**🧩 Software Solutions**

Astrawin develops intelligent, scalable, and industry-ready software platforms that drive digital transformation, automation, and data intelligence.  
Our solutions are tailored for **enterprises, healthcare institutions, and educational organizations**, helping them streamline operations, improve efficiency, and enhance visibility across their ecosystems.

**1. Enterprise Solutions**

**Empowering smarter business operations through intelligent automation and digital transformation.**

**Overview**

Astrawin delivers customized enterprise software systems that simplify complex business processes, integrate departments, and enhance decision-making with real-time insights.  
Our solutions are designed to scale with your business — enabling agility, efficiency, and measurable performance across all operations.

**Capabilities / Solutions**

* **HR & Workforce Solutions:**  
  Streamlined employee lifecycle management covering attendance, payroll, leave, and performance tracking with role-based access control.
* **ERP & CRM Platforms:**  
  Tailor-made business management tools integrating operations, finance, procurement, and customer engagement on a unified platform.
* **Web & Mobile Applications:**  
  Intuitive, secure, and high-performing apps designed to deliver seamless experiences across devices.
* **Cloud & System Integration:**  
  Seamless connection between on-premise infrastructure and cloud environments for unified performance and scalability.
* **Data Analytics & Reporting:**  
  Actionable dashboards and real-time reports for informed decision-making and process optimization.

**Business Outcomes**

* Streamlined business workflows and improved efficiency
* Enhanced visibility and control across departments
* Increased workforce productivity and customer engagement
* Scalable, secure, and future-ready enterprise systems

**2. Healthcare Solutions**

**Transforming healthcare management with integrated, data-driven digital platforms.**

**Overview**

Astrawin’s healthcare software solutions are built to improve operational efficiency, patient care, and data accessibility for hospitals and multi-branch healthcare organizations.  
By integrating information systems, automation, and secure access, we help medical institutions achieve seamless workflows and informed clinical decisions.

**Capabilities / Solutions**

* **Hospital Information Management System (HIMS):**  
  Centralized management of patient records, staff, billing, pharmacy, laboratories, and multiple hospital branches.
* **Electronic Medical Records (EMR):**  
  Cloud-based, secure medical records accessible to authorized staff, ensuring data privacy and compliance.
* **Patient & Doctor Portals:**  
  Digital engagement platforms for appointment scheduling, secure communication, and teleconsultation.
* **Telemedicine & Integration APIs:**  
  Enables remote consultations and integration with labs, imaging, and insurance systems.
* **Vision-Based QA Automation (VisionPro):**  
  AI-powered visual inspection systems that improve quality, traceability, and operational accuracy in healthcare and manufacturing setups.

**Business Outcomes**

* Centralized and automated hospital operations
* Enhanced patient and staff experience
* Data-driven decision-making and resource optimization
* Reduced manual errors and improved operational accuracy

**3. Education Solutions**

**Building smarter, safer, and digitally managed campuses through AI and automation.**

**Overview**

Astrawin provides an end-to-end technology suite for **colleges, universities, and schools**, covering every aspect of campus life — from attendance and access control to hostel and network management.  
Our integrated solutions enable real-time visibility, security, and automation across students, staff, and administration.

**Capabilities / Solutions**

* **AI-Based Attendance System:**  
  Vision-based camera attendance for students and staff, eliminating proxy entries and ensuring real-time, contactless accuracy.
* **Biometric Attendance & Access Control:**  
  Fingerprint and face recognition-based identity systems for controlled access to classrooms, labs, and hostels.
* **Axis-Based Network Security Solutions:**  
  Deployment of Axis network cameras and speakers for surveillance, monitoring, and public announcements, with centralized control for safety and communication.
* **Hostel Management System:**  
  Room allocation, attendance tracking, visitor management, and maintenance records — all integrated with main campus operations.
* **Staff & Student Information System:**  
  Centralized database for student and employee details, attendance, and access rights.
* **Campus Network & Integration:**  
  High-speed, secure LAN/WAN and Wi-Fi connectivity linking all campus zones for seamless operations.
* **Digital Administration Tools:**  
  Dashboards for real-time tracking, analytics, and management visibility across academic and residential zones.

**Business Outcomes**

* Unified digital campus management for students and staff
* Accurate, automated attendance and access tracking
* Improved campus safety and communication
* Centralized visibility of academic and hostel operations
* Higher operational efficiency and accountability

## 🔹 2. IoT Systems

Astrawin’s **IoT and Industrial Automation** solutions transform traditional processes into smart, connected, and self-learning ecosystems.  
We combine hardware integration, edge computing, and intelligent analytics to unlock real-time operational insights.

**IoT & Industrial Automation**

**Objective:** Enable intelligent, data-driven manufacturing and infrastructure management.

**Capabilities / Solutions:**

* **Sensor Integration & Edge Computing:** Data acquisition from machines, utilities, and environment sensors for live process feedback.
* **OEE (Overall Equipment Effectiveness):** Continuous tracking of production availability, performance, and quality.
* **Predictive Maintenance:** AI algorithms detect performance deviations to prevent unplanned downtime.
* **Energy & Utility Optimization:** Smart systems to monitor and reduce power, air, and water consumption.
* **Centralized Dashboards:** Unified view of factory floor data, KPI analytics, and maintenance alerts.

**Business Outcomes:**

* Optimized production and machine uptime
* Lower maintenance and energy costs
* Real-time visibility into process performance
* Improved asset efficiency and sustainability

**Vision-Based Industry Solutions (Vision Pro)**

**Objective:** Leverage artificial intelligence and computer vision to enhance quality control, traceability, and security in industrial environments.

**Capabilities / Solutions:**

* **AI-Based Quality Assurance (QA-NAVI):** Automated defect detection using **Cognex VisionPro Deep Learning**, enabling faster inspection, grading, and traceable production quality.
* **Facial Recognition Attendance:** Contactless identity verification integrated with workforce systems for secure attendance logging.
* **Visitor Management System:** Intelligent access control and digital visitor authentication for safety compliance.
* **Warehouse Vision Solutions:** Real-time visual tracking for stock validation and audit readiness.

**Business Outcomes:**

* Consistent and accurate inspection results
* Elimination of human errors in visual QA
* Improved operational security and efficiency
* End-to-end digital traceability in production lines

**🔹 3. Cybersecurity Services**

Astrawin provides **end-to-end cybersecurity solutions** to protect enterprises from digital threats, ensuring data integrity, business continuity, and compliance readiness.  
We help organizations strengthen their security posture through proactive defense and intelligent response.

**Capabilities / Solutions:**

* **Threat & Vulnerability Assessment:** Identify potential weak points and mitigate security risks before exploitation.
* **Firewall & Network Security:** Design and deployment of next-generation firewalls with advanced intrusion prevention.
* **Endpoint Protection:** Secure management of laptops, desktops, and mobile devices with centralized policy enforcement.
* **Access Control & Encryption:** Role-based access and encrypted data exchange for critical applications.
* **Incident Response & Forensics:** Structured containment, investigation, and recovery planning for faster restoration.
* **Threat Intelligence & Advisory:** Continuous evaluation of global threat trends to enhance local security posture.

**Business Outcomes:**

* Proactive protection against cyber threats
* Secured network and application environments
* Strengthened data privacy and trust
* Reduced exposure to operational disruptions

**🔹 4. Managed IT Services**

Astrawin’s **Managed IT Services** are designed to deliver operational reliability, security, and performance consistency.  
We enable organizations to focus on innovation while we manage and optimize the underlying IT environment.

**Capabilities / Solutions:**

* **IT Operations Management:** End-to-end administration of infrastructure, servers, and networks for seamless business operations.
* **Remote Infrastructure Management (RIM):** Centralized visibility and proactive maintenance of distributed IT assets.
* **Technical Support (L1–L3):** Tiered support framework ensuring timely resolution and escalation management.
* **Backup & Business Continuity:** Automated backup and recovery systems to ensure operational resilience.
* **IT Policy & Governance:** Development of IT usage guidelines and operational frameworks for risk control.

**Business Outcomes:**

* Streamlined IT operations and minimal downtime
* Improved system reliability and performance
* Predictable and optimized IT costs
* Enhanced governance and compliance consistency

**🔹 5. Infrastructure Management**

Astrawin designs and deploys **secure, high-performance, and scalable infrastructure ecosystems** that power digital transformation.  
Our focus is on building resilient IT backbones that support growth, connectivity, and operational agility.

**Capabilities / Solutions:**

* **Data Center Design & Implementation:** Modular and redundant architectures for uninterrupted performance.
* **Enterprise Networking:** End-to-end LAN/WAN setup, SD-WAN deployment, and high-speed connectivity.
* **Structured Cabling & Fiber Networks:** Design and implementation of high-density structured cabling and fiber systems.
* **Surveillance & Access Systems:** Integration of IP-based CCTV, biometric, and RFID systems for workplace security.
* **Power & Cooling Solutions:** Deployment of UPS, PDUs, and optimized cooling systems for energy-efficient operations.
* **Wireless Infrastructure:** Enterprise Wi-Fi solutions with centralized management for seamless connectivity.

**Business Outcomes:**

* Stable and scalable network architecture
* Enhanced operational uptime and data security
* Simplified maintenance and future scalability
* Reliable foundation for digital transformation initiatives

**🔹 6. Next-Generation Workspace Technologies**

Astrawin redefines modern workplaces through **smart, collaborative, and connected environments** that empower teams to work efficiently and securely.  
We integrate **cloud, IoT, and AV technologies** to create seamless digital workspaces.

**Capabilities / Solutions:**

* **Cloud Strategy & Migration:** Hybrid and multi-cloud migration services with performance optimization.
* **Virtual Desktop Infrastructure (VDI):** Secure, centralized computing environments accessible from any device.
* **Collaboration Platforms:** Deployment and customization of enterprise tools such as Microsoft Teams, Zoom, and Google Workspace.
* **Digital Workspace Automation:** Smart meeting rooms, scheduling systems, and environment automation through IoT sensors.
* **Interactive Displays & Panels:** Touch-enabled digital boards for classrooms, training, and conference setups.
* **Unified AV Systems:** Integration of audio-visual systems, conferencing tools, and wireless presentation solutions.
* **Digital Signage Solutions:** Dynamic content display for communication, branding, and announcements.
* **Smart Environment Controls:** IoT-enabled lighting, air-conditioning, and occupancy sensors for sustainable workplaces.
* **Conference & Collaboration Rooms:** End-to-end AV integration with automation, voice control, and hybrid connectivity.

**Business Outcomes:**

* Enhanced team collaboration and communication
* Flexible and efficient workspace utilization
* Improved digital engagement and meeting experiences
* Technology-enabled, sustainable, and future-ready environments