THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Technical

Database Vendor Policy

This policy details the database vendors we work with. It describes how we add new vendors, and the process we follow when implementing additional technologies from existing vendors.

Purpose

This policy has two aims.

The first seeks to avoid the unnecessary proliferation of similar database technologies from different vendors. Database technologies require specialised skills to operate and maintain, make substantial demands on our compute and storage infrastructure and involve substantial ongoing licensing costs. Tightly defining the vendors we work with enables us to support the applications and services we need, limit the extent of our vendor lock-in, while not spreading our staff and financial resources too thinly.

The second aim is to be more deliberate about when we deploy additional database technologies from existing vendors. Deepening a relationship with an existing vendor is often the best choice, but must only be made after the necessity of the requirement has been validated, and the cost, resource and strategic implications have been assessed and approved.

Definitions

The definitions below can have alternate meanings in different contexts. Their usage here is to provide clarity on how the terms are used within this document.

Database Features

Database features are capabilities a database product has. High availability, Transparent Data Encryption are examples of database features. Features can be part of the product's core feature set or be separately downloaded, additionally configured or activated. Additional features can be free, paid for or could come by way of version upgrades, additional licensing or fresh installs.

Database Components

Database components are standalone or add-on products providing additional capabilities beyond the core features. SQL Server Reporting Services, Integration Services, Oracle Rest Data Services (ORDS) are examples of database components. Additional features can be free or paid for, can be separately downloaded or be additionally configured or activated.

Database Vendor Policy

1.Scope

1.1 In Scope

This policy covers:

- Database servers installed in our onsite Datacenters.
- Databases installed on Infrastructure as a Service (IAAS) Virtual Machines provided by cloud hosting vendors.
- Database as a service (DBAAS) offerings provided by cloud hosting vendors.

1.2 Out of Scope

- The databases underpinning the Software as a Service (SAAS) applications we purchase from external vendors.
- Databases which underpin the platform services we purchase, such as Salesforce and M365.
- Databases embedded within appliances or applications where the vendor is responsible for maintenance, upgrades and security.
- Databases used by academics as part of research projects.

2. Onsite Databases

- We use only Oracle and Microsoft SQL Server for our onsite database needs.
- The DTS CIO through the DTS Senior Leadership Team must approve the introduction of any new Database vendor following an appraisal of the necessity of need, strategic value, operational impact and suitability of alternatives.
- Project related new vendor requests must be captured and triaged through the Solution Design Authority. Requests originating from any other source must be captured and triaged as Architectural Exceptions.
- The introduction of new database features as defined above must be captured by the Solution Design Authority.
- Approval for the use of new database features as defined above must be sought in advance from the Business Applications Manager.
- The Solution Design Authority must approve the introduction of new database components.
- The Business Applications Manager will manage the relationship with our database vendors.
- The Business Applications Manager will manage the licensing arrangements with our database vendors.

3. Infrastructure as a service (IAAS) Databases.

- Databases running in Virtual Machines on cloud infrastructures must be avoided wherever possible.
- Installing any database on a cloud hosted VM is an architectural exception, for which approval must be sought in advance.
- Any databases installed on cloud hosted VM are governed by the same rules and processes as onsite databases.

4. Database as a Service (DBAAS) Databases and Cloud data platforms

- Azure SQL Database and AWS Aurora are our primary cloud database providers.
- AWS RDS instances of Oracle and SQL Server are not permitted. Any other intended use of AWS RDS is an architectural exception, for which approval must be sought in advance.
- Any intended Azure database usage beyond Azure SQL database or Azure SQL Managed Instances are architectural exceptions, for which approval must be sought in advance.
- The introduction of a new cloud database vendor is a strategic, not an operational or project decision. As with onsite database vendors, The DTS CIO through the DTS Senior Leadership Team must approve the introduction of any new Database vendor following an appraisal of the necessity of need, strategic value, operational impact and suitability of alternatives.

References

Show examples of where this policy may exist in other institutions

Considerations

How does this policy support the LSE EDI approach? Has an equality impact assessment been completed?	
How does this policy support LSE's sustainability targets? How will sustainability KPIs be affected by this policy?	
How does this policy improve the position on security and privacy? If there is an impact has this policy been reviewed and endorsed by IGMB?	
How does this policy improve the operational objectives including service quality?	

Review schedule

Review interval	Next review due by	Next review start
1 Year	Jan 2024	Dec 2023

Version history

Version	Date	Approved by	Notes
1.0a	17th November, 2021	Architecture Board	
1.0b	24th Jan, 2022	DTDMB	
1.1	08/01/2024		JG Reviewed, no changes necessary

Links

Reference	Link

Contacts

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Communications and Training

Will this document be publicised through Internal Communications?	Yes/ **No**
Will training needs arise from this policy	Yes/ **No**

Communication about the publication and use of this policy will be done via:

1. Notification to DTS via Teams
2. Communication at DTS Service Leaders' Group
3. Notification to Business Led Technology Teams via Teams
4. Notification to the Business Improvement Unit via Teams or email
5. Communication at the Business Led Technology Teams Ops Forum
6. Email notification to any other interested parties, not covered by these groups
7. Updates, eg termly, at DTS All Staff meetings on policy writing, including all new policies