Lightning-Fast and Future-Ready: Why SAP S/4HANA is the Foundation for Intelligent Enterprise.
With digital transformation sweeping across every sector and industry type, enterprises are now forced to focus on the smart utilization of resources to stay relevant in today’s ever changing economy. Organizations running traditional systems of resource management, based on people and processes requiring manual efforts and legacy tech such as spreadsheets are struggling to keep up.

It is no surprise, that digital transformation is yet to reach the vaulting ambitions that it once espoused. Years of research suggests that less than 30% of enterprises actually succeed in meeting their transformation goals. On top of that, 7% out of the 16% who managed to achieve any improvements failed to sustain them in the long run. This makes it critical to adopt next-gen enterprise resource planning (ERP) systems which can optimize the allocation of materials through innovative technologies, and automate human resource processes across different enterprise verticals.

In the quest for better resource utilization, enterprises today, have steadily grown, honed, and transformed their ERP capabilities. Unfortunately, this has led to complex monolithic frameworks which are high on maintenance and low on performance. Due to years of customization or through multiple mergers/acquisitions, enterprises have exponentially created complex ERP systems with less functionality to get the job done. This makes innovating extremely difficult, putting enterprises on the backfoot when it comes to digital transformation.

Intelligent ERP can be defined as a set of ERP applications that overlay existing systems with connectivity and universal access capabilities. It uses cutting-edge technologies such as machine learning, IoT, advanced data analytics, data visualization, and artificial intelligence to optimize the management of enterprise resources. Unlike traditional ERP, stakeholders from across the enterprise as well as partner networks share visibility and governance of key processes. There are no cumbersome and dependency-ridden customizations bogging down the system. And new competencies can be onboarded without months of planning, development, and implementation.

This offers several benefits for the modern enterprise:

- **Seamless user experience** - UX redesign is a vital component of intelligent ERP, making component processes comprehensible to technical and business users alike. The learning curve is kept to an absolute minimum so that enterprises can accelerate their time-to-value from these new systems. As a result, it is possible to envision the ERP as a profit center.

- **Capex to opex conversion** - Typically, ERP systems were built from the ground up, adding components, layers, and integrations on a per-requirement basis. This implied massive investments in both on-premise hardware and software licenses, leading to a sizeable capex that could translate into sunk costs in case the enterprises decided to pivot towards a new direction. Intelligent ERP leverages the cloud to compress these elements into an as-a-service solutioning model. Enterprises need only invest in monthly or utilization-based subscription formats, without any lock-in.

- **Adaptability and scalability** - Another advantage of ERP on the cloud is the ease of scaling. The system can be scaled up or down as per dynamic requirements, ensuring no opportunity is left untapped and no resource is kept sitting idle.

- **Process predictability** - The biggest benefit of intelligent ERP is native support for artificial intelligence, machine learning, and sophisticated analytics. Artificial intelligence helps to optimize decision-making at every level, and machine learning...
ensures that every determining factor across the enterprise is considered when making a decision. Finally, analytics offers a
glimpse into the implications of data trends and forecasts on future requirements.

- **Flexibility** - Intelligent ERP brings greater flexibility than traditional ERP as there is no need to invest in rigid,
  change-resistant software licenses. Enterprises can leverage the benefits of advanced functionality without any vendor
  lock-in, owing to SaaS-based models driven by the cloud. The cloud also allows flexible access, from anytime and
  anywhere, improving productivity and easing collaboration.

While intelligent ERP appears to be highly advanced and futuristic, innovators are already taking major strides in this space.
SAP, for instance, introduced several updates to its intelligent cloud ERP in 2019, building on its decades of expertise with a
bevy of disruptive innovations.

**SAP Continues to Break New Ground in the ERP Space**

It can be argued that SAP was the first mover when it comes to ERP technology. Founded by five IBMers, the company started
with a rudimentary storage and management system for handling enterprise data. Today, SAP’s suite has evolved into a
multi-pronged ERP system, comprising Customer Relationship Management (CRM), Human Resource Management,
Financial Management, Product Lifecycle Management (PLM), Supply Chain Management (SCM), and Supplier Relationship
Management (SRM), among others.

In the last few years, SAP has made a major shift by moving its ERP solution to the cloud. It has also added intelligence
capabilities, making the solution more agile, intuitive, and easy-to-use. Of course, it continues its support for on-premise
systems, letting enterprises choose their preferred mode of integration and implementation. Interestingly, SAP has adopted
an industry-led approach toward intelligence. In other words, this isn’t “innovation for innovation’s sake”. The software’s
built-in AI and ML kick in when performing tasks including customer service center operations, invoice payments,
procurement, engineering, and order completion.

In February of this year, SAP introduced another iteration of its popular Intelligent Cloud ERP - SAP S/4HANA Cloud. This
featured the following:

- A new Advanced Financial Closing function to automate the planning, executing, monitoring, and analyzing of financial
closing tasks.
- An app for inventory KPI analysis which taps into SAP’s embedded analytics tools to power intelligent decision making.
- A new scenario in Project Lifecycle Management (PLM), using SAP’s proprietary machine learning technology SAP
  Leonardo to perform Intelligent Content Processing for Document Classification.
- Budget availability control to complete projects on time, in-budget, and as per pre-set SLAs

Clearly, SAP has gone beyond standalone and isolated applications of “intelligent” technologies. It has identified the use
cases most relevant to customers, squarely targeting the same via Intelligent ERP, this perfectly captures why SAP has
reinforced and continues to expand its market footprint as an ERP provider. Interestingly, these features can either be
deployed out-of-the-box or be configured as per individual enterprise requirements by an implementation partner, so that the
customer has to put in minimal customization efforts.

Either way, SAP’s Intelligent ERP is a massive leap from legacy era ERP technology which was monolithic, on-premise, and
difficult to scale.
Technologies Powering the Rise of Next-Gen ERP

Obviously, the evolution of ERP systems has not taken place in a vacuum. In the last decade, we have seen rapid advancements in several technology fields, all of which have made a significant impact on enterprise systems. SAP has been able to incorporate all of these capabilities into its service and product portfolio, offering a composite solution.

Specifically, we can consider six tech-innovations driving the rise of next-gen ERP:

- **The shift to the cloud** - The cloud has completely changed how data is collected, stored, processed, and retrieved. It democratizes access to both data and applications, as well as opens up opportunities for automation. Cloud-based ERP is also more cost-optimized as no physical hosting infrastructure is required and the vendor takes full ownership for maintenance. Further, enterprises can onboard additional cloud resources if necessary, or offboard the ones sitting idle. The entry of cloud in every technology sector has transformed ERP for good.

- **The widespread adoption of mobile** - Easy mobile access both empowers the employee as well as unlocks measurable gains for the enterprise. Mobile combined with the cloud offers real-time access to ERP data, letting users complete common tasks while on the move. This is useful in several scenarios: consider an on-field sales force that has to constantly manage orders and quotes, without access to the desktop. Also, key client requests may come in at any point of day, making it imperative to provide time & location agnostic response mechanisms. Enterprises can even engage a remote workforce who are dedicated to addressing the needs of a globally distributed customer base.

- **The utilization of big data and analytics** - This is an integral part of Intelligent ERP, converting data from historical transactions and process outcomes into actionable insights. Any modern enterprise will have streams of data pouring in from multiple customer channels -- big data capabilities can turn both structured and unstructured data into valuable action points for decision makers. A critical use case addressed via analytics is supply optimization in-sync with predictive demand.

- **The gradual rise of the Internet of Things (IoT)** - IoT is among the key underlying factors for smart factories, a major trend for manufacturers today. Intelligent ERP can plug into IoT devices, gathering data from these networked operational touch points in a manner similar to digital interfaces. Location, performance, ambient conditions, and other key parameters for IoT devices can be analyzed to help enterprises upgrade their capabilities. Importantly, IoT, Big Data, cloud, and mobile work hand-in-hand to create a fully connected enterprise landscape.

- **Sophisticated Artificial Intelligence (AI) and Machine Learning (ML) models** - Pioneers such as SAP illustrate why AI and ML are at the center of Intelligent ERP. By applying AI at critical junctures of the process value chain, decision making can become faster, automated, and more effective. One of the key areas of application is customer relationships where AI tailors communications and interaction patterns to meet unique customer needs. Similarly, HR operations can also be optimized by utilizing AI and ML.

- **The mainstream usage of Robotic Process Automation (RPA)** - RPA is now fast becoming a staple for future-ready enterprises. In resource planning processes, RPA can take over iterative tasks, freeing up enterprise stakeholders for more strategic initiatives like identifying hidden areas for value addition. Traditional RPA follows process-based workflows to define a fixed decision-making structure for common tasks. However, next-gen ERP couples RPA with AI technology - this allows enterprises to take automated yet intelligent decisions around resource allocation, planning, and decommissioning.

It is important to note that these technologies aren’t limited to a specific sector or industry-vertical. Intelligent ERP can be configured and precisely modelled for turnkey deployment in several domains.
The Need for SAP Intelligent ERP Cuts Across Industry Barriers

SAP’s expansive service and solutions suite targets several discrete around the world. It’s Intelligent ERP that aids problem-solving in critical scenarios such as:

- **Helping automotive suppliers and OEMs adapt to rapidly changing business requirements** - The global auto sector is undergoing a paradigmatic transformation, requiring agile and future-ready business models. Intelligent ERP optimizes operational delivery, turning basic operations for auto-suppliers and OEMs into a strategic asset.

- **Streamlining product launch for manufacturers** - In today’s complex manufacturing value chain, it is necessary to remove inefficiency at every stage and optimize business processes across product launch, distribution, and after-sales services. SAP offers a fully integrated and scalable platform to intelligently orchestrate these elements.

- **Unlocking greater profitability for the Hi-Tech industry** - SAP’s built-in business intelligence, supply chain management tools, and CRM modules gives Hi-Tech companies a closer view of their most essential practices. This boosts performance across the product lifecycle, managing billing, booking, backlogs for sustained profitability.

- **Modernizing infrastructure for energy & utilities companies** - Next-gen ERP can help energy & utilities companies get ahead of the transformation curve. By using SAP’s CRM, finance, and resource planning tools, companies can realize their vision for a digital future and drive greater efficiency.

Probably the biggest factor propelling Intelligent ERP adoption is cloud-based hosting and processing. It allows enterprises to take highly complex and multifaceted technology frameworks, and achieve simplified implementation roadmaps. It’s vital to consider that while SAP’s intelligent ERP can be adapted to domain-specific requirements, enterprises need not invest excessive effort or time in customizing the solution. The right technology partner should be able to provide a turn-key yet tailored SAP suite, minimizing implementation effort while accelerating time-to-value. At Birlasoft, we believe this is a key to realizing the true potential of Intelligent ERP, and positioning it as a pivotal cog for digital transformation journeys.
About Birlasoft SAP Practice - Enterprise to the Power of Digital

Birlasoft is your trusted partner committed to help minimize risk, and maximize your current IT investments with a “grow at your own pace” approach to digital transformation.

Putting industry first, Birlasoft, offers world-wide consultants that share deep domain expertise and provide exclusive IT solutions that create greater functionality across all lines of business. Top ranked by analyst, our rapid deployment methods, and award-winning services are proven to reduce cost, time to value and support your IT journey for better business outcomes. Customer endorsed, we strive to deliver 100% satisfaction for continued IT adoption and post go-live support across the lifecycle of every project.

Our breadth of SAP knowledge spans over more than two decades making Birlasoft your preferred integration partner delivering Intelligent digital and cloud technologies across the entire SAP landscape.

To know more, please contact us at sap@birlasoft.com or visit us at www.birlasoft.com