

CASE STUDY

Air France Soars to New Heights with Upgraded mySAP ERP System: Meeting Its Commitment to Excellence

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Albert Pang
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IDC OPINION

Companies are beginning to realize the benefits of leveraging the latest enterprise applications to better position themselves amid market forces like globalization, shrinking product cycles, and information revolution. As they start building a business case for such investments, they may consider the following factors:

By using the latest releases of enterprise resource planning (ERP) systems, companies like Air France are capable of transforming their operations to pursue even greater operational excellence and service improvement.

Upgrading to the latest version of ERP applications is becoming a prerequisite for companies to mitigate risks, reduce complexity, control maintenance costs, and standardize corporate governance activities.

For many companies, the business as usual approach is not the best option anymore. If these companies want to leverage new functionality, improve their competitiveness, and position themselves for success in the future, they must often upgrade or change their existing system. In general the decision to make necessary changes should be based on the following factors:

- Functional improvement for a larger number of users
- Ease of integration and business process mapping
- Enhanced connectivity and collaboration among internal and external users
- Reduced time to introduce products and services to the marketplace
- Long-term support and maintenance from software vendors
- Positive cost impact via consolidation of systems and software instances, reduced total cost of ownership (TCO), and improved return-on-investment (ROI)

IN THIS CASE STUDY

This IDC case study discusses the strategies that enterprise applications customers, especially those using SAP R/3 versions of SAP's enterprise resource planning software, can apply to plan upgrades for their growth initiatives, improve competitiveness, and boost operational efficiency. It features Air France, which has experienced significant benefits after successfully upgrading to a new mySAP ERP system.

AIR FRANCE

At a time when the airline industry is still reeling from market forces like record oil prices, discount carriers, and geopolitical turbulence, Air France KLM Group is buoyed by strong business performance — 20 billion euros in revenue in 2005 — as it continues to revamp its internal system to control expenses; standardize financial, human resources, and purchasing applications; as well as leverage greater synergistic benefits from its recent merger with KLM.

The moves are expected to have significant impact on business processes and the key controls that Air France and KLM use to optimize a global fleet of 551 airplanes that carried more than 64 million customers last year and supported the collaboration of more than 100,000 employees.

Air France has been an SAP ERP customer since 1998. Starting with financial controlling and purchasing initiatives, Air France has since evolved and standardized many of its internal business processes on SAP. The SAP solution touches the entire organization with thousands of users performing a broad set of business processes: from accounts receivable to budget controls, and from general purchases to maintenance, repair and, overhaul (MRO) for heavy maintenance management of its airplanes.

In May 2005 Air France kicked off a project to upgrade the SAP R/3 4.0B system to mySAP ERP, which provides ERP Central Component (ECC) 5.0, the main component within mySAP ERP solutions. In December 2005, the upgrade project was completed on time and under budget, according to Antoine Bihler, head of SAP Competence Center at Air France. Working closely with SAP and its partner, the systems integration division of IBM, Air France considers the upgrade project a success. "It was 10% less than budgeted, and we worked very well with SAP and IBM," Bihler said.

By upgrading their ERP foundation, Air France gained access to new and enhanced capabilities, lower operational costs, and improved end-user productivity. Some of the other benefits of the upgrade project are multidimensional and include:

- ☒ Greater usability and satisfaction for more than 2,200 corporate users at Air France with regard to Web features like bookmarking frequently used intranet pages and system menus
- ☒ Enhanced reporting and reduced time to generate business warehouse reports

"That is why we made the move to mySAP ERP. We were able to make the move quickly and cost effectively. The upgrade has helped us build the foundation for the future and will enable us to leverage mySAP ERP capabilities, Air France and SAP resources. Furthermore, it will eliminate redundancies, and reduce custom development".

—Antoine Bihler, head of SAP Competence Center at Air France

- ☒ Easier account information access by Air France business analysts, buyers, and other users compared with the difficult data extraction tools used previously
- ☒ Reduced programming and maintenance costs with the elimination of nearly 100 customized programs
- ☒ A repository of over 1,600 test cases and process best practices for future reuse and system improvement

Project Analysis

The successful upgrade project underscores how companies the size of Air France can simplify the task, optimize the value of the latest software technologies, and finally achieve sustainable business process improvements.

While many large corporations could continue with their existing systems and perhaps have the budget to prolong the extended maintenance, the decision to upgrade and migrate to a new environment reinforces the desire of these organizations to change for the better in order to stay competitive in the future.

In the case of Air France, the impetus of change comes down to a number of principles.

Speed of Service Delivery

For any company that prides itself on having an employee-centric culture and quality customer service, the speed of information delivery could separate the winners and laggards. Air France's decision to upgrade is based on providing relevant, role-based, and timely information to its employees, suppliers, and customers, all of which will benefit from a stable and scalable Web-based platform that delivers intuitive user interface, sophisticated reporting and analytics capabilities, as well as design elements that accelerate task and project completion. "It's very important to Air France to be the best...be on top of the (technology) wave," Bihler said.

Retire Legacy Maintenance

At Air France, the continuation of the SAP R/3 4.0B system would have meant rising maintenance costs especially due to customized product features, while the migration to mySAP ERP translates into a controllable expense structure with a predictable outcome. Other organizations are quick to reckon that the continuous maintenance of their existing systems will cost them dearly in terms of support fees as well as keeping a shrinking pool of programmers on board to look after legacy codes. Air France shot two birds with one stone by migrating to mySAP ERP, which carries mainstream maintenance through 2010, and ending the usage of customized programs in the old system by up to 6% on financial and 41% on material management. That would mean the elimination of 98 customized programs, mostly written in the SAP development language ABAP, allowing Air France to redeploy these IT resources to other more strategic projects.

SAP NetWeaver Exchange Infrastructure (XI) is a component of SAP NetWeaver. SAP NetWeaver Exchange Infrastructure provides open integration technologies that can support process-centric collaboration among SAP and non-SAP applications, both within and beyond enterprise boundaries. XI acts as an integration broker and runs on the SAP Web Application Server.

Ease of Integration

The new system will increase the synergistic benefits from its merger with KLM as many of the underlying systems being used in different operations in France, Holland, and elsewhere will be replaced, combined, and standardized. For example, the easy exchange of mission-critical data by using SAP's Exchange Infrastructure (XI) technology in NetWeaver, a standard offering within mySAP ERP. "We can have a common supplier database and a common warehouse for aircraft components," said Bihler. In the next few years, Air France envisions that it will only need to house the parts and components in a central warehouse, creating consolidated inventory and eliminating duplicate orders: "It's going to a huge benefit putting two stocks into one stock," Bihler said.

Lessons Learned

Management Vision

Since the management decided early on to standardize on a single ERP system as a strategic initiative for Air France to remain a world class organization, the upgrade doubled its commitment toward using the latest technology to achieve operational excellence, which serves as a clear goal for all participants to rally around and overcome challenges real or imagined. That in turn fosters greater understanding and collaboration between management and business units and their stakeholders, even extending that to its external technology providers and business partners.

Testing and More Testing

With the help of automated testing tools from Mercury and trained consultants from IBM, the carrier was able to build and expand the test cases through the Air France competence center and its business analysts. Six hundred test cases were built for material management applications and more than 1,000 for financials all within a three-month period. Along with such rigorous testing and simulation, Air France took two practice runs of the preproduction system, which ran flawlessly.

Training Metrics

Training has always been the crucial link to any successful upgrade project, and the Air France project was no exception. The carrier provided both classroom and elearning sessions to about 2,000 material management and financial users detailing the functional changes with the new system. More than 81% of the trained users reported satisfaction after attending the training sessions. User feedback centered on improvements in the menu structure, citing the enhanced look and feel of the transaction processing of the system in line with the positive comments from other ERP users who have experienced productivity gains — such as fewer clicks and easier drill-around from their new Web applications.

SITUATION OVERVIEW — ERP UPGRADE INITIATIVES

In our global marketplace, with pressures created by increased costs, compressed product life cycles, Web-technology-based channels and business models, competition from both traditional and emerging entities, and industry-specific challenges, it is little wonder that organizations are seeking whatever competitive edge is available.

For a long time, many of these companies have either overlooked or postponed the need for upgrading the enterprise resource planning (ERP) systems that address corporate functions like accounting, human resources, procurement and inventory management. In some cases these systems have been running on an outdated client-server architecture that requires heavy and expensive maintenance with limited room to accommodate future growth and changing requirements because of a lack of scalability and usability.

After years of stitching these systems from multiple vendors, companies may even find that they now have a hard time handling day-to-day tasks from bookkeeping to order taking, or extending these systems to meet the rising expectations and demands of their customers, business partners, and regulatory agencies.

In other words, if change is the common currency everybody uses to improve their standing in the so-called global village, can a company rely on its existing system to handle the change with confidence?

In most cases companies that rely on legacy systems — accounting and human resources software — are finding it increasingly difficult to prepare their financial reports, provide management with reliable sales and inventory data, and keep up with the rising costs of maintaining their aging systems — especially those that have gone through significant modifications — that deliver diminishing returns.

The following lists other common issues cited by users when seeking to extend the lifespan of their outdated legacy systems to accommodate growing operations after embarking on a wave of mergers and acquisitions or international expansion:

- Legacy systems are prone to errors, recurring failures and costly fixes.
- Nonintegrated systems prevent timely forecasting and planning.
- Revenue growth is inhibited due to missed or lost opportunities in cross-selling and up-selling, the lack of analysis of product performance, and system limitations around understanding customer profitability.
- Multiple instances and disparate systems breed incompatibility, unnecessary system redundancy, and lack of organizational visibility.
- Insufficient financial control and reporting cause the inability to meet corporate governance and compliance requirements.

Strategies for System Upgrades

While system upgrades can seem challenging, companies can meet these challenges by planning, testing, leveraging vendor partner expertise, and gaining internal commitment. Some users may choose to stay put, but the case study listed below highlights the growing recognition for organizations like Air France to upgrade their ERP system in order to achieve increased operational excellence today and in the future. System upgrades could become one of the most effective strategies to survive and thrive in the marketplace teeming with competition.

Other objectives include the need to have comprehensive analytics and reporting capabilities, attain faster decision making and improved control, enable transparency throughout business processes as well as empower employees through quicker information access.

While it may take some time for organizations to achieve some of these objectives, employee self-service for example is a much easier task to accomplish with the use of a Web-based system.

With open standards like J2EE-based application servers and Web Services support, as well as improved upgrade scripts, testing tools, and best-practices methodologies, companies now have an array of shortcuts and preconfigured templates to help them achieve desirable results in their upgrade process.

Additionally they should consider the following strategies to smooth their upgrade process.

Take a Gradual, but Deliberate Approach

Corporations need to be prepared to cut the umbilical cord, but they need to retire the older systems gradually. In some cases they may need to live with two systems for a short time in order to complete data synchronization.

Initiate a base-level upgrade to meet the minimum requirement for adopting service oriented architecture (SOA) as well as industry standards like J2EE application server in order to take advantage of open technologies and avoid proprietary systems in the future.

Seek Industry Expertise

By using vendors that have industry-specific expertise, ramp-up time will be reduced and success rates will improve accordingly. Also rely on vendors that offer truly open architecture to minimize integration expenses and headaches. That means their products need to be interconnected not just within different modules but also with external systems that invariably use a different code base.

Have Clear Goals

Users may need to factor in some bumps in the road in the beginning of an ERP upgrade process. Allow extra time for planning, training, and outreach exercise in order to ease any end-user transition pain. An ERP upgrade project should allow

companies to gain financial control and operational efficiency. For example, companies should expect improved payables forecast, reduction in time to turn around a purchase order, as well as the shortening of the entire order-to-cash cycle.

Improve Corporate Governance

After consolidating different ERP systems and streamlining the business processes through an upgrade, users should expect improved corporate governance by taking advantage of features like master data management for Basel II requirements or internal control manager for Sarbanes-Oxley compliance.

Align Upgrade with Fiscal Calendaring

Avoid installing or upgrading financials applications in the middle of one's fiscal year. It would create a multitude of reporting, accounting, and auditing problems. Do it in the beginning of the fiscal year instead so that users don't have to duplicate their efforts.

Other shortcuts include:

- Adopt phased implementation with increasing business value
- Embark on short, focused upgrade projects
- Meet fixed-scope, fixed-time requirements by stressing predictable implementation time and cost
- Establish preconfigured end-to-end business scenarios, especially for common business processes, rules, and procedures

mySAP ERP 2005 Update

SAP, the market share leader in ERP applications, is in the midst of ramping up the upgrade process of its 32,000 customers to help them take advantage of better product functionality, Web services components, as well as lower overall maintenance costs.

The move targets many of the first-generation SAP R/3 customers who have been using these client-server systems since the 1990s and are finding it necessary to adapt to a Web-based environment in order to improve their workflow versus their current disjointed processes, access real-time information as opposed to batch data, and finally facilitate internal and external collaboration, which cannot be easily done with different instances of financial, planning, and purchasing applications.

In addition these SAP R/3 customers — running versions from 3.1 to 4.6B — will face the expiration of their system maintenance from SAP by the end of 2006. Customers using SAP R/3 4.6C will receive support to the end of 2006. They can then extend it through the end of 2009 and will have to pay extra fees under extended maintenance agreements.

By moving to mySAP ERP 2005, these customers are expected to achieve the following:

- ☒ A stable foundation for the future
- ☒ Access to new functionality and a reduced need for custom programs
- ☒ New integration tools like SAP NetWeaver
- ☒ Budgetable maintenance fees and commitments
- ☒ An array of enhancements for embedded business intelligence, master data management, portal creation

More than 500 enterprise services enhancements allow users to fully utilize Web-based applications features like employee self service for human capital management and benefits administration, manager self service for recruiting and collaborative project management, and role-based capabilities in manufacturing.

mySAP ERP and Business Suite applications encompass the domain expertise of 28 industries — even at the subvertical level — to address diversified needs from commissions management for insurers to student life cycle in higher education.

Examples of future enhancement packages for mySAP ERP include legacy and statutory updates to SAP's general ledger and user productivity enhancements for budgeting and forecasting.

The cost of an upgrade varies depending on factors like the size and complexity of the upgrade and needs surrounding integration with the existing systems. The final upgrade cost will also be contingent upon the amount of current modifications, which can be replaced by improved functionality with the new mySAP ERP system, and the project scope as well as the diversity of the existing hardware environments. So far more than 500 upgrade and implementation projects of mySAP ERP 2005 have been launched with SAP customers. Fischer Advanced Composites, an aviation parts manufacturer, completed a technical upgrade from R/3 4.6C to mySAP ERP 2005 in 45 days. The project covers sales, purchasing, corporate services, and financials applications for 405 users. By contrast, Edelweiss, a subsidiary of UBS Swiss Bank, has implemented mySAP ERP 2005 in 40 days allowing 450 users to access financials, human capital management, real estate, and business intelligence functionality.

The examples, along with the Air France project, illustrate the changes that many customers can expect:

- ☒ Software upgrades can seem challenging, but SAP has laid out actionable strategies that can help its customers complete the process in a compressed time frame with a fixed budget.
- ☒ Existing business processes and system modifications can continue throughout the upgrade process, while Web-based enhancements can better equip a company in its race against the unrelenting pace of change in the marketplace.

mySAP ERP is powered by the SAP NetWeaver platform, a composition platform that can position organizations to build new business solutions more rapidly while realizing more business value from existing IT investments. SAP NetWeaver supports new cross-functional business processes and can help to lower total cost of ownership by reducing the need for custom integration and by offering complete life-cycle management for applications. It is also seen as the foundation for enterprise services architecture and should help align people, information, and business processes across organizational and technological boundaries.

- ☒ Expected benefits from the upgrade can outweigh the risks of staying with existing systems, which are often likely to compromise a company's competitiveness by inhibiting its full potential to leverage human, physical, and information resources.

CONCLUSION

For many users the status quo is no longer an option because of the rapid changes in their marketplaces as well as the need to present a single face to customers, suppliers, and business partners with consolidated and consistent data sets, detailed reporting, as well as measurable results.

With increased demands for productivity gains, value-based pricing, and continuous product innovation, companies can no longer face up to future challenges with their current legacy systems, which ultimately can cost them dearly in terms of growth, cost containment, flexibility, and agility to address new opportunities and competitiveness.

While companies adapt to change, those that succeed tend to be the ones that have the best understanding and the business intelligence needed to decipher changing customer requirements and quickly respond to them effectively. In that sense companies need to implement a suitable system to embrace and accommodate change before it overwhelms them.

Through 2006 and 2007, SAP plans to accelerate delivery of new capabilities by providing of a series of enhancement packages, which customers can optionally implement on top of mySAP ERP 2005. These enhancement packages are SAP's technique to deliver high-value application solutions to organizations that have implemented mySAP ERP 2005. SAP's enhancement packages offer new and enhanced software capabilities to mySAP ERP 2005 customers. They can afford lower-impact updates to core ERP processes, leverage new capabilities provided by SAP NetWeaver, and can be deployed as an option on top of SAP ERP 2005.

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