MANUFACTURING & SUPPLY CHAIN
IN TWO-TIER ERP

EDITOR'S NOTE

Dear Readers,

As we embark on a new journey through the pages of this month's issue, I am delighted to bring you a wealth of insights into the ever-evolving world of manufacturing and supply chain management, with a special focus on the role of Two-Tier ERP software. This issue is a testament to our commitment to keeping you informed about the latest developments in the industry, and I am excited to share the valuable content we've curated for you.

In this issue, we've had the privilege of engaging in enlightening conversations with industry leaders, each offering a unique perspective on some of the most pressing issues in today's business landscape.

Our first interview is with Sanket Akerkar, Chief Revenue Officer of Acumatica. In an era defined by the remote work economy, Sanket shares his insights on how businesses are adapting to this transformative shift. The remote work model has become integral to the fabric of many organizations, and Sanket's thoughts shed light on the strategies that companies are employing to thrive in this new environment.

Kausik Chaudhuri, Chief Innovation Officer at Lemongrass Consulting, emphasizes the importance of not viewing AI as a one-size-fits-all solution. In our conversation, Kausik rightly points out that AI is a powerful tool, but organizations often fall into the trap of applying it blindly, hoping for the best. His perspectives challenge us to think critically about the true potential of AI and the need for thoughtful, strategic deployment.

Additionally, we've explored the exciting launch of SYSPRO 8 in 2023, and had the privilege of speaking with Paulo de Matos, Chief Product Officer of SYSPRO. Paulo takes us through the innovative features and enhancements that SYSPRO is introducing, shaping the future of manufacturing and supply chain management. SYSPRO's commitment to excellence and innovation is evident in this discussion, and it's a testament to the forward-thinking approach of the industry.

This month's issue encapsulates the dynamism of the manufacturing and supply chain sector, where technology, innovation, and adaptability are the key drivers of success. It is our hope that the insights shared in these interviews and the content within these pages will inspire you, our valued readers, to navigate this ever-changing landscape with confidence and informed decision-making.

As we dive into this issue, I encourage you to absorb the wisdom of our esteemed interviewees, explore the articles penned by our experts, and engage with the thought-provoking content that awaits you. We are dedicated to bringing you the latest trends, breakthroughs, and perspectives that matter.

Thank you for being part of our journey. Enjoy this month's issue, and may it equip you with the knowledge and inspiration to flourish in the world of manufacturing and supply chain, guided by the wisdom of our remarkable interviewees and the expertise of our contributors.

Wishing you an enlightening and rewarding reading experience.

Sincerely,

Pinar SENGUL, EDITOR

ERP NEWS

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Issue # 40, November 2023

Unlocking the Potential of AI with Kausik Chaudhuri

Artificial Intelligence (AI) stands at the forefront of modern technological advancements, promising transformative capabilities across industries. Yet, the journey to harness the full potential of AI is paved with challenges and complexities that demand keen insight and expertise. In this exclusive interview, we engage with Kausik Chaudhuri, Chief Innovation Officer at Lemongrass Consulting, a distinguished authority in the realm of AI and innovation.

With an illustrious career dedicated to pushing the boundaries of AI, Kausik Chaudhuri brings a wealth of knowledge and practical experience to the table. He shares his profound insights on critical aspects of AI that often go unnoticed but are paramount for success: the art of AI training, the peril of bias, and the roadmap to utilizing AI effectively.

Throughout our conversation, Mr. Chaudhuri delves into the pivotal role of AI training in shaping its value, emphasizing the nuances of data collection, preparation, and the transformative outcomes that effective training can yield. He also addresses the pressing concern of bias in AI and the imperative to recognize and mitigate it, offering pragmatic solutions based on his extensive industry experience.

Moreover, Kausik Chaudhuri provides a straightforward guide for organizations aiming to unlock the full potential of AI while avoiding pitfalls and errors. From selecting the right AI tools to deploying models effectively, his guidance paves the way for informed decision-making in the AI landscape.

Interview with
Kausik Chaudhuri
Chief Innovation Officer,
Lemongrass Consulting

lemongrass

As we explore these pivotal topics with Mr. Chaudhuri, we gain invaluable insights that not only shed light on the present challenges of AI but also illuminate the path to a future where AI is an indispensable ally for businesses and society alike. Join us as we embark on this enlightening conversation with a visionary in AI and innovation.

1. Could you tell ERP News readers about the vision of Lemongrass Consulting and your role at Lemongrass Consulting?

Lemongrass specializes in helping clients migrate to and manage their operations on AWS, Microsoft, and Google. Our main goal is to help clients efficiently manage their businesses and related costs, especially those associated with infrastructure and IT services while minimizing operational downtime.

I joined Lemongrass in September 2022 in the role of Chief Innovation Officer. My responsibilities include advancing our intellectual property initiatives, which include working on LCP (Lemongrass Cloud Platform), our multi-cloud control plane. My focus is to ensure that the teams overseeing customer migration and steady-state operations have the best tools (in-house and third-party) for the appropriate actions. I also facilitate the development of innovations that not only assist our clients in conducting their business but also grow our intellectual property portfolio.

2. Can you explain why the training process is so crucial in the development of AI systems, and how it influences their value?

The results produced by artificial intelligence are shaped by the data used during its training. It's imperative to recognize that data

is dynamic; what was accurate ten years ago may not hold true today. Therefore, decisions grounded in historical data might require revisiting as situations evolve.

That being said, data alone doesn't drive AI. Two main factors influence AI training: the data itself and the experts handling said data. Domain knowledge is essential. Those responsible for curating data fed into AI tools must possess a strong understanding of the subject matter context. Without such expertise, the data's significance and accuracy can be compromised.

> "Two main factors influence AI training: the data itself and the experts handling said data. Domain knowledge is essential. Those responsible for curating data fed into AI tools must possess a strong understanding of the subject matter context. Without such expertise, the data's significance and accuracy can be compromised."

3. What are some key considerations organisations should keep in mind when collecting and preparing data for AI training?

Organizations should understand that every piece of data, either historical or current, carries significance and context. Without grasping this context, data loses its meaning. For effective AI training, algorithms require a diverse range of information to make well-informed choices on our behalf.

It's equally crucial to have deep subject matter knowledge when inputting data into AI systems. Lacking this, the data becomes less valuable and pertinent. The absence of appropriate domain expertise increases the likelihood of biases in AI decision-making. Feeding biased data to an AI without proper oversight can lead to unreliable results. Hence, domain knowledge is indispensable.

4. Bias in AI is a critical concern. Can you elaborate on why AI systems often exhibit bias, and what are the potential consequences of this bias?

Data, much like humans and society, inherently contains biases and subjective perspectives. Since data emerges from tools crafted by people, it can naturally encapsulate their biases. Such prejudiced data results in skewed decisions. These biases can take the form of representational bias and subjectivity, deeply rooted in human nature, that can compromise the impartiality of AI system responses.

5. Many organisations aspire to leverage AI but face challenges. What is your advice for organisations looking to use AI effectively while avoiding common errors?

It's crucial to recognise that data landscapes are continually evolving. The data used to train AI systems a decade ago may no longer be relevant today. Therefore, organisations must understand their legacy data and prioritize it based on the goals of the campaign. Regularly updating and curating datasets ensures that AI systems operate with the most up-to-date information, enhancing their effectiveness.

Data may also encompass extraneous details or noise that can adversely affect AI performance. For example,

a camera mounted on a moving vehicle captures everything in its surroundings, not just the intended focus point. Removing unnecessary noise from the data is essential to improving its quality and ensuring that AI systems focus on the most relevant information.

Finally, human intervention and supervision are essential for the successful implementation of machine learning. While AI tools themselves are important, they also require supervision and governance by humans to prevent unintended actions or outcomes.

6. Can you outline a step-by-step guide or best practices for organisations to follow when integrating AI into their operations?

Have Clear Objectives
It's vital to precisely outline your objectives and aims when incorporating AI. It's crucial to have a well-defined purpose to guide the entire process. Objective ambiguity can lead to misalignment between your intentions and the AI integration process.

Collect Relevant Data
Gather and organize high-quality, relevant data that aligns with your goals. Make sure the data is pristine, comprehensive, and correctly tagged. Data quality is a critical factor in the success of AI integration.

Test and Validate the Data
Implement rigorous testing and validation procedures to ensure that the AI model performs as expected. This involves creating a pilot environment for testing, ensuring that it aligns with your anticipated outcomes.

> "Given AI's often opaque nature, it's advisable for organizations to use tools that provide as much clarity as possible. This transparency enables teams to better understand the AI's decision-making processes, illuminating both the 'what' and 'why' of its results."

7. How should organisations approach the selection of AI tools and frameworks to match their specific needs and goals?

AI solutions aren't one-size-fits-all in the market. Organisations should seek tools that have been created by experts for specific sectors, such as manufacturing or healthcare.

Given AI's often opaque nature, it's advisable for organizations to use tools that provide as much clarity as possible. This transparency enables teams to better understand the AI's decision-making processes, illuminating both the 'what' and 'why' of its results.

8. Looking ahead, what emerging trends in AI do you find most exciting, and how can organisations prepare to embrace these trends?

There are a few sectors where we can expect to see rapid implementation of AI. For example, transportation, healthcare, scientific

research, customer experience, manufacturing, and the government sector will all benefit from machine learning and AI tools.

One thing is clear: AI will serve as a foundation for human workers to evolve and flourish – its intentions are meant to support the existing workforce, not replace it.

9. Are there any final recommendations or insights you'd like to share with organisations seeking to maximise the potential of AI in their operations?

Change is inevitable in whatever we do in our lives, therefore we should keep an open mind. Enterprises and employees need to be ready to manage whatever new challenges arise. AI will have a significant impact on a number of industries, so we need to understand this technology and develop practices that are fair and ethical.

lemongrass

About Kausik Chaudhuri

Award-winning Global IT Executive with over 25 years of experience leading high-performing technology teams. Thought-leader known for developing complex technical architecture for mission-critical enterprise applications, including SAP. Expertise in the migration of workloads from disparate operating systems, in addition to the migration of large databases to cloud. Highly skilled at enabling continuous improvement of both services and products through automation. Strong communication skills, paired with high emotional intelligence, lends to an ability to seamlessly collaborate across departmental, seniority, and organizational boundaries.

NEW RELEASE

SYSPRO

Innovation at the Heart of ERP: A Conversation with Paulo de Matos, SYSPRO's Chief Product Officer

In the ever-evolving landscape of enterprise technology, the role of Enterprise Resource Planning (ERP) solutions cannot be overstated. With each passing year, these systems become more sophisticated, adapting to the changing needs of businesses across industries. Among the leaders in this domain stands SYSPRO, a global provider of industry-built ERP software renowned for its commitment to innovation and excellence.

In this interview, we have the distinct privilege of engaging with Mr. Paulo de Matos, Chief Product Officer at SYSPRO, a visionary leader at the forefront of technological advancement. We delve into the launch of SYSPRO 8 2023, the latest iteration of the SYSPRO ERP Platform—a release that not only demonstrates SYSPRO's dedication to staying ahead of the curve but also brings an array of capabilities poised to redefine the ERP landscape.

SYSPRO 8 2023 introduces a host of new features, from enhanced quality control and automation to improved warehouse management and advanced analytics. With a strong focus on efficiency, quality, and automation, this release holds the potential to empower mid-market manufacturers and distributors to navigate the ever-changing tides of modern industry.

Throughout this conversation, we will explore the intricacies of these new capabilities, their implications for businesses, and the broader vision behind SYSPRO's commitment to excellence. Paulo de Matos will share insights into how SYSPRO 8 2023 addresses the evolving priorities of today's manufacturers, emphasizing the critical importance of quality, security, and connectivity in an era defined by rapid change.

Interview with
Paulo de Matos
Chief Product Officer,
Syspro

SYSPRO

Join us as we embark on a journey through the world of ERP innovation, where SYSPRO 8 2023 shines as a testament to the relentless pursuit of efficiency and quality in enterprise solutions. This interview promises to unveil the driving forces behind SYSPRO's latest release and its potential to reshape the future of business operations.

1. Congratulations on the launch of SYSPRO 8 2023.Could you start by providing an overview of the key highlights and improvements in this latest release of the SYSPRO ERP Platform?

This new release includes more than two dozen new capabilities that increase organizations efficiency and optimize supply chain operations, ultimately increasing manufacturers' ability to delight their customers and increase profitability. New capabilities include advanced quality control, seamless automation, enhanced warehouse functionality, increased security and connectivity, and even more predictive power through enhancements to SYSPRO Embedded Analytics.

2. The manufacturing landscape has seen significant changes in recent years. How does SYSPRO 8 2023 address the evolving priorities of mid-market manufacturers and distributors in terms of efficiency, quality, and automation?

Increasingly, manufacturing and distribution businesses run on data, and the ERP platform collects and manages the most critical data in the organization: finance, operations, inventory, supply chain, and more. This release makes data of all kinds easier to access, understand and analyze so the organization can become more efficient, effective and, ultimately, more profitable.

Concerning quality, we've created a quality management module that's fully integrated into SYSPRO ERP, this new solution enables manufacturers to oversee all activities and tasks required to maintain a desired level of excellence. Manufacturers can set their own quality control standards in their business, achieve less variability, and improve overall customer satisfaction as it enables them to inspect and approve quality at each process throughout the supply chain quickly and effectively. Quality managers have instant access to all the critical information required to track a suspect product, from delivery raw materials to customer delivery. Functionality includes customer complaints, recall management, and configurable inspections capabilities.

> **"We've made processing accounts payable invoices far more efficient. SYSPRO can now extract data directly from invoices and then match it with information in the ERP platform."**

We've made processing accounts payable invoices far more efficient. SYSPRO can now extract data directly from invoices and then match it with information in the ERP platform. This saves the organization a ton of time that would otherwise be spent manually processing invoices, which enables those employees to spend their time on more productive tasks.

Earlier this year, SYSPRO released SYSPRO Embedded Analytics. In this release, we've introduced a big data connector that enables organizations to easily connect to cloud data sources, or any data source, really, to augment the data that's already in the ERP.

3. In the context of increased consumer expectations for quality and speed, how does SYSPRO 8 2023 empower organizations to meet these demands effectively?

The quality module will enable SYSPRO customers to raise the bar, because they can gain visibility into quality over the entire product journey, from the materials used to construct it all the way through to customer receipt.

As for speed, the Warehouse Management System (WMS) Marshaling enables manufacturers to easily streamline staging and packing of sales orders to enable the efficient consolidation of multiple orders for a customer into one shipment. They can generate accurate manifest documents and flexible printing of outer labels and manifests based on packaging constraints and stock items shipped. With WMS Marshalling, organizations can accelerate order fulfillment, improve accuracy, and increase customer satisfaction.

> **"The quality module will enable SYSPRO customers to raise the bar, because they can gain visibility into quality over the entire product journey, from the materials used to construct it all the way through to customer receipt."**

4. Could you provide insights into the role of IoT data capture within SYSPRO's capabilities, especially in relation to data analysis and decision-making?

Sure. Our new embedded analytics big data connectors enable organizations to scale analytics capabilities to handle growing volumes of data, such as IoT capture, to ensure they can accommodate current and future data interrogation needs. IoT data is particularly important, because it's a rich source of information on the efficiency, state and functionality of critical machinery and, in many cases, the product itself. By bringing this data into SYSPRO Embedded Analytics, companies could gain insights on:

- Whether there are breaks in the cold chain, which is critical for many food manufacturers
- Declining efficiency of key machinery, which could indicate it needs maintenance
- Real-time movement of inventory through the warehouse
- And much more

5. Integration with cloud and other data sources is critical for modern businesses. Can you share examples of how SYSPRO Embedded Analytics Big Data Connectors have facilitated better data utilization and insights?

Definitely. We just elaborated on how IoT data, much of which is stored in the cloud, can add value. But there are many other data sources that can improve data insights. Weather data, for example, can improve the accuracy of predictive analytics on logistics and delivery. Macroeconomic data can improve sales forecasting. The possibilities are endless.

6. SYSPRO has emphasized the customization of the Product Catalog for different sales channels. How does this flexibility contribute to improving marketing strategies and sales effectiveness?

This new capability enables businesses to create a comprehensive catalog of their products with associated pricing and promotions. It's customizable for different sales channels and facilitates seamless online sales, more effective marketing promotions, and efficient pricing management. Ultimately, it drives revenue growth and higher customer satisfaction because it enables companies to ensure that the products they display to customers matches their needs.

7. With the new Single Sign-On functionality, organizations can simplify user access management. Can you describe the ease of use and advantages for both administrators and end-users?

Users can now log in to SYSPRO using their existing Microsoft, Google, or LinkedIn accounts, which streamlines the login process and enhances user convenience. Administrators can easily manage user access and permissions through centralized identity providers, reducing administrative burden and ensuring consistent user authentication across multiple applications.

8. Looking ahead, what are your expectations for the impact of SYSPRO 8 2023 on the ERP industry, and how do you envision it benefiting a wide range of businesses and industries?

We've already seen a significant number of customers upgrading to the new version because they can see how these new capabilities will improve their ability to meet customer expectations, increase efficiency, gain visibility and augment their analytics capabilities. We live in a volatile economic time, so manufacturers and distributors know they need to become as efficient and effective as possible — SYSPRO is helping them achieve these goals.

SYSPRO

Interview with Paulo de Matos

Security Bridge

The Top SAP Vulnerabilities and How To Protect Your Systems

Even the largest software companies in the world aren't immune to cyberattacks. And with SAP, as one of the leading producers of business software utilized at many of the largest corporations around the globe, it's no surprise that cybercriminals have these systems in their sights when going after a company.

By exploiting vulnerabilities found in SAP systems—be they software bugs, configuration errors, or other weak points that can be brute-forced—bad actors can carve a way into the most sensitive information a company holds. To say this will disrupt business as usual is an understatement; SAP systems can hold everything from personal customer information to corporate strategy and business plans. If this data is compromised or lost, it will throw a wrench in current business processes, require costly fixes, damage the company reputation, and possibly lead to significant fines or lawsuits. And when an organization's SAP system is attacked, it could also put other applications, systems, and departments at the company at risk of exposure due to how tightly integrated these functions often are.

With such a huge trove of data behind the walls of SAP applications and their wide use among the top corporations, many cyberattackers focus much of their

efforts on finding vulnerabilities in SAP software. There are myriad types of vulnerabilities—but just as many ways to mitigate them.

Here are some of the most common vulnerabilities found in SAP systems:

Denial of Service Vulnerability
DoS attacks are intended to overwhelm a system by sending an incredible amount of data or requests to a system, making it crash and be unusable by regular, legitimate users.

Article by
Christoph Nagy
CEO, *SecurityBridge*

Security Bridge

Authorization Vulnerability
Misconfigured authorization protocols and poor role design can sometimes lead to vulnerabilities that allow cybercriminals to gain unauthorized access to company data, customer information, and in some cases even change protocols within the system itself, making it harder to stop the attack.

Code Injection Vulnerability
SQL injection and Remote Function Call (RFC) injection are two types of attacks that execute malicious code in a system like SAP which then makes it possible to access and steal sensitive data from a company and its customers, or even attack and debilitate normal business functions.

Authentication Vulnerability
Similar to authorization vulnerabilities, these types of vulnerabilities make it possible for bad actors to misrepresent their identity and trick the SAP system into thinking they should have access to the system and its data. This can happen when authentication systems are misconfigured or the users utilize shared credentials. It also can occur when a company doesn't enforce the use of strong passwords for its critical systems.

These are only a handful of the most frequently attacked weak points some SAP systems have. Keeping pace with the latest innovations, updates, and security patches can allow a company to stay ahead of malicious attacks, and there are third-party tools that can automate that update process to save employee hours that would be spent doing it manually.

Fortunately, there are a number of measures that businesses can take to shore up defenses and keep SAP systems secure. To start, they can stay informed with the latest security advisories and ensure

SAP systems are updated to the most current version and patches are kept up to date. Organizations

> "SQL injection and Remote Function Call (RFC) injection are two types of attacks that execute malicious code in a system like SAP which then makes it possible to access and steal sensitive data from a company and its customers, or even attack and debilitate normal business functions."

can also monitor the news for new tactics being used by cybercriminals to gain access to systems. This will help create a plan for keeping SAP systems secure and addressing the most pressing vulnerabilities first.

Third-party security tools exist to help identify and protect SAP vulnerabilities and automate various parts of the cybersecurity process. These can empower company leaders to work SAP security into their strategic planning without taking time away from other important duties.

And finally, organizations need to be judicious when providing access to sensitive information to employees; operating on a need-to-know basis, since the more people that have access to data the more likely it is to be compromised. Strong access controls that are regularly reviewed will limit the potential avenues attackers may have into the system. Companies also need to revoke access for those who no longer

need it, or have left a position, as an unused credential is just waiting for a malicious actor to come along and exploit it.

By reviewing current and potential vulnerabilities in a SAP system and making a plan for addressing them as soon as possible, organizations can head off cyberattacks and keep business proceeding forward as normal. The best way to deal with a cyberattack, after all, is to never let them in to begin with.

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.

KOPIS

3 Reasons Software Modernization Cuts Risk and Positions Businesses for Success

Often, it's the software that helped a company grow and succeed that poses the biggest risks to the company's long-term survival. Outdated software often exposes data to risks, leaving a company's lifeblood — its data — vulnerable and unprotected.

Why do companies cling to old software? Like a trusty pair of running shoes that have helped a marathoner traverse hundreds of miles, the shoes remain comfortable and familiar. But races aren't won with holes in the soles. In the same vein, legacy software systems have worked well for a long time. At one point, they were even able to grow with the company, at least to a point. Perhaps most appealing for companies is that employees already know how to use old software systems — like wearing those trusty sneakers. There's comfort in the familiar, but at what cost?

Software patterns, like fashion, evolve over time and so do the threats against them. Software left stagnant leads to legacy systems being susceptible to new threats that jeopardize those legacy systems.

Software that once worked well was not built to withstand the blistering threat-scape of today's online world. Making matters worse is that old software is often fragmented, piecemealed together into a crippling patchwork of puzzles.

There is hope. Here are three reasons why modernizing a company's software systems cuts risk to your business:

Article By
Andrew Kurtz
CEO, *Kopis*

KOPIS

Modernizing software unifies processes and systems

By modernizing outdated software into one, unified system and integrating robust Enterprise Resource Planning (ERP) solutions, businesses can strengthen defenses, mitigate risks and ensure the confidentiality, integrity and accessibility of valuable data. A new, unified system streamlines data collection and creates efficiencies within and among departmental teams.

> "Legacy systems that once helped a business achieve success become patchwork systems over time, or "Frankensystems" sewn together by years of adjustments and unstable code, groaning under the strain of growth in today's environment."

Modernizing software paves the way for business growth

While they have served organizations well in the past, outdated systems were not designed with the current threat-scape in mind, and fixing those issues can pave the way for a business to grow. Legacy systems do not support the adequate defenses and authentication protocols that are essential in warding off unauthorized access, and lack the agility and responsiveness needed to address cyber threats.

Legacy systems that once helped a business achieve success become patchwork systems over time, or "Frankensystems" sewn together by years of adjustments and unstable code, groaning under the strain of growth in today's environment. These older systems lack the

latest security features and built-in safeguards that modern systems possess. By modernizing outdated software into one system, companies are better able to meet their growth targets.

Modernizing software helps businesses build trust

In today's data-driven world, business leaders understand the importance of safeguarding sensitive information. Notwithstanding, we continue to see the use of outdated legacy systems as a common disrupter of operations — often compromising data integrity.

Cyber threats have become more sophisticated and continue to evolve, making a company's private data more susceptible to malicious attacks and exploitation. The consequences of data breaches can lead to significant financial loss, as well as irreparable damage to a company's reputation. Modern systems incorporate robust security features, such as a multi-factor authentication, advanced encryption algorithms, intrusion detection systems and real-time monitoring. With the ability to detect inconsistencies, conduct real-time threat analysis, and implement timely countermeasures, organizations can enhance their incident response and minimize potential damage.

> "By upgrading outdated software, integrating robust security measures and leveraging ERP system capabilities, companies can protect their data, preserve their reputation, and maintain the trust of their customers. Modernization is a necessity in today's data-driven world, and business leaders must adopt proactive measures to protect their data."

In an era defined by continuous technological advancement and the constant threat of cyberattacks, businesses must prioritize security. By upgrading outdated software, integrating robust security measures and leveraging ERP system capabilities, companies can protect their data, preserve their reputation, and maintain the trust of their customers. Modernization is a necessity in today's data-driven world, and business leaders must adopt proactive measures to protect their data.

About Andrew Kurtz
In 1999, Andrew Kurtz founded Kopis, serving as President and CEO since that time and, together with his team, has successfully delivered solutions for firms, from startups to Fortune 500 companies. Kopis specializes in custom software development, Business Intelligence solutions, application development, DBA services and ERP solutions for rapid-growth organizations whose growth typically outpaces their legacy systems and the ability to support and innovate their technologies. In 2022, Kopis acquired Intelice, a Managed Service Provider (MSP), that specializes in cloud and on-premise ERP services that utilize the Microsoft Dynamics 365 Business Central/NAV platform.

About Kopis
Kopis, based in Greenville, S.C., has 20 years of experience building custom software and tech solutions in the app development and ERP spaces. Kopis is committed to creating solutions that enable companies and state agencies to grow better, faster and smarter through strategic technologies that solve real-world inefficiencies that hamper growth. Kopis has worked with hundreds of companies to make them run better and achieve sustainable scalability.

Article by Andrew Kurtz

The Power of Two-Tier ERP: Revolutionizing Business Efficiency and Agility

In today's rapidly evolving business landscape, staying competitive requires more than just adapting to change – it demands innovation and strategic thinking. One revolutionary approach that has gained significant attention is the adoption of Two-Tier Enterprise Resource Planning (ERP) systems. This dynamic strategy has proven to be a game-changer for businesses seeking enhanced flexibility, efficiency, and overall performance. In this article, we delve into the concept of Two-Tier ERP and how it can substantially benefit businesses of all sizes.

Understanding Two-Tier ERP

Traditional ERP systems have long been the backbone of organizations, seamlessly integrating core business processes like finance, human resources, and supply chain management into a single cohesive platform. While these systems excel at handling the complexities of large enterprises, they may not be as agile when it comes to the specific needs of subsidiaries, remote locations, or specialized business units.

Enter Two-Tier ERP. This innovative approach involves implementing a second ERP system, often a lighter and more specialized version, to complement the existing core ERP system. The core system typically serves the headquarters or main business unit, while the second-tier system caters to subsidiary operations or specific departments. This strategy combines the benefits of a centralized, robust ERP with the agility and customization of a focused solution, resulting in a harmonious balance that fuels business growth.

The Benefits of Two-Tier ERP

Tailored Solutions for Diverse Needs: Businesses often have different divisions or subsidiaries with unique requirements. A Two-Tier ERP approach allows each unit to have a solution that's tailored to its specific processes. For instance, manufacturing processes at a subsidiary might need a more specialized module, while the core ERP system maintains standardized processes.

Speed and Agility: One of the standout advantages of Two-Tier ERP is speed. Subsidiaries can be up and running on their dedicated system relatively quickly, bypassing the complex configurations often required for the main ERP. This agility ensures that subsidiaries can respond faster to market demands and changing conditions.

Cost-Effectiveness: Rather than forcing an extensive, resource-intensive rollout of the core ERP system across all branches, Two-Tier ERP allows businesses to allocate resources more strategically. Subsidiaries can have a tailored solution without unnecessary features or overhead costs.

Enhanced Local Control: Subsidiaries or smaller business units can have more control over their processes with a dedicated ERP. This localized control fosters a sense of ownership, and enables more efficient decision-making that aligns with the specific needs of that unit.

Scalability and Integration: As businesses grow or acquire new subsidiaries, a Two-Tier ERP approach easily scales. New subsidiaries can adopt the same second-tier solution or integrate their existing systems as needed. This flexibility is vital in an era of rapid mergers and acquisitions.

Reduced Complexity: A large, monolithic ERP system can sometimes be too complex for smaller business units. Two-Tier ERP reduces this complexity by offering a more focused and streamlined solution that caters to the specific needs of the unit.

Risk Mitigation: When disruptions occur, having separate ERP systems can act as a buffer. If one system faces technical issues or downtime, the other remains operational, reducing the risk of widespread operational disruptions.

Support for Innovation: Smaller units within an organization often experiment with new ideas and innovation. Two-Tier ERP encourages this by providing dedicated systems that can be customized and adapted to support novel processes.

Implementation Challenges and Considerations

While the benefits are compelling, implementing a Two-Tier ERP strategy requires careful planning:

Integration: Smooth integration between the core ERP and subsidiary systems is critical. Data sharing, processes, and reporting must seamlessly bridge the gap between systems.

Data Harmonization: Businesses need to ensure data consistency and accuracy across both tiers to enable accurate reporting and decision-making.

Change Management: Employees need to adapt to new systems and processes. Effective change management strategies are essential to minimize resistance and ensure smooth adoption.

Vendor Relationships: If the core and subsidiary systems come from different vendors, managing relationships, and ensuring compatibility become crucial.

Cost Considerations: While Two-Tier ERP can be cost-effective in the long run, there are initial implementation costs to consider, including software, training, and integration expenses.

Customizable implementation: Being able to customize each process of the solution and modules according to organization needs can be a big challenge, most vendors would implement it as it is without any customization causing organizations to be missing out on the functions or processes that they really need.

Conclusion

In a landscape where adaptability and efficiency are paramount, Two-Tier ERP presents a compelling solution. It offers businesses the ability to leverage the strengths of a centralized ERP system while catering to the specific needs of subsidiaries or specialized units. With benefits ranging from increased agility and cost-effectiveness to enhanced local control and innovation support, Two-Tier ERP is reshaping how businesses approach their operations. As technology continues to advance and business needs evolve, embracing this strategy might just be the key to unlocking unprecedented growth and success.

I-Net Dynamics is able to provide in-depth customization of each process for Microsoft Dynamics 365 BC and Microsoft Dynamics GP based on your organization needs, contact us at contactus@inetdynamics.com.sg or +65 6594 4155 to learn more.

Article from I-Net Dynamics

What is Two-Tier ERP and Why Does it Matter

How can ERP software be aligned to business requirements that vary across different business units, subsidiaries, and geographies? In this blog, we explore how a "two-tier" ERP can provide an effective solution.

What are ERP tiers?

An ERP tier refers to a technology deployment strategy for different business units and/or geographic business locations. In short, a one-tier ERP system seeks to provide the same, unified ERP environment across the entire organization. By contrast, two-tier ERP systems tailor functionality to the needs and resources of specific business units, subsidiaries, and locations.

We take a look at both approaches, including their pros and cons, below. For a deeper dive into this topic, take a look at our recorded webinar here.

The Traditional Approach: One-Tier ERP

A one-tier ERP was the standard for every organization for decades. Not so long ago, a single ERP system across the entire enterprise was the only real option for most enterprises. And this model does offer **proven benefits:**

1. Centralized IT management.
2. All users across the organization use the same application and data, simplifying training and support.
3. Technological simplicity reduces the number of skills, vendors, and integration tasks required.

The streamlined nature of a one-tier approach still has value today. In the past, a one-tier ERP approach was thought to be the pinnacle of efficiency as well. **However, experience has shown that this monolithic approach to ERP systems does have its drawbacks.**

A one-size-fits-all approach risks driving compromised functionality for some parts of the business while introducing unnecessarily expensive, overkill functionality for others (especially smaller regional offices or small acquired companies). An enterprise-wide ERP rollout is a major investment in time, money, and resources; consider the implementation costs, the license fees, and the maintenance support fees associated with large tier-one ERP software (many of which persist into perpetuity).

These systems can also be highly complex to configure, particularly when different business units do not have consistent business environments. For some business units, a generalized ERP software may lack the flexibility to fit all business requirements, forcing industry-standard approaches that do not necessarily reflect unique business practices. At worst, this lack of flexibility can even harm competitiveness by ignoring unique business processes. But customizing this software for each business unit negates the very simplicity this approach was supposed to provide in the first place!

Benefits of a Two-Tier ERP Approach

In a two-tier ERP model, the first tier is a "corporate" or "central" ERP. This foundational tier is typically employed for global finance functions, corporate-level sales, and any other functions which may be unified across all business units.

The second tier refers to the ERP(s) used only by certain divisions, subsidiaries, and/or regional locations. These second-tier systems can be more readily customized to address specific needs, without increasing the complexity of the common core ERP software. A two-tier ERP can also be an ideal solution for newly acquired businesses that have their own technology environments and business processes. Another prototypical rationale is the ability to roll out modern software for corporate operations while retaining highly-customized legacy software for back-end operations.

While employing different ERP systems may appear more complex, this approach offers valuable distinct strategic advantages:

1. The front-end, tier-two systems can be lightweight, user-friendly, and tuned to allow for streamlined use by employees in their day-to-day tasks.
2. The back-end, tier-one system can leverage the process data generated by the front-end systems for more complex, specialized workflows. Common examples include consolidating finances, invoicing sales orders, business reporting, and performing executive-level functions.
3. The ability to modify back-end systems without customizing a monolithic ERP architecture provides added flexibility, agility, and adaptability while enabling geographic autonomy (crucial for meeting local needs like currency, language, taxation, etc.).
4. ERP software aligned to specific business unit needs can help improve efficiency, while a modern UI helps improve productivity at the regional level.
5. Separate back-end solutions make it easier to store and process sensitive data in a secure environment.

Some companies may see a two-tier ERP approach as an expensive option that is only economical for large multinational enterprises with sprawling divisions and diverse functional requirements. But costs are coming down for virtually all of the critical ingredients of a two-tier ERP approach, including license fees and integration costs. In this context, this strategy is a cost-effective option for many more companies than in the past, including many medium-sized companies. **In fact, it can even be the most cost-effective solution for many businesses today, as it avoids spending on overkill functionality.** While a two-tier ERP approach is more accessible than ever, it does have its downsides.

Cons of a Two-Tier ERP Approach

1. Some IT organizations demand unified control at the corporate level. If this is the case, a two-tier ERP is not viable.
2. A two-tier approach introduces new integration requirements, which can be technologically challenging. However, the tools available today make this work dramatically easier and less expensive.
3. Master data management practices are required to eliminate data inconsistencies and redundancies.
4. The central IT department may no longer oversee training for each tier-two ERP, which may add to organizational complexity.
5. The need to manage relationships with multiple software vendors.

Which ERP Deployment Strategy is Right for your organization?

Both of these approaches can be viable, and the right solution will depend on your organizational needs. A tier-one approach has been proven for decades, while PSGi's own experience confirms how valuable a tier-two strategy can be in some representative business situations.

One client, a multinational dairy producer, uses SAP for all of their European offices (including core corporate functions), while their American offices use PRISM. PRISM may be localized for US-specific business needs but is fully integrated with data in the SAP system in Europe. Another client, a large adhesives manufacturer, uses double-byte SAP ERP to address their Japanese subsidiary's language requirement while using a single-byte solution for the rest of their global organization.

For a deeper discussion of this topic, including key questions to ask when evaluating the right path for your business issues discussed above, watch our webinar here.

Or, if you need help deciding which ERP deployment strategy is right for your organization, we encourage you to reach out to our team.

Starting Your Digital Transformation in the Food and Beverage Industry With Purpose-Built Software

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A recent study revealed that 42% of food and beverage companies are concerned with surging inflation rates and higher material prices. The solution to these challenges: **automation.** *Those who embraced automation saw a whopping 20% higher growth rate compared to companies still using manual, paper-based processes.*

Indeed, the food and beverage industry is in the midst of an urgent and imperative digital transformation with 48% of companies gearing up to automate more processes in 2024 per the same study. To achieve the best results on your journey to digital transformation and automation, you'll need industry-specific software solutions designed for your challenges and developed by professionals with in-depth market knowledge.

In this blog, we'll talk about how the manufacturing trifecta—enterprise resource planning (ERP), enterprise asset management (EAM) and overall equipment effectiveness (OEE) software—can accelerate the growth of your operations. We'll also highlight the remarkable synergies you can unlock by integrating these solutions and forming a cohesive tech stack from a trusted provider.

Seamless Integration of Food and Beverage Manufacturing Software

ERP, EAM and OEE are complementary systems that can work together to provide a holistic and integrated approach to your food and beverage manufacturing operations. By integrating these solutions, you can leverage the data and insights from each solution to improve your decision making, planning and execution.

The main benefit of integrating ERP, EAM and OEE is achieving comprehensive operational excellence. Together, these solutions can produce real-time insights into resources, assets and performance to drive success. Such an integration can help position your business at the forefront of Industry 4.0, ultimately accelerating your

growth in the ever-evolving food and beverage landscape.

Now, let's take a closer look at each system to understand how they work for your manufacturing operations.

Drive Operational Excellence With Food ERP

Dedicated food ERP software is the ideal starting point for your digital transformation as it offers features for various business functions and serves as a unified, organization-wide platform. An industry-specific ERP solution can help streamline your operations and promotes automation by integrating diverse business processes whether your company manufactures or distributes food and beverage products.

The software also fosters better collaboration and communication between departments, acting as a "single source of truth" for your entire company by providing accurate and consistent data. What's more, an advanced ERP—like Aptean Food & Beverage ERP—can generate real-time metrics with integrated Business Intelligence (BI) features, enabling you to leverage the actionable insights they offer.

Deploying food manufacturing ERP software in your operation can unlock robust functionalities, including:

- *Recipe and Formulation Management* — Configure your recipes and formulas with precision to promote consistency and customer satisfaction.

- *Bi-Directional Traceability* — Maintain visibility at every stage of the supply chain and review granular data down to the item level.

- *Inventory Management* — Keep close tabs on your inventory to maintain optimal levels and ensure production needs are met.

- Data-Driven *Demand Forecasting* — Create reliable projections of demand based on historical sales data to better align supplies.

- *Quality Control* — Promote consistent quality checks at various supply chain stages to meet the expectations of today's demanding shoppers.

Customer Spotlight: Pizza Joe's
Pizza Joe's recently deployed Aptean Food & Beverage ERP via the cloud. Now, the Pennsylvania-based business can leverage a fully modernized ERP solution to move beyond the limitations of an outdated, generic ERP system that lacked essential capabilities. Plus, the solution gives the company high data accessibility and comprehensive inventory management features.

> "I've heard from our team members that their work is so much easier than it used to be and that's just great to hear. Sometimes change can be terrifying, but if you do it for the right reasons, there's usually a good result."
>
> *Jerry Dugan_Controller, Pizza Joe's*

Improve Asset Performance With EAM

As another step in your digital transformation journey, EAM software helps companies like yours maintain capital equipment and other assets—giving you full visibility into machinery performance and helping to extend expected lifespan with proactive maintenance management. The real-time, advanced analytics the solution provides facilitate strategic decision-making, help keep downtime at a minimum and reduce the risk of sudden production stops.

A food and beverage EAM platform is a flexible and scalable maintenance management solution—boosting profitability by enhancing asset reliability while streamlining maintenance processes.

Food operations using enterprise asset management software will take advantage of the following:

- *Preventative Maintenance* — Implement preventative maintenance programs to help extend the lifespan of equipment, reduce downtime and avoid costly breakdowns.

- *Effective Work Order Management* — Centralize the work order process and automate steps to manage them effectively.

- *Asset Tracking* — Monitor asset performance and maintenance histories to inform your strategy and maximize uptime.

Customer Spotlight: CoreFX
CoreFX embraced the future with Aptean EAM, ditching old spreadsheets and boosting machine performance. This switch not only reduced costs but also cut

downtime. Plus, the easy-to-use system improves maintenance scheduling, giving staff the power to do more—especially during busy seasons, preventive maintenance tasks and compliance checks.

> "Assigning projects to the staff is a lot easier. It's simple for me to get the technicians the jobs that they need to do and it's a lot easier for supervisors and quality techs to get an issue in front of me."
>
> *Clayton Goeke_ Maintenance Manager, CoreFX Ingredients*

Achieve Continuous Improvement With OEE

As a metric, OEE takes into account availability, performance and quality to *calculate a critical performance metric*, allowing you to understand the overall state of your production processes. As a system, OEE helps you glean insight into where improvements can be made—boosting productivity, reducing waste and ultimately elevating your manufacturing operations.

In food and beverage manufacturing, *OEE software* serves as the compass guiding plant, production and shop floor managers; the ideal approach for *continuous improvement* to drive impactful change with optimized programs and results analysis.

Organizations that implement OEE systems can enjoy the following features:

- *Real-Time Performance Tracking* — Maintain full visibility into performance and pinpoint the causes of bottlenecks quickly.

- *Yield and Loss Monitoring* — Leverage user-friendly tools that show real-time production status.

- *Labor, Changeover and Sanitation Tracking* — Measure all aspects of production by having helpful data on work hours, cleaning durations and changeovers.

Customer Spotlight: Monogram Foods

Monogram Foods has gone paperless and is now enjoying a fully digital interface that helps the business streamline operations and reduce downtime by deploying Aptean Process Manufacturing OEE. The company has achieved enhanced accuracy by eliminating the risk of manual errors in logging figures and readings. Implementing this solution ensures precise data recording and provides full visibility into key metrics—empowering their teams with real-time updates on operational performance, allowing them to promptly assess how operations are running and the remarkable results they are achieving.

> "All in all, we've had a significant uptick in overall equipment effectiveness at all of the plants where we've installed *Aptean OEE*. We've seen a rise of 10 points in OEE and those in the food industry running high-volume lines will recognize that's a big number."
>
> *Rod Hodgetts_ Director of Operational Technology, Monogram*

Kickstart Your Digital Transformation With Aptean's Integrated Digital Ecosystem

Aptean's food and beverage manufacturing software trifecta—ERP, EAM and OEE—is a gamechanger for our customers. Existing as an integrated digital ecosystem, our software solutions empower better resource management, greater asset reliability and increased operational efficiency and automation.

In addition, our team of experts possess collective decades of experience in the *food and beverage industry* so they're aware of the real-world challenges you face and can provide invaluable best-practice advice. Our *cloud-based solutions* also offer advanced data security and operational agility with no expensive hardware purchases or additional data center expenses.

Acumatica
The Cloud ERP

Navigating the Remote Work Revolution: A Conversation with Sanket Akerkar

The global workforce has undergone a profound transformation, with remote work emerging as the new standard. To delve into the intricacies of this remote work revolution, we had the privilege of sitting down with Sanket Akerkar, the Chief Revenue Officer of Acumatica, a leading cloud-based ERP software provider. In this enlightening interview, Sanket shares his valuable insights into how organizations are adapting, thriving, and evolving in the age of remote work. With an extensive background in technology and a keen understanding of the changing dynamics in today's business landscape, Sanket offers a compelling perspective on the challenges and opportunities brought about by the remote work economy. Join us as we explore the strategies, tools, and innovative approaches that are shaping the future of work in this exclusive interview.

1. Could you tell ERP News readers about yourself and your role at Acumatica?

Answer: As Acumatica's chief revenue officer, I oversee all revenue-generating aspects of Acumatica's business, including growth strategies, customer generation, and retention. I have over 20 years of industry experience, and I lead Acumatica's worldwide sales, business development, customer success, technical enablement, and business relationships with partners and resellers.

Interview with Sanket Akerkar Chief Revenue Officer, Acumatica

Acumatica
The Cloud ERP

Modern business management solutions help organizations keep pace with the evolving workforce environment by integrating remote and hybrid workers into their operations while maintaining productivity and compliance. Once the technology is incorporated and remote workers are onboard, team leaders must communicate remote work policies, including work hours, communication expectations, data protection, and more.

4. Could you give examples of how business management solutions can help companies navigate staffing and manage their full-time and contract-based employees?

Answer: Business management solutions are pivotal in staffing and managing a diverse workforce. For instance, these solutions can integrate with talent marketplaces and job boards, allowing businesses to access a broader talent pool for full-time and contract-based positions. Business management systems also streamline onboarding processes by offering tools that get remote workers up to speed on company processes, project statuses, and team member expectations. These features ultimately save time for HR teams and ensure a smooth transition for new hires.

Additionally, these solutions provide performance monitoring tools, enabling companies to set goals, track progress, and provide feedback to remote workers. Collaboration features such as shared workspaces and project management tools foster teamwork among distributed teams, and payment processing capabilities streamline payroll for freelancers. Finally, compliance and reporting functionalities help businesses comply with labor laws and regulations, which is particularly

important when managing remote teams across areas with different legal requirements.

5. What management strategies have you found successful in a remote environment?

Answer: Modern technologies are key to successful management strategies in a remote environment. For example, ERP systems provide a foundation for effective remote management by offering real-time visibility into various aspects of business operations. By leveraging the data in an ERP solution, I've found that our customers gain comprehensive insights into performance metrics, project progress, and employee productivity. They are also more easily able to communicate and collaborate with dispersed team members and track progress. Key features I personally rely on are real-time chatting, document sharing, task assignment, and resource allocation modules.

Remote work environments require a digital backbone that enables managers to maintain visibility, foster collaboration, monitor performance, and make informed decisions despite physical distance. These capabilities not only support business success but also contribute to the productivity of remote teams and the achievement of organizational goals.

6. How does Acumatica help customers create a strategy for remote working solutions and shift this new challenge to their advantage?

Answer: Acumatica empowers businesses to develop a comprehensive strategy for remote working models in several ways. Our cloud ERP software offers features that enhance talent management and workforce efficiency by

centralizing talent data, including profiles, skills, qualifications, and availability. It also seamlessly integrates with other resources, such as talent marketplaces and job boards, widening labor pools for identifying top-tier talent.

Additionally, Acumatica supports skills development for freelancers through training modules and assessments while enabling performance monitoring with goal setting, progress measurement, and feedback mechanisms. The solution's availability anytime, anywhere, and from any device and its ability to capture real-time data on suppliers, partners, customers, and products offer unparalleled insight into performance and team productivity. Acumatica's model doesn't charge additional fees to add users, simplifying freelance and remote workers' access to the system. Streamlined compliance and reporting also ensure companies' cooperation with labor laws and regulations, considering geographically dispersed staff.

About Sanket Akerkar

Sanket has 20 years of leadership experience in the software industry. Most recently, he was the SVP of Fleet and Insurance at Nauto where he led their global sales, marketing and services functions. Before Nauto, he spent 14 years at Microsoft in multiple senior leadership positions including VP Global Enterprise, Chief Evangelist of the United States and Managing Director of Microsoft India. Sanket started his career at McKinsey & Co.

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2. Remote work was born during the pandemic, but this trend, borne of the necessity for public health, has become a fixture of the global job market. How do you think remote working affects the global economy? And local economies?

Answer: Initially driven by the pandemic, the shift to remote work has become a permanent feature of the global job market and employee lifestyle. This transformation has significant implications for both the global and local economies. On a worldwide scale, remote work provides a more diverse and accessible job market, allowing companies to tap into broader talent pools from around the world. This shift can increase innovation and efficiency and cut costs on in-person work infrastructure, such as office space and supplies.

The impact this shift has on local economies is a bit more complex. On the one hand, fewer employees coming into the office impacts associated businesses such as restaurants, markets,

and food trucks, which rely on these commuters for their steady customer base. These businesses will need to be more agile to adapt to this new reality. On the other hand, a flexible workforce with remote workers gives all companies access to talent that is not limited by geography, making these companies more viable. The increased reliance on remote workers also provides

> "The first step of this transition is to identify and incorporate modern technology and remote work infrastructure that provides end-to-end support for securing and managing remote workers."

local economies with the needed flexibility to better adapt to changing economic conditions or unexpected crises, such as pandemics or natural disasters, which can help maintain economic stability.

3. In this new era of remote working, organizations must manage and leverage a flexible workforce effectively, but the real challenge is that they do not have the know-how. How can organizations better incorporate remote and hybrid workers into their organization?

Answer: Effectively incorporating remote and hybrid workers is challenging but necessary in today's business landscape. This process requires a strategic approach from business leaders enabled by modern technology and clear communication of remote work policies.

The first step of this transition is to identify and incorporate modern technology and remote work infrastructure that provides end-to-end support for securing and managing remote workers.

3 EV Battery Trends that will Drive a Green Future

The global automotive industry stands at the crossroads of transformation, with electric vehicles (EVs) emerging as the bedrock of a sustainable future. Central to this paradigm shift is the remarkable evolution of EV batteries, which are undergoing unprecedented developments. As the industry surges forward, three pivotal trends come to the forefront: revolutionary strides in battery technology, the intricate geopolitical landscape's influence on production, and the dynamic interplay between established automakers, startups and governmental initiatives across the globe.

Battery Technology Breakthroughs

The relentless pursuit of enhanced battery energy density and sustainability serves as the catalyst behind the ongoing innovations in EV battery technology. Among the most notable achievements is the progress in lithium-ion battery chemistry. Researchers worldwide are tirelessly exploring next-generation cathode and anode materials that promise heightened energy density, extended cycle life and improved safety.

Solid-state batteries, often dubbed the "holy grail" of battery technology and always five years out, are making remarkable strides. These batteries leverage solid electrolytes instead of liquid ones, eliminating flammable components and elevating energy density. Visionaries such as QuantumScape and Toyota are investing substantial resources in solid-state battery research, striving to surmount technical challenges and usher in this transformative technology.

Article by
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QAD

The pursuit of sustainability takes center stage as concerns about the environmental impact of battery production and disposal mount. Cobalt, a crucial battery component, is primarily sourced from politically unstable regions. Consequently, companies are racing to develop cobalt-free and low-cobalt battery chemistries, ensuring a more secure supply chain and reducing ecological footprints.

Geopolitical Landscape and the Global Electric Shift

The evolving geopolitical landscape, spanning the globe, is profoundly shaping the trajectory of the EV battery industry. In Asia, China's ascendancy as an EV battery production powerhouse has been monumental. Its robust manufacturing capabilities, governmental backing, and aggressive investments in EV infrastructure have catapulted it to the vanguard of the global EV movement. China's dominance spans the entire lithium-ion battery supply chain, from raw materials to cell production.

This geopolitical significance also extends to Europe, where countries are fostering localized battery production to lessen dependence on Asian imports. The European Union's focus on the European Battery Alliance highlights the continent's dedication to establishing a competitive battery manufacturing ecosystem. Collaborations between automakers and battery manufacturers also exemplifies this concerted effort to secure a reliable battery supply chain within Europe's borders.

In the US, EV enthusiasm has been underway, bolstered by governmental commitments to decarbonization. The Biden administration's push for EV adoption includes incentives for battery manufacturing, research, and development. Notably, the US is investing in domestic production to reduce reliance on foreign suppliers, mirroring efforts seen in Europe.

Automaker Dynamics: Established Giants and Agile Upstarts

The transformation of the EV landscape hinges on the symbiotic relationship between traditional automobile giants and nimble startups around the world. Established players like Tesla, General Motors, and Volkswagen are steering the EV revolution, leveraging their resources and existing infrastructure to expedite the transition. These industry stalwarts have already poured resources into research, manufacturing capacity and charging networks to propel EV adoption, but they are struggling with failing customer demand for EV to offset their changeover costs.

Simultaneously, startups are rewriting the automotive narrative with fresh perspectives and disruptive innovations. Companies like Rivian, Lucid Motors, and NIO are challenging conventions across vehicle design and business models. Startups, unencumbered by legacy systems, are pioneering concepts like battery swapping and comprehensive ecosystem integration, adding a new layer of dynamism to the market.

This collaborative dynamic between established giants and startups fuels healthy competition, propelling the evolution of EV technology. As traditional automakers adapt and reimagine strategies, startups must demonstrate long-term viability and scalability to establish global prominence. This convergence of approaches not only spurs innovation but also diversifies the market, offering consumers an array of EV options tailored to diverse preferences.

> "Established players like Tesla, General Motors, and Volkswagen are steering the EV revolution, leveraging their resources and existing infrastructure to expedite the transition. These industry stalwarts have already poured resources into research, manufacturing capacity and charging networks to propel EV adoption, but they are struggling with failing customer demand for EV to offset their changeover costs."

Looking to the Future

EV batteries represent the linchpin in the automotive industry's march toward a greener, more sustainable future. The landscape is evolving on a global scale, with breakthroughs in battery technology, geopolitical dynamics, and the interplay between established automakers and agile startups reshaping the industry's trajectory. These interconnected

trends paint a complex tapestry of influences that are redefining mobility and shaping the world we inhabit.

In the journey toward widespread EV adoption, collaborative efforts and innovation are paramount. Governments, corporations, and research institutions must come together to address environmental concerns, secure supply chains, and drive battery technology forward. Striking a balance between economic interests, technological progress, and global stability is pivotal.

The EV battery revolution transcends vehicular transportation; it symbolizes a broader shift toward a more sustainable, interconnected world. By embracing these trends and forging a united front, we can harness the potential of EV batteries to drive transformative change on a global scale. The legacy we leave behind will be one of cleaner air, reduced carbon emissions and a resilient future for generations to come.

10 Ways ESM Can Supercharge HR

Enterprise Service Management, for the uninitiated, is not a superhero with a cape, but it sure can work wonders in the world of Human Resources. In this blog, we're diving headfirst into the world of ESM and its transformative prowess in supercharging HR.

Why should HR teams care?
When ESM takes center stage, HR processes become not just better but spectacularly efficient, user-friendly, and data-driven.
So, what are the ways ESM can transform HR processes?

1. Standardizes processes and brings harmony to HR operations

In the wild, unpredictable world of HR, where each day can feel like a new adventure, there's a need for a compass that points toward consistency.

ESM's superpower is standardization. It's about making sure HR processes, from recruitment to onboarding and performance evaluations, follow the same best practices every time.
Imagine a world where every employee knows exactly what to expect when they join, how performance reviews will be conducted, and how to request time off. ESM streamlines these processes, ensuring they're consistent, repeatable, and aligned with industry standards.

2. Empowers employees with choice with an HR service catalog and self-service

In the HR universe, every employee has unique needs. From leave requests to benefits enrollment and performance appraisals, the HR journey can feel like a maze.

ESM often includes the creation of service catalogs, where HR can define and publish its services. It's akin to a restaurant menu, where employees can pick and choose what they need with ease.
Imagine an employee, Sarah, who needs to request a few days off for a well-deserved vacation. In the past, this might involve hunting down HR personnel and paperwork. But with ESM, Sarah simply logs into her employee portal, clicks 'Request Time Off' in the service catalog, and it's done.

ESM empowers employees to take control of their HR needs, while also reducing the workload on HR teams. It's a win-win that transforms HR from a service provider to an enabler of employee success.

3. Simplifies service fulfillment through automated workflow management

HR processes are often intricate dances of tasks, like employee onboarding, performance reviews, and leave approvals. In the past, these processes resembled a carefully choreographed ballet, but with some missed steps and wobbles.

ESM turns this ballet into a symphony. By automating HR workflows, ESM eliminates the need for manual interventions, reducing the risk of errors.

Imagine a new hire joining the company. With ESM, HR receives a notification when their paperwork is complete. This triggers a series of tasks: setting up their workstation, adding them to payroll, scheduling orientation—everything happens seamlessly, ensuring a flawless first impression.

ESM doesn't just make HR efficient; it makes it consistent. With every step following the same best practices, HR becomes a well-oiled machine, able to juggle multiple tasks without breaking a sweat.

4. Facilitates easier management of HR-related incidents and requests

In the vast ocean of HR, incidents and requests can crop up like unexpected storms. Employees may have grievances, questions about benefits, or IT-related issues. In the past, these concerns might have drifted aimlessly in the sea of emails.

ESM platforms like IFS assyst are equipped with _incident_ and request management capabilities, ensuring that no concern goes unnoticed. Employees can submit their queries or issues through the

portal, and from there, HR takes over with precision. The system tracks each case, ensuring timely resolution and clear communication between HR and the employee. It boosts employee satisfaction while helping HR maintain control over its responsibilities.

ESM ensures that HR is always on top of its game, handling incidents and requests efficiently and ensuring that no concern falls through the cracks.

5. Helps illuminate the path to informed HR decisions with knowledge management

Employees frequently seek answers regarding company policies, procedures, and benefits, and HR teams must provide precise information promptly. This is where

the enchanting power of Enterprise Service Management (ESM) comes into play.

ESM solutions often incorporate _knowledge management_ systems, acting as the repository of HR wisdom. ESM ensures that this crucial knowledge isn't locked away but shines as a beacon.

Imagine an employee, whom we'll call Lisa, pondering the company's remote work policy. With ESM's knowledge management system, Lisa doesn't need to embark on an epic quest for answers. Instead, she simply navigates to the portal, where a treasure trove of HR knowledge awaits her.

This isn't just a glorified FAQ page; it's a dynamic library. HR teams can regularly update and refine HR-related documentation, policies, and procedures, ensuring they're current and accessible. ESM transforms HR into an information powerhouse, empowering employees to make informed decisions effortlessly.

6. Encourages seamless integration with other departments

In the complex ecosystem of modern organizations, different departments need to work together harmoniously. ESM encourages this collaboration, creating a symphony of efficiency where HR dances seamlessly with IT, Facilities, Finance, and more.

Imagine a scenario where an employee needs a new computer setup. With ESM's integration capabilities, HR communicates effortlessly with IT. The result? A perfectly orchestrated performance where HR initiates the request, IT swiftly provides the necessary equipment, and Facilities ensures the workspace is ready, all in a seamless choreography.

ESM streamlines interdepartmental communication, reduces bottlenecks, and ensures everyone is on the same page.

7. Promotes HR excellence through Service Level Agreements (SLAs) and reporting

Employees expect timely, high-quality service, and ESM helps HR deliver by setting clear expectations through Service Level Agreements (SLAs).

ESM tools enable HR to define SLAs for its services, outlining response and resolution times. These aren't just arbitrary numbers but carefully considered commitments to quality. But ESM doesn't stop at making promises; it also helps HR teams keep them. By tracking and monitoring SLAs, HR can ensure they meet their service quality targets. If there are deviations, ESM provides insights to improve processes.

This isn't just about better service; it's about holding HR accountable and continuously striving for excellence. ESM transforms HR into a data-driven powerhouse, where decisions are backed by facts, and performance is measured against benchmarks.

8. Unleashes HR through mobile accessibility

In the dynamic landscape of the modern workplace, the ability to access HR services on the go is no longer a luxury—it's a necessity. Enter mobile accessibility, a key element in the arsenal of Enterprise Service Management (ESM), designed to supercharge HR's responsiveness.

With ESM, HR processes aren't confined to the office desk or the desktop computer; they're unleashed into the mobile world.

Mobile accessibility ensures that HR services are at employees' fingertips 24/7, fostering flexibility and responsiveness. It's a game-changer for HR teams, too, allowing them to manage requests and inquiries swiftly, whether they're in the office or on the move.

9. Helps HR evolve through feedback and continuous improvement features

The world of HR is not static; it's a living, evolving ecosystem where feedback is the currency of growth. ESM makes collecting and acting on this feedback a breeze.

Imagine an HR service that occasionally misses the mark, leading to employee frustration. With ESM's feedback mechanisms, employees can voice their concerns and suggestions directly. HR teams can analyze this feedback, identify pain points, and initiate improvements.

ESM transforms HR into a dynamic entity that adapts to employee needs and industry trends. It ensures that HR is always on the path of evolution, making it a vital force in the ever-changing world of work.

10. Protects HR's integrity with a compliance and audit trail

HR must be the guardian of integrity. ESM equips HR with the tools to not only ensure compliance but also provide a clear audit trail.
ESM ensures that HR processes are not only efficient but also compliant with industry regulations and internal policies.

Imagine an audit scenario where HR needs to provide evidence of compliance with data protection regulations. ESM's audit trail capabilities come to the rescue, providing a detailed record of every HR transaction, decision,

and communication. It's like having an indelible ink for HR operations, ensuring transparency and accountability.

It's not just about ticking boxes; it's about building a culture of trust and accountability. ESM ensures that HR processes are not only compliant today but also adaptable to future regulatory changes.

Supercharge your HR with IFS assyst

IFS assyst embodies the very essence of ESM, seamlessly integrating technology, processes, and people to supercharge HR in ways you never imagined.

Want to learn more? _Get in touch with us today._

Article from IFS

Cloud-Based Two-Tier ERP Strategy – "A Game Changer for Global M&A Industry"

Streamlining M&A Divestiture Scenarios using SAP's Two-Tier ERP Strategy

Introduction

In the world of mergers and acquisitions (M&A), managing the integration of disparate enterprise resource planning (ERP) systems is a major challenge. Companies often face the complexity of consolidating multiple ERP platforms, business processes, and data structures. To overcome these hurdles and drive operational efficiency, organizations are increasingly adopting a cloud-based two-tier ERP strategy. In this blog post, we will delve into the benefits of this approach in M&A transactions and explore its application in divestiture scenarios.

The Challenges of M&A Transactions

During an M&A transaction, combining the ERP systems of two organizations can be a daunting task. Each company might have its own ERP system, customized processes, and data structures, making integration complicated and time-consuming. Additionally, divestiture scenarios pose unique challenges, as companies need to separate specific business units or divisions swiftly and seamlessly.

Two-Tier ERP Strategy: Enhancing Operational Efficiency

The two-tier ERP strategy is a popular approach to address the challenges of M&A transactions. This strategy involves implementing a second ERP system to manage specific business units or divisions while maintaining the existing core ERP system. By adopting this approach, organizations can achieve better integration, scalability, and flexibility. The parent company can consolidate and centralize core functions, while subsidiaries or business units retain autonomy and agility.

Benefits of Two-Tier ERP Strategy in Divestiture Scenarios

Divestiture scenarios require rapid and efficient separation of business units. A cloud-based two-tier ERP strategy offers several advantages in these situations:

1. Speed and Agility: Cloud-based ERP systems enable faster deployment, ensuring a smooth transition during divestiture. The flexibility of cloud platforms allows for the rapid scaling up or down of resources, ensuring that the separated business unit can operate seamlessly.
2. Cost Efficiency: By leveraging cloud-based ERP systems, companies can reduce infrastructure costs associated with setting up separate on-premises solutions for divested units. Cloud-based solutions offer a pay-as-you-go model, eliminating the need for upfront investments in hardware and maintenance.
3. Data Integrity and Security: Maintaining data integrity during divestiture is crucial. With a two-tier ERP strategy, organizations can ensure that data remains secure and isolated for each business unit, reducing the risk of data breaches or unauthorized access.
4. Streamlined Processes: The two-tier ERP strategy facilitates the separation of business processes, allowing divested units to have their own dedicated ERP system that aligns with their specific needs. This streamlining leads to enhanced operational efficiency and agility.
5. Centralized Governance: While divested units gain autonomy, the parent company can still maintain centralized governance and oversight over critical functions, such as financial reporting, compliance, and regulatory requirements. This enables better control and alignment with corporate strategies.

Conclusion

In the realm of M&A transactions, a cloud-based two-tier ERP strategy offers significant advantages in streamlining integration challenges and facilitating divestiture scenarios. This approach provides organizations with the flexibility, scalability, and cost efficiency necessary to manage the complexity of multiple ERP systems. With a two-tier ERP strategy, companies can ensure smooth operations during divestiture, enabling each business unit to function autonomously while maintaining centralized governance. By embracing this approach, organizations can drive operational efficiency, optimize processes, and achieve successful M&A transactions.

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.

Article from SAP

rootstock®
MANUFACTURING ERP

Best Practices for Developing a Two-Tier ERP Consolidation Strategy

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Does your three-letter acronym for enterprise resource planning, or ERP, end with an "s"? If so, you're a manufacturer on track to right-size those ERPs with an ERP consolidation strategy or maybe even a two-tier ERP strategy.

Does your three-letter acronym for enterprise resource planning, or ERP, end with an "s"? If so, you're a manufacturer on track to right-size those ERPs with an ERP consolidation strategy or maybe even a two-tier ERP strategy.

As any manufacturing business grows, it's bound to open new facilities, expand to new regions, and bring on more and different technology systems. Mergers and acquisitions (M&A) are also a likely avenue to help a manufacturer expand, and those new subsidiaries or groups bring more technologies to the mix. At best, these multiple ERP systems create an IT headache and business friction. At worst, they create a nightmare for operations, finance, accounting, and other teams who must manually find, collect, reformat, and merge disparate data from disparate systems.

In either case, manufacturers must embark on an ERP consolidation strategy, not to literally consolidate to a single ERP system, but to reconcile the multiple systems—referred to as "two-tier ERP"—and develop a plan to ensure accurate data gets to the right people in near real-time. _Here's how to run your own two-tier ERP consolidation strategy._

What is ERP Consolidation?

As manufacturers grow organically and through M&A activity, each new addition often brings with it the fundamental IT system every manufacturer needs to run the business: ERP. And, while choosing to move every division, location, and subsidiary to a single, standardized ERP solution might be nirvana, the expense and time to implement a parent company's ERP may be more not be

worth it. The "juice is not worth the squeeze" as they say. The more realistic ERP consolidation strategy is a two-tiered approach where each entity uses the best ERP for their operations and the data all rolls up to a parent ERP and accounting system.

An ERP consolidation, or ERP integration, or ERP reconciliation, or whatever moniker you assign to your project, is the rationalization of the ERP systems in use across your manufacturing business. Selecting your top-tier and second-tier ERP systems, and determining which entities run which ERP, then defines how the data rolls up to the top-tier ERP solution.

Gartner takes this concept a double-click farther with a strategy known as "_Composable ERP._" Composable ERP breaks applications into "packaged business capabilities" (PBCs) and enables manufacturers to _create, modify, and extend their ERP system_ at the functional level — for greater resilience and agility — to dynamically configure functionality as changing needs demand. Composable ERP involves creating a network of applications, data, and solution providers which work seamlessly together to fit any business need.

ERP Integration vs. ERP Consolidation: Which is Right for Your Enterprise?

As mentioned above, a realistic ERP consolidation strategy involves integrating ERP systems as opposed to _replacing a legacy ERP system._ But a more modern approach is to eliminate some of your ERP vendors and _move to a cloud-based ERP as part of your ERP consolidation strategy_ to reduce costs, streamline operations, and natively integrate with the CRM, customer service, and other tools your business already relies on.

Integrating your ERP systems, which just means connecting different software applications together, is a common path for manufacturers. Integration enables you to transfer operational, financial, and other business data easily and automatically to a top-tier ERP system. This is a very common method manufacturers take to integrate data from divisions or entities that manage a distinct profit and loss centers (P&L), and it eases corporate-level compliance reporting, tax calculations, and more.

> "The more realistic ERP consolidation strategy is a two-tiered approach where each entity uses the best ERP for their operations and the data all rolls up to a parent ERP and accounting system."

But the goal of an ERP consolidation strategy for manufacturers should be more focused on minimizing complexity and creating a centralized system of record. In this case, the top-tier ERP system would be the corporate system of record with the second-tier ERP maintaining the operational system of record for individual transactions. Rarely would the parent need to drilldown into the day-to-day operations of a business unit, but the connection enables this such as in the case of an audit. The data is available, just in the secondary system.

For more information on ERP implementation for manufacturers, read _ERP Implementation Strategies_ and _The Four Elements of ERP Implementation Success Guide._

Does Your Enterprise Need an ERP Reconciliation Strategy?

At this point, you may be feeling a bit unsure about an ERP reconciliation strategy. There are five common questions to ask about your current ERP situation that will help you determine how to move forward.

● _Are the ERP systems performing the same functions?_
Redundant, overlapping ERP systems performing the same function is a likely opportunity for ERP consolidation. For example, having separate ERP systems is inefficient and contributes to higher IT costs. So, the logical choice is to eliminate one system and consolidate the business onto the preferred system going forward. The two business units can continue to operate autonomously, but the company can consolidate IT resources under a common eco-system.

● _Is manual data entry or double entry becoming an issue?_
Manual data entry is a magnet for human error. Likewise, double entry of information from paper-based recording activities into a spreadsheet and then transposed into an ERP system is inefficient, wastes time, and also invites human error. For example, _Northeast Lantern_ was managing all of its data in spreadsheets before implementing an ERP system. Its former manual maze of double entry not only took time, but it also left the data disconnected and prevented the company from seeing the details, such as how the sources of demand were connected at the part level. But the manufacturer selected Rootstock Cloud ERP to

give it visibility into its data and automate production processes that used to be performed manually.

Similarly, if you're relying on exporting and importing spreadsheets to move data between manufacturing ERP systems, linking multiple spreadsheets from different departments, or exporting data from multiple ERP systems to a central spreadsheet for reporting and analysis, you're wasting time, creating gaps in reporting, and once again inviting human error. In these scenarios, your reporting is only as accurate as the last upload.

Additionally, productivity tends to suffer if you're frequently moving data between disparate ERP systems and makes reporting capabilities weak. Executives won't trust the data and won't be confident in their decision-making. All it takes is one bad or ill-timed decision to justify the cost of better reporting and analytics.

Using the right ERP for the right level of the business solves these data entry issues.

● **Are ERP maintenance and support costs rising rapidly?**
While an ERP reconciliation strategy may uncover that you need to support and integrate multiple ERP systems, it is still a good idea to consolidate and *eliminate legacy ERP systems* as the costs to maintain and support them is not a good return on your investment and may continue to be a financial burden for quite some time. As indicated above, manufacturers can save time and money simply by having fewer ERP systems for IT to maintain or for teams to train workers to operate. But they may gain tremendous benefits in terms of additional functionality and streamlined business processes with modern cloud ERP that is updated and enhanced regularly.

If you suspect that your ERP system is costing you too much money, check out the free e-book, "*Is Your ERP a Financial Drain?*"

● **Is your enterprise experiencing rapid growth?**
Manufacturers experiencing rapid growth will likely benefit from ERP consolidation. For example, if your company has plans to grow and scale, then a cloud-based ERP with virtually infinite storage and compute capacity can help you maintain and accelerate that growth. Adding newly acquired businesses is significantly easier with cloud ERP than adding to a legacy, on-premise system. Implementation will take time and come with a cost, but the increased visibility into all areas of the company for all functional teams such as sales and field service makes up for the cost in fewer errors and greater productivity. The biggest benefit of reconciliation will be better decision-making through visibility into the entire business across each manufacturing site.

> "Any project needs goals and objectives plus some key people to ensure the project moves toward success, and an ERP consolidation is no different."

Developing an ERP Consolidation Strategy

If you've answered yes to one or more of the questions above, it's time to get started on your ERP consolidation strategy. Here are tips and tricks for taking a best practices approach to ERP consolidation and reconciliation.

1. Assess the Current State of Your ERP System
Create a map detailing the current state of the ERP systems across your manufacturing business. This may be as simple as organizing Post-It notes on a wall by tasks that different groups perform.

Then, look for areas of inefficiency and duplication across systems. Survey decision makers, clerks, administrative personnel, and others who not only work with the ERP systems but rely on data from the ERP systems. Ask where the ERP systems or data collection, reporting, and analysis tasks are adding friction to their processes. Confer with IT to understand how the ERP systems are integrated, what other systems they are integrated with, and the burden of maintaining the systems.

2. Evaluate Your Current IT Infrastructure
Working with IT, operations, and your current and potential ERP vendors to determine if any ERP system can be eliminated or consolidated. Also look for opportunities to move an entity to an ERP system that's currently in use by another division or facility. Cloud-based ERP systems make it easy to add new facilities and users while keeping all your data in a single cloud repository, thereby eliminating the need for fragile and risky integrations.

It's a good idea to understand IT's vision and approach to technology

as well. For example, if most of a company's mission-critical processes and data are hosted on one on-premises ERP system, IT is likely planning to modernize it by moving to the cloud. The pandemic also proved that manufacturers need systems to be in the cloud, easily accessible from anywhere at any time from mobile devices and be inherently robust.

Manufacturers that already have some data and systems, such as CRM, on a cloud platform like Salesforce can make the move very easily. Using *ERP built on the Salesforce Platform* automatically brings your critical demand, operations, and supply data into a common data model. Plus, it's relatively easy to move all data from an on-premises ERP to a new, cloud-based ERP.

3. Set Goals and Objectives, and Identify Key Stakeholders
Any project needs goals and objectives plus some key people to ensure the project moves toward success, and an ERP consolidation is no different. Considering the four critical elements of people, processes, data, and systems is a great foundation for an ERP reconciliation project. You'll need those elements in place to set realistic expectations and allocate the best resources at the right time, while still retaining flexibility.

People: The first critical element to consider is people, who are the drivers of your ERP reconciliation process. You need the right people with the right experience on your team from the start to help ensure a successful outcome.

Processes: Successful ERP reconciliation requires that you have a deep understanding of your current processes, which you mapped in step 1 above as you assessed the current state. Don't

approach this task with a "digitize our current processes" approach but look to the next generation of your business needs for inspiration. When you see what is working and what is not working, then can you decide where you need to improve.

Data: Data is the life's-blood of any manufacturer. But your data spread across multiple ERP systems and disconnected spreadsheets may be inaccurate, incomplete, or otherwise unreliable. Use your ERP reconciliation project to ensure your manufacturing data is always clean, reliable, and accessible.

Systems: Creating a system to support your business strategy is the crux of a two-tier ERP consolidation and reconciliation for manufacturers. You'll want to ensure that the new ERP infrastructure helps each division and facility operate at peak performance while leaders and decision-makers in both tiers of the business have easy access to current data to make confident decisions.

4. Develop a Timeline, Budget, and Go Live Date
Any ERP reconciliation will require a timeline, budget, and switchover or go-live date when new cloud-based ERP systems are deployed and integrations are switched on. A key advantage of a cloud ERP is the ability to configure and train without disrupting operations and only throw the "go-live switch" when you're ready. If you're rolling out a new ERP system, do your homework by evaluating multiple cloud ERP manufacturing software vendors. The vendors can also help you benchmark durations and estimated budgets required for similar projects.

5. Identify the Right ERP System for Your Enterprise
It's helpful to understand the pain points and challenges presented by your current ERP structure to start creating a wish-list for a new manufacturing ERP system as you embark on this ERP consolidation strategy. Look at how much your existing systems cost you in time, money, and even lost and frustrated customers.

If you're considering adding or moving to a cloud ERP solution, use this simple "*Basics of Evaluating Cloud ERP Software" guide* to understand the important factors to consider when making such a decision.

6. Plan for Data Migration and Cleansing
Before you move or integrate any data from existing ERP systems into your manufacturing operations, take the opportunity to clean your data. The adage of "garbage in, garbage out" could not apply more perfectly here. So, make a plan for deleting duplicate, inaccurate and untrustworthy data while *reconciling the right data into the new system.*

Article from Rootstock

Specifically for manufacturing operations and production, it's also critical to create a data map where terms can be defined and agreed upon. For example, an "item" in one ERP system may be a "part" in another ERP system. Or an "assembly of parts" might be sold as a single "item" that your sales team refers to as a "product" in their CRM system. The ramifications of inconsistent or mismatched terminology can cause massive challenges down the road, so take time now to understand how your manufacturing terminology is used now and will be used in the future.

Learn more about the importance of data cleansing in in the blog post "*Data Cleansing – A Most Important Step in ERP Implementations*" and in the data section of *this guide on successful ERP implementations.*

7. Fully Replace ERP and Conduct Extensive Testing
Before you go live on a new or two-tier ERP system, you'll want to test it. You may even run old and new systems side-by-side for a short period to quickly identify and resolve bugs, inconsistencies, or hiccups. Again, the benefit of a cloud solution is that it can be tested prior to being exposed to your production operation.

Once you're comfortable with the reconciled, two-tier ERP infrastructure, it's time to move everyone onto their new system and turn off the old systems.

8. Train Your Employees
The workers using your ERP systems will either be hesitant to change to a new system or wondering why you didn't do it sooner. Or both! But it's clear, especially with new, cloud-based ERP systems built for manufacturers, that employees will be delighted with a modern user interface that provides a familiar

web interface. If your new system is on a next generation platform like the Salesforce Platform, your users will enjoy a common user experience across all domains which makes "switching chairs" easier for the broader team. This makes training faster and easier, and improved user adoption and change management across your manufacturing operations.

Don't forget to tout the benefits this move will give your workers. They'll enjoy the native options for mobile accessibility that empowers them to do more, from anywhere, and with more confidence. Power users and newbies alike will enjoy the advantage of the *low-code ERP* tailoring that automates processes without getting into the underlying software code.

9. Establish Ongoing Maintenance, Monitoring, and Support
Be sure to talk with your ERP vendors about maintenance and support options, either from the ERP vendor or a third-party service. For example, Rootstock offers high quality, high touch support to ensure every customer's complete success. Learn more about *Rootstock Customer Success and Support.*

> "Specifically for manufacturing operations and production, it's also critical to create a data map where terms can be defined and agreed upon."

Sage launches Sage HR integration for Sage 50 to simplify SMBs' business processes

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New integration streamlines accounting, HR and Payroll processes to make work and data flow for customers

Sage, the leader in accounting, financial, HR and payroll technology for small and mid-sized businesses (SMBs), announce the launch of *Sage HR for Sage 50* in the U.S. and Canada. The industry-first solution delivers powerful integration between accounting, HR and payroll processes, allowing teams to be more agile and keep up with the demands of a modern workforce. The Sage HR integration is available exclusively to Sage 50 customers with a Payroll service plan.

Sage 50 is easily integrated with Sage HR and delivers helpful tools for employees to self-serve whenever and wherever they are through a mobile app. Businesses will be able to effortlessly connect data from various parts of the business to provide a holistic view across the organization while automating HR workflows, onboarding new hires and gaining valuable insights that drive smart people decisions.

"SMBs ability to grow and scale largely depends on their people," said Aziz Benmalek, Sage President, North America. "Responding to our customers' needs to help them attract and retain the right talent will help them make decisions that can grow their business.

Incorporating Sage HR with the inherent power of Sage 50 will enable SMBs with ease of automation, seamless employee experiences, and a better people management system overall."

Sage HR for Sage 50 allows businesses to benefit from:

- *Increased collaboration and efficiency* – Sage products that work together and deliver significant time and cost savings for accounting, payroll and HR teams.
- *Smarter people decisions* – Connecting data from multiple parts of the business to gain valuable HR insights that drive more impactful people decisions.
- *Increased agility* – Streamlining separate business processes to increase agility for HR teams to keep up with workforce changes as they come.
- *Engaging employee experiences* – Crafting customized employee experiences and empowering employee journeys with simple self-serve tools.

Sage HR for Sage 50 is now available to customers in the U.S. and Canada.

ERPNEWS

The Top Benefits of Having a Two-Tier ERP System

Enterprise Resource Planning (ERP) systems are integral to the functioning of modern businesses. They streamline processes, enhance decision-making, and improve overall efficiency. In recent years, the adoption of Two-Tier ERP systems has gained momentum. This article explores the key benefits of implementing a Two-Tier ERP system and why it's a compelling choice for many organizations.

What is a Two-Tier ERP System?

A Two-Tier ERP system involves the implementation of two separate ERP systems within an organization. The primary ERP system, often referred to as Tier 1, is responsible for managing core business functions like finance, human resources, and customer relationship management. The secondary ERP system, Tier 2, is a specialized solution tailored to address specific requirements, typically within the manufacturing and supply chain domains.

Top Benefits of a Two-Tier ERP System

1. Enhanced Focus on Business Goals
One of the primary advantages of a Two-Tier ERP system is its ability to provide a dedicated solution for manufacturing and supply chain operations. This specialization allows organizations to prioritize and fine-tune these critical areas to meet their specific business goals. With a Tier 2

system in place, companies can optimize manufacturing processes, reduce lead times, and enhance supply chain efficiency.

2. Improved Scalability
Two-Tier ERP systems are highly scalable, making them a great choice for organizations with diverse product lines, multiple locations, or those experiencing rapid growth. As businesses expand, they can easily add or adjust Tier 2 solutions to accommodate new manufacturing processes or supply chain requirements without disrupting the core ERP system.

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ERPNEWS

3. Streamlined Manufacturing Operations
Tier 2 ERP systems are designed to cater to the unique needs of manufacturing operations. They offer specialized tools and features for production scheduling, work order management, bill of materials (BOM), and quality control. This results in more efficient manufacturing processes, reduced production bottlenecks, and quicker order fulfillment.

4. Precise Inventory Management
Inventory management is a crucial aspect of supply chain efficiency. With a dedicated Tier 2 ERP system, businesses gain better visibility into inventory across multiple locations. This increased visibility enables accurate demand forecasting, optimized inventory levels, and efficient management of raw materials, ensuring products are readily available when needed.

5. Supplier Collaboration
Two-Tier ERP systems foster stronger collaboration with suppliers. Real-time data sharing and communication facilitate more effective procurement, reduced lead times, and an overall more efficient supply chain. Collaborative efforts with suppliers can result in cost savings and improved product quality.

> "The adoption of a Two-Tier ERP system offers organizations numerous benefits, allowing them to optimize their manufacturing and supply chain operations."

6. Compliance and Traceability
In industries with strict regulatory requirements, such as pharmaceuticals or aerospace, Tier 2 ERP systems excel at ensuring compliance and traceability. They offer features for tracking and tracing products throughout the entire production process, ensuring adherence to industry-specific regulations and standards.

7. Data Integration and Reporting
Two-Tier ERP systems can be integrated with the primary Tier 1 system, providing comprehensive data visibility. This integration allows for seamless data transfer and enables the creation of detailed reports. These reports offer valuable insights into the cost of goods sold (COGS), manufacturing lead times, supply chain performance, and more.

The adoption of a Two-Tier ERP system offers organizations numerous benefits, allowing them to optimize their manufacturing and supply chain operations. By utilizing a specialized system designed to meet the unique requirements of these critical functions, companies can experience enhanced focus on business goals, improved scalability, streamlined manufacturing operations, precise inventory management, better supplier collaboration, and compliance with industry regulations. While there may be challenges in terms of integration and cost, the potential advantages often outweigh the investment, making Two-Tier ERP a powerful tool for organizations aiming to excel in manufacturing and supply chain management.

ERPNEWS

Two-Tier ERP Strategies

The goal of "one size fits all" ERP has increasingly been found wanting for large, complex and diverse organisations. In fact, they're finding exactly the opposite – making a legacy system work across every element of an organisation isn't necessarily the best solution.

The idea of two-tier ERP means that legacy or Tier 1 (e.g., SAP or Oracle) solutions retain their role at the top or centre of the organisation's ERP landscape, but lower cost solutions are used to support local/regional or business unit specific requirements.

If you Google "two tier erp strategy" you'll find the top results are largely based on research done by R "Ray" Wang of the Constellation Research Group. The research lists the key drivers behind the recent growth in companies adopting two-tier ERP strategies, and highlights three scenarios where it makes sense to take this approach. The reasons all make perfect sense, but what does it mean in practice?

An e-book published by Epicor shows us some examples. Both of these examples utilise a hub-and-spoke strategy to deliver two-tier ERP.

Article By
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Managing Partner, Lumenia

lumenia
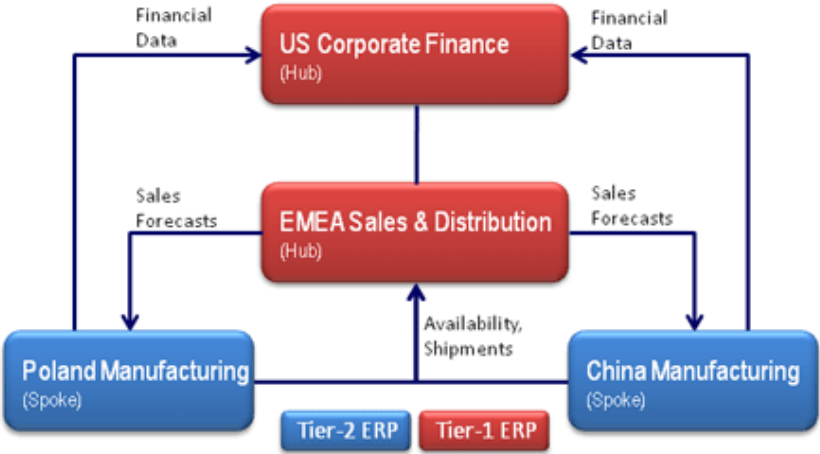
Scenario 1:
Legacy ERP continues to operate in US & EMEA, but new manufacturing plants use a different system (Source: Adapted from [2])

In Scenario 1, the US & EMEA continue to run corporate legacy ERP for Financials, Sales and Distribution. Originally there were manufacturing plants in the US and Western Europe, but manufacturing has been moved to Poland and China. The plants in Poland & China run a Tier-2 ERP specifically to meet their manufacturing requirements as well as local language and accounting needs. The integration points shown are indicative – the exact nature of the integration required will depend on business needs.
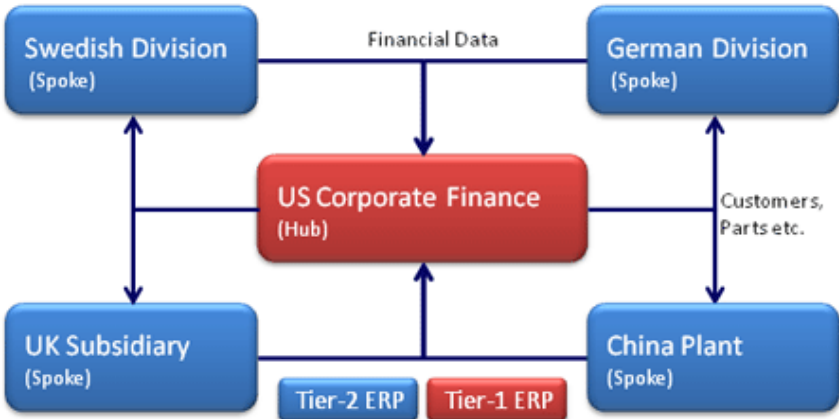
Scenario 2:
US parent runs corporate legacy ERP for Financials; all other sites use a different systems (Source: Adapted from [2])

In Scenario 2, the US parent organisation runs corporate legacy ERP for Financials. In order to support local accounting, manufacturing and distribution requirements local divisions and subsidiaries in Europe as well as a manufacturing plant in China run a Tier-2 ERP. This provides a level of agility in terms of adding new entities and dealing with changing business needs that the legacy system can't easily address. Clearly a robust and detailed selection process is necessary to identify a Tier-2 ERP solution capable of meeting a diverse set of business and technical requirements for a scenario like this.

Every organisation has its own unique situation, but in general the main drivers for two-tier ERP strategies can be distilled down to:

Cost Reduction: The cost of rolling out a Tier-1 system to all sites within an enterprise can be enormous, and the legacy system may not have the features required without upgrading. Tier-2 ERP, SaaS or industry-specific solutions can be deployed much more quickly and cheaply, and if you can devise a repeatable template so much the better! Savings can also be made in relation to ongoing maintenance and upgrade costs. Of course the cost of integrating the two ERP systems must be factored into the overall picture; the exact nature of the integration required will vary hugely depending on the business.

Servicing of local needs: The ability to service local industry-specific or geography-specific requirements or to deliver functionality that doesn't exist in the legacy system.
If your business is expanding, diversifying or acquiring new business units then the challenge of delivering systems to support the changing business environment can force an evaluation of your business systems strategies. Two-tier ERP strategies can be part of the answer.

About John Donagher

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.
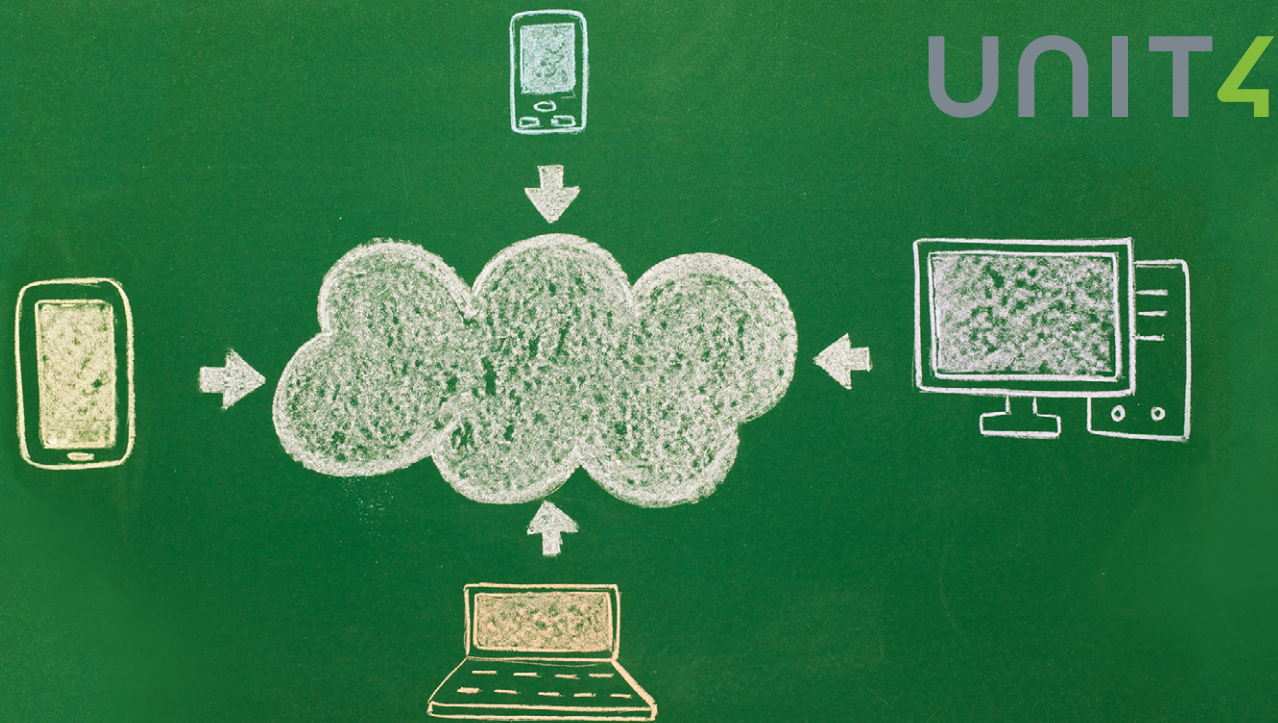
Cloudbusting! Busting some myths about Cloud!

Back in 1985 – almost 40 years ago - Kate Bush released a track, Cloudbusting, and via this blog, I'd like to bust some myths about Cloud too! It's hard to believe that it was almost 18 years ago when Amazon Web Services launched two market-busting 'cloud-based' solutions, swiftly followed by Google with Google Docs.These were the foundations of the original cloud computing services, and when the term was initially coined, so the Cloud is certainly not a new concept.

These were the foundations of the original cloud computing services, and when the term was initially coined, so the Cloud is certainly not a new concept.

Since then, technology has evolved at pace and the world is becoming more digital as both we and our customers are realizing the benefits of cloud migration. At Unit4, we continue to develop and deliver our solutions to produce the outcomes that today's forward-thinking organizations require, and the best way to do this - for both parties - is via the Cloud.

With Software as a Service (SaaS), we can help our mid-market customers to remain compliant, competitive, and efficient. As an industry-leading technology provider,

our next-generation solutions enable greater flexibility and agility, giving mid-market and service-oriented organizations a competitive advantage and helping to heighten both user and customer experiences.

However, this is not just our perspective - a raft of organizations, not just large enterprises, first started using SaaS more extensively around 10 years ago and as usage has grown so have the proven benefits.

Article By
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Chief Executive Office, Unit4

UNIT4

The cost of doing nothing

For any organization, there is natural trepidation when approaching digital transformation, and moving from legacy, and on-premises, systems to the Cloud is no exception. However, the benefits of the Cloud will outweigh the true cost of doing nothing and provide a modern solution to modern issues.

Organizational inefficiency is often characterized by outdated hardware and software which can not only hinder organizational resilience, productivity, and user experience but can lead to higher costs and less customer satisfaction.

For mid-market organizations, a perceived challenge to digital transformation is lacking the resources of larger competitors and, therefore, that cloud migration is a bigger undertaking. Many mid-market organizations have varying levels of IT maturity so may wrongly assume that cloud migration is more effort than it's worth.

However, collaborating with the right technology partner, which can do a full assessment of both current and future needs, will make the cloud migration journey far smoother.

The benefits of an integrated Cloud-based solution

A key benefit of the Cloud is automatic updates to your system, ensuring you are running on the latest versions, equipped with the most recent features and, critically, security measures. Flexibility, and the ability to scale up, or indeed down, to meet your organization's needs, is another positive.

Some fear that shedding on-premises servers can lead to less, or worse quality, maintenance. Again, the truth favors the Cloud – Remote access not only increases the availability of support but allows for 24/7 monitoring meaning that risk can be mitigated.

Support is further bolstered by the existence of customer support agreements, with clear service level agreements, to ensure system uptime and responsiveness. Remote support also frees up internal IT and tech teams to focus on more strategic work, since release management and patching are no longer required.

One myth is that digital transformation can require large financial resources, the truth is the opposite. Cloud migration negates costly hardware and infrastructure changes; the cost of hardware maintenance is high, while an ERP solution can grow, and pull back, as you do.

As growth is at the heart of business, having resilient operations that can adapt to growth, as well as decline, means that adaptation is swift. Realizing this growth with cost and time efficiency is a huge target for smaller organizations and a plus for larger organizations.

For our customers, we have also found that the ease of integration is another positive and they are able to easily exchange data and interoperability using Unit4 Industry Mesh. If such benefits were still not enough, the Cloud provides organizations a competitive advantage by offering the most innovative technology available, which continually evolves.

Hear from those already benefiting from cloud migration in our customer stories

Many of our customers – across multiple sectors - have already made the move to Cloud, either joining us to take advantage of the cloud solutions we offer or migrating from our on-premises ERP.

Speaking about the benefits, Mary Kent, Head of IT Programs at Magnox said, "Unit4 has been a great partner for many years and Unit4 ERP has delivered strong operational benefits. Moving to the cloud has made us even more streamlined and effective and has allowed us to take advantage of improving technology faster."

This sentiment was echoed by Helen Baker, ERP Support and Development Manager at Southampton City Council in the UK who found: "Unit4 is making the council smarter and more agile. By automating and streamlining processes in the cloud, as well as introducing self-service, Southampton City Council can direct more resources to front-line services."

Our customer stories allow you to hear the true benefits of cloud migration directly from our customers, so don't just take our word for it. There really is a cost to not taking action, so find out today why cloud migration with Unit4 can deliver on ROI and time efficiencies.

Learn more about your Cloud Migration journey with Unit4 on these pages for *Unit4 ERP*, *Unit4 Financials by Coda* and *Unit4 FP&A*, and start your *Cloud Migration assessment* today.

UNIT4

Optimizing Manufacturing & Supply Chain in Two-Tier ERP

Enterprise Resource Planning (ERP) systems are the backbone of modern businesses, helping manage various aspects of operations, from finance to human resources. In the context of manufacturing and supply chain management, Two-Tier ERP has emerged as a powerful solution for organizations looking to streamline and enhance their processes. This article explores the concept of Two-Tier ERP and its role in optimizing manufacturing and supply chain operations.

Understanding Two-Tier ERP

Two-Tier ERP is a strategic approach to ERP implementation where an organization utilizes two different ERP systems within its operations. The primary system, often referred to as Tier 1, is used to manage core business functions such as finance, human resources, and customer relationship management. In contrast, the secondary system, Tier 2, is focused specifically on manufacturing and supply chain processes.

Two-Tier ERP can be especially advantageous for organizations with complex operations, multiple locations, or diverse product lines. It offers the ability to achieve greater efficiency, cost reduction, and improved decision-making within the manufacturing and supply

chain domains. Here are some key aspects of how Two-Tier ERP enhances manufacturing and supply chain management:

1.Streamlined Manufacturing Operations
The Tier 2 ERP system is tailored to meet the unique requirements of manufacturing, offering specialized tools and features to optimize processes. These systems can effectively manage production scheduling, work orders,

Article By
Katie Slimov
Social Media Coordinator,
ERPNews

bill of materials (BOM), and quality control. As a result, manufacturing operations become more efficient, reducing lead times and minimizing production bottlenecks.

2. Improved Inventory Management
Effective supply chain management is critical for maintaining inventory levels and ensuring timely deliveries. With a dedicated Tier 2 ERP system, businesses can gain better visibility into inventory across multiple locations, thus enabling accurate demand forecasting and more precise inventory control.

3. Enhanced Supplier Collaboration
Two-Tier ERP facilitates better communication and collaboration with suppliers. Manufacturers can share real-time data with their suppliers, helping to improve procurement, reduce lead times, and ensure the timely availability of raw materials. This collaboration leads to a more efficient and cost-effective supply chain.

4. Compliance and Traceability
Regulatory compliance and traceability are crucial in manufacturing, especially in industries like pharmaceuticals and aerospace. Tier 2 ERP systems often offer features to track and trace products through the entire production process, ensuring compliance with industry-specific regulations and standards.

5. Data Integration and Reporting
Two-Tier ERP solutions can integrate with the primary Tier 1 system to provide comprehensive data visibility. This integration allows for seamless data transfer and enables the creation of detailed reports that help in making informed decisions. For instance, it can provide insights into the cost of goods sold (COGS), manufacturing lead times, and supply chain performance.

Challenges and Considerations

While Two-Tier ERP offers numerous benefits, it is not without its challenges. Organizations must carefully consider the following aspects when implementing a Two-Tier ERP strategy:

1. 1. Integration Complexity: Integrating Tier 2 with the primary ERP system can be complex, requiring careful planning and potentially custom development.

2. 2. Data Consistency: Ensuring data consistency between the two tiers is crucial. Inaccurate or inconsistent data can lead to errors and inefficiencies.

3. Cost: Implementing and maintaining two ERP systems can be costly. However, the potential cost savings in manufacturing and supply chain operations can often justify the investment.

4. Change Management: Employees need to adapt to a new system, which may require training and change management strategies.

Conclusion

Two-Tier ERP is a strategic approach that can significantly optimize manufacturing and supply chain operations. By leveraging a dedicated system designed to meet the specific needs of these functions, organizations can achieve greater efficiency, better inventory management, improved supplier collaboration, and enhanced compliance and traceability. However, successful implementation requires careful planning, integration, and data management. With the right strategy and execution, Two-Tier ERP can be a powerful tool for organizations aiming to excel in manufacturing and supply chain management.

About Katie Slimov
Experienced Social Media Coordinator with a demonstrated history of working in the marketing and advertising industry. Skilled in Search Engine Optimization (SEO), Business Process, Requirements Analysis, Enterprise Software, and E-commerce. Strong media and communication professional graduated from Bosphorus University.

2024 TRENDS

Aptean Unveils 2024 Manufacturing Trends for North America in New Report

Automation Leads to 30% Higher Revenue Growth in Face of Rising Costs and Supply Chain Disruption

Aptean, a global provider of mission-critical enterprise software solutions, announced the publication of its Discrete and Process Manufacturing 2024 Trends and Outlook for North America report. The research surveys process and discrete manufacturers in North America, from manufacturing industry subsegments that include manufacturers of electrical equipment, fabricated metals, industrial machinery, cosmetics, chemicals and pharmaceuticals. The report offers insights into how manufacturers' primary challenges are influencing emerging trends and affecting business growth trajectories.

Rising costs and supply chain disruptions are rated top concerns by over 50% of manufacturers surveyed. Automation of tasks and processes through digital transformation is emerging as a critical path to protect growth in the face of rising costs, and for those choosing to automate, the average rate of growth in 2022 was 30% higher than those relying on manual processes. Supply chain transformation was found to have a significant impact – the percent revenue growth gap between manufacturers that have digitized supply chain operations and those that have yet to do so more than doubled, from .7% greater revenue growth in 2021 to 1.6% greater

revenue growth in 2022. The study further found that cloud adoption by manufacturers has increased significantly in recent years – from 58% in 2022 to 70% in 2023. As businesses moved to the cloud, they also reported higher revenue and profit growth (2021-2022) and predict higher revenue and profit growth in the future (2022-2023).

The research was conducted by Aptean and B2B International in August 2023. Responses came from 200 business decision makers at manufacturing companies in North America within the process and discrete manufacturing sectors. The study also identified three key trends that will shape the manufacturing industry landscape in 2024 and these – along with the full research findings – are now available in a new report, *Discrete and Process Manufacturing 2024 Trends and Outlook for North America.*

"Automation of key manufacturing processes delivers a competitive advantage for manufacturers

struggling to combat rising costs and supply chain disruptions," said Bob Kocis, President, Americas at Aptean. "As the business environment becomes increasingly complex, the performance gap between manufacturers who have embraced digital transformation and cloud adoption and those who have not will continue to grow."

In addition to the impact of digital transformation, the research explored:

- How early adopters of artificial intelligence (AI) are already seeing positive impact on revenue and profits

- Why commercial goals to drive efficiencies are also driving sustainability programs

- What steps manufacturers are taking to leverage data as a tool to keep up with consumer preferences

Copies of the Aptean *Discrete and Process Manufacturing 2024 Trends and Outlook for North America* are now available for download.

About Aptean

Aptean is one of the world's leading providers of purpose-built, industry-specific software that helps manufacturers and distributors effectively run and grow their businesses. With both cloud and on-premise deployment options, Aptean's products, services and unmatched expertise help businesses of all sizes to be Ready for What's Next, Now®. Aptean is headquartered in Alpharetta, Georgia and has offices in North America, Europe and Asia-Pacific. To learn more about Aptean and the markets we serve, visit www.aptean.com.

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Press Release from Aptean

Acumatica
The Cloud ERP

Acumatica Upgrades Business Functionality Across Industries with Launch of Latest Product Update

Acumatica Payments and Vital Customer-driven Features Highlight Cloud ERP Capabilities of Acumatica 2023 R2

Acumatica, an industry-leading business solutions provider, announced the availability of a new set of innovative features and capabilities comprising the company's latest product update, Acumatica 2023 R2. The release of its cloud ERP update demonstrates the company's commitment to delivering best-in-class applications that centralize business operations and address real-world needs.

Acumatica 2023 R2 delivers hundreds of improvements and feature-rich functionality to users, each addition and upgrade specifically designed to improve usability, drive productivity and efficiency, boost sales and help businesses compete in their markets.

"With customer feedback, we can ensure our solution provides organizations with the intelligence and agility to meet their unique challenges," said Ali Jani, chief product officer of Acumatica. "Our diverse community of partners, customers and creators is driven to discover better ways to work, allowing us to redefine business management software. This collaborative effort enables us to continue delivering cutting-edge solutions that address current needs and anticipate and adapt to the ever-changing business landscape."

Acumatica Payments, an integrated payment processing solution, is just one of the many new features in R2 available to all customers. The new capability helps businesses enhance cash flow and streamline payment processes by providing credit card and ACH processing with improved reconciliation, mobile portal payments, click-to-pay and gift cards. Acumatica Payments was initially released as an experimental feature in 2023 R1 for users to test and offer input — feedback that is core to Acumatica's commitment to customer-driven innovation in its product development. Now, Acumatica Payments is automatically available to customers who use the Always Current Program, which delivers automated product updates to customers.

Other key 2023 R2 updates include:

- Access to the world's largest sales channel by connecting Acumatica to Amazon's Seller Central marketplace, supporting FBA (Fulfilled by Amazon) and MFN (Merchant-Fulfilled Network) delivery models.

- Shopify's new B2B eCommerce functionalities, with support for key features such as customer hierarchies and customer price tiers to seamlessly integrate online sales with Acumatica's back-end fulfillment processes.

- New web endpoints for Acumatica's Product Configurator, enabling manufacturers to leverage best-in-class third-party build-to-order solutions.

- A highly requested consolidated account reconciliation retainage invoicing feature, which improves project visibility for construction companies.

- A new Manage Sales Allocations screen, which streamlines mass stock allocation and deallocation for distributors, retailers and commerce merchants.

Acumatica 2023 R2 is generally available today (Thursday, October 5). Acumatica executives provide details of the R2 upgrades and how the new release is delivering exceptional usability and empowering organizations to grow in today's digital economy. Watch 2023 R2 virtual launch on-demand.

In addition to launching 2023 R2, Acumatica has officially opened registration for Summit 2024. The Summit promises three full days of expanded opportunities to network, knowledge-share and discover cutting-edge solutions. Don't miss out on this exciting event—register now by visiting summit.acumatica.com.

About Acumatica

Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today's digital economy, Acumatica's flexible solution, customer-friendly business practices and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future. For more information on Acumatica, visit https://www.acumatica.com or follow us on X (formerly Twitter) and LinkedIn.

Press Release from Acumatica

Maritime giant chooses IFS to drive digital transformation and operational efficiency

IFS Cloud will help Netherlands-based Van Oord to amplify project, supply chain control and visibility, optimize resources and improve data quality.

IFS, the global cloud enterprise software company, today announced that Van Oord, a leading international marine contractor, has chosen IFS Cloud to automate and streamline its business functions. The solution will support the company's ambition to increase revenue growth and achieve a competitive edge by driving digital transformation and operational efficiency across the organization.

Van Oord will use IFS Cloud as a cornerstone of its new "Founding the Future" business transformation program, as part of their 2030 Strategy for Growth.

The implementation is scheduled to start at the beginning of 2024, with the plan to roll out the solution to 45 countries.

Frank Beerlage, Managing Director, IFS Benelux & DACH, said: "Operating in an increasingly complex and multifaceted industry means businesses in the maritime sector need to harness the latest automated digital technologies to ensure they can address the growing challenges, compete strongly and stand out from the crowd. That's exactly what we are delivering for Van Oord through the implementation of IFS Cloud."

ORACLE
NETSUITE

Oracle NetSuite Embeds Generative AI Throughout the Suite to Help Organizations Boost Productivity

New generative AI-powered capabilities help users across the organization leverage company-specific, relevant data to produce content that is contextual and personalized

Oracle NetSuite announced new generative AI-powered capabilities to help organizations reach their goals faster and more efficiently. Supported by the Oracle Cloud Infrastructure (OCI) generative AI service and embedded across the suite, NetSuite Text Enhance helps users leverage company-specific, relevant data from across NetSuite to create and refine content that is contextual and personalized. With NetSuite Text Enhance, finance and accounting, HR, supply chain and operations, sales and marketing, and customer support teams can leverage AI to produce relevant drafts or refine existing content. "We've been building AI into NetSuite for several years to help our customers be more productive and successful. Recent breakthroughs in AI create the opportunity for a quantum leap in doing more with less," said Evan Goldberg, founder and EVP, Oracle NetSuite. "By taking advantage of Oracle's best-in-class AI services and having

unified data within a suite, we are uniquely placed to help our customers achieve immediate value from the latest AI innovations. The new Text Enhance capabilities are just the start, and we will continue to embed powerful AI capabilities across the suite to help our customers turn the breadth and depth of their organizational data into a competitive advantage."

Adding to the existing AI capabilities in NetSuite, NetSuite Text Enhance will help customers further increase productivity by streamlining processes and automating the generation of context-sensitive content across every area of the suite. For example, in the sales process, when a prospect reaches out to an organization using NetSuite and expresses interest in a particular product or service, NetSuite Text Enhance can make it quick and easy for a user to produce a contextual email response by using

a combination of ERP, CRM, and supply chain data. The email can be aligned to the organization's current campaigns and include details such as the latest product description, product images, pricing information, availability, and delivery details.

By integrating company-specific and contextual data from across the suite, NetSuite Text Enhance will help customers transform:

- _**Finance and Accounting:**_ NetSuite Text Enhance can help finance and accounting teams to expedite collections, close the books faster, and focus on more strategic and fulfilling work by accelerating time-consuming writing tasks. Examples of assisted authoring use cases include writing targeted and personalized collection letters and generating summaries and narratives for financial reports.

- _**Supply Chain and Operations:**_ NetSuite Text Enhance can help supply chain and operations teams streamline purchasing and logistics and improve the quality of product-related communications. Examples of assisted authoring use cases include generating procurement orders and request letters; developing personalized vendor engagement letters and emails to chase delayed purchase orders; developing customer updates on delivery schedules; and creating product descriptions that are used by sales, support, and implementation teams for invoices, website, and point-of-sale systems.

- _**Sales and Marketing:**_ NetSuite Text Enhance can help accelerate marketing and sales tasks to create more effective campaigns that drive revenue. Examples of assisted authoring

use cases include developing personalized email content for marketing campaigns and sales pitches; generating contextual responses to leads and prospects; and drafting written quotes and proposals.

- _**Human Resources:**_ NetSuite Text Enhance can help employees, managers, and HR leaders increase the speed and accuracy of important HR activities. Examples of assisted authoring use cases include writing job descriptions and requisitions; drafting goals, including detailed descriptions and measures for success; creating content for peer-to-peer kudos; providing a summary of the employee's performance based on feedback gathered across the year from the employee, peers, or managers, and goal progress and achievements.

- _**Customer Support:**_ NetSuite Text Enhance can help increase customer support agent productivity and improve the customer experience. Examples of assisted authoring use cases include generating responses to online customer comments, such as reviews and commentary in forums and on social media; creating escalation notices for internal teams; and customer support case updates for both internal teams and customers.

Built on OCI and leveraging its best-in-class AI services, the embedded generative AI capabilities within NetSuite are designed to respect customers' enterprise data, privacy, and security. OCI hosts both prebuilt and custom models. With Oracle's generative AI service, no customer data is shared with LLM providers or seen by other customers or other third parties. In addition,

an individual customer is the only entity allowed to use custom models trained on its data. Role-based security embedded directly into NetSuite workflows helps to protect sensitive information about customers and only recommends content that individual users are entitled to view.

OCI accelerates LLM training with the highest performance at the lowest cost by leveraging OCI Supercluster, which includes bare metal compute with NVIDIA GPUs and the highest bandwidth RDMA network in the cloud. This allows Oracle to deliver the fastest AI innovation in the industry and attract the best enterprise-focused innovators, including Cohere, to build on OCI, further contributing to the innovation feedback cycle. In addition, OCI's generative AI services provide end-to-end security.

Get all the latest updates from SuiteWorld by registering for SuiteWorld On Air: netsuitesuiteworld.com/onair. By registering, attendees will have access to keynotes, sessions, demos, and NetSuite's two-day live broadcast, NetSuite TV. Learn more about how organizations are leveraging the power of NetSuite to increase efficiency and drive growth.

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.

SAP technology, we will be able to reduce complexity and highly standardize our processes while delivering on our promise to pioneer breakthroughs in healthcare. This migration to the cloud is especially important for us as we continue to invest in technology to support our continued growth."

By migrating to the cloud through SAP S/4HANA Cloud, private edition, Siemens Healthineers unlocks the power to scale its operations, helping to ensure it remains responsive to the evolving healthcare landscape and customer needs.

"We are proud to be the chosen technology partner for Siemens Healthineers for this transformative journey," said Thomas Saueressig, member of the Executive Board of SAP SE, SAP Product Engineering. "Together, we will leverage the cloud's potential to drive innovation, reduce costs, improve agility, and, most importantly, set new industry standards in healthcare."

RISE with SAP underscores the dedication of Siemens Healthineers to pioneering healthcare solutions and SAP's commitment to empowering intelligent enterprises across industries.

Siemens Healthineers Picks RISE with SAP to Boost Performance

SAP announced that Siemens Healthineers AG, a leading global medical technology company, has selected the RISE with SAP solution to support the company's digital transformation journey.

Through this strategic collaboration with SAP and by migrating its business systems, Siemens Healthineers aims to harness the innovation potential of the cloud. Siemens Healthineers will use SAP S/4HANA Cloud, private edition, SAP Business Technology Platform and SAP Signavio solutions along with several other cloud solutions to streamline its data sources and to improve performance and sustainability in business processes.

Having recently run a successful pilot of the RISE with SAP solution, Siemens Healthineers experienced firsthand the benefits of SAP's cloud solutions in standardizing operations and improving process governance.

"We are excited to partner with SAP to accelerate our digital transformation," said Stefan Henkel, chief information officer, Siemens Healthineers. "By embracing

Press Release from SAP

Rootstock Software to Showcase Latest Manufacturing Cloud ERP Capabilities at World Tour Essentials Minneapolis

Company will demonstrate how Rootstock Cloud ERP connects data streams in a comprehensive Signal Chain

Rootstock Software will showcase its leading Manufacturing Cloud ERP capabilities at the *World Tour Essentials in Minneapolis*—a free event taking place November 1, 2023, 2:00 pm – 5:30 pm CT at the Hyatt Regency Minneapolis. Responding to the event's call to "revolutionize business," Rootstock will showcase the transformative power of its Manufacturing Cloud ERP

in helping manufacturers sync their customer demand and supply chain data streams to optimize production capacity.

"Minneapolis is a manufacturing city and one of the fastest-growing areas in the country. We're thrilled to be coming to town to meet with manufacturers to discuss

how our Cloud ERP platform can help them respond to continued supply and demand challenges," said *Raj Badarinath*, Chief Product & Marketing Officer at *Rootstock Software*. "Manufacturers struggle with data silos and disconnected systems. Our Cloud ERP is purpose-built to help manage their data streams, allowing them to have complete visibility from the frontend to the backend of their operations."

Many manufacturers have a customer relationship management (CRM) solution in place—like *Sales Cloud*—to track orders, but they lack the ability to effectively monitor their supply chains. As a result, it has been challenging to lay out a production plan that reliably fulfills orders. "Our manufacturing customers are using *Rootstock Cloud ERP* to connect a comprehensive signal chain. In this way, they gain immediate insights into customer demand as well as available supplies to unlock their optimal level of production," added Badarinath.

At the World Tour Essentials, manufacturers will have the opportunity to engage with Rootstock team members in the following ways:

- *Level up their ERP knowledge:* Manufacturers can schedule time to meet with the Rootstock team to discuss their most pressing issues and technology priorities. They can receive practical advice on how to automate and enhance their operations with Rootstock Cloud ERP. Contact Rootstock at *marketing@rootstock.com* to arrange a meeting.

- *Inspiration from other manufacturing leaders:* Rootstock provides manufacturers with helpful resources so they can gain

insights and inspiration from their peers. For example, the company will be discussing results from its *State of Manufacturing Technology Survey,* which provides insights on the business and technology strategies being deployed by various manufacturers. In addition, Rootstock is hosting its own industry conference, *Rooted-In Manufacturing*, March 25-27, 2024, in New Orleans, where manufacturers will be able to learn from the digital transformation successes of other manufacturers.

- *Other networking opportunities:* After the World Tour Essentials, Rootstock will be hosting an exclusive, by-invitation-only experience at the Target Center at 8:00 pm CT. Manufacturing guests will be able to catch the Timberwolves vs. Denver Nuggets game from Rootstock's private suite. A bus will provide invited guests with transportation from the Hyatt Regency to the game and back. Guests can partake in pre-game fun in the fan tunnel, and after the game, they can try a shot from the free throw line or pose for photo opportunities at center court.

If you're interested, sign up for *World Tour Essentials in Minneapolis*, and if you can't make it to this event, be sure to check out Rootstock's future events: *https://www.rootstock.com/erp-events/.*

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.

Devon County Council Selects Unit4 and Embridge Consulting to Digitize its Organization, Data and Services

Unit4, a leader in enterprise cloud applications for people-centric organizations, announced - in conjunction with Embridge Consulting, a leading boutique digital transformation consultancy, specializing in ERP and Business Change - that Devon County Council has selected Unit4 ERP, encompassing Finance, Procurement, and Financial Planning and Analysis (FP&A)

This joint project will be delivered in close collaboration with Unit4's Elite Implementation Partner, Embridge Consulting. Together, the two organizations have a proven track record in supporting council-wide transformation programs and delivering tangible value to the Public Sector. This new digital platform will enable the Council to adapt quickly to change and optimize the use of its financial information, as well as support its transformation in the short, medium, and long term. The Council's new platform will also include integrated solutions from strategic partners, Proactis, to deliver invoice process automation, and HeyCentric, a best-in-class income management solution.

Devon County Council is the largest local authority in Southwest England. As a County Council, it is responsible for Adult Social Care, Education & Families, Roads & Transport, Planning & Development, Waste & Recycling, Libraries & Heritage.

The incumbent financial system at Devon had been in place for almost 30 years, and while it had proved robust, it increasingly relied on add on technology and did not provide an integrated user experience. The Council sought to invest in modern, cloud-based technology which would transform the way its people work, bringing new methods of collaboration, as well as deep financial insight to the heart of decision making.

With the implementation of a new digital platform, the Council will be able to leverage efficiencies through improved operational performance with budget management, improved monitoring of the financial health of the Council, and improved forecasting.

By selecting Unit4 and Embridge Consulting, Devon County Council will also benefit from:

- Modern, cloud-based, enterprise software solutions that will transform the way its people work
- A streamlined implementation based on local government best practice
- Workflows and tasks that will automate processes, resulting in increased efficiency and accuracy
- Dynamic, real-time reporting for added management insights
- Accurate forecasting and real-time decision making
- An enhanced citizen experience, with faster service delivery, via streamlined processes.

Similar benefits have also been experienced by other UK councils where Unit4 and Embridge have worked together - including Surrey County Council, Cherwell District Council and North Lincolnshire Council.

> "The Council wanted to work with a market leader with a proven track record in – and a commitment to – the UK Local Government sector."
>
> *– Angie Sinclair_ Director of Finance and Public Value, Devon County Council*

Speaking about this project, Angie Sinclair, Director of Finance and Public Value, Devon County Council said, "The Council wanted to work with a market leader with a proven track record in – and a commitment to – the UK Local Government sector. The collaborative approach from Unit4 and Embridge Consulting, which focuses on best practice utilizing high-quality integrated ERP solutions, combined with their experience in the Public Sector, was integral to our decision making."

"Devon County Council is a leading authority within the UK and, together with Embridge Consulting, we are pleased to support this part of Devon County Council's transformation journey," said James Arvin, Director, Public Sector UKI, Unit4. "Our wealth of experience gained in working with local government means that we understand its nuances. As a result, we have built tailored solutions which provide the functionality, agility, and efficiency needed to combat the complexity of that environment. This recent decision from Devon County Council further cements our market leading position in the sector."

"The team here at Embridge Consulting is very much looking forward to working with Devon County Council on this business-critical finance transformation programme. The Devon project team has shown its desire to make meaningful change in the early stages of our engagement, and the collaboration between all parties has already been an extremely positive experience," said Emma O'Brien, CEO of Embridge Consulting. "Our track record of supporting significant and successful finance transformation programmes across UK Local Government means that we can bring industry expertise and insight to Devon with equal focus on the people, process and technology change that is essential to success."

Enable faster, more impactful frontline services with Microsoft Dynamics 365 Field Service

This post was co-authored by Caroline Dent, Senior Solutions Consultant, Velrada.

Due to fierce competition and increasing customer expectations, many organizations are looking to transform their field service operations to increase customer satisfaction, drive greater efficiency, and ensure higher service effectiveness. Digital transformation for field service operations is often focused on providing modern tools for service dispatchers who manage customer requests and create and dispatch work orders. But what about the people on the frontlines—the service technicians in the field?

Consider a utility provider with field service technicians who may work in remote areas with low network coverage or sometimes brave challenging weather conditions to support customers experiencing outages. Like any

other organization, that provider needs a solution that enables it to streamline field service operations as much as possible, not only for controlling costs but also for providing the best possible experience for its customers. But when bad weather hits, it also needs a solution that ensures its field support can be productive even in extreme conditions and from the most remote locations.

Product Review by
Safiyyah O'Quinn
Senior Product Marketing Manager,
Dynamics 365 Field Service

Microsoft

With *Microsoft Dynamics 365 Field Service*, organizations with service technicians on the frontlines can help maximize productivity with AI-driven assistance and remote expert support in the flow of work. And specifically for service technicians on the frontlines, Dynamics 365 Field Service offers a comprehensive Field Service mobile app for Windows, iOS, and Android devices that provides a set of digital capabilities that extend far beyond the traditional scheduling and dispatching of work orders.

Implementing Field Service to optimize operations

As a long-term Microsoft global partner, Velrada has emerged as a pioneering force in implementing Dynamics 365 Field Service to empower frontline workers. With a rich history of innovation and a strong commitment to business transformation, Velrada has consistently demonstrated its expertise in implementing Dynamics 365 Field Service to help its customers optimize operations.

> "The field service industry is undergoing a profound transformation, and at its forefront is the demand from our customers for innovative solutions that go beyond the scheduling and dispatching of jobs."
>
> *David Conti_ Product Director, Velrada Council*

Let's take a closer look at how organizations are empowering field service workers with more innovative solutions by deploying Dynamics 365 Field Service.

Empowering technicians with real-time information for better service

A primary benefit of Dynamics 365 Field Service is the *Field Service mobile app*, available on Windows, Android, and iOS devices. Service technicians can see their workdays at a glance in Microsoft Teams, including their latest work orders. They simply click on a work order to launch the Field Service mobile app, so they can view and update work orders, customer assets, accounts, and more, no matter where they are working—even in areas with limited connectivity. This means that even during the worst weather events, workers can get real-time dispatch updates from service agents that keep them informed about the latest outages and ready to tackle challenges regardless of the weather conditions.

Using the Field Service mobile app can also help organizations like the utility provider equip field technicians with digital workstations right on their mobile devices, so they can conduct digital inspections, manage forms, and complete service checklists—everything they were previously required to do on paper, often at the end of a long work day.

Enabling efficient on-site assessments

Using the Field Service mobile app, technicians can conduct on-site assessments with unmatched efficiency. They can capture photos, record notes, provide customers with immediate estimates, and even get their sign-off by capturing their digital signature in the app. This accelerates decision-making and facilitates faster service delivery, a crucial advantage in remote and challenging locations.

Ensuring seamless inventory management

Technicians can also easily access up-to-date inventory information on their devices. This eliminates the need for cumbersome manual inventory checks and reduces delays caused by missing parts because technicians can ensure they're well-equipped for their service calls before they leave the service center.

Prioritizing safety and compliance

The Field Service mobile app incorporates safety checklists and real-time reporting, helping to ensure compliance with safety regulations. This not only upholds safety standards but also improves the well-being of service technicians who often work under hazardous conditions, such as near high-voltage transformers or natural gas compressors.

Revolutionizing service with Dynamics 365 Remote Assist and mixed reality

For many organizations, enabling service technicians on the frontlines with digital tools that help eliminate inefficient paper-based processes and ensure workers can be productive even in the most remote locations or extreme conditions is just the beginning. Conti says, "Our customers are constantly looking at ways to innovate, and our next step is to help them give technicians access to more than just transactional information by incorporating mixed reality on top of Field Service solutions." Organizations using Dynamics 365 Field Service can also be integrated with Dynamics 365 Remote Assist on HoloLens, HoloLens 2, Android, or iOS devices to enable technicians to collaborate more efficiently by working together from different locations. This means service technicians can find and connect with technical experts working at other locations to share what they're seeing, receive remote assistance, and quickly resolve customer issues. This is especially critical during outages that affect a large number of customers, but it can also help substantially reduce

the need for on-site visits even for routine maintenance or smaller issues, resulting in improved first-time fix rates and elevated customer satisfaction. Using mixed reality in this way helps service technicians make well-informed, real-time decisions. In addition, Remote Assist call data can be securely stored in _Microsoft Dataverse_ and accessed for future analytics on service performance.

In addition to Remote Assist, Dynamics 365 Field Service can also be integrated with Dynamics 365 Guides to attach mixed reality guides to Field Service tasks. This makes tasks like equipment maintenance more precise as service technicians can use mixed reality to overlay digital instructions onto physical machinery, which helps them perform field inspections and review the areas that require maintenance. ensuring efficient upkeep and field inspections are enhanced through annotated issue documentation, improving accuracy and record-keeping. In addition, technicians can benefit from immersive training experiences, reducing onboarding time and accelerating skill development.

Overall, the integration between Dynamics 365 Field Service, Dynamics 365 Remote Assist, Dynamics 365 Guides, and tools like HoloLens helps to elevate field service operations by enabling them to optimize processes and deliver unparalleled customer experiences in today's dynamic business environment. They can empower technicians with immersive training experiences, precise equipment maintenance guidance, and real-time remote assistance. Field inspections become more accurate, data-driven decisions become the norm, and customer interactions reach new heights.

Next steps

Learn how _Dynamics 365 Field Service_ can help you optimize your service operations and deliver exceptional service. And read how _Copilot in Dynamics 365 Field Service_ can help you accelerate service delivery, boost technician productivity, and streamline work order management with next-generation AI.

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

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Overview

Redmond Inc. mines ancient sea salt in Utah and uses it in many food and industrial products. The company has expanded organically, and through acquisitions, become a sizeable firm generating more than $160 million in revenue. But the companies were managed on QuickBooks, disconnected third-party and custom-built systems that severely hampered its growth. Redmond Inc. deployed Acumatica Cloud ERP in its seven companies, gaining a single platform allowing it to optimize business processes and gain real-time data visibility and insights that streamlined operations and saved millions of dollars.

Key Results

- 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

Customer Stories from Acumatica

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.

Solution

Affordable, Flexible Cloud-Based ERP

Redmond Inc. looked at Oracle NetSuite and Microsoft Dynamics but chose Acumatica Cloud ERP because it offered an affordable pricing model, was flexible, and deployed in the cloud, allowing Redmond to reduce technology costs.

"Acumatica's architecture was one of the main deciding factors from the IP side," says Gabrielson. "It has well-established APIs, well-built cloud infrastructure, and real solid accounting. It was built for mid-sized businesses to help them grow in the long run. We don't want to switch accounting systems very often."

"NetSuite was too expensive and its architecture is out of date," he continues. "Most of the other solutions had bolted-on cloud solutions; they just took their existing solution and slapped them into the cloud. Acumatica was built from the ground up to be a cloud solution."

Deploying Acumatica in Seven Businesses

Crestwood Associates helped Redmond implement Acumatica Enterprise Distribution Edition in three stages across the first five businesses, several of which had more than one location. Before implementation, though, several of the companies needed to clean their data and create and formalize digital processes.

"At Redmond Life, there were no vendor groups, and pricing was a complicated mess," Gabrielson says. "There was also a lack of processes, so the pain was in getting organized and clean. Redmond Life had a lot of growing pains due to its rapid growth; it started with four employees and now has 140, and revenues just hit $60 million."

Redmond Life, now with more than 750 products, has grown 40 to 50 percent in the last three years, Gabrielson explains. "We have multiple new products like toothpaste, all kinds of taco seasonings, and food ingredients. We can't stock our Real Life Hydrate drink mix fast enough. Once we get a shipment in, it's pretty much all gone the same day."

After cleaning data and formulating processes, the first Acumatica implementation project tackled Redmond Inc., Best Vinyl, and Valleywide. The project included two tenants, one with two branches, in a single implementation, completed on time and under budget.

The second Acumatica implementation covered one of the larger entities, Redmond Life. It too was completed on time and under budget.

The third and final Acumatica implementation, for the fifth tenant, was the most complex. Redmond Minerals, which includes all of the agricultural, hunting, and industrial salt products, included connecting a third-party vehicle maintenance application and a home-built system for tracking salt shipments by weight.

> "Acumatica is a really well-built cloud solution that you can run a growing business on for the long run at a reasonable cost."
>
> *Aaron Gabrielson_ CTO, Redmond Inc.*

With guidance from Crestwood and the ease of Acumatica's API, Redmond's talented developers managed many of the integrations, helping to minimize external costs. "Crestwood has a very rigorous project implementation process, and we followed it," says Gabrielson, who managed all the Acumatica deployments for Redmond until James Harris joined the team.

The final two were completed in-house when Harris joined the team. The Redmond Heritage Farm & Stores filled another tenant as two branches. This ended Redmond's dependency on QuickBooks and completed the transition to Acumatica.

"We basically tackled one a year and methodically went through each business. When we finished, we celebrated with a cake that said 'We killed QuickBooks.'"

Redmond easily connected third-party solutions including Shopify, ShipStation, NetStock, PowerBI, Active Directory, Klaviyo, Recharger, Hubspot, Cloud Retailer, and Data Docks to Acumatica.

Benefits

Full Data Visibility Across All Operations and Applications

With Acumatica, all of Redmond's business units have end-to-end data visibility, allowing managers to run their operations more efficiently. "They have current information needed to run and grow the businesses," Gabrielson says. "That wasn't always clear from QuickBooks."

"We have timely information for AP, AR, capital projects, inventory, forecasting orders, and production schedules," he adds. "You can't do any of that with Quick Books. That's one of the biggest competitive advantages we have with Acumatica."

Gabrielson says he shutters to think about the amount of pain the company would have if they were still using QuickBooks.

"We could have never grown the business sticking with QuickBooks," he says. "You can't go to the CEO and say we can't grow because our accounting system sucks." The timing of the Acumatica implementation proved lucky because they began before the pandemic hit. "When we started the implementation, we weren't growing as fast. Since Covid, we've experienced 40 to 50 percent annual growth."

With Acumatica, Redmond is tracking its inventory, bills, cost structures, ordering, customer service, and reporting—essentially all the things a business needs to do, he says. "It does it all and does a great job."

Eliminating Paper Processes

Redmond is phasing out paper-based processes and improving digital ones. Redmond Minerals employees no longer walk to an office where a large corkboard displays truck orders and scheduled pick-ups. Instead, they can automatically see that information in Data Docks, one of the third-party applications connected to Acumatica's API.

> "With Acumatica as the heart of the business, there isn't a challenge or technical problem we can't overcome."
>
> *Aaron Gabrielson_ CTO, Redmond Inc.*

Improved Inventory, Saving Millions

Inventory tracking at Best Vinyl has improved dramatically. "Acumatica's inventory application is a game changer," says Gabrielson. "We've lowered inventory costs, and we couldn't have done that without Acumatica. Now Best Vinyl knows what and when to order stock, which has saved millions."

Redmond Life recently deployed Acumatica's inventory functionality

to get back on track with production and order fulfillment for customer demand. "We've seen improvements, but we anticipate a lot more benefits once every business unit starts using more Acumatica functionality," Gabrielson says.

Open API Makes It Easy to Develop Apps

Redmond Inc.'s development team has easily created customizations with simple data import and export scenarios. In addition, the team cut the time it takes to code applications by 90 percent, Gabrielson says. "What used to take 40 hours to develop something now takes four."

Gabrielson and the dev team like Acumatica's open API and framework, which makes it easy to customize workflows and develop tailored solutions. For example, the internal team created a custom lot-tracing application. "If anything is missing, it's not hard to build our own workarounds."

Harris, now ERP Business Manager, likes Acumatica's low-code, no code capabilities, and the vast amount of training Acumatica provides within Acumatica University. He also praised the community sharing Acumatica fosters among all its stakeholders. The robust community and flexibility just aren't found at other ERP companies, he says, based on his prior experiences.

"To do what we have done (with Acumatica) with SAP, we would have had to hire an army of consultants and give them a blank check and spend millions," he says. "It could be done, but at what cost?"

"Just using their system is difficult and a headache. And their restrictive use would have been a huge pain."

Unconstrained Platform for Growth

Now with its seven businesses off QuickBooks and running successfully on Acumatica, Redmond is fine tuning operations at each business unit and evaluating internal and external growth opportunities.

Redmond Inc. recently acquired Aurora, UT-based Western Clay and Minerals. The 100-yearold bentonite clay mining operation easily transitioned to Acumatica following the acquisition.

The business management solution's integration across its different business units has offered complete visibility, better inventory management, improved operational efficiency, and has been a catalyst for business growth. The ERP's flexibility and robust API allowed Redmond Inc. to tailor custom solutions and integrations for its specific business requirements. In short, Acumatica Cloud ERP has been a game-changer for Redmond Inc.

"From a growth perspective, it's a no-brainer to go with Acumatica," Harris says, praising Acumatica's continuous innovation and responsiveness to customer

demands, emphasizing how it can grow alongside the business.

Adds Gabrielson, "With Acumatica as the heart of the business, there isn't a challenge or technical problem we can't overcome."

Their words highlight the transformative role Acumatica has played in Redmond Inc.'s journey, driving growth, enhancing efficiency, and saving the company millions. With Acumatica, Redmond Inc. has not only found a solution to its present challenges but also discovered a scalable platform that is prepared to support and facilitate its ambitious growth plans.

Customer Stories from Acumatica

How Can Future Proof ERP Support Business Model Transformation Across Global Operations?

Integrating systems in the cloud to support a complex business employing 20,000 people

German polymers giant REHAU Group aims to push the boundaries of what is possible to create a sustainable future. To support this innovation, the company embarked on a digital transformation of Chinese subsidiary REHAU AG China. It wanted to transform its business to business and business to consumer models by implementing an intelligent infrastructure for ERP in the cloud and integrating it smoothly with other systems for greater simplicity, increased scalability, and cost savings. The

Chinese project would set a solid foundation for a cloud first strategy initially in the Asia Pacific Japan region and then across the entire group.

Achieving Operational Excellence with SAP S/4HANA ® Cloud, Intelligent Technologies Packages, and SAP Innovation Services

Before: Challenges and Opportunities
- Aging technology platform that hindered business model transformation
- Low productivity caused by increasingly complex internal and external processes

- Need to establish a lighthouse digital architecture for groupwide standardization and deployment

Why SAP and Delaware Consulting
- SAP S/4HANA ® Cloud, supporting Intelligent ERP that offers simplicity, flexibility, scalability, and extendibility
- Intelligent technologies packages, including SAP ® Intelligent Robotic Process Automation services, and SAP Integration Suite to support continuous innovation and help significantly improve the customer experience, enhance

internal operational efficiency, and aid comprehensive supply chain collaboration
- Joint innovation with the SAP Innovation Services team to design a future proof solution that enables business transformation
- Delaware for global reach that complements REHAU's business network

After: Value Driven Results
- Rapid operational excellence uplift and customer service improvement to support market growth
- Agile adoption of industry best practices thanks to a cloud based digital infrastructure
- Highly automated, simplified, and innovative business solutions enabled by intelligent technologies
- A robust digital foundation for global standardization, integration, and innovation

"Working with SAP, we're building a cloud based business platform that's fit for the future in a dynamic market, facilitates business process standardization and integration across Asia Pacific and the world, and achieves supply chain excellence along the industry value chain."

Chengbo Yu_ CIO, Asia Pacific Region, REHAU AG China.

50%

Reduction in implementation time with 181 standard processes adopted and rolled out in weeks

40%

Lower total cost of ownership with reduced IT costs, minimized risk, and future proof architecture

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Enabling Continuous Innovation in Partnership with SAP

REHAU Group's project teams in China worked with the SAP Innovation Services team to expand the business benefits of the polymers company's newly implemented SAP S /4HANA ® Cloud software. And using intelligent technologies packages allows REHAU to continue its innovation journey across the business value chain.

Deploying SAP ® Intelligent Robotic Process Automation (RPA) services alongside SAP S/4HANA Cloud supports REHAU Group's ambition for continuous operational excellence improvement. The company now benefits from automated billing operations, smooth data synchronization between legacy ERP and new cloud ERP systems, and efficient large volume and high through order processing. This allows its workforce to focus on what really adds value for customers and business partners.

And the SAP Cloud ALM solution enables the company to connect its cloud products to better streamline daily operations. This application lifecycle management solution provides transparency into system status from both a business and integration scenario perspective.

"To eliminate large volume manual intervention, we implemented SAP Intelligent RPA, achieving significant productivity improvement and error reduction. Our employees can now spend their time on strategic and innovative work that matters to our business."

Chengbo Yu_ CIO, Asia Pacific Region, REHAU AG China.

720x

Faster production order processing, from one day down to two minutes

100x

Faster periodic production order batch closing, down from 50 hours to 30 minutes

An Intuitive & Flexible Solution: Pixel Networks Automate Sales and Subscription Services with Odoo

![pixel networks logo]

Established in 2018, Pixel Networks is a telecommunication solution provider that hosts international professionals in its Hong Kong main office. Specializing in IoT (Internet of Things) solutions, it serves public institutions, electric companies, gas companies, and more businesses to build a smart city.

Amateur Tools

In search of an efficient business management tool, Pixel Networks tried numerous tools. Finally, they settled down with Odoo for its accessibility and flexibility, allowing the sales team to focus on providing better customer service.

Intuitive Design & Integrated Modules

Utilizing the _Odoo Website_ & _eCommerce_ suite, the telecommunication company is able to boost sales activities with a DTC (direct-to-customer) model.

With its website builder integrated with the Odoo eCommerce with the backend, Pixel Networks can now access all customer and sales details on the _Sales_ and _Invoicing_ apps on the backend even via mobile devices. This way, sales immediately get hold of all sales records, including the products sold and order time, within one window once the system registers a new customer order.

> "One of the features of Odoo is that it's easy to use. This is important for a salesperson as it allows you to invest more time in our clients rather than on the tool we use."
>
> _Jacky Poon_ Business Development Manager, Pixel Networks Ltd_

Odoo Sales' intuitive design requires little to no training to master. Thanks to this, the sales team at Pixel Networks can, on the one hand, enjoy the boost in efficiency data centralization brought about and, on the other hand, dedicate more time to each customer, ensuring optimal service delivery.

Flexible Odoo Customization

Nonetheless, _Odoo Subscriptions_ has taken much responsibility off the customer services team's shoulders. With the automation feature, renewal invoices are intuitively generated when contracts are due. Customers will then receive an email notification attached with all papers needed to be reviewed and signed. Automated and accurate, these Odoo-generated documents save the team much time cross-checking and manually catching up on every account.

Also, owing to the easily customizable system with _Odoo Studio_, the telecom company can now set up general reminder emails to engage clients with seasonal greetings, special offers, and more personalized messages, creating more opportunities to understand their clients' needs.

The team also finds it easy to modify sales orders from the backend, for instance, adding a product to an existing order, with just a few clicks on Odoo, whereas it could be quite tricky on Salesforce, hence time-consuming.

Optimizing Time and Resources

> "Odoo is a great help in terms of our subscription services"
>
> _Jacky Poon_ Business Development Manager, Pixel Networks Ltd_

In conclusion, the all-in-one business management system is an easy-to-use and flexible tool that optimizes your budget, time, and resources. _Try Odoo for free_ today to empower your team with a more streamlined workflow!

Customer Stories from Odoo

![Rockwell Automation | PLEX]

Ultra Tool & Manufacturing Saves Thousands of Dollars and Hundreds of Labor Hours Annually with Plex

With a humble beginning in 1969 as a Milwaukee-based tool and die shop, Ultra Tool & Manufacturing has grown to include additional services like metal stamping, die design, and metal fabrication. Their world-class operation is headquartered out of Germantown, WI. While they might be located in a smaller town, Ultra manages a larger-scale operation. They have provided their customers with excellent quality and service for over 50 years and continue to thrive today.

This eagerness for growth is why Ultra has gone on to receive national recognition—the company's leaders have never been afraid of embracing new technology. A new facility in 2015 opened the doors for larger presses and expanded capabilities, including the implementation of Plex's Enterprise Resource Planning (ERP) cloud-based solution. Over the years, Plex ERP, which includes its Manufacturing Execution System (MES) solution, has helped Ultra improve quality, processes, and responsiveness. Since this

implementation, Ultra identified a new need for their growing business: the ability to better control plant floor performance.

At A Glance

- Realized $48K annual savings from automating production recording and label-making
- Reduced work center setup time resulting in $80K annual savings
- 243 manual labor hours saved annually

Making Up for Lost Time

The need for improved plant floor performance introduced Ultra to Plex's MES Automation and Orchestration (MES A&O) solution, which connects Plex MES to the plant edge to control information flow and processes adding efficiency, saving cost, and eliminating manual errors. When a company makes millions of parts per year, the ability to track and gain visibility is an important capability. Ultra recognized that lack of automation and insight into data at a granular level left a lot of room for mystery—and with mystery comes cost. For Ultra, that cost equated to tens of thousands of dollars in manual labor for setup and more than 240 extra operating hours each year.

When searching for their plant floor automation solution, Ultra identified a variety of pain points they hoped to be addressed. Overall, they lacked visibility on the plant floor. Little to no plant floor insight brought with it a domino effect of other issues: Ultra had no way of knowing machine rates, what they should be, or why an operator failed to meet rate expectations. Some issues, like an operator forgetting to log in or out of production, boiled down to manual error.

Plex MES A&O, a powerful low-code toolset that connects Plex MES to the plant edge, allowing for automation of tasks and orchestration of workflows to remove human error and manual oversight, offered Ultra the solutions they were looking for. Since implementing Plex MES A&O

in June 2021, Ultra has experienced a variety of positive changes like increasing visibility into production and tracking data.

After starting with just one stamping press, Ultra moved through nine more over the course of a year and upgraded the controls on machines that were old or obsolete. Their implementation went beyond just machines and included training or retraining operators to utilize Plex MES A&O best. This was a crucial move for Ultra as their operators often hop from machine to machine. A big transition for Ultra, the implementation went smoothly as they broke up the process into sizable pieces

Customer Stories from Plex

quickbase

Boyett Construction grows business with Quickbase

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Boyett Construction is a specialty subcontractor that has built its reputation one job at a time. As it grew, the company needed a better way to ensure that it was delivering consistent quality across an increasing number of jobs. Quickbase helps Boyett Construction handle more projects by _centralizing all aspects of every job in one easy-to-use interface._

Challenge

- Paper-based processes and lack of standardization impacted efficiency and ability to scale
- Difficult to track status across multiple concurrent projects
- Risk of delays, fines, and loss of customers due to inability to report quickly and coordinate and control thousands of actions in motion

Solution

- Quickbase app provides more flexible, less costly solutions than out-of-the-box options
- Fast delivery of employee-inspired solutions that match familiar processes
- Dashboards and automated alerts that put the right information in the right hands at the right time

Benefits

- Consistent, quality results and lower risks
- Answers are just a click away with centralized access to project and materials data
- Ability to handle more concurrent projects for accelerated business growth and reduced overhead
- Innovation that empowers staff and delights contractors and manufacturers for which Boyett Construction is a distributor

Modern solutions to old-school problems

With 150 commercial construction projects underway annually in the San Francisco area, Boyett Construction is a busy and growing sub-contractor with a top-notch reputation for reliability in a specialty niche known for challenges. In the past, projects were managed using spreadsheets, emails, and texts, as well as lots of in-person conversations across offices, warehouses, and job sites. With so many moving parts to coordinate, and little room for error, the only way to ensure quality and timeliness was to limit the number of projects the firm could take on at once which hampered growth.

"We had reached our saturation point. To support business growth without impacting quality, we needed a way to standardize everything and put the latest information at our staff's fingertips."

Vern Boyett CEO of Boyett Construction_

Streamlining business processes

To drive greater efficiency, Boyett Construction _standardized communications, data collection, tasks, and processes_ on the Quickbase platform by building a customized app called "BMS". The app supports all parts of the firm's Office & Field business, from bidding to closeout.

"The BMS app can handle everything we want it to do; I'd put it up against any ERP system."

Maria Acuna Built the app while part of the IT team at Boyett Construction_

At its core, the BMS app is a centralized data repository that houses the latest project information collected from over 30 roles and several corporate systems. _Customized dashboards_ are seamlessly populated, notifications and reports are automatically generated, and one-off reports can be compiled in minutes. All these features help Boyett Construction's workforce to get more done, make better decisions, and consistently deliver the best possible service.

"Once we developed a couple of dashboards and information started flowing, people immediately saw the advantages and wanted to know when they were getting their own dashboards."

Vern Boyett CEO of Boyett Construction_

How it works

For many years, Boyett Construction has relied on its Quickbase app to orchestrate every part of every job with perfect timing from estimates and materials ordering to project management and problem resolution. In a world where delays can trigger fines of $200,000 per day, that kind of capability has bottom-line impact.

Quickbase innovation also drives a more productive and satisfying work environment which has enabled Boyett Construction to not only retain and attract the best talent but also build great business relationships. In the highly competitive _construction industry_, having the best people and providing the best service goes a long way in consistently winning new and repeat business.

"It's huge when a contractor calls in with a question and one of our team members can get them an answer while they're on the phone. It's not what they're used to, and we get a lot of WOWs!"

John Khau_ Vice President of Boyett Construction

Higher workforce efficiency within Boyett Construction's Office & Field business has also enabled the firm to take on more projects and grow faster something that wouldn't have been possible without Quickbase.

That growth and success has also spread to others, especially Boyett Construction's materials manufacturers. For ASSA ABLOY, a leading global manufacturer of door assemblies, this has translated into a 250% increase in annual sales from the firm, which now purchases $21 million dollars in materials a year.

Boyett Construction has also become one of the manufacturer's most valued distributors. ASSA ABLOY recently created a network of lean distributor partners (chosen from hundreds of distributors) to help drive greater efficiencies throughout the industry, and Boyett Construction was named among the top four "with the capability and systems in place to support ASSA ABLOY'S efforts."

"Quickbase has been a real game changer in enabling us to differentiate ourselves in this industry. Contractors are more comfortable giving us jobs because they know we can handle it, and ASSA ABLOY knows they made the right decision when they opened up Boyett Construction as a distributor."

Vern Boyett_ CEO of Boyett Construction

Why Implement a Two-Tier ERP Strategy

Well-run, global organizations are increasingly adopting a two-tier enterprise resource planning (ERP) strategy. With such a strategy, organizations keep their existing Tier-1 ERP solution to run common processes, such as financials, at the corporate level and give subsidiaries a Tier-2 ERP solution to address their specific requirements with greater flexibility, agility, and improved manageability at a lower cost. This white paper details the benefits of a two-tier strategy, the types of organizations most likely to benefit, and what to look for in an ERP solution to implement this strategy.

The Growing Popularity of the Two-Tier ERP Strategy

Organizations in the market for ERP solutions are increasingly considering a two-tier ERP strategy. A recent study by Constellation Research found that 48% of buyers in 2011 were considering a two-tier strategy, up sharply from 32% in 2010 and 27% in 3Q09. Similarly, Ventana Research from 2010 found that one-third of companies with more than 1,000 employees use an ERP supplied by a single vendor, while two-thirds use software from two or more vendors.

What Is a Two-Tier Approach?

According to Gartner Research, organizations typically choose from six common global deployment options for ERP when they have a central administrative ERP system, as shown in Figure 1.

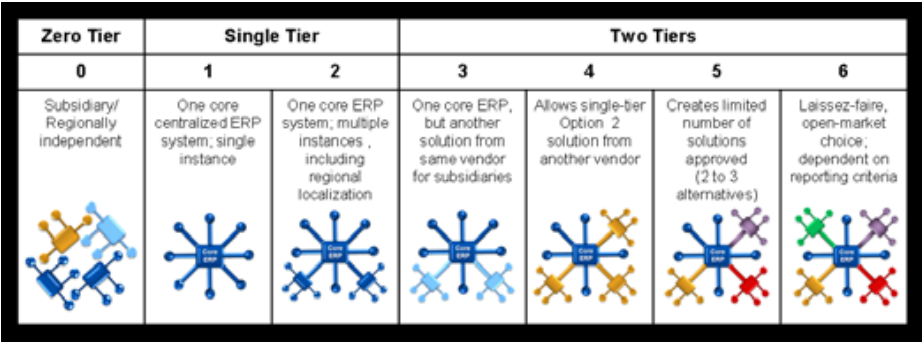| Zero Tier	Single Tier		Two Tiers			
0	1	2	3	4	5	6
Subsidiary/ Regionally independent	One core centralized ERP system; single instance	One core ERP system; multiple instances, including regional localization	One core ERP, but another solution from same vendor for subsidiaries	Allows single-tier Option 2 solution from another vendor	Creates limited number of solutions approved (2 to 3 alternatives)	Laissez-faire, open-market choice, dependent on reporting criteria

Figure 1. ERP Deployment Options3

White Paper from Sage

In a two-tier ERP deployment approach, organizations keep their existing Tier-1 ERP systems at the corporate level while allowing divisions or business units to select a second ERP system. The Tier-1, corporate ERP system acts as the global standard for running processes that must be standardized across all divisions, such as financials, human resources, and procurement. The secondary, Tier-2 ERP system supports the specific needs of subsidiaries, usually for smaller operational requirements such as sales, marketing, field services, or local manufacturing. As Figure 1 shows, the Tier-2 ERP solution can come from the Tier-1 vendor, from a second vendor, or from a list of approved alternatives. Gartner says that the laissez-faire approach is the "predicament" that needs to be resolved with the two-tier ERP approach.

Many types of organizations can benefit from a two-tier ERP strategy, particularly those with subsidiaries that employ multiple business models.

Drivers for Two-Tier Adoption

Two-tier ERP systems began their rise in popularity during the economic recession that began in late 2008. As IT budgets were slashed, IT departments were forced to make do with less. In many cases, large-scale ERP migration plans were delayed or eliminated entirely. Instead of moving to new systems, companies focused on improving existing systems, including legacy ERP applications. As a result, many organizations decided to retain functionality in their existing systems that was still working while migrating to Tier-2 systems where existing solutions were not meeting their requirements.

At the same time, organizations began realizing that big-bang, corporatewide ERP installations are often ineffective. When a system becomes very large, it becomes costly to customize, maintain, and upgrade. Deploying a complex, large-scale ERP solution to a subsidiary is particularly challenging, because smaller divisions may not have the IT infrastructure and experience to customize and support the solution. And because larger vendors have been slow to innovate, there's a good chance that a Tier-1 system will not offer the capabilities subsidiaries need to improve their competitive advantage. Subsidiaries need a simpler, flexible, yet robust and cost-effective system that delivers the same results while integrating seamlessly with the corporate system.

Today, the economy is recovering, and corporations are once again looking to grow. Nonetheless, two-tier implementations continue to gain momentum. In many cases, subsidiaries are the key to developing new business, especially in emerging markets, such as Asia, Latin America, Africa, and the Middle East. Many companies are therefore creating or acquiring new subsidiaries to move into new product and service areas. This means these operations have power and senior management attention—and need to move quickly. IT needs to accommodate these newfound engines of organizational growth. The simplicity, cost effectiveness, and flexibility of Tier-2 solutions make them ideal for fulfilling these requirements.

Additionally, two-tier ERP is a way to consolidate IT support—and thereby reduce costs—in cases where organizations are unable to adopt a single ERP solution. For example, many organizations have undergone multiple mergers and acquisitions that leave them with multiple ERP solutions—and unacceptable support costs. When such organizations are unable to consolidate to a single ERP system, they are finding an answer to the problem with a two-tier ERP solution.

Who's Adopting the Two-Tier ERP Strategy?

Many types of organizations can benefit from a two-tier ERP strategy, particularly those with subsidiaries that employ multiple business models, including:

- Subsidiaries with different lines of business. Having one standard ERP makes little sense if one subsidiary delivers services and another manufactures goods.

- Subsidiaries in different industries. Organizations that make one set of products but sell them to different industries. For example, if the organization makes medical devices, FDA certification can be an onerous task that can be simplified by specialized ERP vendors with validation modules. When selling to the DIY market, however, a subsidiary may prefer an ERP with sophisticated promotion and supply chain capabilities.

- Subsidiaries that provide different functions within the same value chain. One subsidiary may manufacture medication, while another may be responsible for distribution. The ERP processes and localizations would be fundamentally different.

- Subsidiaries in different countries. Global organizations many need smaller, more nimble ERP solutions to meet the needs of local locations, including support for different tax codes, languages, and currencies.

- Acquisitions. Headquarters may acquire businesses to support strategic, inorganic growth initiatives. If converting the acquired company's existing ERP solutions means high costs or timing challenges due to lack of available skills, sticking with the existing ERP solution or putting in a modern, user friendly Tier-2 ERP system that communicates back to the headquarters' Tier-1 ERP system can be a better approach.

- In addition, organizations that want to upgrade and modernize their ERP solutions may wish to keep some legacy systems as they upgrade to more modern systems.

Organizations that adopt a two-tier strategy stand to gain a number of benefits, including systems that are full-featured yet highly customizable, lower cost, innovative, and agile.

Benefits of a Dual-Tier Strategy

Organizations that adopt a two-tier strategy stand to gain a number of benefits, including systems that are full-featured yet highly customizable, lower cost, innovative, and agile.

Comprehensive Functionality Easily Configurable to Industry and Global Requirements
Tier-2 solutions are available that deliver the same comprehensive functionality available through the Tier-1 vendors. At the same time, the vendors provide industry-specific experience gleaned from the vendor's customer base and the systems easy to customize to meet specific industry or regional workflow requirements.

Reduce costs
Seventy percent of respondents to a recent Software Insider survey remarked that existing, Tier-1 systems are too expensive. An estimate published by CIO magazine in 2009 placed the cost of the average Tier-1 ERP system deployment at between $13 million and $17 million. ROI calculation on Tier-1 ERP systems show that
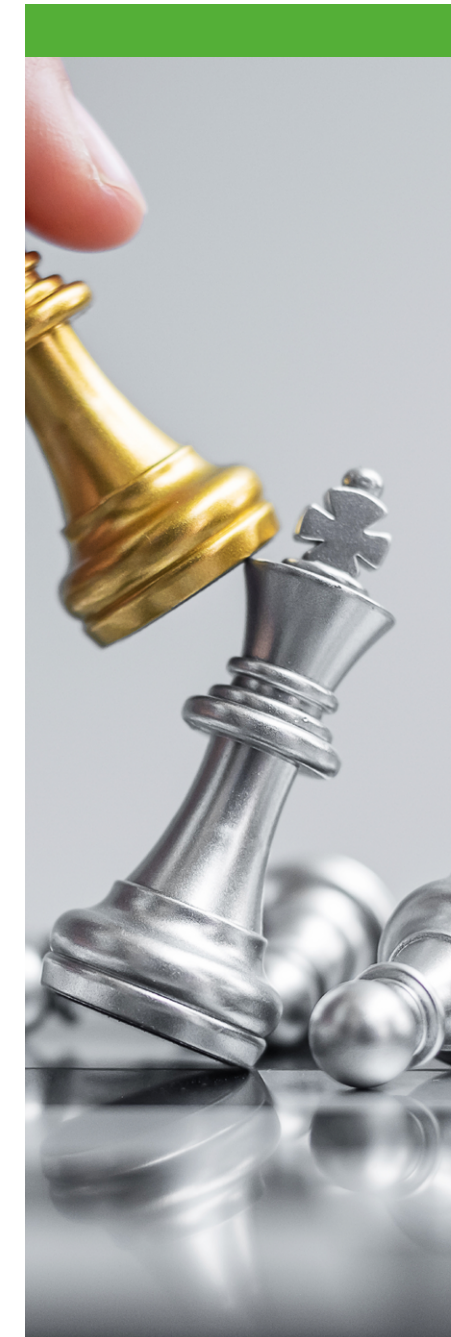
high costs are due to overruns in implementation, customization, maintenance fees, and staff costs. Upgrade costs are also high—45 percent of respondents said that upgrades are too costly.

When all of the implementation, ongoing maintenance fees, upgrades, and modifications are considered, a two-tiered system can offer significant financial savings. For example, Gartner Research found that companies see a 33 percent reduction in implementation costs when a two-tier system is deployed. As mentioned previously, a two-tiered approach also allows organizations to consolidate IT support resources across the organization, further reducing costs.

Improve Innovation

Companies must continually adapt to new threats and opportunities. Subsidiaries in different corners of the world are often subject to different competitive forces and are compelled to evolve in different directions. Yet 35 percent of Software Insider survey participants found that enterprise-class ERP vendors have not innovated quickly enough. Subsidiaries are finding that they can customize Tier-2 applications more quickly than they can convince corporate to change the global ERP system to meet their local needs.

Greater Agility

Sixteen percent of respondents to the Software Insider survey want more agile systems that can integrate and work with other systems, new channels and emerging stakeholders. Large-scale ERP systems cannot keep pace with a changing environment because they take so long and cost so much to deploy. The unmanaged change

results in the need to patch systems, manual processes and chaos.

Tier-2 ERP solutions allow subsidiaries to take more control of their system because those systems are easier to configure. A two-tiered infrastructure can be deployed quickly and cost effectively. The time to implement and modify or upgrade is likely to be shorter, which means that deploying such a system will deliver a shorter time-to-benefit, and these systems can be modified more quickly and easily than a Tier-1 ERP solution.

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What to Look for in an ERP Solution for Use in a Tier-Two Strategy

Of course, not every ERP solution is well suited to your organizations requirements for a Tier 2 ERP system. Look for a Tier-2 ERP solution that can deliver comprehensive functionality, flexibility, and low total cost of ownership.

Comprehensive Functionality

Organizations adopting a two-tier strategy need to consider the functionality the tier-two ERP solution delivers. The solution should offer comprehensive, accounting, finance, front-and back-office functionality, and support similar to that found in Tier-1 applications out of the box. For example, it should incorporate business intelligence (BI), rather than

requiring organizations to purchase BI separately as an add-on module. Comprehensive functionality makes the solution easily adaptable to a specific organization and allows organizations to avoid heavy customization.

Part of this functionality should include specific support for global subsidiaries, such as mulitlanguage, multicurrency, multilegislation, and multicompany structure. And the vendor should have expertise in multiple industries and the ability to help the organization configure the solution to the requirements of its industry.

Consolidation of data from subsidiaries or business units into a single folder structure allows organizations to easily roll up data in real-time for rapid reporting. This eliminates the need for time-consuming data reentry, reduces errors, and makes for reliable, coherent data.

A system built on a serviceoriented architecture will be easy to upgrade and customize, while a simple and secure update procedure makes it easy to take advantage of software improvements.

Flexibility and Adaptability

Not only should the functionality be comprehensive, functions should be easily configurable so the organization can customize it to meet its specific requirements. The solution should also integrate seamlessly with the organization's existing IT environment, including

support for existing databases or operating systems. An adaptable user interface that can be deployed through a Windows® Client or a web browser gives the organization the option to make the system available across the globe without the time, effort and money required to install the system on premise. Users of the browser interface simply log on wherever they may be located. The solution should also be scalable enough to start with ten users and ultimately accommodate thousands of concurrent users.

Sage

Low Cost

A Tier-2 solution should be cost-effective and fit into the organization's budget not only initially but over the entire period of ownership. A solution that is robust (so that it doesn't require a lot of support), deployed rapidly, and easy to maintain will reduce overall support costs. An intuitive user interface minimizes training costs. Parameterized configuration simplifies any necessary customization. A system built on a service-oriented architecture will be easy to upgrade and customize while a simple and secure update procedure makes it easy to take advantage of software improvements.

Conclusion

By using a two-tier ERP strategy, global organizations with multiple subsidiaries stand to gain from comprehensive, highly customizable solutions, lower costs, as well as greater innovation and agility than they could achieve using a single, large-scale ERP solution standard throughout their organization. However, they need the right ERP solution. An ERP solution that furnishes comprehensive functionality, is highly flexible and adaptable, and offers robust, easy-to-configure and-maintain functionality that reduces TCO can fully deliver on the promise of a two-tier ERP strategy.

White Paper from Sage

Unanet Launches New Asset, Inventory and Project Manufacturing Capabilities to Give GovCons the Scalable Solutions They Need for Complex Projects

Acquisition of Flowtrac yields new capabilities to meet federal standards, automate tasks and improve productivity

Unanet announced new inventory and project manufacturing features for government contractors (GovCons). As the leading provider of enterprise resource planning (ERP) and customer relationship management (CRM) solutions for GovCons, Unanet is following through on its commitment to innovating its technology and meet the ever-growing needs of its customers.

Carefully managing materials, inventory, assets, and the manufacturing process is a growing need among thousands of GovCons that deliver made-to-order products to their federal agency clients. From ruggedized laptops for the military to packaging vaccines for delivery, these products are highly specialized and require detailed and unique specifications along with ongoing project management, all of which must meet various compliance requirements. In addition to automating procurement, tracking government furnished property (GFP), supply chain management and other operations, Unanet's customers can stay compliant by keeping inventory and manufacturing aligned with their accounting and ongoing project management.

"GovCons told us they want these capabilities synchronized with their accounting and project management, so we listened and acted. We are committed to ensuring our customers have the tools they need for success," said Craig Halliday, CEO of Unanet. "We're effectively integrating best-in-class capabilities, so our customers have a one-stop-shop that meets all their needs upon implementation. Today's news is just one more example of how we're redefining what it means to be a customer-first solution provider."

Unanet's inventory and project manufacturing capabilities come through a recent acquisition of *Flowtrac Software*, an exclusive Unanet partner who has fully integrated offerings within the Unanet platform. GovCons of all sizes such as *Blue Halo* and *Innoflight* have successfully integrated Unanet ERP with the Flowtrac tools.

"The integration of Unanet and Flowtrac allowed us to streamline our processes and reporting to effectively manage procurement and inventory. We have seen reduced processing time and overhead costs while also getting everything we need for audit compliance," said Patrick Lenahan, CFO of Innoflight.

By acquiring the capabilities, Unanet now has the features as part of its platform, while also having the ability to invest in and refine the tools so they meet customers' expanding needs.

Available today, Unanet GovCon ERP with inventory and project manufacturing gives customers:

- Automatic connections between inventory, assets, manufacturing and finance.

- Simplified compliance with built-in guardrails and audit trails.

- Bill of materials (BOM) integration and project matching to track and allocate costs automatically.

- Ability to track products by quantity, lot, and even by serial/tag code.

- Inventory status and location down to aisle, bin and shelf.

- Receiving and ordering with BOM integration to automate backorder and task assignments.

- Customizable invoicing and billing workflows.

Unanet's acquisition of Flowtrac was a strategic move to add capabilities that will enrich the overall GovCon customer experience. Flowtrac will continue to provide industry-leading asset, inventory, and project manufacturing capabilities to the wide variety of industries it serves today. Currently, Flowtrac's solutions are used by dozens of major GovCons and other successful companies.

"Unanet's customer focus, its drive to innovate, and its designation as a top workplace align closely with our culture, and our two companies complement each other perfectly," said Stacy Tate, President and Founder of Flowtrac. "We are thrilled with the value our combined companies will deliver and look forward to a bright future, together."

"We welcome Flowtrac's team and customer base to the Unanet family," continued Halliday. "The possibilities for growth in a wide variety of industries and geographies are beneficial near-term and long. As a united team we will demonstrate true service and innovation, so our customers can achieve success on their terms."

About Unanet

Unanet is a leading provider of project-based ERP and CRM solutions purpose-built for government contractors, architecture, engineering, construction, and professional services. More than 3,700 project-driven organizations depend on Unanet to turn their information into actionable insights, drive better decision-making, maintain regulatory compliance, and accelerate business growth. All backed by a people-centered team invested in the success of your projects, people, and financials. For more information, visit www.unanet.com.

Press Release from Unanet