

# CitiusTech: Delivering High Performance Solutions

Healthcare organizations worldwide leverage CitiusTech's vast experience in performance analytics and its strong technology expertise to deliver high performance solutions to meet growing business needs.

Healthcare personnel depend on a wide range of mission critical applications for point-of-care decision support, clinical alerts, radiology workflows, emergency care, etc. IT teams are under constant pressure to ensure optimal application and network performance. As technology advances and care providers rely more on information systems for their day-to-day functions, system performance and its impact on various factors like quality of care and patient safety becomes a critical component of application development.

## CitiusTech: Key Offerings for Application Performance

CitiusTech offers strong capabilities to help clients architect, build and test applications for scalable performance requirements. CitiusTech Performance Optimization team includes senior architects with significant experience in designing and building large scale enterprise applications, as well as strong performance testing engineers with expertise in performance management tools (e.g., LoadRunner, JMeter, etc.). CitiusTech offers a wide range of services for performance optimization including performance modeling, application profiling, performance monitoring and performance testing.

## CitiusTech Approach

### Requirement Analysis

- Eliciting non-functional requirements and identifying critical business workflows and growth plans

### Architecture and Design Reviews

- Performance modeling to review architecture and design, determine infrastructure capacity requirements

### Profiling and Optimization Services

- Profiling, unit performance testing and optimizations to application code and design, and infrastructure design

### Performance Testing

- End-to-end system performance testing, results analysis and tuning using automated tools

### Monitoring

- Application, systems and network performance monitoring, capturing metrics for capacity management

### Performance Modeling and Capacity Planning

- Setting performance objectives and budgets
- Identifying baseline hardware
- Transaction-cost analysis & predictive analysis for capacity planning

### Application Profiling and Code Optimization

- Evaluating application performance using open source and commercial profilers
- Analyzing application performance and suggesting code optimization

### Performance Testing

- Performing Load, Stress and Capacity testing using open source and commercial tools
- Performing workload modelling

### Performance Monitoring

- Monitoring resource utilization
- Measuring end user experience and business transactions for trends
- Reporting based on performance metrics

Key Focus Areas: Performance Optimization

## Performance Optimization: Technology Capabilities

- **Application Performance Profiling** – CLR Profiler, ANTS Profiler, performance monitor, debugging tools for Windows, Google Insights, Telerik Fiddler, SQL Profiling, VisualVM, JProfiler
- **Code Optimization** – Image optimizations, domain sharding, JavaScript and CSS, instrumentation, SQL indexing and tuning
- **Performance Testing** – Apache JMeter, HP LoadRunner, WAPT, Microsoft Visual Studio
- **Performance Monitoring** – Zabbix, AppDynamics, NewRelic, Dynatrace
- **Performance Measurement** – Technology-based accelerators to ease instrumentation for performance measurement and visualization