

A black and white photograph of a hand holding a small globe of the Earth. The hand is positioned in the lower right quadrant, with fingers gently cradling the globe. The globe shows the continents and oceans. The background is a blurred landscape of mountains under a light sky. The overall tone is professional and focused on environmental or global themes.

HANSEN

Hansen CIS for North American Utilities

Hansen worldwide

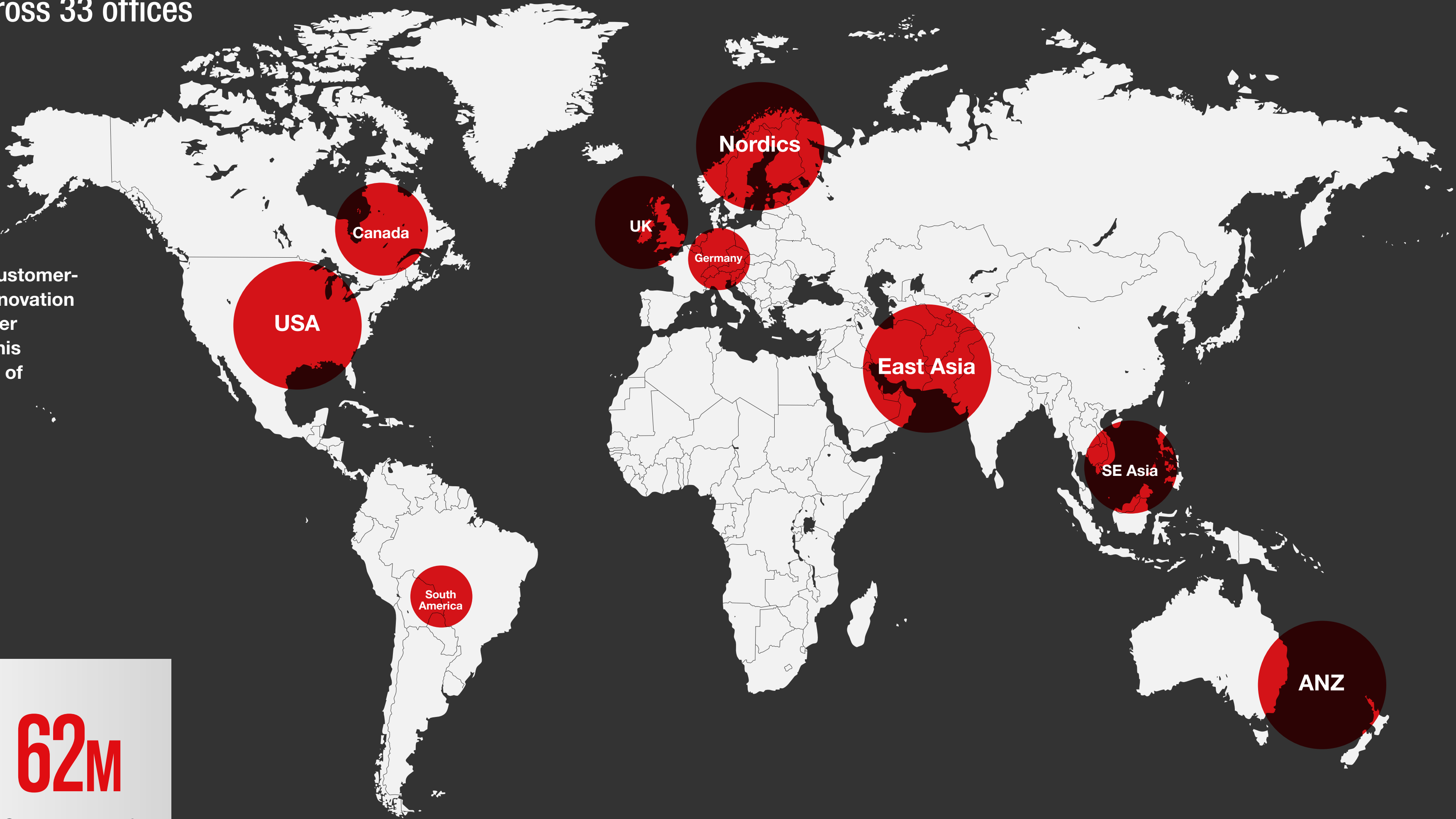
Hansen employs over 1,600+ staff across 33 offices

The Hansen mission is to provide industry-specific software products and expertise that enable our customers to quickly capitalize on the commercial opportunities of the evolving energy, utilities, and communications markets.

“As a result of its exceptional technological capability, customer-focused product development strategy, and continual innovation focus, Hansen consistently delivers outstanding customer experiences leading to optimal customer satisfaction. This success is evidenced in its minimal customer churn rate of less than 2% and long-lasting customer relationships (with an average customer lifetime of 10+ years).”



<p>80+</p> <p>Countries</p>	<p>600+</p> <p>Energy & Telco Clients</p>	<p>62M</p> <p>Customers served</p>
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Hansen's unique value proposition

The goal is clear: transition your business relationships away from providing valueless commodities through giving service and – ultimately – to the point of delivering a genuinely valued customer experience. At the entry-level end of the spectrum, costs are high, and margins are low; it's virtually impossible to establish differentiation, and therefore churn is an ever-present problem. At the value-based end, organizations remain competitive and relevant, and create the stickiness necessary to hold customers and drive additional wallet share.

Commodity-to-Service-to-Experience

Hansen's purpose-built software application suites deliver the next experience end-customers want. Empowering our clients with the ability to manage the critical data that drives their commercial operations is at the heart of our vision.

Our development philosophy focuses on agile innovations and progressive gains, enabling

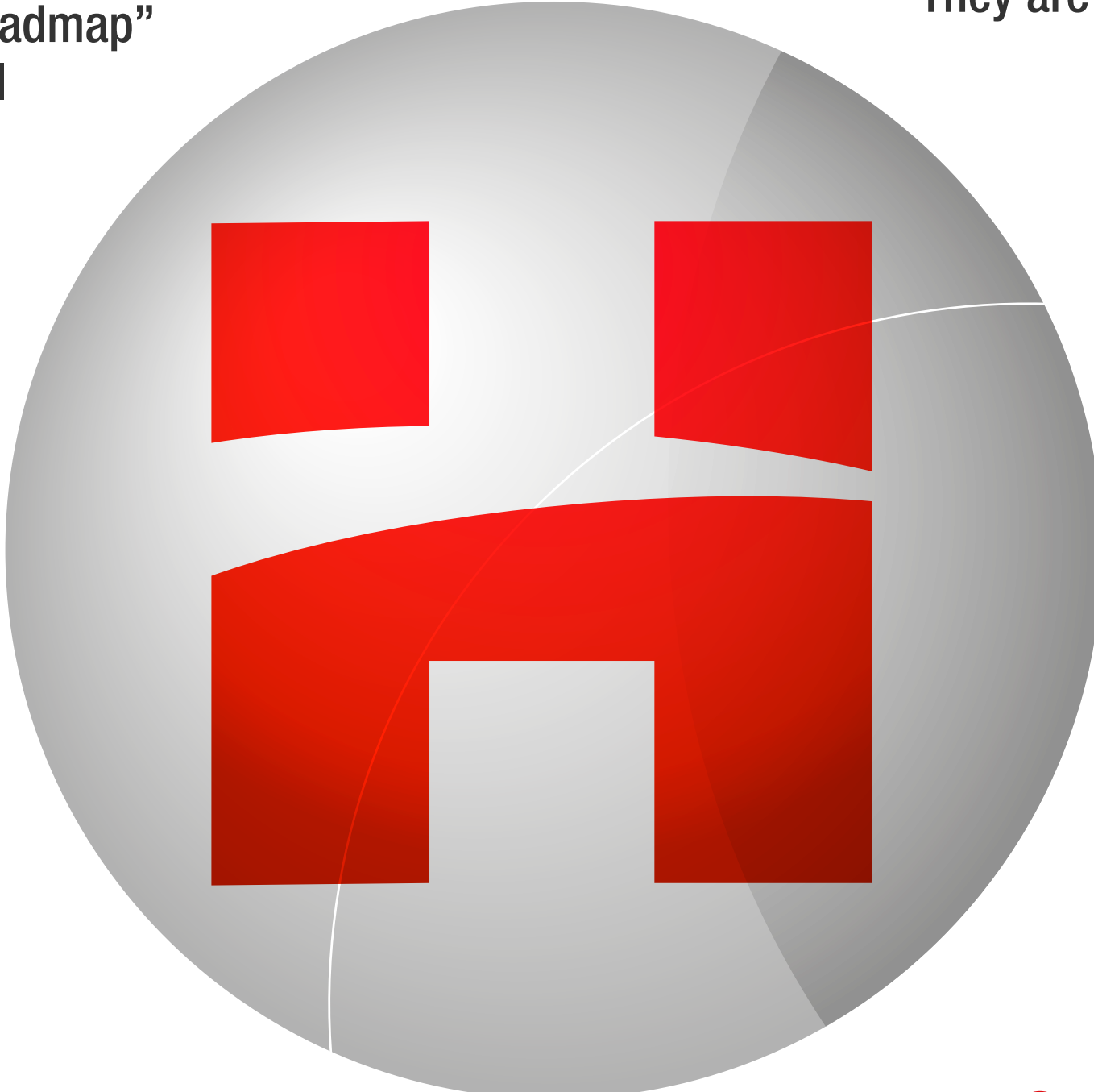
our clients with practical value that enhances their day-to-day operations and customer interactions. Crucially, the Hansen organization is big enough to deliver the technological innovation that our clients must have, yet small enough to care about each and every account: we have a proven ability to deliver what customers need.

Too New?

- Everything is "on the roadmap"
- One size/solution fits all
- Credibility problem with my market

Too Big?

- It's difficult to get their attention
- I'm not worth enough to them
- They are too expensive?



Too Small?

- They talk a big game, but...
- Will they survive?...
- High turnover & focussed on costs



Challenges facing today's Utilities

Organizations know only too well the pressures that they face. Whether publicly owned or privately funded, the ever-present requirement to do more with less, and to maximize the return on every investment, translate into a constant struggle to keep up with the demands of an increasingly intense data-centric world. As a result, while service expectations only increase, budgets rarely do.



Evolution & Transition to the Cloud

- Managing the burden of building and maintaining a platform
- Customers want better availability, dependability, and robustness
- Customers want security
- Customers want the latest features and functionality

Ecosystem Integration

- Experience and expertise gaps
- Need to accelerate productization and time-to-market
- Want to streamline processes and costs
- Need to enhance customer engagement
- Need to generate custom billing files

Engagement Experience

- Customers want to proactively manage their accounts
- Need to provide different engagement models to suit every customer expectation
- Need to facilitate customers enrolling in programs and payment assistance options

Efficiency & Automation

- Product maturity and feature-richness
- Each department require a UI that accommodates their specific needs and preferences
- Agent-Customer interactions must be streamlined and consistent
- Workflows need to be simplified, and approvals need to be automated

Data Era & Business Intelligence

- Management reporting can be opaque but needs to be clear, compelling, and actionable
- Too often, vital data is hidden in a sea of too-much-information
- KPIs need to be highly visual, easily relatable, and act as an entry point for drilling into the fine details



The journey to now

1977

1990s

2000s

2014

2018

2020

2022

The Beginnings

The product we now know as Hansen CIS had its genesis in a humble billing software product developed by Computer Records, part of Digital Systems Incorporated. It was called React, and was built for one of their payroll and billing service bureau customers, who just happened to a Utility.

- TCP/IP successfully tested, connecting 3 ARPANET nodes (aka Internet 1.0)

Banner is Born

Now under the ownership of SCT, the Banner product launches. Very much a product of its time, Banner is built using Oracle components and runs on VMS-based systems; available in any color screen you want as long as it was green!

- Initial release of Banner hits the market, and Philadelphia Suburban Water is the first customer
- Banner 2.0 is released, adding support for multiple utility services
- Banner is successfully deployed to 3 Tier 1 utilities (Atmos Energy)

2000s: Change is the only Constant

The product goes through several releases, upgrades, and architectural changes, constantly gaining features and functionality. Additionally, there's a series of ownership and name changes, ending with Vista promoting the product as the Ventyx Customer Suite.

- Banner successfully supports over 100 customers through the Y2K transition
- Banner 4.0 is released, providing client server as well as browser based UI
- Banner successfully deploys its first PaaS customer (City of Virginia Beach)

Hansen takes the Reigns

Banner is acquired by Hansen Technologies, who immediately announce plans to modernize and evolve; the features and functionality are field-tested and fully proven, but the tech stack requires a refresh.

User consultation occurs to inform strategy and drive priorities; a crucial area being UI.

2016

- Hansen Business Intelligence is added to the platform

2019

- Hansen Integration Framework is added to the platform

2021 Hansen CIS Launches

- Banner renamed Hansen CIS, and 3 customers transition to a Cloud deployment of Version 2021

2023 & Beyond

Pipeline of multiple migrations and Cloud implementations, including

- City of Columbia
- Jamaica Public Service
- City of Alexandria

- Banner v5 released and City of Columbus first customer to migrate to new technology platform

- 5th customer successfully goes live on Banner v5

- City of New Bern signs on as first SaaS customer
- New Mexico Gas switches to Hansen CIS

Spotlight on customers

Energy & Utilities are rapidly transforming from “just essentials” to energy and connected experiences.

At Hansen, we play a pivotal role in this. We are the essential ingredient in our customers’ commercial business model, allowing them to create and deliver these critical services, charge for them, and establish and maintain lasting financial relationships with their customers. Listed here is a cross-section of the innovative and future-looking organizations we work with.

30+ years of industry best practices and the recent completion of a 5-year investment cycle have resulted in a highly referenceable and assured customer base. The combination of a proven software solution and a services team with an average of more than 20 years of experience working in the utility industry marks Hansen as the optimum solution partner. This expertise provides assurance and confidence in our ability to deliver a quality implementation and become a trusted advisor.

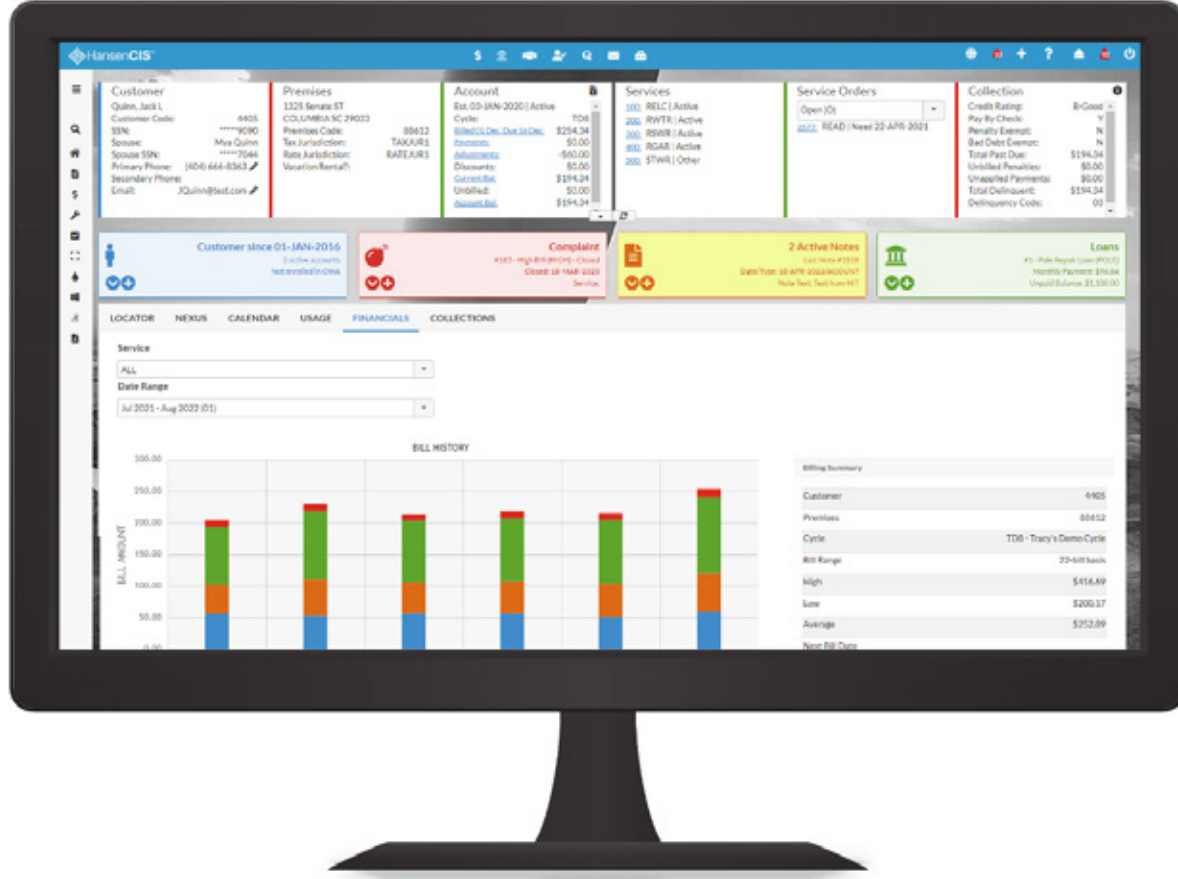


Hansen customer care

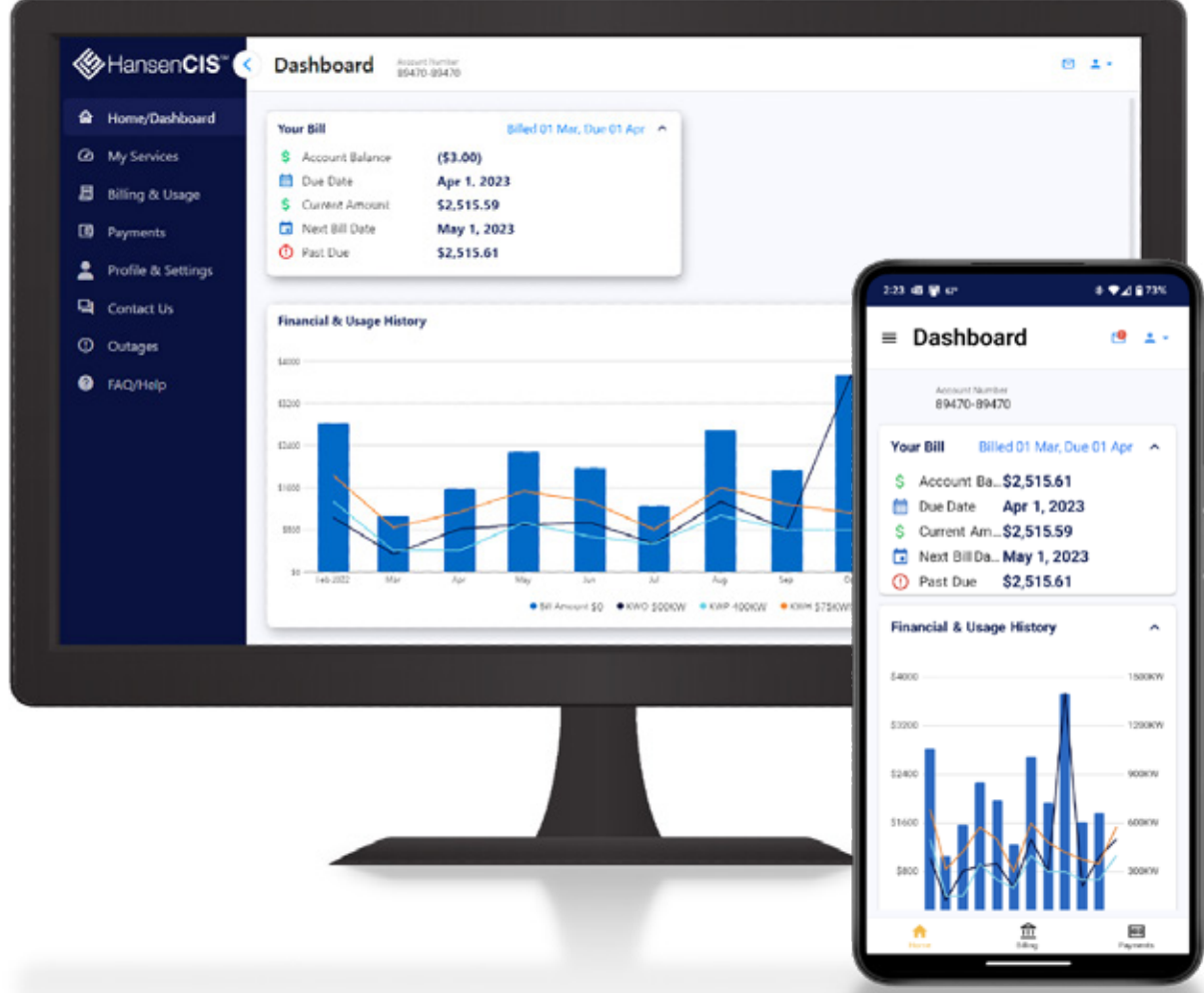
Hansen CIS: Complete customer care & billing optimized for North American Utilities

For over 30 years, Hansen has been at the forefront of embedded industry best practices. Designed with North American utilities in mind, Hansen CIS builds on this legacy to deliver an experience focused on operational efficiency and configuration over customization.

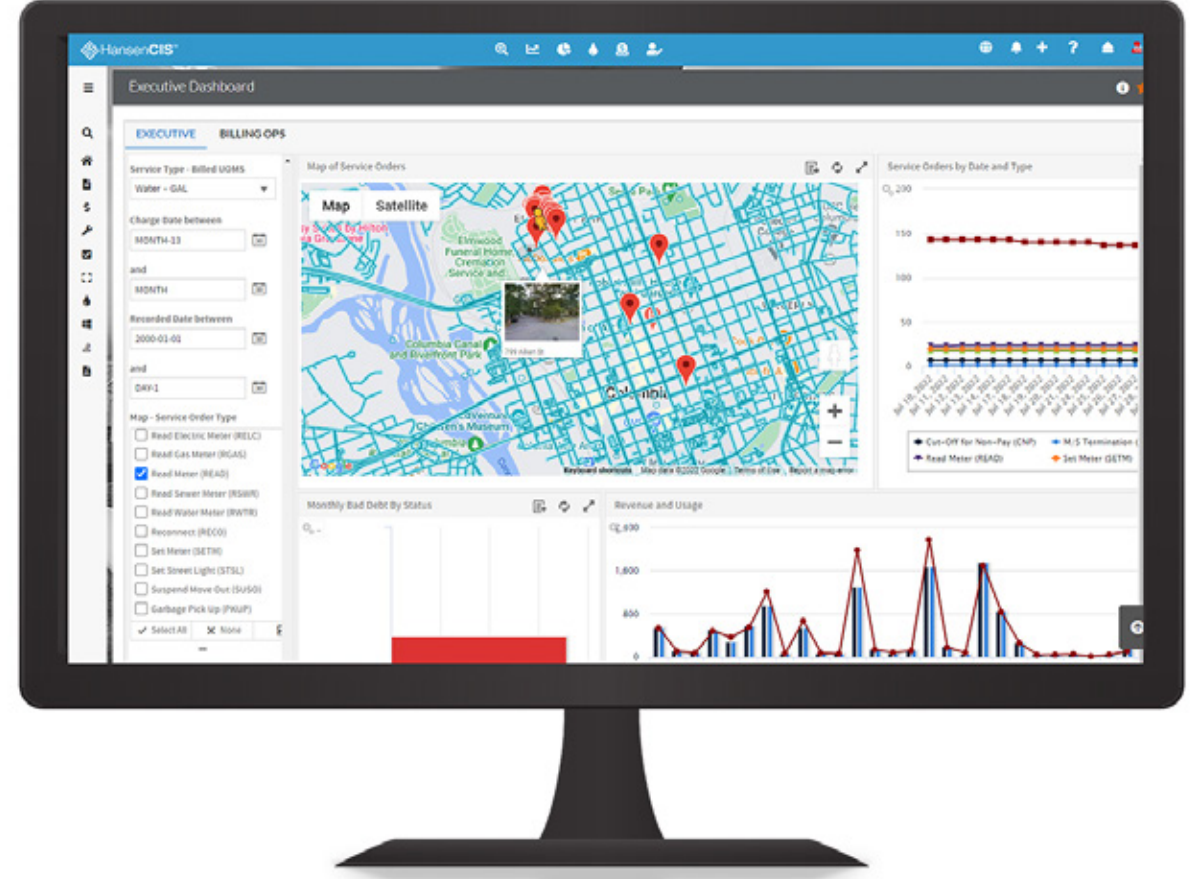
Hansen CIS is a modern SaaS platform with updates provided periodically rather than through an integrated CI/CD pipeline. The ability to manage the critical data that drives commercial business is at the heart of our vision with incremental innovation: delivering practical customer value.



- ### Customer Care & Billing
- Streamlined common business processes with maximum efficiency & consistency.
 - Configurable Wizards & Workflows minimize application changes.
 - Advanced proprietary Roll-Up Purge process.



- ### Customer Engagement
- Metadata-driven & highly extensible business logic.
 - Customer-controlled menu, pods, & pod content.
 - Hansen SDK provides feature sets from across business lines.



- ### Business Intelligence & Reporting
- Persona-based dashboards.
 - Over 100 parameterized reports that can be fully automated.
 - Trend & forecasting graphs operations or financial data over time.



Modern highly-configurable tech stack

Application performance second to none

Technical debt can bring your organization to a halt. Hansen CIS is a modern and proven application that delivers an experience that is easy to configure and manage. Its modern technology stack provides a meta data-driven UI and scalability options that provide unparalleled end user and batch performance.



Application Server Scalability

When implemented On-Premises, the application easily scales vertically with additional CPU & Memory and quickly scales horizontally by spinning-up supplementary server instances. Sessions are load-balanced by leveraging tech from industry-leading partners such as F5 and Cisco.



State-of-the-art Architecture

Hansen CIS is implemented using the AWS Elastic Kubernetes Service (EKS) and is deployed across multiple worker nodes to ensure the application is always available. In addition, the primary database leverages an AWS EC2 instance.



Disaster Recover

Using seamless block-by-block replication to separate regions, AWS Elastic Disaster Recovery continually replicates source machines into a staging area in the AWS account, delivering dependable disaster recovery without causing downtime or impacting performance.



Database Server Scalability

Similarly, the database easily scales vertically with additional CPU & Memory. In addition, it leverages multi-streaming to run multiple parallel instances of critical processes – for example, Charge Calculations – to reduce times drastically.



SPOTLIGHT ON TECHNOLOGY

Rollup Purge

- Data identified for purging is “rolled up” and only summary numbers are stored for future reference.
- Using *Rollup Purge*, Hansen CIS enables organizations to save significant time during data processing windows.
- Written in Google’s award-winning Go programming language, the Purge process is a scalable parallel process.

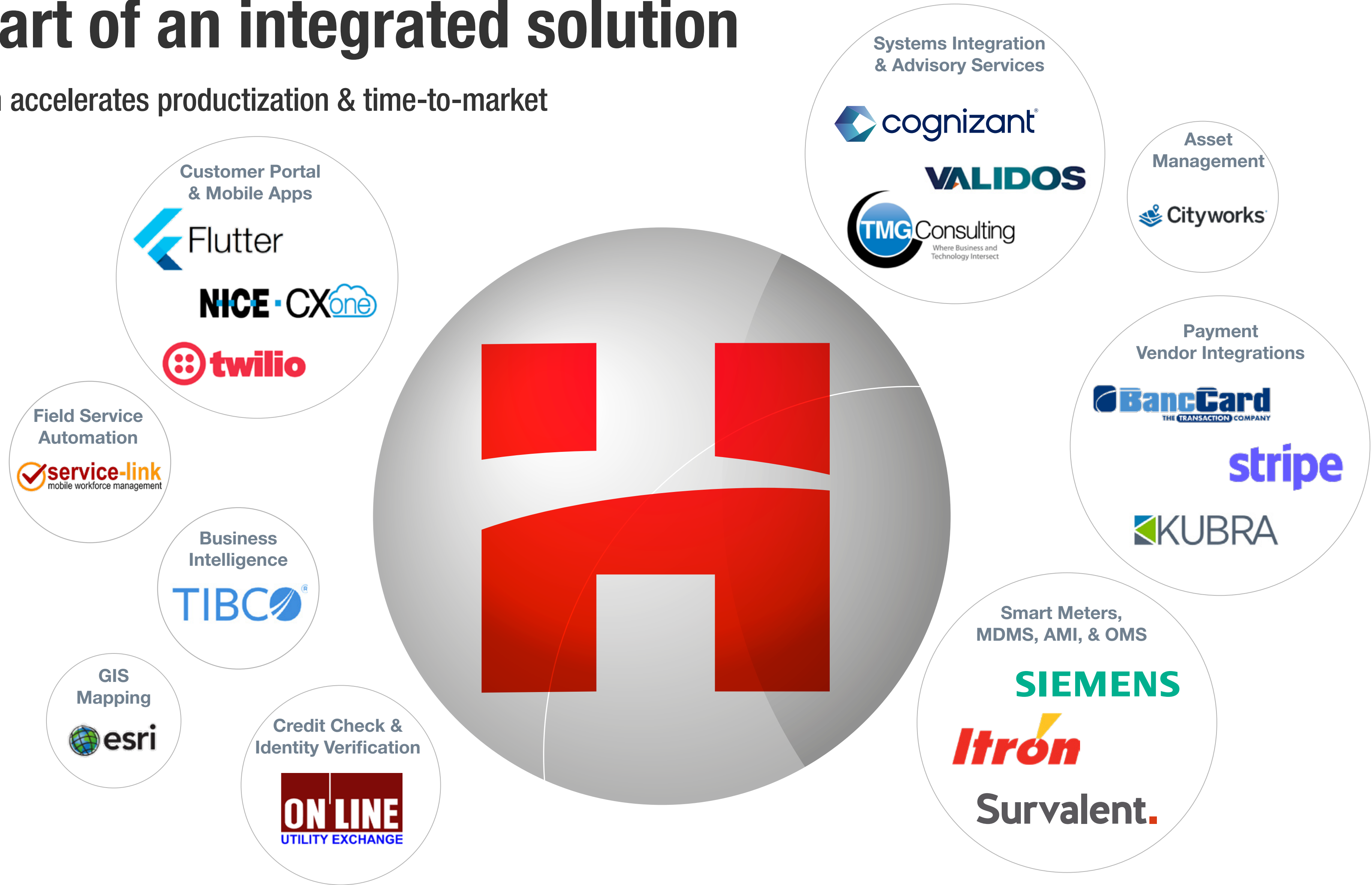


Hansen at the heart of an integrated solution

Transition to standardized integration accelerates productization & time-to-market

In today's business context, having an agile end-to-end solution is critical to success, and technically complex integrations slow progress and increase costs. The Hansen Integration Framework (HIF) provides 100+ fully documented APIs that support ecosystem integrations across a broad spectrum of sophistication and capability. In addition, Hansen has partnered with market-leading vendors to deliver secure pre-built integrations, helping you accelerate innovation, enhance customer experiences, and optimize your services – the HIF value: tangible benefits for your business.

Following best practices, Hansen develops APIs and includes these as part of the Hansen Integration Framework. This results in extending the overall solution capability without modifying the core CIS application, requiring less application testing and delivering a lower cost of ownership.



Are you ready to move your CIS to the Cloud?

Hansen is a leader in cloud deployment

In today's technology market, determining the correct deployment model is critical to success. The cloud has changed how businesses operate and manage mission-critical applications. Hansen has embraced multiple deployment options and has become a world-class provider of solutions globally. From traditional on-premises to end-to-end software-as-a-service, Hansen is the partner for you. We know you have options, and our infrastructure and application experts are here to help determine the right solution for your business. Imagine the possibilities if you had worry-free full-stack management of your CIS application... well, now this can be your reality.

Security products and partners



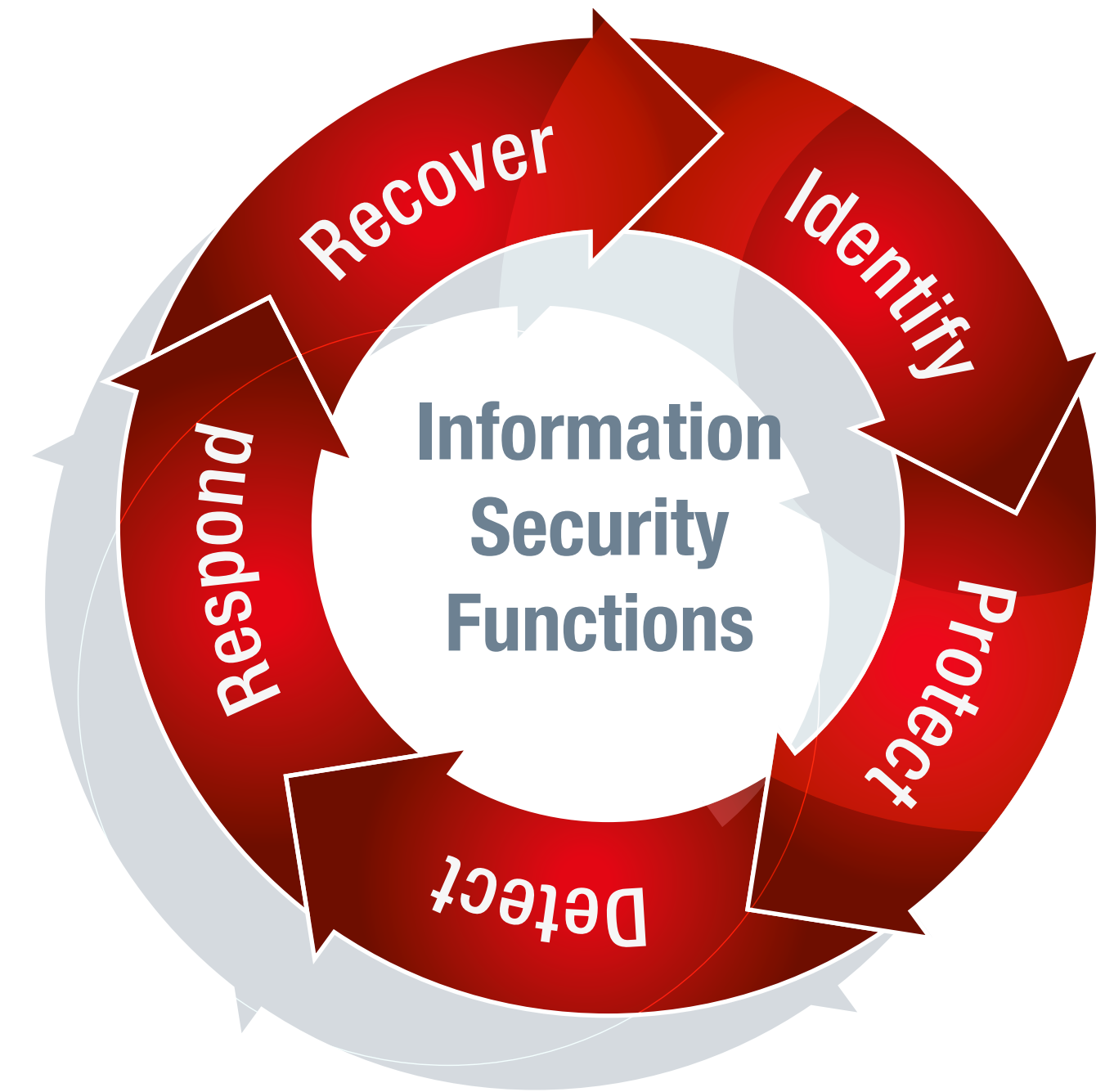
Over the years, Hansen's many customers have benefited by working with a global provider delivering flexible deployment options. Our services range from supporting smaller municipalities, which require a provider offering cost-effective end-to-end infrastructure and application management, all the way up to Platform-as-a-Service (PaaS) for large tier-1 organizations.

In North America, Hansen's hosted customers bill over a million end customers a year using our platform, making us one of the largest hosted CIS providers in the market. Through

our partnership with AWS, Hansen delivers a secure and fully redundant solution that allows customers to focus on strategic initiatives rather than technical deployment concerns.

The Introduction of Hansen's end-to-end SaaS application management solution, along with our business-as-usual service offering, provides our customers with a deterministic cost model that removes the need to justify additional funds for application or technical stack upgrades. Instead, you pay one monthly price and receive everything needed to maintain your Hansen CIS application.

Security technologies



HANSEN IT SECURITY FRAMEWORK

Hansen's current Security Framework is based on inputs from leading industry standards such as ISO27001/2 and PCI DSS. The overarching framework Hansen follows is the NIST CSF. A prioritized approach to improvement initiatives is currently being developed based on the Australian Cyber Security Centre's Information Security Manual (ISM).

Deployment options

Outsourcing your services – On-Premises, SaaS, or PaaS – enables you to access technologies and resources at a lower cost and get them up and running much quicker.

In addition, Hansen offers these services in a sovereign, open Cloud, or private Cloud and you have **complete control over your data; Hansen supports your migration with a range of trusted solutions.**



**On-Premises:
Custom implementation with total control**

Some might call it “old school”, but if you need your solution deployed in your data center, on your servers, help is at hand. Hansen has been supporting the traditional “on-premises” deployment option for decades. In collaboration with Hansen’s technical architects and business analysts, business and IT leadership design solutions for their specific business process and infrastructure requirements.

- The advantages of On-Premises**
- **Control.** With this model, you have total control of the applications and the technical environment. Assuming your technical team has the resources to implement and maintain the technical stack and application, the On-Premises deployment option gives you the maximum power over the life of your service.
 - **Customization.** You can build an infrastructure that matches your situation and configure the application to suit your needs.
 - **Accessible.** Maintaining the physical infrastructure gives you peace of mind in knowing how everything is deployed and configured. In addition, Hansen’s professional services will take a train-the-trainer approach throughout the project to get your team up to speed on the overall solution.

**PaaS:
More time and less worry**

For many, a common-sense transition between yesterday and tomorrow, the Platform-as-a-Service deployment option provides a middle ground for these organizations that prefer to devolve the burden of building and the infrastructure but wish to manage and monitor the CIS application itself. If this is you, then PaaS is the best solution.

- The advantages of PaaS**
- **Optimization.** This option lets your team focus on the core business rather than being diverted to maintaining the underlying tech stack. Hansen will take care of the complete implementation, plus ongoing monitoring and maintenance, working in close collaboration with your team.
 - **Proactive management.** As your trusted PaaS provider, Hansen will proactively recommend patching and security updates for the tech stack. You’ll decide when the time is right; we will ensure everything goes according to plan. Gone are the days of worrying about maintaining the skill set required to keep your CIS going and secure.
 - **Cost reduction.** You don’t have to invest in a massive IT infrastructure that will be outdated the second it goes into production – Hansen takes care of it all, either in the Hansen Private Cloud or AWS.

**SaaS:
Simplicity and scalability, on-demand**

If you are at a point where you want or need to focus the entirety of your resources on critical business goals and objectives, then the Software-as-a-Solution deployment option is for you. Rather than worrying about data growth, security, and performance, you pay a per-account monthly fee and leave everything else to the Hansen team.

- The advantages of SaaS**
- **Efficiency.** Undoubtedly, this is the main advantage of SaaS – you get access to the solutions you need quickly and easily, without any of the traditional burdens of scoping, building or maintaining the physical infrastructure.
 - **Predictability.** You control your budget even more, moving away from the peaks and troughs associated with tightly integrated applications supported by statically dimensioned infrastructure. Instead, pay a fixed monthly or annual subscription.
 - **Simplicity.** With Hansen CIS deployed as a SaaS solution, the initial installation is seamlessly delivered, and the tech stack is regularly maintained and updated.



SaaS Onboarding

Hansen's Implementation Methodology has been developed and refined over 30 years of successfully delivering software projects for utilities and telecommunications companies around the globe. Those decades of experience have enabled us to create standardized processes and tools, considering industry best practices.

The methodology identifies the key activities and tasks required for delivering a CIS solution. It guides the project team through each step of the delivery process:

- Offers professional services for carrying out activities and tasks.
- Incorporates the necessary knowledge transfer activities to ensure effective and efficient operations for day-to-day business functions and processes.
- It helps you determine the most appropriate solution for your needs.
- The methodology minimizes project risk.



Engage

- Identification & definition of Business Drivers
- Solution Evaluation
- Investment Justification/ROI
- SaaS deployment finalization
- Contracting

Scope

- Project Initiation
- Training Environment Configuration
- Introduction Training
- Technical Training(s)
- Data Conversion Mapping(s)
- Requirements Analysis Workshop(s)
- Functional Training(s)
- Configuration Workshop(s)

Build

- Production Environment Configuration
- Build Sprint Execution
- Data Conversion Execution
- Prepare Acceptance Test Plan
- Modules Configuration
- Factory Qualification Test
- Data Conversion Testing

Deploy

- Integration Testing
- Acceptance Testing
- End User Training Support
- Go Live Preparation and Cut-Over
- Knowledge Transfer Training
- On Site Start-up Support

Operate

- Post Go-live Support
- Heightened Support
- Warranty Support
- Transition to SaaS Ops team



Hansen SaaS Offering

Hansen is a proven leader in Service Delivery Management and has, for decades, been providing our PaaS solutions to a large base of customers. We've seamlessly extended this capability by expanding our service offering with an end-to-end SaaS model.

Hansen's delivery teams provide ongoing application management and support, and they are ably supported by our global IT services teams, which focus on network management, security, monitoring, and access control. These two groups provide Hansen customers with 24/7 full-stack monitoring and oversight, which allows them to focus on high-value internal strategic initiatives.

Customer Support Services

Proactive services addressing all aspects of infrastructure & applications management

- Issue Management: triage, break & fix, enhancement requests, helpdesk.
- Operations Management: Operations schedule execution, Cloud environment management.
- Update Management: monthly application patching, quarterly enhancement updates, testing services.

Security & Monitoring Services

Dedicated security professionals overseeing Hansen's & the customer's Cloud infrastructure

- Security monitoring and response program.
- Continuous Monitoring Center.
- Annual application penetration testing.

Infrastructure & Technical Services

End-to-end services that liberate internal resources for strategic initiatives

- Management of all Hansen CIS environments.
- Connectivity, sizing, platform management.
- DR planning and testing.
- Infrastructure patching.

Commercial Terms & SLAs

Flexible T&Cs that remove the administrative overhead of managing your CIS

- Issue, operations, and update services.
- Security & monitoring services.
- Infrastructure & Technical services.
- All required licenses and all required Software environments.
- SLAs across service areas.

Business Value of Cloud/SaaS

Lower Total Cost of Ownership

The transition from steep and abrupt upgrades reduces planning and execution resources, improves project timelines, and lowers costs. An incremental model based on annual or multi-year plans delivers deterministic value.

Integrated Change Management

Integration of fundamental artefact management allowing for approval and acceptance of production-ready changes streamlines routine operations.

Predictable Upgrade Path

Periodic rolling updates pre-tested against configurations specific to individual customer environments allow for the n-stage acceptance of the base product.

Security Compliance

Continually monitoring vulnerabilities enhance security posture.

Data Access

Delivers a non-restrictive approach to customer data by real-time data synchronization with the reporting database.

Scalability on Demand

System monitoring allows instant ramping of resources required to optimise all performance and response.

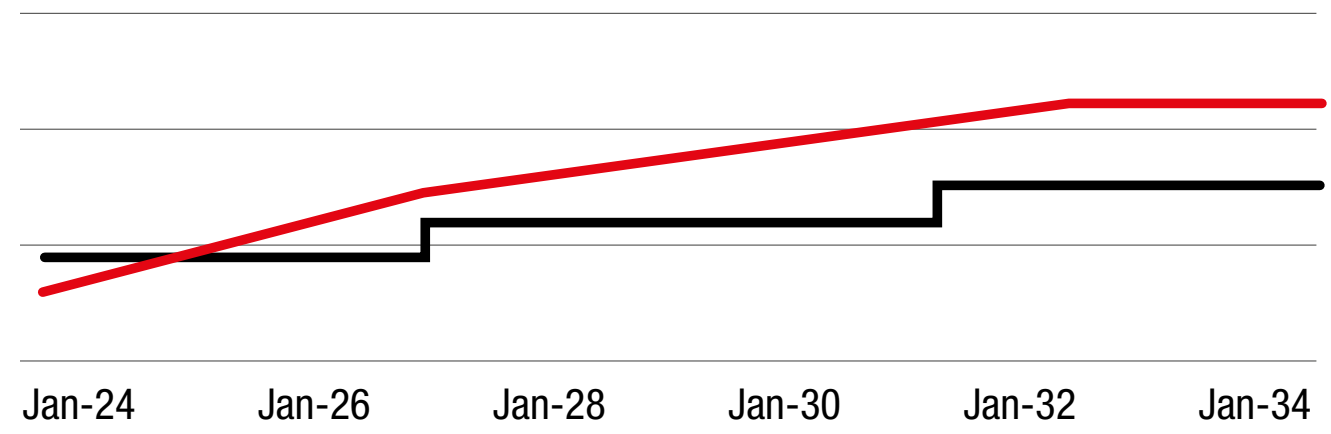
Investment Profile



SaaS is more investment-effective

It eliminates the need for businesses to invest in expensive hardware and software licenses, makes budgeting more predictable and manageable, and liberates in-house resources to focus on more strategic initiatives.

Knowledge Transfer



Incremental updates drive productivity

It drives an expansion of product knowledge, higher adoption of product capabilities, increases business process automation, and reduces testing pressure associated with traditional upgrades.





Hansen People

At Hansen, we know digital transformation requires more than great products.

Genuine change demands the best people: our experts working in partnership with yours, reimagining how businesses deliver what customers want and expect.

Products.

Innovation is crucial, and well-designed applications lend themselves to streamlined integration. Standardized programmatic interfaces are an excellent example of best practice; these can often lead to quickly achieving a workable degree of interoperability and functionality.

Processes.

Systems and workflow optimisation help organizations maximize efficiencies and get the most from their strategic investments in transforming their applications ecosystem.

Partnerships.

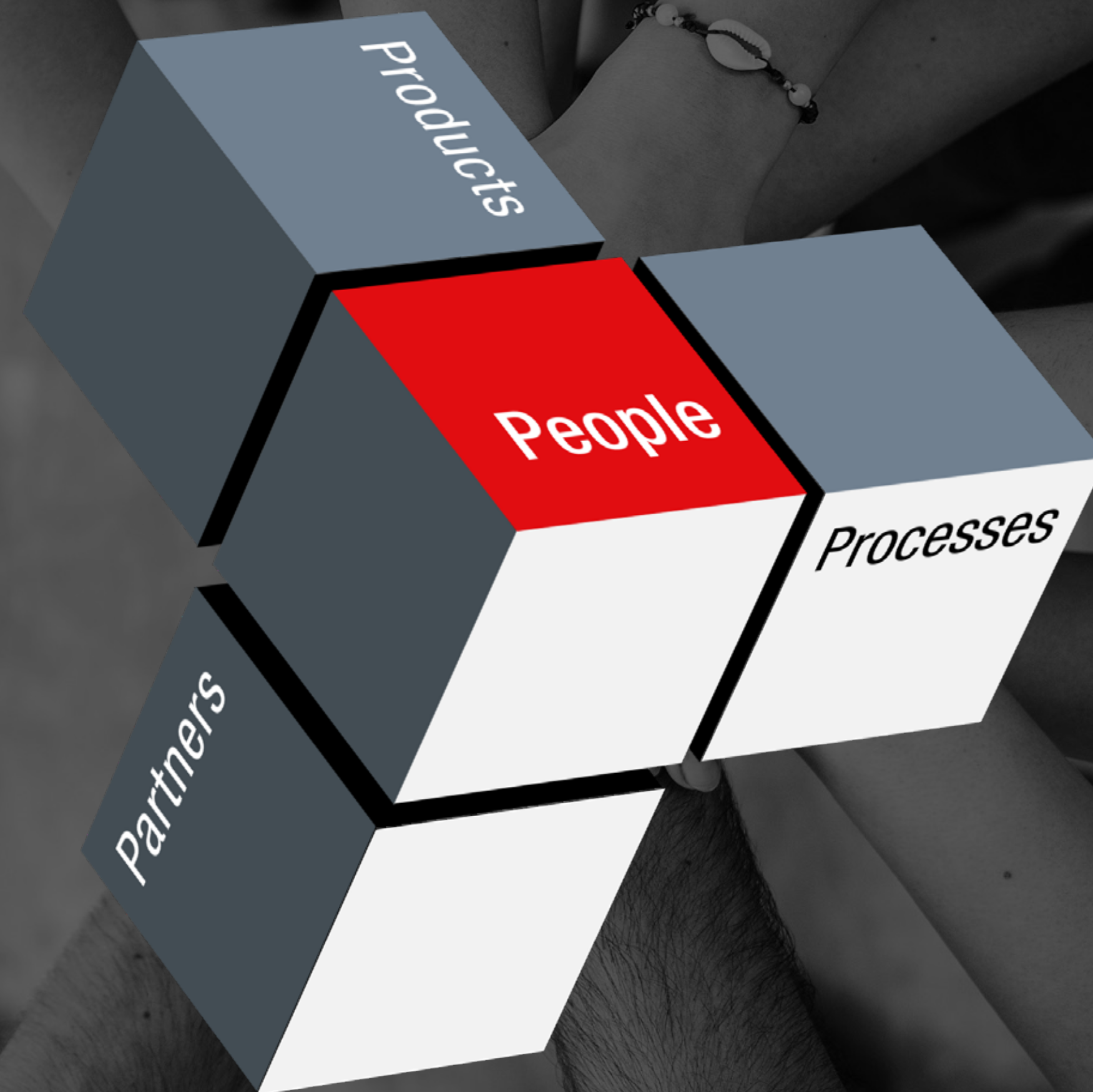
The reality of a diverse marketplace means that there is no one-size-fits-all solution, no silver bullet product, and collaboration between application vendors and system integrators is both necessary and positive.

People.

By maintaining a highly knowledgeable cadre of subject matter expertise, Hansen substantially eases the burden and reduces risk. Primed with industry experience and ready to collaborate with businesses on consulting, planning, testing, implementation, and training.

“Not enough businesses focus on the transformation part of digital transformation, and the transformation part has always been about people.”

Harvard Business Review Analytic Services
Digital Transformation Refocused: New Goals Require New Strategies





HANSEN

POWER THE NEXT.™

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