PROGRESSIVE ORGANIZATION

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Progressive organization

Owing to rapid changes in today's digital world, the data landscape is constantly shifting and creating new complexities. Today, organizations collect, churn, analyze, and mine data at an unprecedented rate. In their journey to implement an analytics-driven culture, organizations need to consider three key pillars – a boundaryless information platform, pervasive analytics, and a progressive organization.

'Progressive organization' refers to the process constructs that help businesses achieve their goal of becoming analytics-driven organizations. Some key challenges involved in driving this change include creating a data and analytics strategy along with an appropriate operating model. By focusing on data governance, change management, and strategic organizational design, organizations can align business goals with technology requirements to increase the speed and responsiveness of the business. Furthermore, data governance can become an enabler for analytics by ensuring the availability of accurate, secure, and complete data along with the right architecture, policies, and procedures in the information value chain.

However, building a progressive organization is not only about technology or advanced analytics. It is important to understand the organization's culture of change and leverage best practices within the industry when adopting such a transformation. Creating a progressive organization is about embedding analytics deeply into business processes as well as the organizational culture and people.

Key challenges of an organization that aspires to be progressive

Over the past few years, several organizations have struggled to address a common challenge – enabling technology to meet the changing requirements of the business. Such organizations face tremendous pressure to leverage new technologies in order to stay competitive. They struggle to keep up with emerging technologies and meet the expectations of providing quick insights.

While some of these enterprises have been slow to adopt new technologies, others have ended up creating a complex and hard-to-manage mosaic of enterprise, divisional, and departmental data systems. This has resulted in complex challenges owing to improper data integration, data reliability, data consistency, and technology proliferation as well as unsatisfactory time-to-value propositions. Organizations also face challenges in

adopting new computing architectures, database technologies, innovative deployment models. etc. Thus, even those enterprises that have embraced new technologies are unable to realize their full potential, often resulting in negative return on investment (ROI).

In the last two decades, the paradigm of separation of transactional and analytical workloads has created constructs such as operational data stores, data warehouses, and data marts that have increased data replication and redundancies, leading to alarming data quality issues that can be solved with sound organizational innovations.

A progressive and analytics-driven organization must aim to unlock data that resides in silos. Boundaryless data platforms create data ownership

challenges that require process and structural intervention. Thus, while technological advancements such as big data platforms, virtualization, and cloud-based models can enable data integration, there continue to be significant organizational challenges.

The dynamic and ever-increasing regulatory need for greater transparency in data submission and faster responses to queries creates additional challenges. Progressive organizations' must address these challenges if they are to become analytics-driven.

The significant obstacles faced by today's organizations in driving the transformation to become analytics-driven enterprises are shown below:
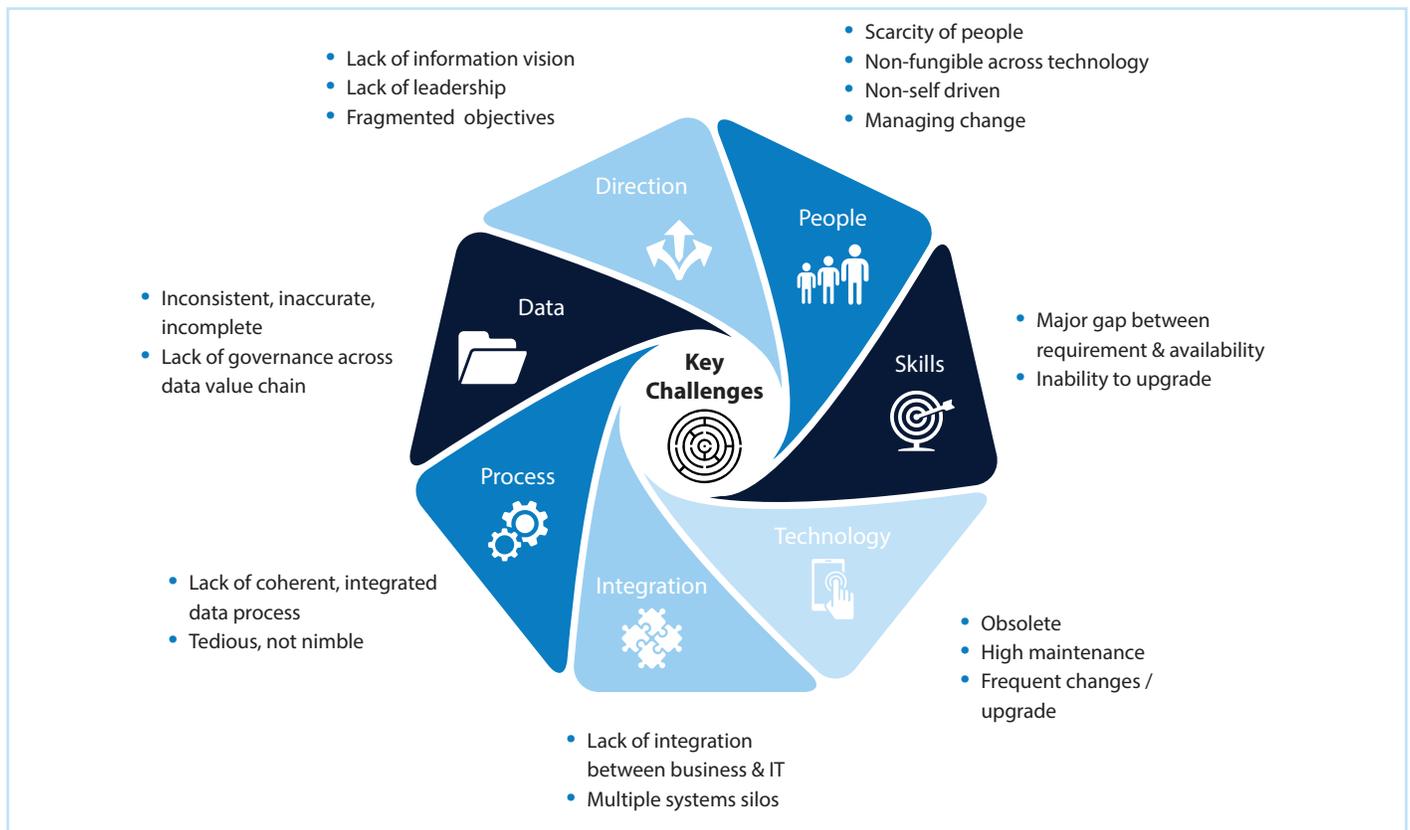

- Lack of information vision
- Lack of leadership
- Fragmented objectives

- Scarcity of people
- Non-fungible across technology
- Non-self driven
- Managing change

- Inconsistent, inaccurate, incomplete
- Lack of governance across data value chain

- Major gap between requirement & availability
- Inability to upgrade

Direction

People

Data

Key Challenges

Skills

Process

Technology

Integration

- Lack of coherent, integrated data process
- Tedious, not nimble

- Obsolete
- High maintenance
- Frequent changes / upgrade

- Lack of integration between business & IT
- Multiple systems silos

Fig 1: Challenges faced in creating a progressive organization

The above challenges cannot be addressed in isolation. The need of the progressive organization is to look at them in an integrated manner that focuses on amplifying the ROI. However, devising such an approach requires identifying the root causes of these issues and creating a pivotal solution, which can be difficult.

Here, the way forward is to place data at the center of the solution and build other capabilities around it based on the principles of lead-and-lag capabilities. Lead capabilities / metrics provide early warnings on an organization's performance, while lag capabilities assess the degree to which an organization's goals have been met.

We argue that a boundaryless data platform becomes a lead capability while an analytics-driven culture becomes a future state. However, in the middle of this capability chain lies the progressive organization. The following figure positions `data' at the center of organizational capabilities and provides a definitive focus on leading capabilities needed to craft a progressive organization.
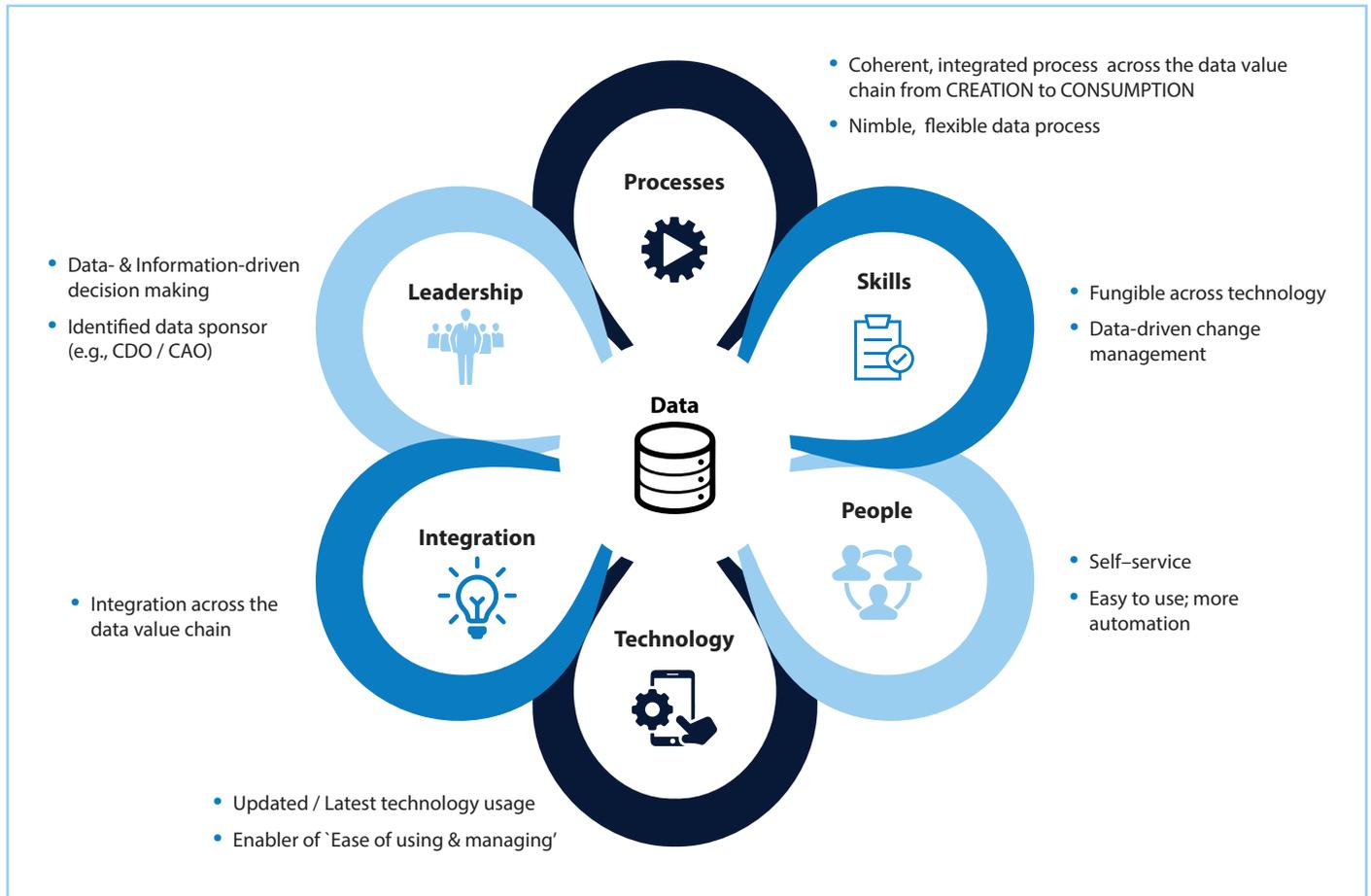

- Coherent, integrated process across the data value chain from CREATION to CONSUMPTION
- Nimble, flexible data process

Processes

Leadership

- Data- & Information-driven decision making
- Identified data sponsor (e.g., CDO / CAO)

Skills

- Fungible across technology
- Data-driven change management

Data

People

Integration

- Integration across the data value chain

- Self–service
- Easy to use; more automation

Technology

- Updated / Latest technology usage
- Enabler of `Ease of using & managing'

Fig 2: Leading capabilities needed to craft a progressive organization with data at its center
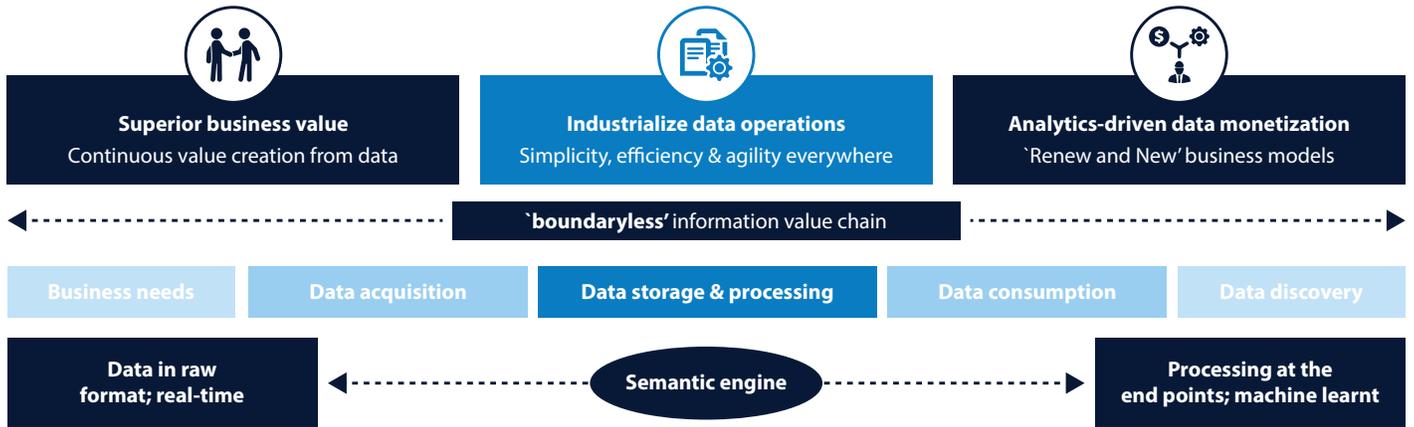
Constructing a progressive organization

Superior business value
Continuous value creation from data

Industrialize data operations
Simplicity, efficiency & agility everywhere

Analytics-driven data monetization
`Renew and New' business models

`**boundaryless'** information value chain

Business needs	Data acquisition	Data storage & processing	Data consumption	Data discovery

Data in raw format; real-time

Semantic engine

Processing at the end points; machine learnt

Fig 3: Data value chain for organizations to transform and build new generation capabilities

Progressive organizations must align their data and information consumption to meet business objectives. This requires controlling how data is ingested, processed, and consumed. To drive this transformation, enterprises need a data strategy that:

- Identifies the vectors of transformation
- Evaluates the current technology and functional landscape
- Designs the experience of the data consumer in this new setting
- Architects and builds the solution

- Governs, manages, sustains, and evolves this progressive organization

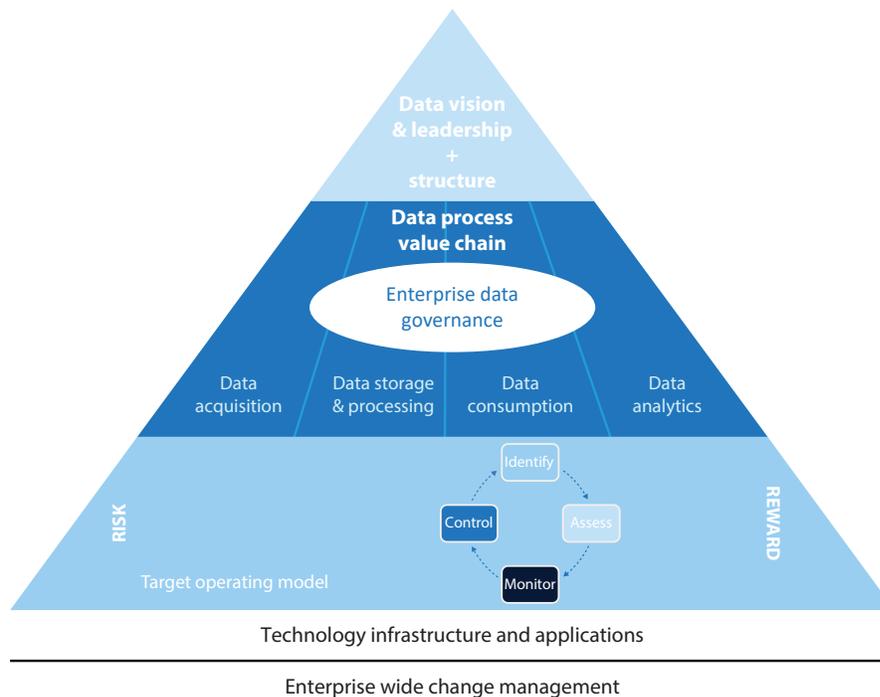This evolution from business-as-usual to a progressive organization should follow specific constructs as shown below:

Data vision & leadership + structure

Data process value chain

Enterprise data governance

Data acquisition | Data storage & processing | Data consumption | Data analytics

Identify

Control | Assess

Monitor

RISK

REWARD

Target operating model

Technology infrastructure and applications

Enterprise wide change management

Fig 4: Key considerations for achieving a progressive organization

1) Assert data vision and leadership

Align business to the data strategy – The goals and objectives of an analytics-driven organization should be linked to the needs of the business's decision-making processes and the underlying data. It is imperative that senior leadership drive the cultural change by using facts and information for reviews and decision-making and monitor decisions regularly for course correction. According to a report from a leading research and analytics group, 70 percent of leading organizations have instituted a senior executive champion for analytics. There are many ways a progressive organization can assert vision and leadership to support the cause of an analytics-driven culture:

- Senior executive champions at the CXO level

- Senior-level representation in the information technology (IT) strategy council / committee

- Proper representation and accountability at the enterprise architecture level for data domain coverage and the architecture review board representation

- Data champions at the business / departmental division level who can effectively communicate executive messages to all and dismantle traditional data ownership barriers

2) Structure and operating model

Function-driven organization design supported by comprehensive review framework – This is an organizational construct that blends the skills, resources, and experiences of business and IT to achieve the common goal of fast and accurate business insights. It requires a clearly defined structure, roles, and responsibilities to support accurate

decision-making. Here, the key is to choose the right organizational model that drives a progressive organization by enabling:

- Strategic alignment of business and IT

- Constructs to support faster decision-making and speed-to-market

- A mindset to invest in future technologies

- Capabilities that can adapt to growing datasets and extract information quickly

- Skills to support future requirements such as predictive and prescriptive analytics

3) Data process value chain

Leverage data to drive processes, compliance, and security – Typically, data processes help organizations define and understand process from data creation to data consumption. However, strong governance ensures that the data is comprehensive, consistent, reliable, repeatable, and recent. The key elements of strategic data processes include:

- **Data acquisition** – Define processes to quickly read, filter, and compress data, as well as record and measure the required data

- **Data storage and processing** – Define processes to collect and store data within a format / structure that can enable dynamic data analysis ranging from reporting to data science. Data processing includes aggregating and integrating data of different types and quality.

- **Data consumption** – Define processes that:

  - Enable interactive data analysis with real-time answers

  - Simplify complex query processing

  - Make data consumption easy and user-friendly

  - Provide data that can be consumed at the lowest grain by enabling flexibility in filtering, aggregating, and transposing data

  - Support multi-modal consumption patterns including batch, real-time, application programming interface (API) based and synchronous / asynchronous modes

- **Data analytics** – Define processes to uncover hidden relationships, hypotheses, and models for better decision-making. While each organization may define their data analysis processes differently, the winners are those that ensure that their analytics processes are properly defined, documented, and governed.

4) Enterprise data governance

Traditionally, data governance involves monitoring data at the source to ensure data quality and enabling consumption for proper usage. In progressive organizations, the construct of data governance evolves into governing data and processes across a comprehensive data management life cycle.

Entails

Enabling a holistic view of data governance will ensure that the data is accurate, complete, secure, and available when required along with the right architecture, policies, and procedures during the entire information value chain. Enterprise data governance is a multidimensional concept that entails establishing governing processes and organizational structures that allow better collaboration among the processes that enable an analytics-driven organization.

Typically, a boundaryless data platform represents a value chain that transcends enterprise data and data systems. Progressive organizations must utilize

a governance structure that represents internal business and IT stakeholders as well as key ecosystem partners, which requires a multilayered approach. However, it is imperative to ensure that the governance process itself does not impede data agility required by an analytics-driven enterprise.

5) Technology infrastructure and applications

Transform data movement and simplify technology and architecture – With the right technology platform, organizations can leverage their datasets in the future to build a more successful data strategy that is trusted, valued, and supported by key stakeholders. Changing business requirements, coupled with advances in the technology landscape, mandate a boundaryless information platform that breaks the barriers within data, processes, and technologies and makes the right information available to the right people at the right time.

6) Target operating model

Risk sharing and committed outcome-based model – The future operating model in progressive organizations will shift from cost-based model to the outcome- and risk-based model where the risk and outcomes will be shared across the partners, within and outside the organization. Outcome-based model will help in improving the value design and in turn will encourage engagement and accountability.

7) Enterprise-wide change management

Align people and the organization to change – It is critical to identify the right capability across the data value chain to meet organizational objectives and improve decision-making. This requires continuous communication, training, and development to ensure that change is seamless and accepted across the organization.

Progressive organizations leverage a relevant data and analytics strategy that is supported by the right operating model. With robust data governance, change management, and organizational design, these organizations can align business with technology and ensure speed and responsiveness for their business. Such a strategy focuses on building the right information assets that enable new avenues for data monetization. While building a progressive organization, it is important to understand organizational culture for change and leverage best-practices within the industry when adopting the change.

Conclusion

Becoming an analytics-driven organization is no longer a matter of choice today. The need of the hour is to quickly embrace the change and leverage the right drivers to maximize the benefits of change. While some organizations have already begun their transformative journey, others are shackled by the constraints of investment and risk. To move forward in this journey, it is imperative to identify and align with value creators that enable your enterprise to monetize data and remain profitable.

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