

Our Digital Application Development Capability

Empowering businesses to meet the ever-growing needs of their customers.

Digital applications built using cloud computing technologies have been enabling businesses to move ideas into production quickly, in an iterative and agile manner. Based on where businesses are in their cloud journey, Blue Altair helps them:

- **Architect and design highly scalable and flexible applications** using a cloud native approach and our industrialized methodologies.
- **Decouple and migrate monolith applications** to a more responsive microservice-based, event-driven architecture.
- **Build a cloud native services culture** throughout the organization to deliver specific services and business capabilities.

Power of Cloud Native

Cloud native is a new, disruptive way of thinking to build next-generation, resilient and scalable applications. It is much more than just a new programming model; it requires a change in mindset. We need to think outside the box, architect using an evolutionary, DevSecOps and API-first approach, and adopt an agile delivery model so our clients can get the benefits of:

- **Microservices architecture** that helps development teams to build, test and deploy highly scalable applications as a set of independently deployable services.
- **Serverless architecture** that provides a cost-effective way of deploying applications while leaving the burden of infrastructure provisioning and management to the cloud provider.
- **DevSecOps** which automates the integration of security best practices as an integral part of digital application development and operations.

Our Approach

We have a robust methodology for our clients' Digital Application Development journeys—from understanding their business needs, to developing a flexible architecture, to deploying applications on the cloud.

	Discovery and Innovation	Evolutionary Architecture	Agile Development	Automation	Execution and Scale
Description	Understand the real business needs of the customers through interactive workshops and research-oriented innovative experiences	Build a flexible, scalable and pluggable architecture to meet the growing and changing customer demands	Adopt a step-by-step approach to iteratively deliver value for customers with a long-term product goal	Build a culture of automation throughout the software delivery lifecycle to reduce time to market	Deploy applications on a cloud platform for extreme flexibility and scalability with no upfront investments
Activities	<ul style="list-style-type: none"> Conduct client and customer interviews Understand business requirements with design thinking workshop Ideate and innovate a research mindset 	<ul style="list-style-type: none"> Architect around business capability with domain-driven design Adopt a cloud-native approach for modularity and loose coupling Design applications with API-first and event-driven approach for resilience Ingrain security into architecture 	<ul style="list-style-type: none"> Build applications using agile and iterative delivery model Adopt a value-driven development approach Build an optimized and flexible code base with TDD/BDD approach Invest in continuous delivery practices 	<ul style="list-style-type: none"> Continuously test and release incrementally with an automated CI/CD with DevSecOps methodology Automate the cloud infrastructure with Infrastructure-as-Code 	<ul style="list-style-type: none"> Build a flexible deployment platform on cloud using containerization with Kubernetes Set up alerts and monitoring for infrastructure and app Implement service discovery and catalog management Adopt a cloud native distributed storage

Our Digital Application Development Offering

Blue Altair's DAD Offering contains four key sub-offerings. Using these principles of microservices architecture, we design and implement highly scalable and flexible applications, and also help clients to leverage the power of the cloud.



Cloud Native Application Development

Develop highly scalable and flexible applications using microservices, DevSecOps and API-First approach



Monolith to Microservice Decomposition

Decompose monolith application into microservices using domain driven design and cloud native technologies



Microservice Architecture Assessment

Assess Microservices Architecture for service design, infrastructure, development velocity and governance



Application Migration to Cloud

Assess and then migrate applications to cloud using lift and shift, refactor or re-platform approach

Case Studies: Addressing Complex Business Needs

For years, we have helped many businesses across industries adopt internet-scale applications on the cloud. This called for a dramatic change in culture and processes to manage and operate these new age digital applications. Here is a glimpse into the type of problems we have helped our clients address:

Fintech

Challenges

Provide greater flexibility and agility to enhance customer experience for using the existing payments platform.

Our Solution

Rearchitected the existing payments platform using a cloud native approach and **domain-driven design** to decouple the existing monolith applications into a microservices-based architecture.

Technology Landscape

- Spring Boot Microservices
- Kafka Event Hub
- DevOps with Jenkins CI/CD
- Openshift cloud deployment

Automotive

Challenges

Build a highly scalable online auto auction platform for dealers and individuals to get instant offers for used cars and sell their cars through auction.

Our Solution

Built auto auction platform as a cloud native application using API-First, microservices, DevSecOps and agile delivery approach. The application was deployed on Google Cloud using serverless technologies for high scalability and reduced maintenance overheads

Technology Landscape

- Google Cloud
- Microservices using Flask API
- Mongo DB
- Serverless – Cloud Run, App Engine

Manufacturing

Challenges

Enhance existing parcel execution platform for enriched user experience, scalability and flexibility, and speedy integrations.

Our Solution

Rearchitected and redesigned the parcel execution platform with a cloud native microservice-based architecture using an **API-first approach** for multi-tenancy and flexibility.

Technology Landscape

- Angular 12
- PostgreSQL
- C#, .NET
- Azure

Government & Public Safety

Challenges

Conduct a survey to assess the effectiveness of the campaign to increase seat belt usage.

Our Solution

Built an **omni-channel survey application** with iOS interface to replace manual paper-based surveys and eliminate errors arising due to manual entry.

Technology Landscape

- Python Django
- Angular JS
- R scripting
- Objective C for iOS App

Pharma

Challenges

Deliver superior healthcare services with enhanced user experience cost-effectively.

Our Solution

Built a comprehensive **health management data platform** to provide high quality, consolidated data for patients, members, providers and organizations.

Technology Landscape

- MDM solution with Reltio
- Apache Kafka and Spark
- AWS SQS
- Enterprise Java
- Apache Spark, Hive

Our Partnerships

To serve the diverse needs of organizations in a rapidly changing business environment, we combine our advanced product knowledge and domain expertise with an in-depth understanding of our clients' business objectives. We collaborate with leading technology partners to build an ecosystem that enables us to leverage modular, scalable, production-grade data management across an enterprise.

How Can Blue Altair Help?

Organizations today rely on building APIs and agile applications that enable them to meet the ever-growing needs of customers. Hence, applications need to be built using a scalable, secure, flexible and nimble architectures by leveraging modern technologies like the cloud, microservices, DevSecOps and responsive UIs. In a nutshell, our Digital Application Development expertise includes:

Full Stack
Development

DevSecOps

Web and Mobile
Development

Microservices

Contact us to learn more about how Blue Altair can help with your Digital Application Development needs.

About Blue Altair

Blue Altair is a niche, industry-recognized business and technology consulting firm that assists our clients with digital transformations. We offer Assessment and Strategy, Technology Implementation, and Managed Services in API Management and Integration; Data Management; Digital Application Development; and Data Science and AI. Our Client Success capability ensures a higher-than-industry rate of successfully delivered projects, with a primary focus on program and project management, business analysis, and quality assurance. Blue Labs is our innovation hub, where we use cutting-edge technology to build offerings that deliver accelerators and solutions. Our culture is the heart of our existence, and our core values are the key drivers for our handpicked, top-tier performers.

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