The case for a smart enterprise data hub

Why IT and business need to collaborate

It is estimated that by 2025, the digital universe (the amount of data created and copied annually) will grow to 163 zettabytes (ZB), or one trillion gigabytes.[1] How will your organization manage this data tsunami to your advantage?

An antidote to the big data problem is the enterprise data hub (EDH). A data management solution, EDH provides storage, processing, and analytics applications that support both emerging and legacy use cases. The needs of new open source technologies, machine learning, artificial intelligence, and cloud-based architectures are calling for a versatile EDH that promises flexibility, faster data access, and lower costs than traditional data stores.

Yet organizations that have built large-scale EDHs without considering their users' consumption needs will fail to reap these benefits. In this paper, we envision the journey toward a "consumption-driven," smart EDH and outline the success factors and pitfalls.

Why do EDH projects fail?

It is estimated that 85% of big data projects fail due to problems presented by legacy technologies and pre-existing corporate biases.[2] Yet many organizations only maintain a technical focus on landing data into an EDH; the end result is a high-cost platform that provides little business value in return, making it hard to justify the program altogether. Here, we name the five pitfalls to watch for when deploying an EDH.

Lack of business objective

The scope of an analytics project should not be limited to the unique objectives arising from select teams. Companies that do not have robust strategy around analytics beyond a few use cases will struggle to derive value from these projects.

Lack of integration across legacy systems

In many organizations, legacy systems have multiplied due to mergers and de-mergers, increasing data integration challenges.

Lack of data assurance

An EDH is usually missing one or more of the key elements of data assurance including data metrics, data quality, data reconciliation, data cleansing, and data cataloguing and lineage.

Lack of responsiveness to evolving industry trends and business needs

Bound by legacy systems, established organizations often struggle to respond to changing business needs. In contrast, fintech companies can, often, quickly and cost-effectively keep pace with evolving business needs.

Lack of agility

Established organizations are hampered by a lack of agility owing to multiple stakeholders, long processes for gathering requirements, rigid business processes, and a dearth of input from business teams until an output is delivered. This lack of agility is another nail in the coffin for data projects.

Critical success factors for an EDH

Organizations aspiring to make business decisions based on reliable data must create a smart EDH. What does a successful EDH deployment look like?

Consistent insight at a lower total cost of ownership

Insight gleaned from data should be consistent and repeatable. Any incremental "data items" required for analysis should be cost-effective while data is democratized and available to every user, anytime and anywhere.

Data innovation through data consumption patterns

Although data consumption primarily focuses on a unified and enriched view, it often leads to new data discoveries, which foster growth and innovation.

Revenue growth

Consumers now do most of their banking through web and mobile apps. The data held in an EDH can help business users surface insights about these omni-channel customers, including their experiences and preferences, creating marketing opportunities and revenue growth.

Improved efficiencies

A smart, consumption-driven EDH makes processes more efficient by providing timely and accurate data.

The smart EDH journey

Organizations should take the steps given in figure 1 to set up a smart, consumption-driven EDH.

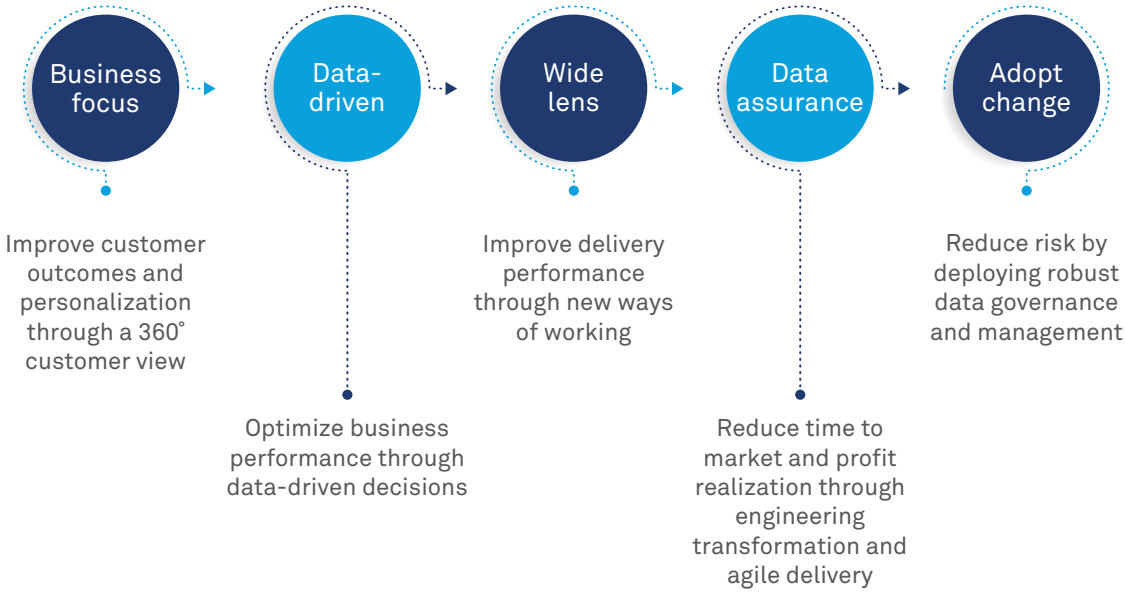

Figure 1: The journey to a smart EDH

Business focus

Establishing a clear business case to support analytics through an EDH is a critical first step. From there, kick off deployment by gathering input from key business stakeholders on how to improve their business or process with data. The business should be involved in every step of the deployment, driving user stories, constantly validating and refining the business benefit and quantifying the return on investment.

Data-driven

Become a data-driven organization. Know where your data lies and how to access and integrate it to enable a unified data view of the data that can be accessed by the entire organization.

Wide lens

When designing the outcome, adopt a wide lens and apply these best practices:

- Curate data sets once for multiple usages
- Approach the consumption layers with a focus on business outcome. For instance, a well-defined payment notification consumption layer can be used for multiple business cases
- Consider the needs of the data marketplace. As the data marketplace serves as a single "shopping interface" to the user, be sure to consider user needs exhaustively

Data assurance

Data must be complete, accurate, available, reliable, consistent, timely and up-to-date. Without this assurance, the business will have little faith in the data provided by an EDH. Be sure to put in place data metrics, quality, reconciliations, cleansing, cataloguing, and lineage.

Adopt change

Ensure that organizational change involving people, processes, and technology are in place to initiate and sustain valuable business outcomes.

Consumption-driven EDH roadmap

Since data is a business asset and IT is its custodian, the execution strategy for building an EDH must involve a collaboration between both IT and the business. Figure 2 shows the typical business and IT roadmap steps along this journey.

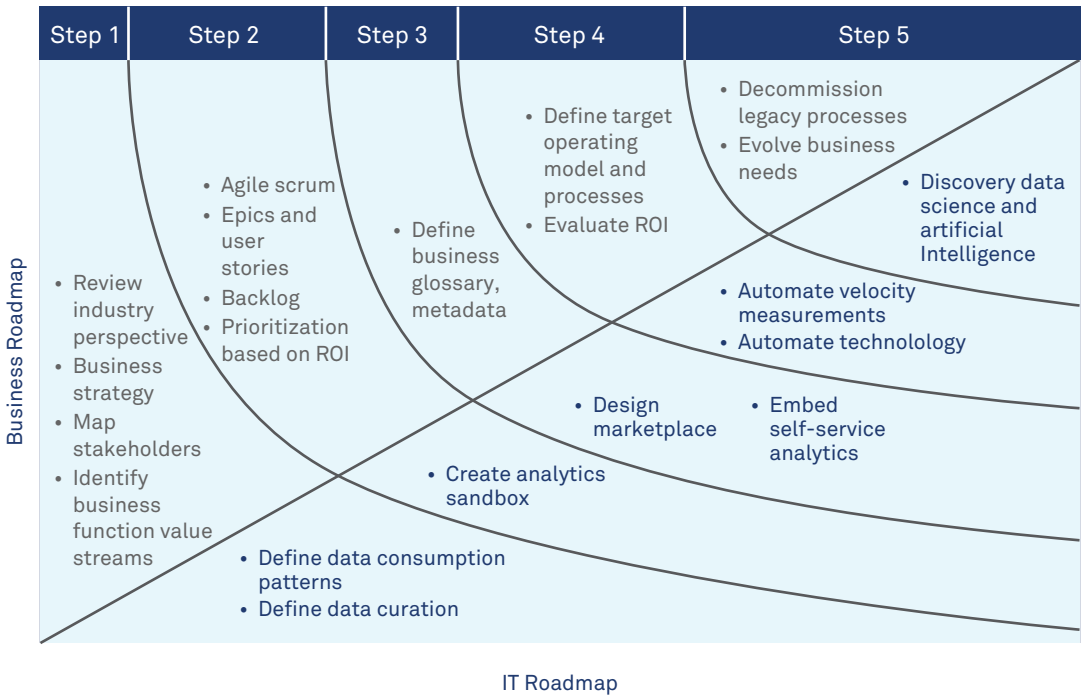

Figure 2: Consumption-driven business and IT roadmap for EDH

Step 1 involves combining the business strategy and vision, engaging stakeholders whilst also agreeing on the technical data consumption and curation needs. Step 2 is the enabling phase, which involves setting up business-driven agile scrums, managing backlogs and creating analytical sandbox environments. Step 3 allows the platform to be used to define business-driven glossaries and design a self-service marketplace. In step 4, we begin to operationalize the EDH by defining the target operating models within the business along with technical automation optimization. The final step in the set-up of a smart EDH involves maximizing the return on investment by decommissioning the legacy processes and technology.

Importance of a smart EDH strategy

This business-IT collaboration for building an EDH will lead to reduced time to market, product diversity, and higher profits. A well-planned and executed EDH strategy delivers the following benefits:

References

1.https://www.scc.com/scc-insights/data-growth-network/

2.http://www.digitaljournal.com/tech-and-science/technology/big-data-strategies-disappoint-with-85-percent-failure-rate/article/508325

About the Authors

Amrita Mukherjee

Consulting Partner, Analytics and AI Consulting
Global Sales, Wipro Limited

With over 20 years of experience, Amrita helps Banking and Financial Services clients solve complex business challenges and advises clients on strategies and industry trends on modern Analytics platforms and AI.

Hardik Jadav

Consultant, Analytics and AI Consulting
Consulting Practice, Wipro Limited

Hardik helps financial services clients assess features for their data and digital transformation, and designs analytics solutions to improve business performance.

Sukhvinder Phalora

Consulting Partner, Analytics and AI Consulting
Consulting Practice, Wipro Limited

With more than 18 years of experience, Sukhvinder helps Banking and Financial Services clients formulate data strategies and roadmaps, architect modern data solutions, and implement solutions to improve business performance within Analytics and AI.

Wipro Limited
Doddakannelli, Sarjapur Road,
Bangalore-560 035, India

Tel: +91 (80) 2844 0011
Fax: +91 (80) 2844 0256
wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 160,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at **info@wipro.com**

IND/BRD/OCT 2018-SEP 2019