Exist Application Modernization

Updating Older Software for Newer Computing Approaches

Modernize your Application with Exist.

Most enterprises have significant investments in their existing application portfolio, from both a financial and operational standpoint. While the term "legacy" sometimes has a negative connotation in software, in reality these legacy systems are often among a business's most mission-critical applications. Few companies are willing or able to simply retire these applications and start over; the costs, productivity losses and other issues are too great. Therefore, application modernization is the most sensible way for many enterprises to realize the advantage of newer software platforms, tools, architectures, libraries and frameworks.

Application modernization is a process that improves software delivery performance for a business by updating—rather than replacing—older legacy software systems.

For many organizations, this involves replatforming existing legacy workloads onto a modern cloud platform based on Kubernetes, and breaking monolithic applications into smaller pieces like microservices.

Benefits of Application modernization

1. Simplify management and maintenance
2. Test the app more efficiently
3. Ship new versions more quickly
4. Scale the app more easily
5. Utilize modern infrastructure
6. Decrease costs

Exist Software Labs. Inc Capabilities and Solution

App Modernization Assessment

Assessment is the first step in understanding the value and how to get there. It will guide you in maximizing the potential of Modernizing from an older,to a modern and Highly secure, Identify organizational objectives, develop an analysis of your current technology while considering the compatibility of legacy systems, learn how to optimize the migration process with an emphasis on reducing effort and expenses, and plan your next steps toward cloud transformation.

App Modernization Implementation

Migrate to Scale-Out SQL

Scalability is the ability to expand or contract the capacity of system resources in order to support the changing usage of your application. This can refer both to increasing and decreasing usage of the application.

Increased usage of your application brings three main challenges to your database server:

1. The CPU and/or memory becomes overloaded, and the database server either cannot respond to all the request throughput or do so in a reasonable amount of time.
2. Your database server runs out of storage, and thus cannot store all the data.
3. Your network interface is overloaded, so it cannot support all the network traffic received.

The first action you might take to address the need for increased capacity is application and database optimization. Examples include optimizing the application code, caching, and appropriately indexing your query patterns . These optimizations increase the efficiency of your application and should bring some relief. However, there comes a point when system resource limits are reached. At this point, you will want to consider scaling your database vertically, horizontally, or both.

Unify Analytics

Unified Analytics is the process of using technology—namely AI—to analyze and interpret data collected from disparate sources. Unified Analytics is the process of interpreting data from any number of disparate silos in an enterprise environment. The goal is to create a more accurate source of truth that drives smarter business decisions regarding products, sales, and customer journeys. Unified Analytics helps enterprises with product development, customer turnover, and other complex enterprise challenges, as the AI-driven analysis often employs models that can be iterated and fine-tuned.

Inject Artificial Intelligence and Machine Learning

Artificial intelligence contains many subfields, including:

- Machine learning automates analytical model building. It uses methods from neural networks, statistics, operations research and physics to find hidden insights in data without being explicitly programmed where to look or what to conclude.
- A neural network is a kind of machine learning inspired by the workings of the human brain. It's a computing system made up of interconnected units (like neurons) that processes information by responding to external inputs, relaying information between each unit. The process requires multiple passes at the data to find connections and derive meaning from undefined data.
- Deep learning uses huge neural networks with many layers of processing units, taking advantage of advances in computing power and improved training techniques to learn complex patterns in large amounts of data. Common applications include image and speech recognition.
- Computer vision relies on pattern recognition and deep learning to recognize what's in a picture or video. When machines can process, analyze and understand images, they can capture images or videos in real time and interpret their surroundings.
- Natural language processing is the ability of computers to analyze, understand and generate human language, including speech. The next stage of **NLP** is

Natural Language Interaction, which allows humans to communicate with computers using normal, everyday language to perform tasks.

While machine learning is based on the idea that machines should be able to learn and adapt through experience, AI refers to a broader idea where machines can execute tasks accurately.

Artificial Intelligence applies machine learning, deep learning and other techniques to solve actual problems.

Move to Cloud

Key Benefits of Cloud Migration

Cost-effective

Companies that switch to the cloud often save significantly on IT operations costs since cloud providers manage maintenance and upgrades. Instead of focusing on keeping things running, businesses can devote more resources to their most pressing business demands, such as developing new services or upgrading existing ones.

Scalability

Cloud computing can readily scale up to accommodate larger workloads and much more users than on-premise infrastructure, which requires enterprises to acquire and set up more physical servers, networking equipment, or software licenses.

Performance

Moving to the cloud can help certain enterprises enhance performance and the overall user experience for their clients. If their application or website is hosted in cloud data centers rather than on-premises servers, data will not have to travel as far to reach customers, resulting in lower latency.

Flexibility

Users, whether employees or customers, can access the cloud services and data they need from anywhere. This makes it easier for a company to expand into new markets, offer its services to a global audience, and enable its workforce to work flexibly.