

DIGITAL BUSINESS PLATFORM: A NEW ERA IN ERP

(Cos there's a new hero in town!)



priority[™]

Catch a Rising Star



It wasn't long ago that Enterprise Resource Planning (ERP) envisioned a single system to manage all of a company's business needs. It was the promise of a unified system of integrated applications to manage the business and automate back office functions related to technology, services and human resources.

But **traditional ERP** hasn't always been able to keep up with evolving technology trends, especially those derived from reduced budgets, cloud computing, mobility, big data analytics and social engagement, not to mention the amount, and changing nature, of data, internal and external, that businesses and industries need to operate.

There is, however, a solution for companies looking to manage their processes in a unified way, but it requires business software vendors to step forward and support an entirely new application integration strategy.

*Enter ERP as a platform, or better still – **Enterprise Resource Platform**. Organizational platform first, with functionality on top.*

As well as the core functionality of traditional ERP to manage a company's finances, human resources, inventory and manufacturing, the Enterprise Resource Platform goes the extra mile. While today's ERP systems were created with a specific function in mind, the Enterprise Resource Platform is not bound to any preconceived idea. It exists to enable developers and more importantly, non tech-savvy business users, to tailor it to meet their needs.


For an ERP to serve as an organizational platform, it should deliver these seven generic cross-functional capabilities: *flexibility, openness, mobility, collaboration tools, user experience (UX), embedded artificial intelligence (AI) and cloud.*

This paper takes a closer look at each of these platform capabilities, the building blocks of the Enterprise Resource Platform and how, together, they can best serve modern businesses and organizations.





Flexibility



Only in recent years have companies sought after ERP systems that could define business processes and rules to potentially serve them for a decade or more. Today, however, competitive dynamics and the pace of change are so quick, that most companies don't know what their business model will be in the next 2-3 years.

This means that ERP must be flexible, as business agility is a must-have, to meet an organization's current and future needs. It must be **easy** to implement, **easy** to maintain and **easy** to enhance. Rest assured, businesses that are not agile or rather, are constrained by their IT systems, will fast become irrelevant.

We believe that users and admins should be able to handle their own systems, minimizing the dependency on third party vendors. This is best illustrated in an ERP with a strong **Business Process Management (BPM)**, the robust tools that define and change the business layer, making an organization's workflow more efficient. These tools also include a graphical drag & drop User Interface (UI) to allow users to build or change workflows in minutes. Further, a modern ERP platform can offer a broader range of flexibility enablers, such as mobile application generators, so that users can build mobile apps with a few easy clicks, without the need for programming skills.

But flexibility doesn't stop there. Flexible ERP offers **user-level personalization** to customize the UI, a **business rules generator** to control the behavior of the business, including the ability for non-developers to define rules, alerts and push notifications and a **Software Development Kit (SDK)**, to build system apps or enhance system modules.

Want to add a new product line to your business? How about a dedicated Mother's Day collection? A flexible ERP system won't require you to call in your integrator or programmer. Instead, it will allow you to add product categories, names and specifications to your existing catalog. What if your new product is offered in a range of colors? Using a set of free product parameters, you simply define a new field that contains the color options – and similarly, it's just as easy to define a separate authorization process for purchase or sales orders. Reports in the system will now include the new parameters and collection and you'll be able to generate a report at any time, without the need to recreate any of your reports. What about being alerted via SMS every time a new product is offered or shipped? With a modern ERP platform, you can do this in just seconds by simply defining a new business rule.

Openness

An important key in building and maintaining a viable Enterprise Resource Platform is openness. System openness enables **hyper-connected ERP** with a new level of interoperability between the core business processes, external data, Internet of Things (IoT) devices and third party applications.

System openness refers to the degree of accessibility to view, use and modify computer code in a shared environment. It creates new opportunities for more direct integration of the physical world into computer-based systems, resulting in improved efficiency, accuracy and revenues.

But to be truly open, an Enterprise Resource Platform must include **standard APIs** as well as **dedicated SDKs**. It's the convenient API layer that enables developers to integrate the ERP on both the database and application level with any third party or self-developed app.

A REST API in an ERP system, for example, enables rapid integration to external applications. With an API, any web developer can, for example, integrate your website and your CRM module. This means that your leads are automatically updated, and when integrated with your e-commerce website, any new orders via the site automatically create the order in the ERP. As part of the sales process, your e-commerce website will immediately show updated inventory and pricing information.

It's the API that literally "opens the door" to real connectivity. For starters, openness through REST APIs enables seamless connection to an infinite number of sensors and connected devices allowing businesses to take full advantage of the IoT. Fleet management is one such example, where the ERP system tracks each vehicle in the fleet, generating reports on mileage, gas consumption, location and even current velocity.

Similarly, if your company produces glass bottles, supported by APIs, sensors on the production floor measure the exact weight and volume of each drop of liquid glass into the mold. In real-time, the system delivers this data to the ERP backend, which immediately updates the inventory balance on the production floor to enable accurate material cost calculation.

Mobility

We recently surveyed **500 senior business decision makers** in UK companies to find out just how mobile their businesses were. Revealing a gap in perception of mobile working and the reality of working practices, the research found that while 95% of those who are permitted to work on-the-go think mobility increases productivity, over a third (34%) do not have the proper technology to fulfil its potential and 43% cannot perform business-critical functions on a mobile application. In short, while UK business leaders generally feel that mobile working increases productivity, it's clear from these findings that many businesses are struggling to perform business-critical functions from mobile devices.

Traditional ERP was designed for desktops, but modern ERP is designed for laptops, smartphones and tablets. While teams become more distributed, core business processes should become simple to do from remote locations as well.

The Enterprise Resource Platform supports mobile ERP on several levels, the most basic is that its *web-based UI* is responsive – with the ability to adjust itself to various screen sizes.

Applications for a mobile sales force, field technicians, proof of delivery (for distribution) and other sales and service-oriented roles must be part of your ERP system. Mobile ERP apps enable field service reps to deliver smooth, seamless and efficient work in the field, with full transparency and control by your corporate organization/management.

The highest level of mobile support is best illustrated by its mobile application generator so as not to limit organizations and mobile ERP users to the platform's pre-defined solutions. This innovative tool enables companies or teams to quickly and easily build their own mini-workflows on their mobile devices – without having to write a single line of code. A simple app can be, for example, for employees to report attendance via the app, equipped with automatic location detection. And if, alternatively, an employee is sick, they simply snap a photo of the doctor's certificate and upload it to the ERP system.

To build more advanced applications or personalized designs, the platform offers an innovative web SDK designed for developers.





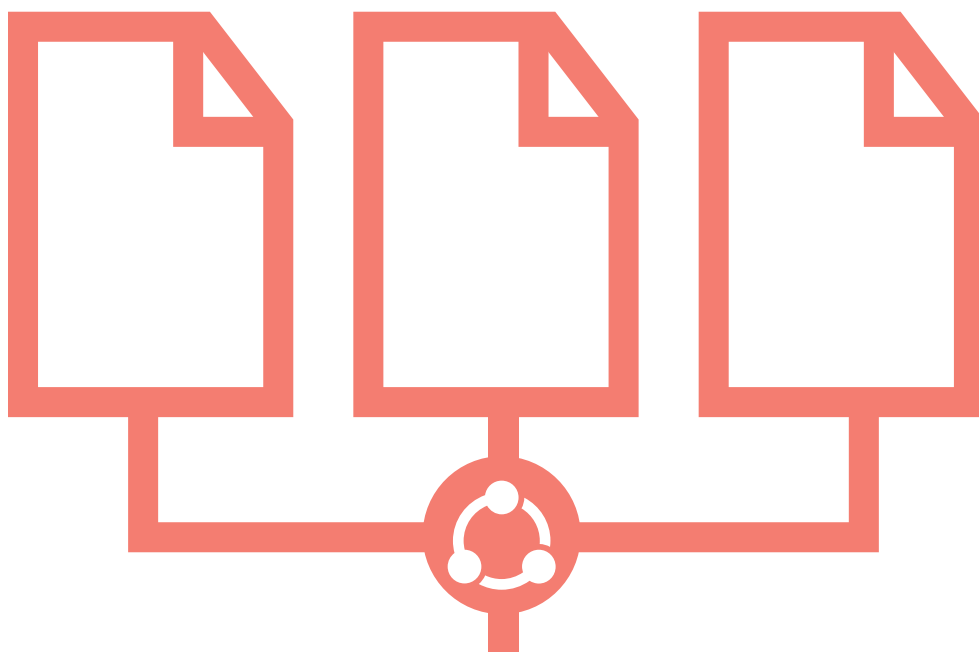
Collaboration Tools

As an initial first step, internal collaboration (or 'social') tools are designed for company employees to share tasks, documents and data – to work together to achieve a common goal or objective.

An ERP platform simplifies the process of collaborating with others by providing employees with access to the data they need when they need it. They do this by providing simple interdepartmental collaboration, where information from each department is funneled into one centralized location. This can potentially affect your business, starting with increased employee engagement, followed by improved efficiency, not to mention reduced operational costs associated with manual data tracking.

The Enterprise Resource Platform takes collaboration even further, by providing the infrastructure required to support these collaboration tools and seamlessly integrating them into the ERP system. Possibly the most important tool supported by the platform, is a strong social network or chat-like UI. Today, ERP vendors are working hard to give their products the look and feel of the popular Facebook or WhatsApp chat UIs.

Collaboration tools are not just for use inside the organization. More advanced collaboration scenarios include not only the ability to have internal dialogs and discussions inside the organization, but also the ability to share information (based on permission and authorization levels) with customers and suppliers. With a modern ERP, such scenarios can include giving your customers access to live data, such as the ability to view their current invoice or payment status or enabling them to open and even track the status of a service ticket until it's resolved/closed.



User Experience (UX)

As is proven time and time again, an intuitive user experience (UX) has tangible effects on employee productivity. That said, the user experience is often more critical than adding new system features or functionality, with the ultimate goal of making the user interface (UI) so simple that employees *can do their jobs without training*.

An integral part of the *UX power* is to have exceptionally rich functionality, yet keep the UI simple, showing only relevant options to each user at every stage in the work process and in accordance with its specific context.

As vendors continue to give a lot of attention to the UX, it's the modern ERP that promises a truly intuitive UI. Simply put, if it's not intuitive and you can't get started with zero effort, then there's little chance of getting users (willingly) on board.

Imagine that new and existing users can easily put shortcuts to their most common tasks or screens right on their home page, so that when entering their ERP system, not only do they get quick access but they can also see how many open tasks/to-do items are waiting for them. This is a real-time, holistic view to your pending tasks. Let's say, for example, you have 17 open price quotes waiting to be handled. With one easy click, you can access them and get to work.

Other examples of tools to boost a more intuitive UI include responsive Help tools to make learning quick and easy and step-by-step tutorials for main processes, advanced contextual search, personalized homepage and menus and quick access to recently opened documents.





Cloud

Cloud-based ERP is ideal for growing organizations, with highly flexible and scalable solutions enabling gradual, steady growth, to serve from a few to several thousand users. The cloud platform is secure and risk-free, keeping sensitive business data safe, while enabling users to easily access applications, services and resources on demand via the cloud.

As the cloud becomes increasingly more efficient, human intervention inside an organization will become less frequent. This means that IT (specifically CIOs) can spend more time on strategic planning, focusing on innovating and growing their core business. This is because with cloud ERP, less time and resources are spent on a company's IT team to manage hardware, software and upgrades.

Supported by the Enterprise Resource Platform, **modern ERP is cloud-based ERP**, where you can access your information from anywhere, anytime, with a simple Internet connection. You and your workforce can work outside the office, at customer sites and on-the-go. And because cloud ERP enables real-time data access, you always have full visibility of your current operational or sales activities, with the ability to track and update at any time.

Today, it's hard to imagine an organization or an entity who could develop and build a more secure environment than that of the cloud. Security today is a comprehensive mind-set that has to be built across every layer of the ERP environment, from actual network interface cards to user passwords. As a result, *cloud ERP is more secure.*

Cloud is the future for ERP implementations. Picture this: You're at a customer site and your ERP system sends an alert to your mobile. You need to approve a bank transfer to a reseller and it's urgent. You open the system app on your mobile, log in, click the message, double check the amount, click APPROVE and you're done. What was once a complex and lengthy process, can now be handled in a matter of minutes, as a growing number of companies make the move to the cloud (and stay there).



Embedded Artificial Intelligence

Artificial Intelligence (AI) is fast on the rise, affecting nearly every aspect of our business and our personal lives. The integration of AI into organizational systems, enterprise technology and ERP in particular, will not only affect our customer-facing work but also a company's internal workflows.

Embedded AI, an integral part of the Enterprise Resource Platform, is well on its way to integrating new functionalities and user interactions with the ERP system. AI can potentially free employees from manual, time-consuming and repetitive interactions with the ERP software. The new UX is now primed and ready to include embedded AI capabilities – a unique combination of bots and conversational UI.

It's not science fiction. It's the integration of AI-enabled bots in the ERP system that will open a range of new services and working scenarios to support conversational UI. Already in use, conversational AI, for example, has taken on the role of your new 'internal' data analyst, or rather, your new *personal assistant* – natural language tools combined with embedded AI and data processing capabilities to enable users to interact with the ERP system.

Just imagine, your salesperson asks the bot to open a new order for 23 mobile phones for a particular customer. The bot will know how to locate the customer in the system, will understand that some data is missing and will then ask the salesperson, "In the previous order, this customer received a 25% discount. What is the price per unit for this order?" And presto, the bot will automatically open the new order in the ERP system.

Bots are already implemented in the areas of customer service/customer portals and supplier portals. In another scenario, customers will chat with the ERP bot to identify and solve a problem, instead of opening a service ticket or calling the service center. The bot will understand their problem and offer an appropriate solution. In case the bot was not helpful in resolving the problem, it can open a service ticket for the customer and even request additional information, for example, "I opened Service Ticket 52687. Please attach a screenshot and our technical service rep will get back to you shortly."

The potential list of embedded AI functionalities can also include Machine Learning-based BPM. Imagine an ERP system being able to define business processes according to behavior patterns (e.g. individuals, departments, entire companies). Instead of defining specific business processes in the implementation project, the system will 'learn' what users are actually doing... and will, in turn, define the BPM itself.

CONCLUSION

We have presented the building blocks that make up the Enterprise Resource Platform – Flexibility, Openness, Mobility, Collaboration Tools, User Experience (UX), Cloud and AI. We believe that this platform does not only represent the future of ERP, but rather, that the future is already here. It is not a new take on old technology. It is vibrant, new technology in and of itself.

In its entirety, with all of its seven building blocks, the Enterprise Resource Platform delivers the missing answers to questions that have been asked in the ERP eco-system, not for years, but for decades. For companies and organizations who are committed to moving towards 100% digital transformation, the time has come for ERP vendors to step up to the plate and deliver the tools and applications that do just that and more.

The Enterprise Resource Platform paves the way towards a new application integration strategy at a time where we are all searching for that one solution to effectively manage our processes and workflows in a unified way.

It's yours for the taking. It's already here.