

# Next generation market infrastructure via Cloud Transformation

**Tech Revolution Summit 2023** 

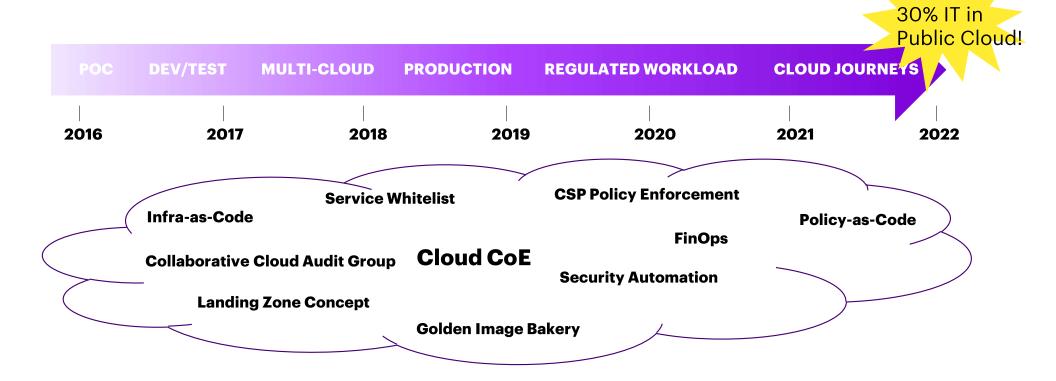
### **DEUTSCHE BÖRSE GROUP**

As an international exchange organisation and innovative market infrastructure provider, we ensure capital markets that are transparent, reliable and stable. With our wide range of products, services and technologies, we organise safe and efficient markets for sustainable economies.

Our business areas cover the entire financial market transaction process chain. This includes the provision of indices, data and analytical solutions as well as admission, trading and clearing. Additionally, it comprises services for funds, the settlement and custody of financial instruments as well as the management of collateral and liquidity. As a technology company, we develop state-of-the-art IT solutions and offer IT systems all over the world.



### UNTIL END OF LAST YEAR – "NORMAL CLOUD JOURNEY"



09 Feb 2023 | Deutsche Börse

#### Deutsche Börse Group and Google Cloud Announce Strategic Partnership to Accelerate Innovation

- Google Cloud will become Deutsche Börse Groups' preferred cloud partner for the next ten years
- Deutsche Börse will accelerate the development of its digital securities platform D7 with Google Cloud's secure infrastructure and leading data and analytics capabilities
- Google Cloud will power a Deutsche Börse Digital Asset Business Platform, which aims to establish an institutional-grade ecosystem for trading digital assets
- The companies will jointly deploy a data mesh to enhance Deutsche Börse's data distribution and data use cases in the cloud

Frankfurt, Germany and Sunnyvale, Calif., 9 February 2023 – Deutsche Börse and Google Cloud have today announced a new strategic partnership to enhance, economize and concentrate Deutsche Börse's cloud adoption. Specifically, Deutsche Börse will leverage Google Cloud's secure infrastructure and leading data and analytics capabilities to accelerate the development of its digital securities platform D7, innovate its digital asset market operations, and enhance its data distribution and data use cases in the cloud.

With its hybrid, multi-cloud strategy, Deutsche Börse Group has already successfully set new standards for cloud innovation within the financial services industry. Google Cloud will become Deutsche Börse Group's preferred partner for cloud consumption for the next ten years and help to further enhance the group's cloud adoption and efficiency.

"Innovation and technological advancements are at the core of Deutsche Börse Group's DNA," said Theodor Weimer, CEO at Deutsche Börse. "To trailblaze changing market environments and not only meet but anticipate customer demand, it is key to couple our financial services expertise with the technological prowess of a true market heavyweight. Our deep market infrastructure understanding, combined with Google Cloud's technology expertise and scale, will drive tangible success for our business and broader financial markets."



# SIDE NOTE - PARTNERSHIP IS ALSO ABOUT MONEY



Committed Spend

Discount Credits (Partner) Funds

# NOW -> BUSINESS LED CLOUD TRANSFORMATION







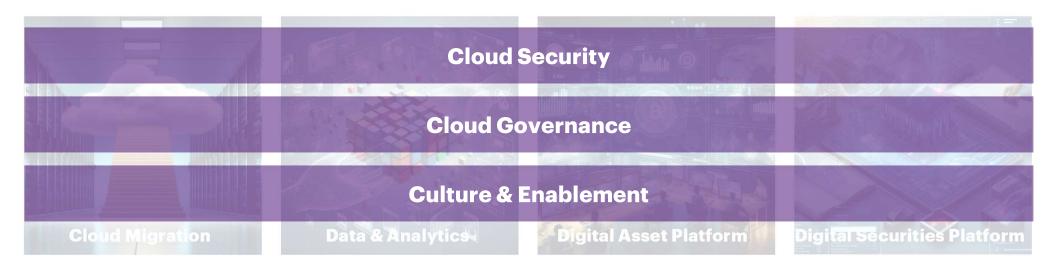


Digital alternative to conventional physical issuance and processing of securities

Access to both existing central and distributed infrastructures and markets

Benefit from same-day-issuance, full transparency, reduced cost and interoperability with existing systems

# CROSS STREAMS REQUIRED TO DRIVE ADOPTION



Hyperion Vision - Mobilize leadership and employees through various communication formats
Re- and upskill employees - Personas, training skills, develop learning journeys
Recruiting strategy - talent demand & sourcing

#### **CLOUD CONTROL FRAMEWORK**

**Regulatory Requirements** 

(Bafin, CSSF, EBA)

**Industry Standards** 

(COBIT, ISO 27x, CCM, C5, ..)

**Organization specifics** 

(Strategy, Policies, ..)

#### **Cloud Control Framework**

CSP monitoring controls

(multi-provider management)

Controls operated by the CSPs

Cloud-related controls in foundational and IT processes

(Risk, BCM, compliance; IT asset, IT incident, IT finops, ..) Cloud development & deployment process controls

(DevSecOps)

Cloud platform configured controls

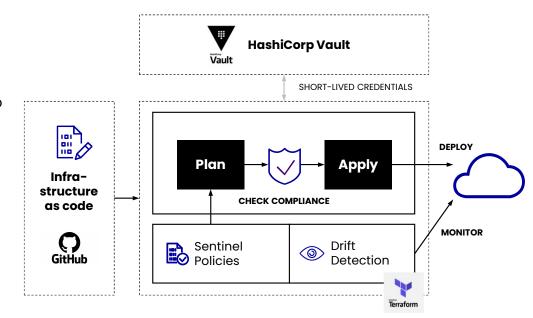
(Infrastructure as code)

Multi-cloud controls monitoring (CNAPP, SIEM, ...)

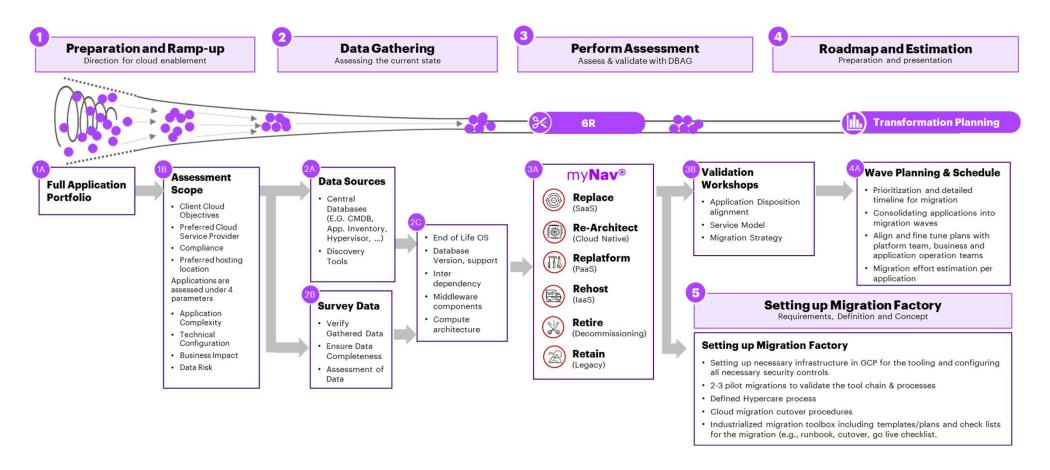
#### **CENTRALIZED CLOUD PROVISIONING**

Vision: To establish a harmonized and structured approach for provisioning multi-cloud infrastructure

- Enable a standardized, secure and efficient way for all teams to provision cloud infrastructure by introducing Terraform Enterprise as a central platform
- Manage secrets and credentials via HashiCorp Vault, generating short-lived credentials for each deployment to reducing risk of compromised credentials
- Ensure infrastructure compliancy and security by evaluating Sentinel policies defined by Group Security for each deployment
- Drift detection will continuously monitor infrastructure state to detect and notify teams of any changes, minimizing risk, downtime and costs



#### **CLOUD MIGRATION FACTORY**



## EMPOWER WORKFORCE WITH SUSTAINABLE RE- AND UPSKILLING



"It takes too long for me to get my PoV; I need realtime insights."

> 1. Personas for Hyperion Upskilling

Identifying and describing Personas is the first step to understand future ways of working and required skills



2. Target Skills for Hyperion Upskilling

Skills needed for future work addressing methodological, technological, process & governance related as well as behavioral aspects



3. Learning Journeys for Personas

Intentional and experience-focused persona-based learning journeys to accelerate time to proficiency by leveraging multiple learning content



4. Concept for Overall Hyperion Learning Program

Hyperion Learning program concept incl. timeline with key activities for Hyperion upskilling and defined communication activities

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