



CLOUD & RESPONSIBLE GEN AI

LEAFS Event

08. November 2023



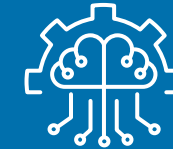
CLOUD for BUSINESS

There is no business strategy without a cloud strategy. High performing organizations are harnessing its immense value and transforming themselves with purpose across talent, processes and technology.



CLOUD OPERATIONS

Harness the cloud to modernize your core business processes, streamline operations, and move to agile models such as DevSecOps and FinOps.



GENERATIVE AI

Unleash data to create intelligent products & services; streamline supply chain & manufacturing processes using 5G, AI, ML, IoT, Quantum computing and edge computing innovations

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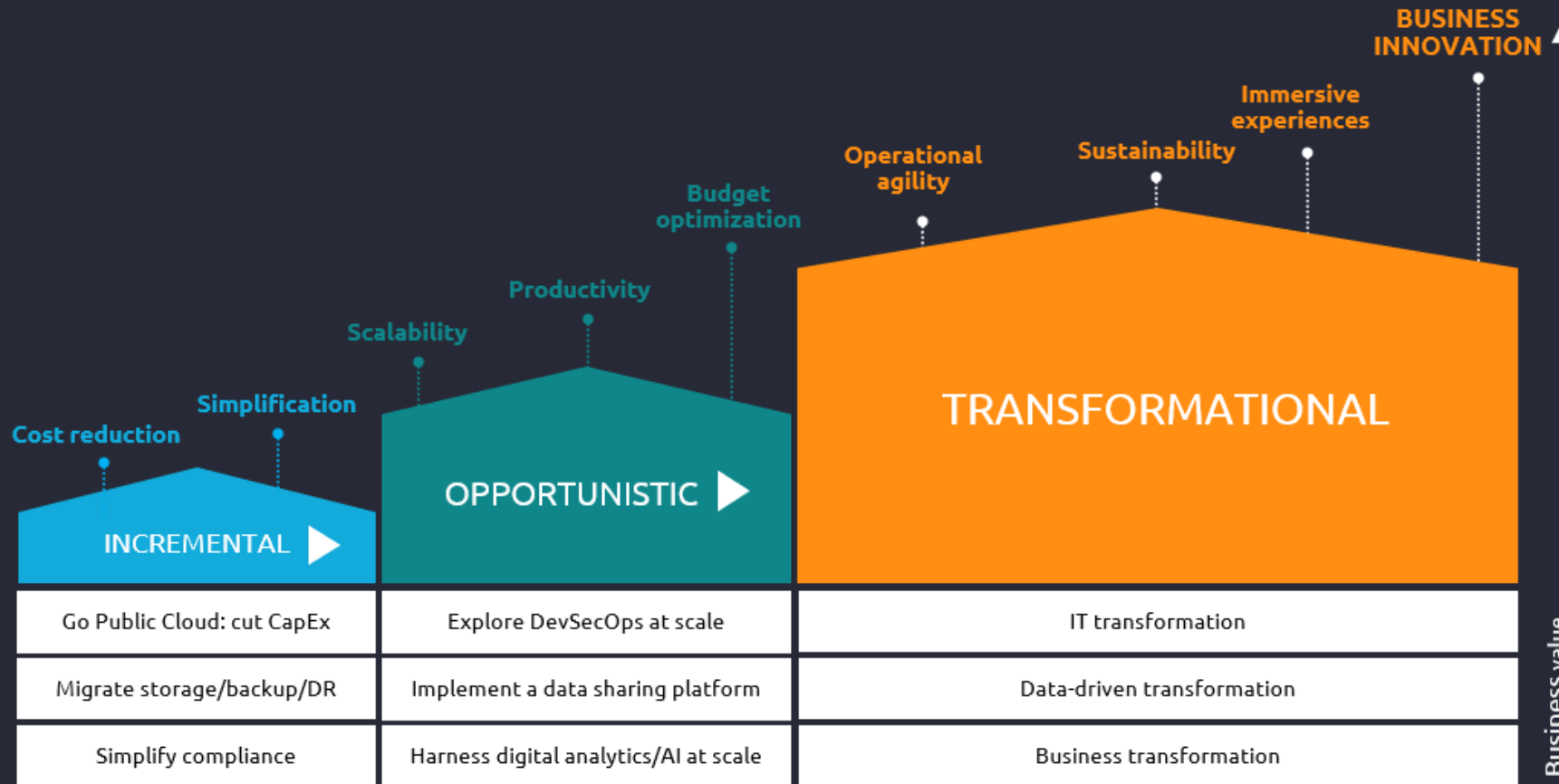
AGENDA

- 01** Cloud 4 Business
- 02 Cloud Operations
- 03 Generative AI



CLOUD FOR BUSINESS OR CLOUD FOR IT?

CLOUD 4 BUSINESS - WHY BOTHER?



Types of Cloud Projects/Initiatives

- The full potential of Cloud is realized only with business transformation
- Even a small top-line growth easily overshadows large IT cost reduction!
- Typical business-centric cloud adoption focus areas: productivity, agility, innovation



WHAT TYPES OF KPIS DO YOU CONSIDER MOST CRUCIAL FROM A BUSINESS GROWTH PERSPECTIVE?

CLOUD 4 BUSINESS – MORE PRODUCTIVITY, AGILITY AND INNOVATION



Capgemini

Client Challenge

Achieve **greater visibility** into its manufacturing processes as well as ability to manage **production in real time**

Solution

Implemented an industrial internet solution to connect **8 manufacturing plants** and **+400 machines**

Value/Results

Prevention of **26,000 hours of downtime** in 2019
12% increase in machine utilization immediately after 5 months of deployment

Baker Hughes

Client Overview

American international oil and gas service company. One of the **world's largest oil field services** company

Services:

- Oil drilling
- Formation
- Evaluation
- Completion
- Production
- Reservoir consulting

Capgemini

Client Challenge

Rapidly **implement a solution** to enable employers across the UK to furlough rather than release employees

Solution

Delivered a digital service to **support the Coronavirus Job Retention Scheme (CJRS)** in **4 weeks** with a CSAT score of **93.5**

Value/Results

Successful launch of public service - **185000** claims, **over £1.5bn** paid

HM Revenue & Customs

Client Overview

Non-ministerial department of the UK Government responsible for the collection of taxes and payment administration for other regulatory regimes.

Value/Results

Supports over **1.2 million** employers and **9.9 million** jobs
Processed over **4.5 million** claims by employers

Productivity increase & Dock Scheduling

Sustainability

Order Lifecycle

Scope

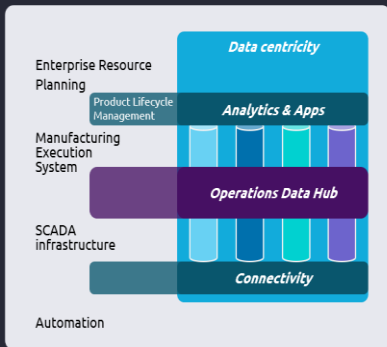
Build a modeling tool for strategy implementation to CO2 Monitoring, in line with IVECO Sustainability Report, to simulate and optimize planning scenarios.

Objectives

- Automating manual data collection to **speed-up loading and consolidation**
- What-if Scenarios toward automatic RT data collection
- Improvement strategy integrating Data MNG and Control Tower simulation engine

Management of end-of-month shipments of IVECO products to Distributors, aiming to optimize the allocation and costs of IVECO GROUP provided to Partner parking lots

OUR APPROACH: A DATA DRIVEN TRANSFORMATION THAT MUST TAKE ADVANTAGE OF IOT & CLOUD WHILE PRESERVING OT/IT ASSETS



TYPICAL RESULTS

DEFECTS: + 2.8
UPTIME: +1.3 pt
PRODUCTIVITY: +5.7%
ENERGY: - 6.5%
PREMIUM QTY: +20%
YIELD: +1.3 pt
MATERIAL: - 4%
STABILITY: +9.2%

OUR APPROACH: ACCELERATION THROUGH DIGITAL TRANSFORMATION

WE FOUND THAT, COMPARED TO TRADITIONAL FIRMS, WORLD-CLASS FIRMS HAVE:

3-5X
Small Teams
Go faster with smaller, more efficient teams

170X
Faster MTR
Fix issues that affect business much quicker

46X
More Releases
Reduced risk with small frequent deployments

90%
Higher Automation
Reduce toil allowing people to focus on value

440X
Faster Lead Time
Cycle times to benefit are much quicker

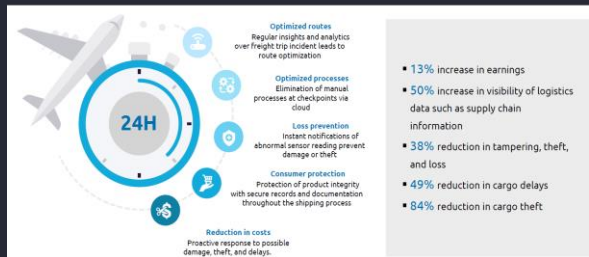
5X
Lower Failure Rates
Create systems that are more resilient

DEVELOPMENT OF A CLOUDIFIED "RAN" AUTOMATION PLATFORM

Enabling mobile network operators to accelerate their 5G journey with a **cloudified, AI-driven RAN automation platform**

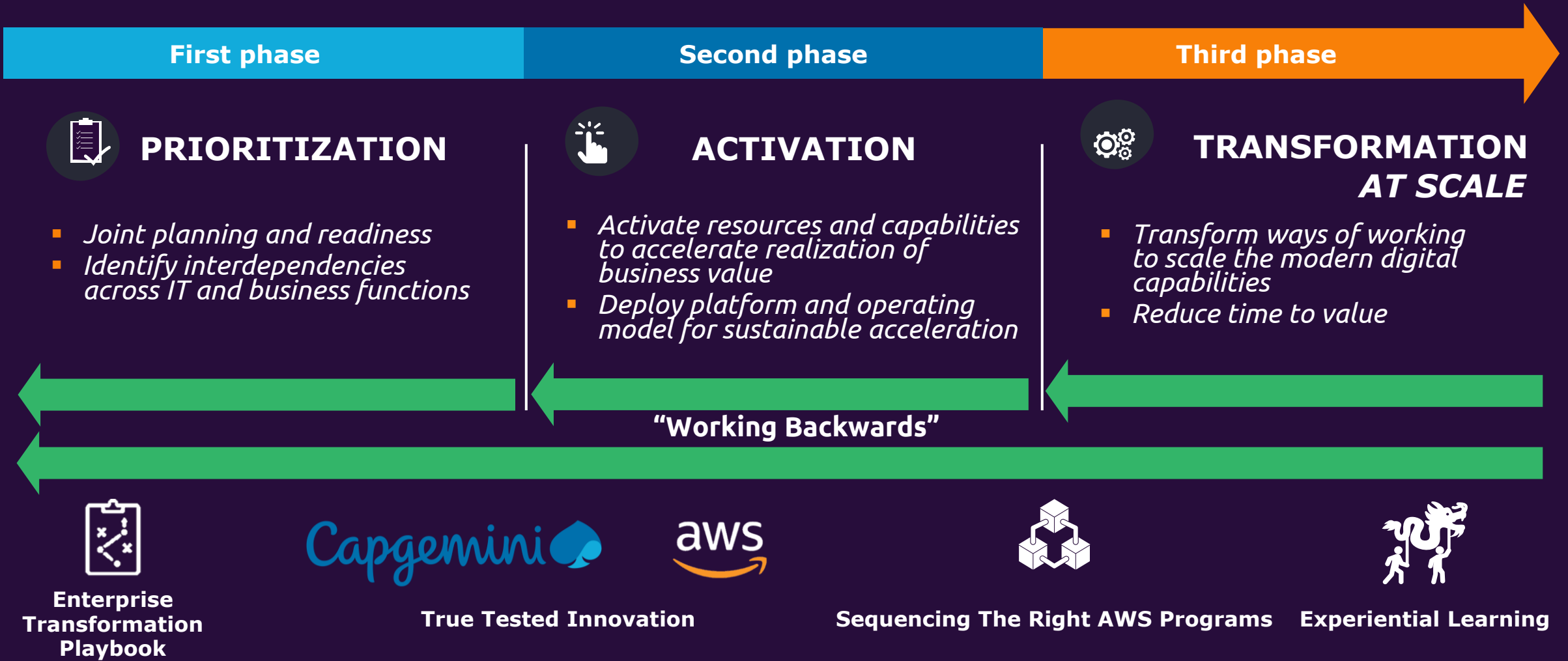
RESULTS / ADDED VALUE

- SaaS-based solution telco agnostic
- Easier & fast Plug and Play deployments
- "IT-fication" of private 5G
- No need of extensive 5G know-how and experience
- Allows better alignment to customer needs
- Enables faster business growth with new services





FAST TRACKING THE CUSTOMER TRANSFORMATION POWERED BY JOINT ASSETS DESIGNED BY AWS & CAPGEMINI



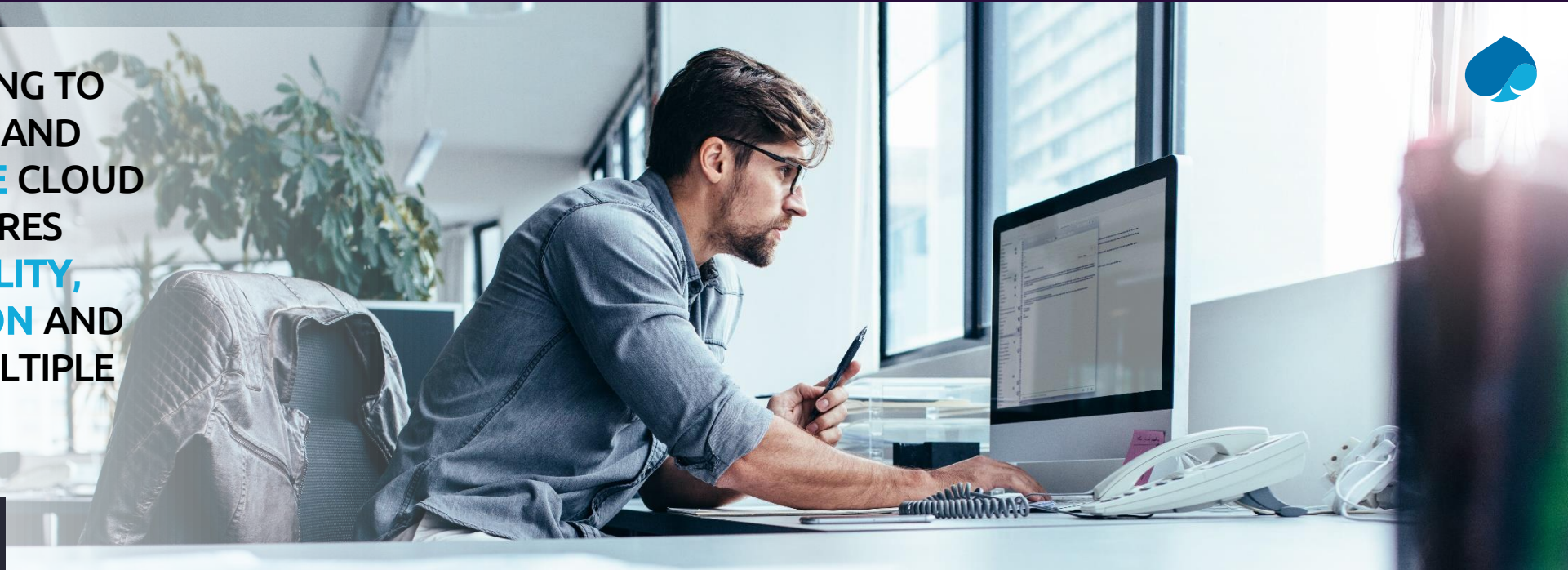
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WHICH ASPECTS OF BUSINESS VALUE DO YOU BELIEVE COULD BE ENHANCED THROUGH THE UTILIZATION OF BETTER CLOUD OPERATIONS?



ENTERPRISES ARE LOOKING TO ADOPT CLOUD AT SCALE AND REQUIRE AN **ADAPTABLE** CLOUD OPERATIONS THAT ENSURES **SPEED SECURITY, VISIBILITY, CONTROL, OPTIMIZATION AND RELIABILITY** ACROSS MULTIPLE CLOUD ECO-SYSTEMS.



Business Value

Operational Efficiency

Speed To Market

Increased Resilience

Reliability

Security

Adaptive Cloud Operations

Hybrid Cloud Operations

Consistent and seamless intelligent operations for multi-cloud, simplifying cloud adoption, streamlining app migrations, and accelerating modernization.

Operational Resilience

Ensure enterprise resilience with protected data and applications, integrated governance, and automated security & compliance processes designed for cloud.

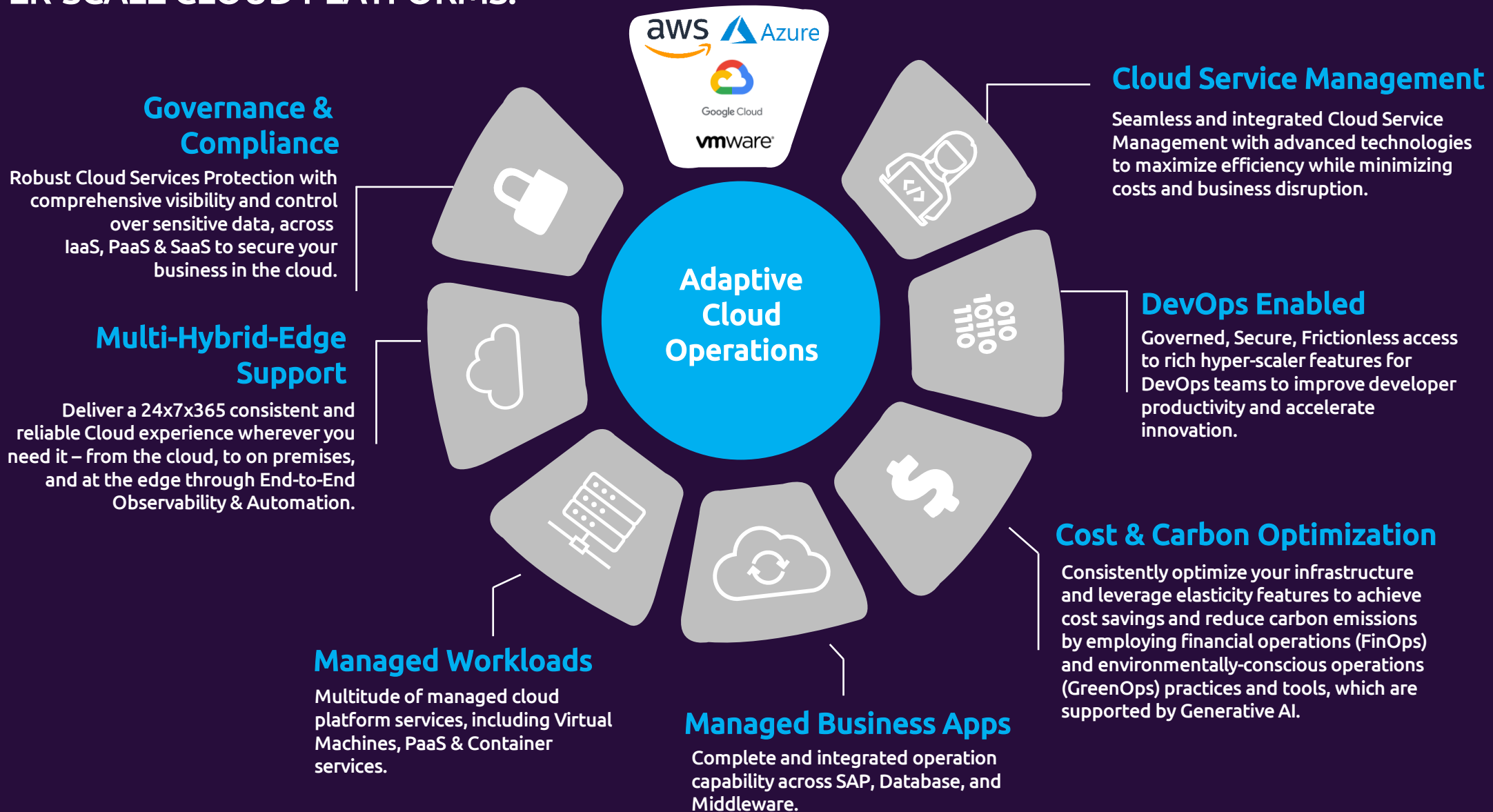
Continuous Optimization

Do more with less with holistic optimization and healing of workloads and platforms to improve efficiency, sustainability, performance and reliability.

Foundations for Digital at Scale

Scale digital initiatives faster through our expert cloud teams, cloud-ready governance, observability and automation to deliver at the pace the business demands and support business innovation.

CLOUD OPERATIONS - ONE SERVICE, DELIVERING EXPERTISE, TOOLING, OPTIMIZATION AND SUPPORT ACROSS YOUR CLOUD LIFECYCLE FOR THE LEADING HYPER-SCALE CLOUD PLATFORMS.



SPOT LIGHT SUCCESS STORIES

DELIVERING OPERATIONAL EXCELLENCE IN THE CLOUD



Cloud Transformation and DevOps

Provide end-to-end, multi-speed Cloud Operations for the full lifecycle of an organisation's cloud transformation journey.



Accelerated Data Center Migrations

Provide immediate, secure and efficient Day 2 Operations for workloads that have been migrated to cloud.



Product Factories

Operate self-service, automated cloud platforms to improve developer productivity and release products and features faster.



Cost-Optimization and Control

On-going cloud management and cost optimization driving control and TCO reduction.



Hybrid and Multi-Cloud Adoption

Support to help teams achieve cloud independence and use the latest, best-practice cloud features and models.



ERP Transformation

Support critical ERP and CRM systems that have moved to cloud with efficiency, scale, and operational support.



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GENERATIVE AI



Input article

A raccoon playing tennis at Wimbledon

Image Style

Realistic x

Generate

raccoon playing tennis at wimbledon

Input article

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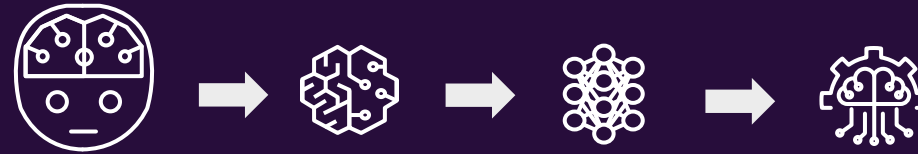
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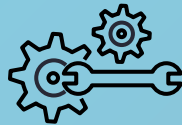




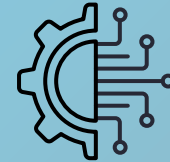
Generative AI

Powered by large models that are pretrained on vast corpuses of data and commonly referred to as foundation models (FMs)

AWS and Capgemini are jointly committed to develop generative AI in a responsible way which is integral to our approach



Transform responsible AI from theory to practice



Integrate responsible AI into the end-to-end lifecycle of a foundation model



Prioritize education around how generative AI works and what are its limitations



Advance the science behind developing generative AI responsibly

To build generative AI applications that are safe, trustworthy, and helpful



WHAT IS EXPECTED LEVEL OF IMPACT OF GEN AI ON CLOUD FOR BUSINESS KPIS?





CHATBOTS

VIRTUAL ASSISTANTS

CONVERSATION ANALYTICS

PERSONALIZATION

Enhance Customer Experiences



CONVERSATIONAL SEARCH

SUMMARIZATION

CONTENT CREATION CODE

GENERATION

DATA TO INSIGHTS

Boost employee productivity & creativity

DOCUMENT PROCESSING

DATA AUGMENTATION

CYBERSECURITY

PROCESS OPTIMIZATION

Optimize business processes




Generative design technology drives new innovations in autonomous mobility



<p>CHALLENGE</p> <p>Mobility start-up Pix Moving sought to improve its processes for creating new mobility solutions in order to shorten lead times, rapidly explore new mobility design concepts, and control engineering and manufacturing costs.</p>	<p>SOLUTION</p> <p>Pix Moving adopted Autodesk Fusion 360, which uses Amazon SageMaker. This empowered them to enable AI-enhanced generative design and additive manufacturing.</p>
<p>OUTCOME</p> <ul style="list-style-type: none"> ✓ Pix Moving was able to reduce the time-to-market for new designs from 3.5 years to 6 months, an 86% faster time-to-market. 	

LG AI Research developed FM using Amazon SageMaker




<p>CHALLENGE</p> <p>Needed the most efficient ML platform to train their foundation model, which handles vast amounts of data and large-scale training and inference. Moreover, the project required a high-performance compute infrastructure and the flexibility to handle billions during training.</p>	<p>SOLUTION</p> <p>Built EXAONE—a foundation model that can be used to transform business processes—using Amazon SageMaker, broadening access to AI in various industries such as fashion, manufacturing, research, education, and finance.</p>
<p>OUTCOME</p> <ul style="list-style-type: none"> ✓ Developed the EXAONE AI engine in under a year ✓ Supports linear scaling ✓ 35% reduction in cost of building AI engine ✓ 60% increase in data preparation speed 	

AWS Partner Caggemini Builds an AI Tool to Identify Sperm Whales with 97.5% Accuracy

Explore or Participate in the AWS Partner Programs

Executive Summary

AWS Partner [Caggemini](#) builds innovative artificial intelligence and machine learning solutions for its customers by being a member of the AWS Partner Network. The technology services company became an AWS Partner in 2012 and is a member of multiple AWS Partner programs, including the AWS Well-Architected Partner Program. Through its annual Global Data Science Challenge (GDSC), Caggemini empowers its team to develop artificial intelligence and machine learning solutions to address single use cases. During the 2020 GDSC, the winning team used AWS services to build a sperm whale identification tool that matches sperm whale flukes with 97.5 percent accuracy in minutes.



About Caggemini


Founded in 1967, [Caggemini](#) provides consulting, technology, and digital transformation services to companies across industries, including healthcare, natural resources, and the public sector. Headquartered in Paris, it operates in over 40 countries.


APN Program Participation

Partner Success Story – Caggemini

For technology services company [Caggemini](#), developing solutions to the world's most pressing environmental problems is a top priority. It builds those innovative cloud-native solutions using Amazon Web Services (AWS) and is an AWS Partner. For its 2020 Global Data Science Challenge (GDSC), an event during which internal teams build solutions for real-life use cases, Caggemini worked with [Whale Watch Azores](#) marine biologist Lisa Steiner. Teams competed to develop an artificial intelligence (AI) model that would match and analyze sperm whale flukes. Using [AWS Partner Network](#) resources and AWS services such as [Amazon SageMaker](#), a machine learning service used to build, train, and deploy machine learning models for virtually any use case, the winning team developed a scalable, automated solution to more rapidly and accurately identify and help protect the vulnerable species.

A CHALLENGE TO PROTECT INSECT ECOSYSTEMS





THE BIODIVERSITY BUZZ
PROTECTING INSECT ECOSYSTEMS THROUGH DATA AND AI

<p>Challenge</p> <p>Classify insect sound data to create a measure for biodiversity. Accounts for large proportion of overall biodiversity.</p> <p>Understand real-world problem of declining insect biodiversity and its impact.</p>	<p>Solution</p> <p>Build an optimal model, that is compute- and storage-efficient, and can easily be applied in different set ups.</p> <p>Create a fast and easy to use training procedure to maximize use-cases.</p>	<p>Sharing Knowledge</p> <p>Share our solutions and knowledge with the community and strengthen our network.</p> <p>Implement a PoC to deploy the solution to generate insights and value.</p>
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- 04 **Summary**



SUMMARY

**STAY LEAN, FAST,
AND SMART**

DISCOVER MORE ABOUT US!



About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 340,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2021 global revenues of €18 billion.

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