

# Enhancing lives & driving business impact with **Digital Transformation**







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# Snapshot

## About Us

**Powersoft19** is a technology service company that delivers end-to-end solutions, specializing in safety-critical embedded systems, hardware engineering, quality assurance, cybersecurity, enterprise apps, IT services, digital transformation, IoT, and automation. Our experts function as extended virtual teams, ensuring long-term and sustainable business outcomes. For over three decades, we have been committed to improving the world for our clients, partners, employees, and communities.

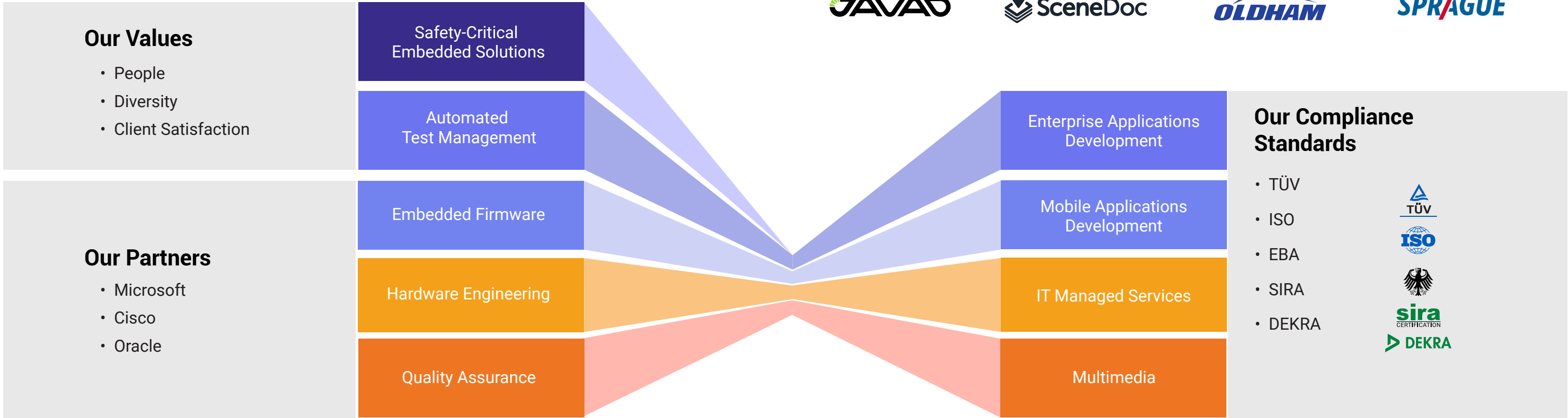
Our services cover every stage of project management, from strategic planning through product development and maintenance to obsolescence. **Powersoft19** offers global project support to its clients while guaranteeing a consistent level of service. We capitalize on our diverse team's knowledge base in four key areas: product life cycle management, engineering, intelligent systems, and information systems.

As a technology partner, **Powersoft19** offers services to businesses in over 20 countries throughout Europe, Asia, North America, and Australia. We serve a wide range of industries, including rail, energy, automotive, material handling, mining, oil and gas, finance, healthcare, and telecom sectors.

## Competitive Advantages

- More than 3,000 man-years of experience in diverse industries
- Access to a large talent pool through teaching affiliations with universities
- Zero marketing budget due to returning customers and client referrals
- Exceptional blend of experienced and young talent
- World-class PhD consultants on board
- High team retention rate of over 10 years

## Our Clients



# Enabling Smarter Industries

*Powersoft19* delivers intelligent solutions to enterprises globally across a wide range of industries with a commitment to the environment. Our team helps enterprises develop intelligent business capabilities and enables them to make smarter and better decisions.



Energy



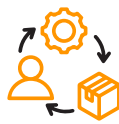
Aerospace



Automotive



AgriTech



Supply Chain



Manufacturing



E-Commerce



Transportation



Telecommunication



Smart City



Retail & Shopping



Civil Infrastructure



Public Services



Healthcare



Proptech



Multimedia



Banking



Finance

# Services

*Powersoft19* is dedicated to providing dependable solutions and base our service offerings on a precise understanding of our clients’ business requirements. Our extensive industry expertise and technical proficiency enable us to deliver cost-effective solutions while providing a competitive edge and maximizing productivity.

## Safety-Critical Embedded Solutions

- New Product Development
- Systems Re-Engineering
- Maintenance and Customization
- Standards Conformance
- Safety Consultancy and Assessment
- Product Documentation
- System Dynamics Modeling
- Process Improvement

## Embedded Firmware

- Firmware for Industrial Products
- Firmware for Consumer Electronics Products
- Embedded Linux
- Custom Android Kernel
- Driver Development
- Firmware for Extremely Low Power Appliances
- Human Machine Interface Design
- MISRA C Compliant Firmware

## Hardware Engineering

- RF Design
- Digital Design
- Analog Design
- Electronic Packaging
- DFX Services
- Prototyping
- Hardware Testing Services
- Certification Oriented Hardware Design

## Quality Assurance

- Software Testing
- Test Management
- Stress/Load Testing
- Agency Approval
- Requirements Analysis
- Functional Testing
- Static and Dynamic Analysis
- Test Automation
- Standards Conformance
- Security Testing
- Compatibility Testing
- Mobile Testing
- Performance Testing
- Big Data Testing

## Automated Test Management

- End-to-End System Level Automated Testing
- Industrial Equipment Automated Testing
- Black/Grey/White Box Automated Testing
- Web Application Automated Testing
- Mobile Application Automated Testing
- Automated Test Equipment at Production Line
- Bed and Nail Testing
- Modular/Data-driven/Keyword-driven/Model-based Test Automation Framework

## Enterprise Application Development

- M2M Applications
- Business Process Automation
- Business Intelligence
- Open Source Apps
- Mobile Application Development
- Energy Management Solutions
- Distance Learning Systems
- Airline Loyalty Systems
- Strategic War Games
- Hospital Management Systems
- Internet Based Training (IBT) Systems
- Online Testing Systems
- Project Management and Tracking Systems
- Customer Support Systems
- Online Insurance Claim Systems

## Mobile Application Development

- Android Apps
- iOS Apps
- Game Development
- E-commerce/M-commerce Apps
- Microsoft Dynamics Applications

## Multimedia

- Web Design and Development
- Trade Show Animation Development
- Mobile Application Development
- Product Training for New Product Launch
- Logo Design
- 3D Modeling and Simulations
- 2D to 3D Conversion
- Video Production

## IT Managed Services

- Managed Network Infrastructure Service
- Managed Server Infrastructure Services
- Managed IT Support Services
- IT Service Desk
- Information Technology



# Enterprise Applications



## Enhancing Mobility with Enterprise Application Services

*Powersoft19* realizes the rise of on-demand services, data-driven digital transformation, customer-centric business goals, and dynamic market needs for enterprises to launch web and mobile applications that provide an empathetic user experience. The digital disruption of our age has led to an increase in the demand for complex, scalable, distributed, component-based, and mission-critical applications. We assist businesses in designing and developing intelligent apps capable of quicker connections and faster operations combined with an unparalleled customer experience at lower costs. We adapt quickly to client-specific technologies and excel in using the best software tools and platforms to develop custom enterprise apps with complete end-to-end solutions.

### Services Offered

- |                                       |                                   |                               |
|---------------------------------------|-----------------------------------|-------------------------------|
| • AWS Server-less Services Deployment | • Digital Transformation          | • Business Intelligence       |
| • Node.js App Design and Development  | • Web and Mobile Apps Development | • Business Process Automation |
| • Microsoft Azure App Services        | • Software Design and Development | • Supply Chain Management     |
| • Microsoft Azure Storage Services    | • Database Design and Development | • Access Control Solutions    |
| • Microsoft Azure IoT                 | • Open-Source Technology Apps     | • Infrastructure Management   |
| • Data Analytics and Transformation   | • Web and API Integrations        | • Project Management          |
| • Machine Learning                    | • System Architecture             | • Business-Case Analysis      |
| • Microsoft Dynamics CRM 365          | • Quality Assurance               | • Application Integration     |

## Enterprise Apps Technology Stack

Our experts adapt quickly to client-specific technologies and excel in using the best tools and platforms to develop custom enterprise apps. We provide complete end-to-end solutions including API integrations with a wide range of expertise in all areas required for reliable software development.

### Frontend

CSS, HTML5, Bootstrap, Vue.js (Dockerize), React, Ember, Express, AngularJS



### Backend

PHP, Python, CodeIgniter, Hapi, Laravel, Drupal, Meteor, Flask, Django, Loopback, Express.js, ASP.NET, C#, Node.js



### APIs & Webhooks

RESTful API, GraphQL, Microsoft Web API, Slack Webhooks



### Platforms

Amazon Web Services, Microsoft Azure, Microsoft Dynamics AX, Microsoft Dynamics 365, SharePoint



### Database

MongoDB, PostgreSQL, SQLite, Neo4J, MySQL, Microsoft SQL, NoSQL, Oracle SQL



### Languages

Java, C#, C/C++, Objective C, Python, Groovy, Swift, Kotlin, PHP, Rust, Scala

### Frameworks

JDBC/JPA, JMS, Hibernate, .NET, EJB, Apache Camel, Node.js, Firebase, LDAP/Active Directory, Reactive (Akka, RxJava, Reactor)

### Mobile

iOS, Android, HTML5, React, Xamarin, JavaScript

### Web

CoffeeScript, Vue, Sass, Angular, WebGL

### Cloud

Amazon Web Services (AWS), Google Cloud, Oracle Cloud, IBM Cloud, Microsoft Azure

# Smart Data-Driven AI Solutions

Machine Learning | Deep Learning | Internet of Things | Digital Transformation

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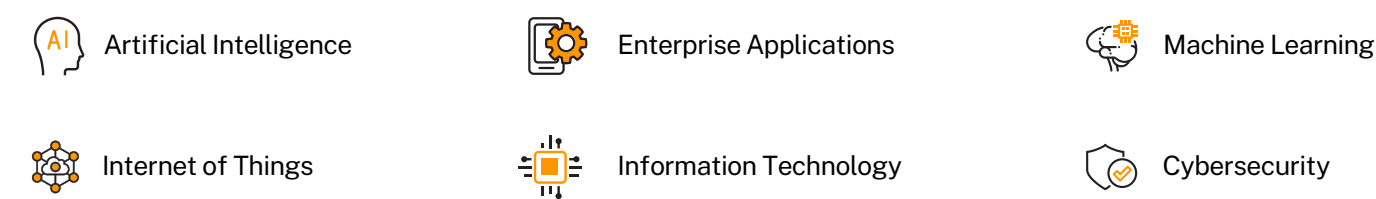
Providing Artificial Intelligence Solutions to  
Overcome the Challenges of Industry 4.0

A glowing blue 'AI' logo is positioned on the right side of the image. The letters are stylized and emit a bright blue light. The background is a dark, textured surface resembling a circuit board or a topographical map, with various lines and patterns visible. The overall color scheme is dark blue and black, with the glowing 'AI' as the primary light source.



# Transforming Businesses with Artificial Intelligence

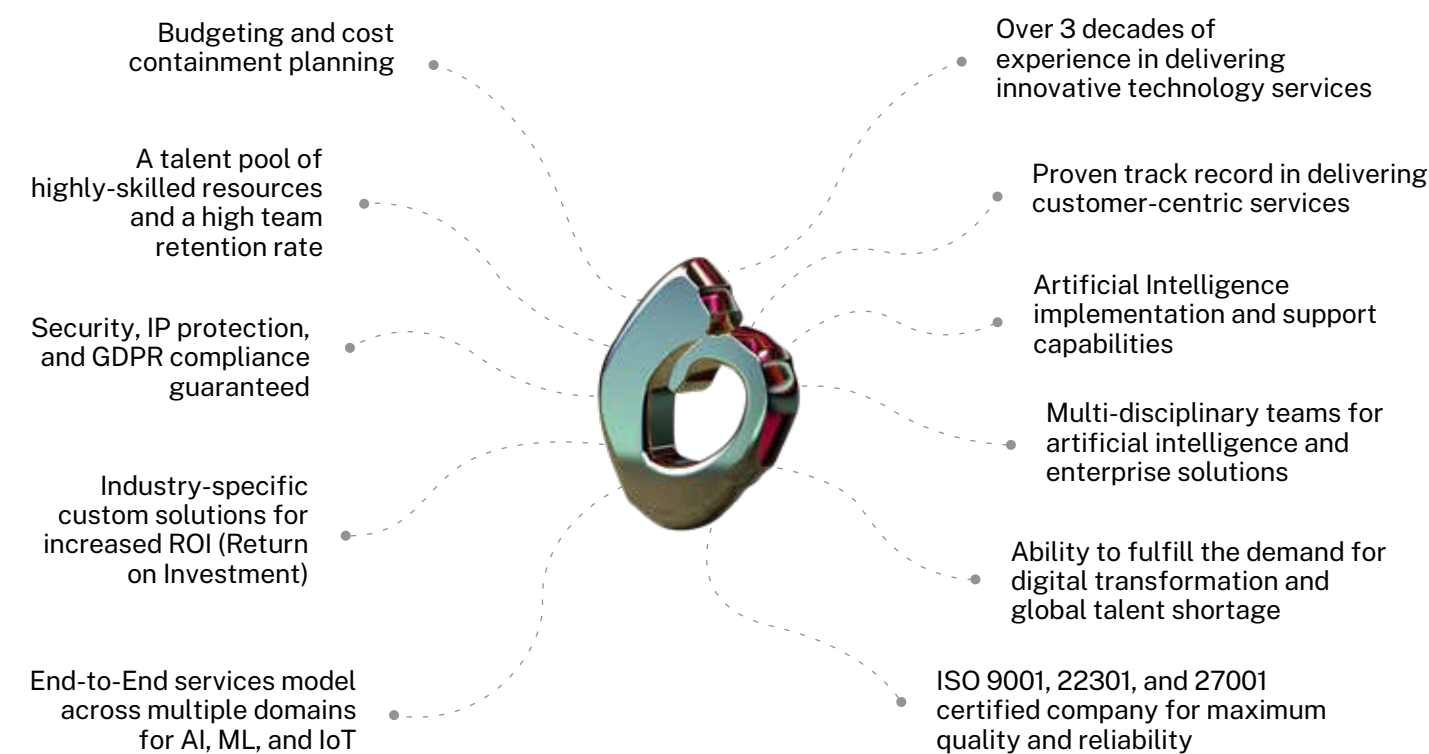
*Powersoft19's* AI solutions redefine business operations by seamlessly integrating with Enterprise Apps, Machine Learning, IoT, IT, and Cybersecurity services. This combination empowers businesses to optimize processes, enhance customer experiences, and make informed decisions. From predictive analytics to process automation, our AI innovations drive efficiency and innovation, ensuring businesses thrive in the digital age.



## Intelligent Technology Synergy

Discover the future of technology through our AI solutions. With AI's cognitive capabilities, businesses enhance customer engagement, automate tasks, and achieve unparalleled efficiency. Embrace intelligent synergy, where every aspect of your technology landscape converges for transformative outcomes.

## Our Competitive Edge



## Delivering Intelligent Solutions from Concept to Completion

*Powersoft19's* experts work closely with clients as an extended team for project-based services. We excel in project management and delivering a complete package of solutions that complement each other throughout each phase of the product development lifecycle.



## Revolutionizing Legacy Businesses Through Digital Transformation

In an era marked by rapid technological evolution, *Powersoft19* pioneers digital transformation for legacy businesses. We craft comprehensive technology ecosystems, reimagining traditional processes and enhancing legacy systems. Our approach focuses on building intelligent infrastructures tailored to each business, seamlessly integrating AI, IoT, and user-centric digital experiences. By aligning technology with users' evolving demands, we modernize legacy systems and revolutionize how businesses engage with their audience. With *Powersoft19*, legacy is an opportunity to evolve and thrive in the digital age.

## AI-Powered Evolution for Emerging Industries

*Powersoft19* catalyzes the potential of emerging industries such as proptech, agritech, fintech, telecommunications, and robotics by infusing cutting-edge AI solutions. We specialize in transforming novel business ideas into fully autonomous systems and robust industrial platforms. Leveraging AI algorithms, machine learning, and deep analytics, we create intelligent frameworks that drive innovation and efficiency. From revolutionizing agricultural practices to optimizing financial technologies, our AI implementations empower businesses to leapfrog competitors and set new industry benchmarks. At *Powersoft19*, we help our clients redefine their capabilities, making their businesses future-ready and globally competitive.







## Transportation and Transit Systems



### Transit Management System

Artificial Intelligence is one of the new-age technologies that is helping the public and industrial sectors overcome the challenges we face in our daily lives for transportation, transit, logistics, and supply chain. *Powersoft19's* team can help you innovate AI solutions to solve your unmet needs for transit management systems, transportation efficiency, a net-zero carbon footprint, public safety, supply chain management, logistics automation, and more.

### Some of Our Services

- Predictive Maintenance Systems
- Traffic Optimization Solutions
- Intelligent Routing Algorithms
- Vehicle Tracking and Monitoring Systems
- Smart Fleet Management Solutions
- Automated Fare Collection Systems
- Network Security Measures
- Data Encryption Solutions
- Threat Detection and Response Systems
- Compliance and Regulations Support
- Mobile Ticketing Apps Development
- Wi-Fi and Connectivity Services
- Embedded Control Systems Development
- IoT Edge Devices Customization
- Sensor Integration Services
- Firmware Development Solutions



# Smart Grid Transformation



## Enabling Digital Energy Networks Through AI

In energy transformation, Artificial Intelligence is the catalyst driving smart grids into the future.

*Powersoft19* harnesses the power of AI to deliver intelligent solutions that revolutionize smart grids, ensuring maximum interoperability, system scalability, enhanced cybersecurity, and seamless digital connectivity. Our expertise transforms conventional energy networks into intelligent, adaptive systems, paving the way for a sustainable and resilient energy future.

## What We Offer?

- System Optimization
- User Behavior Analysis
- Critical Data Analysis
- Predictive Analysis
- Smart Device Communication
- System Cybersecurity



## Addressing Multi-Domain Challenges in Energy

At *Powersoft19*, we assist clients in overcoming multifaceted challenges spanning power generation, transmission, distribution, substations, smart meters, and consumer domains. Through innovative AI-driven approaches, we optimize energy systems, improve efficiency, and enhance reliability. We pioneer green energy initiatives, including smart grid solutions. By integrating cutting-edge AI technologies, we empower clients to create energy ecosystems that are both technologically advanced and environmentally sustainable, fostering a greener and more energy-efficient future.

- Safety-Critical Embedded Systems
- Energy Efficiency Management
- Energy Management System
- Troubleshooting
- Fault Diagnosis
- Digital Twins





## Robotic Process Automation (RPA)

### Embarking on RPA Transformation

Many enterprises worldwide have already embarked on the RPA journey and are heading towards a completely autonomous system. An RPA boost can help you scale your business and increase efficiency. Enterprises need the right partner to help them leverage RPA services that are cost-effective and productive with satisfying results for a better customer experience.

### Harnessing RPA for Business Transformation

RPA can help you automate manual digital tasks, including data entry, predictive maintenance, and service support by using automation software to save significant time and expenses. *Powersoft19* delivers custom RPA development solutions with the implementation and integration of artificial intelligence and machine learning to enhance your complete enterprise ecosystem. Our experts can help you leverage RPA benefits by automating your business processes to achieve higher efficiency, reduce overhead costs, unlock deep insights, provide excellent customer experience, and strengthen cybersecurity.

### Intelligent RPA Implementation

Our tailored approach ensures seamless integration, offering businesses a transformative automation experience. Through the synergy of RPA, artificial intelligence, and machine learning, *Powersoft19* drives operational excellence, enabling enterprises to stay ahead in the competitive landscape while delivering unparalleled value to their customers.

### Our RPA Services

- RPA Design and Implementation
- Customer Service Automation
- Intelligent Document Processing
- Intelligent Knowledge Processing
- Data Migration Automation
- Enterprise Apps Integration
- E2E Process Automation
- Controls Dashboard
- Data Protection and Security
- Systems Data Analysis
- ERP Management System
- Report Generating Automation





# Internet of Things (IoT)

## IoT Innovation Empowering Industry Leaders

Powersoft19 offers highly sophisticated and customized IoT solutions unique to businesses and designed to drive effective outcomes for global industry leaders. Our professionals tap into the full potential of today's cyber-physical systems to create powerful and effective IoT solutions. As a result, we have completed numerous M2M and industrial automation projects with impressive business outcomes over the last 20 years.

## A Race to Digitize Field Assets

Businesses in the transportation and oil and gas industries have been applying IoT solutions in automation and M2M applications for decades. However, more enterprises have entered the race to digitalize their field assets and increase their devices' connectivity for rapid data transfer, monitoring, and control.

## Comprehensive IoT Solutions

Powersoft19 offers a unique end-to-end services model encompassing hardware, firmware, connectivity, data gathering and processing, and consultancy.

## Some of Our Services

- Preventive Maintenance
- Quality Management
- Intelligent Systems
- Process Automation
- Asset Management
- Remote Diagnostics & Analysis
- Cloud Management
- Remote Monitoring
- Environmental Monitoring
- Energy Optimization
- Live-Feed Video Surveillance





# AI-Driven Smart City

## Advanced Tech Empowering Smart Cities

Increasing urbanization and a rapidly growing population is overburdening cities today. Smart cities can leverage an ecosystem of connected devices and digital technologies to gather data and derive insights to streamline and improve city operations. Next-gen technologies like artificial intelligence, machine learning, data analytics, robotic process automation, and 5G communication, coupled with enhanced cybersecurity, can help overcome the challenges of this era. A significant number of smart cities leveraging these technologies are already being developed across the world.

## Enhancing Urban Living with Intelligent Solutions

*Powersoft19* develops innovative smart city solutions that are purpose-built and comply with human-centric specifications and requirements. Our custom services for smart cities adopt artificial intelligence to solve public operational challenges and improve living standards and city accessibility.

## Our Comprehensive Expertise

Our multi-disciplinary team has extensive experience developing artificial intelligence, machine learning, and digital transformation solutions to address any challenges in the public, industrial, and commercial sectors.

## We Offer

- Smart Traffic Management
- Intelligent Public Transportation Systems
- Smart Parking Solutions
- Energy Efficiency Solutions
- Smart Street Lighting Systems
- Public Safety and Surveillance Solutions
- Emergency Response and Disaster Management
- Citizen Engagement Platforms
- Predictive Analytics for Urban Planning
- Healthcare Infrastructure Optimization
- Education Technology Solutions
- Tourism and Hospitality Management
- Smart Building Automation
- Data Analytics and Insights



# Our Approach to Quality

## Customers as Focal Point

The focus of our quality approach is ultimate customer satisfaction. We find out customers' stated and unstated requirements to deliver the best quality. Our team owns our customers' problems as its own and works vigorously to solve them in the most effective manner.

## Integrated Knowledge-Base

Staying current with the latest quality standards is at the core of our quality approach. Equipped with this expert knowledge, we devise systematic, integrated processes to ensure the quality of our client's products against these industry standards.

## Certified Quality

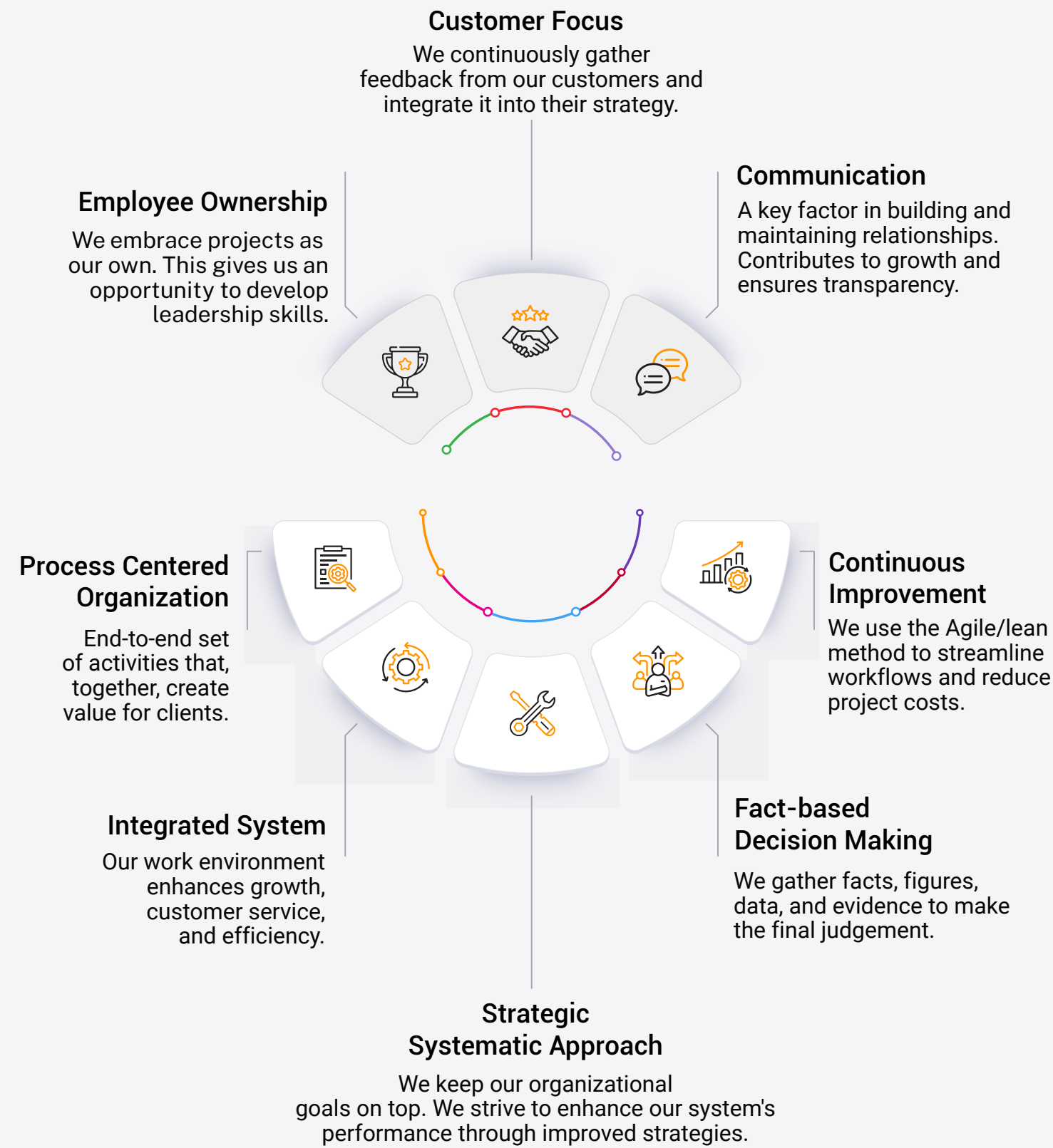
We build our products strictly according to global industry standards and help our clients get third-party approvals for their products. *Powersoft19* has an excellent track record in achieving agency approvals for industrial products from European and American safety agencies for Safety Integrity Levels ranging from SIL 1 to SIL 3:

- IEC 61508
  - IEC 61511
  - EN 50126/EN 50128/EN 50129
  - EN 13849
  - EN 50271
  - EN 50402
- IEC 6060
  - ISO 26262
  - ISO 27001
  - ISO 22301
  - UEAS Management Systems CB-010

## Continuous Improvement

A quality product is one that pleases its users in unexpected ways. To achieve this, we pay attention to every pixel so that the quality is improved incrementally in every possible way. We assure that each product we help build is rated as the best in terms of functionality, reliability, productivity, and scalability.

# Our Process-Centered Approach to Excellence





## Success Stories

### Smart Digital Access Control RFID Technology for Smart Enterprises



*Powersoft19* partnered with a leading technology firm that develops intelligent devices for facility security—to innovate cutting-edge RFID technology with futuristic features that revolutionized physical access control, replacing legacy systems. The new system took the RFID industry to the next level with increased efficiency, improved security, and digital access control management. Working together, we untangled complex industry challenges of digital access with a game-changing solution contributing to the smart city industry.

### Intelligent Document Processing for Law Enforcement



A client from the US public services sector engaged us for an intelligent document processing startup project to help pioneer a revolutionary product, redefining investigative services. This enabled law enforcement personnel to document crimes, accidents, and incidents effortlessly using mobile phone devices. Some of the major considerations for this project included following a predefined process of law enforcement agencies that varied for all 50 states while ensuring security and deciphering the standards applicable to such operations. As a result, the startup project raised over \$4 million.

### Intelligent IoT Solutions for the Gas Industry



A leading global firm in the gas detection industry, that develops, manufactures, and services portable and fixed gas detection equipment, engaged us for innovative IoT and artificial intelligence solutions. *Powersoft19* collaborated closely, which led to astounding success in new product development, legacy product sustenance, requirements engineering, quality assurance, and standards compliance. We helped our client develop market-leading gas detection equipment—products that have saved countless lives.

### Railroad Worker Protection System for the Transportation Industry



A prestigious company from the rail industry engaged us to develop an IoT-based railroad worker protection system. We helped them develop a groundbreaking product line from an idea to installation. This comprehensive product portfolio addressed the market's most critical need—life safety. The patented railroad worker protection system provides the highest level of safety with self-healing neural network technology. The company has saved numerous lives and persists in safeguarding railroad workers from uncertainties and human error.



# Success Stories (Continued)

## Innovative and Secure, Intelligent Solutions for the Smart Grid



*Powersoft19* helped a startup company in the energy and smart grid sector to become a pioneer of intelligent technology based on safety-critical embedded systems. We helped our client modernize their legacy systems and digitalize their field products to resolve today’s power distribution and transmission challenges. The technology involved the development of embedded firmware, quality assurance, test automation, PCB and hardware design, mechanical and electrical engineering, and compliance with international standards. As a result, our client aims to deliver futuristic technology and transform smart grids for a better future and a cleaner, greener environment.

## Intelligent Control Platform Solution for Rail Industry Operations



Another client of *Powersoft19*, from the locomotives industry, provides intelligent expert solutions to improve global freight and logistics operational efficiencies. We helped them secure their Intellectual Property by drafting patents in different domains, developing new concept products, and providing them with services for their legacy software. *Powersoft19* has developed multiple products on a collaboration and turnkey basis for our client. We also designed and developed the complete solution, including the hardware and software of the newly launched next-gen controller platform for our client’s products.

## Automated Remote-Control Communication System for Locomotives



A prestigious technology innovator engaged us to develop an innovative solution for industrial remote controls. *Powersoft19* helped to transform their technology into cutting-edge M2M communication systems. The partnership for continual product line enrichment brought about 2.5 million lines of MISRA C compliant firmware and software, the transformation of ordinary remote controls into an intelligent communication system, and an automation solution for over 1000 locomotives. Today, our client is a market leader in the design and supply of high-reliability wireless remote-control systems serving the rail, mining, and industrial markets globally.

## Enhancing Real Estate Experience with Smart and Seamless Proptech Solutions



One of our clients in the real estate industry required a seamless solution for managing diverse properties efficiently, securing user data, and enhancing customer experience. *Powersoft19* implemented a sophisticated proptech solution integrating smart property management, robust data security protocols, and personalized customer interactions. We streamlined their operational processes, helped reduce data breaches significantly, and increased tenants' experience satisfaction. Our solution resulted in a significant competitive edge for our client. And today, they are a beacon of efficient and secure property management.





## Contact Us

Drop us a line and let us know what we can do for you. There is no limit to what can be made possible with our passionate team. Here are some examples:

- Come up with ideas to solve challenging issues faced by your business.
- Execute complex project/product ideas.
- Take the burden of managing legacy products off your shoulders.
- Provide a skilled project team to augment your in-house resources.
- Provide consultancy regarding industry standards and market trends.
- Design a customized partnership model with **Powersoft19** that empowers you to beat the competition.

### USA/International:

🌐 [www.powersoft19.com](http://www.powersoft19.com)

✉ [info@powersoft19.com](mailto:info@powersoft19.com)

### Europe:

🌐 [www.powersoft19.eu](http://www.powersoft19.eu)

✉ [info@powersoft19.eu](mailto:info@powersoft19.eu)