| GDPR regulation   | Impact on database systems       |                   |
|---|----------------------------------|-------------------|
|   | Attributes                       | Actions           |
| Collect data for explicit purposes                              | Purpose                          | Metadata indexing |
| Do not store data indefinitely                                  | TTL                              | Timely deletion   |
| Inform customers about GDPR metadata associated with their data | Purpose, TTL,<br>Origin, Sharing | Metadata indexing |
| Allow customers to access their data                            | Person id                        | Metadata indexing |
| Allow customers to erase their data                             | TTL                              | Timely deletion   |
| Do not use data for objected reasons                            | Objections                       | Metadata indexing |
| Allow customers to withdraw from algorithmic decision-making    | Automated decisions              | Metadata indexing |
| Safeguard and restrict access to data                           |                                  | Access control    |
| Do not grant unlimited access to data                           |                                  | Access control    |
| Audit operations on personal data                               | Audit trail                      | Monitor and log   |
| Implement appropriate data security                             |                                  | Encryption        |
| Share audit trails from affected systems                        | Audit trail                      | Monitor and log   |