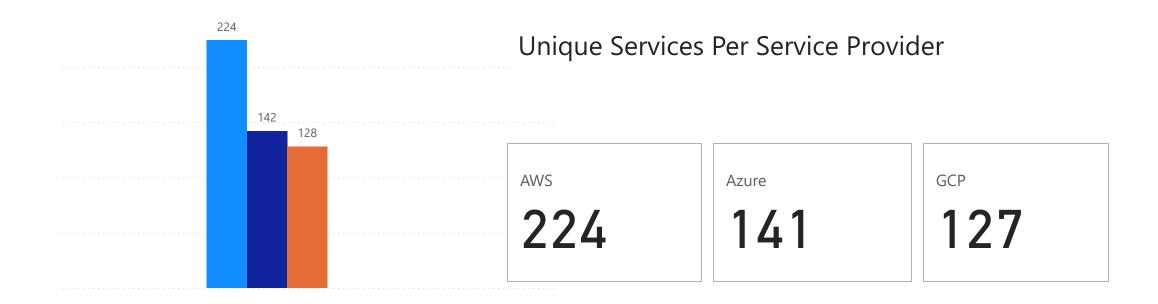
#### Decoding Cloud Choices: AWS, Azure, and GCP Face-Off

(Based on the data available from cloud providers on 16/08/2024)



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Analytics

AWS

19

Azure

10

GCP

| Row_Number | Service Description                                    | AWS Service               | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|---------------------------|---------------------------|-------------------------|
| 1          | Interactive query service for analyzing data in S3.    | Athena                    | Azure Synapse Analytics   | BigQuery                |
| 2          | Data warehouse service for big data analytics.         | Amazon Redshift           | Azure Synapse Analytics   | BigQuery                |
| 3          | Managed search service for custom search applications. | CloudSearch               | Azure Cognitive Search    | Cloud Search            |
| 4          | Managed service for Elasticsearch and OpenSearch.      | Amazon OpenSearch Service | Azure Cognitive Search    | Cloud Search            |
| 5          | Real-time data streaming service.                      | Kinesis                   | Azure Event Hubs          | Pub/Sub                 |
| 6          | Business intelligence service for data visualization.  | QuickSight                | Power BI                  | Looker                  |
| 7          | Orchestrates data movement and transformation.         | Data Pipeline             | Azure Data Factory        | Dataflow                |
| 8          | Facilitates data sharing and subscription.             | AWS Data Exchange         | Azure Data Share          | Data Exchange           |
| 9          | Simplifies building secure data lakes.                 | AWS Lake Formation        | Azure Data Lake           | BigLake                 |
| 10         | Managed service for Apache Kafka.                      | MSK                       | Azure Event Hubs          | Pub/Sub                 |
| 11         | Data preparation service for analytics.                | AWS Glue DataBrew         | Azure Data Factory        | Dataflow                |
| 12         | Data management and analytics for financial services.  | Amazon FinSpace           | Azure Synapse Analytics   | BigQuery                |
| 13         | Serverless data integration service.                   | AWS Glue                  | Azure Data Factory        | Dataflow                |
| 14         | Real-time data delivery to destinations.               | Amazon Data Firehose      | Azure Event Hubs          | Pub/Sub                 |
| 15         | Managed Hadoop framework for big data processing.      | EMR                       | Azure HDInsight           | Dataproc                |
| 16         | Secure data collaboration environment.                 | AWS Clean Rooms           | Azure Synapse Analytics   | BigQuery                |
| 17         | Data management and governance service.                | Amazon DataZone           | Azure Purview             | Data Catalog            |
| 18         | Resolves and links related data entities.              | AWS Entity Resolution     | Azure Data Factory        | Dataflow                |
| 19         | Managed service for Apache Flink.                      | Managed Apache Flink      | Azure Stream Analytics    | Dataflow                |

## **Application Integration**

AWS

9

Azure

6

GCP

| Row_Number | Service Description                                 | AWS Service                 | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|---|-----------------------------|---------------------------|-------------------------|
| 1          | Orchestrates workflows for serverless applications. | Step Functions              | Azure Logic Apps          | Cloud Functions         |
| 2          | Integrates SaaS applications with AWS services.     | Amazon AppFlow              | Azure Data Factory        | Dataflow                |
| 3          | Managed message broker service.                     | Amazon MQ                   | Azure Service Bus         | Pub/Sub                 |
| 4          | Managed messaging service for notifications.        | Simple Notification Service | Azure Notification Hubs   | Pub/Sub                 |
| 5          | Managed message queuing service.                    | Simple Queue Service        | Azure Queue Storage       | Pub/Sub                 |
| 6          | Workflow service for coordinating tasks.            | SWF                         | Azure Logic Apps          | Cloud Functions         |
| 7          | Managed workflow orchestration service.             | Managed Apache Airflow      | Azure Data Factory        | Cloud Composer          |
| 8          | Event bus service for integrating applications.     | Amazon EventBridge          | Azure Event Grid          | Eventarc                |
| 9          | Facilitates B2B data exchange.                      | AWS B2B Data Interchange    | Azure Logic Apps          | Cloud Functions         |

#### Blockchain

AWS Azure GCP 1 1

Row\_Number Service Description AWS Service Azure Service Name GCP S

1 Fully managed service for creating and managing blockchain networks. Amazon Managed Blockchain Blockchain Service N/A

## **Business Applications**

AWS

12

Azure

7

GCP

| Row_Number | Service Description                            | AWS Service                 | Azure Service Name                   | <b>GCP Service Name</b> |
|------------|--|-----------------------------|--------------------------------------|-------------------------|
| 1          | Cloud-based contact center service.            | Amazon Connect              | Azure Communication Services         | Contact Center Al       |
| 2          | Communication service for meetings and chat.   | Amazon Chime                | Microsoft Teams                      | Google Meet             |
| 3          | Email sending service.                         | Amazon Simple Email Service | Azure Communication Services         | SendGrid                |
| 4          | Secure document collaboration service.         | Amazon WorkDocs             | OneDrive                             | Google Drive            |
| 5          | Managed email and calendar service.            | Amazon WorkMail             | Exchange Online                      | Gmail                   |
| 6          | Supply chain management service.               | AWS Supply Chain            | Dynamics 365 Supply Chain Management | Supply Chain Twin       |
| 7          | Integrates SaaS applications for productivity. | AWS AppFabric               | Power Automate                       | AppSheet                |
| 8          | Secure messaging and collaboration service.    | AWS Wickr                   | Microsoft Teams                      | Google Chat             |
| 9          | SDK for building communication applications.   | Amazon Chime SDK            | Azure Communication Services         | Google Meet SDK         |
| 10         | Identity verification service.                 | Amazon One Enterprise       | Azure Active Directory               | Identity Platform       |
| 11         | Marketing communication service.               | Amazon Pinpoint             | Azure Communication Services         | Firebase                |
| 12         | Messaging service for end users.               | AWS End User Messaging      | Microsoft Teams                      | Google Chat             |

## Cloud Financial Management

AWS

Azure 2

| Row_Number | Service Description                           | AWS Service                 | <b>Azure Service Name</b> | GCP Service Name         |
|------------|---|-----------------------------|---------------------------|--------------------------|
| 1          | Online store for buying and selling software. | AWS Marketplace             | Azure Marketplace         | Google Cloud Marketplace |
| 2          | Customizes billing and cost management.       | AWS Billing Conductor       | Azure Cost Management     | Cloud Billing            |
| 3          | Manages billing and cost optimization.        | Billing and Cost Management | Azure Cost Management     | Cloud Billing            |

Compute

AWS

10

Azure

7

GCP

| Row_Number | Service Description  | AWS Service                       | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|-----------------------------------|---------------------------|-------------------------|
| 1          | Virtual servers in the cloud.                                    | EC2                               | Virtual Machines          | Compute Engine          |
| 2          | Simple virtual private servers.                                  | Lightsail                         | N/A                       | N/A                     |
| 3          | Event-driven serverless compute.                                 | Lambda                            | Functions                 | Cloud Functions         |
| 4          | Managed batch processing.  | Batch                             | Batch                     | Cloud Dataflow          |
| 5          | Deploy and scale web applications.                               | Elastic Beanstalk                 | App Service               | App Engine              |
| 6          | Repository for serverless applications.                          | Serverless Application Repository | N/A                       | N/A                     |
| 7          | ${\bf Extends} \ {\bf AWS} \ infrastructure \ to \ on-premises.$ | AWS Outposts                      | Azure Stack               | Dedicated Interconnect  |
| 8          | Create and maintain machine images.                              | EC2 Image Builder                 | Shared Image Gallery      | Image Factory           |
| 9          | Deploy containerized web applications.                           | AWS App Runner                    | Web Apps                  | Cloud Run               |
| 10         | Large-scale spatial simulations.                                 | AWS SimSpace Weaver               | N/A                       | N/A                     |

### Containers

AWS

Azure 3

| Row_Number | <b>Service Description</b>         | AWS Service                             | <b>Azure Service Name</b>      | GCP Service Name               |
|------------|------------------------------------|---|--------------------------------|--------------------------------|
| 1          | Managed container orchestration.   | Elastic Container Service (ECS)         | Azure Kubernetes Service (AKS) | Google Kubernetes Engine (GKE) |
| 2          | Managed Kubernetes service.        | Elastic Kubernetes Service (EKS)        | Azure Kubernetes Service (AKS) | Google Kubernetes Engine (GKE) |
| 3          | Managed OpenShift service.         | Red Hat OpenShift Service on AWS (ROSA) | Azure Red Hat OpenShift        | Anthos                         |
| 4          | Managed Docker container registry. | Elastic Container Registry (ECR)        | Azure Container Registry       | Container Registry             |

#### **Customer Enablement**

AWS

Azure 5

| Row_Number | Service Description                                      | <b>AWS Service</b>    | <b>Azure Service Name</b> | <b>GCP Service Name</b>   |
|------------|--|-----------------------|---------------------------|---------------------------|
| 1          | Connects customers with certified experts.               | AWS IQ                | Expert MSP                | N/A                       |
| 2          | Provides ongoing management of cloud infrastructure.     | Managed Services      | Managed Services          | N/A                       |
| 3          | Resources and support for startups using cloud services. | Activate for Startups | Microsoft for Startups    | Google Cloud for Startups |
| 4          | Technical support plans for cloud customers.             | Support               | Support                   | Cloud Support             |
| 5          | Community-driven Q&A platform for cloud users.           | AWS re:Post Private   | Microsoft Q&A             | Google Cloud Community    |

### Database

AWS

Azure

5

GCP

| Row_Number | Service Description                    | <b>AWS Service</b> | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|--------------------|---------------------------|-------------------------|
| 1          | Managed relational database service.   | RDS                | SQL Database              | Cloud SQL               |
| 2          | In-memory caching service.             | ElastiCache        | Cache for Redis           | Memorystore             |
| 3          | Managed graph database service.        | Neptune            | Cosmos DB                 | Firestore               |
| 4          | Managed ledger database.               | Amazon QLDB        | SQL Database Ledger       | N/A                     |
| 5          | Managed document database.             | Amazon DocumentDB  | Cosmos DB                 | Firestore               |
| 6          | Managed Cassandra-compatible database. | Amazon Keyspaces   | Cosmos DB                 | Bigtable                |
| 7          | Managed time series database.          | Amazon Timestream  | Time Series Insights      | Bigtable                |
| 8          | Managed NoSQL database.                | DynamoDB           | Cosmos DB                 | Firestore               |
| 9          | Redis-compatible in-memory database.   | Amazon MemoryDB    | Cache for Redis           | Memorystore             |

## Developer Tools

AWS

15

Azure

12

GCP

| Row_Number | Service Description   | AWS Service   | <b>Azure Service Name</b> | GCP Service Name          |
|------------|---|---|---------------------------|---------------------------|
| 1          | Unified interface for managing software development.          | CodeStar  | Azure DevOps              | Cloud Build               |
| 2          | Managed source control service.                               | CodeCommit  | Azure Repos               | Cloud Source Repositories |
| 3          | Fully managed build service.                                  | CodeBuild   | Azure Pipelines           | Cloud Build               |
| 4          | Automated code deployment service.                            | CodeDeploy  | Azure Pipelines           | Cloud Deploy              |
| 5          | Continuous integration and delivery service.                  | CodePipeline  | Azure Pipelines           | Cloud Build               |
| 6          | Cloud-based integrated development environment.               | Cloud9  | Visual Studio Online      | Cloud Shell               |
| 7          | Browser-based shell for managing cloud resources.             | CloudShell  | Azure Cloud Shell         | Cloud Shell               |
| 8          | Debugging and analysis service for applications.              | X-Ray   | Azure Monitor             | Cloud Trace               |
| 9          | Fault injection service for testing applications.             | AWS FIS   | Chaos Studio              | N/A                       |
| 10         | Artifact repository service.                                  | CodeArtifact  | Azure Artifacts           | Artifact Registry         |
| 11         | Unified platform for software development.                    | Amazon CodeCatalyst                                 | Azure DevOps              | Cloud Build               |
| 12         | Configuration management service.                             | AWS AppConfig                                       | App Configuration         | Config Connector          |
| 13         | Al-powered code suggestions and developer tools.              | Amazon Q Developer (Including Amazon CodeWhisperer) | Azure Al                  | Al Platform               |
| 14         | Visual tool for building serverless applications.             | Application Composer                                | Logic Apps                | Cloud Functions           |
| 15         | Integrated development environment for building applications. | AWS App Studio                                      | Visual Studio             | Cloud Shell               |

## **End User Computing**

AWS

Azure 1

| Row_Number | Service Description                                | AWS Service               | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|---------------------------|---------------------------|-------------------------|
| 1          | Managed virtual desktop service.                   | WorkSpaces                | Azure Virtual Desktop     | Cloud Workstations      |
| 2          | Application streaming service.                     | AppStream 2.0             | Azure Virtual Desktop     | Cloud Workstations      |
| 3          | Secure browser for accessing web applications.     | WorkSpaces Secure Browser | Azure Virtual Desktop     | Cloud Workstations      |
| 4          | Lightweight client for accessing virtual desktops. | WorkSpaces Thin Client    | Azure Virtual Desktop     | Cloud Workstations      |

## Game Development

AWS Azure GCP

Row\_Number Service Description AWS Service

**Azure Service Name GCP Service Name** 

1 Managed service for deploying and scaling game servers. Amazon GameLift Azure PlayFab

Game Servers

#### Front-end Web & Mobile

AWS

Azure

4

GCP

| Row_Number | Service Description                                | AWS Service             | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|-------------------------|---------------------------|-------------------------|
| 1          | Develops and deploys web and mobile applications.  | AWS Amplify             | Azure Static Web Apps     | Firebase                |
| 2          | GraphQL service for real-time data queries.        | AWS AppSync             | Azure API Management      | GraphQL API             |
| 3          | Tests mobile and web applications on real devices. | Device Farm             | Azure DevTest Labs        | Firebase Test Lab       |
| 4          | Adds location data to applications.                | Amazon Location Service | Azure Maps                | Google Maps Platform    |

## Internet of Things

**AWS** 

9

Azure

4

GCP

| Row_Number | Service Description                               | AWS Service           | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|---|-----------------------|---------------------------|-------------------------|
| 1          | Analyzes IoT data.                                | IoT Analytics         | Azure IoT Central         | Cloud IoT Core          |
| 2          | Secures IoT devices.                              | IoT Device Defender   | Azure IoT Central         | Cloud IoT Core          |
| 3          | Manages IoT devices.                              | IoT Device Management | Azure IoT Central         | Cloud IoT Core          |
| 4          | Runs IoT applications locally.                    | IoT Greengrass        | Azure IoT Edge            | Cloud IoT Edge          |
| 5          | Collects and analyzes industrial IoT data.        | IoT SiteWise          | Azure IoT Central         | Cloud IoT Core          |
| 6          | Connects IoT devices to the cloud.                | IoT Core              | Azure IoT Hub             | Cloud IoT Core          |
| 7          | Detects and responds to IoT events.               | IoT Events            | Azure IoT Central         | Cloud IoT Core          |
| 8          | Collects and transfers vehicle data to the cloud. | AWS IoT FleetWise     | Azure IoT Central         | Cloud IoT Core          |
| 9          | Creates digital twins of physical systems.        | IoT TwinMaker         | Azure Digital Twins       | Digital Twin            |

#### Machine Learning

| Row_Number | Service Description                                     | AWS Service                  | Azure Service Name              | <b>GCP Service Name</b> |
|------------|---|------------------------------|---------------------------------|-------------------------|
| 1          | Builds, trains, and deploys machine learning models.    | Amazon SageMaker             | Azure Machine Learning          | Al Platform             |
| 2          | Adds human review to machine learning predictions.      | Amazon Augmented Al          | Azure Machine Learning          | Al Platform             |
| 3          | Provides code reviews and performance recommendations.  | Amazon CodeGuru              | Azure DevOps                    | Cloud Code              |
| 4          | Detects and resolves operational issues using ML.       | Amazon DevOps Guru           | Azure Monitor                   | Cloud Operations        |
| 5          | Analyzes text for insights and relationships.           | Amazon Comprehend            | Azure Text Analytics            | Cloud Natural Language  |
| 6          | Generates accurate forecasts using machine learning.    | Amazon Forecast              | Azure Machine Learning          | Al Platform             |
| 7          | Detects online fraud using machine learning.            | Amazon Fraud Detector        | Azure Fraud Detection           | Al Platform             |
| 8          | Enterprise search service powered by machine learning.  | Amazon Kendra                | Azure Cognitive Search          | Cloud Search            |
| 9          | Provides personalized recommendations.                  | Amazon Personalize           | Azure Personalizer              | Recommendations Al      |
| 10         | Converts text to lifelike speech.                       | Amazon Polly                 | Azure Speech Service            | Text-to-Speech          |
| 11         | Analyzes images and videos for objects and scenes.      | Amazon Rekognition           | Azure Computer Vision           | Vision Al               |
| 12         | Extracts text and data from documents.                  | Amazon Textract              | Azure Form Recognizer           | Document Al             |
| 13         | Converts speech to text.                                | Amazon Transcribe            | Azure Speech Service            | Speech-to-Text          |
| 14         | Translates text between languages.                      | Amazon Translate             | Azure Translator                | Translation Al          |
| 15         | Al-powered music composition.                           | AWS DeepComposer             | Azure Al                        | Al Platform             |
| 16         | Autonomous racing car driven by reinforcement learning. | AWS DeepRacer                | Azure Al                        | Al Platform             |
| 17         | Adds computer vision to on-premises cameras.            | AWS Panorama                 | Azure Percept                   | Vision Al               |
| 18         | Predictive maintenance using machine learning.          | Amazon Monitron              | Azure IoT Central               | Cloud IoT               |
| 19         | Aggregates and analyzes health data.                    | AWS HealthLake               | Azure Health Data Services      | Cloud Healthcare API    |
| 20         | Detects anomalies in images.                            | Amazon Lookout for Vision    | Azure Anomaly Detector          | Vision Al               |
| 21         | Detects equipment anomalies using machine learning.     | Amazon Lookout for Equipment | Azure IoT Central               | Cloud IoT               |
| 22         | Detects anomalies in metrics.                           | Amazon Lookout for Metrics   | Azure Anomaly Detector          | Al Platform             |
| 23         | Builds conversational interfaces using voice and text.  | Amazon Lex                   | Azure Bot Service               | Dialogflow              |
| 24         | Analyzes medical text for insights.                     | Amazon Comprehend Medical    | Azure Text Analytics for Health | Cloud Healthcare API    |
| 25         | Analyzes genomic data.                                  | AWS HealthOmics              | Azure Genomics                  | Cloud Life Sciences     |
| 26         | Foundation for building and deploying AI models.        | Amazon Bedrock               | Azure Al                        | Al Platform             |
| 27         | Analyzes medical images.                                | AWS HealthImaging            | Azure Health Data Services      | Cloud Healthcare API    |
| 28         | Al-powered business insights.                           | Amazon Q                     | Azure Al                        | Al Platform             |
| 29         | Al-powered business insights for enterprises.           | Amazon Q Business            | Azure Al                        | Al Platform             |

AWS

29

Azure

19

GCP

## Management & Governance

| Row_Number | Service Description  | AWS Service                  | <b>Azure Service Name</b>     | GCP Service Name                    |    |
|------------|--|------------------------------|-------------------------------|-------------------------------------|----|
| 1          | Central management of multiple cloud accounts.                       | AWS Organizations            | Azure Management Groups       | Cloud Resource Manager              |    |
| 2          | Monitoring and observability service for cloud resources.            | CloudWatch                   | Azure Monitor                 | Cloud Monitoring                    |    |
| 3          | Automatically adjusts capacity to maintain performance.              | AWS Auto Scaling             | Azure Autoscale               | Autoscaler                          |    |
| 4          | Infrastructure as code service for cloud resources.                  | CloudFormation               | Azure Resource Manager        | Deployment Manager                  |    |
| 5          | Tracks cloud resource configurations and changes.                    | AWS Config                   | Azure Policy                  | Config Connector                    |    |
| 6          | Configuration management service for automating operations.          | OpsWorks                     | Azure Automation              | Cloud Deployment Manager            |    |
| 7          | Manages approved catalogs of cloud resources.                        | Service Catalog              | Azure Service Catalog         | Service Catalog                     |    |
| 8          | Unified interface for managing cloud resources.                      | Systems Manager              | Azure Automation              | Cloud Operations                    |    |
| 9          | Provides real-time guidance to help optimize cloud environments.     | Trusted Advisor              | Azure Advisor                 | Google Cloud Advisor                | L  |
| 10         | Sets up and governs a secure, multi-account cloud environment.       | Control Tower                | Azure Blueprints              | Cloud Foundation Toolkit            | 4  |
| 11         | Reviews and improves cloud architectures.                            | AWS Well-Architected Tool    | Azure Well-Architected Review | Google Cloud Architecture Framework |    |
| 12         | ChatOps service for monitoring and interacting with cloud resources. | AWS Chatbot                  | Azure Bot Service             | Dialogflow                          | П  |
| 13         | Simplifies deployment of enterprise applications.                    | Launch Wizard                | Azure Quickstart Templates    | Deployment Manager                  |    |
| 14         | Recommends optimal cloud resources for workloads.                    | AWS Compute Optimizer        | Azure Advisor                 | Recommender                         | 41 |
| 15         | Organizes and manages cloud resources using tags.                    | Resource Groups & Tag Editor | Azure Resource Groups         | Resource Manager                    | L  |
| 16         | Managed service for Grafana dashboards.                              | Amazon Grafana               | Azure Managed Grafana         | Managed Service for Grafana         |    |
| 17         | Managed service for Prometheus metrics.                              | Amazon Prometheus            | Azure Monitor                 | Managed Service for Prometheus      |    |
| 18         | Helps design and validate resilient applications.                    | AWS Resilience Hub           | Azure Site Recovery           | Disaster Recovery                   |    |
| 19         | Manages and resolves incidents impacting cloud resources.            | Incident Manager             | Azure Monitor                 | Incident Response                   |    |
| 20         | Manages software licenses across cloud and on-premises environments. | AWS License Manager          | Azure License Management      | License Manager                     |    |
| 21         | Manages cloud service quotas and limits.                             | Service Quotas               | Azure Quota Management        | Quota Management                    |    |
| 22         | Manages deployment of container and serverless applications.         | AWS Proton                   | Azure DevOps                  | Cloud Build                         |    |
| 23         | Tracks user activity and API usage across cloud services.            | CloudTrail                   | Azure Activity Log            | Cloud Audit Logs                    |    |
| 24         | Search and discover cloud resources across accounts.                 | AWS Resource Explorer        | Azure Resource Graph          | Resource Manager                    |    |
| 25         | Centralized notifications for cloud services.                        | AWS User Notifications       | Azure Notification Hubs       | Cloud Pub/Sub                       |    |
| 26         | Provides alerts and remediation guidance for cloud events.           | AWS Health Dashboard         | Azure Service Health          | Google Cloud Status Dashboard       |    |
| 27         | Simplifies the deployment and management of telecom networks.        | AWS Telco Network Builder    | Azure for Operators           | N/A                                 |    |

AWS

27

Azure

23

GCP

#### Media Services

AWS

12

Azure

5

GCP

| Row_Number | Service Description                                   | AWS Service                      | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|---|----------------------------------|---------------------------|-------------------------|
| 1          | Streams video from connected devices to the cloud.    | Kinesis Video Streams            | Azure Media Services      | Video Intelligence API  |
| 2          | Converts media files into various formats.            | MediaConvert                     | Azure Media Services      | Transcoder API          |
| 3          | Broadcasts live video streams.                        | MediaLive                        | Azure Media Services      | Live Stream API         |
| 4          | Prepares and protects video for delivery.             | MediaPackage                     | Azure Media Services      | Media CDN               |
| 5          | Stores and serves media content.                      | MediaStore                       | Azure Blob Storage        | Cloud Storage           |
| 6          | Personalizes video content with targeted ads.         | MediaTailor                      | Azure Media Services      | Video Stitcher API      |
| 7          | On-premises video processing and delivery.            | Elemental Appliances & Software  | Azure Stack Edge          | N/A                     |
| 8          | Converts media files for playback on various devices. | Elastic Transcoder               | Azure Media Services      | Transcoder API          |
| 9          | Creative studio in the cloud for content creation.    | Nimble Studio                    | Azure Virtual Desktop     | Cloud Workstations      |
| 10         | Securely transports live video streams.               | MediaConnect                     | Azure Media Services      | Live Stream API         |
| 11         | Builds interactive live video experiences.            | Amazon Interactive Video Service | Azure Media Services      | Live Stream API         |
| 12         | Manages render workloads in the cloud.                | AWS Deadline Cloud               | Azure Batch               | Cloud Render            |

## Migration & Transfer

Azure GCP **5** 

| Row_Number | Service Description                              | AWS Service                       | <b>Azure Service Name</b>  | <b>GCP Service Name</b>    |
|------------|--|-----------------------------------|----------------------------|----------------------------|
| 1          | Centralized tracking of migration projects.      | AWS Migration Hub                 | Azure Migrate              | Migrate for Compute Engine |
| 2          | Simplifies application migration to the cloud.   | AWS Application Migration Service | Azure Migrate              | Migrate for Anthos         |
| 3          | Identifies on-premises application dependencies. | Application Discovery Service     | Azure Migrate              | Migrate for Compute Engine |
| 4          | Migrates databases to the cloud securely.        | Database Migration Service        | Database Migration Service | Database Migration Service |
| 5          | Transfers files into and out of cloud storage.   | AWS Transfer Family               | Azure Blob Storage         | Storage Transfer Service   |
| 6          | Physical devices for data transfer to the cloud. | AWS Snow Family                   | Azure Data Box             | Transfer Appliance         |
| 7          | Moves large amounts of data online.              | DataSync                          | Data Factory               | Storage Transfer Service   |
| 8          | Modernizes mainframe workloads for the cloud.    | AWS Mainframe Modernization       | Azure Modernization Center | N/A                        |

# Networking & Content Delivery

AWS

10

Azure

10

GCP

| Row_Number | Service Description                                    | AWS Service                              | <b>Azure Service Name</b> | <b>GCP Service Name</b> |
|------------|--|--|---------------------------|-------------------------|
| 1          | Isolated cloud resources in a virtual network.         | VPC                                      | Virtual Network           | Virtual Private Cloud   |
| 2          | Content delivery network service.                      | CloudFront                               | Azure CDN                 | Cloud CDN               |
| 3          | Scalable DNS and domain name registration.             | Route 53                                 | Azure DNS                 | Cloud DNS               |
| 4          | Managed service for creating and managing APIs.        | API Gateway                              | API Management            | API Gateway             |
| 5          | Dedicated network connection to the cloud.             | Direct Connect                           | ExpressRoute              | Dedicated Interconnect  |
| 6          | Service mesh for microservices.                        | AWS App Mesh                             | Azure Service Fabric Mesh | Anthos Service Mesh     |
| 7          | Improves availability and performance of applications. | Global Accelerator                       | Front Door                | Cloud Load Balancing    |
| 8          | Service discovery for cloud resources.                 | AWS Cloud Map                            | Service Fabric            | Service Directory       |
| 9          | Ensures application recovery across regions.           | Route 53 Application Recovery Controller | Traffic Manager           | Traffic Director        |
| 10         | Private 5G network service.                            | AWS Private 5G                           | Private 5G Core           | N/A                     |

## Quantum Technologies

AWS Azure GCP 1

**Row\_Number Service Description** 

**AWS Service** Azure Service Name GCP Service Name

1 Quantum computing service for exploring and running quantum algorithms. Amazon Braket Quantum

**Quantum Computing Service** 

#### Robotics

AWS Azure GCP 1

Row\_Number Service Description AWS Service Azure Service Name GCP Service Name

1 Develops, tests, and deploys robotics applications. AWS RoboMaker IoT Hub

**Cloud Robotics** 

#### Satellite

AWS Azure GCP 1 0

Row\_Number Service Description AWS Service Azure Service Name GCP Service Name

1 Fully managed service for satellite communications. Ground Station Orbital

N/A

## Security, Identity, & Compliance

**AWS** 

23

Azure

15

GCP

| Row_Number | Service Description   | AWS Service                       | Azure Service Name                     | <b>GCP Service Name</b>        |
|------------|---|-----------------------------------|--|--------------------------------|
| 1          | Manages resource sharing across accounts.                   | Resource Access Manager           | Azure Resource Manager                 | Resource Manager               |
| 2          | Provides user authentication and authorization.             | Cognito                           | Azure AD B2C                           | Identity Platform              |
| 3          | Manages and retrieves secrets securely.                     | Secrets Manager                   | Azure Key Vault                        | Secret Manager                 |
| 4          | Threat detection service for monitoring malicious activity. | GuardDuty                         | Azure Security Center                  | Security Command Center        |
| 5          | Automated security assessment service.                      | Amazon Inspector                  | Azure Security Center                  | Security Command Center        |
| 6          | Data security and privacy service using machine learning.   | Amazon Macie                      | Azure Information Protection           | Data Loss Prevention           |
| 7          | Centralized identity management for AWS accounts.           | IAM Identity Center               | Azure Active Directory                 | Identity and Access Management |
| 8          | Manages SSL/TLS certificates.                               | Certificate Manager               | Azure Key Vault                        | Certificate Authority Service  |
| 9          | Manages encryption keys for data security.                  | Key Management Service            | Azure Key Vault                        | Cloud Key Management           |
| 10         | Hardware security module for managing cryptographic keys.   | CloudHSM                          | Azure Dedicated HSM                    | Cloud HSM                      |
| 11         | Managed Microsoft Active Directory in the cloud.            | Directory Service                 | Azure Active Directory Domain Services | Managed Microsoft AD           |
| 12         | Web application firewall and DDoS protection.               | WAF & Shield                      | Azure Web Application Firewall         | Cloud Armor                    |
| 13         | Centralized management of firewall rules.                   | AWS Firewall Manager              | Azure Firewall Manager                 | Firewall Rules                 |
| 14         | Provides access to compliance reports and agreements.       | AWS Artifact                      | Azure Compliance Manager               | Compliance Reports             |
| 15         | Investigates and analyzes security issues.                  | Detective                         | Azure Sentinel                         | Security Command Center        |
| 16         | Digital signature service for code signing.                 | AWS Signer                        | Azure SignTool                         | Cloud KMS                      |
| 17         | Private CA for managing certificates.                       | AWS Private Certificate Authority | Azure Key Vault                        | Certificate Authority Service  |
| 18         | Centralized security management and compliance.             | Security Hub                      | Azure Security Center                  | Security Command Center        |
| 19         | Automates evidence collection for audits.                   | AWS Audit Manager                 | Azure Compliance Manager               | Compliance Reports             |
| 20         | Centralized security data lake for analysis.                | Security Lake                     | Azure Data Lake                        | BigQuery                       |
| 21         | Fine-grained access control for applications.               | Amazon Verified Permissions       | Azure Role-Based Access Control        | Identity and Access Managemen  |
| 22         | Manages cryptographic keys for payment processing.          | AWS Payment Cryptography          | Azure Key Vault                        | Cloud KMS                      |
| 23         | Manages access to AWS resources.                            | IAM                               | Azure Active Directory                 | Identity and Access Managemen  |

Storage

AWS

Azure

| Row_Number | <b>Service Description</b>        | AWS Service                   | <b>Azure Service Name</b> | GCP Service Name                              |
|------------|-----------------------------------|-------------------------------|---------------------------|---|
| 1          | Scalable cloud storage.           | S3                            | Blob Storage              | Cloud Storage                                 |
| 2          | Managed file storage for EC2.     | EFS                           | Azure Files               | Filestore                                     |
| 3          | Managed third-party file systems. | FSx                           | Azure NetApp Files        | Filestore High Scale tier                     |
| 4          | Low-cost archive storage.         | S3 Glacier                    | Archive Blob Storage      | Cloud Storage Archive, Cloud Storage Coldline |
| 5          | Hybrid cloud storage access.      | Storage Gateway               | StorSimple                | Filestore                                     |
| 6          | Centralized backup service.       | AWS Backup                    | Backup                    | N/A   |
| 7          | Disaster recovery service.        | AWS Elastic Disaster Recovery | Site Recovery             | N/A   |