Introduction

Implementing SAP has always been about transformation, or letting go of old ways of doing things in favor of something newer and better. Transformation goes beyond the incremental changes an organization might adopt as it seeks to change. Instead, transformational change is synonymous with revolutionary, rather than evolutionary, change. It’s about turning the corner, getting over the hump, or making the leap to a better place. Is it painful? Nearly always. Is it worth it? With a number of exceptions, the answer is nearly always yes. Implementing SAP is one of the few broad transformations that can take not only a business unit but an entire company to the next level, to a place where better information is delivered more quickly, better decisions are made, and ultimately an increased return on information (an old SAP adage that continues to be validated by thousands of SAP’s customers) is realized. The trick is doing it right.

Doing It Right

The pain associated with an SAP implementation comes from several different places. End users will be changing both their tools and the way they work. Managers and other decision makers will be changing processes with which they’ve grown comfortable over the years. Better information will drive these new processes faster, too, bringing with them a different set of issues. And behind all of this, IT organizations will find themselves deploying and managing the most critical suite of companywide business applications they’ve ever seen. All this change is akin to growth; awkward crawling and hesitant walking at first, followed by a bit of stumbling and a certain amount of falling and getting back up again. Like learning to walk, implementing SAP comes with its share of bruises. Persistent organizations will get through this and see themselves grow more resilient, more self-aware, and ultimately less like the old organization. There’s almost no way around all of this; transformational change has great upside down the road but is painful nonetheless.

What if you had a guide, though? Someone who had already navigated these waters and walked these paths? Wouldn’t such a thing be worthwhile? Wouldn’t a book authored by 10 SAP project managers, functional consultants, and technologists with more than a century of combined experience go a long way toward giving you the peace of mind you need on this journey?

That’s where we come in. Our goal is to outline the business, technical, and project management roadmaps necessary to successfully plan for and complete an SAP implementation, and then fill in all the important gaps. We want you to be able to draw upon a deep pool of experience and lessons learned, comfortable in the knowledge that you not only are in good hands, but are also obviously not the first to attempt an SAP implementation. Through this book, you will crawl, walk, and run in record time. You’ll make fewer
missteps and ultimately cross the finish line closer to budget and your timelines than you ever could have solo. There will still be the underlying discomfort of change, but in retrospect you’ll find that your journey has been a whole lot less painful than it might have been. And you’ll find that you not only did more with less, but did better (than your competitors!) with less, as explained next.

**Doing It Better**

One of the obvious facts about implementing SAP nowadays is that you’re not alone. Upward of 95% of Fortune 500 companies have introduced SAP into their enterprises, as have more than 47,000 other businesses. SAP is everywhere, helping companies change the way they do business, essentially changing their world. Additionally, the information technology underpinning SAP has transitioned from a supporting role (1980s) to something that provides competitive advantage (in the 1990s), to something that also extends where and how business is conducted (2000s). Today, our information technologies are taking us to yet another place, a place where IT and the business are so intertwined and interconnected that IT is the business, and the business is IT.

None of this is a big secret. Truth be told, in such a me-too world, the increased innovation you might have been sold on relative to adopting SAP might turn out to be less of a competitive advantage than you thought. More likely, bringing in SAP and other enterprise applications nowadays will only bring you up to par with the bulk of your competitors. Enterprise Resource Planning (ERP) solutions in particular are less often the innovative game-changers of years past but rather, for many, have become the required investment necessary to merely re-level the playing field.

So, to be most effective, and to really raise the bar compared to your competitors who have already introduced SAP into their environments, you will need to do it better than them. You’ll need to innovate beyond the business innovation that comes with implementing SAP’s business scenarios and well-integrated applications. Through the very way you deploy SAP and prepare your teams to manage, use, and maintain SAP post go-live, you must find ways to innovate. You’ll need to innovate on all fronts, from the way you conduct business, to technical and technology matters, process matters, and even project management approaches and methodologies; it’s these innovations that together will fuel your ascent a rung or two higher than your competition.

Implementing SAP is a ton of work, to be sure. We’ll help you consider and explore potential innovations at every step along the way. We’ll teach you how to boldly sidestep incremental change in favor of strategic revolution—where it makes sense. We’ll tell you what your competitors have already done and explain how you can do the same thing better, faster, and cheaper. Beyond this, we’ll show you how to gain a competitive edge in the process—how to leapfrog your competitors in ways that really make a difference. They might talk of one day achieving operational excellence, but you’ll implement processes, models, and toolsets that set the stage for not only achieving it today but reducing ongoing costs and risks in the process. They will speak of creating a custom application
that somehow differentiates their business from others, but you will transform your business by adopting best and common business practices to deploy an integrated and accessible set of systems that capitalizes on your unique intellectual property.

Furthering our efforts to help you leapfrog your competitors, we will give you actionable advice and real-world insight spanning everything from project management methodologies to leadership styles, the pending impact of “mega trends” such as green IT, service-oriented architectures (SOAs), virtualization strategies, automated systems management approaches, compelling computing platform refresh strategies, social networking leverage, and more.

How will you innovate? The answer depends on the role you play in your SAP implementation. No role is without opportunity for innovation. For example:

- IT architects will be called upon to design systems and solutions that meet business and IT agility needs at a reasonable total cost of ownership (TCO).
- Business process owners need to rethink how the company does business, leveraging best and common practices, templates, and approaches in the process.
- Developers and functional experts must deliver innovative solutions and approaches, creating an agile enterprise based on a balance of both new and time-tested tool sets.
- Organization designers need to work with management and delivery teams to design a purposeful post-go-live organization enabled through automation, creating lean, dynamic, and well-communicating organizations capable of rapidly achieving incremental operational excellence.
- Infrastructure teams need to deploy SAP’s business applications and underlying NetWeaver technologies in such a way as to pull costs out of IT, thus freeing budgets enough to become nearly self-funding.
- Desktop support teams need to quickly assess their current state of affairs and innovate through streamlined SAPGUI deployment along with incorporating Citrix-based or SAP’s WebGUI-based user interfaces.
- Existing IT shops may find it necessary to innovate in terms of the very platforms deployed for mission-critical enterprise applications, leveraging platform migrations and new technologies to transition to more strategic or cost-effective platforms.
- Job scheduling teams might find it necessary to innovate how batch processing is conducted, pulling in third-party scheduling tools that represent yet another way to innovate and create a more agile business solution.
- IT operations teams must draw upon tools they have and new SAP-aware systems management applications to create an automated just-in-time monitoring system capable of truly delivering on a single-pane-of-glass, management-by-exception vision, stabilizing headcount while simultaneously freeing up employee bandwidth in the process.
Executive leadership and first-line management must actively and broadly encourage behaviors that build a work culture that’s effective, rewarding, and “contagious.”

To this last point, contagious cultures and organizations share a number of attributes. They’re seen as outstanding places to work, and therefore draw in talent from the company’s internal employee pool. Because of this, contagious cultures and organizations suffer little from retention problems. They’re naturally innovative, spawn new opportunities for growth, lead the larger organization in terms of adopting and successfully embedding new technologies and business solutions, and act as role models for the rest of the firm. We’ll show you what it takes to create and maintain such a contagious culture, beginning with your SAP project teams and culminating in your operational post-go-live staffing models and support organizations.

Our Audience and Approach

So, you’re ready to plunge into the world of SAP! Or, maybe you’re in too deep already, perhaps even past that critical point of go-live, and need to step back and review where you are and how you got there. Perhaps you’re soon going to be involved in a new SAP implementation, or are considering a support or management role at an existing SAP site. On the other hand, you might just be curious about what an SAP implementation is all about. In any case, you have come to the right place.

Our target audience is broad and includes those new to SAP (users, managers, executives, consultants, educators) as well as those looking to simply broaden their view of the SAP solution landscape. Our intention is to provide an end-to-end look at the SAP solutions and technology. After all, there’s so much going on with SAP’s products, naming conventions, and direction that it’s hard for seasoned insiders and other experts to keep up, much less those on the outside looking in.

We suspect that many readers will use this text as a baseline of sorts, comparing their own SAP plans and implementations to what we have provided, looking for new ideas, or alternatives for approaching the problems that are common to all system implementations. Given this commonality, we believe our readers fall into a number of general categories including:

- Decision makers, including a firm’s executives, key stakeholders, project managers, and others in key leadership positions who need to understand what SAP is, how it is deployed, what an implementation entails, and what a basic roadmap with milestones/critical path items looks like (all without getting bogged down in the technical details, if they want to avoid doing so).

- Business analysts, SAP configurators, and power users who are involved with converting legacy business transactions into cross-application enterprisewide business processes connecting a myriad of business communities to one another. These are important folks, as they will essentially make SAP useful to a company’s end-user communities.
Information technology professionals, the people who need to plan for, design, test, and deploy the technical infrastructure upon which SAP will run. This is a huge community of potential readers both familiar and unfamiliar with SAP. They’ll love the detail in this book, and appreciate how we connect the IT side of a deployment back to the business needs for implementing SAP in the first place.

More specifically, if you fall into one of the following roles, you’ll benefit from this book:

- Executive leaders tasked with implementing, transforming, or maintaining SAP environments
- Stakeholders seeking to understand the breadth and depth of an SAP implementation
- SAP project managers and various business and IT leaders tasked with discrete subprojects related to implementing, supporting, testing, tuning, or training
- Business and application consultants, business process owners, and others tasked with supporting or transforming business processes on behalf of an organization
- SAP technology consultants, including SAP Basis, NetWeaver, and other engineers and specialists asked to architect, size, configure, and implement SAP solutions
- Database administrators (DBAs) and storage area network (SAN) consultants with a need to maintain their piece of the SAP enterprise pie, or simply expand their knowledge
- Traditional data center operations and infrastructure management specialists asked to step up and assist in developing or maintaining an SAP IT shop
- Network administrators, systems administrators, data center power/utility technicians, and others with similar roles supporting the very groundwork upon which the SAP solution depends
- Others internal to (or seeking employment with) an organization, interested in learning the process a company should follow in selecting, designing, and deploying SAP
- Technical individuals who are new to (or want to be a part of) the world of SAP—individuals who may be supporting similar enterprise applications or mission-critical environments (mainframes/midframes and more) and who want to make a career move into learning and supporting SAP
- Nontechnical business managers/supervisors who are soon to be thrust into an SAP project or environment

A key strength of this book is that it contains enough material to satisfy beginners, intermediate readers, and long-time SAP experts without “dumbing down” the content. It’s a hard balance to strike but something your authors have kept in mind throughout the writing process. Another strength is the holistic approach we have taken relative to
explaining implementation projects, particularly the three-lane roadmap (business/functional, technical, and project management) that should not only broaden the appeal of this book but make it more relevant to a wider audience. To make sense of everything SAP, the book has been crafted along the lines of a project plan—our central roadmap is therefore steeped in project management. Along the way, we have generously peppered in real-world observations and practical examples to give substance to the journey. As we mentioned earlier, in this journey lies the core value that we provide to you—the chance to benefit from the experiences of others. There’s no value and no reason to reinvent the wheel. Frankly, most everything you need or want in regard to an SAP implementation has already been done, and done well, by someone else. Your job can be much simpler and certainly less risky because of them.

Whether you are implementing an SAP supply chain system, customer relationship management system, or a portal to front-end your existing business applications, there are certain tasks that must be planned for and executed across the board. If you’re interested in minimizing costs and managing your critical path to a successful outcome, all these tasks must occur in a certain logical order or sequence. With all of this in mind, it seemed rather obvious that a roadmap built first and foremost around a “project plan” made the most sense for the book.

For beginners joining a new implementation project team, we suggest that you read the book sequentially from the first to the last chapter. If you find yourself in the middle of a project, though, feel free to jump to the chapters that best fit your project or timeline status. Of course, in doing so you might well “skip” over knowledge that could very well prove useful, too. We suggest quickly reviewing the Table of Contents, therefore, to determine if it makes sense in your particular case to go back and review any passed-over content. If you’re more experienced, you’ll find it pretty easy to skip around and read chapters as they apply to you. To keep you reading (rather than flipping back and forth between the appendixes and text), we’ve taken care to define acronyms in each chapter. This approach is much different from that used in most books, in which definitions and acronyms are explained only the first time they’re introduced; we hope you find our approach useful.

**Addressing the Real Challenges of SAP Implementations**

In a world filled with books on SAP (those of us who work with SAP for a living like to hear it pronounced “ess-aye-pea,” by the way), this book is unique. In our review of numerous “how to” and other SAP planning guides over the years, we continually noticed how little attention was given to addressing the real challenges related to deploying an SAP business solution or enabling technology. For example, little attention was ever given to

- How a particular leadership style may be appropriate given a firm’s unique competitive landscape, SAP applications, business environment, and IT skills/competencies
How to structure SAP business teams, the SAP technical support organization, and the overall project team

How to build “buy in” with the business folks—the owners and end users to whom the system will eventually be turned over for day-to-day productive use

How and with what to capture and house all of the information necessary to conduct an SAP implementation

How to encourage apples-to-apples SAP sizing exercises, and then evaluate each vendor’s solution approach on a level playing field

How to determine realistic high-availability and performance requirements

How to plan for and develop an SAP data center

What to include in an SAP operations manual

How to plan for and execute functional, regression, and load/stress tests

How SOA fits into the big picture of an SAP implementation

How to prepare the SAP technical infrastructure and “SAP Basis” teams for the tasks that need to be addressed to actually make it to go-live

What mix of systems management tools and applications might work best for an IT organization tasked with managing and monitoring SAP

How to prepare the SAP operations team in terms of staffing and post-go-live tasks

We address all these issues, and much more, from an SAP perspective. And by following the methodical approach outlined earlier, we promote a timeline that coincides nicely with SAP’s ASAP methodology and newer SAP Solution Manager–inspired roadmap. This allows project management tasks, functional/business process development, and related technology deployment milestones and resource requirements to be mapped out in lock-step, one with the others.

How This Book Is Organized

As you can tell by now, there’s much to cover! This book is organized into several high-level sections, or parts. Part I, “Setting the Stage,” lays the groundwork for the book and comprises the first six chapters. The bulk of this material is focused on identifying and then marrying business vision with SAP’s business applications and something we call solution vision. Part I concludes with financial considerations and a chapter on capturing all of the project’s inputs, assumptions, and decisions in a knowledge repository.

Part II, “Getting Started,” focuses initially on the project management office and project staffing, and then turns to matters of leadership. Next, we address the technical matters
critical in setting the groundwork for your SAP hardware and other technology infrastructure, though not before addressing what it means to create a highly available and disaster-tolerant solution.

In Part III, “SAP Realization/Functional Development,” detailed technical planning and installation steps are followed up by chapters focused on functional development, tools, best practices, change control, SOA, and testing—all written from a functional or business perspective.

Part IV, “Planning for Go-Live,” concludes the book and addresses infrastructure, technical change control, load testing, and essential operational considerations that must be addressed well before the SAP system is ready for productive use. The final chapter goes so far as to outline the events and tasks immediately preceding SAP go-live—tasks that should help create a smooth transition from the firm’s old way of doing business to its new, SAP-enabled enterprise business solution.

What Is Not Covered

Although the functional programming, configuration, and work required to make SAP actually useful after it is installed is paramount to the overall success of any SAP implementation, we do not go into the details of how to configure SAP here. Instead, we leave most of the information related to configuration as well as using SAP’s programming language, Advanced Business Application Programming (ABAP), and its more recently supported development option, Java, to the many books, articles, and other documents out there aimed squarely at this kind of activity. When appropriate, we discuss functional development, testing, and other related tasks as they impact our discussions from an SAP implementation perspective, however.

In addition, though we give the topics of business vision and solution vision a great amount of attention, we pretty much assume that you have already selected SAP (or it has been selected for you!) as your enterprise solution package of choice. Certainly, there are a number of choices in the enterprise solutions arena—including products from Oracle, Microsoft, The Sage Group, Lawson, Epicor, and other providers. Pure Internet-based plays and new delivery paradigms such as software as a service (SaaS) and cloud computing offerings are changing the landscape as you read this. However, SAP continues to command the lion’s share of enterprise implementations, even recently surpassing a number of “best of breed” specialty applications in terms of popularity. Some of these will be discussed later, but if you are looking for a book that will help you determine which enterprise application is right for you, you need to keep looking; outside of basic business vision and application considerations outlined in Chapters 3 and 4, this book presupposes that SAP has been chosen for your enterprise business computing needs.
Real-world Case Studies, Lessons Learned, and Techniques

When we initially discussed this book project, we really liked the idea of sharing the lessons we’ve collectively learned over the past 10 to 15 years. Giving the book a “real world” flavor from several roadmap perspectives—project management, business/functional development, and technology—was our first concern. For this reason, we have included practical examples, actual customer lessons learned, real-life explanations, tips and tricks, common mistakes you need to avoid, and much more. In our view, material such as this will help the book to not only stand out in a crowd but create a worthwhile reference that’s pulled out and used time and again. We also wanted to provide a mechanism for applying what you’ve read in a way that really drives it all home. To this end, we are particularly fond of the ongoing case study we have prepared for you. It starts in Chapter 1 and weaves its way through the entire book. An amalgamation of many different projects we’ve been a part of, it includes typical issues, questions, and problems—all of which naturally highlight each chapter’s material. Who better to learn from than those who have gone before you?

In a nutshell, then, to keep you grounded and to present a well-rounded perspective on SAP implementation, each part, if not each chapter, includes material focused on:

- Project management processes, oversight, and decisions
- Executive and other decision maker tasks
- Business or functional business process configuration-focused tasks
- Technology-focused decisions and tasks
- SAP developer/programmer-specific decisions and tasks
- Matters of interest to the end-user community
- Opportunities for innovation

In conclusion, our experiences are real. They reflect the real challenges embraced and conquered by many different SAP enterprise customers spanning many different industries and geographies. Not all of our implementations have been wildly successful, but, with only a handful of exceptions, we have indeed managed to change and essentially help our customers reinvent their companies through implementing SAP. Our best practices, common practices, lessons learned, and laundry list of problem areas and issues are gleaned from literally a thousand implementations, upgrades, and migrations, including the latest NetWeaver-enabled SAP business solutions. So read on, and position yourself and your company to get it right the first time, do it better than your competitors, and reap the benefits that only 10 guides singularly focused on one thing—helping you—can provide. Thank you again for picking up this book and adding it to your collection.
Implementing SAP continues to be one of the most complex undertakings in the world of business applications and information technology (IT). Based on the sheer number of new implementations in the past several years, the rewards apparently continue to outweigh the effort. SAP enables companies to transform themselves and, in doing so, remain both viable and competitive. To understand and appreciate what this means, though, it is necessary to take a couple of steps back and investigate SAP from a company perspective, a historical perspective, and in terms of roadmaps to implementation.

Welcome to SAP Implementation

The core of the material you are about to read stems from more than a hundred man-years of SAP implementation experience across several hundred midsize and global SAP implementations. Our goal in writing this book is to bridge the gap between selecting an SAP business application or solution and actually going “live” on the application (the act of which makes your investment in SAP finally usable by end users who will spend their work days on the new system). It is our hope that you will use this text as both a reference tool and an informed guide, helping you to steer clear of the hazards and pitfalls common to so many SAP implementations. A good roadmap is multilevel, comprising not only a path outlining how to get from here to there but also a set of markings describing the topology of the terrain. We want this book to be your roadmap.
The Changing Business and IT Landscape

SAP AG (AG is the German equivalent of the term “incorporated”) is changing the world around us. The rapid advances in IT hardware and software, and in particular SAP AG’s ever-growing umbrella of solutions, have had a profound influence on the way companies today access and manage their data. The role SAP has played in this regard, especially in the past few years, has been pivotal from several perspectives. When faced with competitive threats from arguably its best partners, hot best-of-breed new applications, and innovative methods of extending and hosting ERP (through service-oriented architectures [SOAs] and software as a service [SaaS] offerings, for example), SAP sought to embrace the best of all worlds and evolved to meet its customers and stakeholder needs. SAP AG’s growing market share combined with its raw penetration of the Forbes Global 2000 made for a great combination. And recent targeting of the small and medium enterprise (SME) market has opened up new significant and growing revenue streams for SAP. All told, SAP is formidable and here to stay.

One-Stop SAP Shopping

In wishing to share our own experiences regarding implementing SAP, we asked ourselves, “What is the number one reason for putting together this book?” The simple answer: one-stop shopping for “SAP implementation.” We have put into this book almost everything a company needs to know or address in terms of planning/organizing for an SAP implementation. Without this book, you would have to hunt through a hodge-podge of SAP instalation guides and other papers, SAP web content, miscellaneous documents and articles published by others, and a chapter here and there in the few really good texts that exist today. Instead of starting from ground zero, as so many SAP customers do, you will be able to put together custom project plans, implementation schedules, management justification, and more in just a few days. This is the book we have been waiting for someone to finally write.

In addition, given our breadth of experience, this book comes to you both broad and unbiased. The decision has been made to go with an SAP solution, knowing full well that the risk on the business side is so high that there is little room for risk in the technical implementation. We provide a “soup to nuts” approach relative to how an SAP implementation should be performed beginning to end. We review the different SAP components and modules, how to translate business vision into business processes, and, in turn, how to translate business processes finally into useful SAP functionality. In different chapters of the book, then, we are quick to address challenges relevant to the following:

- Organizational changes that accompany an SAP implementation will drive sweeping changes across much of the company, from how it conducts business to how the various functional and technology departments are structured to work together.
- Meeting the project’s return on investment (ROI) goals in a timely fashion will impact everything from planning the solution to developing it, testing it, implementing it, and more.
The IT group will tend to think of this as an IT project, and initially will be unaware of the integrated business/technology nature of SAP and how it necessitates a tight partnership between “the business” and IT group.

At the end of the day, the IT department will be faced with implementing a technology solution before the scope of the business solution has crystallized for everyone, and despite the fact that the SAP solution itself is unfamiliar.

Thus, the IT group will benefit from all the help they can receive from people like us who have already made the journey, know the issues, and have dealt successfully with an SAP project’s uncertainties. This book will go a long way toward providing the processes, insights, and wisdom that will enable a firm implementing SAP to do the job right, and on time, the first time.

An Unbiased View

As SAP technology consultants, developers, and project managers, our team established years ago that a solution-agnostic approach to SAP consulting kept all of us working. We let the marketing, technology, and engineering folks do their thing while we focused our own efforts on implementation and taking care of our customers. This meant configuring our customers’ new, redeployed, or best-of-breed hardware and software components into solutions, regardless of the different technology vendors and partners involved. Indeed, we considered ourselves actually quite fortunate when we got involved early enough in a project to allow us to have a hand in the project’s technical architecture, design, and selection. In light of this, we have worked with all of the major hardware, operating system, and database vendors upon which an SAP solution is installed. And when we were engaged in SAP development projects, the platform and partners meant next to nothing—configuring business processes is done the same way regardless of whether Hewlett-Packard (HP) or Deloitte does the configuration, and regardless of whether the underlying computing platform is based on HP-UX, AIX, Windows, or Linux.

Finally, we understand that the only reason a firm implements SAP in the first place is to achieve business objectives—to increase competitiveness, identify and capitalize on customer purchasing trends, reduce supply chain costs, make information more widely available across the company, enable better service to customers, improve decision-making capabilities, enhance resource planning, and ultimately improve the execution of the firm’s various business processes. In summation, then, the technology and development tools required to implement SAP are simply a means to an end, and not the end itself. Because we realize this, you’ll find this to be a better balanced book than otherwise possible.

Why Implement SAP: Enabling Innovation

Introducing SAP into an organization is time consuming, expensive, and subject to creating a whole lot of new challenges. After all, not only will the new system’s end users need to be retrained in how they do their job, but the IT organization will need to ramp up on supporting new applications and the various technologies that underpin them. Why go to all this trouble?
The answer is *competitive innovation*, or the ability to introduce the kind of change that gives a firm a leg up on its competition. SAP also calls this business innovation, though its term is actually a bit more limiting than what we’ve seen in the real world. Innovation with regard to SAP comes in two forms—innovation inherent to introducing new SAP business applications, and the innovation that can be brought to bear relative to how SAP is implemented, deployed, and managed.

The first type of innovation relates to how the system will be used to effect companywide change that presumably reduces operating costs, increases company-internal synergies, helps uncover new revenue streams, and so on. With the exception of introducing ERP (which arguably is more about keeping up with the Joneses than introducing a competitive advantage; see the sidebar for our perspective on this), implementing new SAP business applications will help you to increase your top line and decrease your cost of doing business, or enable other systems to do so.

### ERP Implementation Innovation

Almost every company in the Forbes Global 2000—and many near misses—has introduced enterprise resource planning (ERP) systems in-house. To be sure, there’s a lot more than just SAP ERP being implemented out there. Oracle and Microsoft have robust ERP offerings, as do several midsize and smaller niche players. Thus, most experts speak of implementing ERP as being less about “changing the game” and more about simply leveling the playing field.

ERP as a broad business solution is no longer perceived as innovative. Yes, the opportunity exists for innovative business processes and practices to be introduced, but implementing ERP is generally perceived as a necessary component of doing business and less of a strategic differentiator than 10 or 15 years ago. Fortunately (for SAP and tens of thousands of customers around the globe) the same can’t be said of the robust supply chain, product lifecycle, and customer relationship management business applications available today—applications that still hold the promise of changing the game for those firms who introduce and leverage them for competitive advantage.

The second form of innovation—implementation innovation—is a bit less obvious but just as easy to understand. For starters, a firm that implements a new business application and processes less expensively than its competitors enjoys a better relative capital advantage. If the same company can set up its ongoing IT operations and systems management more cost-effectively, it’ll remain in better fiscal shape year in and year out. Finally, if that same company can introduce nimbler infrastructure and IT processes than its competitors, the company’s business will be able to change direction and go after new markets more quickly than its less-agile competitors. Combined, such a company will enjoy a significant advantage overall—the kind of advantage that keeps a company in the black and people employed.
Our Take on “Best Practices”

In SAP circles, there’s much talk of leveraging best practices. Why? For every thousand implementations, there are nearly a thousand ways to implement SAP but perhaps only several really good ways or a single best way. In the course of consulting, however, we have determined that there tends to be one or two “best” or “preferred” methods of doing a particular task, or addressing a particular problem.

It is these nuggets of insight and knowledge that we hope to pass on to you, our readers, within the larger scope of covering an SAP implementation end to end. Most of the concepts, practices, and approaches outlined in this book are the result of years of experience designing, deploying, and supporting SAP implementations enabled by technology platforms from Compaq, Digital Equipment Corp., HP, IBM, Sun, and Unisys.

Like SAP AG, we too have endured many changes over the past few years, and have grown both stronger and wiser in doing so. Our projects boast some of the largest, fastest-to-production, and complex business-enabling implementations in the world. We are experts in designing and deploying cost-effective SAP business solutions, pushing the envelope when it comes to embracing new computing paradigms, computing platform groundwork, development tools, and project management approaches alike.

Common Practices

Outside of the two or three preferred ways to plan for, complete, or control a task—whether business or technology oriented—there are oftentimes many more common ways of doing the same thing. These common practices stand apart from their best-practices kin in at least one important way—they tend to strike a significantly better balance between what might be deemed best in class and what is deemed acceptable. The classic trade-off cited by those executing common rather than best practices is cost. Best practices are nearly always more expensive to implement than common practices. Common practices fall into the buckets of “good enough” or “good for now” because they do a better job of balancing cost and capabilities. When these “good enough” practices become commonplace, they become de facto common practices.

The Four Priorities of an SAP Implementation

Regardless of whether a practice is “best” or “common,” it may be grouped into one of four general areas. We refer to these as the four priorities or primary characteristics of implementation:

- **People**—End users as well as IT professionals
- **Processes**—Business, technology, and project management
- **Technology**—Relative to its adoption and how it enables business innovation
Money—Budgetary realities, ROI considerations, and total cost of ownership (TCO) targets

Our parallel implementation roadmaps line up well with these four priorities, all of which must be addressed. That is, attention to only one or a few of these priorities will result in a failed implementation—all four need to be addressed and balanced to reflect a firm’s unique business and technology landscape. We like to think that the last priority—the money component of an implementation—is perhaps the most central priority of all four, though, because it enables or limits the other three, and itself is limited. Don’t misunderstand this point, though. Big budgets do not necessarily equate to successful implementations. At the end of the day, success is found in how money is spent (and saved, or recouped afterward) relative to an implementation. We will do our best to ensure that all four of these areas are well covered in each chapter, as appropriate, along with relevant best practices and common practices. It is our intent to help you build an understanding of the problems and pitfalls you might encounter, and how you might best rectify or avoid them altogether as you march down the road to a successful SAP implementation.

As such, we view this book as simply an extension of our own SAP consulting work, an amalgamation of insight and experience bound together for your benefit in one place. You are now our customer, and we are your (quite inexpensive, thank you) SAP consultants. Given that the efficient and proper use of external consultants is one of many keys to a successful SAP implementation, you’re already well on your way to success just by leveraging this book. Nice job.

A Primer on SAP AG and SAP

SAP AG refers to the name of one of the largest software companies in the world, often referred to simply as SAP. The company, consisting originally of ex-IBM folks with a vision of creating an integrated enterprise software solution, is based out of Germany and has been in business since 1972. SAP is also the tag given generically to software created and marketed by SAP AG. The company’s most popular application package by far was called SAP R/3, which competed in the collaborative business solutions category of software. It was designed to facilitate business operations such as order entry, materials and warehouse management, logistics, sales and distribution, financial and asset accounting, human resource management, and more. Today, SAP R/3 continues to live on at thousands of customer sites, though many of SAP’s customers have deployed one of several follow-on ERP products.

Other applications created and marketed by SAP have become quite popular as well. We will cover many of these in detail later, but suffice it to say that SAP has offerings in data warehousing (SAP NetWeaver Business Warehouse, which includes Business Information Warehouse, or SAP BW), supply chain management (Advanced Planner and Optimizer, or SAP APO), customer relationship management (SAP CRM), product lifecycle management (SAP PLM), business-to-business procurement (Supplier Relationship Management, or SAP SRM), and much more. Today, it can be safely said that if there is any system or software
need in the enterprise, SAP probably offers a product to fill that need. This is a much different scenario from a decade ago, when SAP was a synonym for a single business application, namely SAP R/3.

**A History Lesson**

A quick history lesson is in order before we go further. SAP, like its biggest competitors (and partners, incidentally), Oracle and Microsoft, is a business application vendor. All three companies develop and sell software geared toward enabling firms to conduct their day-to-day business. Each provides enterprise-class business software, solutions for small and midsize businesses, platforms for web and application development, software for integrating different systems into one another, and more. SAP comes to the software table from the application side of the house, whereas Oracle has its roots in database management systems and Microsoft is best known for its operating systems and office productivity suite.

SAP was founded to bring forth a novel idea: to develop a software package that integrated and combined a company’s myriad business functions together in a manner that reflected business or industry best practices. In this way, a company could replace 10 different business systems of record—such as financials, warehousing, production planning, and so on—with a single system of record, and in the process gain the synergies and communication benefits inherent to maintaining a single version of the truth. Their idea grew into what soon became Systems, Applications, and Products in Data Processing (SAP), or in German Systemanalyse und Programmentwicklung.

The original ex-IBM engineers quickly delivered on their vision to create a multilingual and multinational platform capable of being easily reconfigured from a functional perspective (to enable flexible business processes) as well as from an underlying information technology perspective. Within a decade, SAP was gaining market share through a groundswell of activity propelled by the software’s capability to establish standardized business processes in large, complex organizations. After another decade, the company realized growth due to its business application’s platform independence, particularly its capability to allow organizations to migrate away from proprietary mainframe solutions to less-expensive infrastructure choices. All the while, SAP’s capabilities matured and its market share continued to grow. Today, SAP supports more than 40 languages, 50 currencies, nearly 30 industry solutions, and more than 20 different combinations of popular hardware platforms, operating systems, and database releases.

In less than 20 years after its inception, SAP not only was Germany’s top software vendor but was giving IBM and others a serious challenge in the enterprise marketplace; new, large entrants to the enterprise software field emerged during this time, including Baan, Oracle Corporation, PeopleSoft, and JD Edwards. Soon afterward, smaller players began gaining ground as well, including Great Plains and Navision. Though still widespread, mainframes had simply grown too cumbersome and expensive for the majority of companies and other large organizations to deploy and operate. Instead, IT organizations found that smaller, UNIX-based hardware platforms represented better value, while databases from vendors such as Oracle and Informix offered nice alternatives to the old mainframe database offerings.
By the mid-1990s, when SAP began supporting Microsoft Windows and SQL Server, and soon afterward Linux, SAP’s place in the enterprise software market was firmly planted—the company’s founders had truly delivered on their vision of a multinational, multilingual business solution capable of running on diverse platforms operated and maintained by equally diverse IT organizations. SAP changed both the business and IT worlds faster than anyone would have dreamed possible only a few years earlier. Today, SAP solutions serve more than 82,000 customers across more than 120 countries. And with employees numbering close to 52,000, and a partner ecosystem of several hundred thousand, it’s safe to say that SAP is one of the world’s largest and most successful employers.

**SAP Business Suite Components: The Big Picture**

Back in the heady days of 1999 or so, when everything was “dot-com this” and “dot-com that,” SAP was already years ahead of the game. R/3 had been Internet-enabled since the introduction of version 3.1G, and the timing was right for SAP AG to introduce a new e-enabled vision of its growing product line. Out of this vision came *mySAP.com*, an umbrella term used to refer to the entire breadth and depth of SAP’s e-business solutions and products. Today, mySAP.com has evolved to reflect a broad collection of business solutions (or *application families*)—the SAP Business Suite.

The SAP Business Suite can be thought of as an umbrella encompassing a wealth of general business applications or functionality that represents in turn additional umbrellas underneath which lie specific point products. That is, underneath the SAP Business Suite umbrella are the actual software products that will eventually be used by an end-user community. These software products are generically referred to as *components*.

The SAP Business Suite currently comprises five general business application families (see Figure 1.1):

- **SAP ERP (Enterprise Resource Planning)**
- **SAP CRM (Customer Relationship Management)**
How to Speak SAP: Terms and Terminology

We have already covered quite a few terms and acronyms. However, especially if you are new to or a bit rusty in using SAP’s general terminology, you should understand the following list (don’t worry about memorizing this right away—to keep the book useful to all levels of readers, we will continue to spell out acronyms and explain key terms throughout the book):

- **SAP component**—One of SAP’s business applications or other products (as opposed to an umbrella term that might instead reflect a group of applications such as SAP Financials).

- **Instance**—An “installation” of an SAP product that equates to an SAP component with its own set of work processes.

- **SAP ERP**—An online transaction processing (OLTP) system, the most popular and prevalent SAP component. It includes functionality such as Asset Management, Financial Accounting, Plant Maintenance, Production Planning, Quality Management, Sales and Distribution, Materials Management, Business Work Flow, and more.

- **Landscape**—The collection of systems supporting a single solution (SAP component) such as CRM, PLM, SCM, and so on. Note that each solution requires its own SAP system landscape.

- **Three-System Landscape**—Typically, each SAP solution requires a development environment, a quality assurance/test environment, and a production environment.

- **Central Instance (CI)**—The main “SAP” installation in a system (as opposed to the “database server” installation or dedicated application server instances, and so on). The CI is responsible for managing locks, interserver messaging, and queuing and can be thought of as SAP’s executables or binaries.

- **System**—A collection of SAP instances. For example, an SAP ERP system may consist of a database instance, an SAP CI, two batch server instances (for processing batch or background jobs as opposed to real-time business transactions), and five application server instances (the instances used by end users executing their day-to-day work).

- **Client**—A legal entity or “business” within an instance—this is what end users actually log in to with their unique user IDs and passwords.

- **SAPGUI**—SAP’s “classic” graphical user interface, which provides a Windows-like look and feel. Other accessibility options exist as well, including a number of web-based user interfaces.
Other terms, such as *SAP NetWeaver* and *SAP* in particular, require a more in-depth definition, even for this introductory chapter, and are covered in the next section. For a truly comprehensive list of SAP acronyms and terms, refer to Appendix B, “SAP Acronyms.”

**SAP NetWeaver: Enabling Business Solutions**

Whereas SAP’s business solutions (by way of the SAP Business Suite) represent the applications to be used by a community of end users, there’s another set of SAP technologies and products developed to *enable* these solutions. Labeled under another umbrella called SAP NetWeaver, these are SAP’s core underlying technology offerings that make it possible to tie together Business Suite components into a unified solution (see Figure 1.2). They include

- Portal and collaboration components
- Business intelligence, knowledge management, and master data management components
- Application platform development tools (J2EE/Java and SAP’s proprietary Advanced Business Application Programming, or ABAP)

![SAP NetWeaver components](image-url)
SAP’s NetWeaver Application Server, formerly Web Application Server (WebAS), acts as the technical foundation for most of SAP’s components. Through the NetWeaver Application Server platform, SAP not only supports a variety of database and operating system alternatives but also enables communication with external applications created with Microsoft’s .NET or IBM’s WebSphere development tools. This gives SAP the capability to create extended enterprise solutions crossing diverse product and application classes.

**SAP Component Naming Conventions**

The underlying software components of any given solution are neatly prefaced with the simple term “SAP” or “SAP NetWeaver,” as in *SAP ERP HCM* (SAP’s Human Capital Management solution within the ERP component) or *SAP NetWeaver BW* (SAP’s business intelligence offering). As you can tell, these products fall under the overall umbrella of either SAP NetWeaver components or SAP Business Suite components. To complicate matters, though, the term SAP is often misused to refer to any business or technical component developed by SAP. For the remainder of this book, we will continue to distinguish between SAP’s Business Suite and its NetWeaver offerings. Keep in mind that others will use the term “SAP” to refer generically to any SAP product or component, or to the company itself.

**Roadmaps to SAP Implementation**

Written from parallel business, technical, and project management perspectives, *SAP Implementation Unleashed* provides you with a high-level roadmap in conjunction with the necessary level of detail across multiple disciplines to set you up for SAP implementation success. We’ve accomplished this by bringing together matters of business, technology, and project management in one book. We outline these roadmaps in the following sections.

**Business Roadmap**

Let’s face it, the reason an organization introduces SAP has nothing to do with a love for cool technology or global projects. SAP implementations are about satisfying the business’s need for business functionality by deploying a business application. For this reason, it’s imperative that the business weighs in on the implementation up front as well as throughout the project. Up front, the business must ensure that its needs are being heard and understood by executive management and translated into an appropriate business vision.

After a valid business vision is established and agreed upon, it’s time for business software experts to marry the firm’s business vision with an application (or suite of applications) capable of actually delivering on the vision. For example, if you have a vision of real-time collaboration and visibility into your product lifecycle (your business vision), application architects and other experts should be able to translate that vision into specific SAP applications and components (or applications and components from Oracle, Microsoft, and a host of midlevel and niche players in the business applications market).
Beyond the initial business vision development and alignment, it remains paramount to an SAP implementation’s success that this vision be validated and tweaked as the implementation progresses. Why? Because we don’t live in a world where things stand still for the year or two it takes to introduce a complex business application. The marketplace will change, after all, as will the firm’s financial, market, and other positions. Strategic vendors and suppliers may change. The firm’s appetite for business transformation may change, too; for example, the firm might change its strategic direction or be acquired by another firm with a different view of the future. In all of this, it is therefore important to validate that the implementation’s progress lines up with the initial vision plus or minus any changes made down the road. Just as critical, the intersection of the firm’s business requirements and strategic technology architecture deserves attention, the latter of which is outlined next.

**Technology Roadmap**

Just as business requirements need to be not only understood up front but validated and tracked as they change, so too do a firm’s strategic technology architecture decisions. Why? Because technology enables firms to conduct business. And just like the business, technology changes over time (as does a firm’s appetite for and ability to digest new technologies). Therefore, deploying SAP business applications is impossible without a proper understanding of and commitment to the system’s underlying technologies and infrastructure. The combination of these technologies is called by some the *SAP computing platform*, *SAP solution stack*, or simply the *SAP technology stack*. Others refer to this collection of technologies by an old SAP term, *SAP Basis*. Regardless, all of these terms refer to the technology foundation as well as the actual SAP technical installation upon which all development activity and productive operations rely (and for our purposes here, these terms should be treated as interchangeable).

To be sure, many of the challenges related to how an SAP implementation is perceived after go-live fall back to the technologies that have been deployed and how well they’ve been brought together to provide a well-performing, highly available and agile business system. Integrating all the technologies necessary to pull off a successful implementation is a major achievement. These technologies come together to create an implementation-unique SAP technology stack; the stack is essentially the various “layers” of infrastructure and technology that sit one atop the other in support of an SAP solution, like the different tiers or levels in a three-layer cake. Of course, the SAP “cake” is much higher than simply three layers, and includes the following:

- Physical facilities, such as a computer room or other data center hosting site
- Power, cooling, and other utility-based core service layers
- Physical hardware mounting and racking layer
- Server and disk subsystem hardware layer
- Firmware layers associated with specific hardware
- Operating system (OS) layer
Roadmaps to SAP Implementation

- OS drivers, service packs, updates, patches/fixes
- Database layer
- Database drivers, service packs, updates, patches/fixes
- SAP application layer, which in and of itself consists of multiple layers
- Internet-enabling layer
- SAP accessibility layer, including desktops, laptops, and other devices used to access an SAP solution

Each of these layers can be further broken down into more detailed layers. For example, server hardware covers the individual servers supporting an SAP solution. Drilling down deeper, we find specific memory, CPU, I/O, and other server hardware subsystems or layers, too.

Furthermore, multiple solution stacks typically exist in any given solution. For example, an SAP ERP solution hosted in a data center might consist of IBM Regatta servers running the AIX operating system underneath an Oracle 11g relational database, which in turn hosts an SAP NetWeaver BW business application. In the various front offices, the system’s end-user community might rely primarily on a laptop-based technology stack composed of an HP Pavilion running Microsoft Windows Vista, Internet Explorer 7, and the SAPGUI version 7.1. Some of the offices might leverage a Citrix-based solution for SAP access and thus depend on a specific Citrix XenApp technology stack to gain access to the same SAP NetWeaver BW system. Obviously we are interested here in SAP’s technology solution stack, but you can apply this same approach to any technology or solution. That is, Microsoft Exchange Server 2007 has its own unique solution stack, as does an Oracle CRM solution or a custom mainframe-based billing application. The enterprise solution differs, and the technology stack will certainly differ, but the approach to building a supported and well-performing solution remains constant.

As you might guess, technology stacks not only are all around you, but are as numerous as they are complex. Perhaps the greatest challenge and greatest achievement is assembling a particular technology stack that both is supported by all the various technology vendors involved in the solution and operates well. Assembling such a supported configuration is by no means trivial! This is one of the reasons why so much time is put into vendor and overall technologies selection—minimizing the number of technology players while bringing together a supportable and well-performing end-to-end solution is the ultimate goal. For these reasons, developing and managing a sensible business-enabling technology roadmap plays a central role throughout this book.

**Project Management Roadmap**

The project management roadmap serves to wrap up the business and technology roadmaps necessary to implement SAP. It’s the glue that cements everything together in a cohesive, manageable manner. Project management enables process discipline, schedule
management, and resource management to be effectively applied to an SAP implementa-
 tion. Together, all three of these roadmaps pave the way to a successful implementa-
 tion. But it is the project management processes inherent to the roadmap that give the project
 shape, make it manageable, and therefore make a successful implementation achievable.
 As such, the project management roadmap is without a doubt the central or most impor-
 tant roadmap—nothing good is possible without it.

Summary

This first chapter answered questions related to what SAP is, its history, key terms, and
 how SAP may be leveraged to usher in for you a new age of enterprise integration and
 information sharing.

To this end, we touched upon the difference between the SAP Business Suite and SAP
 NetWeaver, differentiated between common and best practices, and outlined the three
 roadmaps to implementation. This should position you, our readers, to not only hit the
 ground running, but to do so with the confidence that thousands of installations before
 you have already laid similar groundwork—paving your road to SAP success.

Case Study: Getting on the Same Page

You’ve been employed by the executive committee of HiTech, Inc., a global provider of
 technologies and services, to introduce SAP NetWeaver and SAP ERP into the firm’s North
 American operations. The CEO was most impressed with your perspective that SAP requires
 attention to business, technology, and fundamental project management discipline. Unlike
 much of his team, he noted that you are focused not just on the technology aspects of
 deploying SAP but also on how SAP will help HiTech innovate from a business and
 technology-enablement perspective. To help ground the executive committee, the CEO has
 requested that you answer several of the committee’s basic questions surrounding SAP.

Questions

1. What’s the difference between best practices and common practices?
2. The committee understands that SAP is all about introducing change through busi-
 ness innovation. However, what can HiTech do through the implementation itself to
 introduce SAP in such a way that its very deployment makes a difference to the
 firm’s IT cost model?
3. HiTech tends to look at things from a technology perspective, a by-product of its
 rich heritage in information and communication technologies. To help HiTech
 refocus and prioritize, what are the three or four most important things to consider
 when adopting SAP?
4. Why aren’t we using mySAP.com or deploying WebAS, as we did at my last company?

5. The term “SAP” seems to be tossed around pretty carelessly. Is there a good rule of thumb on how to use the term relative to SAP’s products and naming conventions?

**NOTE**

The answers to these questions can be found in Appendix A, “Case Study Answers.”
Index

NUMBERS
32-bit OS (operating systems), SAP installations, 494
64-bit OS (operating systems), SAP installations, 494

A
ABAP (Advanced Business Application Programming)
   Application Server, installing, 515-517
   CI (Central Instances), 485
   developers (SAP), 409
   Development Workbench, 556
   project management, 179
   roles, 633
   SAP customization (functional development), 555-556
abstraction (eSOA), 603
accelerators, PMO, 165
accessibility, SAP system landscape development, 86
adaptability, functional development and, 562
adaptable change models, project teams and, 207-208
ADK (Archive Development Kit), 636
administrative projects, closing (project management), 151
administrative scripts, stress tests, 668-669
administrative support, PMO, 163
Adobe-based forms, printing, 627-629
ADS (Adobe Document Services), 629
agility, project teams and, 206-207
air handlers, data centers, 442
air registers, data centers, 444
all named users, SAP platform sizing, 366
apples-to-apples SAP platform sizing, 378-379
Application layer
   CCB transport strategies, 573-574
   TCO, lowering via technology stack, 109-111
application platform, NetWeaver as, 510-512
application servers, 485, 600
Application System Administration KPI (Key Performance Indicators), 754
application tiers, 368
application-layer SPOF (single points of failure), 315
applications
  application component specialists (SAP), 409
  application consultants, 186
  connectivity, 601
  integrating, 33
  KM software applications, 126
  knowledge repository, 124
  performance, SAPS, 367-368
archiving
  ADK, 636
  business benefits of, 635
  process overview, 636
  strategies for, 636
  technical benefits of, 635
  XML-based archiving, 636
AS ABAP, 522
AS ABAP+Java, installing, 519-520
AS Java, accessing, 523
ASAP (Accelerated SAP), 39-41, 46
ASCS (ABAP Central Services), 485
ATR (availability through redundancy), 325, 450
authoritarian leadership, 229-230
authorization, 632-635
availability, 291, 511
  backup considerations, 344
    career development, 347-348
    communication strategies, 346-347
    project teams, 345-346
    shared services, 348-349
  SPOF, 349-350
    staffing and, 348-349
    support teams, 345-346
    training and, 347-348
  database requirements, 499
  design considerations, 344
    career development, 347-348
    communication strategies, 346-347
    project teams, 345-346
    shared services, 348-349
  SPOF, 349-350
    staffing and, 348-349
    support teams, 345-346
    training and, 347-348
failover/failback processes, SPOF, 357-358
follow-on mistakes in, 342-343
infrastructure testing, 642, 652-653
NIC teaming, data center network plans, 450-452
organizational decisions affecting, 342-343
people SPOF, 349-350
people-related best practices, 360-361
platform sizing, 395
redundancy and, 360
SAP platform sizing, 370
SAP system landscape development, 79
scalability requirements, 499
TCO solution vision drivers, 97-98
tracking, 747
average load testing, defining, 663
awards (employee retention), 619-620
B
B/R (backup/restore) processes, stress tests and, 681
background noise. See noise scripts
backout plans, people SPOF, 353
Backup Completion KPI (Key Performance Indicators), 754
backups
  availability
    career development, 347-348
    communication strategies, 346-347
    considerations for, 344-350
    project teams, 345-346
    shared services, 348-349
    SPOF, 349-350
    staffing and, 348-349
    support teams, 345-346
    training and, 347-348
  data centers, 461
  database growth, 83
  go-live, 752
  HA and, 306
  hot site backups, 308
  log replication, 308
  people SPOF, 358-359
  platform sizing, 395
  SAP system landscape simplification, 79
  skill-set backups, 411
  standby databases, 308
  technology stacks, lowering TCO, 112
BAPI (Business Application Programming Interface), 601
baseline configuration/validation, project management, 178
basic qualifications, interviewing for, 282-283
Basis administration, platform sizing, 388
Basis specialists (SAP), 409
batch processes, stress testing considerations, 658
BBP (Business Blueprint) documents, functional
development and, 550-552
Best Practices category (SAP Solution Manager), 742
blades (servers), data center configurations, 455
blueprinting process groups (project management),
136, 142
  communications plans, 145
data migration plans, 145
documentation and, 144
management plan development, 143-144
project budgets, validating, 145
project schedules, 144
project standards, establishing, 144
RICEF plans, 145
scope, defining, 144
training plans, 145
blueprints (infrastructure)
  backups and, 395
  client tiers, 368
database tiers, 368
disaster recovery and, 395
fault tolerance, 370
HA and, 370, 395
heterogeneous configurations, 371
homogenous configurations, 371
infrastructure planning workshops, 399-404
middle (application) tiers, 368
new instance sizing, 381
post-go-live resizing, 381-382
predictive modeling and, 382
presentation tiers, 368
presizing conference calls, 392-393
process of, 363-364
production systems, 379-380
proposal review process, 395-399
questionnaires for, 374-379
QuickSizer, 372-374
reliability and, 370
requirements and sizing review teams,
387-390
RFP, 391
SAPS, 367-368, 386-387
scale-out configurations, 369-370
scale-up configurations, 369-370
surveys for, 374-379
system recovery and, 395
system requirements, 385-387
terminology of, 365-366
users in, 366-367
vendor questionnaires, 391
vendor-driven sizing, 393-394
workflow of, 364
BMC, systems management solutions, 736
bonuses (employee retention), 619-620
boundary testing, 589
BPR (business process re-engineering), 34, 550
budgets
  hiring consultants, 200
  implementation budgets, 41-42, 471
  project budgets, 142, 145
Burke, W. Warner, 62-63
Burke-Litwin Organization Change and Performance
model (organizational change strategy), 62-63
business acceptance testing, project management,
179
Business Blueprint phase
  ASAP, 40, 46
  project management, 136, 142, 170, 176-178
    communications plans, 145
    data migration plans, 145
    defining scope, 144
    documentation and, 144
    establishing project standards, 144
    management plan development, 143-144
    project schedules, 144
    RICEF plans, 145
    training plans, 145
    validating project budgets, 145
business drivers, functional development and,
548-549
business goals, functional development and,
548-549
business management, project management and, 139
business metrics, functional development and, 548-549
business partners, 186
business processes
  experts, business teams and, 258
  scripts, stress tests, 662
testing, 577
  automated testing tools, 586-590
  boundary testing, 589
  compressing the testing phase, 592-593
data tracking in, 591
eCATT, 588

How can we make this index more useful? Email us at indexes@samspublishing.com
functional testing, 578-585
tegration testing, 580-584
manual testing, 585
post-execution tasks, 592
process overview, 589
recovery testing, 585
regression testing, 580-585
resources for, 586-587
scheduling, 581-582, 592-593
SLA support, 593
stress tests, 662
Test Workbench and, 591
timing, 581-582, 592-593
too few resources in, 593

business requirements, knowledge repository, 123

business roadmaps (SAP implementation), 23

business sandbox systems, 49, 81, 412-414

business scenario knowledge in knowledge repository, 124

Business Suite, installing, 527
  cProject Suite, 531
  CRM, 529
  ECC, 532-536
  Oracle databases, 537-538
  PLM, 531
  post-installation tasks, 538-542
  SCM, 530
  SRM, 529
  standalone engines, 532

business teams
  business process experts, 258
  business-developer relationships, 266
  CFO, 259
  communications in, 258
  COO, 259
  executive level roles, 259
  experience versus inexperience in, 266
  facilitator roles in, 264
  knowledge deficiencies in, identifying/addressing, 266
  losses, cutting early, 267
  management level roles, 259-260
  organizing, 262-264
  project teams and, 217
  quality versus quantity in, 266
  recognizing limitations of, 266
  relationships in, 258
  staffing, 261-267
  subject matter experts, 260-261
  superusers and, 260
  talent, finding, 258
  technical savvy, 258
  technical teams versus, 257
  testers and, 260
  trainers and, 260
  workloads, balancing with project demands, 266

business-developer relationships, business teams and, 266

BW (Business Warehouse), 314, 521

C

cable
data center rack mounting plans, 447-448
power cable plans, data center development, 441
call volume, handling (help desk), 474
call-back Response Time KPI (Key Performance Indicators), 755
capacity planning, people SPOF, 355-356
career development, availability and, 347-348
career path/training opportunities (employee retention), 620
cash awards (employee retention), 619-620
CATT (Computer Aided Test Tool), 578-580
CCB (change control board), 571-574
CCM (change control management) tools, 566
CCMS (Computer Center Management System), 725-728
CD/DVD management in SAP installations, 503-504
CDM (cutover deployment managers), 746
CEN, 728
central systems (CUA), 632
CEO (chief executive officers), PMO, 158-159
certification programs, training, 429
CFO (chief financial officers), business teams, 259
change control, 51
  approaches to, 699-700
  best practices, 691-701
  CCB, 571-574
  change control tools, 566-568
  change implementation, 147, 574-575
  change management, 151, 708-709
  CM managers and, 709
  communication plans, 698
data loading tools, 569-570
documentation and, 694-695
evolution in, 687
failure scenarios, 337
feedback, 700-701
functional development and, 562
go-live preparations for, 751
goals of, 565, 690
impact of, 689
managers, 709
mentality of, 687-688
organizing, 707-710
P2P process, 688
people SPOF, 353-354
philosophy of, 687-688
planning, 707-710
real-world examples of, 711-714
release cycles, 695-698
reviews, 146-147, 708-709
SAP filters and, 704-707
SAP implementation, 701-703
SAP technology stack and, 703
senior technical change management specialists and, 710
seriousness of, 688
stakeholders and, 690-691
standardization and, 692-693
Technical Sandbox Change Management Checklist, 701
testing and, 693-694
tool sets, 699-700
change models
project teams and, 207-208
VTCM, 207
change waves. See release management
character, leadership and, 238
charters, developing for
PMO, 161
projects, 140-141
child systems (CUA), 632
chkdsk.exe, 651
Cl (central instances)
defining, 21
SAP application SPOF, 311-315
CIO (chief information officers), PMO, 158-159
clients
client tiers, SAP platform sizing, 368
data management, 638
defining, 21
signoffs, closing (project management), 151
close follower technology perspective (ERP solution visions), 72
closing process groups (project management), 137, 151-152
clustering
data center rack mounting plans, 446-447
HA and, 306-307
MSCS, 310
OFS, 310
SPOF, 312-313, 360
SQL Server, 310
testing, 652-653
CM (change management) managers, 709
COE (Centers of Excellence), leveraging lessons via, 183
collaboration, KM and, 127
commodity servers versus proprietary servers, 76
communication
availability strategies, 346-347
business teams, 258, 265
change control and, 698
employee retention, 617
failure scenarios, 338
plans, 99, 145
project management, 150-151
project team development, 145, 212-214
competitive pay (employee retention), 616
component installations
CD/DVD management, 503-504
database software installations, 499-501
infrastructure plans, 480
heterogeneous landscapes, 485
HP Serviceguard in, 490
installation guides/notes, 483-484
master plan development via Master Guides, 481-482
network plans, 487-488
NFS in, 491-492
non-Unicode support, 486
SAN plans, 488-490
server naming conventions, 493
standalone engines, 486
system variant plans, 484-485
Unicode support, 486
Windows file systems in, 490
JRE, 502
OS installations, 493
32-bit OS, 494
64-bit OS, 494

How can we make this index more useful? Email us at indexes@samspublishing.com
dual HBA, 495
mirrored pairs, 495
PCI buses, 495
system drives, 495-496
user/group creation, 498
Windows configuration guidelines, 496-498
prerequisite checklists, 504-506
SAP Solution Manager Key, 502
comprehensive new-product testing, 705-706
computing platform standards, ERP solution vision and, 76-77
concurrent users, SAP platform sizing, 366
conference calls (platform sizing process), 392-393
configuration (functional development), 546, 553-554
Configuration Wizard, NetWeaver installations, 524
configuration-time (process integration), 602
configuring
baselines, project management, 178
configuration knowledge, storing in knowledge repository, 124
pagefiles for SAP installations, 496
servers, TSO staffing, 270
conflict resolution, leadership and, 252
connectivity
eSOA, 603
TCO, lowering, 113
consolidating servers, 462
consultants
experts, business teams, 262
hiring, 199-200
TSO staffing, 286-288
contingency leadership, 233-234
Continuous Improvement Services category (SAP Solution Manager), 742
contract closures, project management, 152
contractors, TSO staffing, 286-288
control technology, front-end printing, 627
Controlling ERP module, functional development and, 546
COO (chief operating officers), business teams, 259
cookbooks (user manuals), 424-426
cooling requirements, data centers, 434, 442-444
core partitioning, 370
core project team members, 218
correction instructions, 568
corrective actions (project management), 147
cost control (project management), 149
cost management, 476-477
CPIC_MAX_CONV environment variable, NetWeaver installations, 523
cProject Suite, installing, 531
CPU benchmarking/testing tools, 644-646
crashing project schedules, 667
CRM (Customer Relationship Management), Business Suites and, 529
Cross-Application Overview section (Master Guides), 481
cross-application stress testing, SE38 and, 666
cross-functional integration, business teams and, 263
CSM (candidate status matrices), resume evaluation, 278-280
CTS (Change and Transport System), 574
CUA (Central User Administration), 632-634
cultural changes, ERP effectiveness and, 211
cultural differences, leadership and, 237-238, 247
cultural environment, project’s effects on, 137-138
current-state documentation, 719-720
curriculums (training), customizing, 420-421
custom code development, project management, 179
customer boards (steering committees), project teams and, 217
customers
PMO links to, 163
simulation scenarios, TSO staffing, 275
customization
functional development, 546, 554, 561-562
ABAP, 555-556
LSMW, 556-557
SAP NetWeaver CE, 557-558
SAP NetWeaver Developer Studio, 557
training curriculums, 420-421
cutover plans, 746-747

d
DA (database administrations), TSO staffing, 270
daily operations documentation, 720-722
data, stress testing considerations, 659-660
data centers, 433
administration, platform sizing, 389
ATR, 450
availability of, 435
backups, 461
cooling requirements, 434, 442-444
data center specialists, 408
data storage, 456-460
deployment of, 434
development system management, 461
downtime, 461
dual data center strategy, DR, 322
environmental requirements, 442-444, 461-462
fire protection, 445
geographically distributed data centers, DR, 323
KPI in, 755
monitoring, 461
multilevel distributed data centers, DR, 323
network planning, 435, 448-452
performance and, 435
physical requirements, 437, 443-448
pods, DR, 323-325
power requirements, 434-435, 438-441
servers
  configuring, 452-455
  consolidating, 462
  SPOF, 301-304
  standardization in, 435-437
  testing, 460-461
  TSO staffing, 270
data collection, CCMS and, 726
data migration plans (project management), creating, 145
data recovery, people SPOF (single points of failure), 358-359
data restores, data centers, 461
data specialists, TSO staffing, 273
data storage
  archiving, 635-636
data centers, 456
  SAN best practices, 457-458
  special SAN considerations, 456
  storage virtualization, 458
  virtual arrays, 459-460
ERP solution vision, 77
databases
  availability, 499
database administrators (SAP), 409
database tiers, SAP platform sizing, 368
exporting data to, 500
management tools, systems management and, 741
MCOD initiative, system landscape development (ERP solution vision), 78
performance requirements, 499
relational databases, lowering TCO via technology stack, 108-109
response time, 499
scalability, 499
software, SAP installations, 499-501
SPOF, 307-311
standby databases, 308
tape backups/restore, effectiveness of during database growth, 83
testing, 646-651
versions of, SAP platform sizing questionnaires, 378
DBA (database administration), platform sizing, 388
decision making processes
  business teams and, 263-264
  project team development and, 214
deliverables
  managing (project management), 146
  SAP partner rules for, 196
delta analysis (TCO), 95
Delta Guides, 722
delta training, 408-411
dependency resolution, 743
design-time (process integration), 602
desktops
  physical desktops, automated business process testing requirements, 590
  support, SAP system landscape simplification, 79
development classes, functional development, 559
development consultants, feedback loops, 427
Development phase (change control in SAP implementation), 702
development systems, 49-50, 81
data centers, managing in, 461
training and, 412-414
dialog instances (application server), 485
disaster recovery, 317
platform sizing, 395
SAP system landscape development, 80
discipline, developing in project management, 181-182
disk I/O tools, 646-651
disk subsystems
  designing, TSO staffing, 270
testing, 646-652
distributed systems, 510
diversity management, leadership and, 237-238, 247

How can we make this index more useful? Email us at indexes@samspublishing.com
DMI (Desktop Management Interface), 729

document management tools, 568

document repositories (project management), 176

documentation

BBP 550-552
best practices, 723-724
blueprinting process groups (project management), 144
change control and, 694-695
cookbooks, 424-426
current-state documentation, 719-720
daily operations documentation, 720-722
Delta Guides, 722
documentation specialists, 410
failure scenarios, 336-337
“how to” documentation, 723
installation documentation, 720-722, 760
maintenance, 724
output management processes, 753
performance reports, project management, 150
platform sizing process, vendor questionnaires, 391
process documentation, 723, 761-762
project management and, 136
publishing, 723
Quick-Checks (quick reference checklists), 721
regularly scheduled procedures, 722-723
SAP operations manual, 718-724
SAP partner rules for, 197
SAP platform sizing requirements, 386-387
screenshots and, 723
user manuals, 424-426
downtime
causes of, 295
data centers, 461
determining cost of, 98-99

DR (disaster recovery)
best practices, 325-326
data centers, 322-325
DR Crash Kit, 328-329
DR (Disaster Recovery) phase (change control in SAP implementation), 702
DR specialists, 409
DR (Disaster Recovery) systems, 50
DRO (Disaster Recovery Organization), 350-351
go-live, 752
HA, 296-297
hosting sites and, 323-324
improving, 332-334
infrastructure testing, 652-653
major disasters, 321-322
minor issues, 317-319
peer ratings, 335
planning for, 682
process testing, 330-331
recoverability, evaluating, 334-336
RPO (realistic recovery points), 326
RTO (recovery time objects), 326
sample failure scenarios, 334-338
severe issues, 319-321
SPOF, 325-328
system failovers, 296
TCO solution vision drivers, 98-100
TR (availability through redundancy), 325
training and, 413
TSO staffing, 270
virtualization, dual data center strategy, 323-324

DSS (decision support systems), 34
dual data center strategy (DR), 322-324
dual HBA, SAP installations, 495
DVD management in SAP installations, 503-504

E

EarlyWatch services, 749
eCATT (extended Computer Aided Test Tool), 578-580, 588, 665
ECC (ERP Central Components), 532-536, 546-547
economic differences, project management and, 138
education services (training), 417-419
EIS (Executive Information Systems), 34
electronic signature tools, 567
e-mail, printing via, 627
EMG (enterprise management groups), system management, 730. See also TSO
employees
failure scenarios, 337
new employees. See also hiring
on-boarding materials (PMO), 156-157
PMO staffing, 163
TSO staffing, 288-290
retaining, 611
career path/training opportunities, 620
communication, 617
compensation alternatives, 621-623
competitive pay, 616
incentive bonuses, 619-620
performance bonuses, 619-620
recognition/praise, 618-619
team motivation, 616
transformational leadership, 612-613
understanding support staff personalities, 613-615
end-users (project management), training, 179
Enhancement tools, 567
Enqueue Replication Servers, 313
Enterprise Controlling and Strategic Enterprise Management ERP module, 546
Enterprise Knowledge Management (SAP), 126, 422
Enterprise management (SAP), go-live, 754
Enterprise Portal, 513
Enterprise SOA (Service-Oriented Architectures), Platform Training category (education services), 418
environmental requirements (data centers), 442-444, 461-462
EP (Enterprise Portal), 520-521, 524
EPC (EP Core), installing, 520-521
ERP (enterprise resource planning)
effectiveness of, 210-211
ERP modules, functional development and, 546-548
functional development and, 546-548
implementation, 16
project failures, reasons for, 208
solution vision
business application tenets, 75-76
business impact of, 71-72
computing platform standards and, 76-77
defining, 69
development of, 70-71
IT outsourcing and, 87-91
review process, 71
SAP system landscape, 74-86
technology perspectives, 72-73
ESB (enterprise service buses), SOA and, 600
ESC (Enterprise Services Community), 604
eSOA (Enterprise SOA), 603
ESR (Enterprise Services Repository), 603
ethical leadership, modeling, 236
ethnic differences, project management and, 138
evolution, project team structures and, 208
executing process groups (project management), 137
corrective actions, 147
deliverable management, 146
gathering work performance information, 147
issue management systems, 147-148
preventative actions, 147
requested changes, reviewing, 146-147
updating risk management plans, 147
executive level roles (business teams), 259
expectations (business), managing (project management), 171
exporting data to databases, 500

F

to-face interviews
qualifications, interviewing for, 282-283
ranking candidates, 284-285
RDSSP 281-285
skill sets, interviewing for, 283-284
facilitator roles, business teams and, 264
failovers
DR, 296
failure points, 299
failure scenarios (DR), 334-338
HA, 296
infrastructure testing, 652-653
people SPOF, 357-358
stress tests and, 679
fans (cooling), data centers, 444
fault tolerance
data center network plans, 450
HA and, 294-295
SAP platform sizing, 370
faxing, 626, 629-631
feedback
change control and, 700-701
feedback loops, 427-429
go-live process, planning for, 767-768
file systems (Windows), SAP installation plans, 490
filters (SAP), change control and, 704-706
final integration tests (project management), 179
Final Preparation phase
ASAP, 40
project management, 170, 180
Finance ERP module, functional development and, 546
financing, lowering TCO, 115
finding SAP partners, 188-189, 194
fire protection, data centers, 445
firewalls, 449, 488
formal client signoffs, closing (project management), 151
freeware, testing tools, 661
front-end deployment specialists, 272, 410
front-end printing, 626-627
function development, overview of, 545
functional configuration change control
   CCB, 571-574
   change control tools, 566-569
   change implementation workflow, 574-575
   data loading tools, 569-570
   goals of, 565
functional consultants, feedback loops, 427
functional development
   adaptability in, 562
   BBP documents and, 550-552
   best practices for, 560-561
   BPR and, 550
   business drivers and, 548-549
   business goals and, 548-549
   business metrics and, 548-549
   change management and, 562
   common ERP modules of, 546-548
   configuration, 546, 553-554
   customization, 546, 554-558, 561-562
   defining, 545
   development classes, 559
   development, organizing for, 559
   go-live issues, 563
   issues with, 561-563
   project communication, 563
   scope and, 562
   training and, 563
   updates in, 562
functional specialists (SAP), 409
functional SPOF (single points of failure), 315
functional testing, 578-585

g
Gap Analysis section (BBP documents), 552
general new-product testing, 706
geographically distributed data centers, 323
Getting Started section (Master Guides), 481
global templates, technology perspectives (ERP solution vision), 73
go-live, 40
   backups, 752
   change management packages, preparing for, 751
cutover plans, 746-747
DR, 752
final system updates, 750-751
first week of, 765-769
functional development, 563
Go-Live and Support phase (project management), 170, 181
GoingLive checks, 568-569, 748, 751
help desks, 759-762
housekeeping jobs, scheduling, 749-750
JEC, 763-765
KPI, determining, 754-756
output management processes, documenting, 753
production support, 748
records management, 757
restore processes, 752
SAP COE, post-go-live focus, 758-759
SAP Enterprise management, 754
SAP Operations, 759-762
SAP TSO, 757-758
SAPGUI rollout mechanism, 749
support agreements, developing, 762
system lockdowns, 751
system performance, tracking, 756-757
system reviews, 750-751
systems management, 753-754
growth/innovation strategies, developing
   business strategies, 58-61
   operational strategies, 64-66
   organizational change strategies, 61-64
   technology strategies, 66-67

H
HA (High Availability), 291, 511
   backups and, 306
   clustering and, 306-307
   downtime, causes of, 295
   DR versus, 296-297
   failover/failback processes, 357-358
   failure scenarios, 336-338
   fault tolerance and, 294-295
   HA specialists, 409
   hot site backups, 308
   implementing, successful implementation considerations, 292-294
   infrastructure testing, 642, 652-653
   log replication, 308
Microsoft SQL Server replication, 311
NIC teaming, data center network plans, 450-452
“Nines of Availability, The”, 298
OFS, 310
Oracle Advanced Replication, 309
Oracle RAC, 309-310
Oracle Streams, 310
platform sizing, 395
recovery systems and, 306
reliability and, 294-295
requirements, determining, 298
SAP platform sizing, 370
SAP system landscape development, 79
SPOF, 299-315, 357-358
SQL Server clustering, 310
standby databases, 308
system failovers, 296
TCO solution vision drivers, 97-98
TSO staffing, 270
hard drives, SAP installations, 495-496
hardware
management tools, system management and, 739-740
partitioning, 370
HBA
dual HBA, SAP installations, 495
infrastructure testing, 652-653
help desk, 472
baseline knowledge, determining, 475
call volume, handling, 474
contact information, determining, 476
device information, managing, 476
escalation processes, determining, 476
feedback loops, 429
go-live, preparing for, 759-762
help desk analysts (SAP), 410
help desk call performance (SAP), 410
Help Desk Resolution Time KPI (Key Performance Indicators), 755
Help Desk Time-to-Answer KPI (Key Performance Indicators), 755
KPI in, 755
platform sizing, 390
staffing, 473
task/issue mapping, 475
training staff, 474-476
heterogeneous landscapes (SAP installations), 485
heterogeneous SAP configurations, 371
heterogeneous system copy, 637
high users, SAP platform sizing, 366
hiring. See also new employees; staffing
consultants, 199-200
TSO staffing, 288-290
Hofman, Debra, 64
homogenous SAP configurations, 371
homogenous system copy, 637
horizontal scalability, 83
hosting providers, 85, 91
hosting sites, DR and, 323-324
hot site backups, 308
housekeeping jobs, scheduling, 749-750
“How to” documentation, 723
HP
HP Quality Center, business process testing, 589
HP Serviceguard, SAP installation plans, 490
systems management solutions, 736-738
HTML (Hypertext Markup Language), SAPGUI, 627
Human Capital Management ERP module, functional development and, 547
IBM Availability Center, systems management solutions, 738
Identity Management, 635
IDES (International Demonstration and Education System), 417
IFS (Information File Store), 417
implementation
budgeting for, 41-42
innovation and, 16
Improvisational Change Model for ERP (organizational change strategy), 63-64
in-house systems management solutions, 732-733
incentive bonuses (employee retention), 619-620
incremental design, eSOA and, 603
individualized consideration (leadership attribute), 613
InfoDB (Information Database), 416
infrastructure blueprinting
backups and, 395
client tiers, 368
database tiers, 368
disaster recovery and, 395
fault tolerance, 370
HA and, 370, 395
heterogeneous configurations, 371

How can we make this index more useful? Email us at indexes@samspublishing.com
homogenous configurations, 371
infrastructure planning workshops, 399-404
middle (application) tiers, 368
new instance sizing, 381
post-go-live resizing, 381-382
predictive modeling and, 382
presentation tiers, 368
presizing conference calls, 392-393
process of, 363-364
production systems, 379-380
proposal review process, 395-399
questionnaires for, 374-379
QuickSizer, 372-374
reliability and, 370
requirements and sizing review teams, 387-390
RFP, 391
SAPS, 367-368, 386-387
scale-out configurations, 369-370
scale-up configurations, 369-370
surveys for, 374-379
system recovery and, 395
system requirements, 385-387
terminology of, 365-366
users in, 366-367
vendor questionnaires, 391
vendor-driven sizing, 393-394
workflow of, 364
infrastructure planning workshops, 399-404
infrastructure security, TSO staffing, 270
infrastructure specialists, 408
infrastructure testing
database tests, 646-651
disk subsystem tests, 646-652
DR testing, 652-653
goals of, 641-642
HA testing, 642, 652-653
HBA testing, 652-653
lifecycle changes, performance impact on, 642
networks infrastructure testing, 642, 651
OS tests, 644-646
platform comparisons, 641
pretuning, 643
SAP failover testing, 652-653
server comparison, 654-655
server hardware tests, 644-646
system installations, 642
system-level stress testing, 643
initiating process groups (project management), 136, 140-142
initiators (projects), selecting, 140
innovation/growth strategies, developing
business strategies, 58-61
operational strategies, 64-66
organizational change strategies, 61-64
technology strategies, 66-67
inspirational motivation (leadership attribute), 612
installable software units (applications), NetWeaver, 512
installation procedures documentation, 720-722, 760
installing
ABAP Application Server, 515-517
AS ABAP+Java, 519-520
Business Suite, 527
cProject Suite, 531
CRM, 529
ECC, 532-536
Oracle databases, 537-538
PLM, 531
post-installation tasks, 538-542
SCM, 530
SRM, 529
standalone engines, 532
BW (Business Warehouse), 521
cProject Suite, 531
ECC, 532-536
EP (Enterprise Portal), 520-521, 524
EPC (EP Core), 520-521
Java Application Server, 517-518
NetWeaver, 512-513
ABAP Application Server installations, 515-517
AS ABAP access, 522
AS ABAP+Java installations, 519-520
AS Java access, 523
BW, 521
Configuration Wizard operation, 524
CPIC_MAX_CONV environment variable, 523
EP, 524
example of, 514-515
Java Application Server installations, 517-518
NetWeaver Portal access, 523
PI, 522-523
RTC Application Sharing Server installations, 524
SAP NetWeaver Portal, 520-521
Oracle databases, 537-538
PI (Process Integration), 522-523
instances
defining, 21
reducing (SAP system landscape simplification), 79
Integration
applications, 33
final integration tests (project management), 179
integration experts (SAP), 409
Integration Repository, XI Content, 602
Integration Servers, 603
PI (Process Integration), 522-523
processes, SAP NetWeaver, 601-602
systems, 50, 601-602
testing, 580-584
Intellectual stimulation (leadership attribute), 612
internal transfers, TSO staffing, 286
interpersonal skills, project management and, 139
interviews
qualifications, interviewing for, 282-283
ranking candidates, 284-285
RDSSP, interviewing techniques, 281-285
skill sets, interviewing for, 283-284
Introductory Training category (education services), 418
Iometer disk I/O tool, 649
IOzone disk I/O tool, 649
issue management systems (project management), 147-148
IT outsourcing, ERP solution vision, 87-91
iterative processes, managing, 135
iterative sizing, SAP partners, 193
ITGI (IT Governance Institute), PMO and, 161
J - K
J2EE developers (SAP), 409
Java
Java Application Server, installing, 517-518
JRE, SAP installations, 502
roles, 633
SCS, 485

JEC (Joint Escalation Centers), go-live preparations, 763-765
job descriptions
business teams, 265
RDSSP, 277
Key Functional Areas of SAP ERP 6.0 section (Master Guides), 481
kickoff meetings, SAP partner, 197
knowledge
business teams, knowledge deficiencies in, 266
KM (Knowledge Management), 315
collaboration and, 127
legacy KM approaches, 127
people SPOF, 352
reasons for, 121-122
SAP Content Server, 126
SAP KM, 125-126
SAP KW, 125-126
third-party software applications, 126
transferring knowledge throughout projects, 127-128
knowledge captures, project management, 180
knowledge repository, 122, 568
applications knowledge in, 124
business requirements/functionality knowledge in, 123
business scenario knowledge in, 124
collaboration and, 127
configuration knowledge in, 124
installation knowledge in, 124
legacy KM approaches, 127
planning/project management knowledge in, 123
project management, 176
SAP Content server, 126
SAP KM, 125-126
SAP KW, 125-126
SAP System Landscape knowledge in, 124
solutions knowledge in, 124
staffing knowledge in, 123
third-party software applications, 126
transferring knowledge throughout projects, 127-128
KW (Knowledge Warehouse), 421-422
project team development, decision making processes, 214
technical savvy, business teams and, 258

How can we make this index more useful? Email us at indexes@samspublishing.com
KPI (Key Performance Indicators)
- data centers, 755
- go-live, 754-756
- help desks, 755
- SAP operations groups, 754
- kVA (kilovolt-amperes), UPS sizing, 440

L

landscapes. See also system landscape
- business sandbox systems, 49
- defining, 21
- development systems, 49-50
- DR (Disaster Recovery) systems, 50
- production systems, 50
- staging systems, 50
- technical sandbox systems, 49
- Test/QA systems, 50
- training and, 50, 412-413

latency, 82

leadership
- attributes of effective leaders, 228
- authoritarian leadership, 229-230
- character and, 238
- communication, 617
- contingency leadership, 233-234
- cultural differences and, 237-238, 247
- diversity management and, 237-238, 247
- employee recognition/praise, 618-619
- ethical leadership, modeling, 236
- evaluating, 243
- incentive bonuses, 619-620
- MLQ, 243
- motivation and, 238
- need for, 135
- organizational needs for, 239
- performance bonuses, 619-620
- personal leadership plans, developing, 240-243
- project team development, 212
- real-world scenarios, 244-253
- servant leadership, 231-232
- social networking and, 214
- support staff personalities, understanding, 613-615
- team motivation, 616
- transactional leadership, 233
- transformational leadership, 211, 234-235, 612-613

leading edge technology perspective (ERP solution visions), 73
Learning Maps, 41
leasing, lowering TCO, 115
less than successful SAP implementations, reasons for, 52-54
lessons, leveraging, 183, 477
Lewin, Kurt, 61-62
links (PMO), 163-164
Linux, SAP installations, 490-492, 498, 505
Litwin, George, 62-63
load testing, 356, 578, 585, 658, 661-663
local printing, 626
locking down systems, 751
log replication, 308
logged-on users, SAP platform sizing, 366
logical drives (Windows), SAP installations, 495
loose coupling (eSOA), 603
low users, SAP platform sizing, 366
LSMW (Legacy System Migration Workbench), 556-557, 579

M

mainstream technology perspective (ERP solution visions), 72

maintenance
- costs of, lowering TCO, 115
- documentation, 724
- SAP system landscape simplification, 79
- SAP TSO, go-live adjustments, 758

management
- database management tools, 741
- hardware management tools, 739-740
- management level roles (business teams), 259-260
- project management
  - data migration plans, 145
  - finding managers, 136
  - mentoring managers, 157, 162
  - monitoring process groups, 137, 148-151
  - need for managers, 135
  - virtual team management, 209
- records management, go-live, 757
- SAP system landscape development, 85-86
- systems management, 724
  - BMC solutions, 736
  - CCMS, 725-728
database management tools, 741
DMI, 729
evaluating applications, 735-738
hardware management tools, 739-740
HP solutions, 736-738
IBM Availability Center, 738
piloting applications, 729-734
reviewing applications, 738-739
SAP Note Assistant, 743
SAP Solution Manager, 728-729, 742
SNMP, 729
subteam development, 730
transactional monitors, 727
UNIX command-line utilities, 741
WBEM, 729
Windows Performance Monitor, 741
mapping project management phases to PMI process groups, 181
Master Guides
Cross-Application Overview section, 481
Getting Started section, 481
Key Functional Areas of SAP ERP 6.0 section, 481
Media Information section, 481
SAP ERP 6.0: Technical Overview section, 481
SAP installations, master plan development, 481-482
Software Components Overview section, 481
Materials Management ERP module, functional development and, 546
MCOD (Multiple Components in One Database) initiative, system landscape development (ERP solution vision), 78
MCS CPU Benchmark testing tool, 644
MDM (Master Data Management), 314
Media Information section (Master Guides), 481
medium users, SAP platform sizing, 366
meeting minutes, 617
mentoring project managers, 157, 162
metadata repository, SOA and, 600
Microsoft cluster testing, 652-653
Microsoft Performance Logs and Alerts, 650
Microsoft SQL Server
replication, 311
SAP installations, 500
middle (application) tiers, SAP platform sizing, 368
migrating data (project management), 145
mirrored pairs, SAP installations, 495
MLQ (Multifactor Leadership Questionnaires), 243
modularity (eSOA), 603
monitoring
data centers, 461
go-live week, 765-766
Monitoring Service Levels KPI (Key Performance Indicators), 754
process groups (project management), 137, 148-151
motivation
leadership and, 238
project teams, 616
MSCS (Microsoft Cluster Server), 105, 310, 488
MTBF (mean time between failures) ratings, reliability and, 294
multilevel distributed data centers, 323
N
N-Bench testing tool, 644-645
naming
SAP components, 23
SAP partner rules for naming conventions, 197
servers, 493
negative testing, 589
NET CLR (Common Language Runtime), SOA and, 600
NetWeaver
application platform, NetWeaver as, 510-512
installable software units (applications), NetWeaver as, 512
installing, 512-513
ABAP Application Server, 515-517
AS ABAP access, 522
AS ABAP+Java, 519-520
AS Java access, 523
BW, 521
Configuration Wizard operation, 524
CPIC_MAX_CONV environment variable, 523
ER 524
example of, 514-515
Java Application Server, 517-518
NetWeaver Portal access, 523
PI, 522-523
RTC Application Sharing Server installations, 524
SAP NetWeaver Portal, 520-521
NetWeaver CE (Composition Environment), 557-558

How can we make this index more useful? Email us at indexes@samspublishing.com
NetWeaver Portal, 513, 520-523
open integration platform, NetWeaver as, 512
Platform Training category (education services), 418
SAP Enterprise Knowledge Management, 422
SAP printing, 524
usage types, NetWeaver as, 512

networks
data center plans, 435, 448-452
infrastructures,
    testing, 642, 651
    TSO staffing, 270
Network Availability by User Origination KPI, 755
network services, ERP solution vision, 77
network specialists (SAP), 408
planning, SAP installation, 487-488
SAN
    data center considerations, 456-458
    ERP solution vision, 77
    SAP installation plans, 488-490
social networks, 213-214

new employees. See also hiring; staffing
    on-boarding materials (PMO), 156-157
    PMO staffing, 163
    TSO staffing, 288-290
new instance sizing (SAP platform sizing), 381
New System Installation KPI (Key Performance Indicators), 755
NFS (Network File Systems), SAP installation plans, 491-492
NIC teaming, data center network plans, 450-452
“Nines of Availability, The”, 298
noise scripts, stress tests, 673-674
non-Unicode support in SAP installations, 486
Note Assistant (SAP), systems management and, 743
NP (new project) personality type, 614
NTIOGEN command-line utility, 649

O

OFS (Oracle Fail Safe), 310
OLAP (online analytical processing), 34
OLTP (online transaction processing), 33-34
on-boarding materials (PMO), 156-157
on-the-job training, help desk staff, 476
online training, 423
open integration platform, NetWeaver as, 512
operating system specialists for SAP, TSO staffing, 272
operational reporting, 33-34
operational reviews, 747
operational strategies (innovation/growth strategy development), 64-66
operations groups (SAP), KPI in, 754
operations management, lowering TCO, 116
operations manual (SAP), 718-724
Oracle
    databases
        installing, 537-538
        OUI, 538
        SAP installations, 501
        Oracle Advanced Replication, 309
        Oracle RAC, 309-310, 501
        Oracle Streams, 310
        standby databases, 308
    organizational change strategies (innovation/growth strategy development), 61-64
    organizational size of project teams, agility and, 206-207
Orlikowski, Wanda, 64
OS (operating systems)
    innovation, ERP solution visions, 76-77
    OS-based SPOF (single points of failure), 305-307
SAP installations, 493
    32-bit versus 64-bit OS, 494
    dual HBA, 495
    Linux, 490-492, 498, 505
    mirrored pairs, 495
    PCI buses, 495
    system drives, 495-496
    user/group creation, 498
    Windows configuration guidelines, 496-498
SAP OS specialists, 409
SAP platform sizing questionnaires, 377
TCO, lowering via technology stack, 107-108
testing, 644-646
Unix, user/group creation in SAP installations, 498
Windows
    configuration guidelines in SAP installations, 496-498
    file system plans in SAP installations, 490
    logical drives in SAP installations, 495
    partitions in SAP installations, 495
    SAP installation checklist, 504
    user/group creation in SAP installations, 498
OUI (Oracle Universal Installers), 538
output management processes, documenting, 753
output requests (printing), 626
outsourcing
    business teams, 262
    ERP solution vision, 87-91

P
P2P (promote to production) process, change control and, 688
pagefiles, configuring for SAP installations, 496
partitions, 370, 495
partners (SAP), 185, 190
    application consultants, 186
    business partners, 186
    finding, 188-189, 194
    internal resources, balancing with, 198-202
    iterative sizing, 193
    kickoff meetings, 197
    project management partners, 188
    RFI, developing, 191-192
    RFP, 193-194
    rules for, 195-197
    technical partners, 188
PCI buses, SAP installations, 495
PCM (project change manager), 572
peer ratings, DR, 335
people SPOF (single points of failure)
    availability and, 349-350
    backup process, 358-359
    capacity planning process, 355-356
    change management process, 353-354
    clustering and, 360
    data recovery process, 358-359
    HA failover/failback process, 358
    identifying, 360
    knowledge management process, 352
    load testing process, 356
    release management process, 353-354
    SAN build/deployment processes, 359
    server build/deployment processes, 359
    systems management process, 354-355
performance
    bonuses (employee retention), 619-620
    data centers, 435
    database requirements, 499
    KPI, 754-756
    information, gathering (project management), 147
    latency, 82
    Performance Logs and Alerts (Microsoft), 650
    Performance Monitor (Windows), systems management and, 741
    performance reports (project management), 150
    response times, 81
    SAP platform sizing questionnaires, 377
    SAP system landscape development, 81-82
    SAPS, 367-368
    system performance, tracking, 756-757
    TCO solution vision drivers, 101
testing, 578, 585, 663
    throughput, 82
personal leadership plans, 240-243
phone screening process, RDSSP (Rapid Deployment SAP Staffing Process), 280-281
physical desktops, automated business process testing requirements, 590
physical servers, reducing number of (SAP system landscape simplification), 79
PI (Process Integration), 522-523
Pilot phase (change control in SAP implementation), 701
planned changes, ERP effectiveness and, 210
planning process groups (project management), 136
planning/project management knowledge (knowledge repository), 123
Plant Maintenance ERP module, functional development and, 547
platform comparisons (infrastructure testing), 641
platform sizing
    backups and, 395
    client tiers, 368
    database tiers, 368
    disaster recovery and, 395
    fault tolerance, 370
    HA and, 370, 395
    heterogeneous configurations, 371
    homogenous configurations, 371
    infrastructure planning workshops, 399-404
    middle (application) tiers, 368
    new instance sizing, 381
    post-go-live resizing, 381-382
    predictive modeling and, 382
    presentation tiers, 368
    presizing conference calls, 392-393
    process of, 363-364
    production systems, 379-380

How can we make this index more useful? Email us at indexes@samspublishing.com
pooled resources (PMO), 156
Portal, 314, 633-634
portfolio projects (PMO), 161
post-go-live resizing (SAP platform sizing), 381-382
post-implementation evaluations, 769
power requirements, data centers, 434-435, 438-441
praise/recognition (employee retention), 618-619
Predictive and Proactive Services category (SAP Solution Manager), 742
predictive modeling, SAP platform sizing, 382
preliminary scope statements, developing, 141
presentation tiers, SAP platform sizing, 368
presizing conference calls (platform sizing process), 392-393
pretuning, 643
preventative actions (project management), 147
printing
Adobe-based forms, 627-629
ADS, 629
e-mail, printing via, 627
front-end printing, 626-627
local printing, 626
output requests, 626
remote printing, 626
SAP printing, 524
spool requests, 626
strategies for, 626-628
process documentation, 723, 761-762
process flow diagrams, swim lanes, 551
process integration (SAP NetWeaver), 601-602
process orientation, ERP effectiveness and, 210
process/operations managers (PMO), 162
Production (Production Rollout) phase (change control in SAP implementation), 703
Production Job Completion KPI (Key Performance Indicators), 754
Production Planning ERP module, functional development and, 547
production servers, data center rack mounting plans, 447
production support, 748
production systems, 50, 379-380, 413
program managers, project teams and, 215
programs (project management), 135
project management, 169
ABAP 179
ASAP 39-41, 46
baseline configuration/validation, 178
blueprinting process groups, 136, 142-145
budgets, 142, 145
business acceptance testing, 179
Business Blueprint phase, 170, 176-178
business expectations management in, 171
business management and, 139
business unit buy-ins, 44
changes to projects over time, 136
characteristics of projects, 135
charters, developing, 140-141
closing process groups, 137, 151-152
cultural environment, effects on, 137, 138
communication, functional development, 563
custom code development, 179
discipline development, 181-182
documentation and, 136
duration of projects, 134
economic differences and, 138
end-users, training, 179
ethnic differences and, 138
executing process groups, 137, 146-148
failures of projects, 135
final integration tests, 179
Final Preparation phase, 170, 180
Go-Live and Support phase, 170, 181
implementation budgets, 41-42
initiating process groups, 136, 140-142
international factors in, 138-139
interpersonal skills and, 139
iterative process management and, 135
key themes of, 134-136
knowledge captures in, 180
knowledge repository, 123
leveraging lessons, 183
major milestones, identifying, 45-46
mapping project phase to PMI process groups, 181
methodologies, importance of, 39-41
monitoring and controlling process groups, 137, 148-151
organizational change management, 178
PMO. See PMO individual entry
political differences and, 138
political factors in, 138-139
programs and, 135
project boards (steering committees), 37, 42-44, 216
project executive champions, project teams and, 216
project initiators, selecting, 140
project leaders
  leadership plans, 240
  need for, 135
project managers
  finding, 136
  mentoring, 157, 162
  need for, 135
project management partners, 188
project management tool experts, PMO staffing, 163
Project Preparation phase, 170
  ASAP, 40, 46
document repositories, 176
  establishing project procedures, 174-175
  initial project planning, 173-174
  knowledge repositories, 176
  project kickoff, 175-176
  training plans, 175
quality assurance, 179
rationale, developing, 143
Realization phase, 170, 178-180
religious differences and, 138
resources for, 133
RICEF objects, 179
roadmaps (SAP implementation), 25
ROI estimates, 38-39
schedules
  crashing, 667
  WBS, 144
scope management in, 171
service levels, determining, 37-38
SIPP, 45-46
social environment, effects on, 137-138
sponsors, 37, 140
standards, establishing, 144
steering committees (project boards), 37, 42-44, 216
technical implementation management in, 172
training materials for, 178
“triple constraint” concept, 135
unit testing plans, 179
validating configurations, 179
work rule differences and, 138
project plans, stress tests, 660-662
project portfolio projects (PMO), 161
project teams, 205
  agility in, 206-207
  employee retention, 611
    career path/training opportunities, 620
    communication, 617
    compensation alternatives, 621-623
    competitive pay, 616
    incentive bonuses, 619-620
    performance bonuses, 619-620
    recognition/praise, 618-619
    team motivation, 616
  transformational leadership, 612-613
  understanding support staff personalities, 613-615
  leadership of
    attributes of effective leaders, 228
    authoritarian leadership, 229-230
    character and, 238
    contingency leadership, 233-234
    cultural differences and, 237-238, 247
    diversity management, 237-238, 247
    ethical leadership, 236
    evaluating, 243
    MLQ, 243
    motivation and, 238
    organizational needs for, 239
    personal leadership plan development, 240-243
    project leadership plan development, 240
    real-world scenarios, 244-253
    servant leadership, 231-232
    transactional leadership, 233
    transformational leadership, 234-235
    real-world organizational examples, 221-222
  staffing, 215-218
  structure of, creating, 207-211
  team member development, 211-214
  VTCM, 219-221
project workers, personality types of, 614
proposal review process (platform sizing)
  detail-oriented reviews, 396
  production references verification, 397
  risk verification, 397
  SAP support verification, 396
  TCO, 398
  technology stacks, vendors selection, 398-399
proposal review process (platform sizing), 395
proprietary servers, 76
publishing documentation, 723

Q
  qualifications, interviewing for, 282-283
  quality assurance, 50, 179
  Quality Center (HP), business process testing, 589
  quality management, 149, 547
  Quality/Test Assurance phase (change control in SAP implementation), 702
  questionnaires, SAP platform sizing, 374-379
  Quick-Checks (quick reference checklists), 721
QuickSizer
    RFP, platform sizing process, 391
    SAP platform sizing, 372-374, 386-387

R
  RAC (Real Application Clusters), 501
  rack mounting systems, data center plans, 443-448
  rationale (project), developing (project management), 143
  RDSSP (Rapid Deployment SAP Staffing Process), TSO staffing, 275
    best practices for, 276
    face-to-face interviews, 281-285
    interviewing techniques, 282-285
    job descriptions, 277
    phone screening process, 280-281
    resume evaluation, 278-280
  Realization phase
    ASAP, 40
    project management, 170, 178-180
  recognition/praise (employee retention), 618-619
  records management, go-live, 757
  recovery
    data recovery, people SPOF, 358-359
    disaster recovery, 317
    DR, 334-336
    DRO, 350-351
    SAP system landscape development, 80
    TCO solution vision drivers, 98-100
    system recovery, 306, 395
    testing, 585
  recurring costs, TCO, 94
  redundancy, 360, 450
  regression testing, 580-585
  regularly scheduled procedures, documenting, 722-723
  relational databases, lowering TCO via technology stack, 108-109
  relationships (business teams), 258
release management, 353-354, 695-698
reliability
  HA and, 294-295
  MTBF ratings, 294
  SAP platform sizing, 370
religious differences, project management and, 138
remote printing, 626
remote project teams, 209
repositories
  ESR, 603
  Integration Repository, XI Content, 602
  metadata, SOA and, 600
requested changes (project management), reviewing, 146-147
requirements and sizing review teams (platform sizing), 387-390
resolving conflicts, leadership and, 252
response times, 81, 499
restores
  data restores, data centers, 461
  go-live, 752
  system restores, 79, 83
  technology stacks, lowering TCO, 112
resume-to-interview staffing approach, TSO staffing, 274
resumes, evaluating, 278-280
retaining employees, 611
  career path/training opportunities, 620
  communication, 617
  compensation alternatives, 621-623
  competitive pay, 616
  incentive bonuses, 619-620
  performance bonuses, 619-620
  recognition/praise, 618-619
  support staff personalities, understanding, 613-615
  team motivation, 616
  transformational leadership, 612-613
revising
  SAP Implementation budgets, 471
  SIP, 470
  staffing plans, 470
  TCO analyses, 467-469
RFC_READ_TABLE function, 601
RFI (Requests for Information), developing, 191-192
RFP (Requests for Proposals), 193-194, 391
RICEF (reports, interfaces, conversions, enhancements, and forms), project management, 145, 179
risk factors, lowering TCO, 117-118
risk management plans (project management), updating, 147
ROI (Return On Investment), estimating, 38-39
role management, 633-634
RPO (realistic recovery points), 326
RTC (Real-Time Collaboration) Application Sharing Server, installing, 524
RTO (recovery time objects), 326
runtime (process integration), 602
salaries (competitive), employee retention, 616
Sales and Distribution ERP module, functional development and, 547
SAN (storage area networks)
  build/deployment processes, people SPOF, 359
  data centers, 456-458
  ERP solution vision, 77
  SAN specialists, 409
  SAP installation plans, 488-490
SAP
  ABAP developers, 409
  AG, EarlyWatch services, 749
  application component specialists, 409
  Application layer
    lowering TCO via technology stack, 109-111
    SPOF, 311-315
  APO, 314
  Basis, 24
    administration, platform sizing, 388
    SAP Basis specialists, 409
    senior SAP Basis specialists, 271-272
  business partners, 186
  Business Suite, 20, 419
  CCM, 572-573
  COE, post-go-live focus, 758-759
  components of, 21-25
  Content Server, enterprise knowledge management, 126
  CRM, 314, 529
  Customizing Implementation Guide, 553
  data centers, KPI in, 755
  data specialists, TSO staffing, 273
  database administrators, 409

How can we make this index more useful? Email us at indexes@samspublishing.com
Enhancement tools, 567
Enterprise Architecture Framework, 47
Enterprise Knowledge Management, 422
Enterprise management, go-live, 754
ERP, 21, 481
failovers, infrastructure testing, 652-653
feedback loops, 428
filters, change control and, 704-707
front-end deployment specialists, TSO staffing, 272
functional specialists, 409
GoingLive Check tool, 568-569
help desks, 410, 755
IMG, 553-554
implementing
application integration, 33
best practices, 17
BPR, 34
budgets, 471
business needs for, 31
business process support, 34
business sandbox systems, 49
Business Suite, 20
change control and, 701-703
changing business/IT landscape and, 14
common practices, 17
component naming conventions, 23
customer benefits from, 35-36
development of, 18-20
development systems, 49-50
DR, 50
DSS, 34
EIS, 34
Enterprise Architecture Framework, 47
ERP implementation, 16
ERP solution vision, 69-91
history of, 18-20
implementation innovation, 16
less than successful implementations, 52-54
look of, 29
NetWeaver platform, 22, 47-48
OLAP 34
OLTR 33-34
operational reporting, 33-34
priorities of, 17-18
production systems, 50
project management, 37-46
real world benefits from, 35-36
reasons for, 15-16, 32-34
staging systems, 50
strategic reporting, 34
successful implementations, 30
technical considerations/constraints, 49-52
technical sandbox systems, 49
terms and terminology, 21
Test/QA systems, 50
training systems, 50
unsuccessful SAP implementations, 52-54
installations
CD/DVD management, 503-504
database software installations, 499-501
infrastructure plans, 480-493
JRE, 502
OS installations, 493-498
prerequisite checklists, 504-506
SAP Solution Manager Key, 502
integration, 315, 409
J2EE developers, 409
KM, 125-126, 315
KW, 125-126, 421-422
liveCache, 530
network specialists, 408
Note Assistant, systems management and, 743
Notes, 483-484, 568, 743
Operations
go-live preparations, 759-762
operations groups, KPI in, 754
operations manual, 718-723
operations professionals, 410
operations teams, 429
OS specialists, 409
partners, 185, 190
application consultants, 186
business partners, 186
finding, 188-189, 194
internal resources, balancing with, 198-202
iterative sizing, 193
kickoff meetings, 197
project management partners, 188
RFI, 191-192
RFP 193-194
rules for, 195-197
technical partners, 188
platform sizing
backups and, 395
client tiers, 368
database tiers, 368
disaster recovery and, 395
fault tolerance, 370
HA and, 370, 395
heterogeneous configurations, 371
homogenous configurations, 371
infrastructure planning workshops, 399-404
middle (application) tiers, 368
new instance sizing, 381
post-go-live resizing, 381-382
predictive modeling and, 382
presentation tiers, 368
presizing conference calls, 392-393
process of, 363-364
production systems, 379-380
proposal review process, 395-399
questionnaires for, 374-379
QuickSizer, 372-374
reliability and, 370
requirements and sizing review teams, 387-390
RFP, 391
SAPS, 367-368, 386-387
scale-out configurations, 369-370
scale-up configurations, 369-370
surveys for, 374-379
system recovery and, 395
system requirements, 385-387
terminology of, 365-366
users in, 366-367
vendor questionnaires, 391
vendor-driven sizing, 393-394
workflow of, 364
PLM, 315, 531
printing, 524
project management partners, 188
SAP-aware testing tools, stress tests, 661
SCM, Business Suites and, 530
security specialists, 410
Solution Manager, 40, 728-729
Best Practices category, 742
Continuous Improvement Services category, 742
hardware requirements for, 41
Learning Maps, 41
Platform Training category (education services), 418
PMO and, 165-166
Predictive and Proactive Services category, 742
SAP installation checklist, 505
software requirements for, 41
Solution Manager Key, 502
systems management and, 742
solution stack, 24
SRM, 314, 529
Standard Application Benchmark, stress tests and, 665
support, 52, 429, 568
system copy, 637-638
system landscape, 49:50
business sandbox systems, 49
development systems, 49:50
DR, 50
knowledge repository, 124
production systems, 50
staging systems, 50
technical sandbox systems, 49
Test/QA systems, 50
training and, 50, 412-413
systems integration, 601-602
technical consultants, 427
technical partners, 188
technology specialists, TSO staffing, 271
technology stack, 24, 31, 415-416, 703
trainers, 410
transaction codes, monitoring via stress tests, 676
TSO, go-live, 757-758. See also EMG
SAPConnect, faxing via, 629
SAPGUI, 21, 522, 626-627, 749
SAPinst, SAP installation checklist, 505-506
SAPS (SAP Application Performance Standard), 367-368
scalability, 82-84, 102
scale-out configurations, SAP platform sizing, 369-370
scale-up configurations, SAP platform sizing, 369-370
schedule control (project management), 149
scheduling
business process testing, 581-582, 592-593
housekeeping jobs, 749-750
procedures, documenting, 722-723
projects, WBS, 144
SCM (Supply Chain Management), 530

How can we make this index more useful? Email us at indexes@samspublishing.com
scope
controlling (project management), 149
defining, blueprinting process groups (project management), 144
functional development and, 562
project management, managing in, 171
statements, developing, 141
verifying (project management), 149
screen scrape, 661
screenshots, documentation and, 723
scripts
business process scripts, 662
noise scripts, 673-674
scripting tools, 675
stress test scripts, 667-669
umbrella scripts, 675
SE38, cross-application stress testing, 666
seamless failovers, determining costs of downtime, 98
security
Identity Management, 635
infrastructure security, TSO staffing, 270
role management, 633-634
SAP system landscape development, 85
security specialists (SAP), 410
user management, 632
senior SAP Basis specialists, TSO staffing, 271-272
senior technical change management specialists, 710
servant leadership, 231-232
server-based SPOF (single points of failure), 305-307
servers
application servers, 515-517, 600
AS ABAP+Java, installing, 519-520
build/deployment processes, people SPOF, 359
clustered servers, data center rack mounting plans, 446-447
commodity servers versus proprietary servers, 76
comparing (infrastructure testing), 654-655
configuring, TSO staffing, 270
consolidating, 462
data centers, server configuration, 452-455
hardware testing, 644-646
Java Application Server, installing, 517-518
Microsoft SQL Server, SAP installations, 500
MSCS, 105
naming conventions, 493
physical servers, reducing number of (SAP system landscape simplification), 79
production servers, data center rack mounting plans, 447
proprietary servers versus commodity servers, 76
TCO, lowering via technology stack, 105-106
virtualization, ERP solution vision, 77
Service Completion KPI (Key Performance Indicators), 755
service registry, 600
shared disk subsystems, SAP system landscape simplification, 79
shared resources (PMO), 156
shared services, availability and, 348-349
signoffs (client), 151
simplifying SAP system landscape, ERP solution vision, 78-79
SIP (Solution Implementation Plans), 470
SIPP (SAP Implementation Project Plans), 45-46
sizing
project teams, agility and, 206-207
SAP platform
backups and, 395
client tiers, 368
database tiers, 368
disaster recovery and, 395
fault tolerance, 370
HA and, 370, 395
heterogeneous configurations, 371
homogenous configurations, 371
infrastructure planning workshops, 399-404
middle (application) tiers, 368
new instance sizing, 381
post-go-live resizing, 381-382
predictive modeling and, 382
presentation tiers, 368
presizing conference calls, 392-393
process of, 363-364
production systems, 379-380
proposal review process, 395-399
questionnaires for, 374-379
QuickSizer, 372-374
reliability, 370
requirements and sizing review teams, 387-390
RFP, 391
SAPS, 367-368, 386-387
scale-out configurations, 369-370
scale-up configurations, 369-370
surveys for, 374-379
system recovery and, 395
system requirements, 385-387
terminology of, 365-366
release management process, 353-354
SAN build/deployment processes, 359
server build/deployment processes, 359
systems management process, 354-355
SAP application SPOF, 311-315
server-based SPOF, 305-307
technology stack and, 327-328
sponsors (projects), selecting, 140
spool requests (printing), 626
SQL Server, 310-311, 500
SQLIO disk I/O tool, 647-648
SRM (Supplier Relationship Management), 529
stacking, 111
staff-testing staffing approach, TSO staffing, 274
staffing. See also, hiring; new employees
availability and, 348-349
business teams, 261-267
help desk, 473
project teams
business teams and, 217
core team members, 218
customer boards, 217
PMO, 215
program managers, 215
project boards (steering committees), 216
project executive champions, 216
team member depth, 218
staffing knowledge, knowledge repository, 123
staffing plans, revising, 470
TSO (Technical Support Organizations), 269
areas of responsibility, 270-271
consultants/contractors, 286-288
internal transfers, 286
new hires, 288-290
operating system specialists for SAP, 272
RDSSP 275-285
resume-to-interview staffing approach, 274
SAP data specialists, 273
SAP front-end deployment specialists, 272
senior SAP Basis specialists, 271-272
staff-testing staffing approach, 274
try-before-you-buy staffing approach, 274
staging systems, 50, 413
stakeholders
change control and, 690-691
managing (project management), 150
PMO links to, 164
standalone engines, 486, 532
standard activity assessments (cost management), 476-477
standard test plans, 705
standardization
change control and, 692-693
data centers and, 435-437
TCO, lowering via technology stack, 104-105
standardized connectivity (eSOA), 603
standards (projects), establishing, 144
standby databases, 308
statistics, collecting for stress tests, 670-671
steady-state workers, personality types of, 614-615
steering committees (project boards), 37, 42-44, 216
storage (data)
archiving, 635-636
data centers, 456-460
ERP solution vision, 77
storage specialists, 409
strategic reporting, 34
stress testing, 578, 585, 657
B/R (backup/restore) processes, 681
batch process considerations, 658
cross-application stress testing, SE38 and, 666
data considerations, 659-660
defining, 663
eCATT, 665
ending sessions, 671
failure scenarios, 338
goals of, 679-681
importance of, 664
monitoring SAP transaction codes via, 676
preparing for, 666-668, 676
project plan updates, 660-662
real-world scenarios, 681-684
SAP Standard Application Benchmark, 665
script development, 667, 672
administrative scripts, 668-669
noise scripts, 673-674
scripting tools, 675
umbrella scripts, 675
utility scripts, 668-669
statistics, collecting, 670-671
Stress Test Weeks, 666-667
system-level stress testing, 643
testing, 676-678
users
considerations for, 658, 661
logins, 669-671
ramping up, 669
subject matter experts (business teams), 260-261
subsystem testing (hard disk), 646-652
superusers, business teams, 260
support
agreements, developing (go-live preparations), 762
availability and, 345-346
EMG, system management, 730
Go-Live and support phase (project management), 170, 181
help desk, 472
baseline knowledge, determining, 475
call volume, handling, 474
contact information, determining, 476
end-user perceptions, managing, 476
escalation processes, determining, 476
go-live preparations, 759-762
KPI in, 755
staffing, 473
task/issue mapping, 475
training staff, 474-476
JEC, go-live preparations, 763-765
SAP Operations, go-live preparations, 759-762
SAP support organizations, 52
SAP system landscape simplification, 79
TSO (Technical Support Organizations), 269
adding new staff to, 286-290
areas of responsibility, 270-271
go-live adjustments, 758
operating system specialists for SAP, 272
RDSSP, 275-285
resume-to-interview staffing approach, 274
SAP data specialists, 273
SAP front-end deployment specialists, 272
senior SAP Basis specialists, 271-272
staff-testing staffing approach, 274
try-before-you-buy staffing approach, 274
TSP, project teams and, 218
support specialists (SAP), feedback loops, 429
support staff
personalities of, 614-615
TCO, lowering, 114-115
surveys, SAP platform sizing, 374
apples-to-apples sizing, 378-379
database versions and, 378
OS and, 377
performance and, 377
SAPS values, 376-377
web resources, 375
swim lanes (process flow diagrams), 551
system administration, platform sizing, 389
system availability, 294
system copy (SAP), 637-638
system drives, SAP installations, 495-496
system failovers, 296
System Information utility (winmsd.exe), 651
system integration, 601-604
system landscape. See also landscapes
accessibility and, 86
disaster recovery and, 80
ERP solution vision, 77
accessibility and, 86
disaster recovery and, 80
HA and, 79
manageability and, 85-86
MCOD initiative, 78
performance and, 81-82
requirements for, 74-75
scalability and, 82-84
security, 85
simplification in, 78-79
training requirements, 80-81
HA and, 79
manageability and, 85-86
performance and, 81-82
scalability and, 82-84
security, 85
System Landscape Availability KPI (Key Performance Indicators), 755
TCO and, 84-85
training requirements, 80-81
system-level stress testing, 643
system lockdowns, 751
system management, 724
CCMS, 725-726
database management tools, 741
evaluating applications, 735-738
go-live, 753-754
hardware management tools, 739-740
people SPOF, 354-355
Piloting applications, 729-734
Reviewing applications, 738-739
SAP Note Assistant, 743
SAP Solution Manager, 728-729, 742
SMI, 729
SNMP 729
System management professionals, 410
TCO, lowering, 116
UNIX command-line utilities, 741
WBEM, 729
Windows Performance Monitor, 741
System performance, tracking, 756-757
System recovery, platform sizing, 395
System Requests KPI (Key Performance Indicators), 755
System Restores, 79, 83
System Updates, 750-751
System variants
ABAP CI, 485
ASCS, 485
dialog instances (application server), 485
SAP installation plans, 484-485
SCS, 485

t-codes (Transaction Codes), CCMS, 725-726
tactical testing, 706-707
talent (business teams), finding, 258
tape backups/restores, 79, 83
Task Manager (Windows), 651
TCO (Total Cost of Ownership), 93
analyzing, 94-95, 467-469
lowering, 103-118
platform sizing and, 398
recurring costs, 94
SAP system landscape development, 84-85
solution vision and, 96-103
TCP/IP ports, 450
team member depth (project teams), 218
team motivation (project teams), 616
TechEd, 423-424
Technical change control
approaches to, 699-700
best practices, 691-701
change management review board and, 708-709
CM managers and, 709
communication plans, 698
documentation and, 694-695
evolution in, 687
feedback, 700-701
goals of, 690
impact of, 689
mentality of, 687-688
organizing, 707-710
P2P process, 688
philosophy of, 687-688
planning, 707-710
real-world examples of, 711-714
release cycles, 695-698
SAP filters and, 704-707
SAP implementation, 701-703
SAP technology stack and, 703
senior technical change management specialists and, 710
seriousness of, 688
stakeholders and, 690-691
standardization and, 692-693
Technical Sandbox Change Management Checklist, 701
testing and, 693-694
tool sets, 699-700
technical consultants (SAP), feedback loops, 427
technical implementation (project management), 172
technical partners, 188
technical sandbox systems, 49, 81, 412-413, 701
technical savvy, business teams and, 258
technical support, 52, 218
technical teams versus business teams, 257
technology perspectives (ERP solution visions), 72-73
technology roadmaps, 24-25
technology stacks
backups, lowering TCO, 112
change control and, 703
connectivity tools, lowering TCO, 113
management applications, lowering TCO, 113
people SPOF, change/release management, 353
platform sizing, 398-399
restores, lowering TCO, 112
SPOF and, 327-328
standardizing options/approaches (SAP system landscape simplification), 79
training as support for, 415-416
upgrades, lowering TCO, 112
user interface deployment, lowering TCO, 113
technology strategies (innovation/growth strategy development), 66-67
templates
global templates, technology perspectives (ERP solution vision), 73
PMO, 165
temporary staffing (business teams), 262
testing
boundary testing, 589
business process testing, 577
automated testing tools, 586-590
boundary testing, 589
compressing the testing phase, 592-593
data tracking in, 591
eCATT, 588
functional testing, 578-585
HP Quality Center, 589
integration testing, 580-584
manual testing drawbacks, 585
people considerations in, 588-589
post-execution tasks, 592
process overview, 589
recovery testing, 585
regression testing, 580-585
resources for, 586-587
scheduling, 581-582, 592-593
SLA support, 593
timing, 581-582, 592-593
too few resources in, 593
CATT, 578-580
change control and, 693-694
comprehensive new-product testing, 705-706
data center implementations, 460-461
database tests, 646-651
disk subsystem tests, 646-652
DR process, 330-331
eCATT, 578-580, 588
functional testing, 578-585
general new-product testing, 706
infrastructure tests
database tests, 646-651
disk subsystem tests, 646-652
DR tests, 652-653
goals of, 641
HA tests, 642, 652-653
HBA tests, 652-653
lifecycle changes, performance impact on, 642
network infrastructure tests, 642, 651
OS (operating system) tests, 644-646
platform comparisons, 641
pretuning, 643
SAP failover tests, 652-653
server comparisons, 654-655
server hardware tests, 644-646
system installations, 642
system-level stress tests, 643
integration testing, 580-584
load testing, 578, 585, 658, 661-663
LSMW, 579
Microsoft cluster tests, 652-653
negative testing, 589
OS (operating system) testing, 644-646
performance testing, 578, 585, 663
recovery testing, 585
regression testing, 580-585
SAP filters, change control and, 704-707
server hardware tests, 644-646
smoke testing, 663
standard test plans, 705
stress testing, 578, 585, 657
B/R (backup/restore) processes, 681
batch process considerations, 658
client infrastructure, 668
cross-application stress testing, 666
data considerations, 659-660
defining, 663
eCATT, 665
ending sessions, 671
failover processes, 679
failure scenarios, 338
goals of, 679-681
importance of, 664
leveraging testing tools, 676
monitoring SAP transaction codes via, 676
noise scripts, 673-674
preparing for, 666-668, 676
project plan updates, 660-662
ramping up users, 669
ramping up workloads, 680-681
real-world scenarios, 681-684
SAP Standard Application Benchmark, 665
script development, 667-669, 672
scripting tools, 675
SE38, 666
statistics collection, 670-671
Stress Test Weeks, 666-667
system-level stress tests, 643
umbrella scripts, 675
user considerations, 658, 661
user logins, 669-671
using test output for improvement, 677-678
“what if” approach, 679
tactical testing, 706-707
test plans, people SPOF, 353
Test/QA systems, 50
Test/Quality Assurance phase (change control in SAP implementation), 702
Test Workbench, business process testing and, 591
testers (business teams), 260
volume testing, 578, 663
text QA systems, training and, 413
three-system landscapes, defining, 21
throughput, 82
throughput-based SAP platform sizing via QuickSizer, 373
timelines (delivery), SAP partner rules for, 196
tools/process managers (PMO), 162
top-down sponsorships (business teams), 264
trainers (business teams), 260
training, 407
availability and, 347-348
business sandboxes, 412-414
computer-based training, 423
cookbooks, 424-426
consultant hires versus, 199-200
curriculums, customizing, 420-421
data center specialists, 408
delta training, 408-411
development systems, 412-414
documentation specialists, 410
DR and, 413
DR specialists, 409
education services, 417-419
failure scenarios, 337-338
feedback loops, 427-429
front-end deployment specialists, 410
functional development and, 563
HA specialists, 409
help desk staff, 410, 474-476
IDES, 417
IFS, 417
InfoDB, 416
infrastructure specialists, 408
need for, determining, 408-411
online training, 423
onsite training workshops, 419
production systems, 413
SAN specialists, 409
SAP ABAP developers, 409
SAP application component specialists, 409
SAP Basis specialists, 409
SAP database administrators, 409
SAP Enterprise Knowledge Management, 422
SAP functional specialists, 409
SAP integration experts, 409
SAP J2EE developers, 409
SAP KW, 421-422
SAP network specialists, 408
SAP operations professionals, 410
SAP OS specialists, 409
SAP security specialists, 410
SAP system landscape, 80-81, 412-413
SAP technology stacks, 415-416
SAP trainers, 410
skill-set backups, 411
skill-set matrixes, 411
staging systems, 413
storage specialists, 409
systems management professionals, 410
TechEd, 423-424
technical sandboxes, 412-413
test QA systems, 413
timing and, 411
training opportunities (employee retention), 620
Training phase (change control in SAP implementation), 702
training plans (project management), 145, 175
training systems, 50, 80, 413-415
user interface deployment specialists, 410
user manuals, 424-426
transaction codes (SAP), monitoring via stress tests, 676
transactional leadership, 233
transactional monitors, 727
transferring knowledge throughout projects, 127-128
transformational leadership, 211, 234-235, 612-613
transitioning systems. See cutover plans
“triple constraint” concept (project management), 135
TSO (technical support organization), 269
areas of responsibility, 270-271
data center specialists, 408
documentation specialists, 410
DR specialists, 409
process documentation, 761-762
risk management plans (project management), 147
stress test project plans, 660-662
upgrades, technology stacks, 112
UPS, sizing via kVA, 440
usage types
  EP (Enterprise Portal), installing, 520-521, 524
  EPC (EP Core), installing, 520-521
  NetWeaver as, 512
  PI (Process Integration), 522-523
users
  interfaces, deploying, 113, 410
  managing, 632
  manuals, 424-426
  stress tests, 658, 661, 669-671
  user-based SAP platform sizing via QuickSizer, 373
utility scripts, stress tests, 668-669

V
validating (project management)
  baselines, 178
  configurations, 179
variants (system)
  ABAP CI, 485
  ASCS, 485
  dialog instances (application server), 485
  SAP installation plans, 484-485
  SCS, 485
vendor questionnaires, platform sizing process, 391
vertical scalability, 83
virtual arrays, data center options, 459-460
virtual machines, partitioning and, 370
virtualization
  dual data center strategy (DR) and, 323-324
  project team management, 209
  servers, ERP solution vision, 77
  storage virtualization, data centers, 458
visionaries (business teams), finding, 258
volume testing, 578, 663
VTCM (Virtual Team Change Model), 207, 219-221

W
waves (change). See release management
WBEM (Web-Based Enterprise Management), 729
WBS (work breakdown structures), 144, 575
web services, application connectivity and, 601
Windows
  file systems, SAP installation plans, 490
  logical drives, SAP installations, 495
  Microsoft Performance Logs and Alerts, 650
  partitions, SAP installations, 495
  Performance Monitor, systems management and, 741
  SAP installations, 496-498, 504
  SAPGUI, front-end printing, 626
  Task Manager, 651
winmsd.exe (System Information utility), 651
WinShuttle, 569-570
work performance information, gathering (project management), 147
work rule differences, project management and, 138
workloads, balancing with project demands (business teams), 266
workshops, training, 419

X - Y - Z
XI Content (Process Integration Content), 602
XML-based archiving, 636