Capgemini’s synergy with growth
Cloud Services Market

Data Analytics including AI ML and AI Engineering on Cloud platforms are seeing massive growth in the industry. As per Gartner, the cloud services market is projected to grow 17.5 percent in 2019 to total of $214.3 billion, up from $182.4 billion in 2018.

Capgemini is targeting to grow over 40% in revenue and head count in 2019 its Data Analytics and Cloud services. The portfolio shift and capability building had started some years back with heavy investments in learning, development and innovation in the NEW technology offerings. With strong growth strategies around adoption of Cloud, it bolsters Capgemini’s capabilities in Artificial Intelligence, Machine Learning, and Big Data Engineering.

Table 1: Worldwide Public Cloud Service Revenue Forecast (Billions of U.S. Dollars)

<table>
<thead>
<tr>
<th>Services</th>
<th>2018</th>
<th>2018</th>
<th>2018</th>
<th>2018</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud Business Process Services (BPaaS)</td>
<td>45.8</td>
<td>49.3</td>
<td>53.1</td>
<td>57.0</td>
<td>61.1</td>
</tr>
<tr>
<td>Cloud Application Infrastructure Services (PaaS)</td>
<td>15.6</td>
<td>19.0</td>
<td>23.0</td>
<td>27.5</td>
<td>31.8</td>
</tr>
<tr>
<td>Cloud Application Services (SaaS)</td>
<td>80.0</td>
<td>94.8</td>
<td>110.5</td>
<td>126.7</td>
<td>143.7</td>
</tr>
<tr>
<td>Cloud Management and Security Services</td>
<td>10.5</td>
<td>12.2</td>
<td>14.1</td>
<td>16.0</td>
<td>17.9</td>
</tr>
<tr>
<td>Cloud System Infrastructure Services (IaaS)</td>
<td>30.5</td>
<td>38.9</td>
<td>49.1</td>
<td>61.9</td>
<td>76.6</td>
</tr>
<tr>
<td>Total Market</td>
<td>182.4</td>
<td>214.3</td>
<td>249.8</td>
<td>289.1</td>
<td>331.2</td>
</tr>
</tbody>
</table>

BPaaS = business process as a service;  
IaaS = infrastructure as a service;  
PaaS = platform as a service;  
SaaS = software as a service

Note: Totals may not add up due to rounding.

Source: Gartner (April 2019)
Alliance and Partnership

Capgemini’s journey with AWS Data Analytics started more than a decade back. In 2008, Capgemini started formal partner relationship with AWS and since then the partnership journey grew stronger with AWS Premier Partnership Consulting partner award, SAP Competency Award, Financial Services competency Award, AWS Managed Service Provider Certification, Data Migration Competency Award.

Global Partnership formed

Formal relationship begins

2008

2011

2012

2015

2016

2017

2018

2019

2022

Awarded migration competency by AWS
Participation in AWS Mass Migration Program (MAP)
Trained +2,000 FTEs on AWS
Selected as one of four GSIs to participate in the VMware Cloud on AWS

Awarded AWS Transformation Award in Germany
Strategic Initiative launched together with AWS
First AWS partner to get certified on new AWS MSP 3.3
Reached +700 associate and professional certifications
Trained +2,500 FTE’s on AWS
Insights & Data practice launched on AWS, to ramp-up to 1,000 people over three years

Awarded AWS Cloud Adoption Framework embedded into Capgemini methodologies
Established AWS-dedicated migration/cloud

Awarded Financial Services competency by AWS
Certified AWS Managed Services Provider
Trained +1,000 FTEs on AWS

2021

Additional 5400 FTEs to be certified on AWS

Capgemini’s AI Engineering and Cloud Data Platform Practice
Talent Fostering

Capgemini has more than 16,000 engineers who specializes in Data and Analytics. There are 12,000 cloud specialists in AWS, Azure, Google, Alibaba Cloud Platforms. Capgemini is first AWS Premium Consulting Partner jointly certified for delivering ERP application on AWS. Capgemini differentiates from competitors by building industry specific solutions such as Guidewire on AWS. Capgemini is certifying additional 6000 people, and currently has 1,000 + AWS certified people, with 100+ engineers certified in AWS Professional and Specialty level certification.

To enable massive people transformation, Capgemini has launched AI Academy. AI Academy is with target to educate 1,000 employees in Data Analytics, Cloud, AI Engineering and ML in 2019. Apart from AI Academy various other learning and development programs such as AWS Well Architected Review Training, AWS Data Labs, AWS Innovation drives, Capgemini is targeting to transform additional 6,000 employees. AWS Certification is now a mandatory requirement among AWS engineers, and Capgemini support certification preparation investing 600 to 1000 USD per person for preparation and examination. Investments on learning and development are driven on bold people agenda – to attract, grow, transform and retain best talent.

Offerings

Capgemini’s has invested in multiple departments for AWS Cloud competency building. Insights & Data – Cloud Data Platform and AI Engineering, Cloud Foundation Services, Cloud Infra Structure Services are some examples. The offerings include –

- Inspection, Consulting, Advisory, Architecture Design, Solution Prototype building
- Cloud Application, Data and Analytics Delivery and Maintenance
- Hybrid and Multi Cloud Design to Deployments and Maintenance
- Design, Development and Maintenance of Unified Data Lake
- Data Estate Modernization
- Data Science, Artificial Intelligence & Machine Learning Solutions with support from Capgemini’s AI ML Research Lab, Accelerators and Assets/IPs
- Cloud Reference Architecture and Migration frameworks, Methodologies and Accelerators curated for various industries and business sectors.
Key Components of the Next Generation Enterprise Data Platform

Applied Insights & AI
Customer Value Analytics, Fraud Analytics

Enhance the Data Platform
Realtime analytics on Variety of Information at High Velocity

Modernize the Landscape
Enabling 'Data as a Service'

Core Data & Platform Management
Database Management with Master Data Management, Metadata, Data Quality, Data Security

Platform Deployment
Bringing Agility, Scalability, Automation, Security, along with Unified control across multiple options (on-prem, on-cloud, containers)

Capgemini’s Technology Capabilities on AWS Cloud Services

Machine Learning
Amazon Managed ML, Amazon SageMaker

Text to Speech
Amazon Polly

Deep Learning
MNIST, TensorFlow, Caffe, TensorFlow, Theano, Torch and Keras

Speech Recognition
Amazon Transcribe

Natural Language Processing
Amazon Lex

ETL
Glue, Lambda

Interactive Query
Athena, Spectrum

Visualization
QuickSight

Hadoop/Spark
EMR, Databricks

Stream Processing
Kinesis

Data Workflow
Datapipeline, Sleep Functions

Interactive
AWS Lambda

Graph Database
Amazon Neptune

Data Warehouse
Amazon Redshift

Data Cache
ElastiCache (Redis, Memcached)

Relational DB
RDS

NoSQL DB
Document DB, MongoDB

Special Purpose DB
Timeseries, QLDB

Object Storage
S3

Block Storage
EBS

File Storage
EFS

Archival Storage
Glacier

Queues
SQS, SNS, Kinesis

AWS IaaS, PaaS Services, DevOps Tool Chain
Capgemini's assets on cloud solutions include REAP, mRapid Accelerated Data Estate Modernization Offerings such as LEGACY TO NEW AGE DATA FOUNDATION (LEAP), Intelligence Integration Services (IIS), Data As A Service (DaaS) frameworks, BI Innovation (REAP), ETL to Spark migration (JumpSpark), TeraData to Spark (TeraSpark), Schema & Script Migration (Papillion) Testing Framework (Virtu), Migration Data Reconciliation, Meta Data Driven ETL Accelerator (MELT).

Services for:

- Semi-automated conversion of SQL-Based Source (e.g., Teradata, Oracle) to Cloud DBMS Components - namely Python based transformation, Snowflake SQL and Objects
- Kickstart Migration of ETLs to Spark:
  - Semi-Automated conversion of source - target mapping to spark code.
  - High degree of reusability and efficiency while significantly reducing effort
  - Templatized Spark transforms
- End-to-end automated testing framework that manages:
  - Automated Testing - Objects, Scripts, and data
  - Data Reconciliation
  - Data quality elements
- Database specific components to:
  - Covert Teradata BTEQ to SQL
  - Convert TD table to Azure SQL
  - Automate the translation of SQL statements from RDBMS (e.g., Oracle) to ANSI tool

Frameworks, BI Innovation (REAP), ETL to Spark migration (JumpSpark), TeraData to Spark (TeraSpark), Schema & Script Migration (Papillion) Testing Framework (Virtu), Migration Data Reconciliation, Meta Data Driven ETL Accelerator (MELT)
Thought Leadership

Capgemini constantly contributes to Data Analytics Cloud community by presenting architecture patterns, best practices and design methodologies, field experiences about design and implementation, customer success stories, in conferences such as AWS-Reinvent, AWS Summits, Gartner Customer Experience and Technology Summit, Nasscom Annual Technology Conferences, Forrester Data Strategy & Insights Conference, Microsoft Ignite, Google Cloud Next, Informatica World, and many more.

There several white papers publications by Capgemini AI Research published.

Capgemini enterprise architects and engineers has deep level insights about technology fitments curated for individual customers use cases, best practices of design and implementation, accelerators to catalyze and simplify customer cloud adaption journeys.

For more details, please check https://www.capgemini.com/research/
About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients’ opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of over 200,000 team members in more than 40 countries. The Group reported 2018 global revenues of EUR 13.2 billion.

Learn more about us at
www.capgemini.com

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