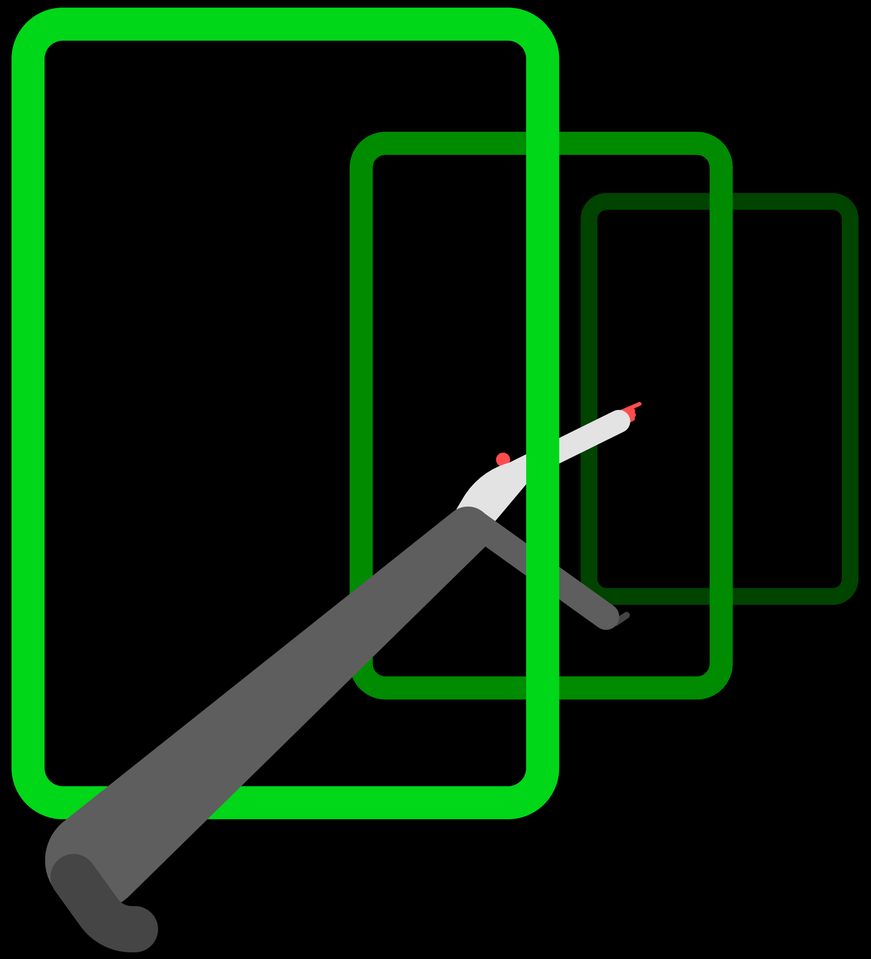
E-book

Life Sciences ERP

Facing today’s challenges and gaining operational excellence with Sage X3.

Sage

Table of contents



Introduction

As Life Sciences evolve, legacy technology, once developed for speed, innovation, and efficiency, is now beginning to hold us back. In a world where pandemics, biotechnology, and biosecurity are commonplace, Industry 4.0 indicates an exciting opportunity to digitally transform businesses.

Digitalisation enables us to take advantage of innovations such as big data, Internet of Things (IoT), and robotics, to address the new set of challenges facing Life Sciences companies today.

Digital transformation typically takes place out of sight in back office functions. Life Sciences is no different. The most important areas for manufacturers are quality and compliance with mandatory legislation. Added to this are areas such as the ability to ensure specific, identifiable, and verifiable electronic signatures for sign-offs; serial and lot number traceability for fast and accurate trace and track capabilities and a validated environment to prove regulatory compliance. These 'foundational' requirements provide the basis for a 360-degree view of supply chain and quality control, and the introduction of new technologies, so executives can make well-informed and rapid decisions.

Today however, manufacturers are limited by disparate networks which means collaboration between departments, divisions, companies, and continents is often slow and cumbersome. Isolated systems can also mean costly and time-consuming maintenance to ensure each system is secure, up to date, and compliant. In comparison to the potential of digital transformation, the overall effect of legacy systems and tech silos is one that hampers operations and actually slows companies down.

In this guide, we'll explore how Enterprise Resource Planning (ERP) can enable you to address the modern challenges faced by today's Life Sciences manufacturers and optimise technological innovation to achieve a new, Industry 4.0 level of operational excellence.

"47% of manufacturers state that becoming data driven is essential to success"

Aberdeen Group

Industry overview

With a predicted industry CAGR of 12.9% through 2025, the time is now for Life Sciences organisations to make the change and embrace transformation to meet the growing needs and expectations of end-users, shareholders, and regulatory bodies.

For instance, Pharmaceuticals is a long established industry characterised by significant long-term growth potential. Within this context is the relatively recent emergence of Nutraceuticals, which is opening up new opportunities for growth. By 2026 the projected market size is estimated to be USD 167.3 million.

Other growth drivers include:

- rapid changes in innovation and product development.
- increased investment in Life Sciences research.
- enhanced digital focus on solving problems through technology.
- commercial challenges.
- compliance management.
- nutraceutical/dietary supplement price/demand model.
- prescription drug pricing regulations and mergers and acquisitions.

Dramatic change has been triggered through substantive research into personalised medicines based on genetics, product growth in Cannabidiol (CBD), a vast expansion in Nutraceuticals, the incorporation of genetics in treatment options, and a heightened focus on immune cell function.

Under increasing pressure to streamline all areas of operational activity from research to product development, the industry has adopted an increasingly digital approach to problem-solving. This has led to the use of new systems for handling complex processes, data management and Just-in-Time (JIT) manufacturing.

Nutraceuticals is opening up new opportunities with an anticipated market size of USD 167 million by 2026[3]

“Our supply chain team could no longer manage everything. We needed an ERP solution with financial, manufacturing, stock, and supply chain management that could support the company as we grew.”

Alastair Hay
CFO, Atnahs

What's driving the future of Life Sciences?

Life Sciences building blocks for the future

Innovating around patients and access	Digital transformation	Building trust	Corporate Social Responsibility
Clinically based value chain built around patients	Data driven devices	Clinical trial transparency	New corporate priorities
Novel pricing and access approaches	Technology partnerships	Scrutinisable data ownership	Managing innovation and social good

Digital transformation
Only by investing in the right technology will Life Sciences companies be able to derive the full benefit of increased amounts of data.

Building trust
Robust data ownership and end-to-end transparency of product manufacturers and clinical trials are essential to earn the trust and buy-in from government regulators and healthcare professionals.

Corporate Social Responsibility
Life Sciences will need to adopt increasing responsibility for combatting stigma around health issues and provide a positive role model for sustainable production.

Regulatory pressure
Regulatory demands for visibility into raw materials, safety measures, processes, suppliers, and quality assurance processes, enable the end-to-end tracking of development and production, which are now given equal weight to more traditional pressures such as streamlining delivery and driving down costs.

Supply chain evolution
As supply chains become increasingly complex, digital management becomes more critical to avoid costly downtime, or production grinding to a halt. Managing modern production with fragmented business processes and deep-rooted functional silos will only lead to increasing demand miscalculations and unnecessary costs.

These issues can be successfully addressed with ERP systems that deliver critical functions. Take serial and lot number traceability as an example. Recalls do happen, and when they do, fast and accurate trace and track capabilities are absolutely essential. An ERP system must be able to quickly identify component location and should also be able to assign a serial number and a lot number to components.

Delivering this track-and-trace functionality addresses four key drivers identified above. It's a feature of digital transformation, it builds trust, it meets regulatory demands, and it's an important evolutionary step for the supply chain. Of course this is just one component in the wider move to digital transformation but when dovetailed with other ERP features such as sophisticated quality assurance and management, it is significant.

For instance, Life Sciences manufacturers need to be able to meet complex quality needs such as the ability to record detailed test results by serial number or verifying test procedures and scripts during testing. An ERP system with native full feature quality management system, track and trace functionality, and identifiable and verifiable electronic signatures goes a long way in helping manufacturers undertake digital transformation while meeting the requirements of Life Sciences manufacturers both today and tomorrow.

The impact of globalisation on Life Sciences

With increasing travel, global trade, and faster communications, there are more opportunities to share information and collaborate with other countries. There are also more opportunities for viruses to spread from country to country and continent to continent, faster than ever before.

With the latest global pandemic, the industry faced unprecedented pressure to develop medications and vaccines in record time. Collaboration was greater than ever, as the world came together to engage science in the fight against a common enemy.

With many Life Sciences companies committing time and energy to the development of a vaccine, the cost to other operations has been significant. As many employees adjusted to a remote work environment and new safety standards for product creation, severe disruption to R&D projects, reduced lab capacities, and frozen clinical trials were just some of the lesser-seen implications of the pandemic.

How the industry is changing

The Life Sciences landscape has transformed and continues to do so with:

Digital innovation and integration
While efficiency concerns and production challenges can be addressed with the integration of all-encompassing technology across supply chains, integration of new technologies isn't straightforward. A constant regulatory pressure to maintain system validation is at odds with the ever-green nature of Software-as-a-Service (SaaS), which depends on continuous updates. The regularity of these updates prevents organisations from conforming to the requirements of validation.

Greater regulatory requirements
Greater transparency of the production chain and processes involved are essential in achieving the trust and buy-in of end-users, government regulators, and healthcare professionals. This support is imperative to securing approval to research, develop and produce pharmaceuticals and nutraceuticals, and to the demand that it relies upon.

Sustainability
As the world increasingly acknowledges the importance of resources and sustainability, Life Sciences companies are under increasing pressure to model sustainable sourcing practices and to play a key role in combatting the social stigma surrounding many health issues. This is compounded by greater visibility into the activities of an organisation made possible by social media and the internet.

Delivering a modern ERP solution for the Life Sciences industry

Many Life Sciences companies are reassessing how technology can support risk mitigation while increasing productivity. To make the next step and fully embrace technology, they need a solution that can help them:

- understand data in real-time.
- make informed, data-driven decisions.
- prevent, identify, and remediate compliance concerns.

Sage X3 provides a modern and scalable ERP solution for today's growing Life Sciences enterprises. It combines advanced manufacturing, distribution, warehousing, quality management, Customer Relationship Management (CRM), and accounting functionalities.

Sage X3 has an innovative core of crucial business intelligence and management functions specifically developed for and used by Life Sciences companies. These support the unique requirements of your Pharmaceutical and Nutraceutical business with minimal customisation.

Sage X3 supports evolving product-centric businesses with:

- managing cross-functional projects.
- delivering value-added after-market services.
- managing complex contractual relationships across the value chain.
- managing resources and assets.
- planning and execution across multiple locations.
- quality, provenance, and safety.
- delivering consistent data insight across multiple datasets.

Sage X3 Solution Summary

Financial management

Budgets and accounting

Fixed assets

Financial reporting

Dashboards

Supply chain management

Purchasing

Inventory and warehousing

Sales

Customer service

Production management

BOM and production planning

Shop floor control

Quality control

Non conformance

Project management

Project definition

Project execution

Time sheet

Financial tracking

“We have two lines of business, and Sage X3 makes it very easy to manage those companies in a single pane of glass... Sage X3 supports our complex and multi-stepped quality assurance program. We’re able to serialise samples, track extensive data about each one, and maintain product traceability.”

Carlos Jofre Jr.
Executive Director of IT, TissueTech Inc

Why use Sage X3?

Sage X3 is a modern business management solution designed specifically to meet the needs of Life Sciences manufacturers by bringing together all critical data, reducing inefficiencies of running discrete laboratories, supply chain, manufacturing, and financial systems.

Digital transformation enables insight, efficiency, compliance, competitiveness, a chance to scale and grow, and a way to develop a single source of truth. With Sage's tailored ERP solution, leaders can use real-time data to ensure that their entire Life Sciences business model is streamlined and efficient.

With the help of an advanced ERP solution like Sage X3, Life Sciences companies can create:

- a single source of truth and complete visibility into key measures and metrics.
- actionable data-driven insights.
- automation of processes across the entire business.
- global and local compliance.

Key functionality for the Life Sciences industry

Sage X3 helps Life Sciences companies access critical data and insights so their leaders can make informed decisions about the business. With Sage X3, Life Sciences companies can:

1. keep on top of costs and drive productivity—leading production processes to a new level of accuracy with one source of truth.
2. minimise waste.
3. reduce the risk of non-compliance with enhanced process automation including administrative tasks.
4. quickly adapt procedures and processes—swift responses to changing regulations that may affect safety standards or even product formulas.
5. enable fast tracking and traceability through cloud-based responsiveness and smart technology.
6. record detailed test results by serial number, or verify test procedure and components during testing with a full featured quality management system.
7. store and collect e-signatures which are permanently linked to a record. Digital signatures cannot be modified or copied once posted.

In short, Sage X3 provides specific formula functionality so Life Sciences manufacturers can drive ahead with digital transformation, meet compliance requirements, deliver specific functionality unique to their needs, and provide a 360-degree view of business operations.

Gaining a competitive advantage

While other ERPs enable companies to track data securely in various departments, Sage X3 delivers intelligent business insights with built-in capabilities such as quality control, regulatory compliance, and product tracking. These features help businesses in the Life Sciences industry understand their inventory, allocate costs to R&D, plan for consumer demand, react to changing industry regulations, and provide transparent data on their processes.

Sage X3 provides faster, more intuitive, and tailored business management solutions than conventional ERPs. Organisations that are looking to thrive and retain their competitive advantage by increasing their agility and embracing change at scale are the perfect fit for Sage.

Sage X3 supports evolving product-centric businesses:

- managing cross-functional projects.
- delivering value-added after-market services.
- managing complex contractual relationships across the value chain.
- managing resources and assets.
- planning and execution across multiple locations.
- quality, provenance, and safety.
- delivering consistent data insight across multiple datasets.

With its powerful range of features and functionality, users can pre-configure:

- legal conditions for finance.
- languages.
- multiple currencies.
- locations in the system.

This enables them to reduce the Total Cost of Ownership (TCO) and deliver quick time to market.

Real-time data across the business
Sage X3 embraces the latest technology trends, providing users with universal access to data on web and mobile devices, increasing productivity with visual process flows, and automating business workflows.

Sage X3 provides visibility into a business with real-time insight, dashboards, and data drill-down capabilities. With Sage X3, Life Sciences companies can take control of their entire business, from supply chain to sales.

Get more information on specific industry benefits, product capabilities, and social proof from current clients at **sage.com/sagex3**

Sage X3: Not your typical ERP

Faster

Simpler

Flexible

“We needed to have scalability, flexibility, and reliability. We also knew that we were going to be in a rapid growth mode. In order to sustain that and multi-site capability, we needed cloud capability. At the end of the implementation, which was five months in length—really rapid for an ERP overhaul, we described it as changing the wheels on a train, while it was in motion, it was challenging, but also extremely successful and very smooth.”

Matthew Collins
VP of IT, SCA Pharmaceuticals

Sage X3, delivering ERP for Life Sciences

Sage X3 Life Sciences Solution Summary

Lot tracking and traceability	**Batch production**	**Quality management**	**Formula management**
Regulator compliance and reporting	**Planning and scheduling**	**Inventory management**	**Single and multi-site management**
Role-based workspace	Workflow automation and alerts	Reporting and business analytics	Mobility toolkit

1 *Source: Grand View Research,* **Global Life Science Analytics Market Size Report, 2020-2027 (grandviewresearch.com)**

2 **Nutraceutical Ingredients Market Size to Reach USD 167.3 Million by 2026 at CAGR 4.0%—Valuates Reports (prnewswire.co.uk)**

3 **Nutraceutical Ingredients Market Size to Reach USD 167.3 Million by 2026 at CAGR 4.0%—Valuates Reports (prnewswire.co.uk)**

A Sage partner

CitySoft

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CitySoft provides buyers of Sage X3 the most experienced and well resourced team in this region who de-risk your investment from the perspective of cost, the project delivery timeline and solution value to the business.

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