Cloud & Cognitive Software gross profit margin of 79.2 percent decreased 0.2 points during the fourth quarter of 2019 compared to the prior year. Pre-tax income of \$2,901 million decreased 7.1 percent compared to the prior year and pre-tax margin decreased 6.0 points to 36.6 percent, driven primarily by the purchase accounting impacts from the Red Hat acquisition.

Global Business Services

GBS revenue of \$4,243 million decreased 0.6 percent as reported, but was flat adjusted for currency in the fourth quarter of 2019 compared to the prior year. We had growth in Consulting, offset by declines in Application Management and Global Process Services. We have been investing in offerings and capabilities to help advise our clients and move their applications to a hybrid multi-cloud environment.

Consulting revenue of \$2,078 million increased 3.5 percent as reported (4 percent adjusted for currency). The growth in Consulting was driven by services that enable each phase of our clients' digital journey. We had continued growth in application modernization and development, next-generation enterprise applications such as S/4 Hana and Salesforce, and in offerings that use AI to help clients unlock opportunities and realize productivity improvements.

Application Management revenue of \$1,922 million decreased 3.3 percent as reported (3 percent adjusted for currency). We had continued growth across our offerings that build and manage cloud applications, offset by declines in traditional enterprise application management. This was primarily driven by strong performance in the fourth-quarter 2018 as a result of significant milestone achievements across a few accounts.

Global Process Services revenue of \$243 million decreased 10.8 percent as reported (10 percent adjusted for currency), as demand shifted from traditional Business Process Optimization offerings to our new business platforms around intelligent workflows.

Within GBS, cloud revenue of \$1.5 billion grew 3 percent as reported (4 percent adjusted for currency) year to year.

GBS fourth-quarter gross profit margin of 27.5 percent decreased 0.3 points year to year. Pre-tax income of \$478 million decreased 15.6 percent year to year. The pre-tax margin decreased 1.9 points to 11.1 percent. In the quarter, we had margin contribution from the yield on our contract delivery improvements, a mix shift to higher-value content and a currency benefit from leveraging our global delivery resource footprint. These benefits were offset by investments we made in capacity and offerings to capture market opportunity.

Global Technology Services

GTS revenue of \$6,949 million decreased 4.8 percent as reported (4 percent adjusted for currency), primarily due to lower client business volumes which impacted some of the more traditional labor-based managed services. We continued to have solid growth in our cloud offerings as clients turn to IBM to enable their transition to cloud. GTS' knowledge of our clients' industries, business and regulatory requirements is a differentiator as clients accelerate their shift of mission-critical workloads to the cloud.

Infrastructure & Cloud Services revenue of \$5,282 million declined 5.3 percent as reported (5 percent adjusted for currency). Revenue was impacted by lower client business volumes. We are taking actions to accelerate the shift to higher-value segments of the market opportunity, such as introducing new managed services offerings for public and private cloud in the areas of cybersecurity, data management and hybrid orchestration. We are also expanding our cloud data center footprint and deploying a more asset-based delivery model.

Technology Support Services revenue of \$1,667 million decreased 3.2 percent as reported (2 percent adjusted for currency) primarily due to hardware product cycle dynamics.

Within GTS, cloud revenue of \$2.4 billion grew 12 percent year to year as reported (13 percent adjusted for currency).

GTS gross profit margin of 35.2 percent expanded 0.2 points in the fourth-quarter 2019 compared to the prior-year period. This improvement was driven by our continued scale-out of our public cloud, a mix within the portfolio and productivity actions. Pre-tax income of \$645 million decreased 1.7 percent and the pre-tax margin increased 0.3 points to 8.9 percent year to year, reflecting a significant sequential improvement in pre-tax margin.

System

Systems revenue of \$3,042 million grew 16.0 percent year to year as reported (16 percent adjusted for currency) in the fourth quarter of 2019. Systems Hardware revenue of \$2,560 million increased 17.7 percent as reported (18 percent adjusted for currency). This growth was driven primarily by IBM Z and Storage Systems, partially offset by a decline in Power Systems. The strong performance in IBM Z reflects our first full quarter of shipments of the new z15 mainframe. Storage Systems growth was led by the high-end systems, which includes the next generation high-end storage system DS8900 that is tightly integrated with the z15 mainframe.

Within Systems Hardware, IBM Z revenue grew 62.3 percent as reported (63 percent adjusted for currency) year to year, reflecting the broad adoption of the new z15 mainframe across many industries and countries, and demonstrates our clients' demand for technology that addresses data privacy and resiliency, across hybrid cloud. We shipped the highest volume of MIPs in the program's history in the fourth-quarter 2019, driven by growth in new workloads, and in October 2019, we announced Red Hat OpenShift for IBM Z, integrating the industry's most comprehensive enterprise container and Kubernetes platform with the enterprise server platforms of IBM Z and LinuxONE.