was our first full quarter with the z14, and with pervasive encryption and the ability to address new technologies like blockchain, we're adding new clients and new workloads to the platform. In Cognitive Solutions we had good growth in several areas including security, IoT and our industry-based solutions like Watson Health and Watson Financial Services, though we were disappointed by the performance in a few of our more traditional analytics offerings. And in services, we had our second consecutive growth in consulting, led by digital offerings. Performance in our outsourcing businesses across GTS and GBS was pretty consistent with the last few quarters. From a geographic perspective, we had growth in many countries, including our two largest, the U.S. and Japan.

Across all of our businesses, our strategic imperatives revenue was up 17 percent, or 14 percent at constant currency, as we embed cognitive and cloud into more of what we offer. For all of 2017, strategic imperatives revenue was up 11 percent to thirty-six-and-a-half billion dollars, which is 46 percent of our revenue. I should mention that we'll continue to focus on constant currency revenue growth rates throughout, but any way you look at it this was a strong finish to the year.

## **A Cognitive Solutions & Cloud Platform Company**

We introduced the strategic imperatives framework back in 2015 as a way to show how we're moving our clients to the future. As you know, these aren't separate businesses, but the revenue from our offerings that address opportunities in analytics, cloud, security and mobile. This quarter, the 14 percent growth in strategic imperatives revenue was led by cloud, and by security. Let me give you a little more on each.

Our Cloud revenue was up 27 percent, as we help our clients to implement hybrid environments, integrating public and private and traditional IT. For the year, our cloud revenue was \$17 billion and we're exiting 2017 with a run rate in our as-a-Service offerings of over \$10 billion. To put that \$17 billion in perspective, it's up from \$7 billion just three years ago. As you know we play an important role in running our client's most critical processes, and now with the IBM Cloud, which is built for the enterprise, each of the 10 largest global banks, nine of the top 10 retailers, and eight of the top 10 airlines are Cloud as-a-Service clients. We can help clients with their hybrid environments as well. With the introduction of IBM Cloud Private, we provide clients with the attributes of a cloud behind their own firewall, and give them increased portability of workloads across any cloud environment. This is really important for enterprise work.

And then in security, revenue across our security offerings more than doubled. This reflects the strong demand for our pervasive encryption in IBM Z, as we reinvent that platform for the most contemporary workloads. We also had good performance in managed security services within our GTS business, and in our security software.

Over the last several years we've been making investments and shifting resources, embedding AI and cloud into more of what we offer, and building new solutions and modernizing existing ones. These investments not only drive our strategic imperatives revenue performance today, but will also extend our innovation leadership into the future. I'll give you a few examples. In the third quarter we formed a partnership with MIT to create

the MIT-Watson AI lab. Through this partnership, we're mobilizing the talent of more than 100 AI scientists, professors and students to carry out fundamental AI research and drive scientific breakthroughs that unlock the potential of AI. In quantum, we now have a 20-qubit IBM Q system available for all to use, and we have the first working 50-qubit processor, and we've launched the Q network, which is a collaboration of leading Fortune 500 companies, academic institutions and national research labs that can access IBM Q systems through the IBM Cloud as they explore the practical applications to advance quantum computing. And you saw just last week we announced that IBM led the U.S in patents in 2017, marking our twenty-fifth consecutive year at number one. Nearly half of the more than 9,000 patents in 2017 are for advancements in AI, cloud computing, cybersecurity, blockchain and quantum computing.

So now, let me move on to our financial metrics for the quarter.

## Key Financial Metrics

Our revenue was twenty-two-and-a-half billion dollars, which as I said is up year to year. Like last quarter, our performance is pretty much all organic.

I'll go into the highlights by brand in the segment discussions, so let me comment here on the geographic performance. Revenue from the Americas was up four percent, with growth across the U.S., Canada, and Brazil. This is a significant sequential improvement in the year-to-year performance, six points compared to the third quarter, driven by systems and infrastructure services. Our EMEA revenue was down about one-and-a-half percent, which is consistent with last quarter's performance. As always the performance varied within the geography. This quarter, we had growth in France, Spain, and the Middle East and Africa region, offset by weakness in the UK, Germany and Italy. You'll remember that the UK and Germany were impacted by the contract dynamics at the end of 2016 and we've now wrapped on those. In Asia Pacific, we had strong growth again in Japan, which was up four percent. Impacting overall Asia Pacific performance was China, where you'll remember we had double-digit growth last year from some large roll-outs in China banks.

Looking at our margin performance, our operating gross margin was down a little over a point year to year, and up nearly two points sequentially. This is about half a point behind what we talked about last quarter, with some of the difference due to mix, and the rest due to a delay in the yield from some of our productivity actions in our services business.

Our operating expense was up six percent, and with revenue up four percent our E/R increased nearly 70 basis points year to year. Now, keep in mind, when currency helps the top line, it also hurts the expense line, not just because of translation, but because that's where the majority of the hedges are reported. We mentioned this back in October. And so, in the fourth quarter, currency, between translation and the year-to-year impact from hedges, drove four of the six points of expense growth. We also had

a lower level of IP income in the fourth quarter, about \$175 million year to year, and it was down for the full year about the same amount. At the beginning of the year we said we weren't counting on IP income being flat year to year, though we had the opportunity pool to do so. And as we went through the year, we were delighted with the new IP partnerships we signed. You can see they contributed to the \$300 million of IP income in each of the last three quarters. And we weren't going to do anything unnatural to drive flat performance year to year in this line item. Without the effect of currency and IP, our E/R improved modestly, reflecting the continued efficiency we're driving in our underlying spend base, while maintaining a high level of investment, together with the benefit of growing revenue.

Looking at operating taxes, again, this excludes the one-time charge. We provided a range for our ongoing tax rate at the beginning of the year, and we finished at the bottom end of the range. And so our tax rate for the quarter reflects an underlying effective tax rate of 12 percent for the year. You'll recall we had some discrete items in both the first and second quarter, which took our full-year operating tax rate down to seven percent.

We generated \$4.8 billion of operating net income in the quarter, which is up one percent, and with share reduction of about two-and-a-half percent our operating EPS of \$5.18 was better by three-and-a-half percent.

We generated \$6.8 billion of free cash flow in the quarter and \$13 billion for the year. Now when you look at our realization of GAAP net income, that's over 200 percent, but when you normalize for the one-time tax charge, it's about 115 percent for the year. For your awareness, as we show realization of GAAP net income going forward, we'll be using that adjusted view on our charts. Our free cash flow supports both a high level of investment and shareholder returns and in 2017, we returned three-quarters of our annual free cash flow to shareholders through dividends and share repurchases.

So now let me move on to the segments.

## Cognitive Solutions Segment

Our Cognitive Solutions revenue was flat. Within Solutions Software, our annuity content, which represents 80 percent of revenue on an annual basis, was up three percent year to year, which is over a point better than last quarter's growth. We had double-digit growth in our SaaS offerings again this quarter, as we continue to invest to build scale in our as-a-Service businesses. The transactional revenue within Solutions was down, driven by weakness this quarter in a few of our more traditional analytics offerings, like data integration, and content management. As you know, because of the larger mix of transactional content in the fourth quarter, it has an outsized impact on the overall software performance.

Within our Solutions Software portfolio, we continue to focus on building out our industry verticals, and had strong performance in those areas, including Watson Health, Watson Financial Services and Watson IoT offerings. In Watson Health, we continued to deliver strong growth, driven by State and Local Government agencies, as well as Life Sciences, and Oncology. Watson Health is scaling. We have reached 115,000 people with our cognitive offerings, and Oncology is now in over 150 hospitals and health organizations, and trained on 13 cancers, compared to 4 cancers just over a year ago. Watson Financial Services had another strong quarter, as clients look to evolve their financial systems. Growth here was led by our RegTech and Commercial Payments offerings.

Also within analytics this quarter, we had good growth in areas that provide data management in hybrid environments, like our new unified data system, which leverages DB2 technology built on IBM Power and in our Software-as-a-Service business intelligence offerings, including Cognos Analytics.

As I said earlier, Security contributed to growth again this quarter. We had good performance, particularly in the areas of data security, with GDPR as a key driver, as well as fraud detection. We saw increased interest and

uptake in our Software-as-a-Service offerings, particularly with QRadar on Cloud and Resilient on Cloud.

We also continue to make progress in emerging areas like blockchain. Remember that for us, blockchain is a set of technologies that allow our clients to simplify complex, end-to-end processes in a way that couldn't have been done before. It requires the attributes of immutability, permissioning, and scalability and we're already performing thousands of transactions per second. And we offer some of the most advanced cryptography available to verify transactions. So, by running on Z, we provide industry-leading technology to help improve security and performance for our clients' blockchain networks. We have engaged in blockchain projects with hundreds of clients, and since the release of our IBM Blockchain Platform in the third quarter, we've collaborated on 35 active networks with clients such as CLS, Everledger, KBank, London Stock Exchange, and Mizuho. These reflect a wide variety of use cases like cross-border payments in financial services, supply chains in retail, valuable goods authentication in industrials and digital identification for governments. This quarter, we extended our Food Safety initiative with Walmart into China, and just this week we announced the creation of a joint venture with Maersk, to provide more efficient and secure global trade using blockchain technology.

Turning to Transaction Processing Software, we had another good quarter with revenue up three percent, reflecting our clients' long-term commitment, and the value our platform provides to them. Growth was driven by middleware, as our clients continue to invest and grow their high value, mission-critical workloads on the Z platform.

Turning to profit for Cognitive Solutions, PTI margin declined year to year, driven by ongoing investment into strategic areas, and mix of business into lower margin offerings, including the shift toward SaaS. Our SaaS margins continued to expand, though we're still not at scale.

## **Global Business Services Segment**

Moving on to services, Global Business Services generated \$4.2 billion of revenue this quarter, up one percent at actual rates, and down one-and-a-half percent at constant currency. We had modest growth in GBS signings, marking the fourth consecutive quarter of signings growth, and our GBS revenue is up in several regions, including Asia Pacific and Latin America. We have good momentum in Consulting, but continue to see declines in Application Management, particularly in North America and Europe.

Consulting revenue grew one percent again this quarter. We've said for some time that the path to revenue growth starts with signings, which then translates to backlog growth. Our consulting backlog was essentially flat in the second quarter, and was up starting in the third, and we've now driven two consecutive quarters of consulting revenue growth. Revenue in our Digital Strategy and ix business grew about 40 percent, and we're also seeing good growth in the new practices we've built around our innovative technologies like AI and blockchain. The reason we're able to lead in these emerging areas is because of the technology, as well as our ability to implement these platforms into our clients' workflows. So GBS plays a critical role in our leadership in these areas. This doesn't apply to just our own technology, we're also building ecosystems and partnerships around other platforms, we've talked in the past about Salesforce and Workday. And now in December we announced a partnership with Blue Prism that will combine their robotics processing automation software with IBM services, to deliver digital workforce solutions that increase productivity and enable automation at scale.

Application Management was down three percent this quarter, driven by declines in traditional ERP managed services, and the successful completion of some large contracts. Within application management, we grew in our offerings that help clients modernize their critical application suites by implementing cloud-centric architectures and microservices.

Turning to profit, GBS gross margin was down about two points year to year. Half of this was due to currency dynamics this quarter, and it impacted margin by about a point. We're also continuing to invest in our skills and transform our GBS business. As Mark Foster talked about at our Investor Briefing, our strategy is focused around digital, cognitive, and cloud growth platforms, and we've streamlined our practice model to ensure the right skills enablement for practitioners. We're investing to further develop our long-term client relationships with the leading organizations around the world, both with more dedicated senior account leadership, and the reinforcement of delivery excellence through methods, automation and widespread re-skilling of our practitioners. We're also bringing in new skills through acquisitions. We closed on the acquisition of Vivant this quarter in Australia, which is the seventh acquisition we've done in GBS over the last two years. In some of the more traditional areas in Application Management, we continue to see some price and profit pressure.

## Technology Services and Cloud Platforms

Technology Services and Cloud Platforms generated \$9.2 billion of revenue this quarter. Our strategic imperatives grew at a double-digit rate, and the as-a-service exit run rate for the segment was nearly \$7 billion. The IBM Cloud is optimized for cognitive workloads, and provides clients with the ability to integrate public, private, and managed environments through a single architecture.

Infrastructure Services was down four percent which is similar to the trajectory we've seen in recent quarters. As we've talked about, this quarter we had a more difficult year-to-year compare because of some large contract items a year ago. We've now wrapped on those dynamics. Clients are looking to cloud to drive efficiency and agility in their infrastructure and help them create new business models. But they need help getting there, and they need someone to manage it for them given the complexity of their, data, environments, and industry. When you look at the composition of our Infrastructure Services signings this year, about 45 percent was cloud content, which is ahead of the market mix.

Integration Software was down five percent. Our SaaS revenue was again up at a strong double-digit rate across the portfolio, and we continue to have momentum in our hybrid integration tools that are important to enterprise cloud deployments, but it was not enough to offset the decline in our on-premise tools as more of that portfolio shifts to cloud.

I mentioned earlier that this quarter we announced IBM Cloud Private, a platform to help clients unlock their significant IT investment in core data and applications and extend cloud-native tools across public and private clouds. The new platform is built on an open-source container architecture and supports both Docker containers and Cloud Foundry. This facilitates integration and portability of workloads, as they evolve to any cloud environment. IBM Cloud Private was developed in response to our clients who want more control of their data and processes, while leveraging cloud capabilities. The need is obvious in regulated industries, but every client

has data residency requirements, and is concerned with the security and performance of pure public clouds. This platform will help everyone to better implement cloud infrastructure that aligns with whatever business model they have. Since the announcement of IBM Cloud Private, we have already brought 120 enterprise clients onto the platform.

Technical Support Services was up one percent at actual rates and down two percent at constant currency. We grew in our multi-vendor support offerings, where we drive productivity and scale for our clients, with integrated and wall-to-wall support solutions, across any platform.

Turning to profit, gross margin for the segment was down about two points year to year. Some of the large contract dynamics that we've talked about are impacting margins. There were also new large contracts that came into the portfolio at lower margins, as we invest ahead to optimize our clients' environments. We continue to invest to scale our cloud platforms, and more of the software content in this segment shifts to as-a-service. We're scaling the IBM Services Platform with Watson, where we've already added over 1000 clients to the platform in 2017. Additionally, we've wrapped on the benefit from our workforce transformation actions that we took in 2016. We did improve our spending here, but as I mentioned, the yield from some of our productivity actions is delayed.

## Systems Segment

In Systems, we had another strong quarter with double-digit revenue growth. All three brands, IBM Z, Power and Storage, grew. We continue to deliver innovation in our systems to enable them to run the most contemporary workloads. Now, roughly half of our Systems revenue in 2017 addressed workloads in the areas of our strategic imperatives.

This quarter, IBM Z revenue was up 71 percent year to year, with the highest shipped MIPs in history. The results reflect our first full quarter of z14, and demonstrate the strong client demand for this platform. Our mainframe is an enduring franchise. In fact, it's an enduring and growing franchise. Our MIPs install base is up two-and-a-half times over the last 10 years. And as long as we continue to innovate and modernize, this platform will continue to be the leading enterprise platform in the world. More than ten years ago it was Linux, five years ago it was mobile, and now it's pervasive encryption. The z14 adoption was again broad based, across many countries and industries. We added 14 new clients to the platform across 10 countries this quarter. And we saw especially strong performance in North America, where clients continue to leverage traditional IT infrastructure together with the cloud. We're continuing to address emerging workloads across the z platform, like blockchain, machine learning, dev ops and payments. We closed 10 instant payments deals this quarter across several markets, and in the emerging blockchain space, the Beijing Institute of Technology selected the IBM LinuxONE platform to run their blockchain solution. Overall, the mainframe continues to deliver a high value, secure and scalable platform that is critical in managing our clients' complex environments.

Power revenue grew 15 percent, driven by double-digit growth in our high and low-end portfolio, with our cloud-enabled offerings serving new clients in Deep Learning and HANA markets. We continue to shift into the growing Linux market, and our Linux-on-Power revenue grew again and gained share. For 2017, this now represents a quarter of our Power portfolio.

We also delivered the first installment of our supercomputers at U.S. Department of Energy, with more to come later in 2018. There are three labs of this type, and we won two of the three, which is the most any provider is allowed to win. And this quarter, in our low-end Linux portfolio, we released our next-gen Power System, with our new POWER9 processor. These POWER9 systems bring unprecedented speed to AI workloads and enable our clients to compete and win in the data-intensive AI era.

Storage hardware was up eight percent. This is the fourth consecutive quarter of growth, so obviously we've got some momentum here. We gained share in a very competitive market, while holding margins stable. We had double-digit growth in our high-end hardware products for the quarter, which reflects the demand for Flash, as well as the capacity increase linked to mainframe demand. Our all-flash array offerings once again grew at a strong double-digit rate, and faster than the high-growth all-flash market. And our storage software, which is reported in Cognitive Solutions and a major contributor to our storage business, had strong revenue from our Cloud Object Storage offerings.

Looking at profit for Systems, our margin was down slightly year to year, and up sequentially, consistent with product cycle dynamics.

And so now I'll go quickly through cash and the balance sheet, and Jim will wrap up with the segments in the context of 2018.

## Cash Flow and Balance Sheet Highlights

We generated \$7.8 billion of cash from operations in the quarter, excluding our financing receivables. We invested nearly a billion dollars in capital expenditures, and generated \$6.8 billion of free cash flow.

For the full year, we generated \$16.3 billion of cash from operations excluding financing receivables. We invested \$3.3 billion in capex this year, mainly in cloud and in support of our services business. And so we generated free cash flow of \$13 billion, and as I mentioned, our cash realization was strong at 116 percent. That's up 17 points from last year.

You'll recall that we expected our free cash flow to be roughly flat for the year. At \$13 billion we're up \$1.3 billion year to year, so obviously we delivered a much stronger number. Relative to what we expected, we were more efficient in the deployment of capital expenditures, which was down about \$400 million year to year. Additionally, because of the mix of business and the strong working capital performance at the end of the year across collections and our factoring program, we drove better cash performance.

With that free cash flow performance, we've returned almost \$10 billion to shareholders, including dividends of five-and-a-half billion dollars and \$4.3 billion in gross share repurchases. We bought back over 27 million shares, reducing our average share count by just over two percent. At the end of the year, we had \$3.8 billion remaining in our buyback authorization.

Now looking at the balance sheet, we clearly have the strength and flexibility to support our business over the long term. We ended the quarter with a cash balance of \$12.6 billion, higher than a year ago, as the bulk of our 2018 debt maturities will occur earlier in the year.

Total debt was \$46.8 billion, of which two thirds was in support of our financing business. The leverage in our financing business is 9 to 1 and the credit quality of our financing receivables remains strong at 53 percent

investment grade, a point better than both September and last December.

Given that this is the year end call, I want to give a quick update on our pension plans. Our U.S. plan has been frozen for some time, and we've been remixing our asset base toward a lower risk, lower return profile. At the end of 2017, in aggregate, our worldwide tax-qualified plans are funded at 100 percent, up a couple of points from a year ago, so our plans are in really good shape. We've provided information on the performance of our retirement-related plans and year-end 2017 assumptions in the supplemental charts.

So now let me turn it back to Jim.

## Summary

Thanks Martin. Let me take a couple of minutes to wrap up.

We've been doing a lot of work to reposition our business to help move our clients to the future, investing, shifting skills and reallocating capital. In short, a lot of heavy lifting and our results for 2017 reflect that, with an improvement in our revenue and our gross profit trajectory in the second half.

Let me make a few comments on 2017 by business, and how it positions us for 2018. In Cognitive Solutions, we're driving good results across most of our solutions portfolio, including our Watson and security offerings. Most of these new areas have a Software-as-a-Service delivery model, and so for 2018, we'll continue to build scale in these as-a-service businesses. In our services segments, we've got some momentum in consulting driven by our digital offerings, and strong growth in our cloud content as we help our clients to build out hybrid environments. As you know, the majority of services revenue in any given year comes out of the opening backlog. As we enter 2018, the projected revenue from the current backlog points to an improved revenue trajectory in 2018 vs 2017 and that's in both GTS and GBS. In Systems, we had a great year. Looking to 2018, we have a strong start to our new z14 and are introducing POWER9 systems, and have the most competitive storage offerings in some time. And then across our businesses, our strategic imperatives revenue was up at a double-digit rate to thirty-six-and-a-half billion dollars for the year, which is now 46 percent of our revenue.

So when you take all of this together, we're entering 2018 with a stronger revenue profile than a year ago.

In 2018, we'll maintain a high level of investment. This is important as we continue to build out capabilities in AI, in cloud, in security, and in blockchain, just to name a few. As always, we'll look for more productivity

in our spend base, especially in our services business where we'll continue to remix our skills to new opportunities.

And then let me comment on tax. Tax reform provides additional flexibility over the longer term. Our 2018 rate will reflect the implementation of tax reform, which includes a lower U.S. corporate tax rate, offset by the broader tax base and reduced foreign tax credit utilization. This translates to an ongoing operating rate for 2018 of 16 percent plus or minus two points, which is a four-point headwind year to year. This, as always, excludes any discrete items we will have.

Putting it all together, we expect to deliver operating EPS of at least \$13.80.

I want to briefly comment on two other items with respect to our earnings per share expectations. First, regarding the skew of our business, we expect to deliver between 17 percent and 18 percent of the full year expectation of at least \$13.80 in the first quarter, which is consistent with the average over the last five years. You'll recall the last couple of years we've had a benefit from a discrete item in the first quarter. We anticipate a potential benefit again this year, and as in the past, we will likely take actions that will offset some portion of the benefit. This is reflected in the first quarter skew. And then second, there are two accounting changes that will be effective in 2018 that will affect our results and are included in our expectations. One helps operating earnings per share, and the other hurts, and they essentially offset each other within the \$13.80 of operating EPS in 2018.

Now, looking at cash flow, we had a very strong end to 2017. Martin mentioned a couple of the drivers, which provide some context to our 2018 expectations. We were more efficient last year in the deployment of capital and in 2018, we're allowing for some growth in cap ex. In addition, we had a strong finish in receivables performance in the fourth quarter, primarily because of the mix of business that creates a year-to-year headwind in 2018. And we also expect a headwind from cash tax payments in 2018. At

this point, it looks to be about \$600 million year to year. Put all of that together, and we expect free cash flow of about \$12 billion in 2018, which results in free cash flow realization well over 100 percent.

So we're building momentum across our business, but as always, more work to do. And with that, let me turn it back to Patricia for the Q&A.

## **Closing**

Thank you, Jim. Before we begin the Q&A I'd like to mention a few items.

First, as Jim said up front, he and Martin will take your questions together. Second, we have supplemental charts at the end of the slide deck that provide additional information on the quarter and the full year. And third, as always I'd ask you to refrain from multi-part questions.

So operator, let's please open it up for questions.