



Flex83 AEP for Your Rapid Custom Application/ Platform Development

There are, without a doubt, a number of Industrial IoT applications available, and they have encouraged an increasing number of businesses to adopt this new paradigm to boost productivity and balance costs and profits.

According to some sources, 92 % of industrial organizations have already adopted IoT solutions to enhance monitoring, maintenance, and remote operations.

Major companies have already adopted this market, which is constantly growing. Even though studies present varying numbers when it comes to precise forecasts of the market value of IIoT in the ensuing years, the most significant reports concur that investment will at the very least increase threefold.

Overview

IoT83 (AEP) Application Enablement Platform

With its Application Creation Pipeline tools, IoT83's Application Enablement Platform speeds up the development and rollout of new IoT services/applications and has conclusively demonstrated their potential in deployments connecting over 50 million end-user devices.

The IoT83's Scalable Elastic Core, which houses all of the IoT plumbing, security, scalability, and essential platform functions for assured reliability as well as application flexibility, is at the heart of the solution.

The Application Creation Pipeline tools that enable accelerated creation of complex IoT applications surround the Core. The Application Creation Enablement platform does a good job of removing the obstacles to successful IoT deployments, from onboarding of devices or various types of "data flow" to normalizing data into a flexible data lake to building custom logic, dashboards, building and launching multiple role-based applications, to connecting to third party software to build richer total solutions.

An illustration of the (AEP) Application Enablement Platform

IoT83 Advantages

Because of the numerous technologies involved, their complexity, the variety of IoT applications, and the challenges associated with managing IoT Scale, the IoT83 business was founded on the fundamental premise that developing Industrial IoT applications and scaling their deployment is simply too complex.

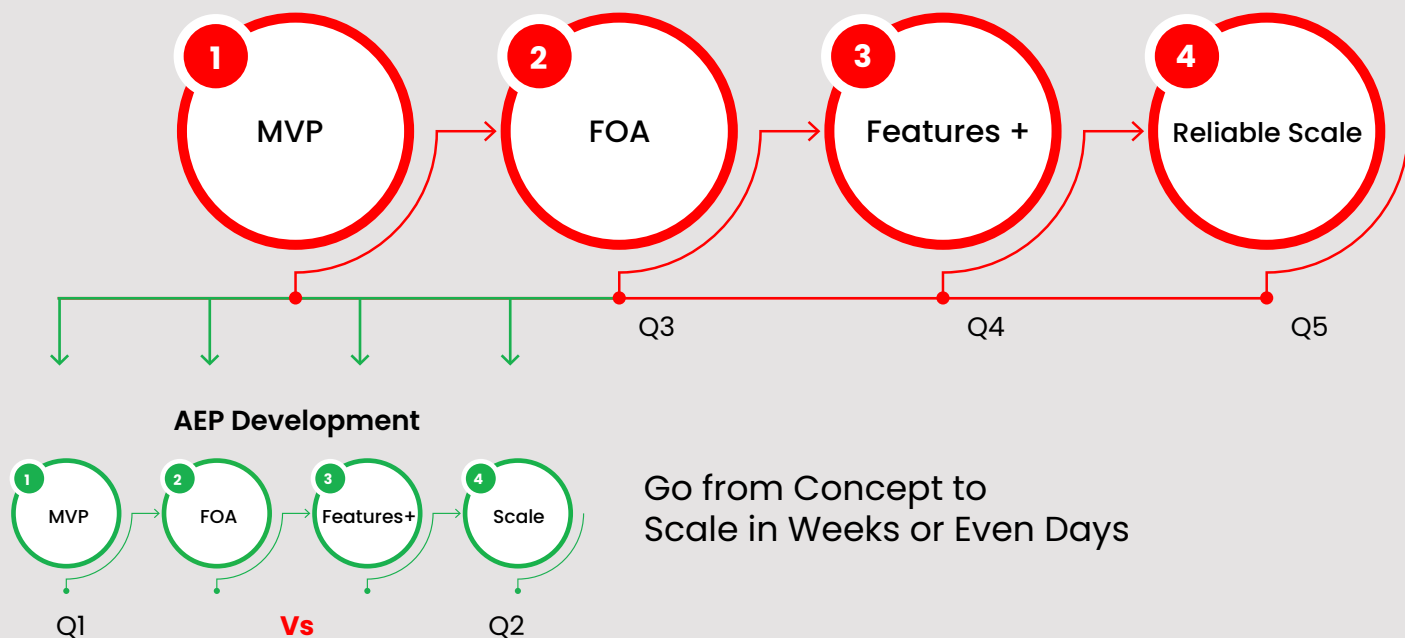
- 1) High feature velocity
- 2) Operational excellence
- 3) Efficient change management
- 4) Price Maintenance

The (AEP) Application Enablement Platform from IoT83 was created specifically to help operators and businesses overcome these obstacles so they can successfully implement IoT and reap its benefits.

Made possible by carefully chosen open source technologies, the core of IoT83's solution is an open system, making it simple to integrate with any current software programs you might already be using in your company. Additionally, this best-of-breed open source software is combined with IoT83's (AEP) Application Enablement Platform to create a fully secure, manageable, resilient, and flexible system.

Here is an illustration of how the IoT83 platform offers a pipeline or workflow of tools and procedures to develop novel and sophisticated IoT solutions

Difference Between AEP and Non AEP Development



Development Done in 1st Quarter Vs Development Done in 2nd Quarter

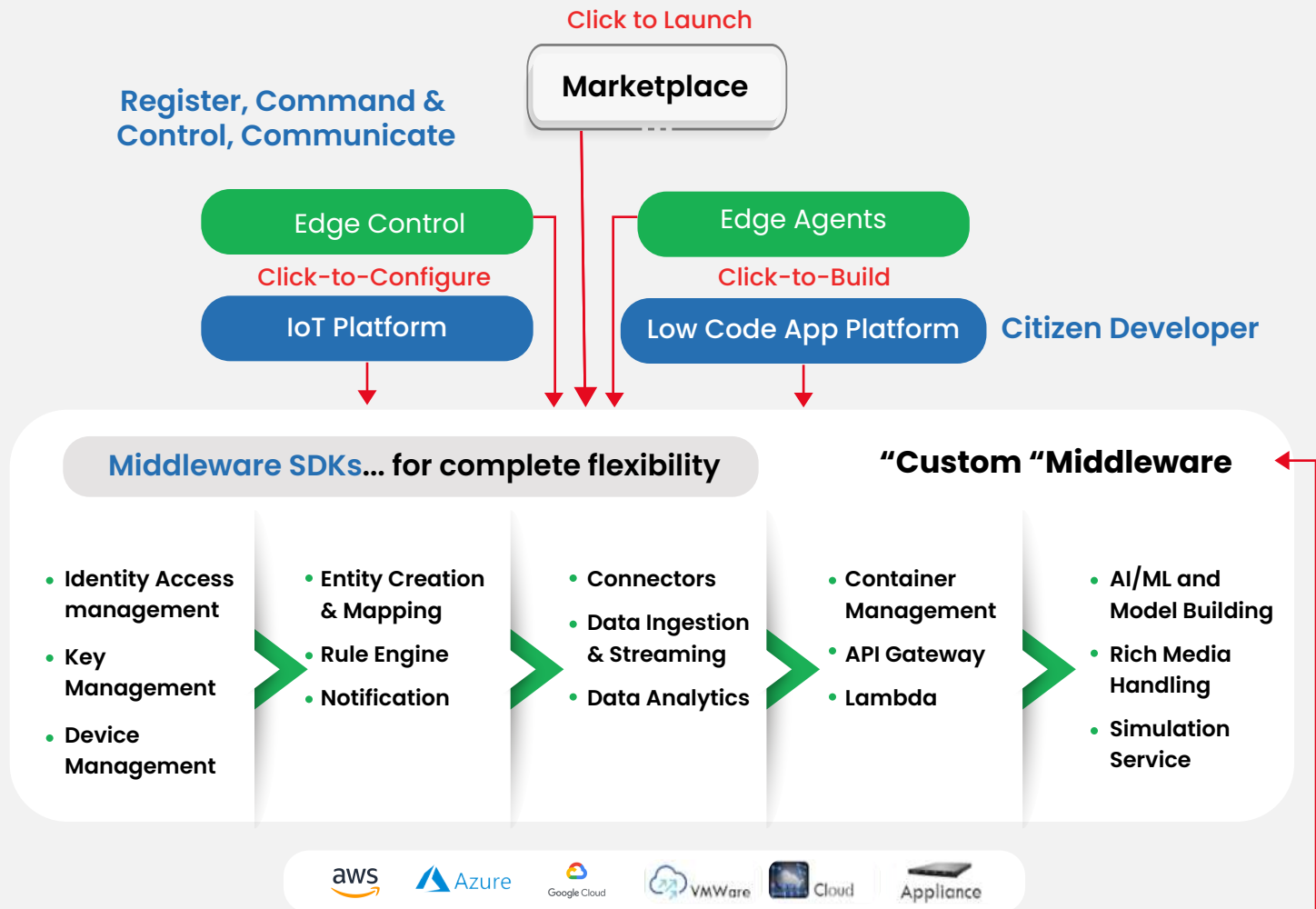
6X+
Acceleration in
Time to Market

3X+
Reduction in
Cost to Develop

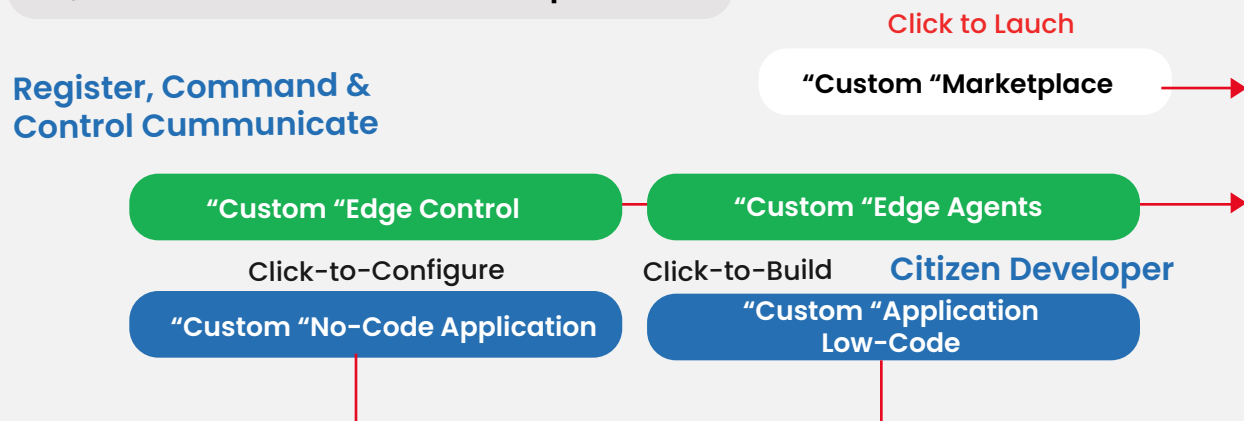
Solves
the Big-Data /
Cloud Skills Gaps

Flexibility
Public / Private
Cloud or
Appliance

This is what we have as a product



We Custom Tailor It For Your Requirement



IoT83 (AEP) Application Enablement Platform offers a logical flow for creating applications and substantially standardizes the fulfillment of each step by providing specific modules for device onboarding, data management, business logic creation, analytics, dashboard and visualizations, and application creation.

Additionally, the IoT83 platform has implemented a "click-to-configure" capability for each module, allowing for the creation of application functions "by clicks" for relatively simpler functions. However, each module also comes with tools that make complex applications smooth. Without having to access the underlying core platform code, the Dynamic Data Manager, for instance, enables users to transform ingested data "at speed" using Apache Spark or unique JavaScript functions from a straightforward User Interface.

Similarly, adding advanced analytics and business rules "code blocks" and even allocating run-time Docker images for these are made simple by the Business Logic and Analytics modules. We can say that the IoT83 Application Enablement Platform embraces complexity while also keeping the things simple.

Business, OEM, and front-line operation staff can directly apply their business acumen to the development of new applications using the IoT83 platform, which offers this rich set of tools. This eliminates the cost, risk, and complexity of working on the IoT plumbing, resulting in more efficient operations and quicker value creation.

To truly appreciate what IoT83 (AEP) Application Enablement Platform offers, one must comprehend the advantages of an (AEP) Application Enablement Platform over the "old way" of developing IoT solutions.



Let's have a look at the "old way" and the "AEP way":

Here, there is a clear difference in how effectively new applications are developed and deployed.

The Old Way – Build Everything (This is what you need to build)

Diluted
Effort
& Focus

- 1 OPS
- 2 DEPLOYMENT
- 3 APP CLIENT OPTIONS
(B2B | B2B2C | B2C)
- 4 IoT APPLICATION CONTEXT
- 5 DATA MANGEMENT PLATFORM (DMP)
- 6 PLATFORM SERVICES + TECH STACK
- 7 DEVICE MANGEMENT APP (DMA)
- 8 CONNECTIVITY (IoTaaS)

VM - - This is what available in market

The AEP Way – Focused Execution (You will get Flex83 AEP)

- 1 OPS
- 2 DEPLOYMENT
- 3 APP CLIENT OPTIONS
(B2B | B2B2C | B2C)
- 4 DATA MANGEMENT PLATFORM (DMP)
- 5 PLATFORM SERVICES + TECH STACK
- 6 DEVICE MANGEMENT APP (DMA)
- 7 CONNECTIVITY (IoTaaS)
- 8 VM

Flex83

APPLICATION CONTEXT
(100% of your focus)

VS

Required Resources

Old Way



- Customer Team
- Domain Team
- Big-Data Team
- Ops Team
- Sustaining Team
- Field Engr Team
- Dev Ops Team
- Business Team

Required Resources

AEP Way



- Customer Focus Team
- Domain Focus Team
- Delivery Team

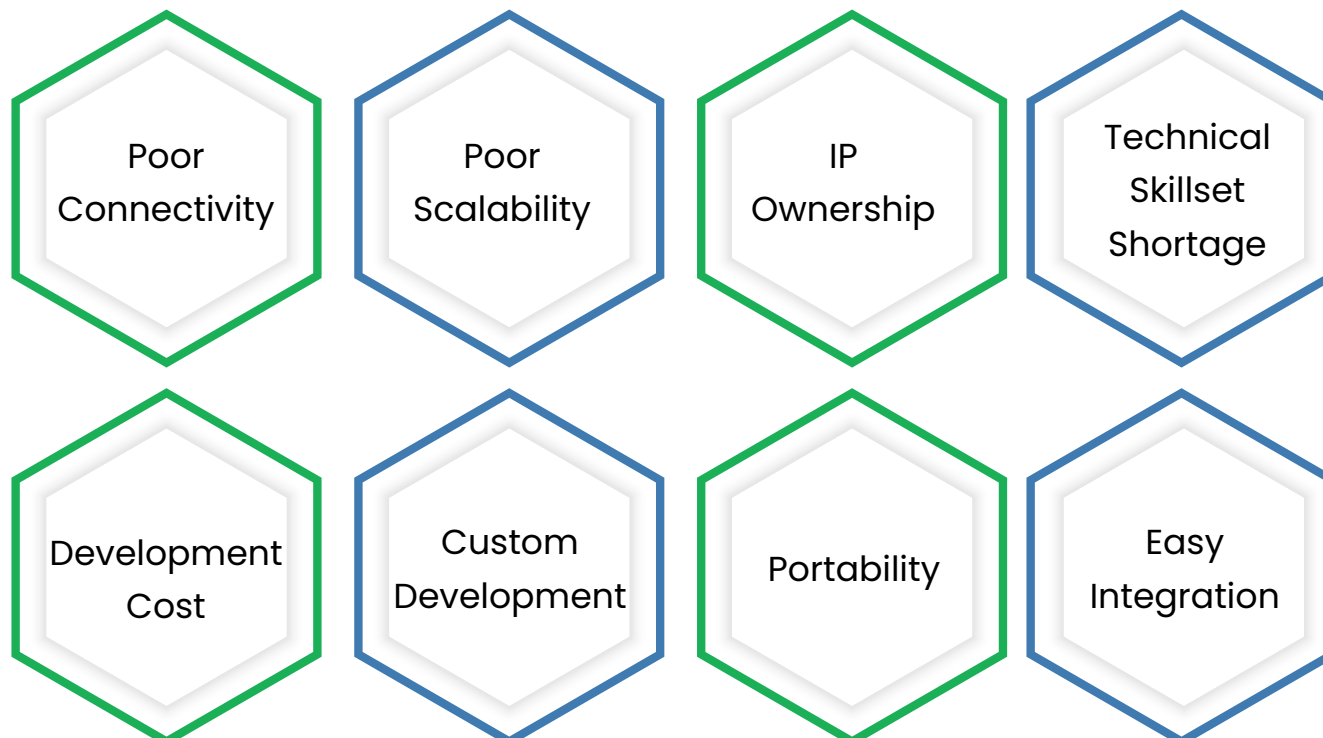
A Far Smaller Team **Delivers Far More**

A rich (AEP) Application Enablement Platform completely changes the cost to develop, time to market, and risky proposition for IoT application creation and deployment. This feature-rich (AEP) Application Enablement Platform has Application Creation Pipeline tools to greatly accelerate feature creation plus a pre-existing platform core that provides all of the essential IoT plumbing features needed for rapid deployment.

IoT Application Development: Key Challenges

According to the latest Cisco survey, Only 26% of businesses are experiencing success with their IoT initiatives. Although there are many opportunities for IoT application development, putting the idea of smart interaction and connected devices into practice is challenging.

IoT83 platform understands the deep-rooted challenges of improving the efficiency of IoT application development services and promoting greater adoption of the technology and is proud to offer a secure and scalable platform for IoT Applications development based on



How does IoT83 address enterprise IoT Applications development challenges?

Flex83 provides value across the application lifecycle, from basic solutions to sophisticated, small applications to large-scale applications.

Multi-Tenancy

IoT83 enables users to experiment with a variety of multi-tenant solutions that use reserved shared resources. This solution GUARANTEES the scalability, speed, and cost-effectiveness of the public cloud enterprise NEED without requiring workloads and applications to be refactored.

Middleware

Flex83 facilitates in effectively managing the transition by breaking down information silos and utilizing all of the data produced by a company through horizontal and vertical integration.

Edge Agents

To oversee an environment for edge computing where devices typically lack networking capabilities.

Development Cost

The rapid Application Development framework requires short, agile sprints that repeat as frequently as the project requires. This iterative approach uncovers bugs and logic issues before they can derail delivery. The shortened cycle time improved productivity and fewer resources significantly reduce the cost of application development.

Market Place

The IoT83 platform is a powerful yet simple click-and-buy platform that provides complete IoT solutions, including hardware, software, and cloud connectivity, and is ready for smart application deployment.

Edge Controller

To enhance data processing, increase productivity, decrease downtime, and cut operational costs.

Low Code Platform

With the Flex83 Low-Code Platform for High-Speed Digital Transformation, you can create, release, scale, and secure applications more quickly.

IP Ownership

Any application built for you either by your team or using IoT83 Engineering Services remains your IP, and is stored on secure software repositories (such as your private GitHub account or other similar repositories). All of your application is your IP, while the underlying platform is the IP of IoT83

Solutions

A tried-and-true, scalable, and secure IoT engine to power your applications

Flex83 is here with a tested, scalable, and secure IoT engine to power your applications, as well as Rapid Application Development (RAD), Low-Code, and No-Code workflows to create unique and powerful applications.

Streamlining complex connections

The (AEP) Application Enablement Platform connection manager from Flex83 simplifies connecting anything to everything. In a simple and secure environment, you can create complex connections between external databases, current applications, APIs, middleware, web applications, and network files using a variety of devices.

Integrate data from multiple sources.

Easily manage data ingestion and transformations with Flex83's Data Transformation Studio without having to become intimately familiar with all of the underlying technology's quirks. Collect and manage data from a variety of sources, including Hadoop, Mongo, Cassandra, Elastic, and SQL.

Consolidate insights from siloed data

Flex83 enables users to collaborate and conduct data analysis in a variety of ways for faster and more accurate decision-making by facilitating the easy integration of critical data from various sources. You can store all of your structured and unstructured data at any scale with Flex83's Data Lake. Flex83's extensive database collection provides all of the tools required for a normalized data lake and unified secure data access.

Dashboards with a customized interactive context

Explore our readily available Flex83 Dashboard Studio to learn how simple it is to convert your data into useful IoT system improvements. Alternatively, build custom dashboards using our Widget Builder and sample reports, libraries, data sources, and visualizations relevant to your sector.

IoT83: Multiple Flexible Licensing Models

IoT83 offers pricing models for both "OpEx" and "CapEx" IoT investment preferences by customers.



IoT83 provides a variety of licensing options to suit clients' requirements:



Hosted PaaS and SaaS services by IoT83 this Application Enablement Platform (AEP) can be made available as a platform as a service and Software as a Service (SaaS) solutions.



The same PaaS and SaaS services can be used in customer clouds or data centers.



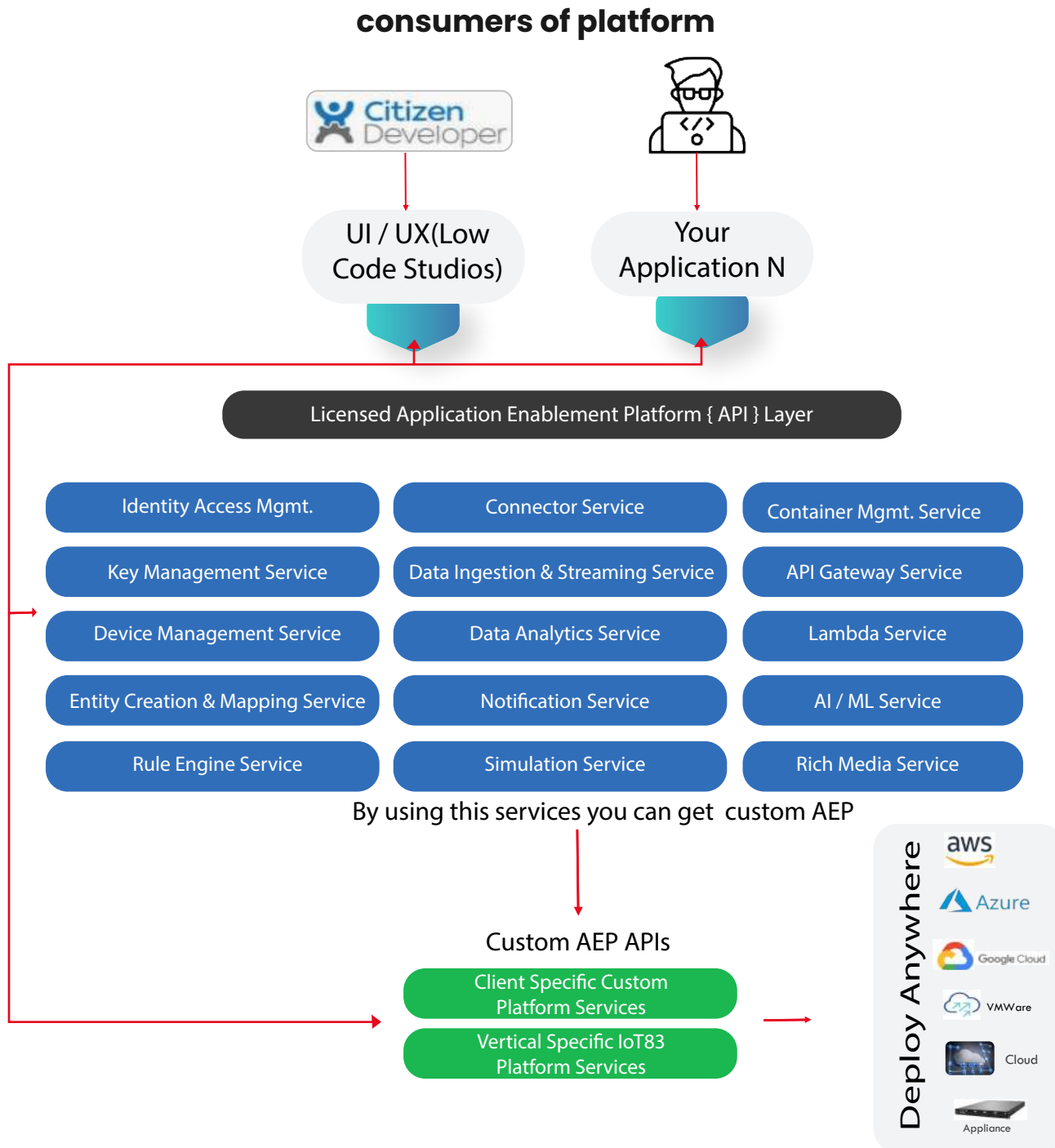
Also facilitates IoT83 DevOps services.



The full IoT83 (AEP) Application Enablement Platform can also be provided under an Object Code or Source Code Enterprise



Microservices Architecture: Flex83 and Its Components



IoT platform for industrial operation

Flex83's (AEP) Application Enablement Platform (PaaS) Platform-as-a-Service allows businesses to develop and deploy applications more quickly. Our platform connects IoT devices and applications for various industrial operations.

Marketplace

Once the developed applications is published on the marketplace, it is simple to handle tenant administration, billing, performance management, and resource management.

Middleware/ APIs

A user-friendly workflow that ensures data connectivity from multiple sources and can connect to almost anything. The analytics tools and custom code engine collaborate to build robust middleware components for all solutions.

Analytics/Big Data

A comprehensive ETL studio to create ETL migration and modernization strategies based on current technology stacks, use cases, business processes, and objectives.

Connectors

A user-friendly workflow and application tools to help you launch your solution quickly. IoT83 (AEP) Application Enablement Platform covers a range of activities, including integrating devices, flows, and applications, as well as data transformation and storage, analytics, AI & ML, dashboard creation, and application development and launch.

A Solid and Robust Low-Code Application Platform

There is a lot of interest (and money) being invested in low-code development platforms these days, and for good reason. They not only enable those doing the work to develop solutions that precisely address their needs, but they also free up IT to concentrate on enhancing core systems and fostering strategic innovation.

Now, both internal and external users can contribute to the responsive, innovative, and intelligent expansion of their business processes. Along with being able to draw in and keep top talent, they also have the crucial ability to quickly change course and evolve in response to the constantly shifting competitive landscape, technological advancements, and client feedback.

IoT83 significantly reduced application development complexity by utilizing a low-code approach and analytics tools.

With IoT83's Low-Code workflows, you can connect to virtually anything using our Connector library, transform data using our intuitive ETL engine, build custom business logic using multiple coding tools, add custom analytics and ML models, and create custom dashboards.

A low code application development platform enables the quick creation and deployment of sophisticated, context-aware, and customer-focused business applications, empowering professional IT developers and streamlining enterprise-wide workflows. It can assist businesses in giving their clients, staff, and partners a frictionless and hassle-free experience.

A low code platform allows businesses to:

01

Automate complex, content-centric business processes from beginning to end.

02

Create solutions with a range of domains to meet dynamically changing business needs.

03

Develop business-grade applications for the web and mobile quickly.

04

Utilize cutting-edge technologies to promote continuous process improvement and provide a rich user experience.



Functionality of the IoT83 Application Enablement Platform

The core technology and platform of IoT83's (AEP) Application Enablement Platform are "vertical market" agnostic. Capabilities provide the foundation for developing applications for virtually any vertical market.

However, at IoT83, we have identified that, across various vertical markets, certain IoT "design patterns" for asset management, fault detection, prevention, and avoidance, as well as service optimization and operational excellence are repeated and reusable.

As a result, IoT83 has developed templates and functional components to speed up and improve applications.

Conclusions and Summary

IoT83's proven Application Enablement Platform, collaborative problem-solving approach, experienced engagement and services team, and flexible engagement model all place IoT83 as an ideal partner for your IoT Application investments.

Working with IoT83 means accelerated time-to-market, significantly reduced risk, and guaranteed scale and reliability and we welcome the opportunity to dive deeper into our platform, flexible deployment solutions, and collaborative engagement model.

Our goal at IoT83 is to always assist you in accelerating truly valuable IoT solutions so that you can reap the full benefits of IoT for your business and operations. Let's get started.

Get in touch
and start building your
IoT application Seamlessly with Flex83

