SAPIENS

Sapiens SaaS and Cloud Services

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1 Overview

In today's highly competitive, high-pressure, and complex markets, cloud services have become an integral part of the insurance IT landscape, with cloud providers offering a wide range of services to cater to different needs. Companies can now build, deploy, and scale applications more efficiently and cost-effectively.

In addition to risk-management planning and the shift to remote working, insurers are constantly looking for new ways to reduce costs, drive revenue, improve collaboration, offer value to customers, and reduce time to market for products. Customers demand customized, high-value products that are delivered efficiently across every channel. But insurers' profits are being eroded by drops in demand, and regulation requirements continue to slow them down. Insurers must be able to adapt and price their products and services in response to dynamic markets and increasing competition.

To keep up, insurers must constantly upgrade and expand their capabilities and become more agile, which impacts both their IT and business operations. Managing complex applications, data warehouses, data lakes, and software requires significant computing power and a skilled team to keep everything running smoothly.

Moving to the cloud gives insurers the flexibility to scale their business as needed during daily operations while ensuring the same architecture, tools, and processes can support them through even the most challenging times. Sapiens SaaS offering and world-class cloud services and support enable insurers to stay ahead of the technological curve by offering holistic, 24/7 support and maintenance services tailored to your business needs.

Sapiens' market-leading solutions include Sapiens Insurance Platform, an AI-based, open, integrated platform that accelerates adoption and empowers insurers to swiftly adapt to market changes and offer innovative products and services more efficiently.

The strong partnership with Microsoft backs Sapiens' cloud-first approach to continue to evolve our platforms and digital solutions for our hundreds of customers across 30 countries. To date we have focused on consolidation and containerization, following Microsoft best practices leading to operational efficiencies, greater visibility, and improved security and compliance.

2 Sapiens SaaS/Cloud Services Benefits

In this dynamic and transformative environment, insurers are leveraging cloud solutions to gain significant advantages:

Scalability: cloud platforms enable scaling resources up and down based on current needs. Computing power storage can easily be added, and users pay only for what is used.

Cost optimization through improved processes:

- Moving labor-intensive processes like data collection, business analytics, archiving, monitoring, application testing and development to the cloud
- Scaling IT services like storage and actuarial computation, keeping processing time to a minimum
- Flexible infrastructure, automatically scaling to meet demand without downtime
- Paying per use for resources and workloads
- Eliminating the CAPEX of buying hardware and software and setting up and running on-site data centers, including server racks, around-the-clock electricity for power and cooling, and IT experts to manage the infrastructure
- Using services that run on a worldwide network of secure data centers that are regularly upgraded to the latest generation of fast and efficient hardware for reduced network latency and greater economies of scale

Security: with everything now being real time and digitized, any downtime costs are significant in terms of customers wanting to buy or file claims online, for example. This requires airtight business continuity, disaster recovery measures, and security in all the infrastructure that sits behind the cloud. Cloud providers are investing more than any other organization in the world in security measures to protect the customers' data that they hold.

Technology innovation: cloud adoption enables access to the latest features, performance improvements, and security enhancements, without the need to manage large upgrade programs. The cloud enables insurers to have a constant flow of innovation, new features and functions, without going through massive migration processes.

3 Sapiens SaaS-First Strategy

Sapiens SaaS offering enables insurers to sell insurance while Sapiens takes care of managing and monitoring the infrastructure with our leading platform solutions for property and casualty; life, pension and annuities; reinsurance; financial and compliance; workers' compensation; financial markets; and digital offerings, including smart components for digital portals, a digital hub with an API layer and digital studio; and an advanced analytics solution.

Sapiens SaaS offering leverages the company's 40+ years of experience and successful track record of end-to-end implementations with carriers around the world to offer a 'SaaS-first strategy'. The concept behind this approach is that cloud best practices are shared with product and R&D to become an integral part of the delivery of new features.

This drives a cost and value approach that offers unparalleled benefits:

- Systems can be built piece by piece based on business needs and growth
- Lower equipment and maintenance costs than on-premise solutions
- Cost-effective upgrade options and increased speed of delivery of updates, repairs, and improvements
- Access to powerful software and platforms with lower initial investment and guaranteed cost of fees
- Access to skilled support for specific services
- Flexible pricing models for infrastructure and services – current and future costs are based on an agreed-upon growth model
- Economical choice of IT services hosted in a secure cloud with secured access
- Increased speed of delivery for updates, repairs, and improvements
- Reduced dependency on key resources; single vendor responsibility for end-to-end service and risk mitigation
- Compliance with regulations and security standards

4 Partnership with Microsoft

Microsoft

Sapiens entered into a strategic partnership with Microsoft aimed at driving innovation and efficiency in the insurance industry, including the provision of our cloud services. Sapiens has an Excellent capability score in Microsoft Azure's Well-Architected Framework, which measures five main pillars: cost optimization, operational excellence, performance efficiency, reliability, and security.

Given the regulated nature of the insurance sector, Sapiens also invests heavily in infrastructure as code and automation, reducing time to market and operational costs significantly utilizing Microsoft Azure market tool kits for automated testing and security delivery.

Most of Sapiens' workloads run on Azure. Sapiens take a two-pronged approach with Azure, using it to deliver services to customers while also allowing customers to use Sapiens and Azure together. This close collaboration with Microsoft has influenced product development to meet specific business needs.
Sapiens is looking to the future for enhancement of a Cloud Center of Excellence to provide more self-service capabilities to users and improve their offerings. The partnership with Microsoft and use of Azure provide a comprehensive, end-to-end technology stack that meets insurers' current and future needs.

5 Sapiens Saas/Cloud Offering

Sapiens offers SaaS subscription packages with various service verticals, ensuring that a single vendor is responsible for end-to-end services and quality, and enabling our customers to focus on their strategic direction. With ongoing cloud-technology modernization and continuous service improvement, insurers can now provide better service and customized offerings while insureds benefit from better user experience at every touchpoint.

Cloud Architecture

Sapiens global cloud platform's Hub & Spoke architecture follows an Enterprise Scale Landing Zone approach. Microsoft Azure's landing zone conceptual architecture universally applies to any Azure landing zone process or implementation. At the foundation of the architecture, a set of core design principles serves as a compass for subsequent design decisions across critical technical domains.

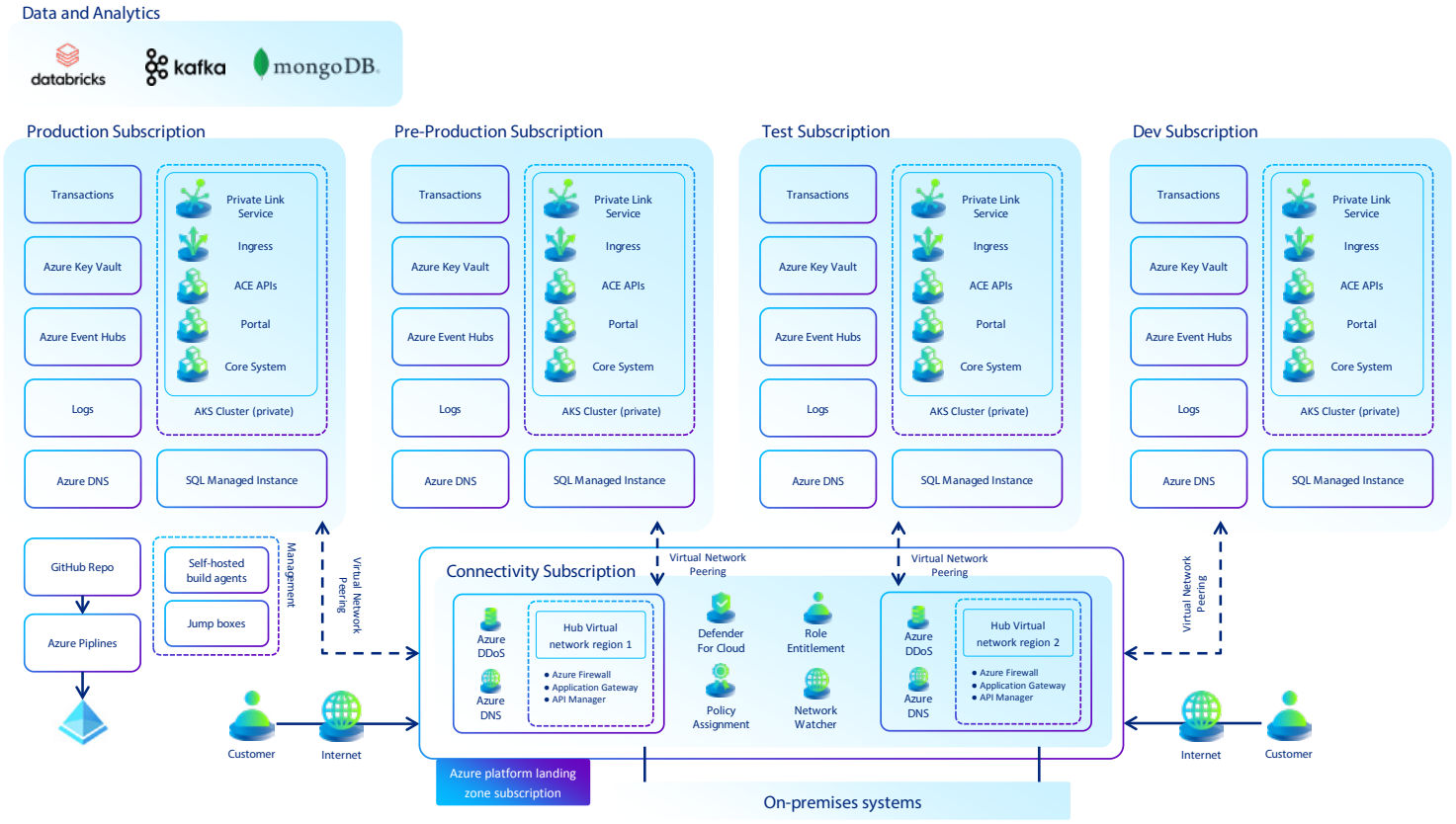
The Azure landing zone architecture is scalable and modular to meet various deployment needs. A repeatable infrastructure allows us to apply configurations and controls to every subscription consistently. Modules make it easy to deploy and modify specific Azure landing-zone architecture components as requirements evolve.

An Azure landing zone consists of platform landing zones and application landing zones:

Platform landing zone - a subscription that provides shared services (identity, connectivity, management) to applications in application landing zones

Application landing zone - a subscription for hosting an application; application landing zones are pre-provisioned through code and use-management groups to assign policy controls to them

Each customer is designed to be isolated from others and operates a 'single tenant' architecture without sharing any personal data with other customers. **The following illustrates this architecture.**



Sapiens SaaS/Cloud Services

With our SaaS-subscription solution, Sapiens offers three service verticals – Core-Product Services, Cloud-Management Services, and Application-Management Services (Optional)– which are described in more detail in the following sections.

Core Product Services

The Core Product Services include Sapiens' product license, standard support and maintenance for Sapiens' core product, and core upgrades.

- The product license is based on Gross Written Premium (GWP), Assets Under Management (AUM), or number of policies (if GWP and AUM are not applicable)
- **Standard maintenance and support service includes:**
  - Service-desk during business hours
  - Corrective maintenance, including incident management and defect-handling processes for the core products based on Sapiens' incident-management procedure
  - Adaptations to new versions of infrastructure components (databases, operating systems, browsers, etc.)
  - Basic SLAs (see Service Governance)
- **Core upgrade:** implementation of the core product upgrade

Cloud Management Services

Cloud management services are provided on top of the Core Product Services and cover all aspects of the cloud's production IT operations, supporting environment infrastructure, and end-to-end IT services.

Cloud Vendor Management

This service covers the engagement with the cloud provider for the provisioning and ongoing maintenance of the customer's environments in the defined cloud architecture.

Environment Management

Sapiens Cloud Services (SCS) team installs, configures, and monitors all cloud components that are part of the hosted solution, and provides ongoing maintenance for all hosted environments, including security, OS patching, and tuning of system parameters.
Standard/baseic environments include:

- One (1) production environment
- One (1) pre-production environment
- One (1) disaster recovery (DR) environment
- Two (2) test environments for the customer

Additional environments can be provided upon request.

Monitoring Management

Sapiens sets up and maintains a comprehensive monitoring and control service providing 24x7 insights into the environments, ensuring high-level availability and a proactive approach. This monitoring array is updated and fine-tuned as needed based on changes and events in the environments.
The service includes:

- Comprehensive set of monitoring and control tools
- Insights into all the components of the system, including CPU, memory, locks, databases, JVMs, garbage collection, and application availability
- Identification and prevention of issues in real time
- Troubleshooting assistance
- Monitoring of alerts based on defined thresholds, which are automatically routed to the Service Desk and relevant teams

The service proactively identifies and prevents issues in real time and includes both infrastructure monitoring and synthetic monitoring.

Disaster Recovery (DR) Management

The DR service consists of the design, deployment and management of a disaster-recovery service for the production environment. It includes the full configuration of a DR environment, status tracking, and an annual DR test.
The basic DR management service provides the following services levels:

- Recovery Time Objective (RTO) – up to 12 hours
- Recovery Point Objective (RPO) - up-to 1 hour

Database Management

Monitoring services and data availability/recovery options, including:

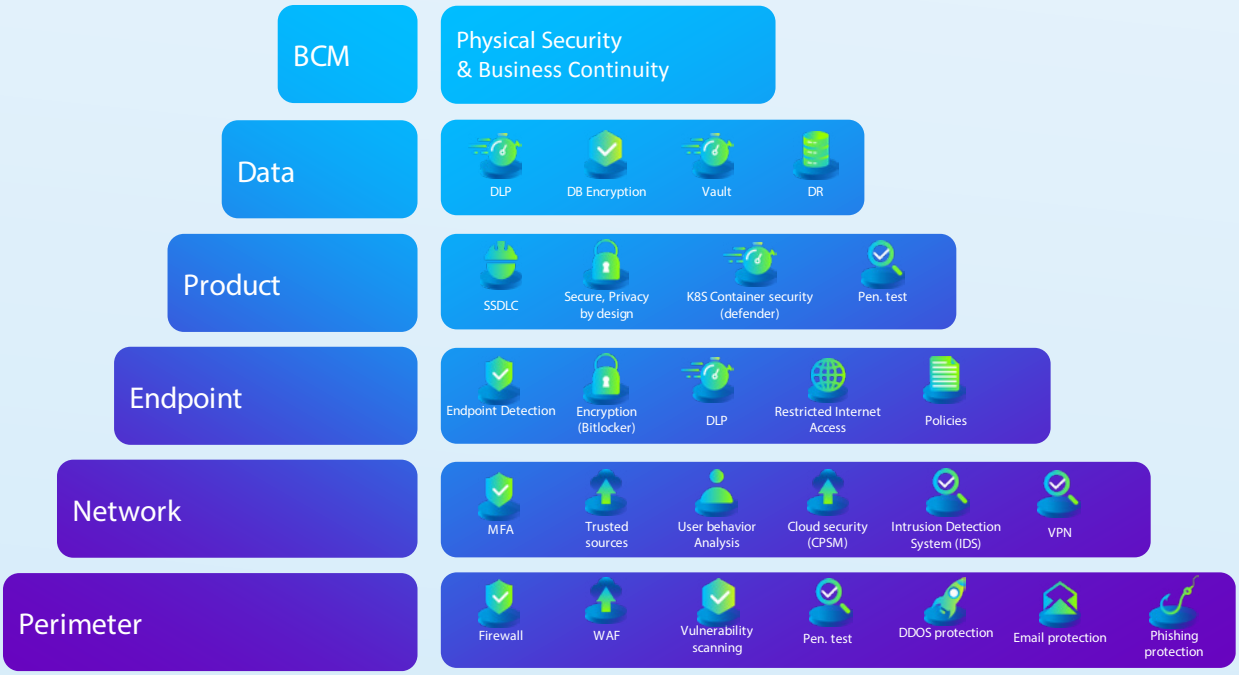
- Ongoing database health checks and maintenance
- Troubleshooting and assistance with incident management
- Identification of database bottlenecks
- Assistance with SQL query performance optimization

Deployment Management

Includes the deployment and installation of operating system patches, security patches, and application releases (minor, major, patches). Deployments are automated, first rolling out in a lower environment for testing before being securely and efficiently installed, minimizing time investment and reducing human error.

Security Management

Security management is provided by the Sapiens Security Operational Center (SOC) based on the following security-management strategy:



The SOC studies and responds to every incident in the environments including, among others:

- Detection of and response to any type of malicious or suspicious activities
- 24/7 monitoring of security events
- Periodic operating systems and third-party vulnerabilities scanning and remediation
- Encryption key management
- Annual penetration test

Backup Management	This service covers the design, deployment, management, and status tracking of a backup service for the servers in the hosted environments. It tracks the status of backups daily and enables service restoration in case of data loss: • Daily incremental backups with a retention of 14 days • Full weekly backups with a retention of 4 weeks • Full monthly backup of the production environment with a retention of 12 months • Full annual backup of the production environment with a retention of 6 years • Annual restore test exercise
Capacity Management	The service assesses requirements for new capacity and their impact when adding, removing, or modifying infrastructure or functionality, or when there are expected changes in user behavior.

Application Management Services

Application management services offer another, optional, vertical of services for Sapiens' applications including the core, country and customer layers of deployed solutions. It provides support for all aspects of the day-to-day operations of the applications to support business and regulatory demands. It includes the following services:

Application Operations	• BatchCycle Management: scheduling, running and monitoring periodical batches of Sapiens' solutions • Proactive application performance monitoring: identification of trends and negative behavior of the applications before they affect users
Application Maintenance	This service includes application maintenance services daily or as needed, depending on incidents, monitored events, and planned activities. Services include: • Investigation and analysis of application issues • Fixes and workarounds for application incidents • Application consultation and support services
Application Changes	Application changes include enhancements to Sapiens' solutions based on customers' changing business needs and regulatory requirements. Changes are managed using Sapiens' change management process. Once estimated and approved, changes are prioritized and assigned to development sprints based on agreed capacity and schedules. This service is usually managed using a capacity-based approach.

6 Service Governance

The service governance methodology combines ITIL-based practices and industry-leading tools to provide a holistic support model. The Sapiens workflow methodology ensures efficient event handling and response to every customer requests. Service governance is aligned with the customer during the onboarding phase to comply with specific requirements.

Service Methodology

The Sapiens Cloud Services (SCS) methodology is built upon the Information Technology Infrastructure Library (ITIL) framework, focusing on business value, agile delivery processes, and automation. From service strategy and design through service transition to operation, we use tools and procedures that ensure optimum call, incident, and problem management, as well as request fulfilment. In our effort to be a business service partner to our customers, we engage in a process of continued service improvement to measure service quality.

We enable insurance companies to gain value without taking on the ownership, costs and risks involved in operational services, while aligning with global compliance guidelines and standards:

- **ISO 27001** – Information Security Management
- **ISO 27017** – Information Technology – Security Techniques – Code of practice for information security controls based on ISO/IEC 27002 for cloud services
- **ISO 27017** – Cloud Security
- **ISO 22301** – Business Continuity Management
- **GDPR and ePrivacy (PR)** as per EU regulations
- Sapiens has achieved compliance with the **Digital Operational Resilience Act (DORA)**
- **SOC 1 Types 1 & 2** – enabling Sapiens to transparently communicate with our customers on control design, risk mitigation, security, availability, process integrity, and more
- **SOC 2 Type 2** - which assesses the five trust principles (Security, Availability, Confidentiality, Privacy, and Integrity) based on the systems and processes in place with Sapiens
- **NYCRR 500** for cybersecurity and risk profiles
- **California Consumer Privacy Act** for personal information privacy and safeguarding
- **Numerous certifications by MS Azure** and similar providers
- In addition, **members of our SCS have certifications from Microsoft Azure (administration, data engineering, and others),** and many other cloud organizations.

Service Desk and Service Manager

SCS adheres to strict principles that focus on the status and progress of activities, monitor risks (issues) and mitigate them, and constantly nurture and improve the partnership with each customer.
SCS puts at the disposal of our customers a 24/7 global Service Desk, which serves as the single point of contact for incidents, requests, and monitoring events.

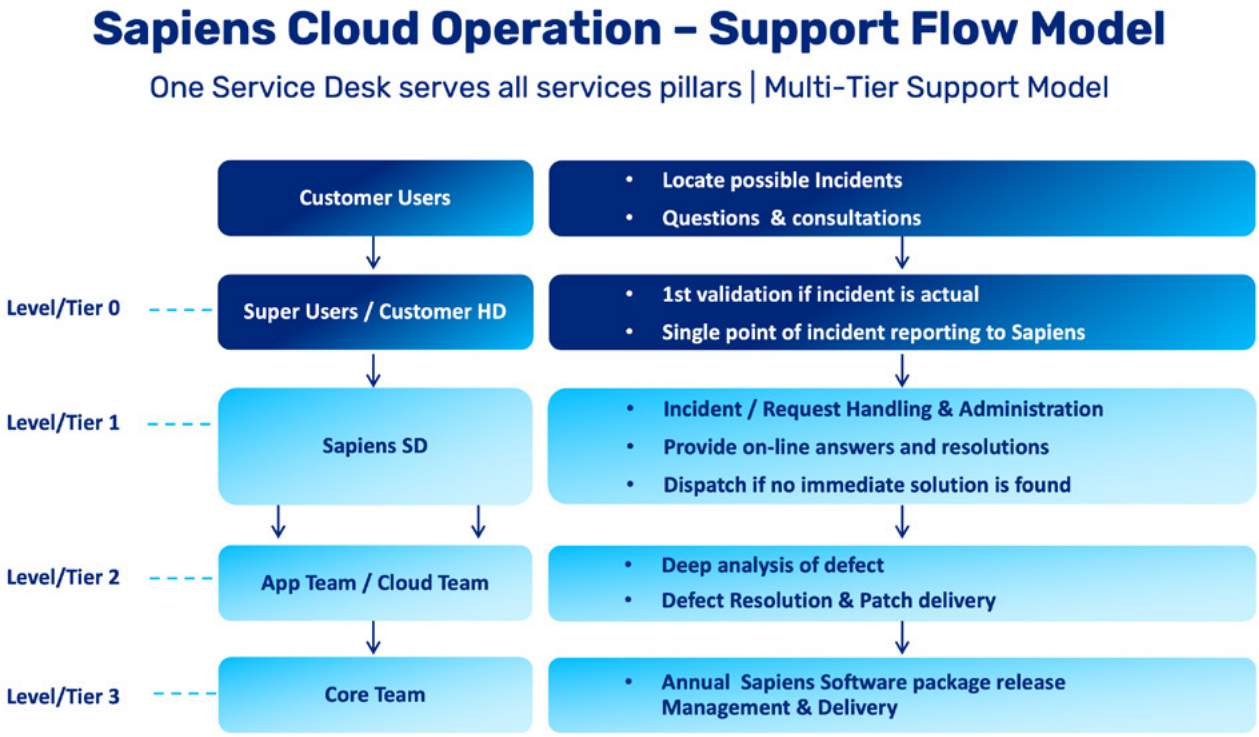
A dedicated Sapiens Service Manager is the main point of contact (and first escalation point) with the customer, and is responsible for the day-to-day management, delivery, and operations of all the services Sapiens provides. The Service Manager is in charge of process implementation and deliverables, as well as governance and reporting.

Support Flow Model

Sapiens provides a field-proven, robust, multi-level support model based on years of experience successfully managing hundreds of projects and providing excellent support services. The model combines people, processes, and technologies to deliver best-in-class services.

We offer a global operations control center and first-touch closure capabilities supported by a service desk with 24/7 availability. Our integrated IT service management platform is ServiceNow, which provides incident management (for the core product and the cloud services), problem management (including RCA for major incidents), change control, and knowledge-management services.

The following diagram provides a brief description of the roles and responsibilities of Sapiens Cloud Services (SCS) support tiers:



Service Level Agreements (SLAs)

Sapiens Cloud Services are delivered in accordance with SLAs that ensure proactiveness, high availability, and prioritization based on severity and impact. SLAs allow the support tiers to focus on the customer's business priorities.

The SLAs cover the entire in-scope solution with all components and services (application, infrastructure, data, etc.). The following are typical SLAs provided by Sapiens:

- Production system availability 24/7, 99.5% to 99.9% depending on the product and excluding maintenance windows
- Incident response time – Priority 1 (P1) – 60 minutes; Priority 2 (P2) – 4 hours
- Incident resolution time – follow the sun
- Recovery Time Objective (RTO) – up to 12 hours
- Recovery Point Objective (RPO) – up to 1 hour

About Sapiens

Sapiens International Corporation (NASDAQ and TASE: SPNS) is a global leader in intelligent SaaS-based software solutions. With Sapiens' robust platform, customer-driven partnerships, and rich ecosystem, insurers are empowered to future-proof their organizations with operational excellence in a rapidly changing marketplace. Our Saas-based solutions help insurers harness the power of AI and advanced automation to support core solutions for property and casualty, workers' compensation, and life insurance, including reinsurance, financial & compliance, data & analytics, digital, and decision management. Sapiens boasts a longtime global presence, serving over 600 customers in more than 30 countries with its innovative offerings. Recognized by industry experts and selected for the Microsoft Top 100 Partner program, Sapiens is committed to partnering with our customers for their entire transformation journey and is continuously innovating to ensure their success.

For more information visit sapiens.com or follow us on LinkedIn.

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