Performance Engineering and Enhancement (PE²)

The performance of an organization is inseparable from the performance of its IT systems. Organizations risk losing revenue and productivity as their IT system performance degrades. According to an industry survey, "Improving IT system performance cuts productivity losses by as much as 40%.”

Yet, organizations do not focus adequately on performance. IT systems are often designed without considering parameters like performance, availability and reliability, thereby impacting application performance. At best, organizational responses to performance issues are reactive and disjointed, exemplified by validating performance post-development and assigning responsibility for performance to multiple stakeholders. For instance, application vendors take responsibility for optimizing application performance and a database vendor optimizes the database, while hardware vendors focus solely on hardware. From the customer’s point of view, this results in a sub-optimal solution as the entire stack is not optimized for best performance improvement.

Infosys' PE² solution, based on a holistic approach to performance improvement, amplifies application performance, availability and scalability to enable organizations to derive maximum value from their IT systems.

Approach to Performance Engineering

Infosys' PE² solution is a proactive and vendor-agnostic approach to performance improvement. Based on quantitative analysis and modeling, the entire technology stack covering the whole application lifecycle — SDLC and Post-Deployment — is optimized to deliver best results.
Service Offering

The PE² solution portfolio provides a wide range of services, in combination or standalone, across the application lifecycle to address end-to-end performance requirements of enterprises. Our services include:

- **Architecture Optimization**
  - Introducing better performing products/tools/frameworks
  - Optimal deployment of web/application servers, etc.
  - Tuning SQL queries
  - Reusing cursors
  - Optimizing looping constructs

- **Code Enhancement/Optimization**
  - Tuning configuration parameters
  - Load balancing
  - Planning file systems

- **Database (DB) Tuning & Modeling**
  - DB partitioning to improve performance
  - Operating System & network optimization
  - DB planning and optimization of I/O
  - Tuning memory allocation

- **Configuration Support and Audit**
  - Tuning configuration parameters
  - Load balancing
  - Planning file systems

- **Design Optimization**
  - Shared objects
  - Parallelization
  - Memory/connection pooling
  - Caching

- **Hardware Infrastructure Optimization**
  - Infrastructure deployment - architecture review/validation
  - IT infrastructure consulting

- **Performance Modeling**
  - Workload modeling
  - Characterization & Queuing Network Models (QNM)
  - Capacity planning and benchmarking

- **Platform Optimization**
  - Optimizing messaging, middleware
  - Tuning rules engines
  - Grid computing

Success Story

The client, a leading bank headquartered in India, faced severe performance issues with 100 branches that served 1500 system users. It planned to add 400 branches with an additional user load of about 5000 to its existing core banking system to achieve optimal performance. Infosys partnered with the bank to resolve the issues and enabled it to successfully migrate all the targeted branches. The bank made huge cost savings by migrating 450 branches with the same hardware and improved response time.

Allied Services

- **Business Consulting**
  Provides you with strategic differentiation and operational superiority, assessments, proprietary industry analyses & projects structured around beating the competition.

- **Technology Consulting**
  We work with you to develop implementable architecture solutions that help you leverage technology to enable business strategy. Our solution helps you achieve a balance between IT effectiveness and business innovation.

- **Application Development**
  We help you develop turnkey solutions with a faster time to market and a lower Total Cost of Ownership. Our services range from building a business case to assessing your application portfolio to designing solutions to building and implementing the solutions.

- **Infrastructure Management**
  Our range of services is geared to keep your operations running smoothly and reduce costs. Services include infrastructure planning, auditing, data center and application management and help-desk services.

About Infosys

Many of the world’s most successful organizations rely on Infosys to deliver measurable business value. Infosys provides business consulting, technology, engineering and outsourcing services to help clients in over 30 countries build tomorrow’s enterprise.

For more information about Infosys (NASDAQ: INFY), visit www.infosys.com.

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