excelra

Where data means more

Informatics Solutions

Drug Discovery and Research

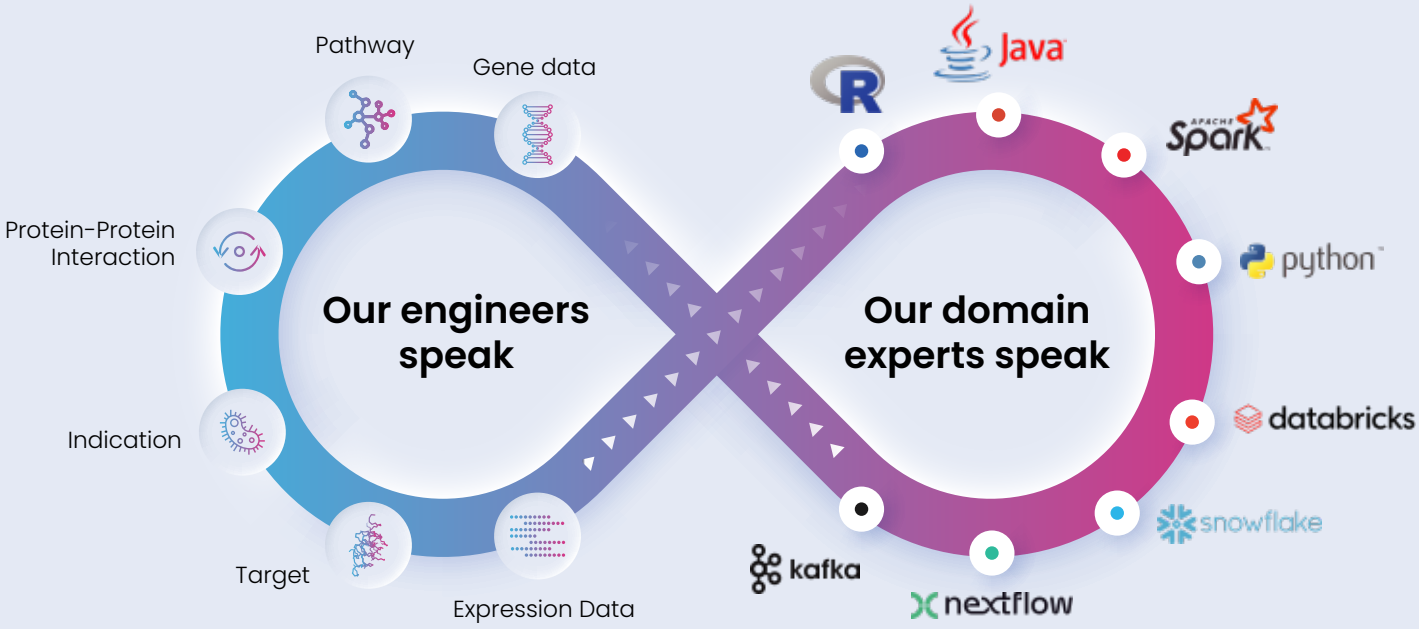
https://www.excelra.com/our-services/technology/

Excelra offers scientific informatics services & solutions infused with expertise in the drug development domain, specifically designed for research data functions within the pharmaceutical and biotechnology sectors. Science and technology is blended to create innovative solutions that bridge the gap between scientific understanding and technological advancement.

Our approach involves effective communication and collaboration across interdisciplinary teams, facilitated by our ability to speak both the languages of science and technology domains fluently.

With extensive knowledge and experience in handling drug discovery and research data, coupled with our deep understanding of informatics engineering, we provide domain-led solutions that drive transformative outcomes in accelerating research.

At Excelra, we pride ourselves on delivering business-first solutions that leverage the synergy between science and technology to address complex challenges and propel our clients toward success in the rapidly evolving landscape of life sciences R&D.



Seamless interplay of domain experts and engineers supporting 120+ active customers

01 Scientific Application Development

Empowering Innovation Through Customized Solutions

At the intersection of science and technology, our Scientific Application Development services cater to the unique needs of Lab Scientists.

We excel in understanding requirements by collaborating closely with scientists to define precise goals, ensuring our solutions align with their needs. Through agile innovation, we rapidly develop functional proofs-of-concept (PoCs) and enterprise-ready applications to accelerate progress. Our flexible delivery approach ensures tailored deployment and seamless integration across diverse operational environments.

Solutions We Provide

Workspace collaborator applications

Workspace collaborator applications- Facilitate seamless collaboration between teams with tools designed to improve communication, data sharing, and project coordination. These applications enable scientists and researchers to work together efficiently, regardless of location.

Early R&D data products

Streamline early research and development processes with data products that capture, analyze, and visualize key insights. These solutions help accelerate decision-making and provide a strong foundation for downstream activities.

Workflow management tools

Optimize research and operational workflows with tools that automate repetitive tasks, track project progress, and enhance overall productivity. These solutions enable better resource allocation and timeline adherence.

Biomedical data aggregators

Centralize and integrate biomedical data from multiple sources into a unified platform. This enables faster insights, supports complex analyses, and enhances data-driven decision-making in research and clinical settings.

Compound registration platforms

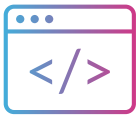
Simplify the process of registering and managing chemical compounds with secure and user-friendly platforms. These systems ensure accurate record-keeping, compliance, and easy retrieval of compound information.

Clinical study repositories

Efficiently store and manage clinical study data with repositories that ensure accessibility, compliance, and scalability. These solutions support robust data governance and foster collaboration across clinical research teams.

Our Capabilities

Ideate, Design, and Prototype: Work alongside biopharma and IT experts to co-create product ideas, business cases, and mock-ups.



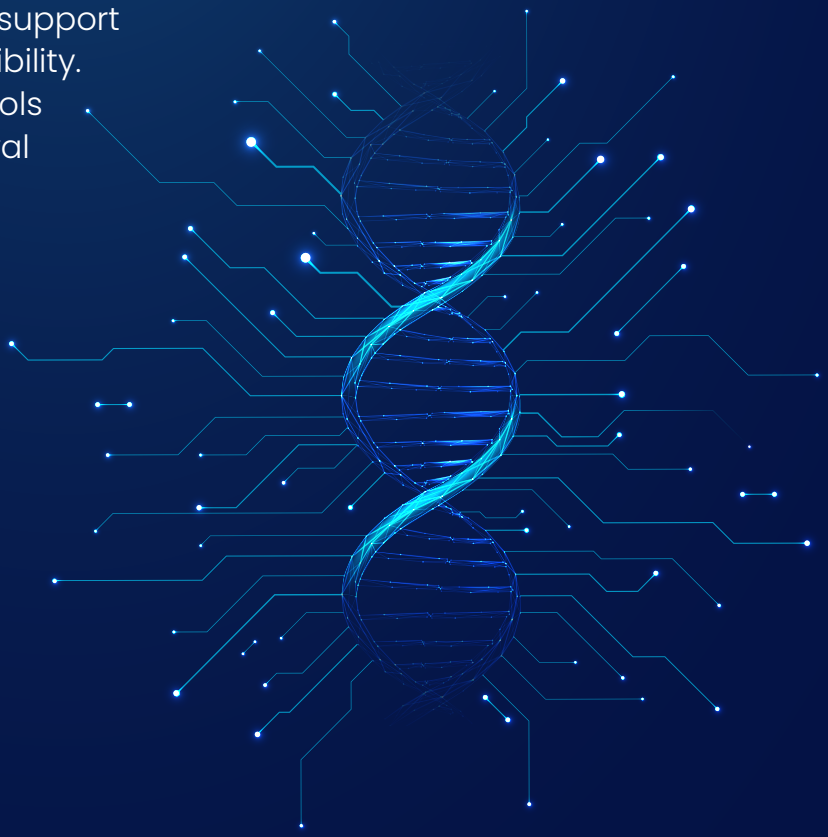
Product Development: Build or modernize applications using low-code/no-code methodologies and bio-led wireframes.

Regulatory-Ready Testing: Ensure quality and compliance with GxP-compliant independent testing services.

02 Scientific data management solutions

Accelerating your journey from data to insights

We offer data management solutions tailored for pharmaceutical and biotechnology companies involved in drug discovery and research. Our expertise includes sample management, workflow development, ontologies, and multi-omics data analysis. We develop centralized systems and secure data repositories to support efficient storage, integration, and accessibility. Our approach incorporates advanced tools like generative AI to enhance data retrieval and analysis, facilitating informed decision-making.



Solutions We Provide

Helped a large pharma client

Deploy a enterprise-wide customised instance of the Open Targets Genetics platform for them to analyze, annotate and visualize their genetics studies and derive actionable insights and drive their target research programs

Migrated ~40 OMICs data analysis workflows

From DNAN to a GCP environment thereby bringing down research overheads for a large pharma by ~40%

Developed an intuitively usable system
for OMICs data storage, search, cataloguing, and retrieval from multiple data sources adhering to FAIR data principles, to be used by multiple personas in R&D, to derive insights from OMICs data, and drive decision-making in various stages of drug development

Built an interactive web application
That enabled medicinal chemists in a biotech to easily mine, analyze, and visualize the large-scale SAR data generated via proteome-wide chemical screening at the client's end to support their TARGET IDENTIFICATION and prioritization initiatives further.

Our Capabilities

Cloud data engineering/data operations: Data ingestion, storage, and managing ETL/ELT operations. Orchestrating data pipelines for smooth and highly manageable end-to-end functioning.

Custom data lakes/warehouses: Data roadmap, Storage optimization and strategy. Design, develop, and manage data lake/warehouse.

Data visualization: Developing interactive dashboards and platforms to present insights, track key metrics, and enable data-driven decision-making.

03 R&D Cloud Enablement

Empowering Scientific Innovation with Secure IT Solutions

Unlock the full potential of your scientific endeavors with robust, secure, and scalable IT infrastructure designed specifically for research and development.

Our expertise lies in creating tailored IT solutions to meet the unique demands of scientific research. We provide comprehensive IT setup for OMICs data, enabling seamless management and analysis of complex datasets. Our cloud migration and modernization services help you transition effortlessly to modern, cloud-native solutions designed for scientific applications. Additionally, we specialize in secure and streamlined data access management, ensuring your critical study data is always accessible while maintaining the highest standards of security.

Solutions We Provide

Ready-to-use migration templates

Pre-configured templates streamline the migration process, reducing time and effort for transitioning workloads to the cloud. These templates ensure seamless integration with existing workflows and applications.

Secure data environments for early R&D and pre-clinical needs

Custom-built, secure environments designed to handle sensitive R&D data, providing reliable infrastructure for early-stage research and pre-clinical trials.

Advanced IT infrastructure for bioinformatics:
Scalable and high-performance computing solutions tailored for bioinformatics, enabling efficient analysis of genomic, proteomic, and other complex scientific data.

Comprehensive privacy frameworks for compliance and security:
Robust privacy engineering frameworks ensure adherence to regulatory standards while safeguarding sensitive data from breaches and unauthorized access.

Our Capabilities

Cost-effective, scalable infrastructure tailored for R&D without the need for large IT teams.

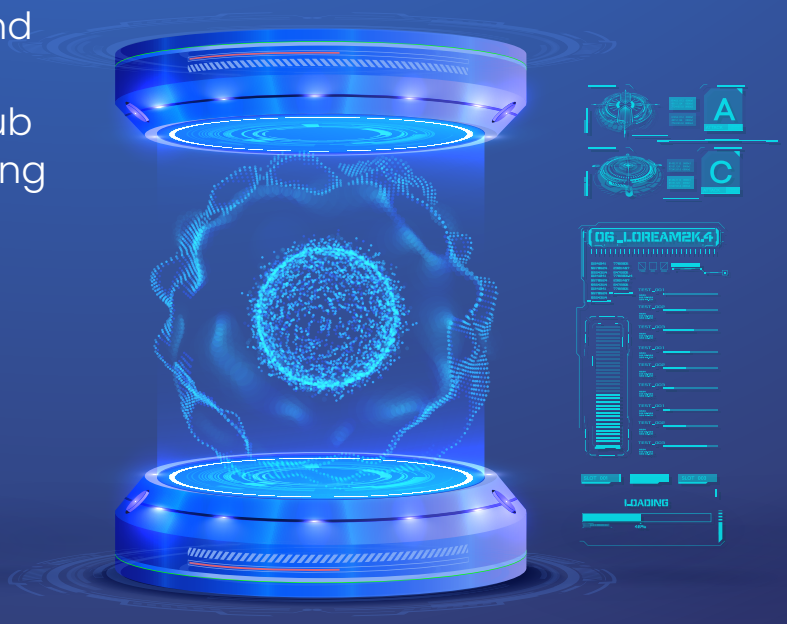
From on-premises to cloud or specialized life sciences (LS) cloud frameworks. Modernize Bio IT applications with ease.

Advanced privacy engineering and OT risk management frameworks to safeguard your research.

Experience the future of scientific IT with our R&D Cloud Enablement solutions!

04 Lab informatics services

In most organizations, the experimental data capture starts with the ELN and other lab informatics pplications. Streamlining laboratory operations with an optimized lab informatics landscape is a critical aspect. Our lab informatics solutions enhance data integrity, support compliance, and improve research productivity, transforming your laboratory into a hub of efficiency and innovation and making your data born-fair.



Business consulting and scientific advice

Application implementation and delivery

Portfolio / program / project management

Packaged Solutions

Migration, Integrations and custom application development

Our Capabilities

Typical implementation journey

Typical Implementation journey without a lab informatics partner is a twisted path and takes longer time to implement and the approach is mostly disjointed

Define the Requirements

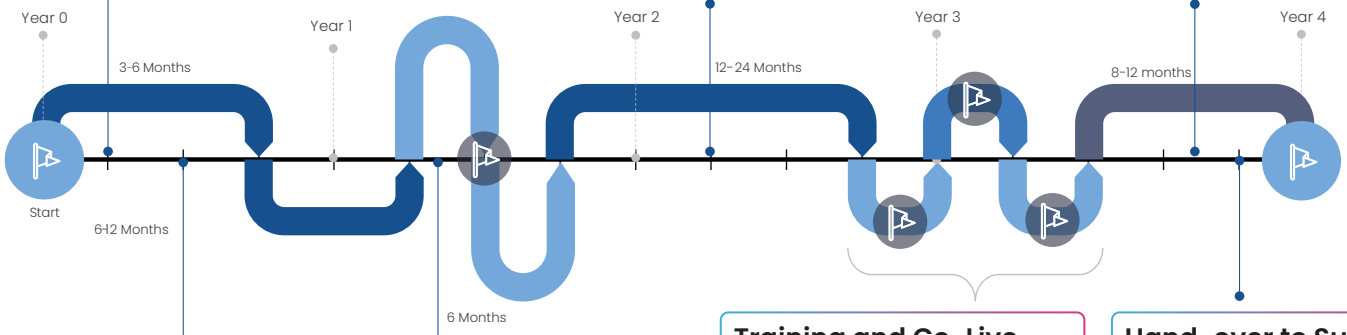
- Define the requirements including the features and functionality required to meet the organisation's needs.
- This stage involves identifying the specific needs of each team, including scientists, lab managers, IT personnel, and other stakeholders

Implementation and Data migration

- Configure the ELN to meet the specific requirements of the organisation. **Note: this requires domain and specific ELN/LIMS knowledge.**
- This may involve customising the software to match the organisation's workflows, setting up security protocols, and configuring data backup and recovery
- Migrate data from existing electronic systems into the new ELN.

Scale-out and Integrations

- Implementation of other workflows
- Work on the integrations to automate manual tasks
- Scale-out to other sites and new departments



Select an ELN/LIMS Vendor

- The organisation needs to identify and evaluate potential ELN vendors.
- This stage involves conducting a thorough review of each vendor's product offerings, support, and pricing.

Develop an Implementation Plan

- With a vendor selected, the organisation needs to develop a comprehensive implementation plan.
- This plan should include timelines, budgets, and resources needed for each implementation stage.

Training and Go-Live

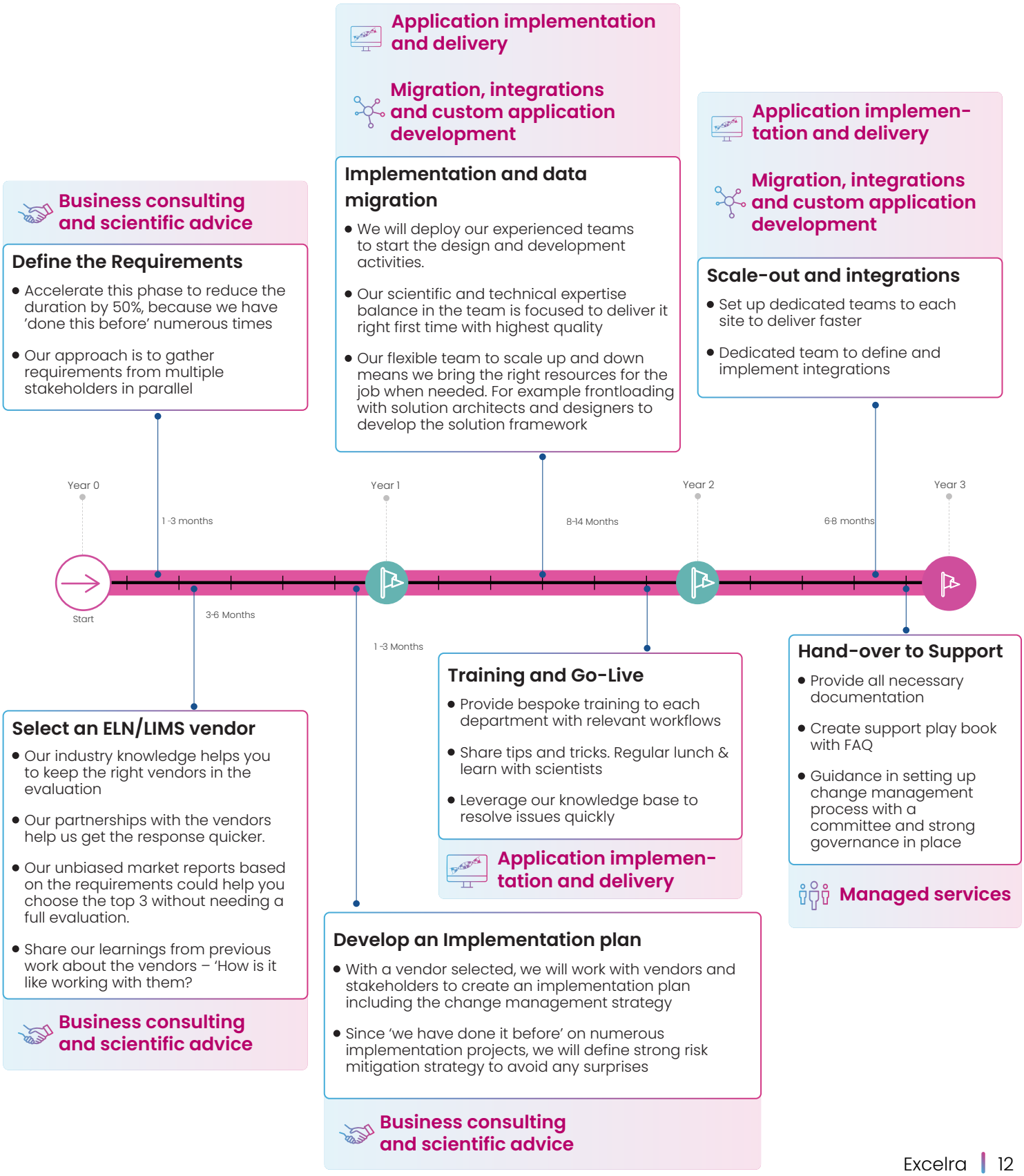
- Train users to ensure they understand how to use the ELN effectively
- This stage includes monitoring the system for issues and providing hyper care support to users as needed.

Hand-over to Support

- Project phase ends
- Hand-over to operational support
- Change process and governance in place

Our approach

Excelra's approach streamlines the implementation right from the technology selection to handing over to the operation support. Overall saving upto 25% of the time and bringing value to business quicker



Why Excelra

Intersecting science and technology

Our technology experts and scientists work in synergy leveraging cutting-edge digital innovation and scientific know-how.

Experience and expertise

We have a proven track record of data and application migration, developing data environments for early R&D and pre-clinical research, and configuring infrastructure for bioinformatics projects.

Scalability and modularity

We design products with scalability and modularity at their core. They're not one-size-fits-all. They're any size you want.

Deep Pharma expertise of working with 16 of the top 20 pharma and biotech firms

A tradition of empowering scientists by implementing scalable, user-friendly applications for their data problems

Digital Trust

bsi. certified

HIPAA COMPLIANCE

21 CFR PART 11 FDA COMPLIANCE

Google Cloud Partner

EU GDPR COMPLIANT

ISO

aws PARTNER Select Tier Services

Microsoft Partner Microsoft

Gold application integration
Silver application development

Where data means more

excelra

SAN FRANCISCO • BOSTON • LONDON • GHENT/GENT • UTRECHT • HYDERABAD

Contact us to learn more: **marketing@excelra.com**

www.excelra.com