

White Paper



Upgrade Dilemma – SAP R/3 Enterprise or mySAP ERP?

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Keeping pace with the changes in technological and customer requirements, SAP has been prompt in delivering version upgrades for its products. But not all organizations using SAP have been able to upgrade their systems due to reasons ranging from lack of a clear roadmap to the end state post-upgrade, the business value that can be derived from an upgrade, and the cost implications. Further, organizations lack clarity about which SAP version would be more suitable for their business imperatives and scenarios. These reasons have led to organizations using SAP applications that exist at different stages of the application lifecycle.

Normally this situation is not a cause for concern, but SAP's recent announcements to discontinue direct maintenance support to earlier versions of its SAP R/3 software (3.1i, 4.0b, 4.5b, 4.6b, 4.6c), coupled with the unveiling of its next generation mySAP ERP and SAP R/3 Enterprise product roadmaps, creates a business need to analyze which SAP version and strategy is most appropriate for your organization. Take a look at *Figure 1: Release and Maintenance Strategy* to get a clearer picture.

In such a scenario, organizations considering upgrades as an opportunity for enhancing business performance while reducing IT costs – both capital and operational – would surely benefit in the long run.

The big choice: SAP R/3 Enterprise or mySAP ERP?

With the launch of SAP R/3 Enterprise and mySAP ERP, SAP has ushered in sweeping changes in the base technology. Besides providing compelling functionalities, the planned mainstream maintenance support for SAP R/3 Enterprise version is valid until Q1 2009 and for mySAP ERP until Q1 2010. This means users who are using SAP R/3 Enterprise or mySAP ERP will not only reap the dual benefit of advanced functionalities and features but also receive immunity from technological upgrades for the next four to five years — all in a single stroke.

Easily, the burning question on every SAP users' mind today is which version of SAP to choose: SAP R/3 Enterprise or mySAP ERP?

The answer lies in the fact that the business value derived from an upgrade exercise has a direct relationship to the depth of process changes in the value chain. Enabling industry-wide best practices, solutions and process improvements will generate greater value to an organization compared to making changes on a technical level. Eventually, your choice should depend on your organization's specific business needs and future requirements.

SAP R/3 Enterprise

An upgrade to SAP R/3 Enterprise means a full upgrade of the SAP R/3 core system. Your organization can upgrade directly to SAP R/3 Enterprise from any of the earlier versions of the SAP R/3 software. SAP R/3 Enterprise uses the SAP Web Application Server (SAP Web AS), which is based on open technology standards and connectivity protocols. This release, available since July 2002, is more stable, includes Core 4.7 with Extension set, and provides comprehensive Internet-enabled processing, improved portal integration, and flexible upgrade strategies.

Customers upgrading to SAP R/3 Enterprise gain not only from improved application functionality but also from shorter upgrade cycles in the future. As the SAP R/3 Enterprise core will be frozen moving forward, all future enhancements will be provided in smaller pre-packaged extension sets, which can be added at the user's convenience. Once the user is on SAP R/3 Enterprise, upcoming upgrades (planned annually) will take place only on the level of SAP Web AS and/or SAP R/3 Enterprise Extensions.

In terms of cost benefits, the Enterprise version does not require a new license. However, NetWeaver components for integration like EP/BW must be purchased separately.

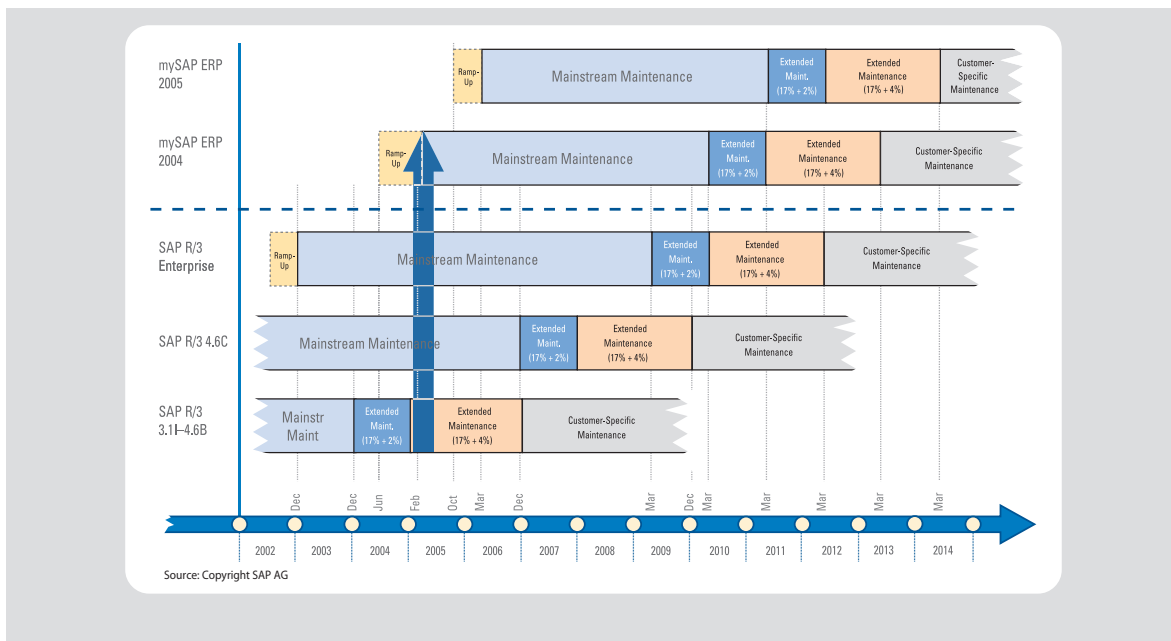


Figure 1: Release and maintenance strategy

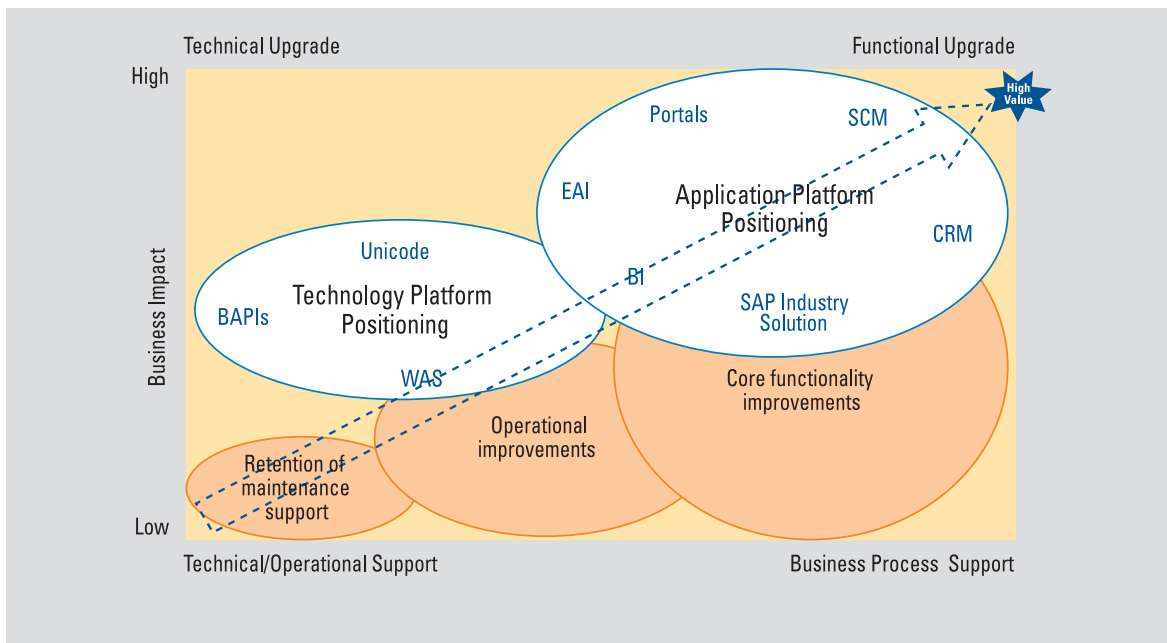


Figure 2: Upgrade value map

The existing license for 4.6c will be extended to include direct maintenance support for R/3 Enterprise as well. Further, the R/3 Enterprise's NetWeaver architecture allows organizations to integrate heterogeneous systems, which helps lower integration cost and time. If your organization uses only core R/3 modules (like MM/FI/PP/HR) and does not need to expand to other SAP components like mySAP Enterprise Portal, SAP BW and SAP XI, upgrading to SAP R/ 3 Enterprise version is the better choice.

mySAP ERP

Powered by SAP NetWeaver, mySAP ERP takes the SAP R/3 Enterprise application core and extends it with additional functions and features, such as people-centric usability and collaborative ERP processes. The key aspect of mySAP ERP is the SAP NetWeaver platform, which lays the foundation for new cross-functional business processes. Besides increased business process flexibility through Web Services, enabled by Enterprise Services Architecture, and significant flexibility through .NET and J2EE interoperability, mySAP ERP provides the following advantages:

- Workforce mobility through mobile infrastructure
- Transparency through Business Intelligence framework
- Improved workforce efficiency and productivity
- Delivery of people-centric services
- Faster turnaround and better decision making due to faster access to information
- Seamless integration with processes throughout the business to achieve a lower cost of ownership

Choosing mySAP ERP means that your organization will have the necessary infrastructure ready to extend the boundaries of your system landscape to include web-enabled services and hub-based integration of SAP and non-SAP systems. If your systems are not on SAP R/3 Enterprise already, a complete upgrade of the system is usually required to upgrade to mySAP ERP; otherwise, a functional upgrade is sufficient.

You should consider mySAP ERP when there is a clear business need for mySAP Business Suite solutions, or when integration of a range of different technologies and platforms is the need of the hour.

In terms of cost benefits, mySAP ERP comes with a new licensing fee, which bundles NetWeaver with Core R/3 and lowers the total cost of ownership (TCO) by reducing the need for custom integration and offering a complete lifecycle management for the system. However, our experience has shown that since the product is relatively new, upgrade costs could be higher in the future.

Choosing the right upgrade strategy

Choosing the right SAP version would deliver the business results you expect. In order to extract maximum business value from your SAP upgrades, you need to choose the best upgrade strategy for your business.

The right strategy depends upon an organization's need for advanced applications and open architecture standards. According to the Gartner Group, enterprises should upgrade directly to R/3 Enterprise¹. However, irrespective of the current version, you can choose to upgrade directly to mySAP ERP or migrate to SAP R/3 Enterprise first and then upgrade to mySAP ERP, according to your convenience. This is because, from an upgrade point of view, these steps are identical — SAP R/3 Enterprise is fully compatible and incorporated within mySAP ERP.

Typically, in any SAP upgrade project, consolidation is the vital preliminary step as it will not only provide its own benefits but also considerably simplify and accelerate the upgrade implementation process. A successful transition to Enterprise version or mySAP ERP can either be through a technical upgrade and/or a functional upgrade.

1. In a **technical upgrade**, functional enhancements requiring significant implementation effort are not done. The focus is on eliminating IT operating costs and realizing cost savings through IT consolidation and easier application maintenance. Since upgrade projects need to be carried out in a dynamic environment where changes due to ongoing projects and production support are continuous, managing this additional level of complexity while ensuring minimal business impact is essential. Therefore, using the right toolset to monitor the upgrade process is imperative. The other key challenges for a technical upgrade include the following:
 - Minimizing business impact
 - Minimal disruption of ongoing projects
 - Lowering TCO
 - Faster stabilization of new version
 - Zero cost or time overruns

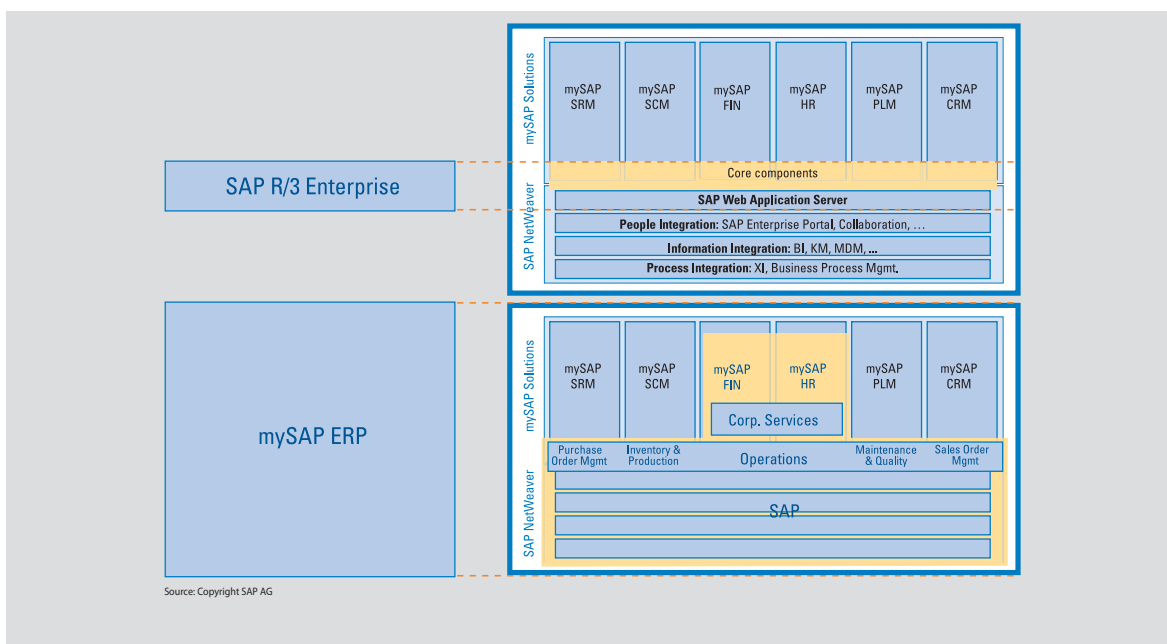


Figure 3: Feature overview: R/3 Enterprise vs. mySAP ERP

2. In a **functional upgrade**, functionalities offered by the new SAP version are also implemented in addition to the technical upgrade. The focus here is to optimize prioritized core business. For a functional upgrade, the key challenge is risk minimization while achieving the required business benefit. The challenge is more pronounced in the case of mySAP ERP, as it is an evolving product. Hence, determining the roadmap for implementing NetWeaver/mySAP ERP components that bring in the highest business value at the right time without significantly increasing the risk associated with the project becomes very critical. A detailed feasibility/ roadmap study to determine the best fit of NetWeaver components to the business situation becomes almost mandatory.

For the chosen components, the next logical step recommended would be to opt for a selective “Proof of Concept” before taking the decision to launch a full-fledged implementation. Also, it is important that you look at evolving components like XI carefully, especially when considering a direct replacement of the existing robust solution.

The best solution is an EAI tool, which coexists with XI for complete transition at a later time. However, organizations need to consider the following key issues, despite the approach they take, to avoid any surprises during the upgrade process:

The right toolset: We believe that using a toolset with the right kind of functionality is imperative because the predictability of the upgrade process is the key. A typical toolset should support planning, staffing, timelines, tracking of changes during the upgrade project, identification of the impact on custom objects, tracking of upgrade issues and their resolution, and identification of version conflicts when changes are transported from one system to another.

Moreover, the upgrade toolset should provide pre-upgrade system assessment and upgrade services, including system, technical and functional upgrades, as well as post-upgrade operations and improvements, using the Global Delivery Model. Some of the features you should expect from an upgrade tool are:

- SAP Upgrade Information Toolset: This reduces upgrade efforts and cost and helps achieve execution excellence and a high quality upgrade; it also gives accurate estimation of technical effort, monitors technical effort, and assists Transport Management
- Continuous monitoring and updating of project plan, including regular review/status meetings
- De-risking through iterative upgrades; detailed cut-over planning
- Multi-level testing approach minimizing chances of errors going undetected
- Retrofit activity to allow for routine production changes during the course of the upgrade

Retrofit/Landscape strategy: Depending on specific system requirements, you must chalk out a system landscape and retrofit strategy. The strategy depends on the duration for which the complete code freeze can be afforded, and the volume of changes planned for both bug fixes and other ongoing projects during the upgrade.

Co-sourced project team and well-rehearsed production upgrades: A project team co-sourced from the current IT team and the upgrade partner with intelligent work breakdown is critical to ensure that the time taken for business knowledge transfer to upgrade partner for effective functional testing of specific areas is minimized and the upgrade duration is reduced. Also, depending on the level of complexity of the instance to be upgraded, the upgrade system landscape should allow for multiple trial upgrades before the actual production upgrade.

Stabilization, standardization: A SAP upgrade project provides organizations with a unique opportunity to replace custom modification with standard SAP objects. This opportunity needs to be fully utilized to identify and remove obsolete custom objects and create a comprehensive, well-documented test plan, as well as ensure automation of test scripts for standard scenarios using CATT, which can be leveraged for future projects.

For more help during the upgrade, users can also take advantage of the SAP Functional Upgrade Check. With SAP R/3 Enterprise as target release, it provides an additional step called the “planning session”, which provides the guidance needed to put projects on the right track from the very beginning.

Recommendations and best practices for your next SAP upgrade

In order to extract maximum business value from SAP investments, it is recommended that enterprise businesses incorporate the following key elements into their future upgrade strategies:

1. **Change perceptions:** Instead of treating the upgrade as an isolated event, enterprises should view the upgrade process as an integral and ongoing activity that is closely aligned to the business. As business requirements change, the applications tied to those processes will also need to change and modifications must be made as and when required to support the functional value chain. Organizations that are able to overcome this hurdle can turn the upgrade process into a positive opportunity and achieve a distinct competitive advantage, improve business functionality, and engender greater cost savings.

2. **Use an upgrade assessment-based approach:** Enterprises should look to create a holistic upgrade roadmap. Before conducting a mission-critical application upgrade, they should conduct a comprehensive assessment that includes the financial, operational and technical impact on their existing system landscape.
3. **Use a trusted single-source partner:** Organizations should partner with a single, trusted, experienced and global consulting organization that has proven global delivery models and collaborations with product vendors. The chosen partner should, at the very least, possess delivery capabilities to execute recommendations from the upgrade assessment exercise. However, the best choice would be to partner with an organization that can create a holistic upgrade roadmap (discussed in previous sections) as well as implement the same. An upgrade partner should have expertise in SAP and non-SAP systems and components like EAI and NetWeaver.
4. **Enable your SAP applications:** Organizations should look at SAP upgrades as an opportunity for enhancing business performance and operational superiority. This can be achieved by adopting a strategy to bring down the cost of IT operations and improving business focus by investing in the latest SAP functionalities.

A key challenge that every organization faces while upgrading to Enterprise version/mySAP ERP is the lack of best/next practices.² This is where your carefully selected upgrade partner plays a vital role. Here are some of the key best practices/learnings recommended for your next SAP upgrade:

- Functional enhancements and the new NetWeaver component implementation should be taken up after the technical upgrade to reduce business continuity risk
- The R/3 application upgrade should be isolated from the required database and OS upgrade to minimize risk
- A plan should be made to manage other ongoing initiatives (apart from the upgrade) by selecting the best retrofit and upgrade landscape strategy
- The right toolset should be leveraged to aid exhaustive testing, fixing technical upgrade issues, improving predictability, and achieving execution excellence

Before embarking on the upgrade path, assess if upgrading your SAP applications would enable your organization to derive continuous business value while reducing the cost of operations. Moreover, you should ensure that upgrades are not done in silos, but are linked to the organization's IT setup as well as business objectives.

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¹ Gartner Group

² Yvonne Genovese, Vice President, Research Director, Gartner, Inc, 2003



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