

# Corporate Capabilities



**optimoz**



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## Optimoz Capabilities Summary


When it's time to transform your enterprise, it's time to call on Optimoz. Our clients present us with some of the most difficult AI-driven technical challenges imaginable. Optimoz delivers the experience and expertise you need to take advantage of advances in the technologies that will shape the next 25 years: AI, data management, software engineering, DevSecOps, and cloud technologies to improve your enterprise. Our work spans the entire solution development lifecycle from strategy through technology planning, architecture, development, operations, and on-going enhancement.

Our approach is driven by six guiding principles:

- **Embrace AI** to deliver new insights and deliver big leaps in productivity for your enterprise.
- **Use agile development processes** to build solutions that are fluid, flexible, and fast.
- **Leverage modern technologies**, such as APIs, microservices, containers to radically increase the performance and functionality of solutions.
- **Deploy modern DevSecOps processes, automation, and performance management tools** to ensure that applications always run smoothly, scale effortlessly, and are always secure.
- **Implement Continuous Integration / Continuous Delivery principles** to link every step of the software development to deployment lifecycle to gain better productivity and visibility.
- **Transfer knowledge to your enterprise**, so that, when the time is right, your technical team can stand on its own.

## Our Solutions

Our solutions are delivered through five, connected practice areas and cover every stage in the software development lifecycle:

<p><b>ARTIFICIAL INTELLIGENCE</b></p> <p>High performance solutions built using our proprietary AI framework and industry-leading generative AI technologies.</p>	<p><b>DEVSECOPS</b></p> <p>Modern processes that speed the development pipeline, enhance operations, and increase security.</p>	<p><b>HEALTHCARE IT</b></p> <p>Data management and interoperability solutions that make healthcare systems more efficient and benefit public health.</p>
<p><b>DATA MANAGEMENT</b></p> <p>Data science and big data management solutions that maximize insights from data.</p>	<p><b>SOFTWARE ENGINEERING</b></p> <p>High performance custom software applications that increase enterprise value.</p>	

## Expertise And Experience

Our clients are exclusively large federal agencies, state governments, and mid-to-large sized corporations, Therefore, every solution we build and deliver is mission-critical. We have demonstrated expertise in the technologies that drive most cutting-edge AI-driven technical solutions that our clients demand:

- **AI** – including leading large language models and development tools – plus, proprietary Optimoz-developed tools that enhance the performance and usability of AI-driven applications.
- **Data Management** – including ELT, data warehousing, database management, and data science and analytics.
- **Cybersecurity** – using zero trust security models to protect infrastructure, applications, and data.
- **Cloud Platforms** – including deploying and running AI-driven applications on all the major cloud platforms: AWS, Azure, and Google Cloud.
- **Software Engineering Processes** – that enable efficient development and delivery of great AI-driven applications.
- **DevSecOps and CI/CD Processes** – that ensure the smooth and secure deployment and operation of mission critical, AI-driven applications.

## Customers



## Partners



## Solutions Delivery Team

Optimoz serves the entire AI solution development lifecycle. Our team has the experience and expertise you need to deliver and operate your AI applications successfully, including:

- CTOs
- Product managers
- Business analysts
- Solution architects
- AI technology experts
- Data scientists and engineers
- AI-fluent software engineers
- DevSecOps experts
- Cloud engineers

We provide services targeted at making your technical projects successful in operation and impactful for your enterprise:

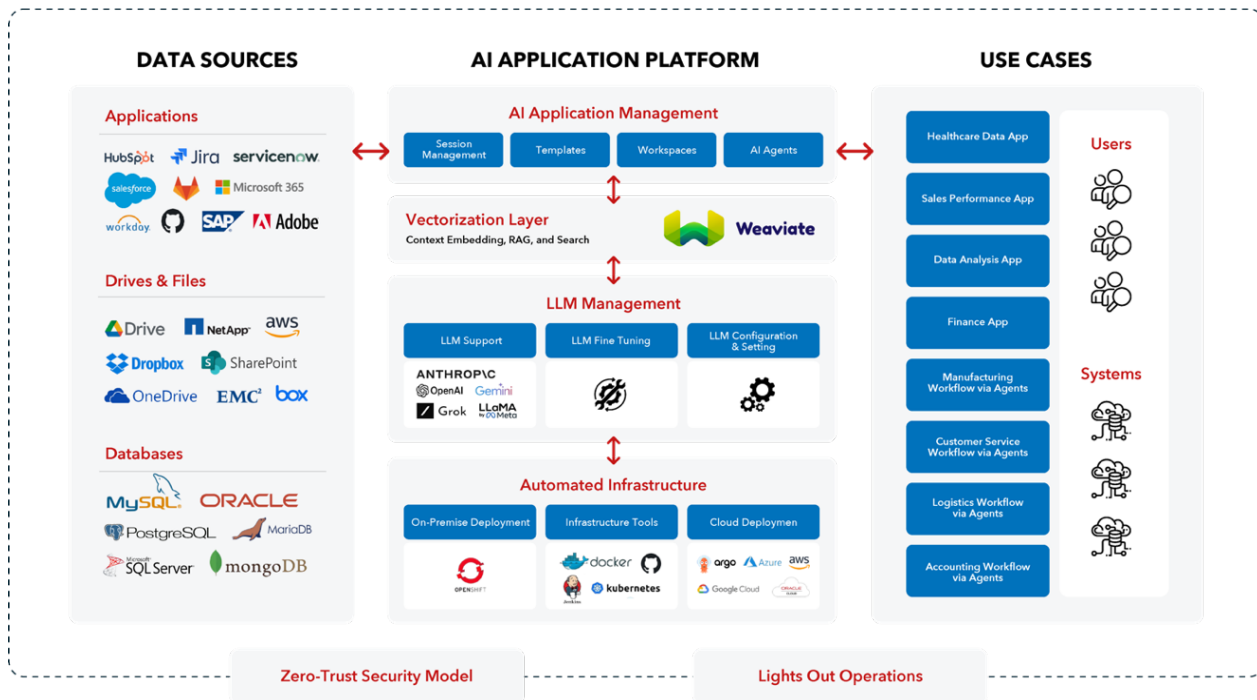
- **Business case development** – to ensure that your enterprise sets the right priorities for your AI efforts.
- **Application architecture** – We work with your enterprise to make the architectural decisions that will drive the performance of an application, including
  - Selecting the structural components and interfaces to use in the application.
  - Determining the expected interfaces between those components.
  - Configuring selected components into appropriate subsystems.
  - Defining the interfaces between components.
  - Aligning architectural decisions with business requirements.
- **Project Management** – Many workstreams must come together to deliver a quality software application on time and on budget. We work with your team to project manage your software development project to completion.
- **Product management** – We work with your enterprise to bring new products to market. We sit at the intersection of the business, technology, and user experience. We work with your team to determine your requirements and prioritize features for the initial and subsequent releases based on customer feedback, the state of the market, and the technical requirements of the application.
- **Reporting and visualization** – to present insights to support effective decision-making.
  - Defining the interfaces between components.
  - AI/ML components
  - Analytics and reporting tools
  - Third-party components, such as microservices
- **Data science & data management** – to effectively manage the data used by your applications and maximize the business insights your enterprise receives.
- **Project Management** – Many workstreams must come together to deliver a quality software application on time and on budget. We work with your team to project manage your software development project to completion.

- **Platform evaluation and selection** – to enable you to select the right technologies to support your plans.
- **DevSecOps & CI/CD** – We put in places practices to improve your software development processes, better integrate your technical teams, supercharge the performance of your applications and infrastructure, improve security, and ensure that software can be released on-time with very high quality.
- **Software Engineering** – We put in place and manage software development teams that can get the job done. Our teams typically include application architects, senior and mid-level developers, AI/ML experts, data analysts, QA engineers, DevSecOps professionals. We can either provide a full team or work as part of a blended team – providing specific technical skills and project leadership, as needed.

## Artificial Intelligence

Optimoz AI products and solution development services streamline the process of building and operating AI applications that can transform your business. Using Optimoz-developed AI applications, you will:

- Unify and understand your all your data.
- Streamline mission critical workflows.
- Gain new insights into your business.
- Enhance your decision-making.
- Radically increase enterprise value.



## High Performance AI Applications

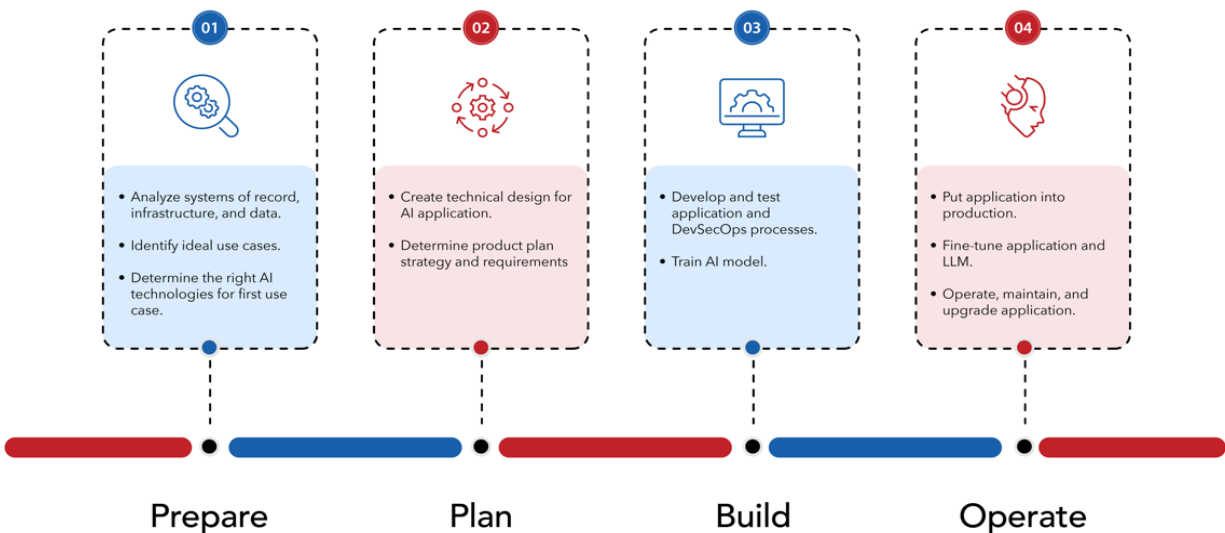
We build and operate AI applications based on a set of guiding principles that ensure superior performance and operating efficiency.

- **Secure and private** – Secure your data inside your enterprise. Your data never touches the public internet.
- **LLM agnostic** – Use the LLM that is right for your business and applications.
- **API-driven open architecture** – Speed development, enhance operations, and increase security.
- **Flexible, powerful UI/UX** – Work productively with your AI applications.
- **Best-in-class commercial components** – Use proven AI-optimized infrastructure components and application development tools.
- **Purpose-built proprietary components** – Maximize usability, performance, and data integration and management.
- **Data management** – Connect to, access, and analyze any type of data from any drive, application, or database.
- **Flexible, powerful UI/UX** – Work productively with your AI applications.

## Real-time AI infrastructure automation

We deploy an embedded engine for configuring, deploying, and operating AI applications. The result is we automate all the infrastructure functions needed to deliver high-performance AI applications:

- **Infrastructure set-up and management** – Automate configuration, deployment, operation, and scaling of AI application infrastructure.
- **LLM deployment and operations** – Configure and operate the LLM to support AI applications.
- **LLM interfaces** – Connects LLMs to data sources, rendering engines, and end users.
- **Data access, analysis, and management** – Manage access to and the flow of data through OpTalk.ai applications.



## Our Approach

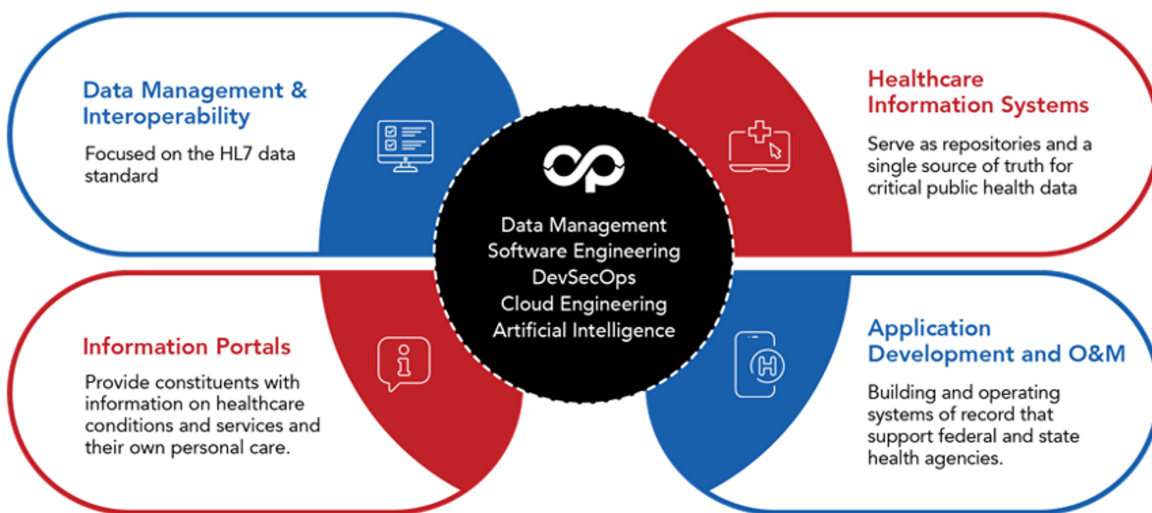
Optimoz works with your team through the AI application development lifecycle to deliver game-changing results using AI. Our four-phased approach is highly collaborative and focused on realizing business value.

<b>Prepare</b>	<ul style="list-style-type: none"><li>• <b>Analyze Systems &amp; Data</b> – Analyze systems of record, data quality, data management, practices, and infrastructure.</li><li>• <b>Prioritize Needs</b> – Work with your team to identify the use cases where AI can have a positive, immediate impact.</li><li>• <b>Choose Technologies</b> – Determine which AI technologies are appropriate for identified use cases.</li></ul>
<b>Plan</b>	<ul style="list-style-type: none"><li>• <b>Design Applications</b> – Create a technical design for your AI applications.</li><li>• <b>Create Product Plan</b> – Develop product strategy and requirements.</li></ul>
<b>Build</b>	<ul style="list-style-type: none"><li>• <b>Develop Applications</b> – Build &amp; test applications.</li><li>• <b>Train AI Model</b> – Build integrations, ingest data, and begin training of AI model</li><li>• <b>Implement DevSecOps Process</b> – Ensure high performance of applications in production.</li><li>• <b>Acceptance Testing</b> – Test applications with end-users and solicit feedback.</li></ul>
<b>Deploy, Optimize, &amp; Operate</b>	<ul style="list-style-type: none"><li>• <b>Design Applications</b> – Create a technical design for your AI applications.</li><li>• <b>Create Product Plan</b> – Develop product strategy and requirements.</li></ul>



## Healthcare IT

Federal and state agencies provide healthcare services and health information to constituents nationwide. As the healthcare system becomes more complex, healthcare agencies face an expanding set of challenges. Optimoz leverages its entire suite of technical capabilities to provide healthcare IT solutions that help agencies improve public health and provide better services to constituents.



Optimoz’s delivers four types of healthcare IT solutions:

- **Data Management and Interoperability Solutions** – focused on the HL7 data standard used across the healthcare industry – enabling federal and state agencies, healthcare systems, and constituents to more easily access healthcare data to serve constituents.
- **Portals** – that provide constituents with information on healthcare services and their own personal care.
- **Healthcare Information Systems** – that serve as repositories and a single source of truth for critical public health data related to immunizations and behavioral and population health.
- **Custom Application Development and O&M support** – for systems of record that support the work of federal and state health agencies.

## OpenHIT

OpenHIT is a prime example of Optimoz’s expertise in healthcare data management and interoperability. Working with the CDC, we have developed and deployed OpenHIT as a next-generation application for managing the consumer immunization records collected by public health agencies at the national, state, and local levels. OpenHIT replaces a complex legacy application that public health agencies have been using since the early 1990s. CDC’s goal is that, over time, OpenHIT will function as the enterprise-class system of record for immunization data nationally.

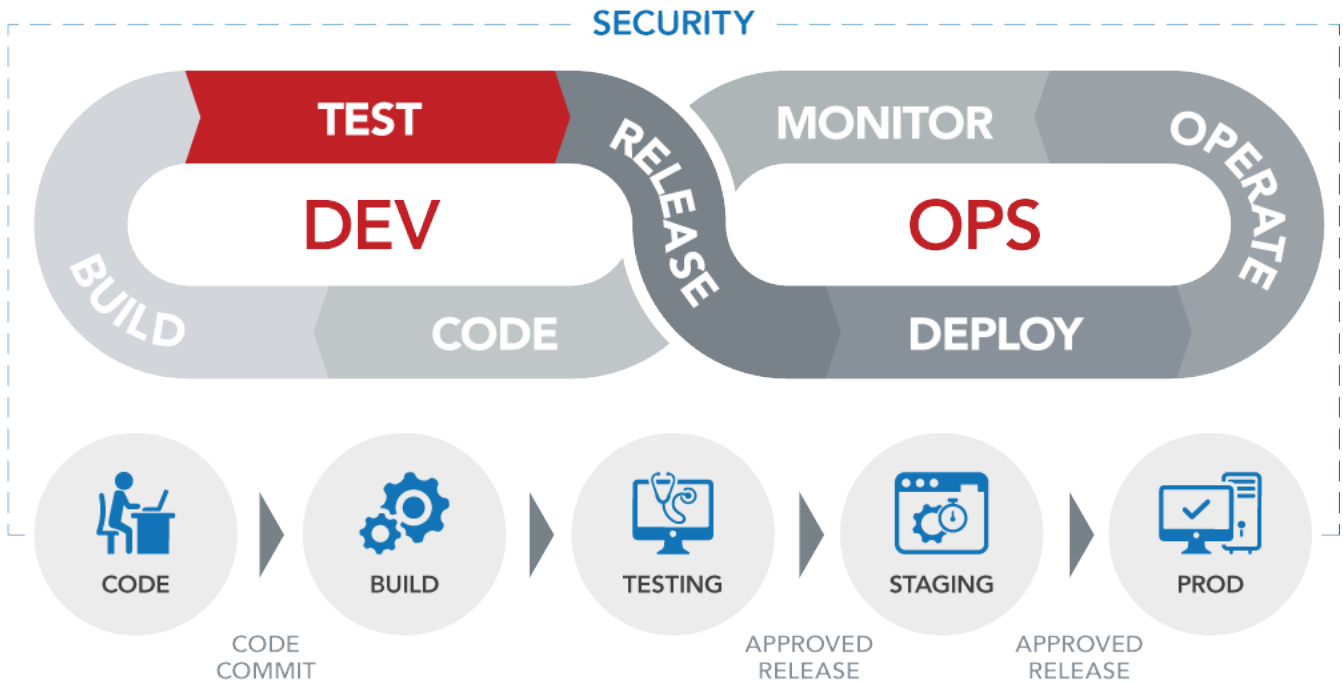
OpenHIT has been built from the ground up using advanced cloud, DevSecOps, and data management technologies and supports the advanced HL7 FHIR and HL7 V2 healthcare data standards. Using OpenHIT, public health agencies can contribute to a national immunization database for multiple conditions and improve population health across the US.

## DevSecOps

For most enterprises, building, operating, and supporting software applications takes too long, costs too much, and doesn't meet the high expectations of stakeholders or end-users. Optimoz works with your enterprise to implement DevSecOps practices to improve your application development processes and supercharge the performance of your applications in operation.

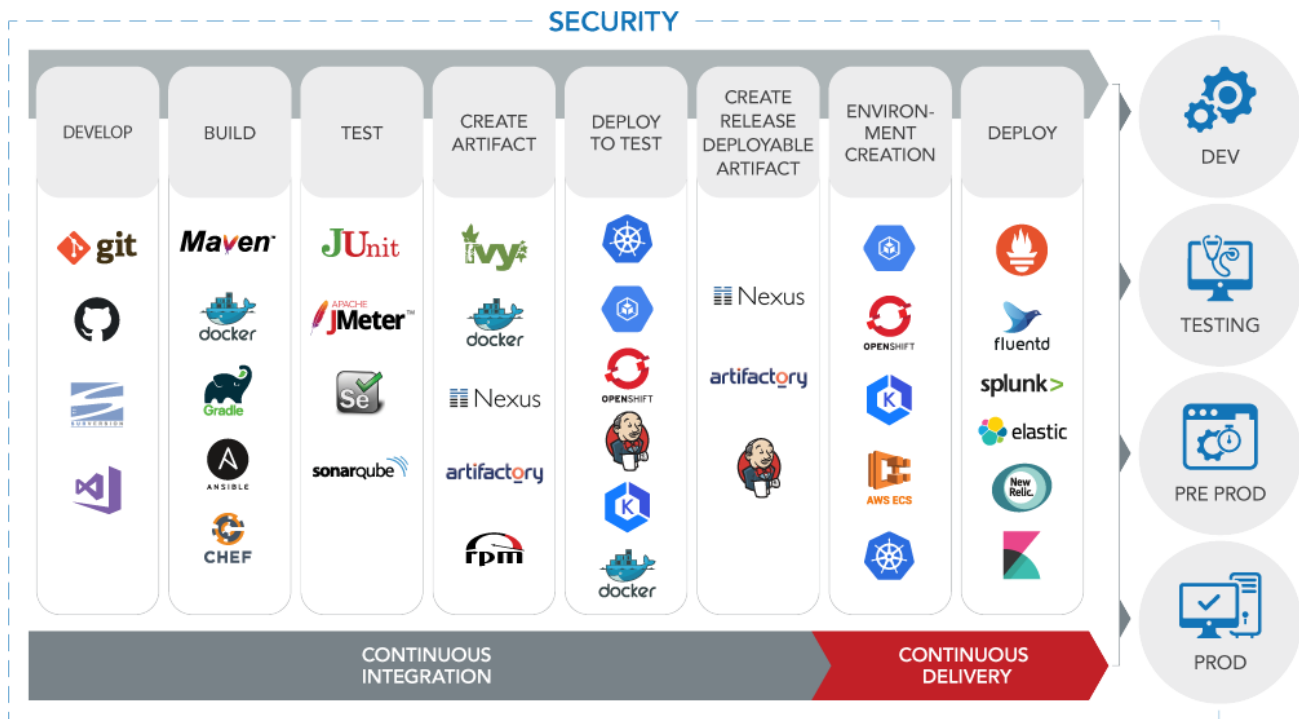
Our key capabilities include:

- DevSecOps** emphasizes communication, collaboration, and cohesion between the developer, IT operations, and security teams. By integrating these teams, your enterprise can deploy software more frequently, maintain service stability, and promote innovation. DevSecOps inserts a focus on security into every role and process involved in building, updating, and maintaining applications.
- Continuous Integration / Continuous Delivery (CI/CD)** is a software engineering approach, where teams work together to produce software in short cycles and then ensure that the software can be reliably released at any time. A successful CI/CD process connects the work of all the groups involved in software development – product management, architecture, software development, QA, DevSecOps, Operations, and Support. The result is an efficient, repeatable, cost effective, and high-quality set of processes that deliver consistently great applications.



Our DevSecOps approach is divided into four phases:

- **Assess** – Establish clear criteria for improving the product delivery lifecycle.
- **Design** – Understand what needs to be optimized to create a business advantage in product delivery.
- **Implement** – implement a right-sized Continuous Delivery process designed around in-house capabilities and needs.
- **Operate** – Create an operational advantage based on repeatability, flexibility, and fast cycle times.



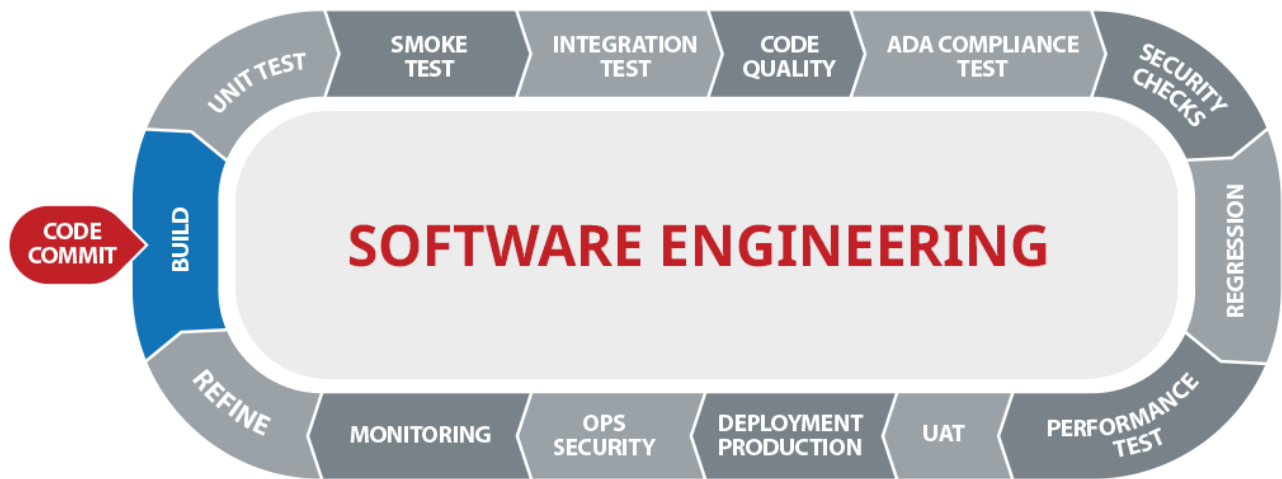
Optimoz AI products and solution development services streamline the process of building and operating AI applications that can transform your business. Using Optimoz-developed AI applications, you will:

- Deliver fast results
- Improve security
- Become more competitive
- Create competitive advantage
- Measure progress
- Set & meet expectations with stakeholders and users
- Increase reliability
- Lower development and operations costs
- Lower risk
- Streamline problem resolution

## Software Engineering

Optimoz works with enterprises to build, maintain, and upgrade their most important applications. We bring best-in-class capabilities in five areas:

- **Injecting modern software development techniques** to supercharge the performance of the application, including:
  - Microservices that perform specialized functions, such as payments, with high reliability.
  - APIs to manage seamless data exchange with other applications.
  - Modern approaches to analytics to maximize the insight gained from data in the application.
- **Building applications that scale effortlessly and economically** as user demand and volumes of data increase.
- **Incorporating AI** to maximize productivity and provide unique insights that improve decision-making.
- **Integrating open source and commercial software products and components** into the application to improve performance, time to delivery, and upgradability and lower the cost of development.
- **Embedding modern DevSecOps and CI/CD processes** from the start to improve time to delivery, reliability, security, manageability, upgradability, and communication between all members of the software development team.



Our services include:

- **Technology Evaluation and Selection** – In any software development effort, several key technology choices need to be made based on the desired outcome, cost of delivery, skills of the current and desired team, and user expectations. These choices include:
  - Cloud platform selection
  - Cloud infrastructure components
  - Programming language
  - Databases
  - AI/ML components
  - Analytics and reporting tools
  - Third-party components, such as microservices

We do the research and make fact-based recommendations on the technologies and approaches that will be suit your needs.
- **DevSecOps & CI/CD** – We put in places practices to improve your software development processes, better integrate your technical teams, supercharge the performance of your applications and infrastructure, improve security, and ensure that software can be released on-time with very high quality.
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## Data Management

Most enterprises can't effectively manage their own data, but having reliable, quality data becomes more important every day. By partnering Optimoz, your enterprise can develop a cohesive data management strategy, platform, and set of processes that delivers accurate answers and insights drawn straight from your own data.

We employ leading experts in every data management discipline:

- Data strategy and architecture
- Database management
- Data ingestion, transformation, and quality
- Data warehousing
- Data governance & compliance
- Data science and analytics
- Artificial intelligence & machine learning



## Data Management Process

Our five-step approach to data management enables enterprises to put data management technologies and processes in place quickly and rapidly build expertise:

- **Plan** – Perform research on the state of data in your enterprise to create a bespoke data management strategy that matches your business needs.
- **Deliver** – Implement data management technologies, ingest data, and define and execute data management and governance processes.
- **Products & Technologies** – Research and select the appropriate products and technologies for your data management platform and build an implementation team made up of Optimoz experts and your employees.
- **Optimize** – Analyze and continue to fine-tune performance to deliver more accurate results.
- **Train** – Transfer knowledge to your employees, so they can manage and derive continuous value from your data management platform.

For our customers, the benefits from best-in-class data management technologies and processes are significant:

- Improved access to data and reporting to support decision-making
- Improved process execution across the enterprise
- Increased transparency in operations
- Enhanced customer service
- Improved governance and regulatory compliance