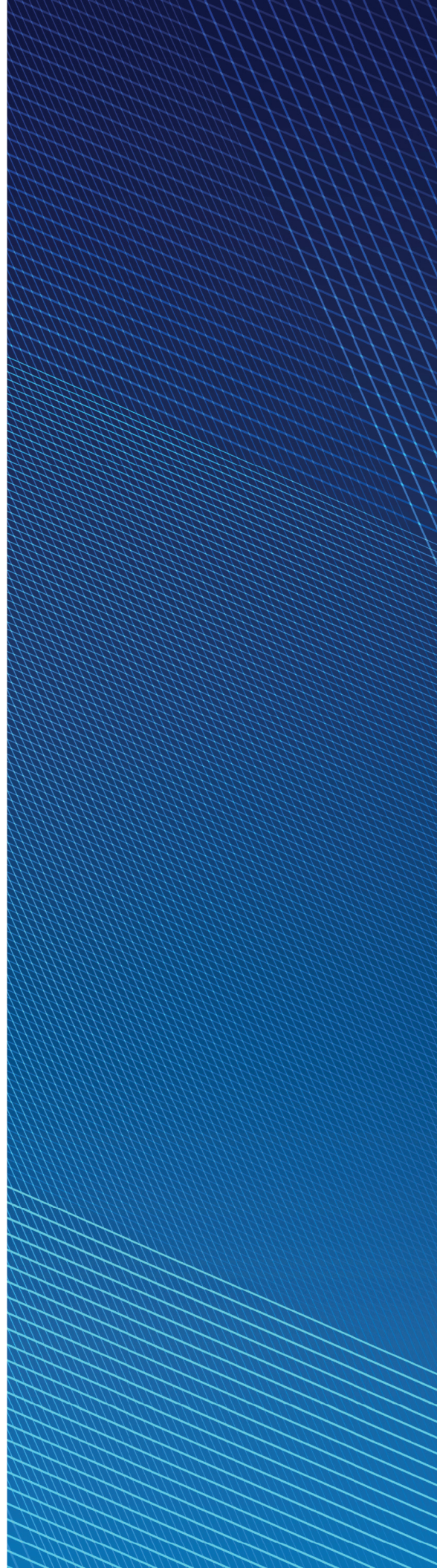


IQVIA **RECEIVES THE 2023** ENABLING TECHNOLOGY LEADERSHIP AWARD

*Identified as best in class in the North American
QMS market for life sciences industry*



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. IQVIA excels in many of the criteria in the QMS space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Customer Impact</i>
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

Commitment to Innovation, Creativity & Application Diversity

Legacy quality management systems (QMS) and point solutions lacking wide-ranging functionality are insufficient to overcome today’s regulatory challenges and manage the complexity of quality compliance and speed of business changes. A comprehensive, advanced QMS purpose-built for life sciences and equipped with solution integration capabilities –featuring AI for improving efficiency and accuracy as well as consulting services– proves critical to achieving excellent quality.

In this scenario, IQVIA offers SmartSolve, its enterprise quality management system (eQMS). SmartSolve is built upon four pillars: quality management, compliance, digital content management, and supplier quality management. IQVIA implements best practices that make SmartSolve a transformative eQMS with continuous solution updates through constant regulatory and functional updates, quality portal expansion, and other digital expansion; solution integrations with complementary IQVIA offerings; enriched user experience through an advanced consumer-grade user interface, improved translation, and internationalization features, as well as advanced search capabilities; and, finally, AI/machine learning. The foundation that enables IQVIA to carry out all these practices is based on Microsoft technologies, which ensures enterprise level capabilities and applicability in many environments.

IQVIA has one of the broadest, deepest quality management solution footprints in the industry as SmartSolve has expanded over the last two years to the point where capabilities initially only envisioned have become a reality, such as risk and design control—which became even more pertinent to quality management with the advent of the EU Medical Device Regulation— or compliance-driven modules for the medical-device-centric post-market surveillance, meaning, for managing PMS process control and

storage of reports. By granting customers such a broad set of quality management solutions, SmartSolve differentiates itself from competing point solutions.

SmartSolve's tightly integrated modules increase efficiency by reducing implementation workload, versus the separate modules of some competing solutions, and its design facilitates seamless data coordination, connectivity, and integration across different enterprise systems such as ERP, MDM, LABS, PLM, SCM, MES, and HRM used by customers.

The life sciences industry faces many complexities across safety, regulatory, and quality functions. For instance, there is a new or changed regulation somewhere in the world every 22 minutes. In 2021, adverse events and product technical complaints increased by 100% versus 20% in 2020 and before, as well as a 150% increase in regulatory mandates. In a display of excellent industrial practices, IQVIA differentiates itself from competitors by considering customers not only from a quality standpoint, but globally –from a comprehensive and integrated safety, regulatory, and quality (SRQ) standpoint– as IQVIA's solutions and services revolve around this comprehensive standpoint and is the first to offer intelligently connected integration for all three SRQ processes whilst accelerating their digital transformation through SaaS and intelligence-driven simplification, automation and integration of functions, processes and systems. For instance, SmartSolve connects with the safety and surveillance environment as well as with the regulatory environment, all three of which drive quality, safety, regulatory and quality workflows, and automation. To this end, SmartSolve regulatory connector works with IQVIA's regulatory intelligence solution.

On the industry intelligence front, IQVIA provides customers with Connected Intelligence. While there is more information, technology, and stakeholders in today's businesses there is less intelligence available, which complicates timely and accurate decision-making. Most organizations spend a large percentage of their time on operations and less time on strategy. IQVIA –with its intelligent automation and AI methods– helps life sciences organizations to spend less time on operations and more time on strategy, thus lowering operational costs and complexity while increasing efficiency, productivity, quality, and compliance levels. By streamlining workflows and processes (simplification), eliminating manual operational workflows (automation), and enabling end-to-end cross-functional safety, regulatory, quality workflows and collaboration (integration), the required regulatory intelligence and reference/operational data produced by SRQ activities become easily available and enables targeted, actionable insights to trigger effective, timely action. Thanks to IQVIA, users are spared the repetitive work and can instead concentrate on high-value activities, like strategy and innovation, thus deriving more value from their SRQ investments: functions transform from cost centers into value drivers, achieving better business outcomes with fewer resource expenditure amid tightening regulations.

Finally, on the front of user experience, IQVIA's strives to provide the best it can, such as with its User Interface based on React, the technology Facebook was built on. However, what further differentiates IQVIA from the competition is its dedicated UI design team working across all IQVIA products, looking for ways to increase efficiencies and productivity by giving the user similar experiences at work. IQVIA's design team has brought together conceptual design, information architecture, interaction design, and visual design in SmartSolve. Great examples of this are the advanced search capability, a three-panel layout that reduces scrolling and clicks, and task status with details on demand that highlight SmartSolve's UX/UI design. SmartSolve's simple and intuitive user interface drives critical processes that improve

product quality, ensure patient safety, and maintain regulatory compliance.

While some of its competitors are yet to apply digital technologies in QMS, IQVIA is already adding automation, AI, ML, and other advanced capabilities to accelerate users' workflow and increase the accuracy, efficiency, and productivity of their tasks by providing recommendations. Furthermore, IQVIA invests in other technologies such as predictive and prescriptive analytics, natural language processing (through Google's BERT model), and cloud computing. Converting the transactional into transformational is IQVIA's main customer impact. Case in point: changing static configurable data set to a dynamic data

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**- Sankara Narayanan
Industry Principal**

set managed through ML algorithms or changing coded parameter-driven workflows to time-variable, dynamic data sets that drive workflows.

A common use case for the conversion from transactional to transformational is that of adverse FDA codes (which includes IMDRF coding): when complaints come in and reports must be filed with the FDA, it is necessary to use the appropriate FDA code that matches the description of the event. IQVIA has taken existing coding and descriptions of events and complaints and fed the data to an ML model so that when a user presents a new adverse event, their description of it (subjected to NLP) will

prompt the program to make a recommendation regarding the correct classification with an FDA code, although it is the end user who makes the final decision. In true ML fashion, this reinforces the consistency of reporting, as the model learns from the users it suggests to.

For all this, Frost & Sullivan applauds IQVIA as it offers a transformative eQMS based on innovative technologies and a partnership with Microsoft to help life science companies overcome the challenges of point solutions, aged and disconnected systems, and legacy technology.

Customer Ownership, Purchase and Service Experience

SmartSolve's roadmap drivers include regulatory concerns and innovation but, above all, it is the voice of the customers and their product advisory boards that prove truly determinant, which highlights the commitment that IQVIA expresses toward customers' opinions.

Furthermore, while IQVIA offers SmartSolve eQMS platform technology, providing comprehensive quality consulting services is also one of its best practices, which includes organizational change management, mock inspections and audits, system enhancements and support, and verification and validation services, among others. Where some of its competitors offer only solutions, IQVIA distinguishes itself by providing customers with both solutions and consulting services that advance a customer's quality maturity from the stage of development to that of successful leadership.

IQVIA's SmartSolve eQMS is purpose-built to meet the quality management needs of the life sciences industry. With more than one million global users, SmartSolve has managed more than 3 million documents, handled more than 26 million complaints, and conducted more than 37 million training certifications. IQVIA's solution enhances quality, improves compliance throughout the product lifecycle,

and enables life sciences companies to accelerate the time-to-market, increase the scale to meet changing market demands, and reduce quality costs and risks. The company also helps customers report on a global scale and obtain country-by-country views of quality management developments. In sum, IQVIA enables customers to implement and maintain a self-regulated quality culture while reducing data integrity risks within the organization. One of IQVIA's customer value proposition is that its integrated, end-to-end business processes cover everything from molecule to market (Pharma) and concept to market (Medical Device) encompassing clinical, real-world data, SRQ, and commercial.

Customers can buy and use a single SmartSolve module or a fully integrated suite with end-to-end quality management, thus allowing them to scale easily, grow quickly, and update their models as their businesses evolve with emerging market trends. SmartSolve allows IQVIA to serve various customers using the same software, from those with smaller footprints and in initial business stages to mid-sized and large enterprise life sciences companies operating in multiple sites and countries across the globe.

Conclusion

Life sciences companies need purpose-built, transformative, comprehensive, and advanced QMS. IQVIA's SmartSolve –enabled and powered by ongoing solution updates, solution integrations, user experience, and AI/ML– successfully addresses this need, improving user efficiency and accuracy.

Furthermore, IQVIA's AI-based Connected Intelligence brings innovation to safety, regulatory and quality (SRQ) functions and accelerates their digital transformation through SaaS and intelligence-driven simplification, automation and integration of processes and systems, thus enabling customers to derive more value from their work. Finally, IQVIA'S quality consulting services prove to be one of its best value propositions as they convert the company into not just a provider, but a trusted business partner. IQVIA's ability to accelerate the time-to-market, scale to meet changing market demands, and reduce quality costs and risks further enhance the customer value proposition.

For its strong overall performance, IQVIA is recognized with Frost & Sullivan's 2023 North American Enabling Technology Leadership Award in the QMS market for life sciences industry.

What You Need to Know about the Enabling Technology Leadership Recognition

Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

Best Practices Award Analysis

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

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Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- **Transformational Growth:** Industry Leadership



The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- **Mega Trend (MT)**
- **Business Model (BM)**
- **Technology (TE)**
- **Industries (IN)**
- **Customer (CU)**
- **Geographies (GE)**

