BLOCKCHAIN
INTEGRATION IN ERP
Transforming Security and Transparency

We have been in the heart of the ERP industry for the last decade.

EDITOR'S NOTE

Dear Readers,

Welcome to the February edition of ERPNEWS, where we delve into the innovative intersection of blockchain technology with enterprise resource planning (ERP) systems. This month, our editorial theme, "Blockchain Integration in ERP: Transforming Security and Transparency," explores the transformative potential blockchain brings to ERP systems, enhancing the integrity, security, and transparency of digital transactions in an era that demands nothing less.

In a digital landscape where security breaches and data integrity issues can severely impact operations and trust, the integration of blockchain into ERP systems stands as a beacon of innovation. It promises not only to redefine how transactions are recorded and verified but also to enhance the overall trust in business processes by making them more transparent and secure. This issue aims to provide you with a comprehensive understanding of how blockchain technology can revolutionize ERP systems, ensuring that your business remains at the cutting edge of digital transformation.

Adding to our exploration of cutting-edge technology, we are thrilled to present an exclusive interview with Mike BeDell, CEO of Protera. Under Mike's leadership, Protera has achieved full-service authorization for SAP S/4HANA Cloud, private edition (part of RISE with SAP), SAP S/4HANA (on-premise), and SAP Business Technology Platform (SAP BTP). This significant milestone not only underscores Protera's enduring partnership with SAP but also reinforces its commitment to supporting customers through every phase of their digital transformation journey. Mike's insights provide a valuable perspective on the evolution of ERP solutions and Protera's pivotal role in shaping the future of digital business practices.

As we navigate through the complexities of integrating blockchain with ERP systems, it is conversations like these that illuminate the path forward, highlighting the innovations that will drive our industry towards greater security, transparency, and efficiency. We hope that this issue of ERPNEWS not only informs but also inspires you to explore the potential of blockchain in your ERP initiatives.

Thank you for joining us on this journey into the future of ERP. Your trust in us fuels our commitment to bring you the most relevant and transformative insights in the field.

Warm regards,

Pinar SENGUL, EDITOR

ERPNEWS

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Compare the leading solutions at the UK's premier ERP event

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13-14 March

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The ERP packed Agenda will also include presentations of keynote speeches from Lumenia Consulting on 'What Makes Successful ERP Projects', 'Navigating the Intersection between ERP and Digital Transformation' and 'Are you ERP Ready'? There are also four ERP sector focused presentations on Food & Beverage, Manufacturing, Distribution and Field Service Management. Day 2 will conclude with a panel-discussion on 'Avoiding ERP Implementation Mistakes'.

"ERP is as important as ever. It is a central platform for most organisations and a foundation on which many of their digital transformation initiatives will be built. The continued focus on ERP demonstrates its centrality to digitalisation, which is a key imperative across all sectors. Surveying the various options in the ERP market can take time. If you are looking to replace, upgrade or select

an ERP or simply want to find out more about the ERP marketplace, this event will prove to be a very efficient use of your time. Not only that, across the two days you will hear from Lumenia independent ERP experts about many of the good practices to follow, and pitfalls to avoid, when embarking on an ERP transformation programme", commented Ian O'Toole, Managing Partner at Lumenia.

The ERP vendors will also be available in the expo area for questions and 1:1 meetings and the expert ERP team at Lumenia are on hand for impartial guidance and advice.

As attendance at the event is limited to organisations who are potential buyers of ERP, it's also an ideal opportunity to network with others about to embark on the same journey and the event will have ample time for meetings and networking.

For further information on the event and to register please visit the event website http://erpheadtohead.com/uk.

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About Lumenia Consulting
More than 20 years of consulting experience working with Lumenia clients on ERP Strategy, Process Design, System Selection and Implementation projects. Extensive experience of major ERP projects in the Life Sciences and Consumer Products sectors.

Compare 14 ERP solutions at the 2-day ERP HEADtoHEAD™ event

The 9th UK Lumenia ERP HEADtoHEAD™ will take place on 13-14 March in the DoubleTree by Hilton, Milton Keynes. The unique format of the event brings together the leading ERP vendors, who must follow a script during their presentations, allowing delegates to compare like for like. The event is facilitated by independent ERP consultants, Lumenia Consulting.

The event will feature ERP product demonstrations from 14 ERP vendors, along with sector presentations, though-leadership sessions and a panel discussion. Solutions suitable for various organisation sizes, from large corporations to SME's, will be represented. ERP solutions to be demonstrated include SAP S/4HANA, Oracle NetSuite, Epicor, Sage X3, SAP Business One, Microsoft Dynamics 365, Infor, IFS, Priority Software, SAP Business ByDesign, Rootstock ERP, QAD, Intact and Kerridge.

The event kicks off with the ERP vendors take part in an 'Elevator Pitch'. During this session the vendors present a summary of their USP's to convince delegates why it would be a good idea to attend their on-line demonstrations. Delegates can then choose to attend demo sessions focused on Finance, Production, Procurement, HR, Projects or Sales. The demonstrations are based on standardised high-level scripts which makes it easier to make system comparisons.

Press Release from Lumenia Consulting

Acumatica
The Cloud ERP

Acumatica Summit 2024

With an audience of more than 3,000 attendees, the opening keynote by Acumatica CEO John Case highlighted the company's plans to support its growing customer base of small and mid-market businesses as it steps into a new era of economic growth and opportunity.

During the keynote, Acumatica made the following announcements:

- The future release of Acumatica Professional Services Edition
- The company's new Principles of Innovation
- An updated logo illustrating Acumatica's forward-thinking philosophy
- Customer of the Year: Portacool
- Impact Customer of the Year: Polywood

The full press release can be found here: _https://www.acumatica.com/corporate-newsroom/press-releases/acumatica-launches-new-era-of-business-growth-and-product-expansion-at-summit-2024/_

Are you interested in learning more about the news coming out of Acumatica Summit? If so, I can put you in touch with company executives to delve deeper into Acumatica's plans for 2024 and beyond.

Press Release from Acumatica

Charting the Course of Enterprise Transformation: An Exclusive Interview with Mike BeDell, CEO of Protera

In a significant development for businesses navigating the complexities of digital transformation, Protera Technologies, a leading software-enabled services provider, has proudly announced its comprehensive authorization for SAP S/4HANA Cloud, private edition (part of RISE with SAP), SAP S/4HANA (on-premise), and SAP Business Technology Platform (SAP BTP). This landmark announcement not only marks a new chapter in Protera's longstanding 25-year relationship with SAP but also reinforces the company's dedication to supporting customers through every phase of their digital transformation journey.

To delve deeper into the implications of this achievement and what it means for Protera's future, we sat down with Mike BeDell, CEO of Protera, for an exclusive interview. BeDell, who has been at the forefront of the company's strategic initiatives, shares his insights on how this authorization positions Protera as a pivotal partner for businesses looking to leverage SAP solutions to drive innovation and growth.

1. Congratulations on the recent service authorizations for SAP S/4HANA Cloud, private edition, SAP S/4HANA, and SAP Business Technology Platform. How do these authorizations enhance Protera's capabilities to continue guiding businesses through their transformation journeys?

As we help enterprises modernize their operations in the cloud, we apply state-of-the-art technologies and tactics that day-to-day IT operators wouldn't otherwise have the time to stay informed about due to rapid innovation and change. We make keeping up with innovation and change our priority, bringing to bear industry-leading tools, automation capabilities and best practices that shape a well-governed, cost-effective and highly scalable business environment — and enable great technology to drive lasting value.

These authorizations speak to that. We know the ins and outs of SAP's evolving digital transformation landscape, and guiding clients through the IT procurement and decision-making process is a proven strength of our

Interview with
Mike BeDell
CEO, Protera

company. More so, our technical strengths enable us to focus on being a superior customer service company, as evidenced by our client's exceptional experiences and differentiated business outcomes. It's about interacting with clients every single day and providing an experience focused on deep understanding and problem-solving. As a cloud and application services provider, we know that SAP is going to continue to evolve going forward. But they can't do it all themselves, and we plan to use our experience, deep expertise and relationships to chart the course for the future of business management technologies in the cloud — and to ensure we deliver a consistent and positive business impact for our clients.

2. As a key component of RISE with SAP, SAP S/4HANA Cloud, private edition, plays a crucial role in modern business landscapes. How does Protera envision leveraging this offering to empower businesses migrating their SAP ERP systems to thrive in the cloud?

One of SAP's big focuses right now is helping enterprises clean their digital core and moving them away from the complex customizations keeping their business running. SAP S/4HANA Cloud carries a promise of more off-the-shelf capability, with more templates and standardization right out of the box.

Moving forward, SAP S/4HANA Cloud environments may be less complicated than managing an SAP ECC environment with lots of custom code. Determining the cause of system performance issues in an on-prem system could also be a long and complicated process, but in the cloud, it should be much faster and more straightforward. That will be true whether enterprises are deploying RISE with SAP, S/4HANA

cloud private edition, or moving their SAP natively to the hyperscale cloud.

Regardless, none of this changes how we help our clients modernize their technology: by approaching it from their perspective. What's the technology roadmap? What needs to be modernized? What needs to be upgraded? We always start with client goals and build outward from there. Adapting and evolving with SAP's approach is and always has been part of our broader strategy. But we're primarily focused on designing a highly available, secure and high-performing environment for clients that helps achieve their business goals.

> "Adapting and evolving with SAP's approach is and always has been part of our broader strategy. But we're primarily focused on designing a highly available, secure and high-performing environment for clients that helps achieve their business goals."

3. In your perspective, how do these service authorizations align with Protera's mission to provide improved value, increased quality, and reduced risk in enterprise modernization objectives?

In general, these service authorizations will make it easier to maintain SAP systems — and to keep them running at a higher-performing, more reliable and more secure level than before.

One thing to note about SAP's approach, though, is that it's very focused on SAP applications. When we're working with clients on their migration and modernization roadmaps, there are always non-SAP applications that go along with it. Take a manufacturer, for instance, that is working to extend its edge architecture to its plant operations and distribution centers. SAP might be 25-30 percent of their landscape; they have other applications that need to move as well. We provide a complete service offering to those businesses. SAP can manage its infrastructure, and we fill in the gaps, offering enterprises the peace of mind that we know SAP and how to work everything in together. Ultimately, we offer them the ability to put their surrounding workloads in more native environments in the cloud.

4. With 25 years of presence in the SAP ecosystem, how does Protera plan to utilize its experience and expertise to support customers at various stages of their transformation, from design and development to deployment and integration?

We're not experimenting. We've been working in this space for 25 years, like you said, and our experience and expertise is something that sets us apart when enterprises are looking for a partner in this process. Clients want a global partner who is available, proactive and offers full visibility into systems, workloads and operations. They want a trusted team that can guide them from discovery to migration and beyond. Protera is here to fill those roles.

Complexity has been introduced, and we're here to navigate that — both with SAP as our partner and with our enterprise clients as their transformation partner.

5. Given the dynamic nature of technology, what role does Protera see itself playing in the evolving SAP landscape, especially with the increasing focus on cloud-based solutions and digital transformations?

We are front and center in that exact conversation with clients today, and we intend to serve as a trusted advisor through every phase of their transformation process. Moving to the cloud alone won't solve every business' problems, and we are clear-eyed about that. That's why we offer comprehensive managed services to our clients that include security and financial governance, continuous optimization, and — through our deep hyperscale relationships — cloud-native tooling and funding to support their modernization roadmap. We provide complete and total support as a partner.

"Protera is accelerating the entire business transformation, not just SAP. Clients need to look at everything in their landscape beyond SAP, and that's a perspective we're here to provide so that we can position them for future growth and deliver continuous business value up the stack."

Security is an especially crucial element today, as threat actors continue to find more ways to attack their victims. When we're helping clients manage their environments, we're working with artificial intelligence (AI) to enhance auto-remediation or self-healing capabilities so that clients' systems can solve problems without manual intervention. Elsewhere, we're using AI for quicker detection, analysis and reporting overall. It's going to make it much more efficient for teams to quickly identify threats and remediate them.

6. Can you elaborate on Protera's approach to guiding businesses through optimizing practices, positioning for future growth, and accelerating SAP transformation efforts? How do these service authorizations contribute to this approach?

Protera is accelerating the entire business transformation, not just SAP. Clients need to look at everything in their landscape beyond SAP, and that's a perspective we're here to provide so that we can position them for future growth and deliver continuous business value up the stack. These authorizations are required to support these applications as an SAP partner, but, more so, they illustrate our organization's alignment with both SAP and those businesses that choose to deploy RISE with SAP or SAP S/4HANA Cloud, private edition. They prove our expertise and help us stand out amidst a vibrant partner ecosystem.

As part of any transformation effort, we address client IT maturity and practice optimization (i.e., problem management, major incident response, major incident change, change management, etc.). Many enterprises, running SAP or not, have

been operating in an undisciplined way. Our job is to bring structure and maturity to those practices and to help streamline them using our deep knowledge base, IT service management platform, and strategies. This requires close coordination, total understanding of internal business practices, and a clear vision of how we can help them mature their practices.

We're in the business of optimizing those practices in a way that will still exist effectively post-transition to the cloud. In other words, we'll do the blocking and tackling to free up internal resources so they can work on future-focused projects and strategies to drive growth.

7. In the realm of SAP and cloud-based environments, what trends does Protera anticipate in the coming years, and how does the company plan to stay at the forefront of these developments?

We're seeing much more rapid implementation of things like hybrid cloud models across the business landscape today. The continued embrace of this will enable clients to benefit from the best qualities of each platform. The positives can include things like cost control, robustness to ensure business continuity, and even the ability to take advantage of certain areas where on-premise cloud may still be the best solution.

In more specific areas, like plant modernization in the manufacturing sector, there are a lot of digital transformation initiatives yet to come. That is an area we expect to continue optimizing its efforts as technology and analytic capabilities multiply tenfold.

8. With a focus on managing the entire business application portfolio, how does Protera ensure a seamless and efficient transition for enterprises of all sizes, and what benefits can clients expect from this comprehensive ERP management approach?

That question really ties back to our fundamental value proposition as a company. As we help companies advance their cloud operations, we're bringing the latest and greatest best practices and strategies to the table. We're bringing knowledge and expertise across a variety of leading technologies, whether they're related to AI, automation, machine learning or something else.

But it's not just about technological knowledge and capabilities for us. We are, first and foremost, a customer service company. Because all of that knowledge means nothing if you operate without agility and responsiveness for your clients. We are here to provide an exceptional experience and a differentiated outcome. We want business leaders to view us as a natural extension of their organization.

9. Looking ahead, what is Protera's strategic vision for the future, both in terms of its partnership with SAP and its role in guiding businesses through their transformation journey?

As a company, we are looking to continue going up-stack in the future. We want to understand what it will take to add more system integration capabilities underneath the RISE with SAP umbrella. More broadly, we plan to continue expanding our portfolio around security and modern work, as mentioned. That's always been a key focus, but we'll continue to expand

there. We're also building more capabilities around data and AI. We want to optimize what's possible there, especially around financial governance and security — and to end users.

But most of all, we want to emphasize that we're not selling technology. We're technology-enabled. What truly differentiates us is that we are building long-term business relationships — oriented toward business growth and success — with our clients. That's what will make the real difference as we envision the technology landscape of tomorrow.

"We're bringing knowledge and expertise across a variety of leading technologies, whether they're related to AI, automation, machine learning or something else. But it's not just about technological knowledge and capabilities for us. We are, first and foremost, a customer service company. Because all of that knowledge means nothing if you operate without agility and responsiveness for your clients."

About Mike BeDell
Mike has served as CEO of Protera since 2021 and carries more than 30 years of IT executive experience into the role. During his tenure, the company has continued to scale, extend and expand its modernization capabilities, with a heavy emphasis on client satisfaction. To date, Mike has led the company to double-digit growth on a year-over-year basis. He previously served as a chief executive for Secure-24 and NTT Managed Services, North America, as well as various leadership positions at KPMG, Oracle, USInterworking and AT&T."

About Protera
We have been enterprise cloud management pioneers ever since managing the world's first production instance of SAP on the public cloud. We are a proactive global comprehensive managed services partner offering full visibility into your system, workloads, and operations. A trusted team who guides you from discovery to migration and beyond with the deepest of technical cloud and ERP expertise. That team is Protera.

Interview with Mike BeDell

How SAP BTP Users Keep Their Environments Secure

In 2021, SAP packaged several services and products into a single platform that would allow businesses to make better and more informed decisions. That was the SAP Business Technology Platform (BTP), representing the next iteration of the SAP Cloud Platform.

Since its release, SAP BTP has been well-received by enterprise users and has become a core pillar of a growing number of companies' SAP and ERP strategies.

However, security questions arise whenever a new product, version, or ERP strategy is implemented. How does SAP BTP change what enterprises must do to keep their customer's private information and business data safe? Let's explore.

An Overview Of SAP BTP

SAP BTP is billed as a cross-functional "innovation platform" that integrates numerous SAP applications in the cloud. That means app development, data and analytics, AI, automation, and integration functions come together in SAP BTP, allowing businesses to innovate and create personalized customer experiences on an SAP-managed cloud. Of particular note is that SAP BTP helps businesses seamlessly interface with S/4HANA cloud environments.

When enterprises use SAP BTP, they're looking to take advantage of its flexibility, close application proximity, and simplicity. They're looking for a "clean core"— which

Article by
Christoph Nagy
CEO, *SecurityBridge*

SAP defines as "a system which follows standardized guidelines for all elements of the core," and one that can be upgraded without "significant and costly efforts to test and adapt existing structures." This implies the decoupling and implementing custom code and customer-specific extensions without significant dependencies on ECC solutions. The goal is to increase flexibility and expandability while reducing the effort necessary for upgrades.

How Is Security Handled In SAP BTP?

"Clean core" requires significant sensitive data sharing with SAP BTP services; whenever a cloud or SaaS solution is in use, the provider heavily monitors security activity. While this may lull users into a false sense of comfort, thinking that the provider is solely responsible for any cyber incidents, the reality is that accountability is typically the user's responsibility. With SAP BTP, a shared responsibility model is available, establishing trust between the two parties. In this scenario, customers or users only see auditing services data. When it comes to auditing, a central log-in SAP BTP is available via SAP's Audit Log Service—an essential tool for users to monitor their system.

How SAP BTP Users Can Strengthen Security Postures

SAP BTP users should focus on the data exchange and integration architecture, emphasizing authentication, permissions, data transfer, and identity management. There are over 100 security components for the platform *listed on the SAP site*, ranked by priority— this can be a valuable resource for checking all the required boxes and focusing on the most critical security components first.

Considering the SAP BTP services used and the degree to which they're utilized, an enterprise's integration architecture should be carefully reviewed with an eye toward security. This includes the entire data communication path where sensitive information needs protection. Experts from the enterprise's IT and networking teams should be leveraged to set up the required firewalls in the SAP Cloud Connector and ensure they are correctly configured. Several security components listed on the SAP site will help to harden SAP BTP services against attackers.

> "With SAP BTP, a shared responsibility model is available, establishing trust between the two parties. In this scenario, customers or users only see auditing services data. When it comes to auditing, a central log-in SAP BTP is available via SAP's Audit Log Service—an essential tool for users to monitor their system."

Developing With An Eye Toward Security

The SAP BTP is an excellent enterprise resource for creating better customer experiences. It enables access to additional development environments like the *ABAP*, *Cloud Foundry Runtime*, and *Kyma Runtime*. SAP BTP's many advantages and flexibility of solutions will make it the first stop for many deployments, which means that customers must closely consider the

development environments they're using and the specific security requirements that accompany them. The onus is on the enterprise to improve its standardization and governance practices to ensure that thorough and regular analyses of its environments and SAP components and tools are conducted. The tools from SAP and *third parties* are available, but monitoring and management are necessary to ensure security is established effectively.

About Christoph Nagy
Christoph Nagy has 20 years of working experience within the SAP industry. He has utilized this knowledge as a founding member and CEO at SecurityBridge—a global SAP security provider, serving many of the world's leading brands and now operating in the U.S. Through his efforts, the SecurityBridge Platform for SAP has become renowned as a strategic security solution for automated analysis of SAP security settings, and detection of cyber-attacks in real-time. Prior to SecurityBridge, Nagy applied his skills as a SAP technology consultant at Adidas and Audi.

About Security Bridge
Real-time Intrusion Detection and Vulnerability Monitoring for SAP® applications. SecurityBridge is the first and only holistic, natively integrated security platform, addressing all aspects needed to protect organizations running SAP from internal and external threats against their core business applications. SecurityBridge's unique approach to protecting SAP NetWeaver, ABAP, and S/4HANA platforms reveal exploits, and uncovers previously unknown vulnerabilities, directing and enabling remediation before any harm is done.

Agiloft Selected by Epicor for Contract Lifecycle Management

Leader in industry-specific enterprise software Epicor chooses Agiloft to digitally transform its contract-driven processes

With its unmatched configurability, Agiloft's CLM platform automates the most complex workflows and integrates with the numerous commercial processes surrounding contracts. Its user-friendly, no-code software customizes and streamlines the complete contract lifecycle, enabling cost discipline in procurement, visibility into contractual risk and regulatory compliance by legal departments, and quantifiable reductions in revenue leakage in sales operations.

> "Agiloft's CLM platform automates the most complex workflows and integrates with the numerous commercial processes surrounding contracts."

"In a rapidly changing world, contracts and business execution must be in sync, but many businesses' contracting processes are out of step with the dynamic needs of the wider business, leading to misalignment and missed opportunities. This disconnect between core business goals can hinder growth and profitability. By choosing Agiloft, Epicor will bridge that gap," said Eric Laughlin, CEO of Agiloft. "Agiloft will empower Epicor's teams to manage their contracts effectively, while seamlessly integrating data from those contracts into their broader business workflows. We provide the technology Epicor's teams need to create contracts on-demand, tailored to their specific needs, ensuring everyone involved is informed and aligned, so they can drive business goals and accelerate execution."

"Agiloft's software is a perfect fit for our needs," said Robin Bell, Senior Procurement Manager at Epicor. "Agiloft offered the flexibility and robustness we needed, while also being extremely easy for non-technical practitioners to configure, maintain, and administer without any formal training."

Epicor equips hard-working businesses from across the globe with enterprise solutions that keep the world turning. For nearly 50 years, Epicor's customers in the automotive, building supply, distribution, manufacturing, and retail industries have trusted Epicor to help them do business better.

About Agiloft
As the most trusted global leader in data-first contract lifecycle management (CLM) software, Agiloft connects contractual commitments to real business outcomes using its flexible Data-first Agreement Platform (DAP). With contract data as the foundation, customers quickly and collaboratively reach agreement and leverage contract visibility to thrive with competitive advantage. Employing powerful, pragmatic artificial intelligence as a legal force multiplier, and robust integration capabilities as a data liberator, organizations around the world trust Agiloft's certified implementers to deliver connected, intelligent, and autonomous solutions across the entire contract lifecycle. With a 99.6% implementation success rate, it's clear why some of the largest companies choose Agiloft to unlock the value of contract data and accelerate business. Learn more at www.agiloft.com.

Agiloft, the most trusted global leader in data-first contract lifecycle management (CLM), announced that it has been selected by Epicor, a global leader of industry-specific enterprise software, to digitally transform contract-driven processes across its global operations. Agiloft's intuitive, data-first agreement platform will be closely integrated with Epicor's existing core systems, including Salesforce and Epicor's own Business Intelligence and Enterprise Resource Planning solutions, to drive efficiency, ensure compliance, and enable increased visibility into Epicor's key business relationships.

Agiloft will provide Epicor with a user-friendly and customizable CLM solution to connect their contractual commitments to business operations. With the new CLM system its sales and procurement teams will be able to reach agreement quickly and collaboratively with their external business partners and then leverage data from those contracts to thrive with powerful competitive advantage. Specifically, Epicor selected Agiloft CLM to help the company improve customer relations and service, create internal and operational efficiencies, improve business process agility, as well as improve compliance and risk management.

A significant development in the research lab's history is the appointment of Joris Van De Vis, SecurityBridge's Director of Security Research and Lab Director. As co-founder of the recently acquired *Protect4S* organization, Joris brings more than two decades of SAP security experience and has been credited with identifying over 100 SAP vulnerabilities. While at Protect4S, he was a frequent SAP security speaker at international security conferences, large enterprises, the Dutch government, the Dutch user association VNSG, and SAP's annual security conference. Joris' skills amplify SecurityBridge's capabilities to analyze newly released SAP security notes on Patch Tuesday. These insights further help the lab proactively protect SAP customers.

"The SAP Security Response Team has duly recognized the efforts of the SecurityBridge Research Lab, acknowledging its pivotal role in uncovering vulnerabilities," Joris said. "We are proud the SAP Security Response Team has swiftly created numerous patches to rectify the vulnerabilities our research lab has discovered."

The SecurityBridge platform seamlessly integrates with any SAP environment, and the research lab findings are automatically included within the patches. For more information, please visit *securitybridge.com* or call +1 (416) 821 0850.

About Security Bridge, Inc.
SecurityBridge is an SAP Security Platform provider developing tools to extend the SAP ecosystem. The company takes a radically different approach to traditional security solutions, believing SAP applications and custom code will be infiltrated no matter how diligently security hygiene is applied. In response to this belief, SecurityBridge created its integrated real-time solution for constant monitoring. Powered by anomaly detection, the SecurityBridge platform can differentiate between accurate results and false positives so that security teams can better focus on real issues. For details, please visit securitybridge.com.

SAP Security Response Names SecurityBridge's Research Lab As Top-3 Worldwide; Joris Van De Vis Appointed Lab's Director

SecurityBridge, a leading global provider of SAP security solutions, announced the SAP Security Response Team has rated the SecurityBridge Research Lab among the Top-3 sources for discovering and reporting vulnerabilities in SAP software.

The research lab has found and reported over 100 zero-day vulnerabilities that contribute to securing the SAP ecosystem, SAP products, and SAP customer platforms worldwide. This accolade underscores the research lab's exceptional contributions to SAP security and positions SecurityBridge as a crucial partner for those seeking to fortify their SAP installations.

The SecurityBridge Research Lab's involvement extends beyond reporting vulnerabilities and is instrumental in analyzing newly released SAP security notes on *Patch Tuesday.* These insights contribute to the proactive protection of SAP customers, as SAP patches and detection signatures are seamlessly integrated into the SecurityBridge platform.

Press Release from Security Bridge

3i Infotech Recognized in the 2023 Gartner® Market Guide for Higher Education Student Information Systems

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3i Infotech Limited, a global information and technology company committed to accelerating digital transformation, announced that it has been identified as one of the Representative Vendors in the 2023 Gartner Market Guide for Higher Education Student Information Systems 2023.

The recognition is believed to have come at the back of 3i Infotech's EdTech initiative - NuRe Campus that facilitates robust and efficient management capabilities encompassing end-to-end intelligent automation proficiencies in the cloud.

3i Infotech has been investing in NuRe Campus to build it as a unique offering in the educational SaaS based ecosystem.

In the past NuRe Campus has been recognized as the best university management system in India. This product offering from the company is competent with the needs of the contemporary and comprehensive management of all key processes, covering all requirements of courses, faculty, students, and support staff from the application, selection, and admissions to examinations, evaluations, and results.

All the providers in the SIS based category have solutions that illustrate the variety of SIS delivery options. These range across multiple geographic regions and include vendor-based, open-source and consortium-membership-based solutions. 3i Infotech was also recognized based on the Gartner's survey of excellent competencies.

Speaking on the recognition, **Thompson P. Gnanam, Managing Director & Global CEO, 3i Infotech** said, "We are very pleased to be recognized by Gartner as a Representative Providers in the higher education SIS market. Our core value lies in providing seamless digital transformation in all spheres of what we do and NuRe Campus has been our exceptional offering to promote the same in the education management industry. To us, this recognition extends support and adds strength to our vision and endeavors as we consistently engage ourselves in tapping into the limitless potential of approaching the modern-day complexities with cloud first and edge ready applications".

Ashish Srivastava, Chief Executive Officer, NuRe Campus said, "It is indeed an honor to be recognized for our consistent efforts in the education space. Since the inception of NuRe Campus we have been committed to building and accelerating a technologically advanced educational management ecosystem to facilitate excellence in academia and such recognitions add to the credibility of the brilliant team behind the growth. We look forward to more such accomplishments in the future".

Additionally, 3i Infotech was recently recognized by Gartner in their latest report as a Representative Vendor in the 2023 Gartner® Market Guide for Oracle Cloud Infrastructure Professional and Managed Services[1] and the 2023 Market Guide for Application Testing Services Worldwide.[2]

Gartner, Market Guide for Higher Education Student Information Systems, By Analyst(s): Robert Yanckello, Grace Farrell, Published 06 December 2023
[1]Gartner, Market Guide for Oracle Cloud Infrastructure Professional and Managed Services, 14 August 2023.
2Gartner, Market Guide for Application Testing Services, Worldwide, 28 August 2023.

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About 3i Infotech
3i Infotech Limited incorporated in 1993 and headquartered in Mumbai, India, provides information technology services and software solutions. Since its inception the company has 25+ years of experience in delivering business value to its clients across multiple industry verticals. 3i Infotech has emerged as a leading name in propelling the current wave of digital transformation initiatives, with deep domain expertise across BFSI, Healthcare, Manufacturing, Retail, and Government sectors. The company currently stands with a strength of 5000 employees and over 500+ clients across the globe. Website: https://www.3i-infotech.com/

Press Release from 3i Infotech

Decentralized Finance Technology Market Anticipates Impressive 28.4% CAGR Growth by 2034 | Future Market Insights

The global decentralized finance technology market is anticipated to reach a valuation of US$ 75.7 billion in 2024, driven by the integration of decentralized finance in gaming. The trend is expected to create new opportunities for the market, leading to a projected CAGR of 28.4% between 2024 and 2034, and reaching a total valuation of approximately US$ 919.8 billion by 2034.

One of the major factors contributing to the growth of the market is non-fungible tokens. The intersection of DeFi and NFTs creates new opportunities for decentralized ownership, fractionalization of assets, and innovative financial models around digital collectibles.

Projects working on layer 2 scaling solutions, such as Optimistic Rollups and zk Rollups, aim to address the scalability issues of blockchain networks, making DeFi more scalable and cost-effective. Decentralized oracles provide reliable external data to smart contracts,

reducing reliance on centralized sources and enhancing the security and reliability of DeFi applications.

DeFi projects focusing on microfinance and financial inclusion aim to provide services to unbanked and underbanked populations, unlocking economic opportunities for a broader range of individuals. Ongoing innovation in decentralized derivatives markets and options trading platforms introduces new financial instruments and risk management tools to the DeFi ecosystem.

Platforms offering dynamic and algorithmic asset management solutions attract users looking for automated and optimized portfolio strategies in the DeFi space. The development and adoption of enhanced security measures, including formal verification of smart contracts and insurance protocols, aim to minimize the risk of vulnerabilities and attacks.

> "The ongoing digital transformation in the financial industry is a major driver for embedded banking."
>
> *Sudip Saha_*
> *Managing Director at Future Market Insights (FMI) Analyst*

The development and adoption of interoperable protocols and standards promote collaboration between different DeFi projects and ecosystems, fostering a more interconnected financial landscape. The concept of Decentralized Autonomous Liquidity Pools involves creating decentralized and community-governed liquidity pools, allowing for more flexible and community-driven liquidity provision. The rise of decentralized insurance platforms provides users with coverage against smart contract failures, hacks, and other risks, adding a layer of security to the DeFi ecosystem.

Key Takeaways

- The global decentralized finance technology market was valued at US$ 59.6 billion by 2023-end.
- From 2019 to 2023, the market demand expanded at a CAGR of 26.3%.
- The market in Australia is expected to expand at a CAGR of 31.9% through 2034.
- By industry, the BFSI segment to account for a share of 24.0% in 2024.
- From 2024 to 2034, the decentralized finance technology market is expected to flourish at a CAGR of 28.4%.
- By 2034, the market value of decentralized finance technology is expected to reach US$ 919.8 billion.

The development of algorithmic stablecoins aims to maintain price stability through algorithmic mechanisms, reducing reliance on collateral-backed stablecoins, remarks an FMI analyst.

Recent Developments

- In 2022, Compound, a decentralized finance protocol, introduced a new iteration called Comet. The updated protocol places a strong focus on enhancing capital efficiency, bolstering security measures, and providing users with a streamlined experience for borrowing and lending cryptocurrencies.
- In 2022, the DeFi platform experienced a security breach, with Terra Luna falling victim to an attack that resulted in a staggering loss of USD 40 billion within the DeFi industry. The incident is recognized as one of the major security breaches in the DeFi sector, causing a significant downturn in the global market.

These insights are based on a report on the *Decentralized Finance Technology Market* by Sudip Saha, Principal Consultant, Future Market Insights

Article from Future Market Insights

Global Shop SOLUTIONS

7 Ways Manufacturers Can Deliver a Quality Part on Time Every Time

Have you ever met someone that accomplished or finished something that seemed impossible?

When you look under the hood at the journey of that person, the difference between your way and their way is normally minor. It isn't a special skill or talent; it is simply knowledge or a blueprint that can be repeated to see the same results. Few things are created anew; most are ideas that are improved upon. The phrase "on time every time" is a typical benefit of Global Shop Solutions ERP software customers. This whitepaper takes repeatable actions from our best customers and puts them into a single blueprint for manufacturers that are looking for that edge to deliver a quality part on time every time.

Our customers are generally small and medium-sized discrete manufacturers and they face numerous challenges in delivering quality parts on time. These challenges include supply chain disruptions, inefficient processes, and limited access to data and insights. To overcome these challenges, manufacturers need to simplify production processes, optimize inventory management, improve quality control, enhance supply chain visibility, automate financial processes, provide real-time data analytics, and boost collaboration. Read on to see the benefits and challenges associated with each strategy.

Article by
Chris Pinaire,
MBA, PMP Director of New Implementations

Global Shop SOLUTIONS

1.Simplify Production Processes
To deliver quality parts on time, manufacturers need to optimize their production processes. *ERP software* can help them streamline production processes by providing real-time data and insights into production schedules, resource allocation, and bottlenecks. This can help identify inefficiencies and allocate resources more effectively, reducing production delays and enhancing customer satisfaction.

2.Optimize Inventory Management
Inventory management is critical to delivering quality parts on time, but it can be a time-consuming and complex task. ERP software can help optimize inventory management by providing instant data and insights into inventory levels, demand, and supply chain performance. This can help manufacturers minimize carrying costs, optimize stock levels, and improve supply chain efficiency, leading to reduced waste and improved customer satisfaction.

3.Improve Quality Control
Quality control is essential to maintaining customer satisfaction and reducing the risk of product recalls. ERP software can help improve quality control by providing quality metrics, defect rates, and customer feedback immediately. Automated quality control processes can help manufacturers identify and address quality issues before they become major problems, increasing customer satisfaction and brand reputation.

4.Enhance Supply Chain Visibility
Manufacturers must have real-time visibility into their supply chain to stay competitive. ERP software can provide supplier performance, lead times, and inventory levels knowledge allowing manufacturers to optimize their supply chain, reduce lead times, and improve overall efficiency.

> "The result is reduced costs and improved on-time delivery rates."

5.Automate Financial Processes
Automating *financial processes* helps manufacturers save time, reduce errors, and improve financial transparency. ERP software can automate financial processes such as invoicing, payment processing, and financial reporting, reducing manual errors and improving compliance. This can augment cash flow, reduce costs, and improve overall business performance.

6.Provide Real-Time Data Analytics
ERP software provides manufacturers with real-time data analytics capabilities, enabling them to make data-driven decisions based on real-time insights into production processes, inventory levels, and customer behavior. This can help you optimize production schedules, reduce costs, and raise customer satisfaction.

7.Boost Collaboration
Enhanced collaboration between different departments and stakeholders can help you optimize your business processes and improve overall efficiency. ERP software can provide a unified platform for communication, data sharing, and project management, improving collaboration and decision-making.

Generally speaking, most manufacturers face similar challenges in delivering quality parts on time and those challenges are more complex without an ERP

software package at the center of their business. This whitepaper has presented seven ways in which ERP software can help manufacturers deliver a quality part on time every time. By implementing ERP software, manufacturers can increase efficiency, reduce costs, and enhance customer satisfaction and ultimately make their ERP software the Most Valuable Asset at the company.

About Chris Pinaire
Chris Pinaire, MBA, PMP is the Director of Consulting and Implementation at Global Shop Solutions, where he has been a part of more than 350 ERP software implementations. His team has more than 250 implementations active at any given time. With Global Shop Solutions for more than 18 years, Pinaire daily helps manufacturers simplify their operations and become better.

About Global Shop Solutions
Global Shop Solutions ERP software provides the applications needed to deliver a quality part on time every time from quote to cash and everything in between including shop management, scheduling, inventory, accounting, quality control, CRM and 25 more. Available in the cloud or on premise, our manufacturing customers benefit from real-time inventory accuracy, improved on-time delivery, lower administrative costs, increased sales and improved customer service. Headquarters in The Woodlands, Texas includes a state-of-the-art R&D facility and Global Shop Solutions training center. Through its offices in the U.S., Mexico, Indonesia, Singapore, Australia, New Zealand and the United Kingdom, the company supports thousands of manufacturing facilities in over 25 countries and more than 30 industries.

Article by Chris Pinaire

aptean

How Transportation Management Software Shores Up 5 Logistics Pain Points

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A transportation management system (TMS) can play a pivotal role in optimizing logistics and transportation operations for any manufacturer, distributor, third-party logistics provider (3PL) or retailer—delivering transformative benefits that can significantly impact your organization.

When you boil everything down, the true advantage of a TMS lies in its ability to harmonize demand with available capacity. Industry research has shown that companies with advanced routing and scheduling functionality—one of the primary capabilities of TMS software—*save up to 30% in their delivery transportation costs*. Apply these numbers to your business model, and it's easy to see the return on investment (ROI) implementing transportation management software tools can deliver.

As with any substantial financial commitment, it's imperative to construct a compelling case for TMS adoption and secure buy-in from key stakeholders within your company. To do this, you'll need to evaluate how a

TMS can effectively address your critical logistics pain points, ultimately leading to improvements across various operational areas. From optimizing route planning and carrier management to enhancing visibility and cost control, the right TMS software equips your organization with the tools needed to drive measurable growth throughout your entire company.

Now, let's dive into the specifics of how TMS tools can empower your team and help your business overcome barriers to success. We'll explore five key challenges, highlighting the pertinent features TMS software offers and the corresponding benefits you can attain.

Pain Point No. 1: Route Planning and Optimization

If you've ever been frustrated by the time-consuming manual route planning process, you're not alone. It drains your team's valuable time, which could be better spent elsewhere. That's where *route optimization software* comes in. By automating route creation, you can reduce planning time from hours to minutes. With those efficiency gains, your planning team can focus on more strategic tasks, and you can potentially offer later order cut-off times to your customers since route planning no longer needs to be done so far in advance.

Traditional routing methods often lead to inefficient schedules, manual workarounds, wasted fuel and increased costs. But a *routing and scheduling tool, with advanced algorithms*, calculates the most efficient routes for your vehicles, leading to significant fuel savings, reduced vehicle wear-and-tear and potentially more drops per route.

Of course, there are still late orders and last-minute changes that can disrupt your plans. Traditional methods or basic routing software struggle to quickly adapt, limiting your flexibility and scalability, and potentially affecting your revenue. However, the right route planning and optimization tool provides the agility you need.

With hybrid modeling, the solution takes into account every route as well as late, emergency or off-day orders. This helps ensure that you can promptly accommodate late or urgent requests, maintaining flexibility and even creating new revenue opportunities with your ability to fulfill these unexpected orders.

Pain Point No. 2: Delivery Execution

Imagine having the ability to implement dispatch smoothing, where your scheduling process factors in vehicle capacity, warehouse resources and manufacturing capabilities. The result? Greater dispatch efficiency and the reduction of delivery bottlenecks, ensuring smoother operations that help to get your deliveries to their destinations promptly.

> "Traditional methods or basic routing software struggle to quickly adapt, limiting your flexibility and scalability, and potentially affecting your revenue. However, the right route planning and optimization tool provides the agility you need."

Operating with multi-trip routes can be challenging, especially when exceptions or delays occur. Late-running drivers can leave trailers waiting, causing disruptions and added costs. However, with a *delivery execution tool*, you can be proactive. This powerful functionality provides real-time visibility of route progress so that your managers can react quickly to any deviations or issues, helping to ensure successful deliveries and enhanced customer satisfaction, even amid unexpected challenges.

Plus, you can feed all that real-world execution data, such as driver availability and hours worked, back into the planning process to further enhance performance. This leads to more efficient resource utilization and improved overall results, making it a "win-win-win" for achieving better outcomes and optimizing your operations.

Additionally, if you've struggled with a lack of insight into how adjustments to your operations could affect outcomes, *strategic route planning* capabilities can drive further optimization. You can use "what-if" modeling capabilities to test out scenarios—such as how a new depot location may affect efficiency—enabling smarter decision-making to bolster future planning and execution.

Pain Point No. 3: Customer Service

As customers across industries become more and more demanding, meeting precise delivery requirements, like specific time windows, truck and/ or bay stipulations, can become an insurmountable task without the right *routing and scheduling solution.* Advanced systems can accommodate your business rules and customer preferences in the planning process, meaning your finished routes are aligned with customer expectations—enhancing satisfaction and improving first time success rate.

Even with the best-laid plans, ensuring excellence in customer service once your drivers are out on the road can be challenging. Thankfully, TMS software with *electronic proof of delivery software (ePOD)* functionality is ideal for improving final-mile satisfaction. By removing the need for delivery paperwork customer-facing processes can be carried out efficiently and easily.

The software also helps you enforce consistent processes across all of your mobile workers, ensuring reliable service levels. And by providing real-time visibility to help you proactively solve customer service issues before they arise and automating customer delivery notifications, transportation management tools can really drive improvement in last-mile customer service.

And for goods requiring specific transport conditions, the right TMS software should offer functionality to help manage temperature-controlled zones and segregated compartments. This capability helps to ensure that products arrive in the desired condition, meeting client requirements and preserving product quality. With this feature, you gain confidence that deliveries will consistently meet clients' expectations.

> "By providing real-time visibility to help you proactively solve customer service issues before they arise and automating customer delivery notifications, transportation management tools can really drive improvement in last-mile customer service."

Pain Point No. 4: Home Delivery and Service Fulfillment

For businesses delivering goods or services directly to consumers, _home delivery software_ is another critical part of a comprehensive TMS setup. This sophisticated solution continuously optimizes routes as orders come in, even in high-volume omnichannel environments.

That means that your business can automatically offer tailored delivery time windows at point of sale that are both convenient for the customer and aligned with the needs of your operations. For example, by incentivizing the customer to choose a specific delivery slot because it's more efficient for your operation—thus shaping the incoming demand to suit your business objectives.

Additionally, a TMS with tailored home delivery functionality helps by providing complete customer histories, including every interaction in the lifecycle, all easily accessible within the system. That empowers your customer service team to provide the best possible service, quickly resolving inquiries and issues.

Furthermore, a home delivery solution can give your entire organization visibility into orders, from the time they're submitted through the moment that they're delivered. There are no information silos when you have the right TMS system in place, and the home delivery aspects of such software unify order data and make it transparent for all to see.

Pain Point No. 5: Delivery Performance

When you're dealing with fragmented systems for tracking customer delivery details, it can lead to inefficiencies and missed opportunities. However, with the right TMS, you gain digital proof

of delivery data captured in the field by drivers, all while following essential business rules with app-side guidance. This streamlined approach _ensures efficient and effective delivery_ documentation processes, providing a cohesive solution to your tracking needs.

> "A home delivery solution can give your entire organization visibility into orders, from the time they're submitted through the moment that they're delivered."

Not only that, but if you've been facing issues where customers lack insight into the delivery process, ePOD functionality automates customer communications with real-time updates. This not only results in better customer satisfaction but also enhances transparency throughout the delivery process, leading to a higher first-time delivery success rate. With this tool, you're better equipped to keep your customers informed and satisfied while optimizing your delivery operations.

Lastly, it's important to point out that the _best ePOD solutions_ are fully configurable according to your business's processes. Depending on the kind of delivery, product or customer, you can tailor the instructions for your driver to ensure that expectations are met, and then apply those same parameters to similar situations across your wider operations.

Making the Case for Aptean as Your Provider

Now that you've discovered how transportation management software tools can address critical logistics and transportation challenges while delivering operational and financial advantages, it's time to build a compelling case for implementing our advanced TMS solution suite in your business. As we conclude, we'd like to present why Aptean should be on your list of potential providers.

First, consider our extensive experience. With a deep understanding of the unique challenges your industry presents and a wealth of best practices to overcome them, we bring decades of collective expertise to the table. We've collaborated with organizations like yours worldwide, spanning various industry segments, so we're ready to help you drive your _digital transformation._

Don't just take our word for it. Take a peek at what some of our clients have to say.

- _Wren Kitchens_, a leading provider of high-quality kitchens, reduced miles by 15% and improved customer delivery lead times by 60%.

- _BSW Timber_, a timber manufacturer and supplier, used Aptean Routing & Scheduling to improve its route planning time and gained measurable efficiencies.

- _A leading pharmaceutical company_ optimized its home delivery operations with Aptean's ePOD solution.

Next, consider the fact that as a comprehensive solution provider, our approach is to help you build the right tech stack to meet your organization's current and future requirements, including those beyond TMS. Whether your business needs an _enterprise resource planning (ERP) system_, _overall equipment effectiveness (OEE) software_, _enterprise asset management (EAM) tools_ or another solution, we've got you covered.

Ready to mitigate your major logistics pain points? _Learn more about Aptean TMS today._

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Article from Aptean

Aerospace and Defense 2024 Industry Predictions: Geopolitical Volatility Brings Increased Defense Budgets to Ensure Preparedness

Matt Medley, Global Industry Director, A&D, IFS, highlights the four key trends impacting the defense sector throughout 2024. As budgets increase and the spectrum of conflict scenarios widens, swarm drones take to our land, air, and sea and the double-edged AI sword adds cutting edges to cybersecurity.

Conflicts and geopolitical volatility show no sign of abating – that means defense budgets are set to increase, but where will the spend go?

The conflicts of 2023 have caused major disruptions to military supply chains, leading to increased inventory pressures, and inadequate resources for military forces in combat. It comes as no surprise that in 2024 defense budgets across the globe are set to increase—witness the UK defense budget set to increase by *£5 billion* and the U.S. defense budget which is set to increase by *3.2%* from *$816 billion in 2023 to $842 billion in 2024*. As a result of this, the global defense market is expected to grow significantly, with a lot of the budget set to be focused on increasing production to help military forces regain control.

The *Deloitte report* on supply chain risk management identifies the real conundrum underlying the increase in defense budget on the manufacturing sector, too. Many A&D suppliers who produce specialized and complex equipment struggle to adapt quickly to changing demands.

Article by
Matthew Medley,
Global Industry Director, A&D

As many suppliers also operate in the commercial aerospace and defense sector, there is risk of spillover that can leave defense OEMs at risk of lacking critical resources in their operations. With rising budgets and increased procurement set to dominate the defense agenda throughout 2024, these are the four key areas I predict large portions of these increased budgets being spent on.

> "As many suppliers also operate in the commercial aerospace and defense sector, there is risk of spillover that can leave defense OEMs at risk of lacking critical resources in their operations."

Prediction 1: The widening spectrum of conflict calls for military forces to improve Total Asset Readiness®

The last 12 months have given rise to a wider spectrum of conflict. For example, the combat between Ukraine and Russia shows traditional symmetric warfare features, while the conflict between Israel and Hamas presents a more asymmetric style of combat.

This difference has prompted defense ministries and departments to better prepare for a broader spectrum of eventualities—from natural disasters to full scale warfare.

A recent Global Security Review essay paints a powerful picture of the ongoing evolution of defense forces and the *changing face of international conflict*. It states that an "agile approach to hybrid warfare offers a promising framework for responding to these complex and evolving threats." Indeed, with an increasing need for flexibility, adaptability and rapid-decision making, the impact of technology, and its developments will have a dramatic effect on future warfare.

These developments will apply to software infrastructure underpinning the military equipment supply chain, where disparate reporting mechanisms and software systems can be consolidated with an all-encompassing solution to track Total Asset Readiness—giving commanders a clear real-time view of the assets at their disposal.

As a result of this, we expect to see a *16.3% increase in total defense spending* in the U.S. alone, with the IT spend in defense contractors rising from 3% of revenue up to around 5% of revenue as they invest heavily in AI and automation to optimize asset management.

> "The U.S. Army is already looking at logistics and readiness as the service examines more opportunities to boost those operations by using advanced manufacturing technologies such as Additive Manufacturing and 3D printing technology to improve and sustain readiness."

Prediction 2: Recent conflicts highlight the lack of assets and inventories 'at the ready' – defense industrial bases must change

The conflict between Ukraine and Russia has highlighted a need to rethink Total Asset Readiness and improve the availability of resources to military forces in combat. This comes despite the mass investments made in ammunition and inventories by supporting countries. Current defense industrial bases (DIB) do not have the facilities to match the increase in recent demand as production rates were set up on non-large scale conflict replenishment. DIB expansion has never been so important!

This has been recognized by defense forces as for the first time ever, the U.S. DoD is set to release a *defense industrial base policy* in late 2023. The policy outlines four key focus areas: building a resilient supply chain, improving workforce readiness, increasing flexible acquisitions, and economic deterrence. The U.S. is not alone here. The *U.K. military* has also refreshed its defense strategy as it will reallocate £2.5billion to bolster the ammunition stockpiles as it aims to increase military power and agility.

New manufacturing principles are likely to play a key role. The U.S. Army is already looking at logistics and readiness as the service examines more opportunities to boost those operations by using advanced manufacturing technologies such as *Additive Manufacturing and 3D printing technology* to improve and sustain readiness.

As we move forward into 2024, and respond to U.S. DoD policy developments, I expect significant requirements will begin appearing

over 50% of all new defense contracts. I also predict that allied nations will follow suit with their own directives, requiring DIB organizations to transparently demonstrate supply chain resilience for not only themselves, but their suppliers as well.

> "As evidenced by recent conflicts, drones will increasingly be used as part of the military's arsenal in swarms. "

Prediction 3: The rise in low-cost 'swarm' drones as the use of autonomous vehicles adapts to 2024 land, sea, and air requirements

As evidenced by recent conflicts, drones will increasingly be used as part of the military's arsenal in swarms. Drones can be produced quickly, cheaply and have a range of features ranging from carrying out surveillance missions in previously too dangerous areas, to even carrying out light attack missions without putting warfighters at risk. As a result, they are becoming more prominent in military fleets and adoption rates are rising.

Drones are also hugely desirable for defense forces as they can be deployed on air, land, and sea

making them very versatile. For example, the development of drone carriers, such as the Royal Navy's _HMS Prince of Wales_, are growing in number to facilitate the transfer of assets and supplies from different vessels without requiring any manned vehicles.

The U.S. DoD is also seeing the benefit of swarm drones, as seen when the Deputy Secretary of Defense Kathleen Hicks announced the _'Replicator'_ initiative at the 2023 Defense News Conference. The initiative aims to quickly build and field low-cost air, land, and sea drones, or All-Domain Attributable autonomy (ADA2), that are able to swarm hostile forces. The DoD aims to have these ready for deployment in the next 18-24 months. These ADA2 assets will help military forces overcome and overwhelm threats that are posed by large assets and use Artificial Intelligence to autonomously "swarm" enemy forces.

Effective equipment alternatives such as a drones will be the way forward in 2024 as military powers seek to keep costs low and maximize budgets ,while reimagining the concept of mass in the sea/air/land battlespace.

Prediction 4: The AI boom forces cybersecurity to up its game

The increase in use of autonomous vehicles and digital technologies comes with heightened vulnerabilities to cyberattacks across the military supply chain. As seen in a Deloitte report, "National security concerns elevate the importance of data security for defense manufacturers. They share and exchange covered defense information (CDI) and controlled unclassified information (CUI) on program specifications, technology, and equipment performance as they

collaborate across research, design, development, and deployment of defense products."

The AI boom has brought its own cyber threats, including AI-enabled hackers able to carry out cyberattacks faster and at a much larger scale with increased anonymity. As AI can accelerate malware and change codes, it has made it harder for cybersecurity infrastructure to detect threats.

> "It is increasingly important that organizations connected to the military supply chain have penetration-tested cybersecurity software that can react quickly to prevent data breaches. "

However, using AI-enabled defense technology, cybersecurity can stay one step ahead of hackers by implementing machine learning (ML) to boost threat detection accuracy and quickly automate responses to cyberattacks.

It is increasingly important that organizations connected to the military supply chain have penetration-tested cybersecurity software that can react quickly

to prevent data breaches. Many _forces have already been deploying autonomous cyber defense tools_ with intelligent agents to monitor network activity and trigger immediate action when anomalous behavior is detected. Early malware detection, crucial for cyber risk mitigation, is considered a high-potential activity in which autonomous systems could excel in the future.

In the year ahead, I expect to see defense forces exponentially increasing their use of autonomous agents and specialized digital artifacts to enhance cyber defense, as seen with the _Defense Information Systems Agency_ looking to immediately expand its use of AI-driven tools to automate penetration testing on defense networks.

About Matthew Medley
Matthew Medley ensures IFS solutions meet the demanding needs of Defense Operators, In-Service Support Organizations, and Manufacturers worldwide. He has served as a management consultant, program manager, and project manager in aerospace, defense, and manufacturing organizations including Porsche, Lockheed Martin and others. A graduate of the US Air Force Academy, Matt served as a Major in the US Air Force, compiling over 2,500 flight hours in the C-130 aircraft. He holds the FAA Airline Transport Pilot and Certified Flight Instructor ratings and has earned multiple postgraduate degrees and certifications including an MBA from Kennesaw State University and PMI's Project Management Professional certification.

Article by Matthew Medley

Fusing Sustainability and AI for Inclusive Global Progress

The echoes of the 28th UN Climate Change Conference's (COP28) groundbreaking commitments lingered as the annual World Economic Forum (WEF) in Davos became the epicenter of global dialogues this month. Against this backdrop, SAP's innovative strides in sustainability and artificial intelligence (AI) spotlighted the transformative potential of technology in addressing pressing global challenges.

SAP's presence at both events exemplifies the seamless connection between environmental commitment and technological innovation. The nearly 100 initiatives SAP was involved in at COP28 last month demonstrated the company's unwavering focus on fostering collaboration across governance, the private sector, and civil society, which, coupled with a commitment to transparency, also resonated with Davos' core values.

For example, the "From Farm to Consumer" showcase emphasizing intelligent agriculture solutions at COP28 and the WEF Collaboration Village at Davos both showed the power of technology, such as how AI can optimize all industry practices and foster collaboration across the supply chain. This embodies SAP's multifaceted approach to innovation.

The company's strategies involve valuing carbon assets, supporting collaborative supply chains, and actively backing local climate initiatives. Recent studies highlight how SAP solutions can seamlessly integrate sustainability into core business strategies, giving companies a competitive edge. By treating emissions tracking with the same rigor as financial transactions, SAP solutions can enable data-driven decision-making for positive environmental impact.

Navigating the AI Landscape Responsibly

As the WEF in Davos unfolded, the pervasive enthusiasm for AI became evident along the promenade. A dedicated pavilion called "AI House" served as a testament to the technology's significance in shaping the future. SAP's commitment to innovation aligns with the forum's pulse, offering a glimpse into how AI can transform industries and societies.

Article by
Luis Trunk de Flores,
Deputy Managing Editor

AI's impact on the global workforce was a central concern at Davos. The International Monetary Fund (IMF) warns that the AI revolution could affect almost 40% of jobs worldwide, including highly skilled ones. In industrialized countries, this number could surge to 60%. The integration of AI in various industries can exacerbate inequalities, especially in terms of job displacement. However, SAP believes the time is right to explore the implications and the steps required for this future. One of the first mind shifts may be seeing AI as a coworker rather than a software tool.

SAP's approach seeks to mitigate potential inequalities. The company didn't merely showcase innovation at Davos; it actively engaged in discussions to address the complexities surrounding AI and find solutions for a responsible approach.

Striking the Balance: A Global Perspective

SAP recognizes the broader, global context of responsible AI, particularly with varying regulatory standards in the U.S. and China. The discussions at Davos provided a platform for SAP to advocate for a harmonized approach to AI regulation, which is especially relevant for the EU. The company's commitment to finding the right balance resonated in discussions about regulatory standards, emphasizing the need for global cooperation to navigate the evolving landscape of AI. This global perspective gains profound meaning when viewed through the lens of COP28.

COP28 concluded with a landmark decision by nearly 200 countries to transition away from fossil fuels in energy systems. The renegotiated text emphasized a just, orderly, and equitable shift, aiming to achieve net-zero emissions by 2050. This signifies a global move, committing nations to tripling renewable energy use by 2030 and doubling energy efficiency. The resolution proposes the first-ever phase-out of fossil fuels, accelerating coal's exit, boosting renewable energy, and emphasizing energy efficiency. However, the resolution falls short of a complete commitment due to opposition from economically reliant countries like Saudi Arabia. And despite progress, vulnerable island nations stress the need for inclusive decision-making, as they face immediate threats from climate change and depend on global solidarity for survival.

> "It's crucial to recognize AI's broader role in climate action. Scaling proven applications and technology, AI has the potential to unlock insights that could help mitigate 5% to 10% of global greenhouse gas emissions by 2030 and significantly bolster climate-related adaptation and resilience initiatives. "

Hand-in-Hand: AI and Climate Action

It's crucial to recognize AI's broader role in climate action. Scaling proven applications and technology, AI has the potential to unlock insights that could help mitigate 5% to 10% of global greenhouse gas emissions by 2030 and significantly bolster climate-related adaptation and resilience initiatives. Approximately 87% of executives view AI as having the potential to address climate issues, making it a key player in the fight against climate change.

AI contributes to climate protection not only by helping to reduce emissions but also by helping to navigate unavoidable climate change impacts and provide essential capabilities that enable climate action. SAP, alongside its dedication to AI ethics, wants to ensure that its AI solutions drive sustainability strategies and contribute to a more resilient and adaptive world.

SAP believes that working together and being open and transparent are key to solving bigger challenges. It's not just about cool tech; it's about creating real connections. As AI evolves, SAP's dedication to a responsible and inclusive future shows the power of teamwork in making a difference.

About SAP

SAP's strategy is to help every business run as an intelligent, sustainable enterprise. As a market leader in enterprise application software, we help companies of all sizes and in all industries run at their best: SAP customers generate 87% of total global commerce. Our machine learning, Internet of Things (IoT), and advanced analytics technologies help turn customers' businesses into intelligent enterprises. SAP helps give people and organizations deep business insight and fosters collaboration that helps them stay ahead of their competition. We simplify technology for companies so they can consume our software the way they want – without disruption. Our end-to-end suite of applications and services enables business and public customers across 25 industries globally to operate profitably, adapt continuously, and make a difference. With a global network of customers, partners, employees, and thought leaders, SAP helps the world run better and improve people's lives. For more information, visit www.sap.com.

Blockchain in ERP: Transforming Supply Chain Transparency

In the realm of Enterprise Resource Planning (ERP) and supply chain management, the demand for transparency, security, and efficiency has never been greater. As businesses aim to streamline operations, reduce costs, and build trust among customers and partners, blockchain technology has emerged as a game-changer. In this article, we will delve into the transformative power of blockchain in ERP, how it enhances supply chain transparency, and its role in AI business automation, workflow efficiency, and business transformation.

1. The Quest for Supply Chain Transparency

In a world where supply chains span the globe, transparency is the key to building trust. Businesses are under pressure to provide real-time visibility into their supply chain processes.

2. Blockchain and ERP Integration

Blockchain technology is finding its way into ERP systems, and the integration is driving supply chain transformation. The decentralized and immutable nature of blockchain provides a new level of trust and transparency.

3. Workflow Efficiency and Blockchain

Efficiency in ERP and supply chain management is closely tied to workflow efficiency. Blockchain streamlines processes by providing real-time data that all stakeholders can trust.

4. Predictive Analysis and Blockchain Data

Predictive analysis, a critical component of AI, benefits from blockchain data. The quality and integrity of the data are essential for making accurate forecasts.

5. Customer Service AI and Data Security

Customer service AI relies on accurate data. With blockchain ensuring the security and integrity of data, AI-driven customer service can provide more informed and personalized support.

6. AI-Driven Marketing and Data Integrity

Blockchain enhances data integrity, which is crucial for AI-driven marketing. Marketers can use trustworthy data to create personalized campaigns that yield better results.

> "Efficiency in ERP and supply chain management is closely tied to workflow efficiency. Blockchain streamlines processes by providing real-time data that all stakeholders can trust."

7. Supply Chain Automation and Blockchain

Supply chain automation gets a boost from blockchain technology. It ensures that data is consistent, secure, and available in real-time, leading to more efficient and responsive supply chain operations.

8. Measuring the ROI of Blockchain in ERP

Investing in blockchain technology involves costs, but the return on investment (ROI) is significant. Improved supply chain transparency, data security, and automation justify the initial investment.

9. Challenges of Blockchain Implementation

Implementing blockchain in ERP and supply chain management can be challenging. Challenges include technology integration, data standards, and ensuring all stakeholders adopt the new technology. Addressing these challenges is crucial for successful implementation.

10. The Path to Business Transformation

Blockchain is not just a tool; it's a path to business transformation. It empowers organizations to operate with transparency, security, and efficiency while adapting to the demands of the modern supply chain.

> "Blockchain in ERP is transforming supply chain management by enhancing transparency and trust. It empowers businesses to build stronger relationships with customers and partners, optimize their operations, and embrace a future where transparency is the norm."

11. The Future of Supply Chain Management

In conclusion, blockchain in ERP is transforming supply chain management by enhancing transparency and trust. It empowers businesses to build stronger relationships with customers and partners, optimize their operations, and embrace a future where transparency is the norm. BoldBrix is at the forefront of this transformative technology, offering advanced solutions to help organizations harness the power of blockchain in ERP. If you're ready to explore the potential of blockchain and its role in business transformation, contact our team today. We specialize in implementing and optimizing blockchain solutions to help businesses achieve greater efficiency, transparency, and supply chain satisfaction.

The future of supply chain management is here, and it's about transparency, trust, and efficiency. Don't wait; it's time to embrace the future and transform the way you manage your supply chain.

BOLDBRIX

Blockchain and ERP: What's the Impact on Manufacturing and Distribution?

The convergence of between blockchain and enterprise resource planning (ERP) systems is revolutionizing the way organizations manage and share data, leading to a more secure, transparent, and efficient future.

Key Takeaways

- Integration of blockchain and ERP systems unlocks potential opportunities to automate processes, enhance data security and streamline supply chain operations.
- Smart contracts enable efficient business transactions with increased accuracy, optimized supply chain management & improved cybersecurity.
- Blockchain integration offers enhanced collaboration, risk management & compliance for real-time data sharing among stakeholders.

Blockchain can be described as a decentralized, distributed ledger that records transactions across multiple computers. It drives cryptocurrencies, smart contracts, and offers manufacturing and distribution organizations the potential to support traceability, records management, supply chain automation, payment applications and other operational transactions.

Researchers note that the business value-add of Blockchain will grow to slightly more than $176B by 2025, then exceed $3.1T by 2030. In fact, a *study* by PwC reports 24% of industrial manufacturing CEOs are exploring or deploying the technology.

> "Blockchain delivers a near-real-time record that's replicated among a network of business partners that is immutable in nature."

With this astounding volume of transactions comes a transformation of enterprise data.

There are significant *business process improvement* considerations. Blockchain delivers a near-real-time record that's replicated among a network of business partners that is immutable in nature. The process takes information that would have previously been stored in the ERP silos of just one company and makes it available in a distributed network of records across disparate companies.

Unlocking the Potential of Blockchain in ERP

The combination of blockchain technology and ERP systems has the power to transform businesses by automating processes, enhancing data security, and streamlining supply chain operations. As organizations explore the potential benefits of integrating these technologies, they are discovering innovative ways to improve their operations, utilizing their business data more effectively.

This era of digital transformation witnesses the merger of blockchain and ERP systems propelling efficiency and growth in multiple industries.

Enhancing Data Security with Blockchain

In today's digital environment, data security is a top priority for businesses. Blockchain technology provides a robust system model that significantly enhances data security in ERP systems, minimizing the risk of data breaches and manipulation. Organizations can address common security issues like unknown vulnerabilities, missing software updates, and weak authentication by incorporating blockchain into ERP systems, which optimizes the supply chain process while safeguarding data integrity.

Blockchain's decentralized structure offers several benefits, including:

- Strengthening data security by distributing the responsibility of maintaining the ledger across multiple participants in the network
- Preventing any single entity from controlling the data
- Ensuring that any attempts to alter or corrupt the ledger will be rejected by the majority of network members

With the integration of blockchain and ERP systems, businesses can establish a transparent, secure, and tamper-proof foundation for their operations, building trust and collaboration among stakeholders.

Streamlining Supply Chain Processes

The integration of blockchain with ERP systems can revolutionize supply chain management by providing:

- Real-time visibility and traceability
- Digitized transactions and information
- An immutable record shared with all authorized members

- Comprehensive visibility into business operations
- Enhanced capabilities of current ERP systems
- Improved efficiency and decision-making

Moreover, blockchain technology enables secure data sharing across company and industry boundaries, fostering trust and collaboration among supply chain participants. The shared ledger, linked through cryptography, allows for real-time, scalable data sharing between different organizations without the need for duplicate data entry into separate databases. As a result, integrating blockchain with ERP systems can optimize supply chain operations, reduce visibility problems, and facilitate efficient collaboration, ultimately driving business success.

> "Blockchain technology provides a robust system model that significantly enhances data security in ERP systems, minimizing the risk of data breaches and manipulation."

Article from Ultra Consultants

Smart Contracts for Efficient Business Transactions

One of the most promising aspects of blockchain technology is the implementation of smart contracts—computer protocols that automatically verify and enforce contractual obligations, eliminating the need for third-party intermediaries. Integrating smart contracts within ERP systems can automate business processes, streamlining various operations, reducing manual intervention, and enhancing overall efficiency.

Smart contracts can expedite financial transactions, automate purchase orders, and authenticate identities, providing a risk-free and efficient method for conducting business transactions. By integrating blockchain-based smart contracts into ERP systems, organizations can unlock numerous benefits, including increased data accuracy, optimized supply chain management, and improved cybersecurity. This powerful combination has the potential to revolutionize the way businesses operate, paving the way for a more secure and efficient future.

> "Smart contracts can expedite financial transactions, automate purchase orders, and authenticate identities, providing a risk-free and efficient method for conducting business transactions."

The Synergy Between ERP Systems and Distributed Ledger Technology

The synergy between ERP systems and distributed ledger technology is a game-changer for businesses, enabling:

- Real-time data sharing
- Collaboration
- Improved risk management
- Compliance

Combining the comprehensive solution of ERP systems with the decentralized and transparent nature of blockchain technology can lead to a more efficient and secure way of conducting business operations.

Real-Time Data Sharing and Collaboration

When blockchain is synchronized with ERP systems, it facilitates:

- Safe and instant data sharing across organizations
- Promoting trust and collaboration among stakeholders
- Shared, decentralized, and immutable ledger
- Authorized parties can access up-to-date information and updates
- Improving data visibility and accessibility
- Increasing transparency and traceability in the ERP system
- Bridging trust gaps
- Paving the way for innovative business models and opportunities

In addition to enhancing data sharing, blockchain integration with ERP systems can help organizations overcome challenges such as data loss, data interoperability, and siloed information. Blockchain technology offers a consolidated platform for data management that removes redundancies, streamlines

processes, and ultimately enhances decision-making and overall efficiency.

Risk Management and Compliance

Blockchain's transparency features can help organizations maintain compliance and manage risks more effectively when integrated with ERP systems. By providing increased visibility and traceability of transactions, blockchain bolsters data security and ensures that all transactions are recorded in a tamper-proof and verifiable manner. This transparency aids in preserving compliance with regulations and enables superior risk management in ERP systems.

Integrating blockchain into ERP systems can help mitigate risks associated with data security, fraud prevention, supply chain, compliance, and data interoperability more effectively. This powerful combination allows organizations to stay ahead of potential threats, maintain regulatory compliance, and capitalize on the transformative potential of blockchain technology to drive business growth.

> "Integrating blockchain into ERP systems can help mitigate risks associated with data security, fraud prevention, supply chain, compliance, and data interoperability more effectively."

Overcoming Integration Challenges

Successfully integrating blockchain and ERP systems can be a complex process, but the benefits far outweigh the challenges. To unlock the full potential of this powerful convergence, organizations need to choose the right blockchain platform and partner with ERP vendors for a smooth integration process.

We will now examine the primary factors for overcoming integration hurdles and guaranteeing a smooth merger of blockchain and ERP.

Partnering with ERP Vendors for Smooth Integration

Working together with ERP vendors aids organizations in navigating the integration process. By partnering with experienced vendors, companies can access valuable insights, best practices, and technical expertise to facilitate a smooth and effective integration. Major ERP vendors such as *SAP*, Microsoft, and Oracle have already adopted blockchain technology, offering a range of solutions to

help businesses integrate this transformative technology into their ERP systems.

Conclusion

The integration of blockchain technology with ERP systems presents a wealth of opportunities for businesses looking to enhance data security, streamline supply chain processes, and automate business transactions. By embracing the synergy between these innovative technologies, organizations can unlock the full potential of real-time data sharing, collaboration, risk management, and compliance. Overcoming integration challenges by selecting the right blockchain platform and partnering with ERP vendors is crucial for a successful and seamless convergence. As the future of blockchain and ERP unfolds, businesses that adapt and innovate will undoubtedly lead the way in a more secure, transparent, and efficient digital world.

Value achieved through integrating Blockchain and ERP systems comes not by adding new information

into the distributed ledger, but by linking existing data from enterprise systems and being able to tightly control with whom it is shared.

- Learn more by viewing the entire on demand *webinar session Ultra conducted on Blockchain and ERP*.
- *Contact the Ultra team* for additional information.

Article from Ultra Consultants

ZEISS Group: Combining process innovation and digital transformation to reshape manufacturing in a highly regulated environment

Realizing a vision for smart manufacturing in the cloud

When leading optics technology provider Carl Zeiss AG (ZEISS Group) embarked on its digital transformation journey, it adopted the SAP Digital Manufacturing solution and SAP Business Technology Platform as its advanced manufacturing execution system. Direct interaction between the shop floor and the top floor means improved efficiency and no more manual inputs.

Industry	Region	Company Size	Partner
Industrial manufacturing	Oberkochen, Germany	~38,000 employees	Deloitte and Syntax

~100%
reduction of paper-based digital history record printing.

~>3x
more efficient, going from 3 to 10 parallel rollouts.

~100%
elimination of printed work-instructions verification for the first rollout.

> "We are just at the beginning of our smart factory transformation journey. With SAP Digital Manufacturing, we will make manufacturing more intelligent, more efficient, and more productive now and in the years to come."
>
> *Jochen Scheuerer_*
> *Head of Connected Smart Factory, Carl Zeiss AG*

Digitalizing production practices in a highly regulated environment

For more than 175 years, a unique, innovative spirit has imbued Carl Zeiss AG (ZEISS Group) with real staying power, allowing it to challenge the limits of what is physically and technically feasible. As one of the world's leading optics technology companies, ZEISS Group has a balanced portfolio geared toward future-oriented markets in optics, precision mechanics, and optoelectronics.

Committed to advancing the world of optics, ZEISS Group operates in around 50 countries with more than 30 production sites, over 60 sales and service locations, and around 30 research and development facilities worldwide.

Ready to bring its digital transformation strategy to life, ZEISS Group mapped out key requirements for digitalizing its shop floor and manufacturing processes, mindful of the stringent regulatory requirements of its operational environment.

Jochen Scheuerer, head of Connected Smart Factory at ZEISS Group, explains, "In general, the idea was to harmonize operations and support smooth production practices, with standardized applications replacing manual production processes. But a major consideration involved the very high standards of testing and documentation required to meet our regulatory obligations. This provided a multitude of challenges in terms of how to adapt them to an entirely new context."

> "Part of the success of our proof of concept using the SAP Digital Manufacturing solution at our subsidiary Carl Zeiss Meditec was the ability to scale it across our group of companies in a timely manner."
>
> *Jochen Scheuerer_*
> *Head of Connected Smart Factory, Carl Zeiss AG*

Connecting smart production lines of the future

Committed to a cloud-first strategy, ZEISS Group looked for a cloud-based manufacturing execution system (MES) to underpin its smart production lines of the future. It made the decision to invest in the SAP Digital Manufacturing solution. Guided by strategic partner Deloitte in tandem with implementation partner Syntax, ZEISS Group deployed the solution in a proof of concept. And to prepare the solution for validation and operation, the company took advantage of SAP Services and Support offerings, gaining expert advice from SAP Enterprise Support services.

Andreas Busse, with Connected Smart Factory at Carl Zeiss AG, comments, "We needed to invent new processes for staying validated through new releases and had to talk about what the operation of that could look like in the context of manufacturing combined with the cloud. And we had to discuss the governance of the entire solution. There were many parts of this project that were new and hadn't been done before."

Forming the backbone of its manufacturing operations, SAP Digital Manufacturing connects top-floor business systems to shop-floor equipment, providing visibility across plants. Connectivity between the MES and the shop floor allows ZEISS Group to send information about a production order from the MES layer directly to the shop-floor layer. This also acts as a process control mechanism, meaning production can't be started or a special pause executed without all the correct information in place. And when finishing processes on the shop floor, confirmation signals trigger in SAP Digital Manufacturing. Busse adds, "We have direct interaction between the shop floor and the solution, eliminating manual inputs. And based on those various actions and events, SAP Digital Manufacturing offers specific information to the machine-to-machine exchange."

SAP Business Technology Platform (SAP BTP) was used to provide the technical foundation to manage and audit processes and workflows and integrate with its instance of the SAP ERP application and other custom apps, shown in the architecture diagram below. This creates a link between its production and business operations, allowing the production orders housed in SAP ERP to be shared with the MES for good issue confirmations and approval.
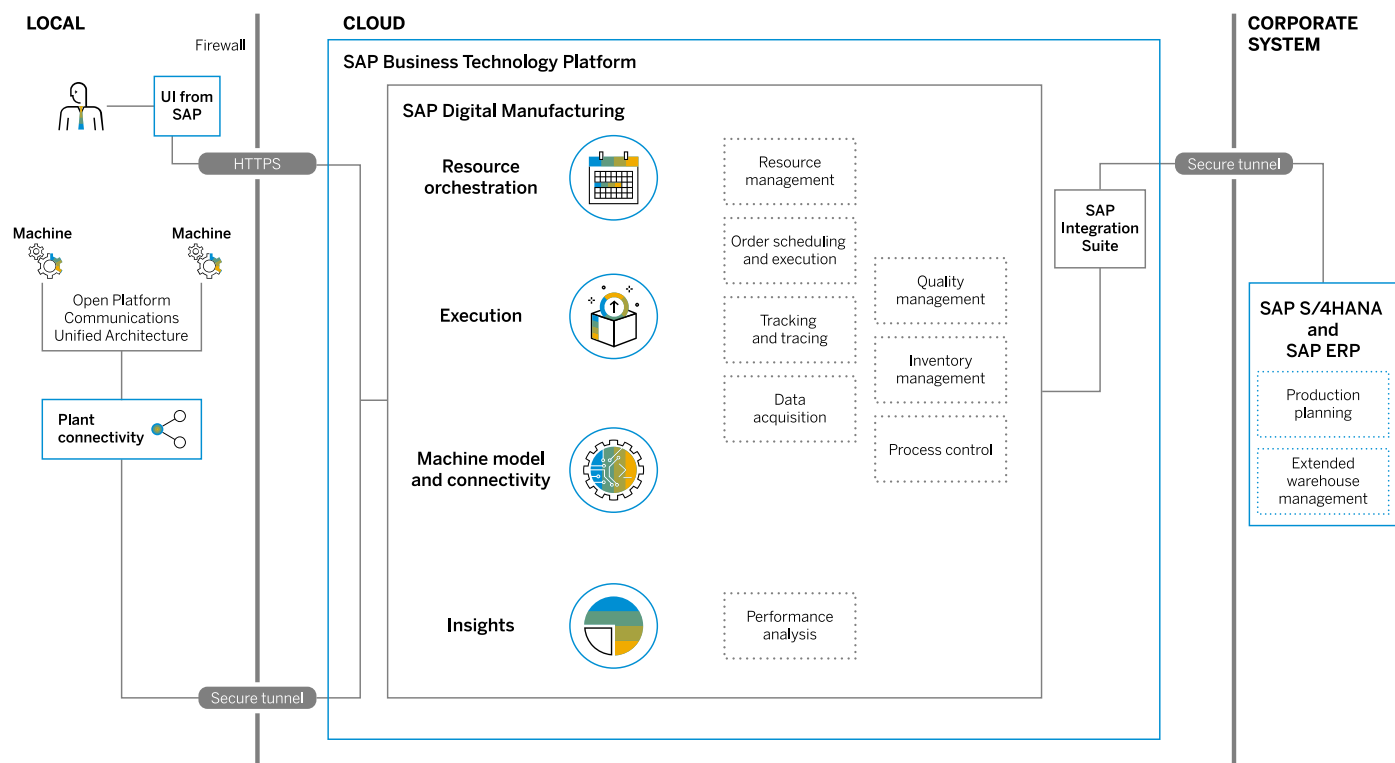
> "It's a much faster world, and our innovation potential is now much higher thanks to SAP Digital Manufacturing giving us agility in a manufacturing context."
>
> *Andreas Busse_*
> *Connected Smart Factory,*
> *Carl Zeiss AG*

Rolling out smart manufacturing capabilities enterprise-wide

Following the successful proof of concept at its subsidiary Carl Zeiss Meditec, the implementation of SAP Digital Manufacturing across ZEISS Group's production lines is now in full swing, with 29 rollouts planned over the fiscal year.

"Using the solution, we have defined an approach that allows us to roll out MES projects into production, including the validation at the end of every sprint," says Scheuerer. "This is highly unusual and quite innovative and means we are packaging an entire solution that's fully tested and fully documented once per month."

Connecting the shop floor with the top floor blends process innovation and new automated production processes and means the management team at ZEISS Group has more accessible and transparent production information. By integrating production execution, visibility, and analysis to optimize manufacturing performance, the company is seeing significant efficiency gains, an increase in production output, and improved product quality. Importantly, the solution allows the company to fulfill its medical product traceability requirements. This includes a history of the product, starting with the process used to assemble it in the production line, as the data previously collected manually on paper now resides in the solution.

In terms of efficiency, using the digital manufacturing execution system allows ZEISS Group to improve its operations from a sustainability standpoint. Busse explains, "The company now has data to provide a better understanding of where scrap is produced, so we can alter inputs to use less energy to produce the same number of finished parts."

> "We chose the SAP Digital Manufacturing solution because of its extensive functionality and because our partnership with SAP allows us to contribute to the future road map of the solution based on our needs."
>
> *Jochen Scheuerer_*
> *Head of Connected Smart Factory, Carl Zeiss AG*

Realizing its strategic vision for operational excellence

As part of its digital transformation, ZEISS Group is executing a number of strategic programs in tandem with its digital manufacturing initiative, including planning for operational excellence and the implementation of *SAP S/4HANA*.

Abas ERP Takes Lacher Grossküchen GMBH to a New Level of Efficiency…

… and enables significant process improvements, up to 100 percent faster invoicing, and an increase in liquidity

Founded in 1920, Lacher Großküchen GmbH is one of the leading large-scale catering and kitchen suppliers in Germany. The company's unique selling point is its comprehensive planning and consulting services, because when drafting a large-scale catering facility or kitchen the focus is not on design but rather on efficiency. It is not unusual that 5,000 meals have to be prepared and served within only an hour. Stoves, ventilation systems, contact grills, coffee makers, and other electrical devices as well as utensils have to be customized to individual needs. With more than 100 years of industry experience, Lacher not only provides the necessary equipment but also adds the required expertise. The wholesaler offers all steps from a single source, successively and perfectly coordinated. This was also the case with the largest project in the company's history: At the European Central Bank in Frankfurt, Lacher was responsible for providing the large-scale catering and small kitchen equipment from the first draft and the development of a tailored solution through to the final implementation. Since the previous ERP system could no longer meet the increasing market requirements, the wholesaler decided to introduce a new ERP system from abas in 2016 to automate and improve its processes.

Prepared for Future Requirements

On the path towards the final decision for a provider, Lacher first performed a comprehensive comparison of various ERP systems. In several successive stages, the wholesaler reduced the initial ten providers, first to four, then to two, and finally made the decision in favor of the business software Abas ERP: With the support of reference customers, external consultants, comparison platforms, and further sources, a detailed information base was established in a first step to make a top 10 preselection of potentially suitable software solutions. After roughly defining the function requirements for the

ERP system, these were compared with the function ranges of the ten providers. They were weighted on the basis of the results according to their suitability and the number of providers was reduced to four. This was followed by individual presentations to the management and heads of the responsible departments of Lacher, who finally decided in the next step which two providers would be invited to the final selection round. This included creating an actual quotation with a detailed specification by the provider and Lacher visiting several reference customers of the two software companies. The last step was the final evaluation of the offers and overall performance. The German ERP manufacturer abas from Karlsruhe finally fulfilled the objective of providing an advanced system that satisfies not only current but also future requirements for logistics, project business, and customer service across all processes.

> "Abas offers exactly the flexibility and efficiency that we need. We would choose Abas ERP again. Driven by this high level of satisfaction and the previous success with Abas ERP, Lacher aims to further intensify the cooperation with abas and is continuously working on optimizing the software installation."
>
> *Thilo Jörg_*
> *CIO, Lacher Großküchen GmbH*

Methodical ERP Introduction Up To The Go-Live

The introduction took place according to the seven-stage method GIM (Global Implementation Method). It began with the kick-off meeting in the start-up phase to define the exact project organization and the milestone plan, among other things. Then the Smart Check was performed: abas checked how "ERP-compatible" Lacher was with regard to the planned introduction of the business software. This also included the training of the project team by means of abas Academy courses in Karlsruhe during the next stage. For the team to get to know the software better and to tailor the requirements specifically to day-to-day business, a training infrastructure with demo clients was installed. In this way, the target processes and applications could be defined during the organization stage and as the result of the stage the organizational and technical implementation concept could be created.

As a next step, this concept was transferred to Abas ERP as part of the configuration stage. In continuous cooperation with the Lacher project team, the implementation partners of abas checked if the requirements had changed during the project phase. In this way, corrections could still be made as necessary. Furthermore, the data from the previously used system were migrated to Abas ERP. The subsequent training phase was about familiarizing the individual users of the technical departments with the specific, workstation-related content by means of project-related test scenarios and applying the acquired knowledge. In general, the procedure helped Lacher to achieve the company's goals with the available human, economic and financial resources within the

defined period and also had positive effects in terms of increased sales and faster ROIs. Because the method guided the catering and kitchen supplier reliably through the entire process, took into account the individual requirements, strengths and weaknesses, and helped to identify hidden potential. Finally, the go-live took place in February 2017. Abas ERP was put into operation with 70 licenses and very little customization.

The ERP software from abas defines an important part of Lacher's restructuring and is the basis for the digitization of all core processes of the company group in order to finally get rid of manual work steps and duplicate work. For example, invoices are now processed electronically via EDI: Incoming invoices are posted fully automatically and outgoing invoices are transferred directly to the email system. Manual enveloping is now a thing of the past.

Comprehensive ERP Functions Perfectly Completed by Further IT Solutions

In addition to the basic functions, a great variety of expansions, plug-ins, mobile apps, and various interfaces to other programs are available to Lacher. Lacher uses Abas ERP for its entire financial accounting, controlling, purchasing, sales, material management and scheduling, as well as for service processing and customer relationship management (CRM). Furthermore, various plug-ins are used, such as the project management tool Abas PM and Abas BI (Business Intelligence), while mobile applications are connected via interfaces. Additionally, Lacher relies on an expansion for plant data collection as well as on the CTI (Computer Telephony Integration) and communication tool. A

significant advantage for Lacher is the compatibility of Abas ERP with the DMS system (document management) from ArcFlow previously in use. There are also interfaces to different carriers, such as the logistics tool Delisprint from DPD, the above mentioned email system and the CTI software from Estos as well as the connection of Praxedo as a mobile cloud solution for field service management. Barcode scanners are included in the business software as well.

> "The increase in efficiency that we achieve thanks to Abas ERP is really enormous."
>
> *Vanessa Fischer_*
> *CFO, Lacher Großküchen GmbH*

Achieved Benefit and Added Value

In general, the introduction of Abas ERP at Lacher has resulted in better structuring, traceability, and transparency of the business processes. This is particularly evident in the area of financial accounting. Last but not least, the change to Abas ERP has significantly increased the level of automation, which with regard to financial accounting does not only reduce errors but also considerably accelerates the processes: While previously it took up to 12 hours to collect all relevant data from the departments, today the information is centrally available in Abas ERP for invoicing at just the click of a button. Lacher is now able to achieve much higher productivity with only half the number of employees and

perform more postings in less time. Another advantage is improved liquidity: The company mainly works with downpayment invoices and discounts that are based on the performance progress of the projects, and relies on the percentage of completion method to evaluate them. What was previously almost impossible to achieve manually can now be done easily and considerably faster thanks to the comprehensive approach of abas including material cost posting. "Particularly in the project business, it is essential being able to map the current status and progress to generate liquidity. With the completely contained financial accounting in Abas ERP, we have all relevant data readily available in real time thanks to material cost posting, and process chains are adhered to in all areas," explains Vanessa Fischer, CFO at Lacher.

High Level of Flexibility and Efficiency

Above all, the specialist for large-scale catering facilities benefits from the high flexibility of the ERP system, because also after the go-life adjustments can be made quickly and flexibly. "Being able to implement many things ourselves thanks to FOP (flexible interface programming) and making customizations according to our requirements – without loosing the ability to upgrade – is a convincing added value for us," says Thilo Jörg, CIO of Lacher Großküchen GmbH. This also becomes evident with regard to the challenge in project business that any kitchen order consists of a different number of parts that are difficult to evaluate as mixed products. For this, the company now uses a solution that generates a unique one-time product for each project, imports it to Abas ERP, and triggers the subsequent standard processes there.

In addition, the high degree of digitization made possible by Abas ERP leads to a significant improvement in sales processes: On the one hand, this is reflected in the creation of quotations, which can be carried out much faster thanks to recorded product images and brochures that are automatically sent by email and stored in the DMS. On the other hand, enormous time savings are also achieved when creating and processing orders,

Customer Stories from Abas ERP

because the ERP solution provides a transparent status overview of the order progress at all times and ensures automated and bottleneck-focused process control. Another reason for this is that figures are always available transparently through the Abas BI solution, which allows Lacher to react quickly to any changes, if necessary. Last but not least, Lacher gains an enormous advantage from the fact that the online shops based on Shopware are directly connected to Abas ERP via a standard interface, which once again increases digitization of sales. The Multisite connection of the sister company Lacher Service GmbH, which is responsible for the maintenance, repair, and installation of the kitchen appliances, creates further added value: Thanks to Abas ERP, a service product is created for every product sold that informs the responsible employees about all important data and documents at a glance – from the serial number, the purchase date, and the warranty period through to the packing slips, invoices, and the current service location.

> "Being able to implement many things ourselves thanks to FOP (flexible interface programming) and making customizations according to our requirements – without loosing the ability to upgrade – is a convincing added value for us."
>
> *Thilo Jörg_*
> *CIO, Lacher Großküchen GmbH*

At its headquarters, the catering and kitchen supplier has a 4,000 m² showroom where customers can gain an overview of the product range in advance of a project. In addition to the European Central Bank, its customers include commercial kitchens at well-known companies, such as ADAC in Munich or Fraport, restaurants, but also street food trucks, and bistros. The company is a member of the leading industry associations, such as GGKA e. V., the German Professional Association of Food Service and Commercial Kitchen Equipment, as well as PENTAGAST, Europe's largest network for restaurants, hotel business, and communal catering. With the ERP system from the Karlsruhe-based provider abas, Lacher is more advanced than almost any other company of the association. "The increase in efficiency that we achieve thanks to Abas ERP is really enormous," sums up Vanessa Fischer, and also Thilo Jörg says: "Abas offers us exactly the flexibility and efficiency that we need. We would choose Abas ERP again. Driven by this high level of satisfaction and the previous success with Abas ERP, Lacher aims to further intensify the cooperation with abas and is continuously working on optimizing the software installation." For example, the company plans to perform an upgrade to the current version of the ERP solution. Furthermore, Lacher wants to expand the Abas BI solution that is already being used in other departments to the finance area.

Fueling SaaS finance success with GenAI

Elevate your SaaS finance results with GenAI. Learn how this innovative technology is reshaping the industry.

Succeeding in SaaS requires MUCH MORE than just offering a great product or fulfilling a genuine customer need. If you can't back up those external factors with a well-oiled and optimized finance department, you'll soon find your momentum flagging.

But here's the thing. The members of your finance department will only be as effective as the tech stack you've supplied them with. That's why it's imperative for SaaS CFOs to consider the business benefits of generative AI (GenAI) accounting tools.

In this blog, we'll 1) Offer valuable context on SaaS finance and the unique challenges it poses, 2) Explore how GenAI intersects with SaaS finance, 3) Look at the day-to-day benefits of GenAI for finance teams, 4) Discuss the unique benefits of GenAI accounting tools for companies with a subscription business model, and 5) Dive into valuable GenAI use cases for SaaS finance teams.

Keep reading if you're ready to learn how this innovative tech can fuel your organization's success.

Article by
David Appel & Eric Sleeth,
Head of Sage's Software & SaaS Industry Team for Sage Intacct & Sage's Sr Industry & Sr Industry Marketing Manager, Software & SaaS

What makes SaaS finance unique?

SaaS companies deal with a number of financial realities that make them unique among corporate organizations. SaaS finance teams engage in reporting, forecasting, and financial planning and analysis (FP&A) just like any other accounting department. However, the strategic details that underlie those activities are unique to subscription companies.

SaaS finance teams need to worry about considerations such as:

- Managing subscription journeys and maximizing renewals
- Recognizing revenue in compliance with ASC 606
- Finding the best subscription billing method for your company
- Forecasting the impact of churn on future cash flow
- Optimizing investor relations and ensuring profitable capital raises

That's a tall order, and it only scratches the surface. With so many complex accounting workflows swirling around, it's no surprise that SaaS finance teams run into some recurring problems.

Let's take a look at some of the primary operational challenges SaaS finance teams face.

What makes SaaS finance uniquely difficult?

Maintaining operational efficiency and visibility are two major roadblocks SaaS accounting teams face. Those two foundational challenges manifest in all kinds of day-to-day problems and inconveniences for your finance team.

These include:

Keeping up with your company's SaaS metrics: Legacy accounting tools don't offer SaaS metrics integration. This means your key performance indicators (KPIs) won't be updated in real time. That's a serious strategic disadvantage, both in terms of time wasted on manual labor and the inevitable inaccuracies that creep into your reporting.

Maintaining ASC 606 and IFRS 15 compliance: SaaS revenue recognition is strictly regulated. Any deviation from accepted practices will result in stiff non-compliance fines and revenue leakage— unreportable revenue, in other words.

Forecasting an evolving landscape: The unique complexities of SaaS finance make forecasting especially crucial but also especially difficult. Manual forecasting takes huge amounts of time and is prone to formula errors, data entry mistakes, and high variance rates.

- *Navigating an abundance of pricing options:* The SaaS industry is known for its flexibility and creativity around pricing methods. However, this freedom of choice can very quickly grow overwhelming. Without automation, it's extremely difficult to be certain you've made the best selection.

Now that you've had a refresher on the intricacies of SaaS finance, let's see how accounting software equipped with GenAI can optimize these processes.

How does GenAI benefit SaaS finance teams?

Traditionally, AI has been rather narrow in its business applicability, in the sense that AI models would typically be used to accomplish a repetitive task based on predefined rules. This is extremely useful, but its flexibility is limited.

Generative AI (GenAI) represents the next generation of enterprise automation. GenAI models are trained on massive amounts of online data, allowing them to rapidly produce humanlike content.

As you can imagine, this significantly impacts SaaS finance efficiency. Below are some of the primary ways SaaS finance teams benefit from accounting software equipped with GenAI.

Streamlining financial operations

In a legacy SaaS finance department, tremendous amounts of time and money are devoted to manual accounting workflows. GenAI saves time and cash while eliminating costly manual errors.

How can this innovative technology improve your department's effectiveness and efficiency?

Accounting software with GenAI integrates with your SaaS metrics.

Your SaaS metrics are crucial to your long-term profitability. They allow you to keep track of pivotally important KPIs—your annual and monthly recurring revenue, churn rate, customer lifetime value, customer acquisition costs, and many others.

Manually tracking your SaaS metrics is impractical at best and impossible at worst, depending on your company's size and transactional velocity. Cloud accounting software with GenAI features full SaaS metrics integration and role-based dashboards for real-time reporting.

The Billing Forecast

Booked Billings

456,344

Projected Billing

848,875

Billings by Revenue stream

Licenses									
Subscription Package									
Total									

Role-Based

Customer Count Begining Period	Customer Count End of Period	Customer Count	Customer Loss
80 ↑	176 ↑	96 ↓	2 ↑

CMRR Growth by Type

CMRR Growth (Trailing 12 Months)

Custom Navigation

Article by David Appel & Eric Sleeth
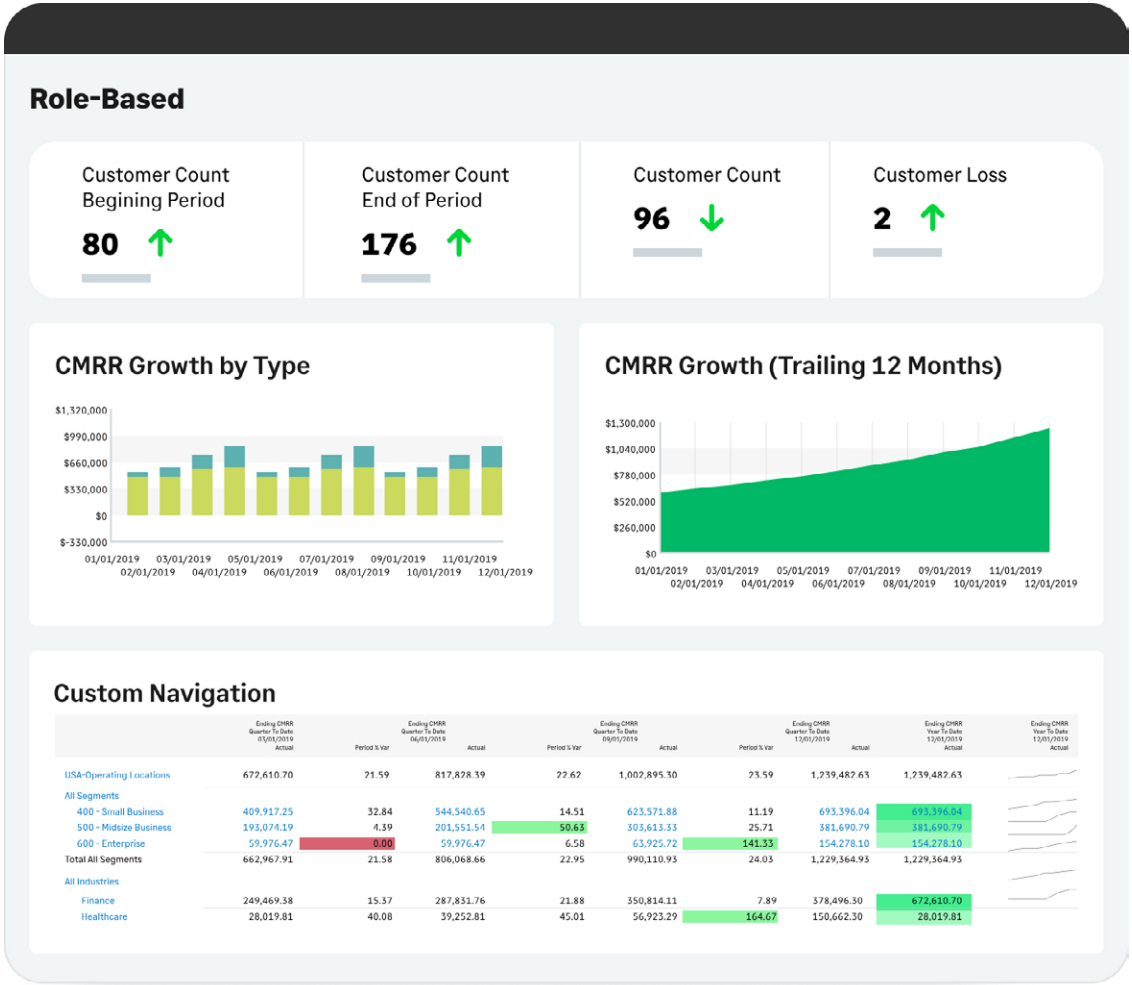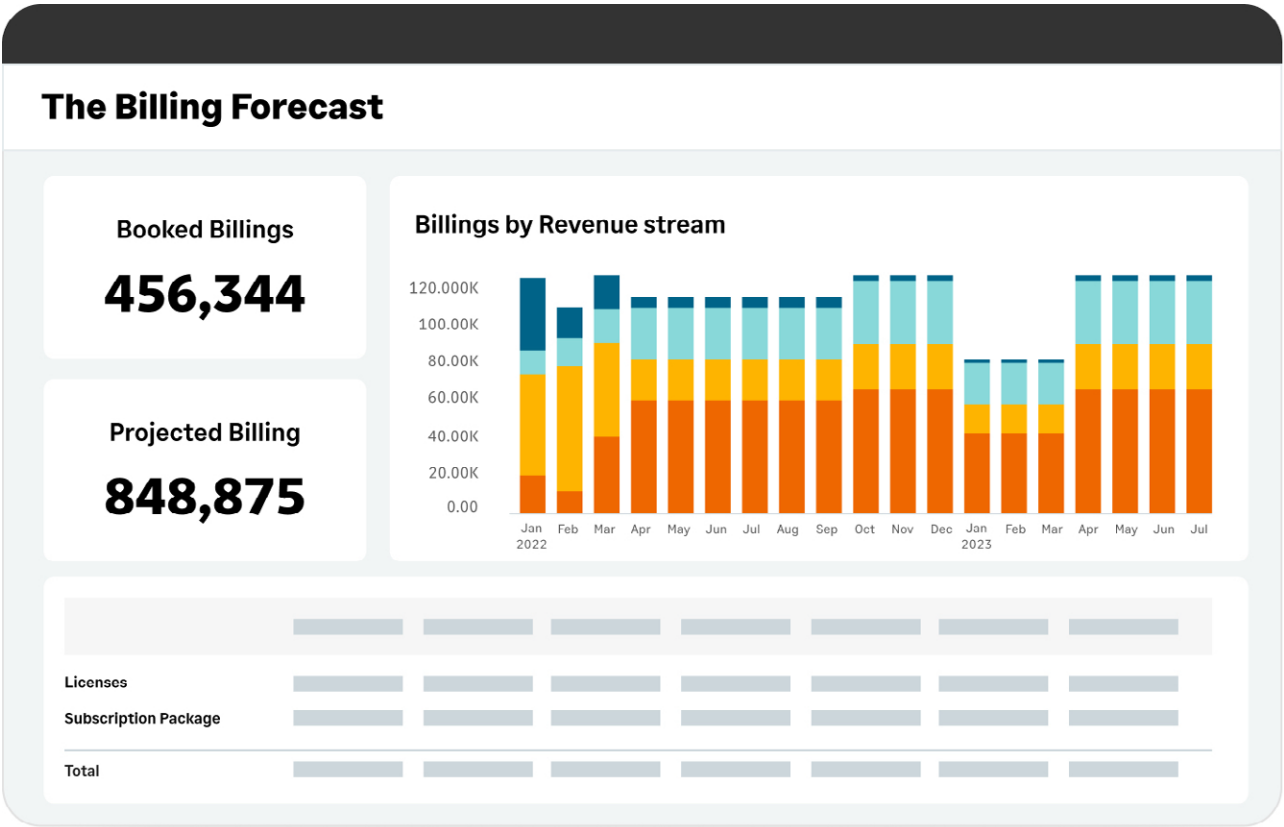
Automating your reporting and SaaS metrics tracking frees up large amounts of time for more proactive and profitable activities.

GenAI optimizes SaaS forecasting for finance teams.

Legacy SaaS forecasting is a tedious and error-prone process that involves assembling data with email chains and piecing forecasts together in spreadsheets.

The liabilities here are numerous, including:

- Compromised business data from email hacking.
- Manual forecast errors—formula errors, data entry mistakes, and more.
- Intolerably high rates of forecast variance.

GenAI makes SaaS forecasting as simple as entering your starting data and clicking a button. No more hassle and no more second-guessing your results.

> "Cloud accounting tools with GenAI can generate board packs complete with the latest financial storytelling techniques for SaaS companies."

GenAI can create high-quality board packs and capitalization tables.

For SaaS CFOs and accounting teams, optimizing financial clarity for board members and investors is paramount. Board members and investors demand high levels of transparency into a company's cash flow, operational performance, and overall effectiveness in the marketplace.

Cloud accounting tools with GenAI can *generate board packs* complete with the latest financial storytelling techniques for SaaS companies.

GenAI accounting tools are *particularly well-suited* to subscription organizations. Let's explore why that is.

GenAI can cure SaaS growing pains

As we touched on earlier, a variety of factors can make it particularly difficult for SaaS finance teams to:

- Handle the intense industry reporting requirements in a timely and accurate manner.
- Maintain visibility into cash inflows and outflows, especially at scale.
- Engage in effective FP&A to keep renewals high and churn low.

And it's especially difficult to handle all of that at scale. GenAI accounting tools can help your subscription organization overcome these challenges and win your market.

Facilitating scalability in SaaS finance

When you rely on legacy accounting workflows, it's tremendously difficult to maintain efficiency as you scale. From accounts payable and receivable to revenue recognition,

> "Forecast assembly and calculations become more complicated as your underlying data pool deepens. GenAI tools can quickly assemble a low-variance forecast no matter how complex your needs are."
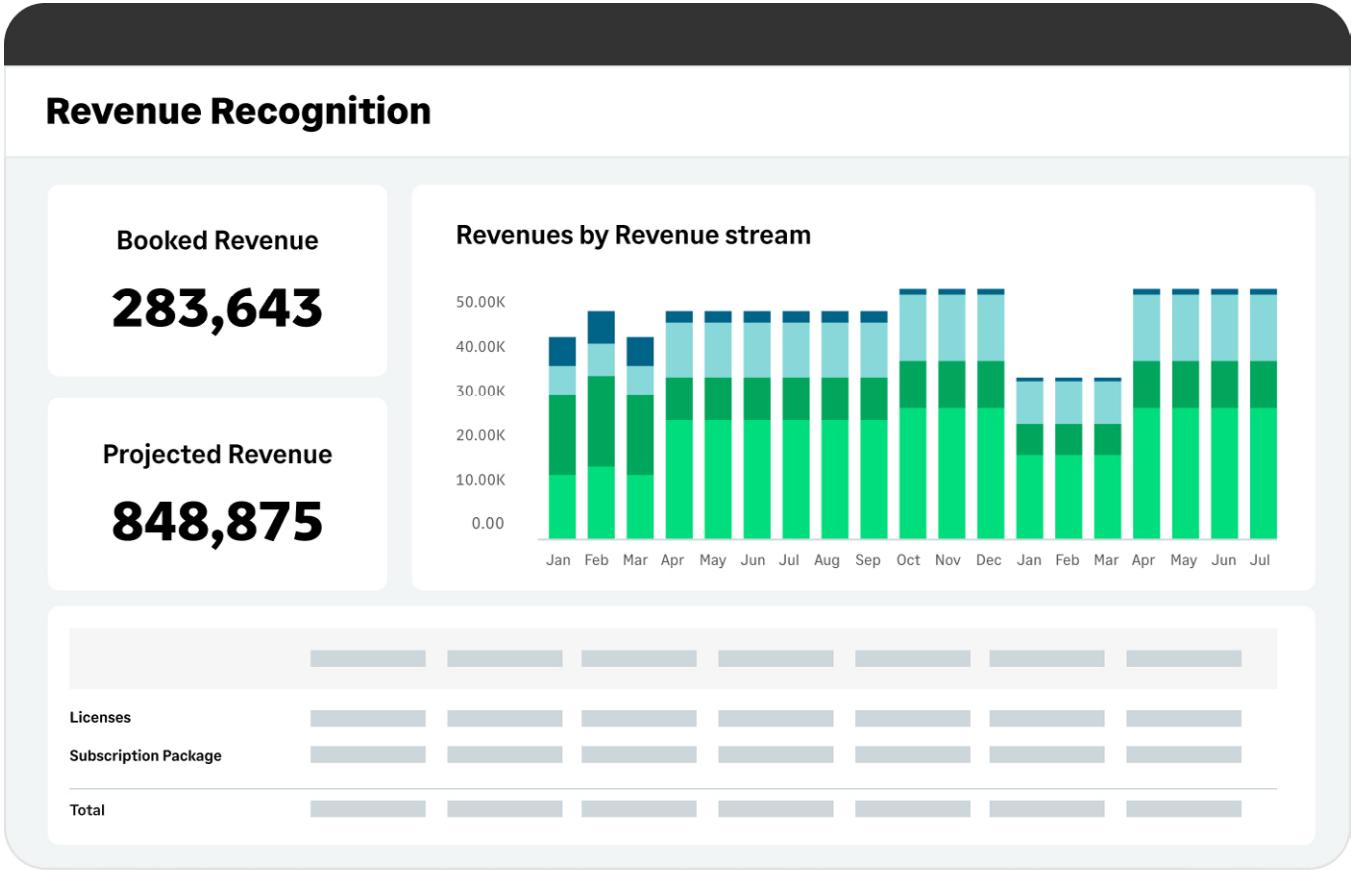
manual errors are almost guaranteed to become more frequent as your transactional volume increases.

Accounting software with GenAI can keep that from occurring. With cloud tools in your department, you can handle 15,000 users as easily as 1,500 or 150.

Forecasting can be another problem for growing SaaS companies. Forecast assembly and calculations become more complicated as your underlying data pool deepens. GenAI tools can quickly assemble a low-variance forecast no matter how complex your needs are.

GenAI's Role in SaaS revenue recognition

Ensuring accurate revenue recognition and compliance with United States accounting standards like ASC 606 can be a struggle for SaaS companies. By consolidating revenue data from multiple sources with a single source of truth, accounting software with GenAI sets companies up for accurate and efficient revenue recognition.

Revenue Recognition

Booked Revenue
283,643

Projected Revenue
848,875

Revenues by Revenue stream

Licenses
Subscription Package
Total

Revenue leakage and non-compliance fines can add up quickly, limiting your operational resources. An ounce of AI-fueled prevention is worth a pound of cure. Let's peel back a few more layers.

Ensuring ASC 606 compliance

Automated cloud software uses machine learning technology for ASC 606 monitoring and reporting. GenAI guarantees regulatory conformity through automated workflows, providing a seamless—and inexpensive—alternative to manual compliance.

By combining revenue recognition best practices with GenAI, SaaS CFOs can:

- Receive automatic alerts about regulatory updates.
- Streamline the compliance auditing process.

- Have peace of mind that standardized protocols are being followed.

How else can GenAI help your SaaS business maximize revenue recognition efficiency?

Process automation and centralization

GenAI automates and centralizes ASC 606 management, ensuring that your revenue sticks around to fuel future growth—instead of leaking away. Since revenue recognition occurs continuously for each contract, having a centralized automated system dramatically simplifies the process as you scale.

From a young SaaS startup to the largest software organization in America, any company stands to benefit from centralized ASC 606 management.

Are you ready to fuel your SaaS finance success with GenAI?

A quick Google search is all it takes to see what a huge topic artificial intelligence has become and how much promise it holds. But for SaaS CFOs, GenAI is uniquely well-suited to optimizing operational effectiveness. It can help you onboard new users more efficiently, maximize your annual recurring revenue, easily handle complex hybrid billing models, and much more.

It's the equivalent of having a full team of employees to handle tedious and repetitive but vital tasks—freeing up you and your team to knock out the high-level strategizing.

To learn how a robust tech stack with GenAI can help you win your market, check out our *Sage Intacct demo for software and SaaS companies.*

Article by David Appel & Eric Sleeth

How Blockchain enhances ERP Software

Blockchain (or Distributed Ledger Technology) has become a buzzword in the past couple of years and it's being tested in various industries. In this experimental phase, technology is rapidly maturing and opening new possibilities, especially in terms of efficiency and cutting costs. Businesses are taking note, but are also puzzled about the potential benefits and the way this technology can be utilized for gaining competitive advantage.

Initially used for cryptocurrency, Blockchain technology has seen its promising future in the techno industry quickly. Today as the Blockchain continues to mature, it finds several adoption areas, and ERP is one of them.

ERP vendors intend to use Blockchain and ERP together to integrate the system in a safer and trackable manner utilizing immutable records for everything in the business areas like supply chain, manufacturing, etc.

Blockchain in the supply chain dramatically improves transparency, quality, security, and process integrity through the secure ledger. Similarly, in the manufacturing sector, Blockchain encourages reliability and works as a trust-based layer without middleman intervention.

While companies eventually target using public blockchains for business operations, implementing private blockchains is easier to control and manage security and privacy. The Blockchain and ERP integration creates and ports new information into the distributed ledger and draws existing data from enterprise systems. Blockchain ERP combination enables businesses to control data sharing tightly.

What is Blockchain?
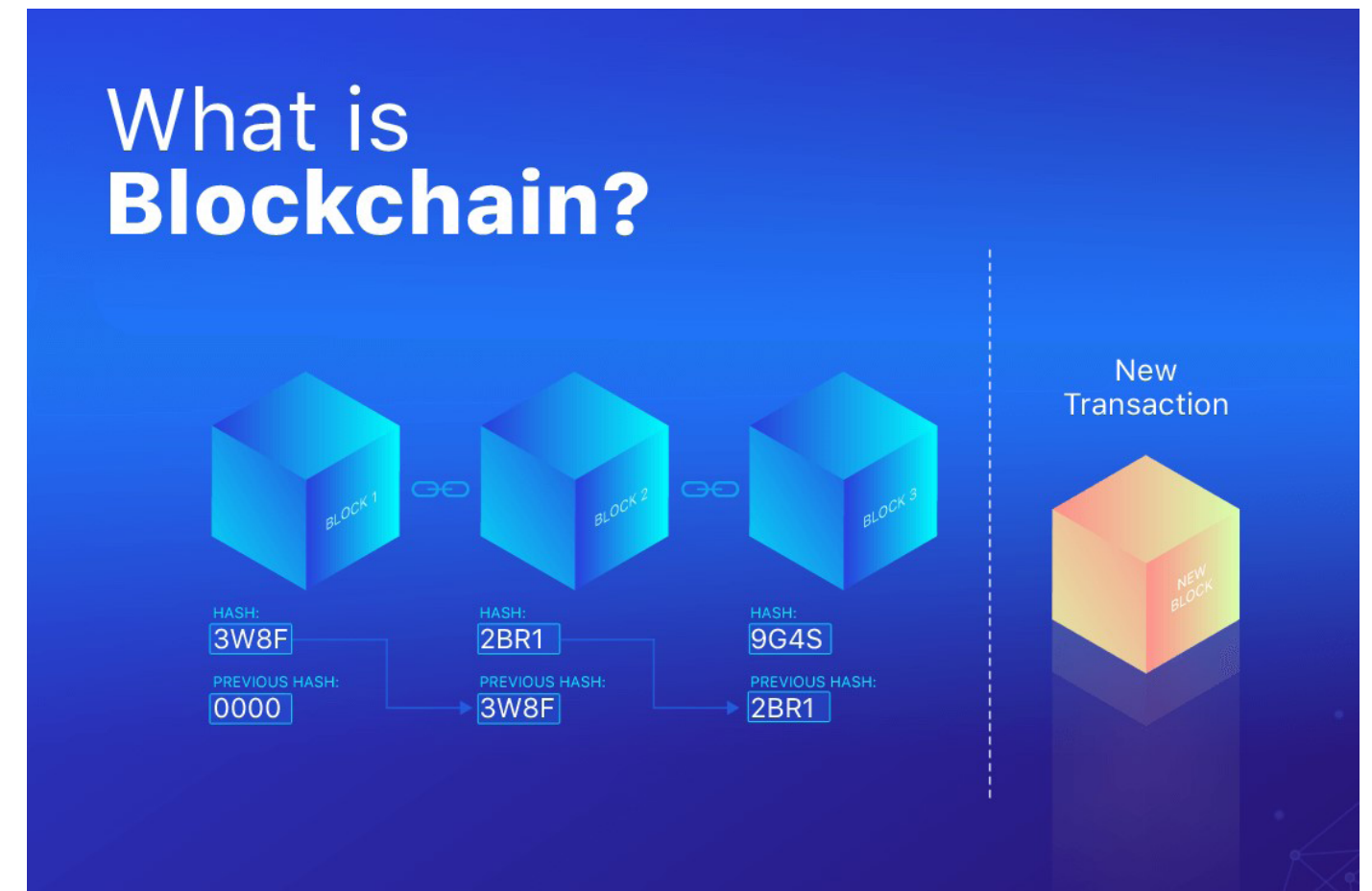
By nature, blockchain technology can be complex and a little confusing. Put simply, it is a technology that records information in a secure way that makes it difficult or even impossible for anyone to edit or hack into.

At its core, blockchain centers on an unalterable, decentralized digital ledger. This ledger contains a chain-like record of transactions that is duplicated and distributed across every computer system connected to the peer-to-peer blockchain network. Every "block" in this chain contains a set number of transactions.

Each time a new transaction happens on the blockchain, every participant's ledger is updated with the details of that transaction. Thus, as the number of transactions continues to grow, the blockchain is likewise lengthened. Each transaction in the thread is stored as a digital record and called a block linked to a specific user. Interestingly, no record can be erased from a Blockchain. However, the Blockchain can be updated depending on the consensus between the participants.
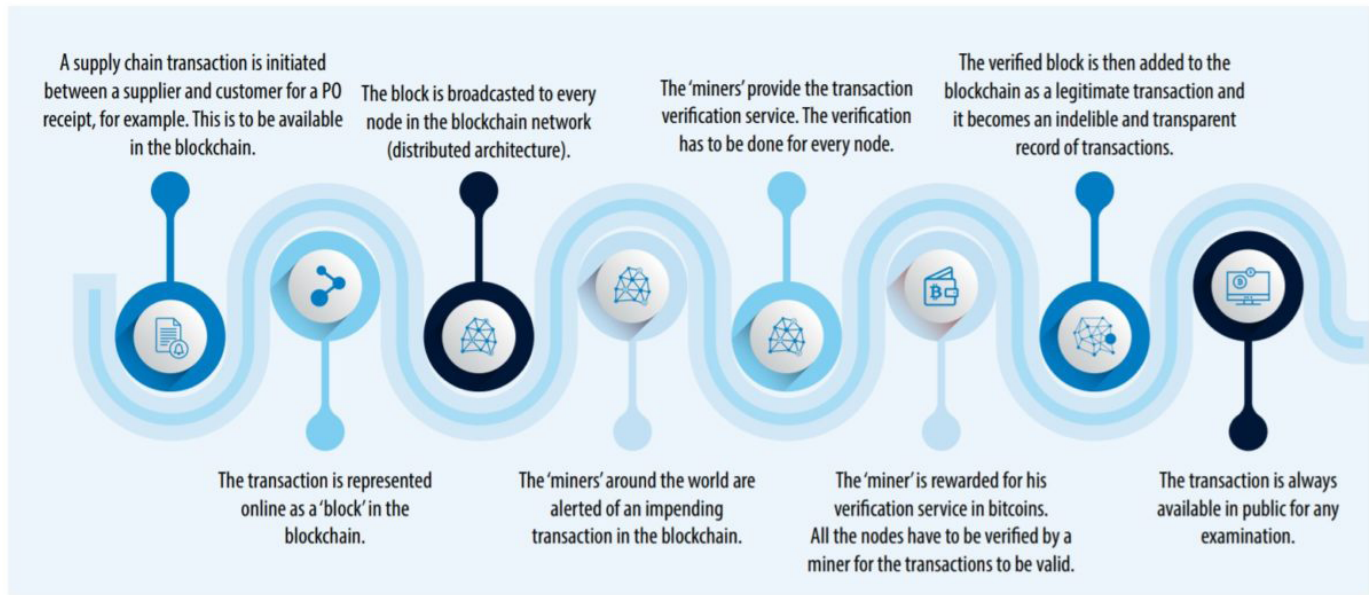
What is ERP?
ERP, known as Enterprise Resource Planning, is a solution that enterprises use to manage different operations like procurement, risk management, accounting, project management, compliance, supply chain operations, etc. Sometimes ERP comes as a suite, and in that case, it helps in performance analysis, planning of daily events, budgeting, and predictions. Overall, an ERP system helps to enhance the company's performance.

ERP systems have significantly improved the efficiency of and visibility into business and supply chain processes. The use of ERP systems enables companies to gain real-time info to maximize resource utilization, improve planning processes, optimize inventory levels, and even ensure same-day delivery of products to clients, thereby enhancing customer satisfaction.

There are numerous benefits of ERP software. It centralizes all business data, allowing businesses to gain fuller control of the inner operations and make informed decisions for the future. In addition, all data is updated in real time, which is crucial for the seamless functioning of all business sectors. Continuous communication between departments eliminates the chance for dangerous errors, while instant access makes it possible to identify potential setbacks in the current way processes are taking place. Therefore, companies have everything they need for setting the perfect conditions for business growth.

Article from Al Reyami Technologies

How Blockchain ERP Integration Enhances Existing Features of ERP

A blockchain extends trust boundary among ERP systems
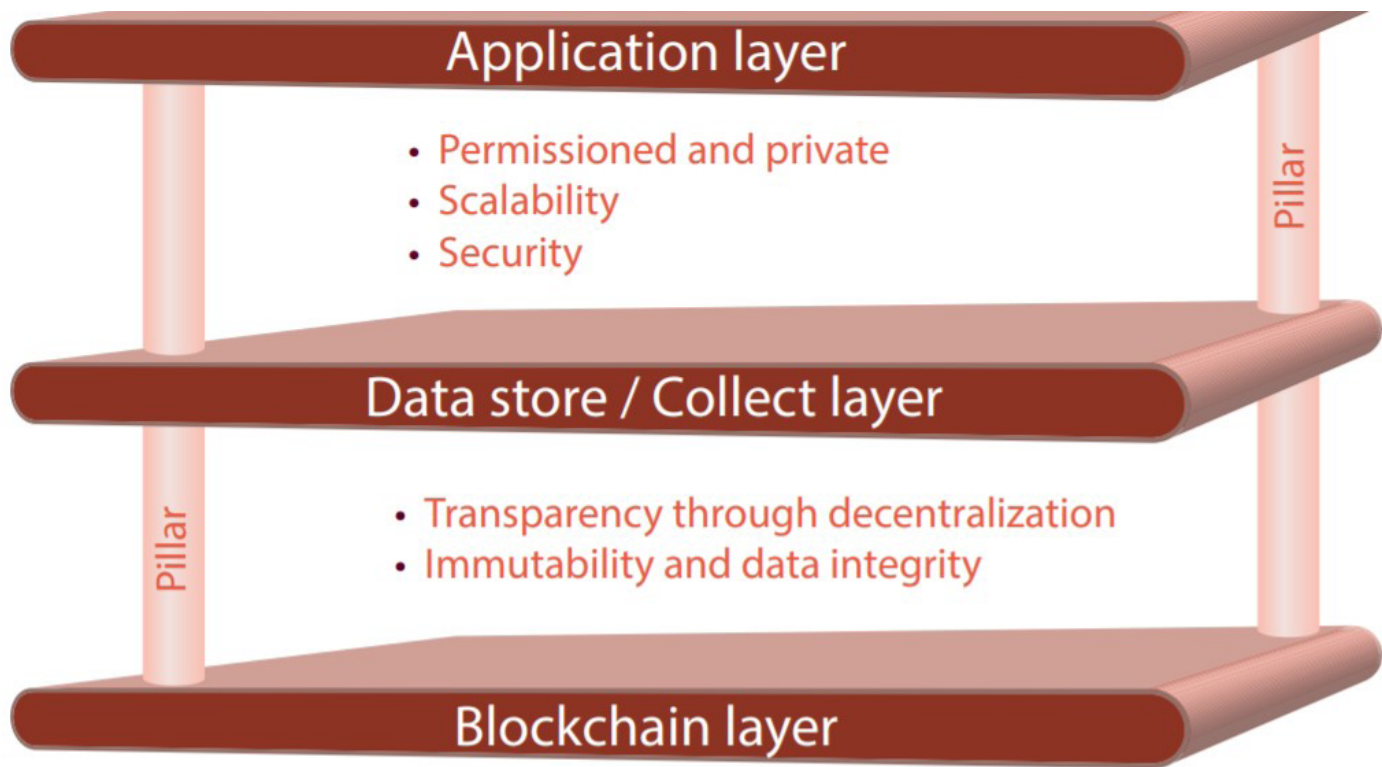
As mentioned, ERP systems create visibility problems between different parts of an entire system, known as trust gaps between companies. One of the main reasons behind it is every company has processes and associated people they trust. This includes its own ERP system. However, that sphere of trust doesn't always work with the next company.

Blockchain and ERP's combination eliminates this trust gap between siloed ERPs while providing *visibility* throughout the system. For example, a supply chain system acts as an ERP system for an entire supply chain by keeping a shared system of records for inter companies' transactions.

In the Supply Chain

The **decentralization** property of Blockchain gives companies the potential to unite a large supply chain network. Blockchain in ERP combinedly helps to improve the automation supply chains. So, every company can use its own internal ERP system while including one rule-enforced blockchain network.

This brings up some distinct advantages. For example, it reduces the visibility problem within the supply chain. Each participant in the entire system can trace the product journey from manufacturing to final delivery on the shelf. Unlike ERP systems, Blockchain ERP solution is also cheaper as all the participants like manufacturers, retailers, and distributors can use the same solution.

So, the business rules and the data currently residing with different companies would be available in one network. And each transaction would automatically be recorded on the distributed ledger technology. Companies would have visibility into the entire supply chain. However, they can still record and keep the private data relevant. They don't have to share business intelligence.

Potential to Automate Business Processes
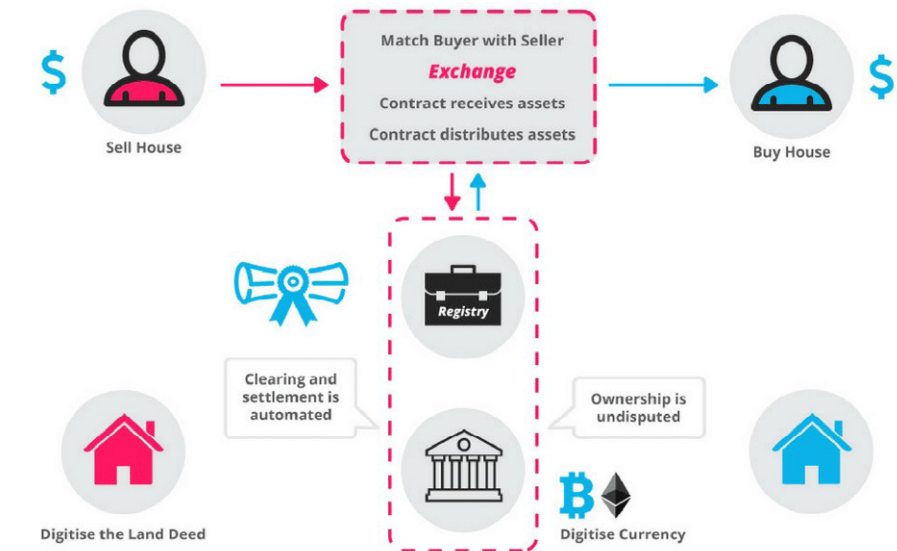
A **smart contract** is a protocol encoded in a blockchain and helps automate a business transaction. It is equivalent to automatic payment for a credit card. This does not need any website log in or confirmation. Smart contracts have several benefits, like achieving faster as well as hassle-free business processes. Simultaneously, companies can automate huge amounts of manual tasks that are time-consuming using multiple smart contracts.

For example, when a business receives a product order, a smart contract can automatically trigger the shipment. Similarly, when that shipment leaves the office or building, it can trigger an invoice. Afterward, when the payment goes through, the invoice gets automatically recorded and closed. In this scenario, invoices are one part of current ERP systems that companies can standardize on a blockchain system.

With the expansion of the blockchain network, companies can automate more and more ERP processes by the blockchain system.

Authenticate and Verify Identities

One of the most important implementations of blockchain in ERP is its ability to verify and authenticate identities. It's been a long time for the ERP systems to be used for financial transactions like process claiming of insurance and financial companies. As part of this process, companies need to verify the customers' identities or authenticate financial transactions.

Now, what happens when you integrate Blockchain into ERP?

We can do the following:
- It can verify the identities of the employees.
- It can also verify customers' identities as a part of post-sales support or during the servicing of the older products under warranty.
- Blockchain and ERP integration can authenticate the identity of individuals who have access to sensitive data on ERP systems.

Risk-free Payment Processing

Cross-border payment through the blockchain

Blockchain is famous for its security features, especially in financial transactions. It ensures risk-free financial transactions. This is why banks and insurance companies use blockchain-based authentication systems. Blockchain and ERP integration ensures that any B2B purchases and payments are automatic and risk-free.

Additionally, B2B payments need various compliance as per the regulations, and a blockchain ERP makes sure that it meets regulatory compliance. Furthermore, Blockchain and ERP combined can make payments automatic and fast, avoiding any delay in stock replenishment. It makes the whole process transparent and authentic, which ultimately makes auditing risk-free and easy.

Enhanced Security Settings

Blockchain can ensure data privacy and system security. Various companies use Blockchain to maintain cloud security, detect suspicious or unauthorized access to data, and fix BYOD vulnerabilities.

In this case, Blockchain and ERP integration can ensure that any suspicious transactions or data vulnerabilities are detected in time, and threats are averted. This also ensures that employees who use ERP on mobile phones don't get any chance to create vulnerabilities.

Helps to Maintain GDPR Compliance

Enterprises need to be GDPR compliant while dealing with consumers and related sensitive information. Furthermore, the company must ensure that all the customers' information remains private so that no third-party company can use those data for market analysis. Non-compliance with GDPR rules can have serious legal issues along with fines. In

addition to that, it will hit the brand value of the company as well.

This is where the Blockchain and ERP use cases come into play. With the help of Blockchain, companies can securely store all the consumers' information. Moreover, the company can also be fully compliant with GDPR while offering full transparency in handling customers.

Enhanced Data quality that Offers Immutable Integrated Information

As mentioned earlier, the ERP systems are centralized, so often they become faulty and vulnerable. In addition to that, users can change or alter data in an ERP system after putting it in the system. So, data manipulation is not a rare case here. On the contrary, once the data gets into the ledger in a Blockchain ERP system, it becomes immutable. Hence, manipulation is impossible. Blockchain and ERP integration offer an immutable system.

> "As more companies embrace the movement, the infrastructure will continue to be built. In fact, big ERP vendors are starting to integrate distributed ledger technology into their systems."

Creates a Robust System Model with Flexibility

Blockchain ERP integration creates a flexible, configurable, and robust model. Furthermore,

many blockchain technologies offer extensive customizations like enterprise blockchain platforms -Hyperledger, R3 Corda, Enterprise Ethereum Alliance, Quorum, Ripple, etc. They offer an architecture that enterprises can shape based on their requirements.

Besides, these systems can quickly adapt to the changing business scenarios and ensure that there is no need to end up with an obsolete system. However, Blockchain and the ERP system must be fully compatible with each other to make it work.

Do You Have the Infrastructure in Place for Blockchain?

For all its perceivable benefits, blockchain technology might still feel like an out-of-reach concept, especially because you might be unsure if you have the right infrastructure to support such a transformation.

The good news is that while it might be a relatively new concept in the ERP realm, big corporations have used blockchain for years. As such, they have already created much of the infrastructure required to run it.

What does this mean for small-to-midsized companies that want to follow suit?

It means business leaders are already calling for a shift to blockchain, and clients and partner companies are increasingly expecting it. As more companies embrace the movement, the infrastructure will continue to be built. In fact, big ERP vendors are starting to integrate distributed ledger technology into their systems.

All this means that the time is now for organizations to look more seriously at blockchain as a valuable resource for supply chain and manufacturing operations.

Article from Al Reyami Technologies

Oracle ERP and Blockchain: Smart Way to Pricing in Oracle Cloud

Blockchain technology has emerged as a revolutionary tool that can greatly enhance the security, transparency, and traceability of various business processes. When integrated with Oracle ERP Cloud, this technology offers immense potential for transforming the way organizations operate.

The integration can be achieved using Oracle Blockchain Platform or other third-party blockchain solutions. By leveraging the power of blockchain, businesses can ensure the integrity of their data, streamline operations, and foster trust among stakeholders. This combination presents a unique opportunity to unlock new levels of efficiency and effectiveness in the realm of enterprise resource planning.

Some use cases include:

- **Supply Chain Management:** Enhance visibility, traceability, and data integrity across the entire supply chain by securely storing and sharing information about products, shipments, and transactions.

- **Smart Contracts:** Automate contractual agreements and business processes through self-executing contracts, reducing manual intervention and increasing efficiency.

- **Procure-to-Pay:** Improve transparency and reduce fraud risk in procurement by validating supplier credentials and tracking transactions on an immutable ledger.

Article by
Abhishek Pareek,
Supply Chain Consultant

Infosys®

- **Financial Management:** Streamline financial transactions, such as intercompany transfers, by automating reconciliation and settlement processes on a shared ledger.

- **Compliance and Audit:** Enhance regulatory compliance and audit processes by providing a transparent, tamper-proof record of transactions and data.

Blockchain technology can revolutionize the pricing process of Oracle's order management system by providing a secure, transparent, and tamper-proof way to track and manage pricing data.

> "Another way that blockchain could be used in the pricing process is through the use of tokenization. Tokenization is the process of representing physical assets, such as products or services, as digital tokens on a blockchain."

By leveraging blockchain-based smart contracts, businesses can automate the pricing process and ensure transparency and accuracy. These smart contracts can be programmed with specific rules and conditions that determine prices based on factors like supply and demand, competition, and market conditions. This integration enhances security, transparency, and traceability, providing real-time visibility into pricing updates and eliminating the risk of tampering or fraudulent activities. It introduces a new level of efficiency and effectiveness to the pricing process, fostering trust among stakeholders and improving overall business operations.

Another way that blockchain could be used in the pricing process is through the use of tokenization. Tokenization is the process of representing physical assets, such as products or services, as digital tokens on a blockchain. By tokenizing the products and services offered in the Oracle order management system, the prices can be determined by the market demand for the tokens, rather than being set by the company.

Using blockchain in this way can bring more transparency and trust in pricing process and also help to reduce fraud and errors in the order management process.

There are several advantages present for using blockchain technology in the pricing process of Oracle's order management system:

- **Transparency:** Blockchain technology provides a transparent and tamper-proof record of all transactions, making it easy to track and verify pricing information.

- **Automation:** Blockchain-based smart contracts can automate the process of setting prices, making it faster and more efficient.

- **Decentralization:** By using blockchain technology, the pricing process can be decentralized, which in turn will allow multiple parties to access and update pricing information, which can improve the accuracy and timeliness of pricing information.

- **Tokenization:** Tokenization allows for the creation of digital assets that can be traded on a blockchain network; this can help to determine prices based on market demand for the tokens.

- **Data Security:** Blockchain technology provides a secure method for storing and sharing data. This can help to reduce the risk of data breaches and ensure that pricing information is only accessible to authorized parties.

- **Traceability:** Blockchain allows to track the origin of the product and services which can be used to determine the prices.

- **Cost Savings:** Automating the pricing process using blockchain technology can reduce the cost of manual labor and the risk of errors.

- **Immutable record:** Blockchain's immutability feature allows to have an unchangeable record of the pricing process, which can help in auditing and compliance.

- **Interoperability:** Blockchain can enable different systems to interact with each other, allowing for greater efficiency and automation in the pricing process.

> "Blockchain's immutability feature allows to have an unchangeable record of the pricing process, which can help in auditing and compliance."

Article by Abhishek Pareek

It's important to note that, while blockchain technology can bring a lot of benefits in the pricing process, it might not be a perfect fit for every situation. The implementation and usage of blockchain technology should be evaluated based on the specific use case and requirements, and the potential benefits should be weighed against the costs and complexity of implementation.

There are a few steps that could be taken to use a blockchain-based smart contract to automate the process of setting prices for products and services in Oracle Order Management Cloud. Here's an example of how it could be done:

- Identify the products and services that will be offered on the Oracle Order Management Cloud.
- Develop a smart contract that specifies the rules and conditions that determine the prices for each product or service. The smart contract could consider factors such as supply and demand, competition, and market conditions.
- Integrate the smart contract into the Oracle Order Management Cloud system. This can be done by connecting the Oracle system to a blockchain platform (e.g. Ethereum) that supports smart contracts.

- Deploy and upload smart contract to blockchain network for pricing.
- When smart contract is deployed, there are ways to automatically set prices for products and services based on the rules and conditions specified in the smart contract.
- Implement a mechanism for updating prices on regular basis as market conditions change, such as through oracles, which are smart contract enabled connectors.
- Monitor the performance and adjust the smart contract if required, so that pricing is aligned to business goals.

It's important to note that this is just one example of how blockchain-based smart contracts could be used to automate the process of setting prices for products and services in Oracle Order Management Cloud, and the specifics of the implementation will depend on the specific use case and requirements.

About Abhishek Pareek
Abhishek Pareek is a Supply Chain Consultant with 14+ years of experience in ERP Consulting. He is a successful practitioner of Oracle SCM modules with experience in Supply Chain transformation and Implementation projects. Successfully handled projects across geographic locations like Europe, Asia, North America and Latin America.

About Infosys
Infosys is a global leader in next-generation digital services and consulting. We enable clients in more than 50 countries to navigate their digital transformation. With over three decades of experience in managing the systems and workings of global enterprises, we expertly steer our clients through their digital journey. We do it by enabling the enterprise with an AI-powered core that helps prioritize the execution of change. We also empower the business with agile digital at scale to deliver unprecedented levels of performance and customer delight. Our always-on learning agenda drives their continuous improvement through building and transferring digital skills, expertise, and ideas from our innovation ecosystem.

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Hunkemöller Finds Perfect Fit with RISE with SAP

SAP announced that Hunkemöller International B.V., Europe's fastest-growing lingerie brand, has moved to the cloud, leveraging the RISE with SAP solution to offer customers personalized experiences and to keep up with strong demand.

With more than 850 retail stores and 15 online stores across 23 countries, Hunkemöller needed a technology infrastructure that could scale and keep up with the brand's growth. Moving from an on-premise system to the SAP S/4HANA Cloud Private Edition solution with Google Cloud marks the first milestone in Hunkemöller's digital transformation journey to become a data-driven company.

Hunkemöller has an omnichannel sales strategy, selling through its own shops and through wholesale and international franchises. Strong wholesale activities were one of the reasons the company looked to move to the cloud. Hunkemöller wanted a technology infrastructure that could offer flexibility, personalized insights into customers' shopping behaviors and innovation to position itself for further growth.

With SAP S/4HANA Cloud Private Edition, Hunkemöller is eyeing its next step in its digital transformation journey as it embarks on the implementation of the SAP S/4HANA solution for fashion and vertical business, a version of SAP S/4HANA optimized for the fashion industry. The solution will allow the company to manage its business,

from design to wholesale and retail, all on one platform. This will enable Hunkemöller to deliver collections faster on its channels, optimize inventory and cost as well as increase margins.

"About 75% of our customers are already a member of Hunkemöller," said Gordon Smit, global IT director, Hunkemöller. "How great would it be if we could offer them an even more personalized experience, for example, by predicting when a customer wants to make a repeat purchase and being able to send the right offer at the right time? Thanks to our current efforts with RISE with SAP, we are ready for that next phase. This is going to be a game changer for our customer experience."

Achim Schneider, global head of industry business unit retail and wholesale distribution, SAP, said: "Having worked closely over the past few months and migrating from on-premise to cloud in 48 hours is testament to the strong collaboration that our teams have had. With RISE with SAP now implemented, Hunkemöller is ready to continue building on the strong growth momentum they've had, and I'm excited to see them setting new standards in the lingerie market."

Rootstock Software Launches New QuickStart Implementation for Mid-size Manufacturers

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New ERP Deployment Methodology Accelerates Go-Live and Reduces Burden on IT Teams With Limited Resources

Rootstock Software, a recognized leader in the Manufacturing Cloud ERP space, announced the launch of its QuickStart Implementation for Manufacturers. This innovative implementation methodology is specifically designed for mid-sized manufacturers and is set to revolutionize how these companies adopt Cloud ERP.

The *Rootstock QuickStart Implementation*, aptly named for its swift and efficient deployment capabilities, is tailored to meet the unique needs and constraints of manufacturers with annual revenues over $15 million.

"*Rootstock Manufacturing ERP* is a robust and powerful solution. Now, we've made it more accessible and manageable for growth-focused manufacturers," said *Caroline Santander*, SVP of Global Professional Services & Enablement at Rootstock Software. "For this group of manufacturers, Rootstock QuickStart is a game-changer, offering a phased approach that is digestible and cost-effective. Since this implementation methodology offers a scope honed to their unique needs and capacities, it is designed to accelerate deployment and the timeframe to achieve value and success with Rootstock."

Rootstock QuickStart comes at a crucial time when organizations are looking to rapidly replace disjointed legacy systems and data silos with a unified ERP platform that helps create a streamlined *Manufacturing Signal Chain*. To ensure a quality deployment, the QuickStart setup is based on Rootstock's *implementation best practices* and in-depth manufacturing experience. The approach utilizes pre-configured settings, templates, and a user-friendly wizard, which greatly streamlines the go-live process.

"Implementation speed is usually dictated by the customer's readiness, but with this methodology, we'll be able to shepherd manufacturers through a more rapid launch," added Santander. "Our wizard offers a step-by-step guide, streamlining configuration and significantly saving time and effort. It also enables manufacturers to seamlessly import data. All of this contributes to a faster, more accurate setup—a crucial factor for manufacturers with limited resources. Overall, with Rootstock's

QuickStart Implementation, smaller manufacturers will experience a huge leap forward from typical implementation timelines."

Rootstock QuickStart is more than just rapid deployment; it also encompasses a comprehensive package that includes access to best practices, robust customer support, extensive training through the *Rootstock Learning Center*, and peer-to-peer engagement in the *Rootstock Community*. This ensures that manufacturers have the knowledge and support to reap the full benefits of Rootstock to manage their entire operations—from inventory and supplier collaboration to financials.

Rootstock Software is committed to addressing the unique needs of mid-size manufacturers through cost-effectiveness, scalability, ease of use, configurability, integration, and more. This new implementation methodology ensures manufacturers can leverage *Rootstock Cloud ERP* to grow and scale their business, even during volatile market conditions.

For more information about Rootstock QuickStart and Rootstock Manufacturing ERP solution, *sign up for a demo.*

About Rootstock

Rootstock Software provides the leading *Manufacturing Cloud ERP*, which empowers hundreds of manufacturers to turbocharge their operations in today's dynamic, post-pandemic world. Natively built on the Salesforce Platform, Rootstock delivers a futureproof solution. With it, manufacturers gain the agility to continually transform their businesses to meet evolving customer needs, navigate emerging challenges, and accelerate success. In addition, the "connectability" of Rootstock Cloud ERP gives manufacturers 360° visibility to collaborate with suppliers, trading partners, and the broader value chain. As Rootstock continues to grow, stay tuned to the company's latest *customers*, *career opportunities*, and *LinkedIn* posts.

Press Release from Rootstock

NetSuite Helps Retailers Unlock Data to Drive Growth

NetSuite Analytics Warehouse provides AI-powered insights to help retail brands innovate and grow faster

Retail businesses are turning to *Oracle NetSuite* to unlock value from their data, increase efficiency, and remain competitive. With *NetSuite Analytics Warehouse*, NetSuite customers including Feetures, Hudson&Canal, Thread, and many others have gained the insights needed to improve customer experiences and grow their businesses.

With industry-leading ERP capabilities for financials, CRM, inventory and order management, and omnichannel commerce, NetSuite helps retail businesses improve productivity and deliver exceptional customer experiences. When paired with NetSuite Analytics Warehouse, NetSuite helps retailers centralize business data and gain AI-backed insights to improve operations and identify opportunities for growth.

"To keep up with shifting consumer demands, increasing industry competition, and on-going economic uncertainty, retailers need agile processes and fast access to business

insights," said Sam Levy, senior vice president of growth and operations, Oracle NetSuite. "With NetSuite Analytics Warehouse, retailers can quickly make sense of business data to make more informed decisions to help manage costs, attract new customers, and create new revenue streams."

Retail businesses that are leveraging NetSuite Analytics Warehouse include:

Feetures Hits its Stride with NetSuite Analytics Warehouse

Founded in 2002, *Feetures* is a family-run retailer of specialty socks designed for athletic performance. Today, Feetures sells its footwear in stores such as Dick's Sporting Goods, Nordstrom, and athletic specialty outlets, as well as its own ecommerce site and Amazon. With *NetSuite Connector*, Feetures is able to link its ERP and Shopify workflows to understand SKU-level product performance. In addition, with NetSuite Analytics Warehouse, Feetures

can consolidate and analyze data from NetSuite, Shopify, Google Analytics, and other business systems, and better understand near and long-term trends in consumer buying behaviors, inventory, and financial performance.

"As we continue to grow our global footprint, data visibility is critical to our financial and operational success," said Daniel Roath, IT manager, Feetures. "NetSuite helps centralize our data and provides automated insights to help fine-tune product strategies, improve cash flow forecasting, and optimize warehouse staffing."

Hudson&Canal Delivers Data-Driven Home Furnishings with NetSuite Analytics Warehouse

Founded in 2017, *Hudson&Canal* is a B2B ecommerce manufacturer of home furnishings that supplies retailers including Wayfair, Overstock, Best Buy, and Amazon. With NetSuite Analytics Warehouse, Hudson&Canal can integrate data from NetSuite, ecommerce retailers, logistics providers, and its product management systems to identify growth opportunities as well as make smarter decisions about new products to bring to market.

NetSuite has also helped automate Hudson&Canal's invoicing and inventory workflows. For example, Hudson&Canal was able to reduce time spent analyzing landed costs and accruals from four hours to ten minutes each week.

"As our business has grown, the number of data sources has also escalated. NetSuite helps us make sense of the data, improves productivity, and enhances team collaboration," said Marc Sculler, chief executive officer, Hudson&Canal. "Data-driven insights from NetSuite have helped us analyze sales performance, right-size inventory, and further optimize profit margins."

Thread Bags New Insights with NetSuite Analytics Warehouse

Founded in 2014, *Thread* started as a direct-to-consumer ecommerce site selling wallets before expanding into bags, lanyards, and other accessories and adding mall kiosks and wholesale distribution channels. NetSuite provides a single cloud business system to consolidate and automate supply chain, sales, and financial processes across its product portfolio and sales channels. With NetSuite Analytics

Warehouse's machine learning capabilities, Thread combines data from NetSuite, Shopify, and Google Sheets to analyze historical trends, optimize sales forecasting, and improve demand planning.

"To continue our rapid growth, we needed accurate and real-time data visibility across all our sales channels," said Mitch Sanders, chief operating officer, Thread. "With automated insights from NetSuite Analytics Warehouse, we can anticipate buying behaviors, ensure the timely fulfillment and delivery of inventory, and avoid the risk of stockouts or overstock."

About Oracle NetSuite
For more than 25 years, Oracle NetSuite has helped organizations grow, scale, and adapt to change. NetSuite provides an integrated system that includes financials / Enterprise Resource Planning (ERP), inventory management, HR, professional services automation and omnichannel commerce, used by more than 37,000 customers in 219 countries and dependent territories.

Press Release from Oracle Netsuite

New financial business mentor program looks to empower Atlanta Black entrepreneurs

Sage, The BOSS Network and Swoop unveil new mentorship program

Sage, the leader in accounting, financial, HR, and payroll technology for small and medium-sized businesses (SMBs), in collaboration with **The BOSS Network** and **Swoop**, unveil a new training and mentorship program, Pathways to Success, designed to support Black women entrepreneurs in Atlanta.

The Pathways to Success training and mentor program, developed and delivered through Sage Foundation, will equip 150 Atlanta-based Black women entrepreneurs with a structured series of training and roundtables, providing tactical advice to address and overcome financial and capital-raising challenges. The program was developed as a direct result of Sage, The BOSS Network and Swoop's report titled "*Voices of Strength: Pathways to Success for Black Women Founders*" launched in September 2023. The report identified the most prominent challenges Black women founders in Atlanta face, including a lack of access to funding through grants and government resources, mentorship, and the ability to digitally scale their businesses for growth.

Participants will receive one year of training access and a three-year membership to The BOSS Network. In tandem with the Pathways to Success program, applications for The BOSS Network and Sage's Invest in Progress 2024 grant open January 22, launching the third year of the program. Twenty-five grants will be provided to Black women founders across the US, with seven going directly to Atlanta-based business owners, all aiming to take their business to the next level. The program offers $10,000 USD business grants and alongside training, networking and mentor opportunities with The BOSS Network.

Aziz Benmalek, President of North America at Sage explains, "Atlanta is uniquely positioned with the highest concentration of Black entrepreneurs in the US. When we uncovered the challenges Black women founders were having in our research, we decided it was vital to move forward with a meaningful program to address the issues around funding capital and access to coaching and network connections. Being a large tech company in Atlanta and an authentic ally to Black women founders, it is our duty to uplift more opportunities for funding resources and offer forums for connection and educational resources. Investing in women is imperative to building a prosperous and inclusive society."

Dr. Cameka Smith, founder of The BOSS Network adds, "For the past fifteen years, The BOSS Network has been committed to investing in and equipping Black women entrepreneurs to achieve success in business. From our vast network of over two hundred thousand, to launching our first BOSS Impact Fund three years ago and investing in sixty-five Black women founders, The BOSS Network is well aware of the challenges and needs of this audience, and continues to seek new ways to support them. With Atlanta at the epicenter for Black business, The BOSS Network is excited to partner with Sage and Swoop on this program to not only provide resources, but to also empower them as they go to the next level in their business endeavors."

Andrea Reynolds, CEO and Founder of Swoop, says: "BOSS, Sage and Swoop align in our goal to make every business achieve its potential. Swoop's contribution will be to empower these brilliant entrepreneurs with education and insights to make the right financial decisions to start and grow their businesses. Some business owners have been historically under-represented, but that means there is potential for huge, positive change. With Sage and BOSS, we're ready to roll up our sleeves and get to work."

To apply, visit the **Pathways to Success program website** (applications close on February 5, 2024). To apply for the Invest in Progress grant program visit **https://www.bossimpactfund.com/** (applications close on February 23, 2024).

About Sage
Sage exists to knock down barriers so everyone can thrive, starting with the millions of small- and mid-sized businesses served by us, our partners, and accountants. Customers trust our finance, HR, and payroll software to help business flow. By digitizing business processes and relationships with customers, suppliers, employees, banks and governments, our digital network connects SMBs, removing friction and delivering insights. Knocking down barriers also means we use our time, technology, and experience to tackle digital inequality, economic inequality, and the climate crisis. Learn more at **Sage.com.**

About The BOSS Network
Founded by Dr. Cameka Smith, BOSS™ is an acronym for "Bringing Out Successful Sisters," and the network's mission is to promote and encourage the small business spirit and career development of women. The BOSS Network is an online community of professional and entrepreneurial women who support each other through conversation, online, and event-based networking. To find out more about The BOSS Network, please visit **www.TheBOSSNetwork.org**. *The BOSS Network was named as a Forbes Top 10 Career and Entrepreneurial website for Women. More than 200,000 active women members throughout the United States are engaged through our social and digital programming. The BOSS Network's latest initiative is the BOSS Impact Fund, with a focus on grant funding for 500+ Black women entrepreneurs, over the next three years. In addition, each grant recipient will have a 1-year scholarship to our BOSS Business University, a digital mentorship program that will provide a comprehensive entrepreneurship curriculum, to assist in long-term business growth.*

About Swoop
Swoop *is a global fintech company specializing in funding solutions for businesses. Swoop's platform connects businesses and advisors with the right funding options, streamlining the application process and saving them time and money. Swoop is committed to helping businesses thrive by making funding accessible and hassle-free.*

Acumatica
The Cloud ERP

Redmond Inc. Deploys Acumatica Cloud ERP in Five Companies, Saves Millions with Improved Inventory

REDMOND
Elevating the Human Experience™

- Implemented a single, connected, modern platform in seven businesses for growth
- Gained real-time operational visibility into its seven businesses
- Reduced period close times dramatically
- Saved millions with better inventory insight and management
- Gained integrated reports with Power BI Reduced software development time 90 percent, from 40 hours to 4 when developing new applications and processes
- Improved operations with integrated warehouse management system functionality
- Eliminated duplicate data entry into third-party and custom solutions, saving time while increasing productivity
- Secured remote access to data at 10 locations

Challenges

When the Bosshardt brothers in Utah couldn't farm their land because of its large salt deposits, they began mining salt and selling it to cities that used it to melt snow and ice on roads. Decades later, in the 1980s, they started selling consumer salt products, the first of which were sold in Ziploc bags.

Rhett Roberts bought and expanded the company dramatically in early 2000 after serving as a consultant. The company continues to sell tons of salt for use in agriculture and snow removal, mined and milled in the town of Redmond. In addition to Redmond Minerals, Roberts' holdings include Redmond Inc., Redmond Life, Best Vinyl, Valleywide Fence, Western Clay, and Heritage Farm & Stores.

Redmond Life offers consumer beauty and food products like toothpaste and electrolyte mixes, some of which are produced in-house at Redmond's 40,000-square-foot facility in Heber City, Utah. Other products are contract manufactured. Redmond Life also supplies outside food businesses with its salt products and counts customers such as Route 11 Potato Chips, Hilary's, Xochitl Chips and Salsa, and CLIF Bar & Co.

Best Vinyl installs and wholesales vinyl and ornamental fencing materials. It is also a wholesaler of chain link fencing. Valleywide Fence provides similar services and materials as Best Vinyl, but it is located in Grand Junction, Colorado.

Redmond Heritage Farm & Stores, with three locations in Utah, produces raw milk, six varieties of cheese, and eggs from free-range chickens. They also raise cows and pigs for beef and pork products on several local farms.

Some of Redmond's recognizable brands include Real Salt, Re-Lyte, Earthpaste, Redmond Clay, Redmond Hunt: Trophy Rock, Redmond Minerals, and Best Vinyl Fence & Deck. The companies generate more than $160 million in combined revenues annually.

Couldn't Handle Large Transaction Volumes

Each of the Redmond companies started on QuickBooks, with some later adding siloed third party and custom software applications.

QuickBooks provides basic accounting functionality as a standalone application. It does not handle inventory, sales, customer tracking, warehouse operations, or project management and does not connect to other applications.

As a result, Redmond either added separate applications or custom-built solutions, which worked fine when the companies were small.

Over time, working in so many disconnected systems became problematic. Finance teams created spreadsheets to consolidate information and constantly imported and exported information. It grew challenging to track costs per project and product profitability. Employees found it difficult to track inventory, which was constantly changing, or understand how much cash was tied up in inventory.

All of the Redmond businesses were run differently. Employees at each company spent countless hours a week entering, double-checking, and re-entering data into spreadsheets, which was time-consuming and occasionally led to mistakes, making it hard to trust the data.

Consolidated and other reports were nonexistent and nearly impossible to produce because data lived in siloed systems and often didn't match. None of the managers had timely

information to run their businesses, which, as each started to grow, led to problems with AR, AP, inventory, and production schedules, among other functional issues. A 3-person development team spent months importing and exporting data so a reporting team of another three people could create reports that were outdated the minute they were completed.

Outgrew QuickBooks

"QuickBooks was designed for smaller businesses," says Aaron Gabrielson, CTO, adding that some of its entities had four employees when they implemented the software, and several now have more than 100. "Best Vinyl was actually using Sage 50 when we purchased them."

Many Redmond-owned businesses used paper processes to manage various business processes. At Redmond Life, for example, employees tracked order information by pinning paper on a large corkboard to track incoming and outgoing orders. "That's how it was done for 30 years," Gabrielson says.

Later they learned "Redmond Life didn't have its inventory as tight as it needed to be and ran out of materials that took three to six months to correct," he says. "That cost us $2 million to $3 million because customers couldn't get products."

Likewise, he says, Best Vinyl also had trouble tracking inventory and experienced long-term forecasting challenges to determine how much vinyl it needed to purchase. This led to shortfalls and delayed projects.

As transaction volumes increased, QuickBooks slowed and sometimes crashed the on-premises servers, managed by an IT team of six.

Customer Stories from Acumatica

Unit4 Makes Talent Management as Easy as ABC

Leading Belgian software consultancy ABC-Groep is investing in its future with a modern, connected Unit4 Talent Management platform to help develop people, attract talent, and proactively encourage engagement, learning, and development.

- Equips managers and IT consultants with agile tools to boost productivity, engagement, and growth
- Proactively encourages skill development
- Supports ABC-Groep in its ambition to become a 'great place to work'

Challenges

Leading European IT consultancy was relying on an outmoded, manual platform to support employee engagement. It lacked the ability to track functionality and ensure people have the skills, knowledge, and expertise to deliver great service.

Forward-thinking Belgian IT consultancy

ABC-Groep is a leading Belgian software consultancy company, providing digital collaboration, staffing, software development, and other services to customers throughout Benelux. The company's particular specialties are Java, Microsoft.NET, and Microsoft 365.

ABC is always looking to the future. The organization recognizes that people, skills, and talent build the cornerstone for success. For this reason, the organization is always looking to enhance people's capabilities and provide them with learning and development, supporting their growth and career ambitions.

Ken Coenen, Business Unit Manager at ABC-Groep, explains, "Expertise is key. Our customers demand our people to be experts in their fields – and one of our overriding goals is to ensure our people have the skills, knowledge, and expertise to deliver a great service."

ABC previously relied on an annual engagement questionnaire to manage its people. CEO Guy Hendrickx says, "The tool was a one-shot, annual snapshot. We asked questions like, 'What do you like about working at ABC? What don't you like? What could we do better?' It was fragmented, manual, and lacking in real insights."

ABC then discovered Unit4 Talent Management. Ken explains, "During the selection process, we were looking for three capabilities in a partner: performance monitoring, learning management, and people engagement.

> "Make no mistake: Using Unit4, we are seeing a steady increase in our people engagement scores."
>
> *Guy Hendrickx_*
> *CEO, ABC-Groep*

Unit4 enables us to achieve all of these in a single, integrated, and very smart solution."

Comprehensive, connected talent management portfolio

The organization uses all the Talent Management modules as a united portfolio to transform engagement, learning, and performance. The cloud platform connects data from people, enabling managers to define, measure, and understand engagement levels throughout the business. Managers use these timely insights to facilitate one-onone conversations, define and track objectives, and provide ABC people with learning and development opportunities to support their growth and career ambitions.

"When I show the Unit4 platform to potential candidates, it makes the learning very tangible. Unit4 is a real differentiator when it comes to winning the war on talent. It helps make ABC a more innovative, dynamic, and trusted place to work," says Ken. The modules include:

- **Engagement:** ABC is always striving to increase its people engagement score, as understanding more about employees is a huge advantage. Guy comments, "Using Unit4, we can measure and track this engagement score bi-weekly, monthly, or whenever we choose. Having the consultant's feedback – knowing what they like and don't like about us as an employer – is a huge competitive differentiator." The open nature of the Unit4 platform also has benefits for ABC. Ken again: "It means we can quickly and easily integrate Unit4 with our own ABC-people application – for example, to generate resumes for our customers. The right resume decides whether or not a consultant can start on an assignment at a customer. Having the Engagement Module embedded, we can periodically check on employee engagement."

- **Performance:** ABC uses the Performance Module to schedule and structure more informed one-on-one conversations. These insights support workforce development and help build high-performing teams. "We use the Performance Module to follow up on people's careers. Listening to people and what they want to achieve in the upcoming years is crucial. Besides informal events, we aim to speak to each consultant four to five times each year to talk about their career, and Unit4 allows us to track their career profile," says Ken.

- **Learning:** The Learning Module is integral in ABC-Groep's efforts to drive continuous, best-practice learning with classroom, online and blended courses. The organization awards certificates, captures the information in CVs, and appoints learning mentors. Looking ahead, ABC will continue to focus on increasing employee retention and attracting new people. The Unit4 cloud platform is proven to deliver right across the organization. "Make no mistake, using Unit4, we are seeing a steady increase in our people engagement scores," says Guy. "Unit4 has an important role to play in ABC's future growth. It will help us to define, measure, and understand engagement levels throughout the organization – and help us become a great place to work."

Customer Stories from Unit4
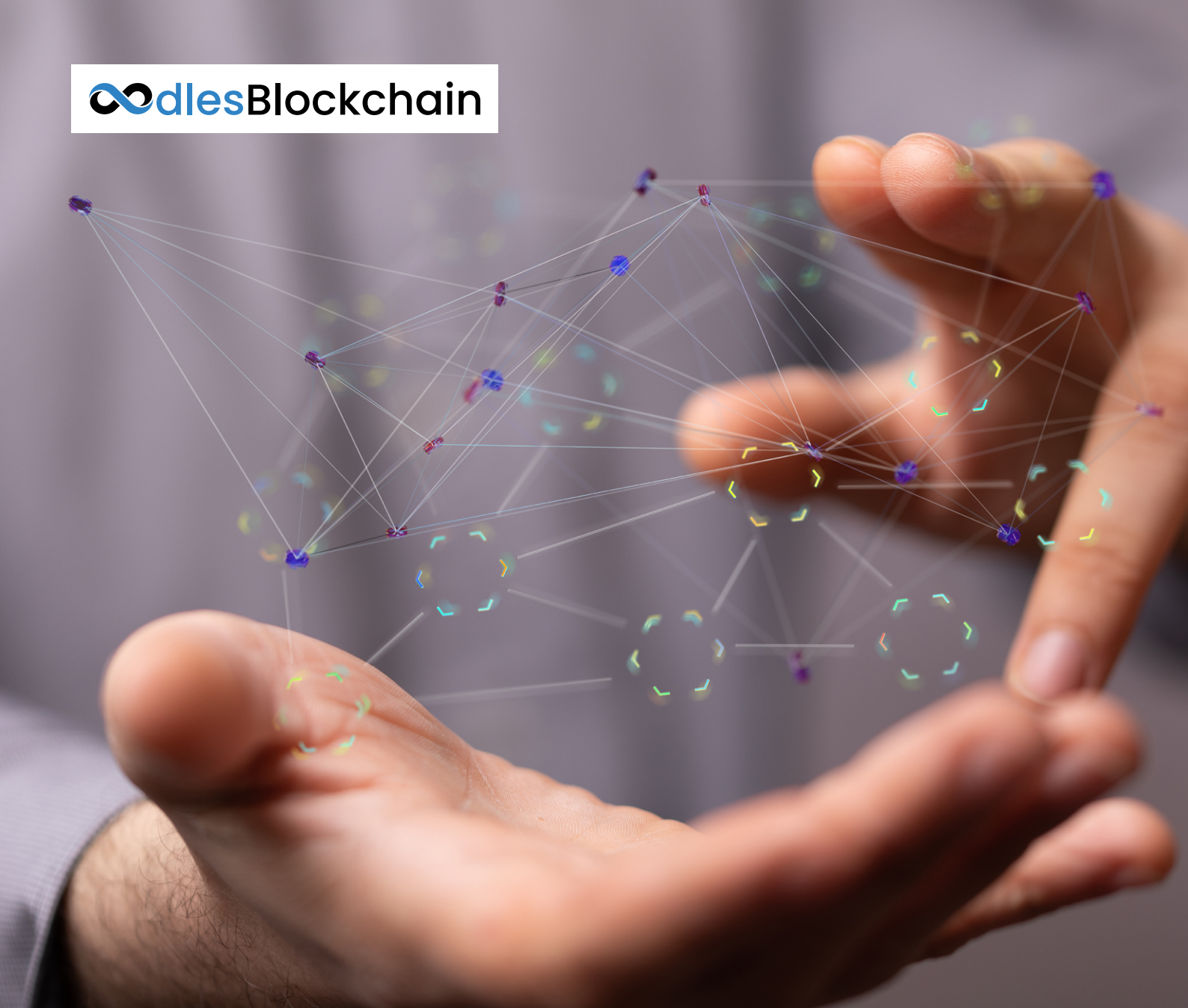
Exploring Diverse Use Cases of Polygon Blockchain

In this blog, we will delve into the myriad use cases of the Polygon blockchain, showcasing its adaptability and implications across various sectors.

Polygon, a layer 2 scaling solution for Ethereum, has rapidly emerged as a transformative force in the blockchain ecosystem. Beyond enhancing scalability and reducing transaction costs, *Polygon blockchain development* offers a versatile platform for a wide range of decentralized applications (dApps) and use cases. In this blog, we will delve into the myriad applications of Polygon, showcasing its adaptability and impact across various sectors.

Polygon Use Cases

Decentralized Finance (DeFi)
Liquidity Pools and Yield Farming
Polygon provides an ideal environment for decentralized finance protocols, enabling users to participate in liquidity provision and yield farming with significantly lower transaction fees compared to the Ethereum mainnet.

Decentralized Exchanges (DEX)
DEX platforms on Polygon leverage its low-latency and low-fee environment to facilitate seamless and cost-effective token swaps, fostering increased liquidity and user engagement.

Lending and Borrowing Protocols
DeFi lending and borrowing platforms on Polygon empower users to access loans and earn interest on their assets without the burden of exorbitant gas fees.

Also, Explore | *Polygon zkEVM | For Efficient Scalability of Your dApp*

Non-Fungible Tokens (NFTs)
NFT Marketplaces
Polygon has become a preferred choice for NFT marketplaces, allowing artists and creators to mint, buy, and sell digital assets with minimal transaction costs, making NFTs more accessible to a broader audience.

Gaming and Virtual Assets
Gaming ecosystems benefit from Polygon's fast transaction speeds and cost-effectiveness, enabling the creation and trading of in-game assets on blockchain with a seamless user experience.

Decentralized Autonomous Organizations (DAOs)
Governance Protocols
DAOs on Polygon utilize its efficient and low-cost transactions to facilitate community-driven governance, enabling users to actively participate in decision-making processes.

Token Voting
Polygon's blockchain is leveraged for token-based voting mechanisms within DAOs, ensuring secure and transparent governance practices.

You may also like | *Polygon Blockchain (Matic) | A Comprehensive Guide*

Supply Chain and Logistics
Traceability and Transparency
Polygon's blockchain enhances the traceability of products in supply chains, allowing businesses to create transparent and immutable records, reducing fraud and ensuring the authenticity of goods.

Smart Contracts for Agreements
Smart contracts on Polygon streamline agreements and transactions within supply chain processes, automating tasks such as payment releases upon delivery confirmation.

Social Impact and Charity
Transparent Fundraising
Charities and social impact initiatives utilize Polygon's blockchain for transparent fundraising, allowing donors to track their contributions and ensuring that funds reach their intended destinations.

Tokenization for Fundraising
Tokenization on Polygon enables charities to create digital tokens, representing ownership or value, to raise funds in a more accessible and inclusive manner.

Also, Read | *Polygon 2.0 | Unifying Liquidity and Beyond*

Education and Credentials:
Blockchain Certificates
Educational institutions leverage Polygon to issue blockchain-based certificates and diplomas, providing secure and tamper-resistant records of academic achievements.

Decentralized Identity
Polygon supports the development of decentralized identity solutions, empowering individuals to control and share their personal information securely.

Gaming and Virtual Reality (VR)
Blockchain Integration in Gaming
Polygon's low transaction costs and fast confirmation times make it an ideal blockchain for integrating blockchain technology into gaming ecosystems, allowing for the creation of blockchain-based game assets.

Virtual Real Estate
Virtual worlds and marketplaces on Polygon enable the buying, selling, and ownership of virtual real estate, providing users with a tangible and tradable presence in virtual spaces.

Explore More | *Polygon Blockchain Explained | A Detailed Look*

Future Outlook

As Polygon continues to evolve, its versatility and commitment to fostering innovation position it as a key player in the blockchain space. The diverse array of use cases mentioned above is just the beginning, and as developers explore new possibilities, Polygon is poised to play a crucial role in shaping the decentralized future.

Conclusion

Polygon's rise to prominence is not merely a testament to its technological prowess but also to its commitment to facilitating a more accessible, scalable, and user-friendly blockchain ecosystem. The use cases highlighted above illustrate the breadth of Polygon's impact across various industries, showcasing its potential to revolutionize the way we interact with decentralized technologies. As we look ahead, the continued exploration of Polygon's capabilities promises a future where blockchain is not just a technological novelty but an integral part of our everyday lives. If you are interested in exploring and developing innovative blockchain solutions on Polygon, *hire blockchain developers* to get started.