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LIFE SCIENCES INNOVATION WITH GENERATIVE AI

Prepared by SoftServe

FUTURE OF LIFE SCIENCES WITH GENERATIVE AI

Life science organizations have been using advanced analytics and AI technologies to make clinical development and commercial operations more efficient and to gain valuable insights. Now with Generative AI, life science executives must understand how to maximize their investment in this next phase of AI technology while avoiding the regulatory compliance and legal risks. Here are the key challenges and priorities these segments face as they think about adopting Generative AI.

KEY CHALLENGES

FURTHER R&D INVESTMENT	As new approaches to drug discovery and devices evolve, companies must continue to rapidly innovate and reduce the time-to-market, requiring an investment in AI-driven drug discovery.
INCREASE SALES EFFICIENCY AND PATIENT LOYALTY	The wealth of data life science organizations has access to now enables a personalized, omnichannel, and AI-driven approach to engagement with clinicians and patients. This approach can have a meaningful impact on both revenues and patient health.
DEMONSTRATING CLINICAL VALUE	As competition increases alongside pricing pressures and the shift to value-based contracts continues, life science organizations need to better mine and understand their data. This is essential for generating evidence to support safety and efficacy claims.
CONNECTED SUPPLY CHAIN	Life science organizations are now exploring the use of AI-driven forecasting and supply chains to improve operational efficiency and sustainability. This includes smart factory technologies to intelligently automate production facilities and control tower technologies to connect the supply chain.
DIGITAL HEALTH SOLUTIONS	Companies are now developing products that enable people to take greater control of their own personal health. This involves digital solutions that facilitate more informed choices based on personal insight and novel delivery mechanisms like apps and digital therapeutics.

GENERATIVE AI BUSINESS BENEFITS

Generative AI has the potential to revolutionize the broad life sciences ecosystem in ways we can only begin to predict. It's critical that life science organizations prepare for and understand the most promising applications as shown below.

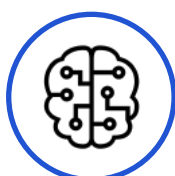Biomedical or medical literature review

Analysis of clinical data for drug repurposing

Identification of new drug targets

Design of more efficient clinical trials

Medical science intelligence
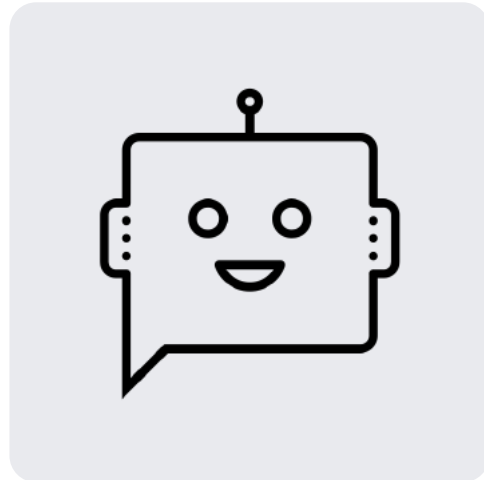
Improve patient support and experience

Predictive maintenance of medical devices

Regulatory filing
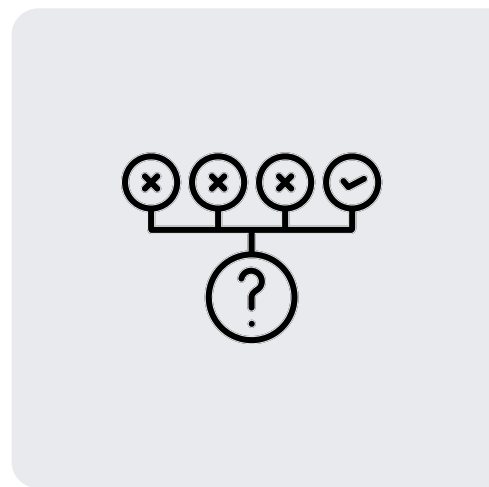
PROMISING GENERATIVE AI USE CASES

DIGITAL HEALTH CHATBOT

Virtual assistant to automate tasks like filling out forms, answering questions, providing statuses, and enhancing user experiences for HCPs, life sciences sales teams, and patients.

CLINICAL TRIAL OPERATIONS

From automating patient narratives and medical coding to improved trial designs, these use cases promise to reduce clinical trial time while increasing a trial's success.
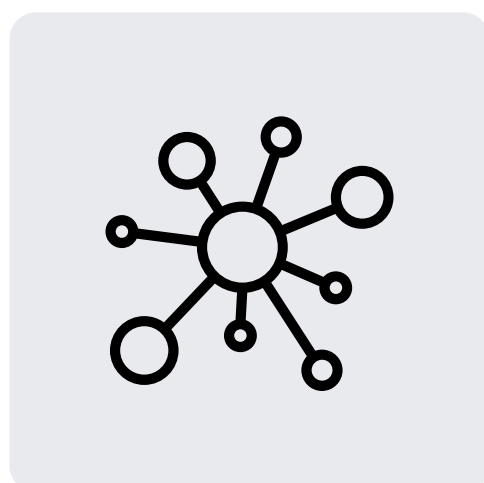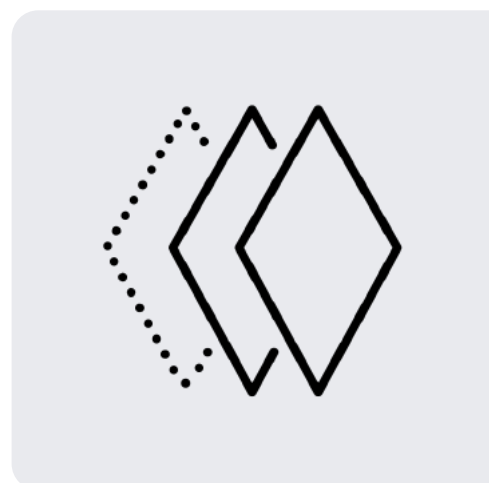
DRUG DISCOVERY AND DRUG REPURPOSING

Gen AI models can be used to predict the properties of molecules and design drugs that are more effective with fewer side effects.

IMPROVE PRODUCT TESTING AND QUALITY

Using Gen AI in design can produce a higher-quality product, resulting in increased attractiveness and market appeal.

REAL-TIME DATA INSIGHTS AND SCENARIO PLANNING

Model and predict issues in manufacturing or within supply chains to ensure there are no issues getting devices or therapies to patients when they need them.

GET STARTED ON YOUR GENERATIVE AI JOURNEY

LET SOFTSERVE ACCELERATE YOUR GENERATIVE AI JOURNEY WITH THREE OFFERINGS

Don't be left behind in the race to harness the disruptive innovation of Generative AI. SoftServe defined **Generative AI adoption patterns** that are designed to help you navigate the complexities of this emerging technology. We will help you select an appropriate adoption pattern or a combination of them to build tailored solutions that meet your enterprise's unique needs. Expedite your journey towards a new way of productivity and creativity with SoftServe Generative AI offerings, positioning your business as a leader in the industry:

AI DISCOVERY

From Interest to Discovery: Generative AI Ecosystem and Implications for My Business

- Use Cases and Business Impact Priorities
- Data Quality and Availability
- Technology Trade-offs and Architecture
- Technical Feasibility with POC

AI LAUNCHPAD

Launchpad to Innovation: Evidence-Based Exploration and Deployment

- Generative AI Lab
- AI Launchpad Program for Rapid Experimentation
- Value Stream Mapping and Use Cases
- POC/POV Pipeline

AI ADOPTION

From Insight to Impact: Rapid Scaling and Adoption in My Organization

- Generative AI Adoption Roadmap
- Technology Strategy
- Data Strategy
- Change Management and AI Governance

- Generative AI Solution Development
- Generative AI in Product and Engineering Teams

It's urgent and the time to start is now. But you know that Generative AI is not a deployment sprint. With SoftServe's experts to address your unique enterprise needs and guide you through possible adoption options, you will move past the hype and harness its benefits for your enterprise.

Learn more about SoftServe's Generative AI Lab, our view on ideal uses cases, how to get started, and more. Visit us at our Generative AI website page.
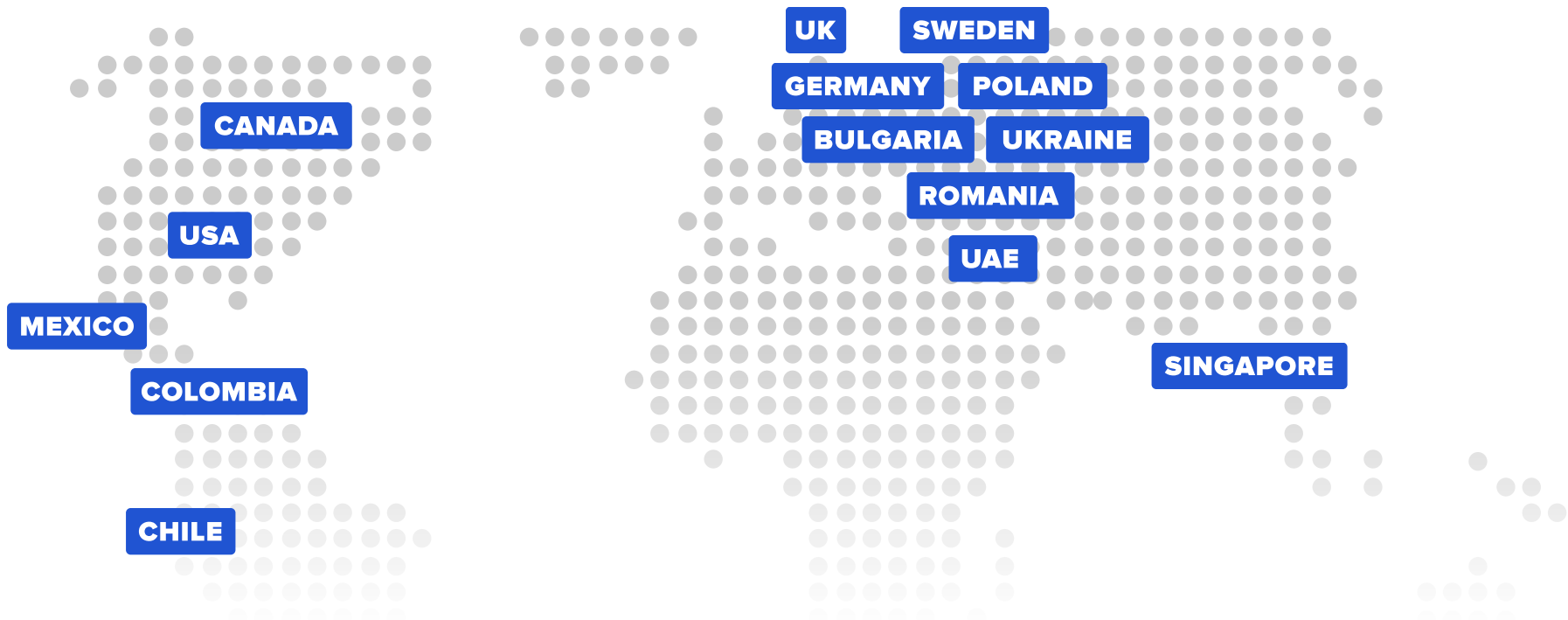
YOUR PARTNER FOR THE FUTURE

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30 Years of Experience   **98%** Client Retention   **14** Countries of Operation   **58** Offices Worldwide

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ROMANIA

USA

UAE

MEXICO

COLOMBIA

SINGAPORE

CHILE

GOOGLE CLOUD EXPERTISE

As a Google Cloud Partner and the winner of the 2020 Google Cloud Partner of the Year Award for Machine Learning, SoftServe is committed to helping customers solve their most pressing business challenges. SoftServe utilizes Google Cloud's AI ecosystem, including tools such as Google Cloud Vertex AI and Generative AI App Builder. Learn more

| **120+** | **690+** | **100+** | **3** |
| GCP Enabled Customers | GCP Certified Recources | Data Science Experts | Anthos Fellows |

AMAZON WEB SERVICES

As an APN Premier Services Partner, SoftServe acts as an exceptional cloud guide, vastly decreasing the time to achieve cloud value. By doing so, SoftServe ensures that your AI initiatives unleash the full potential of AWS Machine Learning services, such as Amazon Bedrock and SageMaker, and that they are deployed in accordance with AWS Well-Architected best practices. Learn more

| **500+** | **100+** | **50+** | **11** |
| AWS Certified Resources | AWS Certified Solution Architects | AWS Professional Certifications | AWS Competencies |

MICROSOFT

Innovate with purpose, rationalize costs, and drive efficiencies with Microsoft Azure's open and flexible cloud computing platform. Leverage Azure OpenAI and Machine Learning services to deliver next-generation AI solutions. As a Gold Microsoft Partner, SoftServe enables your business to build and deploy on your terms — both today and in the future. Learn more

| **250+** | **19+** |
| Azure Certified Professionals | Years as a Microsoft Partner |

NVIDIA

As an NVIDIA Service Delivery Partner, SoftServe harnesses NVIDIA's cutting-edge technologies, like GPU-accelerated compute infrastructure, to deliver robust AI solutions. Leveraging NVIDIA's NeMo Service, SoftServe streamlines the development of Generative AI products, driving rapid digital transformation. Learn more

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DEEP TECHNOLOGY EXPERTISE IN AI/ML

HUMAN-FIRST APPROACH TO DESIGNING EFFECTIVE EXPERIENCES

INDUSTRY EXPERTISE AND PARTNERSHIPS WITH CLOUD SOLUTIONS PROVIDERS

LET'S TALK