

Single Day Event

*SAS cloud-based technology
accelerates clinical research
intelligence*

Sherwin Zhang
SAS

Agenda



Introduction



Advanced Technology in Life Science



SAS Solution for Clinical Research



The Advantages of SAS Technology



CHALLENGE-

Deliver Clinical Trials ON-TIME, within BUDGET and COMPLIANCE



COMPLEXITY

*Clinical Trial
Designs*



DATA INTEGRITY

*COVID-19, Virtual,
Decentralized, Hybrid
Clinical Trials*



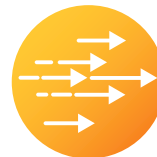
NEW DATA (ENDPOINTS)

*Wearables/Sensors,
Real World Evidence (RWE),
Images*



OUTSOURCING & EXTERNALIZATION

*almost 75% of all clinical trials
are run today by CROs*



SPEED TO INSIGHTS

*Inability to
investigate issues
near real-time*



Deliver **Better**, **Safer** products to patients **Faster**

With SAS, you can...



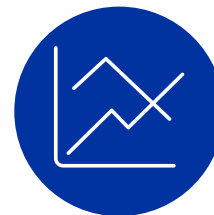
**Drive speed to
market**



**Support regulatory
compliance**



**Improve operational
efficiency**



**Advance innovation
and modernization**



Advanced Analytics & AI



Cloud-based Computing



Connected People & Devices

Agenda



Introduction



Advanced Technology in Life Science



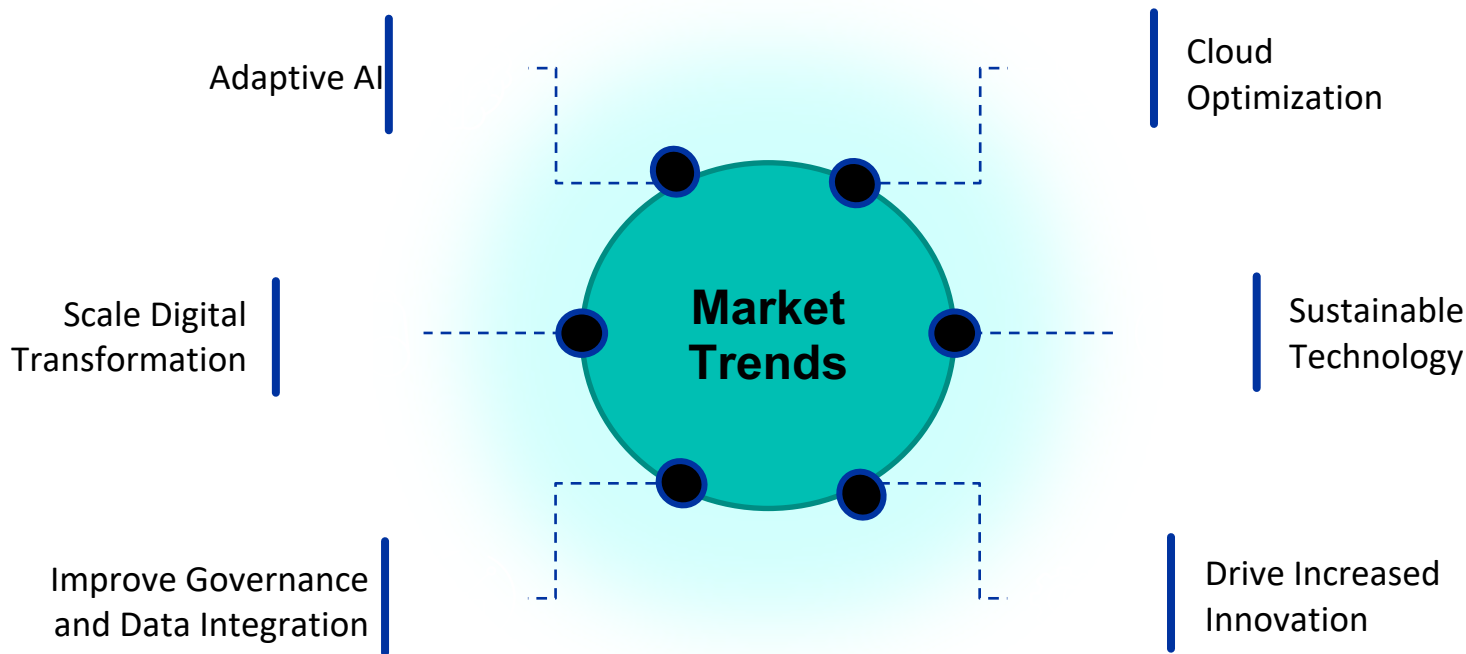
SAS Solution for Clinical Research



The Advantages of SAS technology

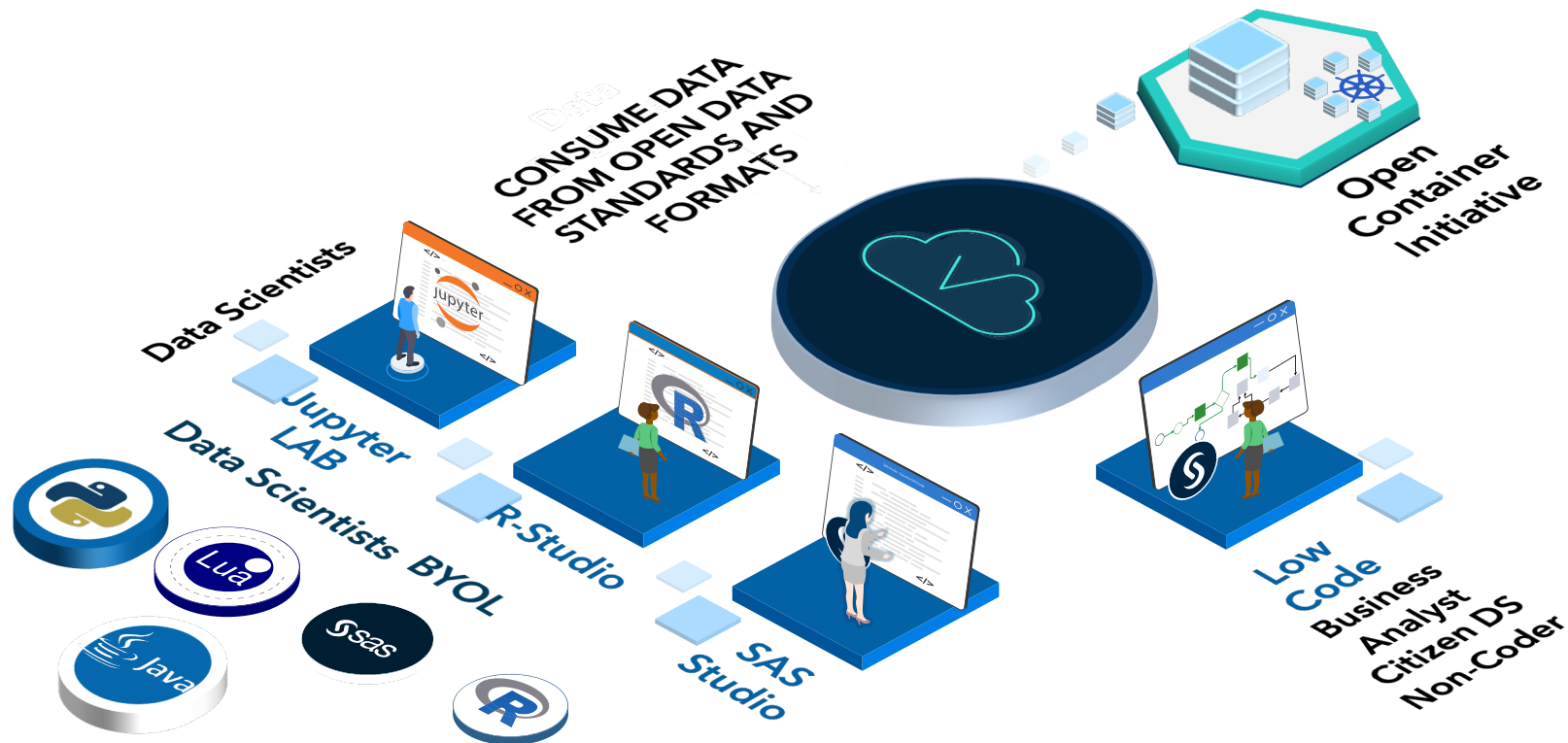


Market Trends to Reshape Health Care and Life Sciences



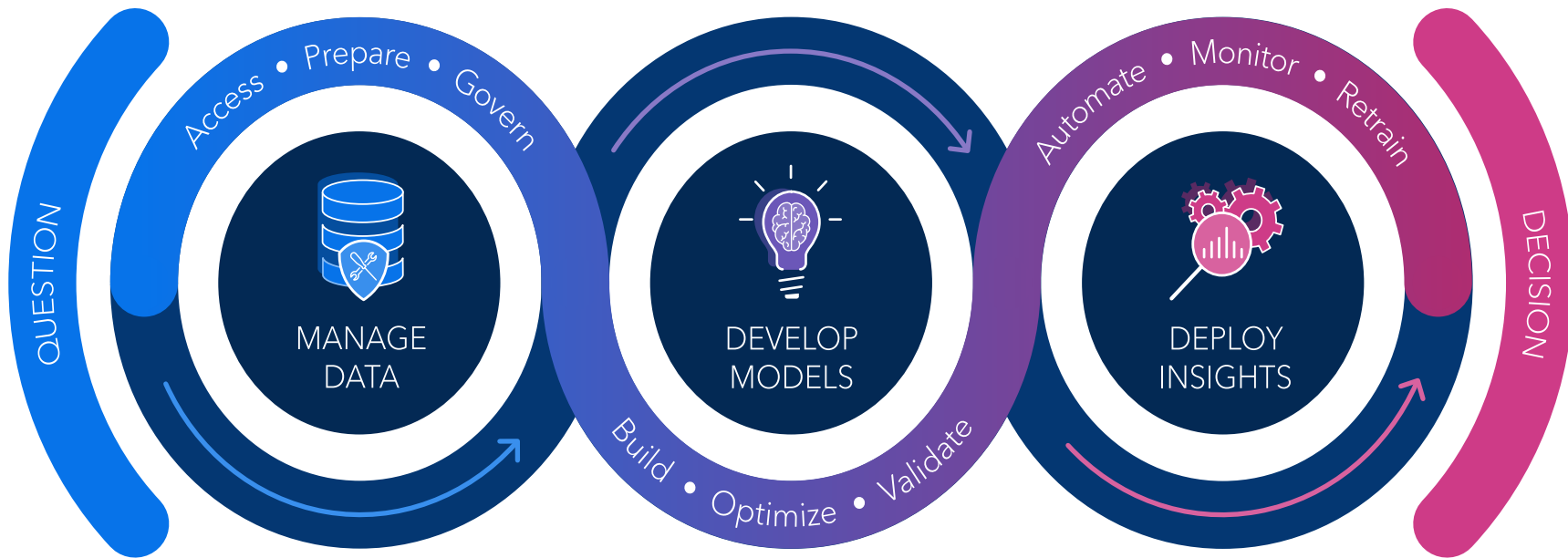


SAS Viya -A cloud native platform for AI and Analytics





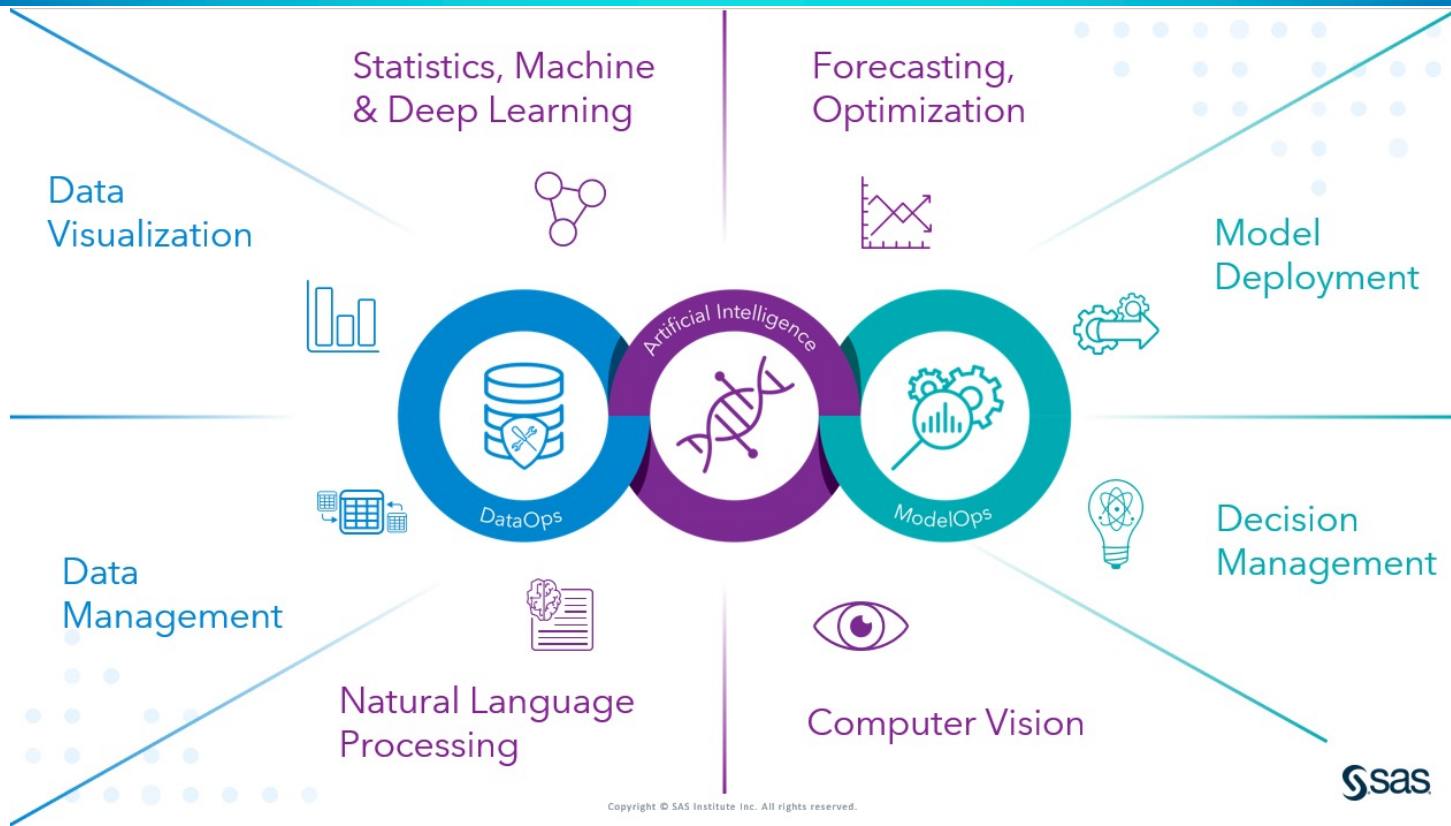
SAS Viya - Connects All Aspects of the AI and Analytics Lifecycle





SAS Viya

-Components to Support Entire Analytics Lifecycle



SAS Viya-Faster, More productive AI and analytics Platform



Innovate Faster

- End-to-End
- Automate Your Work
- Fast Model Deployment
- High-performance Analytics



Elevate Everyone

- Continuous collaboration
- All skill sets
- Open integration
- Combine multiple approaches



Results You Trust

- Governance
- Enable responsible AI
- Transparent insights
- Trusted partner



Analytics You Need, Delivered on Your Terms

- Frictionless access
- Agile development
- Flexible compute environments
- Deploy anywhere

Agenda



Introduction



Advanced Technology in Life Science



SAS Solution for Clinical Research



The Advantages of SAS Technology



Empower Innovation, Improve Lives

Powered by SAS Viya

Clinical Research Analytics

Reimagining drug development.

Clinical Trial Operations

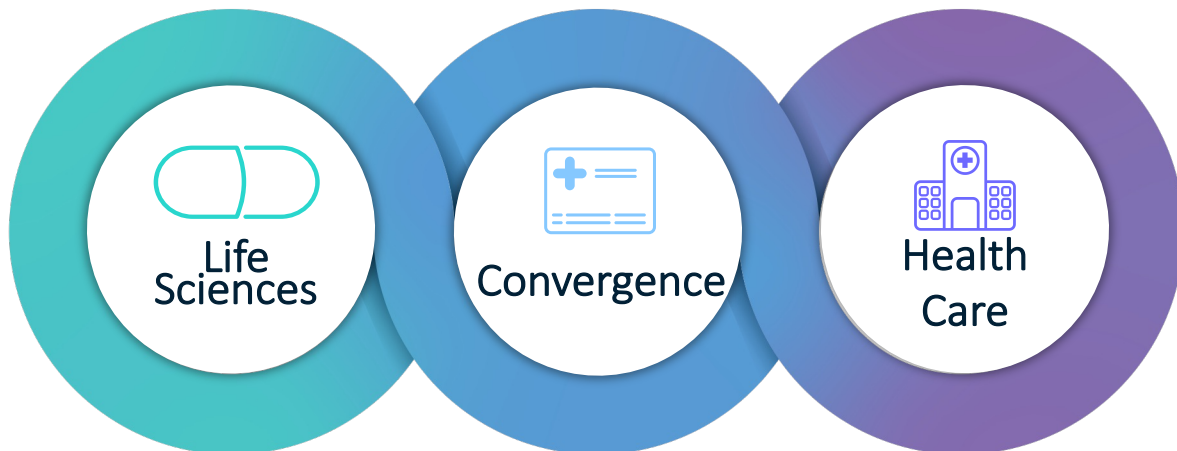
Comprehensive insight for patient-centric clinical trials

Connected Quality

Improving quality and inventory in manufacturing and supply chain.

Outcomes Research & Epidemiology

Maximize RWD to support product strategy.



Market Access & Commercial

Optimize decisions across the product life cycle.

Patient and Member Engagement

Proactive customer-centric communication, outreach and case management.

Population Health

Building healthier communities through analytics

Health Care

Financial Insights

Use analytics to adjust for risk and reduce costs, such as fraud, waste and abuse.

Health Care Operations

Actionable insights leads to more efficient health care.



SAS Life Sciences Product Ecology



Clinical
Research
Analytics



Outcomes
Research &
Epidemiology



Connected
Quality



Market Access &
Commercial



Population
Health



Health
Operations



Health Care
Finance





SAS Life Sciences Analytics Framework

A stable cloud analytics platform to Secure Product Approval

Clinical data repository

Statistical computing environment

Collaborative workflows

Regulatory reporting Management insight

A central store with a build in rigorous governance framework-

Provide role based access and version control to provide complete auditability.

All data and metadata for each clinical trial is held in one secure, tamper-proof environment

data lineage is traceable from end to end.

A powerful, open analytics engine meet advanced SCE requirements-

Empowers statisticians, data scientists and programmers to write code and run analyses in SAS, R or Python.

Integrate seamlessly to SAS Viya

-to run machine learning models and integrate the results back into the clinical data repository.

A GxP-qualified cloud platform that can access securely anywhere and from any device

Integrates seamlessly with internal and third-party workflow management tools

-simplifying handoffs between internal and external stakeholders and making it easy to adapt to new clinical trial methodologies.

A fully governed environment

-Ensure that both data and analyses are documented and reproducible.

With tools to create and manage

regulatory submissions that comply with all relevant **data standards** and formats.

(GxP and CDISC compliance)

Powerful dashboards and reporting that enable users in different roles from data scientists to trial managers and executives

–to view the data that's relevant to them in real time.

-helps to identify and resolve issues quickly and

-maintain momentum in clinical trials to get new medicines to market faster

Agenda



Introduction



Advanced Technology in Life Science



SAS Solution for Clinical Research



The Advantages of SAS Technology



Drive speed to market



SAS helps you reliably speed data into insights and accelerate your product's path to submission. Free up more time to focus on results.

- A could native, single, open, integrated, end-to-end platform
- Seamless integration for all stakeholders across geos, including outsourced partners
- Near real-time access to all data
- CDISC metadata driven approach reducing manual efforts and re-work
- Rapid GxP-qualified deployment by SAS managed services
- Automation through workflows and support for current and future integrations



Support regulatory compliance



SAS helps you avoid delays on regulatory submissions and reduce the risk of non-compliance.

- A secure, centralized repository meeting regulatory requirements
- Enabling GxP and CDISC compliance
- Auditable actions, traceability of data and repeatability of analysis (SAS and R)
- comprehensive platform that fulfils all the requirements of the SCE.
- A standards-driven approach integrated with program development and analysis



Improve operational efficiency



SAS helps you make informed operational decisions with powerful predictive and optimization analytics.

- Accelerate study start up and optimize the enrollment processes
- Run simulations to keep studies on track and inform site supply
- Leverage real-world data to inform operational decisions



Advance innovation and modernization



SAS brings you robust analytical capabilities and extensive life sciences industry expertise to bring your organization a competitive advantage through analytics.

- Shift from managing compliance to collaboration and data insights
- Enables adoption of AI and IoT capabilities in support of decentralized clinical trials and modern trial designs
- Full integration with open source
- Seamlessly scale from pilot to enterprise-wide implementation

Thank you !



**The Global Healthcare
Data Science Community**

Contact Channels

📞 UK +44 1843 609600
✉ office@phuse.global
🌐 phuse.global

Social Media

🐦 [@phusetwitta](https://twitter.com/phusetwitta)
📘 [/phusebook](https://www.facebook.com/phusebook)
▶ [/phusetube](https://www.youtube.com/channel/UCphusetube)
🌐 [/company/phuse](https://www.linkedin.com/company/phuse)