The Pharmaceutical industry is experiencing greater change than ever before. The rise of digital, a shift from volume-to-value and a changing regulatory environment has truly transformed the landscape. The market calls for new insights, new approaches and new ways of thinking.

From a customer perspective, the physician is no longer the only target. In nearly all markets, access to physicians is more restrictive, prescriber autonomy is decreasing and purchasing decisions are being heavily influenced by a new range of stakeholders. At the top level, healthcare providers are consolidating with hospitals and medical groups merging into networks and large health systems. The customer landscape has transformed.

The rise of digital channels also means that interactions are no longer just face-to-face, and customers can choose how they engage based on preference. Whilst this offers Pharma companies new ways of interacting with their customers and patients, it also makes it much more challenging to orchestrate a consistent and contextual engagement. More channels mean more data, more systems and more integrations. The importance of maintaining an accurate customer 360, and truly understanding all interactions across channels, is as critical as ever.

And this increase in data sources, data volume and data velocity is not just seen across customer channels. The explosion of data is occurring in all areas of the business, including product, patient, plan, payer, provider, clinical studies and even intellectual property. Whilst this provides a significant opportunity in terms of business insight and data-driven decision making, it is not of value without a consolidated view and a single source of truth.

These challenges demand a new way of thinking that goes way beyond just shifting legacy, process-driven applications to the cloud. This needs to be about much more than just modernizing CRM, ERP or digital channels. This is about breaking down the enterprise silos and establishing a modern data management layer that drives a single source of truth about customer, product, plan, payer, patient, and clinical studies across the company. This is the only way to ensure your organization can leverage insight and make data-driven decisions with confidence.

Over the past year we have worked with over 50 leading pharmaceutical companies in the commercial insight and information management space, helping them accelerate their journey from data to insights to impact. Based on these engagements and our learnings we have created this strategic 5 step guide for senior executives on Master Data Management.

Step 1: Think Beyond The Customer
Step 2: Look For Relationships
Step 3: Focus On Data Veracity
Step 4: Plan For The Unexpected
Step 5: Break Free From Legacy & Leverage The Cloud
Master Data Management (MDM) has long been associated with the data quality of the customer record in CRM. Do you have the golden record... do you have a 360 degree view... do you have the most up-to-date and accurate information?

And whilst the importance of the customer has not changed, there are now many more demands of MDM across the modern organization. Product, Patient, Managed Markets, Plan, Payer, Clinical Studies and even intellectual property all require a consolidated view and single source of truth.

Before thinking beyond the customer however, it is important to consider how you interact with them. In our experience, the majority of organizations have processes in place to keep healthcare professional (HCP) and healthcare organization (HCO) information accurate and up-to-date. However, we see much less maturity on the multichannel engagement side of things where multiple systems are used to interact with the customer.

The ability to blend data from multiple sources including traditional call, email, online, educational, social, IoT and other third party feeds is often lacking. Despite the importance in providing contextual engagement, very few organizations have established a true customer interaction master.

Product MDM is another hot area for Pharma, required to support global reporting, competitive performance, pricing analysis and compliance. However, gaining an accurate and consistent view of product information is still a challenge. Pharma companies often contract with multiple data vendors and rely on them to consolidate and master the information provided. Key product information will vary by provider. Product names and descriptions also vary by affiliate and country which makes it difficult to get a consistent global view.

A modern Product MDM solution allows you to accurately standardize, match and cleanse product records into consistent profiles and groupings that account for various forms, strengths and geographical variations.

It is recommended to enhance the traditional product master beyond the commercial scope with clinical particulars such as active ingredients, passive ingredients, color of medicine, serialization, packaging, manufacturing and barcode information. This enhances the richness of the data and value it can add to the organization. Flexible hierarchies should then be established by brand, country, market and segment, allowing the product information to be grouped and analyzed from a range of perspectives.

With real world data sources such as claims and EHR data now available in many markets, the ability to inject insight into decision making process that touch the patient, managed markets, plans and payers become possible. But like Customer and Product MDM above, the available of the data sources is only the first step. The need to established a consolidated view and single source of truth to govern the volumes of data is the only path to confidently generating insight.
The pharmaceutical landscape is continually evolving. Access to physicians and prescriber autonomy are decreasing and new stakeholders are emerging.

Smaller healthcare providers are consolidating with hospitals, medical groups, IDN's and large health systems. These larger organizations are able to exert more control through guidelines, protocols, and incentives. Understanding the universe of healthcare professionals, stakeholders, key opinion leaders (KOLs), organizations and their relationships to each other is critical for success.

There is a need for insight-driven affiliations management to support commercial teams in engaging with the new range of stakeholders.

As fundamental as it seems, there is first the need to understand the healthcare professional (HCP) to healthcare organization (HCO) relationship. Not just the link between professional and organization, but also the role, influence and tenure in the context captured. It is also important to consider that a HCP may map to multiple organizations, directly and indirectly. This should also be captured and maintained.

The relationship and influence from one HCP to another HCP is another important affiliation to capture and maintain. It is also important to consider the relationship and influence with other stakeholders in the organization as well as external KOLs.

With the consolidating healthcare landscape, it is also important to capture the HCO hierarchies and relationships within the healthcare systems. Beyond just the HCO to HCO mapping, how entities are setup, related and the influence they carry within large healthcare networks and delivery organizations.

In the new selling landscape, understanding these relationships and how to navigate the healthcare systems is key to success. From relationship selling to strategic account management, it is a fundamental pillar of the modern go-to-market.

With these core relationships established, it is then necessary to look outside the traditional patterns to truly innovate and differentiate.

Correlating patterns between HCPs and patients, HCPs and products, HCPs and KOLs, and even HCPs and digital content provides insight that supports pro-active engagement, contextual experiences and a smarter understanding of stakeholder influence.

It is also important to remember that relationships are subjective and can often change. There will not be a direct data source that covers all areas of affiliation mapping. Field collaboration should not be overlooked as a key source of input here, leveraging local knowledge and insight gained from face-to-face meetings.
Even once you have established a single source of truth, the insight generated from these data sources is of no value to the commercial organization unless they can trust it.

Data quality is the fundamental pillar of enterprise data management. The ability to understand and pro-actively monitor the quality of master data is critical to all commercial applications that use it.

Key decisions that business users take from potentially inaccurate data can have significant consequences. Your commercial model, marketing investments, market access plans and compliance are all at risk if the underlying data quality is in doubt. In fact, Gartner predicts that poor data quality is a primary reason for 40% of all business initiatives failing to achieve their targeted benefits.¹

Data quality checks should be carried out against the dimensions of completeness, consistency, timeliness, uniqueness, validity and referential integrity. Business rules should also be applied to the data sets, checking for anomalies, thresholds and process violations.

As the volume of commercial data explodes at a rate much faster than can be manually reviewed and corrected, companies are looking for more automated ways to solve the data quality problem.

From our experience in the industry, we have seen a lot of success in moving away from manual, error-prone processes towards innovative cloud-based data management solutions.

Modern Data Management Platforms, such as Axtria’s DataMax, leverage advanced data science techniques to pro-actively on-board, manage, monitor and improve data quality issues across a complete range of commercial data sources.

Axtria DataMax provides a complete DaaS (Data As A Service) framework pre-configured for industry specific data needs. It supports several applications including master data management, data quality, data integration and data enhancement.

The centralized data management platform allows Data Stewards to take control of the commercial data sources with better transparency, consistency and agility. This increases confidence and accuracy in the data used to drive strategic business decisions.

Sources
1. Gartner - Measuring the Business Value of Data Quality
The one constant in the pharmaceutical industry is change. Fierce competition, government regulations (DSCSA, IDMP, RDC 54), rapid innovation and M&A activity have created a dynamic environment that is continually evolving. When it comes to data management, you need to plan for the unexpected.

The data sources managed, mastered and governed today, will be very different from those tomorrow.

Mergers & Acquisitions will only increase the complexity of the commercial data environment, often leading to multiple versions of the truth for master data. The desire is often to reduce and consolidate as quickly as possible, with the acquiring company’s system being maintained as the system of record. However, not planning ahead and accounting for this sort of agility and flexibility in your data management architecture can make this a very painful and drawn out process.

Government rules and regulations is another dynamic area, especially in the area of customer and patient data. Taking a proactive approach to auditing and regulatory reporting of master data assets is recommended. From ensuring that only the right people have access to the MDM environment and data, to being able to demonstrate that the data is protected and privacy controls are in place, is all key to supporting future demands in this space.

The other unexpected element is the data itself. You need to be in a position to leverage new data sources as they become available. The speed at which you are able to onboard, process and generate actionable insights from new data sources is a key competitive differentiator. Your data management platform should have the flexibility to adapt to the wide range of structured and unstructured data sources and never be the bottleneck to future insight.

You need to be able to quickly leverage new data sources, with the right mixture of people, processes and technology, and generate insights at scale.

People: Do you have the people in place with the experience, knowledge and skill sets to know where the industry is going and how to handle future data management challenges?

Process: Do you have well defined yet flexible processes in place that will allow you to adapt to change and rapidly leverage the insights available from new and evolving datasets?

Technology: Do you have agile, flexible and enterprise-grade platforms in place to handle new data sources which may be structured or unstructured, and in different formats and frequencies?

Experienced talent, strong governance and next generation cloud technology are all needed to future-proof your commercial strategy against the unexpected.
Companies are excited with the volume and variety of emerging data available. However, the analytics needed to drive commercial insight from these data sources is often hampered by one serious issue: the legacy data architecture.

The ability to leverage the cloud to create a single authoritative view of business critical data and integrate disparate, duplicate, and conflicting data sources is key to success.

Modern Cloud MDM is a fundamental enabler to a best-in-class Cloud Information Management, supporting you to:

- Evaluate and understand all new, relevant data sources
- Utilize pre-built connectors to rapidly onboard, manage and govern various data sources such as structured, unstructured and semi-structured with embedded quality checks
- Establish a master data foundation and single source of truth
- Deliver engaging, mobile-ready insights, and visualizations by business role
- Leverage the cloud for speed, agility, and scale

The business demanded a 360 view across all personal and non-personal channels. We just couldn’t do this with our on-premise CRM application.

Head of CRM, European Top 10 Pharma

To successfully technology-proof your enterprise data management you need to leverage a platform that meets your business requirements today, from a vendor who knows where the industry is going tomorrow.

The cloud makes it possible to consume innovation at a rapid pace, allowing you to quickly take advantage of new functionality and react to future business demands. Going forward, there will be new data sources, new technologies and new ways of going to market. You need to be ready.

Axtria is a global big data analytics and information management company.

We empower global leaders across the Life Sciences and Financial Services industry to make better data-driven business decisions, with a combination of information management, commercial operations applications and analytics consulting.

We are leaders in managing data using the latest cloud and on-premise information management technologies, working with 8 of the top 10 global life sciences companies and 2 of the top 5 global banks.
The Axtria® 5 Step Guide

Over the past year we have worked with over 50 leading pharmaceutical companies in the commercial IT space with the majority of interactions at the VP and director level. Based on these engagements and our learnings we have created a series of strategic 5 step guides for senior executives on how to drive commercial excellence.

For access to the other guides and to learn how Axtria® can contribute to your continued commercial success please go to www.axtria.com.