

Connecting Success: PUI's Tailored Solutions for SMBs in the Evolving Tech Landscape

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White Paper Systems Integration

Introduction

Positioning Universal (PUI) is an established, recognized industry pioneer in providing customizable mobile IoT hardware, innovative software, and value-added services. We specialize in creating, deploying, and integrating advanced IoT solutions that help companies improve operational efficiencies, safeguard valuable assets and drivers, increase customer satisfaction, and maximize their bottom lines.

Our Systems Integration (SI) services, targeted to Small-to-Medium-Sized Businesses (SMBs), include the following capabilities:

- Broad range of customizable mobile IoT hardware
- Mobile IoT hardware installation services
- Custom software and app development
- Custom APIs, reports and alerts

Systems Integration (SI)

SI refers to the strategic process of connecting diverse and often disparate hardware devices, software applications, data sources, and communication protocols into a unified system.

By harmonizing the interactions between hardware and software solutions, SI maximizes the value of IoT investments, enhances operational efficiency, reduces downtime, and facilitates data-driven decision-making, ultimately empowering organizations to harness the transformative potential of connected technologies for improved business outcomes.

Our multidisciplinary SI teams work closely with our customers to bring their IoT visions and solutions to life. We stay at the forefront of IoT technology advancements to further enhance the value provided to our customers.

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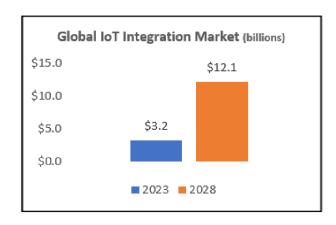
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Systems Integration Market Overview

The global SI market, valued at ~\$400 billion with a forecasted compound annual growth rate (CAGR) of 13.8% from 2023 to 20301, services a broad range of industries ranging from healthcare to manufacturing to transportation.

As businesses seek improved business outcomes through connected systems, the SI market continues to expand, fostering innovation and addressing complex challenges across the global business landscape.



Over the years, the SI market has expanded well beyond its original roots in integrating disparate IT systems at large Enterprise accounts to include connecting hardware devices and software applications. As an example, the global IoT integration market is forecast to increase from \$3.2 billion in 2023 to \$12.1 billion by 2028 at a 30.8% CAGR .

Small-To-Medium-Sized (SMB Market)

SI has also extended beyond servicing large Enterprise accounts to solving similar challenges with SMBs. This extension is not a surprise given the scale of the SMB market in the U.S. The SMB market encompasses a diverse range of more than 33 million businesses (99.9% of all businesses in the U.S.) that play a crucial role in driving innovation, job creation, and economic growth.

SMB's nimbleness and adaptability enable them to swiftly respond to market trends and consumer demands, often contributing novel solutions that fuel industry innovation. Moreover, the SMB sector employs over 61 million (~46 of the U.S. workforce) and contributes approximately 40% of Gross Domestic Product (GDP) underlining its essential contribution to the U.S. economy.

Overview

Key Trends

In today's rapidly evolving tech and business landscape, the following key trends are shaping SI:

Digital Transformation: Organizations are increasingly focusing on digital transformation initiatives, which involve integrating various devices, software applications, systems, and processes to improve efficiency, customer experience, and overall business performance.

Cloud: Cloud computing continues to grow in popularity, driving the need for seamless integration between on-premises systems and cloud-based applications. Hybrid cloud solutions, multi-cloud strategies, and tools for integrating different cloud services have gained prominence.

Internet of Things (IoT): With the proliferation of IoT devices across industries, there is a growing demand for integrating data from these devices with internal and 3rd-party systems and building custom reports and alerts to provide better business intelligence and quicker responses to emerging issues. SIs work with companies to create solutions to manage, process, and analyze data from diverse IoT sources.

Application Programming Interfaces (APIs): APIs are central to modern integration strategies. Organizations use APIs to connect different systems, applications, and platforms, enabling real-time data sharing and enhancing interoperability.

Data Security and Privacy: As data breaches and privacy concerns continue to make headlines, security and compliance are crucial aspects of systems integration. SIs are tasked with ensuring that data flows between systems are secure, and that they comply with relevant regulations like the General Data Protection Regulation (GDPR).

Key Benefits

The continued growth in SI services is being driven by SI services solving the challenges in building unified systems as described by the following key benefits:

Expertise and Domain Experience: SI specialize in integrating different hardware, software, systems, and processes. They bring extensive expertise and experience in designing, implementing, and managing complex integration projects. Their knowledge can help companies avoid common pitfalls and ensure successful project execution.

Custom Solutions: SIs tailor solutions to meet specific business needs. They analyze a company's existing systems, processes, and goals, and then design integration strategies that align with these requirements. This results in solutions that are customized to the company's unique challenges and objectives.

Cost and Time Savings: Implementing integration projects in-house can be time-consuming and resource intensive. SIs have established methodologies, tools, and best practices that enable them to complete projects efficiently. By outsourcing integration efforts, companies can often reduce costs and accelerate project timelines.

Reduced Complexity: Many companies have a mix of hardware, legacy systems, new applications, and technologies from different vendors. Integrating these diverse components can be complex and challenging. SI simplify this process by designing holistic solutions that connect various systems, reducing complexity for the company.

Scalability and Future-Proofing: A well-designed integration solution considers future scalability and growth. SIs design architectures that can accommodate expanding data volumes, new technologies, and evolving business needs. This future-proofing ensures that the company's systems remain adaptable to changes.

Case Studies

PUI has provided SI services to companies in various markets including automotive technology, construction, and automotive dealerships as highlighted in the following case studies.

Automotive Technology Company

PUI joined forces with an automotive technology company ("Autotech") to support a nationwide initiative aimed at assisting a leading ride-sharing company in expanding its pool of drivers in key markets. This expansion strategy involved offering leased vehicles to individuals with lower credit scores.

In this partnership, PUI provided a comprehensive SI solution to Autotech, encompassing the following services:

- Developed GPS devices tailored specifically for this unique use case.
- Engaged with four different companies to provide installation services in various markets.
- Collaborated with Autotech to create custom APIs for retrieving mileage and battery health data by VIN (Vehicle Identification Number) and receiving real-time vehicle status data.
- Implemented an API to furnish location data by VIN to a third-party software solution, streamlining the repossession of vehicles.
- Updated PUI's national impound database, with a specific focus on Autotech's commercial launch markets.
- Designed custom impound alerts to proactively notify Autotech and its partners whenever a vehicle entered and exited an impound lot.
- Generated customized automated reports which included a daily list of vehicles installed with GPS devices by location.

Throughout the initial 9-month commercial launch period, Autotech's ride-sharing partner successfully onboarded thousands of new drivers. This accomplishment was made possible by PUI, and its installation partners, installing GPS devices in over 18,000 vehicles, averaging approximately 500

installations per week. The utilization of API data also enabled Autotech's partner to recover more than 1,000 vehicles that had been towed to impound lots or repossessed due to non-payment.

Construction Contractor

PUI teamed with a leading construction contractor in Tennessee for a fleet safety and operational efficiency initiative aimed at developing and enforcing their driver safety program as well as delivering actionable vehicle use data to the company's leadership.

PUI provided a turnkey solution to this contractor company which included the following SI services:

- Provided GPS devices and Al-powered dashcams designed specifically for this use case
- Contracted with 2 installation companies to provide installation services across the company's area of operation.
- Hired installation and support assets to locally support the ongoing installation and service requirements for the company.
- Customized Al-powered dashcams to provide in-cabin alerts for safety concerns defined by the customer.
- Created custom reports to assist fleet management with monthly reconciliation and maintenance requirements.
- Provided a method to obtain video clips if a vehicle is involved in an incident, allowing management to quickly act on insurance claims.
- Developed and launched multi-camera capabilities on the platform, allowing for up to 5 cameras to be installed on customer assets.

Since its inception, PUI has delivered notable benefits to enhance the construction contractor's fleet management and safety efforts. Our customer now captures video footage in the event of any off-site or on-site accidents which has helped them develop improved driving training programs to reduce the likelihood of costly accidents. Additionally, the SI program has improved their ability to reinforce essential safety program components, such as seatbelt usage and restricted mobile phone use while driving. Finally, the program has streamlined data collection efforts by consolidating all usage data for the fleet into a single, customized report. This consolidated report has simplified the monthly reconciliation process for their fleet managers, enhancing data-driven decision-making to improve their operations and safety performance.

Advanced Vehicle Protection Company

PUI, in collaboration with its longstanding partner ("AVP Co") in the Advanced Vehicle Protection market, has expanded its range of services offered to new and used auto dealerships. AVP Co preinstalls GPS devices in all vehicles at its customer sites, offering valuable lot management and vehicle protection & recovery solutions.

The lot management feature allows dealers to efficiently locate vehicles within their lots for test drives, while the vehicle protection service offers real-time tracking capabilities, enabling dealers to quickly recover any vehicles that may be stolen from their premises. The dealership then offers a stolen vehicle recovery service, which includes the pre-installed GPS device and a mobile app, to its customers as an upgrade option during the vehicle purchase process.

PUI teamed with AVP Co to offer a new service which addresses a key pain point for auto dealerships: locating and recovering missing vehicle keys at the dealerships. AVP Co leverages PUI's technology to offer the following vehicle key tracking services:

- Providing Bluetooth tags for dealerships to attach to keys
- Tracking keys using a fixed network of Positioning Universal's tracking devices
- Identifying and recovering missing keys using PUI's mobile app

This collaboration addresses a significant issue for dealerships, as a survey indicated they lose an average of 5 keys per month, each costing approximately \$275 to replace3. This annual loss amounts to around \$16,500, excluding the additional lost productivity costs associated with the time spent by auto dealer team members in their efforts to locate missing keys.

Summary

PUI offers tailored SI solutions for businesses, especially SMBs, in a rapidly evolving technology landscape. This landscape is marked by key trends such as digital transformation, cloud adoption, and the proliferation of IoT devices. PUI is actively engaged in addressing these trends, collaborating with companies to bridge the gap between diverse systems and data sources to deliver tailored solutions that drive efficiency, enhance customer experiences, and boost overall business performance.

As the SI market continues to evolve and expand, PUI stands ready to help businesses across various industries to navigate the complexities of IoT integration, unlock new opportunities, and achieve their strategic vision and operational goals. With a commitment to excellence and a history of innovation, PUI remains a trusted partner to empower businesses to thrive in a connected world.

Sources:

- ¹ Grand View Research
- ² MarketsandMarkets
- ³ KeyTrak