

POV

Enterprise Data Office - An Essential Component of Data-Driven Insurer

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What we are experiencing now is an AI-led Fourth Industrial Revolution, and Data is at the heart of this transformation. AI is expected to change the way we live, as well as how every industry is run in next ten years, for example: Conversational AI would take over most of the tasks handled by live agents, AI would make information available 24X7 to policyholders, while also providing recommendations on additional coverage, and so on. This transformation is going to be much larger than anything we have seen before; in that it will completely change the way the business is done.

Majority of C-level insurance executives are concerned to be disrupted by their agile, data-driven peers, especially new entrant InsureTechs such as Lemonade and Kettle. As per research, Kettle utilizes about 47 Data sources for their AI & ML models that runs 42 million simulations to arrive at risk insight for likelihood of wildfire. This gives them an edge over others to price the risk much accurately and save premium dollars of end customers. Every insurer understands the need to innovate and invest into AI & Data, and its role in enabling the next level of customer focus and growth. However, many have struggled to get intended ROI from large scale data initiatives.

While we look at few examples of these across the industry, some of the key reasons that have negatively impacted the key outcomes of these initiatives are:

Individual business units / line of business operating independently and creating data silos. Such as personal and commercial lines operating on their own.

Lack of trust in data by critical stakeholders, especially on the business side of the insurer, data anomalies, lack of data currency are some of the reasons for this lack of trust.

Lack of common technology choices and streamlined architecture patterns, significantly increasing TCO, for example: each business unit having their own cataloging tool, model-ready data sets.

Higher cost of implementation and operation due to redundant capabilities across BUs/LOBs.

Data procurement and data asset ownership are not well-defined, causing delays in data availability, thereby reducing relevance of datasets.

As Albert Einstein once said, "The world cannot be changed without changing our thinking." What is now clear is that the greatest barrier to data-driven journey is culture, people and processes and not lagging technology. Even, 90% organizations in NVP survey have also acknowledged this. Enterprise Data Office (EDO) perfectly fits in this position in which it facilitates partnerships and data culture across the organization to achieve common objectives, and at the same time empowers BUs/LOBs to address specific nuances of their business needs.

Enterprise Data Office has various flavors in which it can be implemented viz:

Centralized:

Strong control through a central core team. Centralized governance and data capability management, leadership-intensive program with a top-down approach.



De-Centralized:

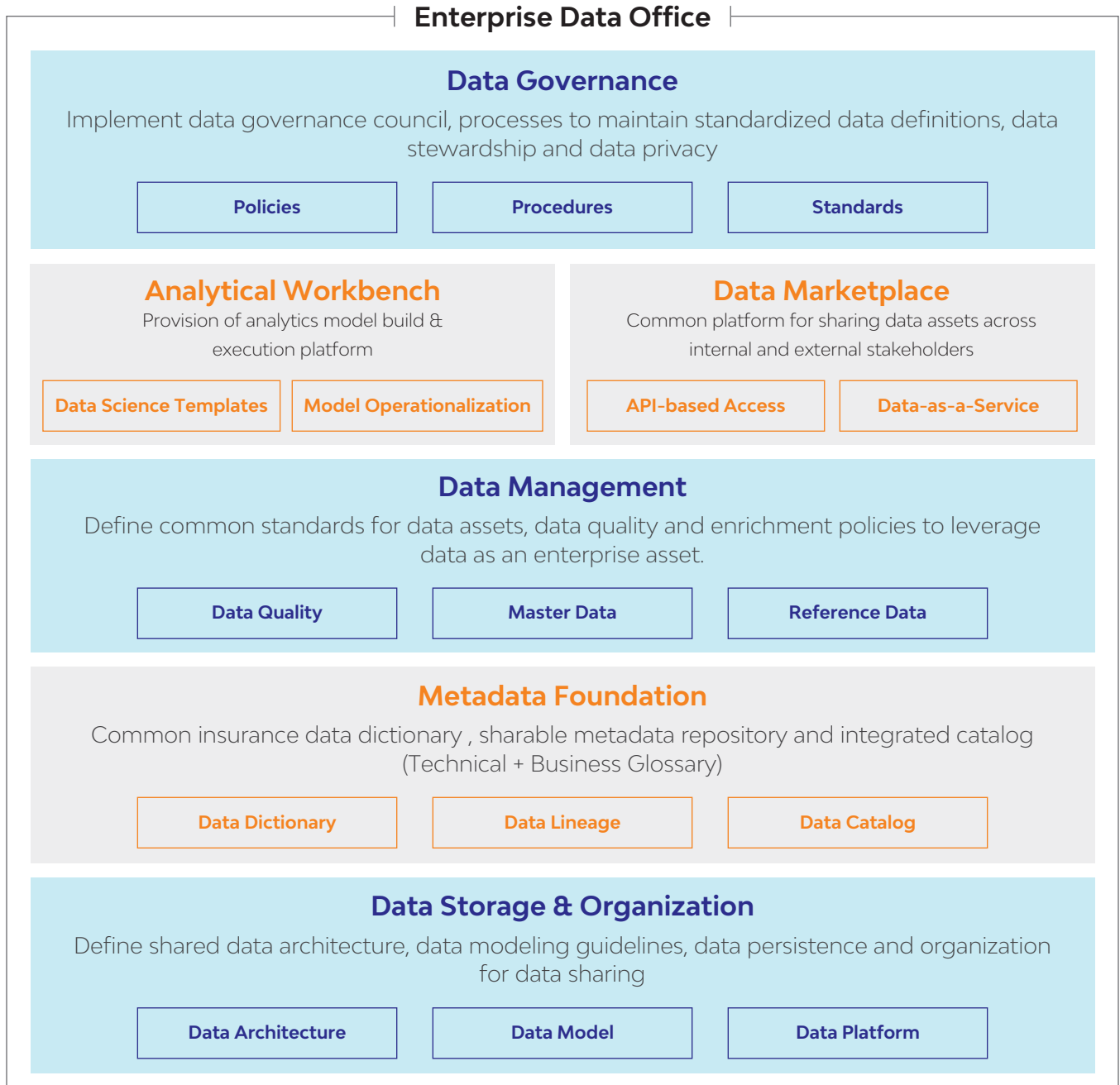
Business Units / Line of Business operates independently based on specific needs. A central team may exist with very low or no control, but can be kept informed by BUs/LOBs. A relatively flat structure here is easier to implement.

Federated:

Centralized strategy and data capability management with decentralized execution. Federated governance that empowers decisions while improving accuracy. The right amount of decision-making power to BUs/LOBs that helps address nuances specific to their business needs while rolling out data initiatives.

Federated model for the EDO is by far most popular in recent days and is the recommended model for modern data-driven organizations.

Next question that comes in the EDO solution is – as an enterprise, what I really need to bring in under the centralized EDO versus what should remain with BUs/LOBs. Although there is no one solution that fits all answer, diagram below shows key capabilities recommended to be part of EDO:



Data Governance | Data Management Capabilities | Metadata & Data Quality Management | Core Data Platform | Data Science Platform | Data Marketplace

Key capabilities that fall under Enterprise Data Office



Data Governance

- Streamline and manage data access and data assets ownership.
- Processes and standards for the enterprise and governance needed to leverage data assets.
- Enabling technical capabilities and tool choices that supports unified information delivery across the enterprise.
- Cross-organizational structure required to ensure data decisions are being made consistently.



Metadata Management

- Enable data discovery capability by building metadata capabilities covering technical, business, as well as operational metadata.
- Identification of what data assets exist and how they are utilized (Context) by whom.
- Enforcement of authoritative data sources and its usage regulated by known data owners and stewards by subject area.
- Setup data quality capabilities and process of continuous improvement based on business needs, thereby building stakeholders trust in the data.
- Enable end-to-end data lineage for critical business data domains, facilitating data & compliance audits and ease of impact analysis for AI & Analytics use cases.



Data Management

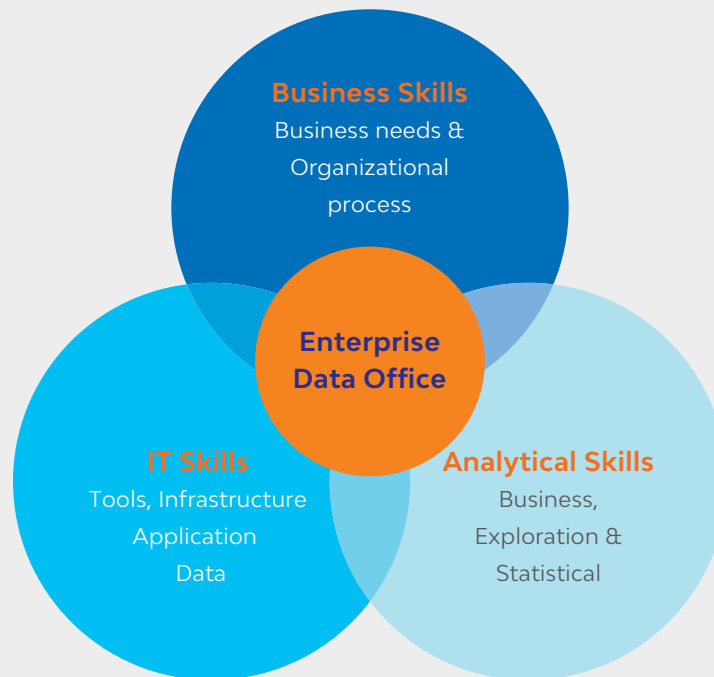
- Define the canonical format for the data platform.
- Build and enable master data management for common data elements shared across the enterprise.
- Approved data design standards and modeling patterns.
- Data storage strategy including right choice of cloud platform and platform management plan.
- Establish how should data be accessed and secured across on-premise / cloud locations.



Common Data Capability Provision

- Define technology roadmap for the organization by running a proof of technology for business need versus technology options' evaluation.
- Building data science workbench and model operationalization capabilities – which will be used by all BUs to build and deploy their analytical models.
- Building common data Integration and data consumption tools/utilities that will be utilized by all BUs.
- Design and build data marketplace – that will be utilized by all BUs and centralized team to publish and access shared data assets.

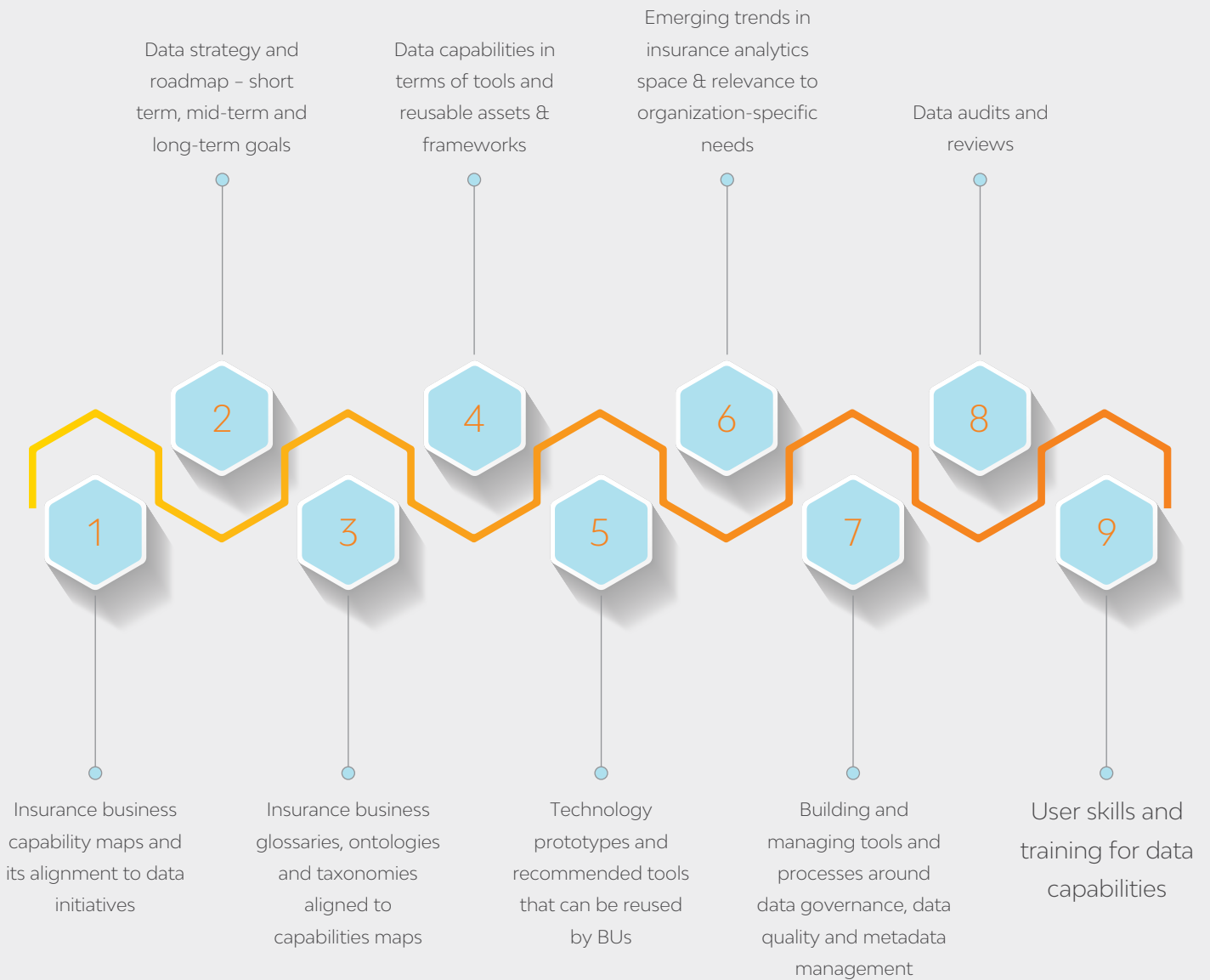
To better manage the EDO and generate intended benefits of it, it needs to be right sized for the organization. Below are the details on recommended roles, critical skills and key deliverables aligned to the EDO –



Key roles that will be part of EDO are

Chief Data & Analytics Officer | Enterprise Data Architect | Integration Architect | Business Intelligence Analyst | Application SMEs | Data Quality & Data Governance Lead | Business Data Steward

Some of the critical deliverables that will be build and managed by Enterprise Data office



Although setting up an Enterprise Data Office and maturing this capability is a long journey for most organizations, the benefits that are realized by implementing EDO are almost immediate and long lasting. Some of the key benefits that organizations have realized thru EDO are:

- 1** Bringing revenue responsibility under CDO attached to business growth and operational cost optimization related KPIs.
- 2** Streamlined data tools, process and standards across the organization, thereby reducing the technology and operational cost by up to 30% while compared with decentralized data organization.
- 3** Significantly reducing the cost associated with data assets, by eliminating the redundancy across BUs.
- 4** Building the single source of truth for data by breaking silos and bringing data under centralized control and governance, which helps improve accuracy of data & analytics insights by ~20%, while significantly reducing time spent on data procurement.
- 5** End-to-end data governance through centralized council, enabling better control and security on data. High degree of protecting PII and other critical data elements.
- 6** Centralized data ownership helps faster procurement of data from internal and external sources, enabling depth and width of data needed for analytics use cases.
- 7** vAs compared to organizations with traditional information delivery models, EDO enables 5X faster time-to-market for business growth and efficiency related analytical use cases by enabling reusable tools, common data capabilities and data currency.

In summary, EDO brings in significant benefits to the organization by organizing, streamlining and governing data assets and capabilities. We are seeing significant push in the insurance industry for building EDO to enable long term success of Data & Analytics and realizing intended benefits from all data initiatives.

About the Author



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Ravi leads Data Analytics & AI Solutions for Insurance business unit in North America. He has more than 18 years of experience working with insurance companies. Ravi specialize in Commercial line of business and role of Data Analytics to build risk Insights, profitable Underwriting decisions and cost & fraud optimization for claims. He has led various strategic initiatives in business and IT transformation, Digital and Analytics for leading Insurers in the NA region.

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