

# Top 10 Ways to Ensure a Successful SAP® Upgrade

By Anurag Barua, The Washington Post

***Editor's Note:** Ouch! Nothing stings worse than the results of an upgrade gone bad. All that time and money wasted (not to mention the burning looks from those impacted as you walk down the hall). Makes you wonder, "What makes the difference in a successful upgrade vs. one that's destined to fail?" Anurag Barua has carefully observed the key ingredients in the recipe for a positive SAP upgrade experience. Allow him to share with you his "top-ten" best practices, and see if implementing them in your next upgrade can bring you a round of cheers (and spare you a lot of jeers!)*

## Introduction

If you (or your company) have successfully implemented SAP or are in the process of doing so, you probably know that in addition to death and taxes, SAP upgrades are among the unavoidable certainties of life. Now, by putting upgrades in the same category as death and taxes, I am not implying that all three are equally painful—although, many of us that have seen and lived through upgrades will promptly tell you that a poorly planned and badly executed upgrade can be more taxing than death itself. On the other hand, a meticulously planned and well-executed upgrade project can generate numerous benefits for the project team and the company. This article will provide you with several best practices in planning for and carrying out an SAP upgrade. Yes, a lot of these best practices might sound like common sense, yet I am amazed at how often some of these best practices are never thought of, and worse still, ignored in the interest of time.

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Whether you are upgrading from a 3.X version to any higher version, 4.6C to Enterprise 4.7, from Enterprise 4.7 to ECC 5.0, from 4.x to ECC 6.0, or from any other combination of SAP releases, the keys to upgrading success in this article can be effectively applied to your project.

### **1. Clearly understand and assimilate the value proposition, ROI, and key business drivers of an upgrade**

Different enterprises have different reasons for upgrading. For some enterprises, access to the latest and greatest in SAP functionality seems to be the compelling reason to upgrade. For others, the end of maintenance – in the near future of the release they are currently on – is the dominant reason to upgrade. Some customers who are not in produc-

tion like to upgrade to a major release earlier rather than post Go-Live to enhance the impact to their live production systems. Whatever your primary reason(s) might be, it is absolutely critical that every single constituent of your SAP universe equally comprehends and assimilates the business drivers of your upgrade. I have often heard those affected by an upgrade ask, "Why did we ever decide to do this?", "What are we getting out of this?", etc. Such skepticism, bordering on cynicism, creates an atmosphere of mistrust that can ultimately undermine the efforts of the project team in getting the project completed on time.

### **2. Strive for maximizing support, commitment, and sponsorship of senior management team.**

Any project, and not just an upgrade project, requires the full commitment, support, and sponsorship of the senior/executive management team for it to succeed. Experience has shown that there is a direct correlation between management support and the success of an upgrade project. While the project may not get the blessings of every member for the senior management team, it is incumbent on the project team leadership to ensure that disagreement does not degenerate into skepticism and culminate in cynicism. In the very least, steadfast support of your organization's CIO/CTO and CFO are a must.

### **3. Treat an upgrade (however limited in scope) as a full-blown project.**

It goes without saying that an upgrade is a project and thus requires a project team with at least one project manager, if not a Project Management Office (PMO). An upgrade should never be approached in an ad-hoc manner because it impacts your entire organization. In fact, I'd go to the extent of saying that an unstructured approach to an upgrade is a recipe for disaster. Therefore, it is critical that an upgrade project has a project charter, plan, and scope. It needs to be assigned resources and a budget. And, of course, once the project is kicked-off, progress needs to be tracked to the plan.

#### 4. Assemble a very competent project team.

The upgrade project team should consist of as many A-players as possible. Unfortunately, if your enterprise has not gone through an SAP upgrade before, even having all the A-players may not suffice. Consideration should be given to engaging competent consulting resources (onsite and/or offshore) that have the experience. One often-overlooked fact is that companies are sometimes just too happy to find resources that have been through any SAP upgrade; this is a myopic approach. You should try, if possible, to find consulting resources that have gone through the exact same upgrade. In other words, if you were upgrading from R/3 4.6C to R/3 Enterprise 4.7, it would be highly beneficial if your consulting resources have gone through the exact same upgrade path.

If you do have the expertise in-house, you still need to make sure that you have your best Basis administrators, security specialists, developers and architects,

configuration specialists, business analysts/experts, and testers on the team.

#### 5. Devise an effective communication strategy.

A poor communication plan can jeopardize your upgrade project for a very simple reason: The sponsors of a company's SAP investments seldom consider an upgrade project a necessity. Emotions on investing time and effort into an upgrade range from suspicion to confusion to disbelief, just to mention three. It's therefore imperative that the upgrade project's leadership team draw up a communication plan that includes regular updates on the progress, early notification of potential impediments, regular team meetings, and frequent reminders of the objectives of the upgrade. A robust communication plan is critical if the upgrade is being carried out in various physical locations simultaneously and/or if key constituents of the project team are geographically dispersed. An effective communication plan is your best change management tool.

***"A poor communication plan can jeopardize your upgrade project."***

#### 6. Carry out a very detailed upgrade assessment.

Your upgrade assessment must include:

- System sizing: SAP's preferred approach is to use the QuickSizer tool that gives you an approximate idea of the space requirements. The other tool that helps in system sizing is your own judgement and insight. It is always a better idea to err on the side of caution and allocate more space than necessary. Adding space on the fly is inconvenient and disruptive. On the other hand, unused space can be easily reclaimed, so it's better to be safe than be sorry.
- Analysis and compilation of all the customizations carried out in your system: This includes (but is not limited to) all utilized user exits, append structures, implemented Business Add-Ins (BadIs), and most importantly, modifications to the core (in SAP jargon, this is commonly referred to as "core mods").
- Complete analysis of your interfaces to and from your SAP system(s) and most importantly, the connections that bind other systems to your SAP systems: Don't just limit this analysis to true interfaces; remember to include "bolt-ons".
- A complete inventory of available hardware and software needs to be taken, then compared with the requirements for the upgrade: Most often, client machines have to be upgraded to a newer version of SAPGUI following the upgrade; if not planned properly, there can be a mad scramble to accomplish this after the upgrade. If the hardware on client machines

has to be upgraded, the right time to do so is prior to the upgrade.

- Release notes for the release that you are upgrading to need to be read and understood by your upgrade team: Quite often, perusal of release notes is considered to be an activity limited to the functional and configuration specialists. In reality, regardless of whether your upgrade is a “technical” one or a “functional” one, the whole team, including your technical resources, needs to read and digest these notes.

**7. Try and carry out at least one dress rehearsal of your actual upgrade.**

This may sound like a luxury when you are upgrading a live system and need to minimize downtime. Instead, it's a highly recommended practice as a dress rehearsal will give you the opportunity to identify issues ahead of time, get them fixed, and learn from the experience. If you have sandboxes in your environment, you can carry out your upgrade in one first and treat it as a dress rehearsal. Some companies do several upgrade dress rehearsals before they do the actual upgrade.

**8. Plan and deploy an effective testing strategy.**

Ensure that you have properly scoped out your testing effort. If time and resources prevent you from testing every single “delta” feature of your upgraded SAP version, make sure that the areas that are most relevant to you are thoroughly tested. The project team, in close collaboration with representatives from various business units, should decide and document the subset of the

overall functionality they will be testing. It goes without saying that the unit and integration test scripts and scenarios should be written up prior to the completion of the actual upgrade. Try to use your Business Process Procedures (BPPs) for testing various scenarios after the upgrade.

**9. Fully leverage SAP's support framework.**

Of all the things I have recommended so far, this may sound like the most obvious. Yet, quite often, it is something that is considered late in the game and worse still, comes in hindsight. Refer to relevant OSS notes and guides, and consider enlisting the direct services of SAP's support organization for guidance, as well as rapid troubleshooting of issues and resolutions.

After every upgrade, inexplicable short dumps are very common. If your research does not yield any meaningful results, do not hesitate to open an OSS message. Even then, just opening an OSS message may not be enough. You need to fully understand SAP's escalation mechanism in the event that you do not receive a timely response in the OSS. If the OSS message you have entered is in reference to a showstopper, you do not have the luxury of waiting too long for a response. Therefore, you need to be aware of the escalation options that you potentially have in order to expedite SAP's response. When you create a message in the OSS system, you need to assign a priority. If the problem you have is a showstopper, you should assign it “high” or “very high” priority. SAP may not agree with you and may downgrade the severity of the message but you can make a case for a higher priority on your message.

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
**10. Plan for an environment that will be subject to minimal changes during the upgrade.**

All activities that may lead to changes in your upgrade environment must be controlled and, if possible, minimized. Aspects of the upgrade may be compromised if your upgrade exercise is akin to taking shots at a moving target. No configuration or development can take place during the actual execution of the upgrade; you may consider locking down the system during this period. During the post-upgrade phase (adjustments, then testing and validation), all normal configuration and/or development activities should be avoided. The only types of configuration and/or development activities to be carried out are in response to the

technical adjustments (via transactions SPAU and SPDD) and fixes to bugs found during testing and validation. Should there be issues, mixing normal and upgrade-specific configuration and/or development activities makes it a challenge to determine which issues might have been caused by the upgrade and which ones would have occurred even with the non-upgraded version.

### **Conclusion:**

In this article, I have shared with you ten of the most important things to keep in mind in order to plan for and execute an SAP upgrade. Yes, there are customers that have achieved success without the rigorous planning and meticulous execution as discussed in my article, but these are few and far between. You have nothing to lose and a whole lot to gain by incorporating these recommendations into your upgrade planning and execution.

**Anurag Barua** is Manager, SAP Application Support for the Customer Competency Center (CCC) at The Washington Post. He has over 13 years of experience in conceiving, designing, managing, and implementing complex software solutions, including 8 years of SAP experience. He has been associated with several SAP implementations in various capacities. Anurag's areas of specialization and expertise extend beyond BI and include FI/CO, Logistics, NetWeaver™, ABAP, SOX compliance, reporting, and Project Management. Anurag is a frequent speaker at various SAP Conferences and writes for several SAP publications. He is the author of the book "SAP BW Ultimate Questions, Answers, and Explanations: SAP BW Certification Review". He has a B.S. in Computer Science and an MBA in Finance. You may reach Anurag at [Anurag.Barua@SAPtips.com](mailto:Anurag.Barua@SAPtips.com). 

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