



Revolutionizing Healthcare Operations with 50% Efficiency Boost using AI-Driven Healthcare Solutions with AWS

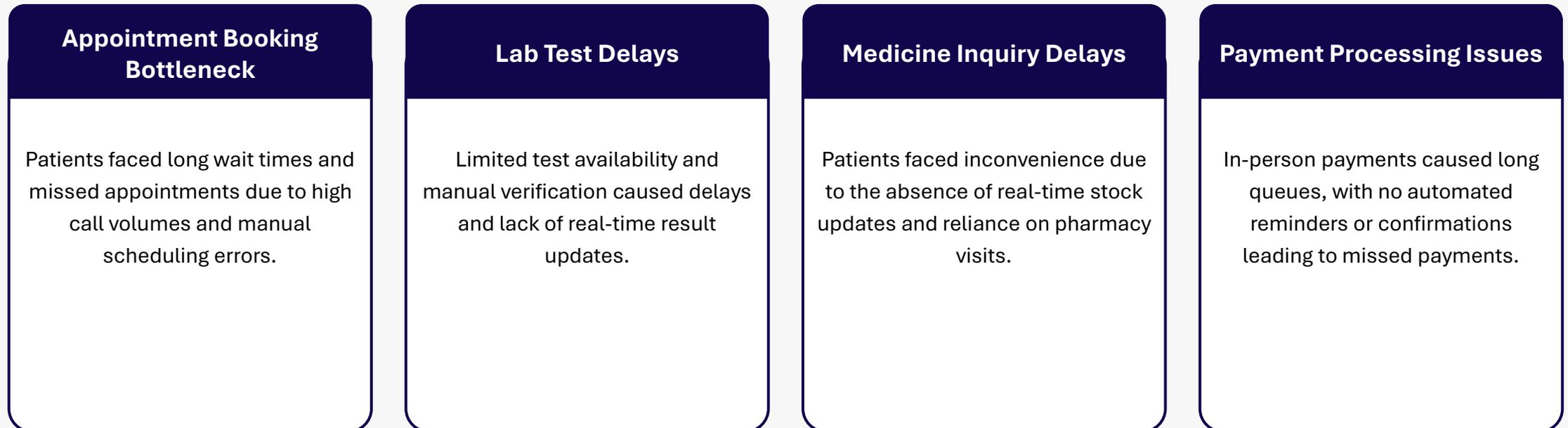
Client Overview

A leading healthcare provider with a network of hospitals and diagnostic centers faced inefficiencies in managing patient interactions. Patients experienced long wait times, manual appointment scheduling issues, and difficulty accessing medical services such as lab tests and medicine availability.

Challenges

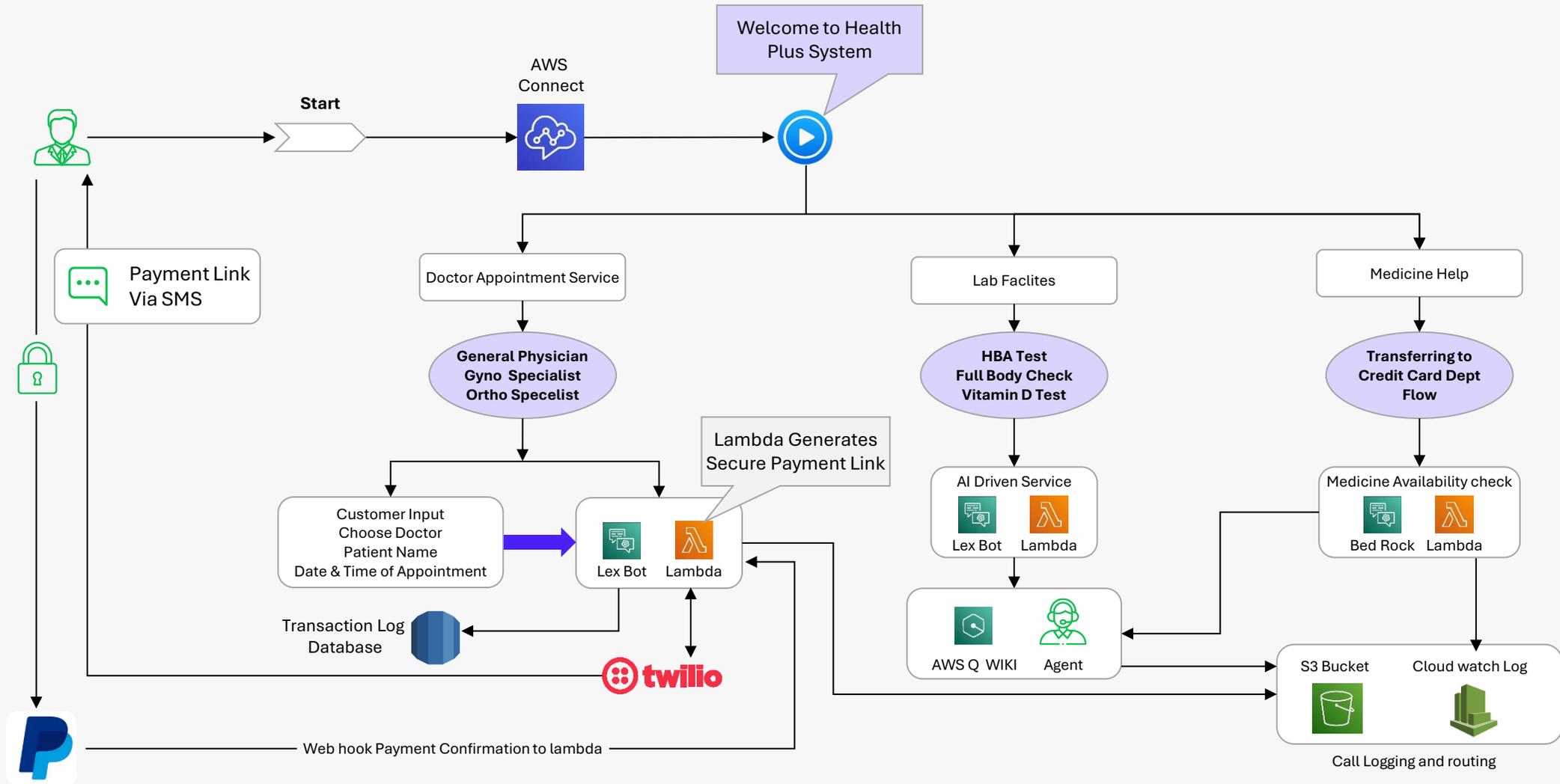
The healthcare provider struggled with operational inefficiencies in handling high call volumes for appointment scheduling, lab test bookings, and medicine availability inquiries. The manual processes led to patient dissatisfaction and increased administrative workload.

Healthcare System Process



AWS Connect center Healthcare System

Transformation Through AI



AWS based AI driven Solutions

AWS Connect, Amazon Lex, and AWS Lambda have been implemented to automate patient interactions and improve service efficiency.

AI-Powered Appointment Booking

An Amazon Lex chatbot with AWS Lambda automates scheduling, checks doctor availability, and sends SMS confirmations via Amazon SNS.

Smart Lab Test Scheduling

AWS Connect and Lambda enable real-time test booking, schedule verification, and automated SMS/email result notifications.

Real-Time Medicine Checker

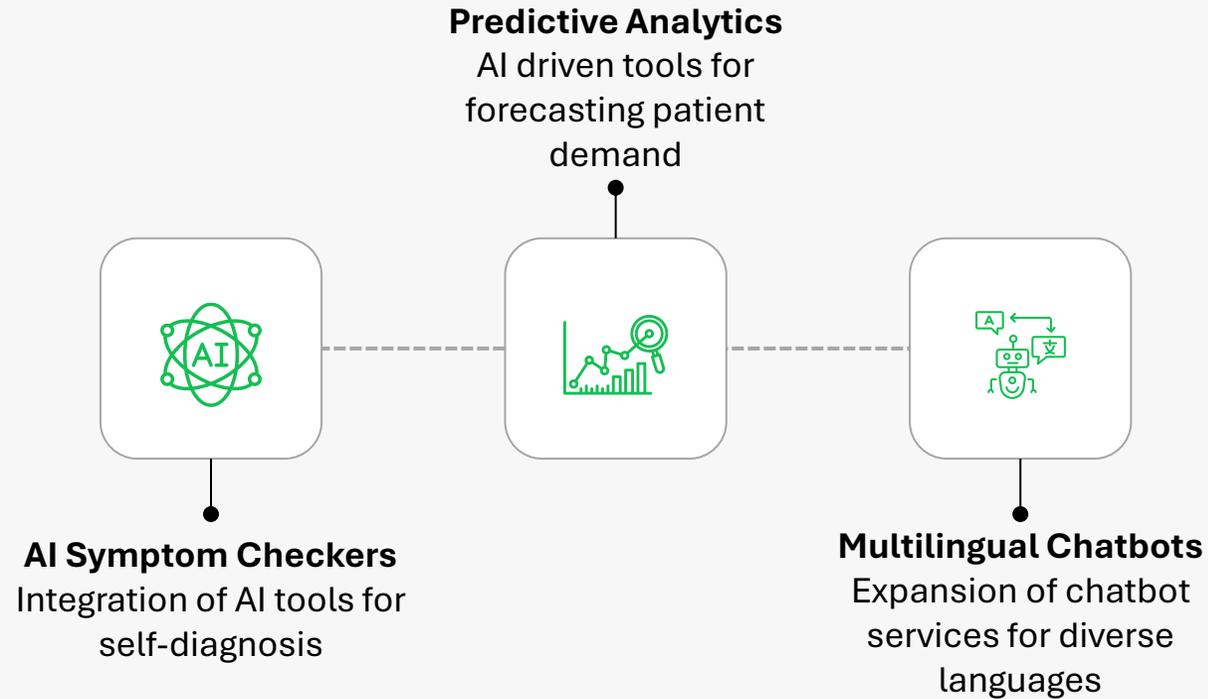
An AI chatbot with AWS Lambda queries pharmacy databases for stock availability and sends automated restock alerts.

Seamless Secure Payments

AWS Lambda integrates Stripe/PayPal for payment links, with Twilio SMS and AWS Connect handling confirmations.

Future Enhancement in Healthcare System

Transformation Through AI



Business Outcome

The AWS AI-driven Healthcare system with AI implementation delivered measurable improvements across multiple metrics:

Optimized Appointment Scheduling

Automated booking cut call center workload by 50% and reduced patient wait times by 40%.

Faster Lab Test Processing

AI-driven scheduling slashed test booking delays by 60% and sped up result delivery by 30%.

Instant Medicine Access

Automated inquiries cut resolution time from 10 to 1 minute with real-time stock updates.

Seamless Payment Experience

Online payments reduced hospital queues by 70%, while automated confirmations lowered billing disputes by 30%.



Integrating AI-driven automation with AWS Connect and Amazon Lex transformed the healthcare provider's operations, enhancing efficiency, reducing patient wait times, and improving service quality.

- **Optimized Resources** – Automated scheduling, lab test bookings, and medicine inquiries to streamline workflows.
- **Seamless Patient Experience** – Enabled real-time updates, ensuring smooth and hassle-free interactions.
- **Reduced Administrative Burden** – Minimized manual effort, allowing staff to focus on patient care.
- **Enhanced Compliance & Financial Performance** – Strengthened regulatory adherence while boosting operational efficiency.

This implementation showcases how AI-powered healthcare solutions can revolutionize patient engagement, improve accessibility, and create a secure, patient-centric ecosystem.

About Us

Transformation Through AI

4100+ Employees Worldwide
204 Million USD Revenue
18 Development Centres



Global Footprint

USA, India, Europe, APAC
Established in 1993



Services

Digital Product Engineering (DPE),
Custom Application, Mobility,
Testing, Knowledge Services,
Customer Experience



Digital Technology

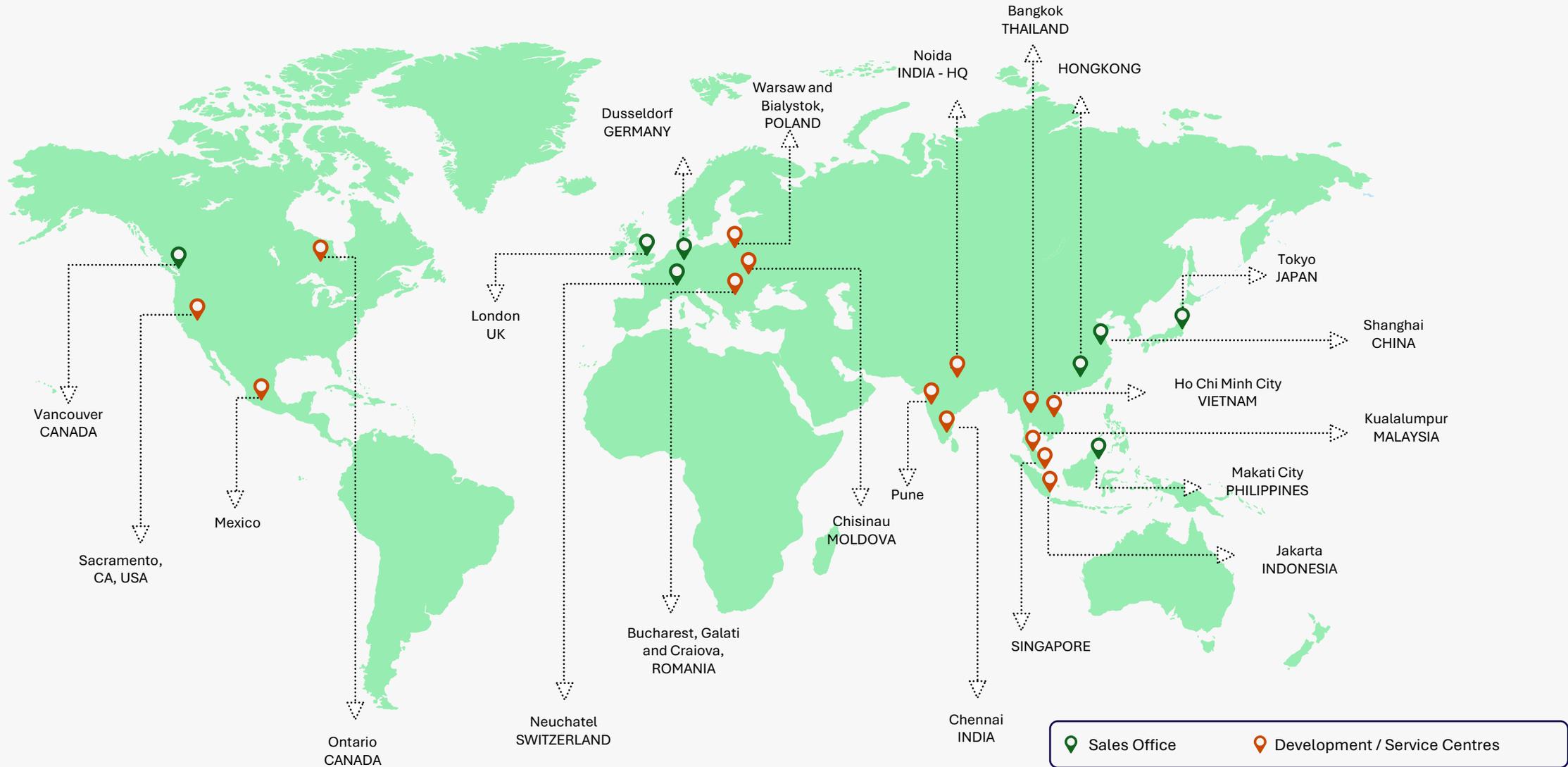
Cloud & DevOps, Data & Analytics,
AI / ML, Embedded, Automation,
Enterprise Packaged Services



Verticals

Telecom & Media, Tech, Internet,
and Platforms, Healthcare,
Banking & Financial Services,
Manufacturing, Logistics,
Automotive, Public Services

Global Presence





Ready to drive efficiency and better outcomes? Let's discuss how AWS can help.

Worldwide Headquarter

R Systems International Ltd.
C - 40, Sector - 59,
Noida 201307 (UP), India
P: (+91) 120-430-3500
F: (+91) 120-258-7123

USA Corporate Office

R Systems Inc.
5000 Windplay Drive,
El Dorado Hills, CA 95762
P: (+1) 916-939-9696
(+1) 800-355-5159
F: (+1) 916-939-9697