

## White Paper

# How Much Is Enough? Defining How Much Training Is Required to Achieve Maximum Business Value

Sponsored by: SAP

Cushing Anderson  
August 2018

## EXECUTIVE SUMMARY

---

This study highlights the breadth and magnitude of the benefits organizations receive from having well-trained staff who deploy, maintain, and use enterprise technology in their day-to-day jobs. It includes suggestions for best practices related to the amount of technical and end-user training to maximize the benefits organizations receive from their enterprise applications.

The research captured solid customer metrics and statistics, which showed the impact of training on implementations and software adoption of various solutions within the SAP portfolio. The research specifically targeted procurement (SAP Ariba solutions), sales and marketing (formerly SAP Hybris solutions, now SAP Customer Experience solutions), ERP (SAP S/4HANA), and HR (SAP SuccessFactors solutions).

The following are the top key business benefits that organizations realized when they provided enough technical and end-user training:

- **Improved key performance measures.** On average, organizations saw 7-13 times improvement in key performance measures for end users.
- **Fewer support tickets and critical tickets.** Administrators with more than 45 hours of training had up to 62% fewer support calls. Escalations to SAP were reduced by about 27% when organizations had well-trained administrators.
- **Shorter deployment time.** Organizations saved almost a month in deployment with a little more than a week more of training.
- **Improved satisfaction with the deployed solution.** Organizational satisfaction with SAP solutions was about 15% higher when system administrators were "well trained."

## BACKGROUND

---

Our goal for this research was to identify how much technical and end-user training resulted in peak performance and to identify the best practices that organizations could employ to help maximize the business value of their SAP solutions.

This research found that organizations that had recently implemented SAP saw performance gains across many significant performance indicators. The benefits varied by solution and by performance measure but ranged from about 20% improvement for drivers impacted by SAP Hybris solutions (now SAP Customer Experience solutions and supported as the SAP C/4HANA suite on SAP Cloud Platform) to almost 30% improvement across metrics related to SAP Ariba solutions.

These key performance indicators, known as KPIs or "value drivers," are specific business or operational measures that organizations expect will change when their business processes improve. The KPIs include a wide range of business improvement objectives and vary by specific solution and module. For example:

- In the SAP Ariba Invoice Management solution, value drivers include:
  - Reducing invoice processing time
  - Reducing requisition processing time
- In the SAP Hybris Commerce solution (now SAP Commerce solution), value drivers include:
  - Reducing total operating expenses (including cost of goods sold)
  - Reducing sales and marketing cost
- In the SAP S/4HANA Finance solution, value drivers include:
  - Reducing days to close annual books
  - Reducing losses due to fraud
- In the SAP SuccessFactors Core HR and Payroll solution, value drivers include:
  - Reducing manager time on employee administration
  - Reducing human resources compliance cost

Organizations have their own priorities and often target the improvement of one set of drivers over others. When installing SAP solutions, the drivers aren't just the low-hanging fruit; they are the operational imperatives that organizations believe will help them succeed.

This makes gains of 20-30% across metrics quite impressive. But not every organization has the same improvement. What's different? Why do some organizations gain a lot and others gain less? There may be several factors related to effective adoption of the new processes and maximizing the benefits of an enterprise application implementation. This research was specifically interested in the impact of training: Does more training lead to greater benefit? More specifically, how much training is necessary to achieve the greatest improvement?

## Methodology

We conducted a web-based survey of more than 950 SAP clients, plus phone interviews with line-of-business leaders responsible for implementation of more than 2,000 modules in the past two years from 19 countries across North America, Latin America, EMEA, MEE, APJ, and Greater China. Approximately 75% of respondents were directors or above in their organizations. All respondents had knowledge of the business goals and results impacted by the installed SAP solutions and had knowledge of or visibility into the training and skills of the administrators, implementation team, and end users.

Not all business measures were equally important to all organizations; therefore, we focused our inquiries on those benefits that were described as important to each specific organization and to each specific solution.

For every solution and every benefit, we segmented the responses into four groups of equal size based on how much improvement the organization observed, ranging from most improvement to least improvement.

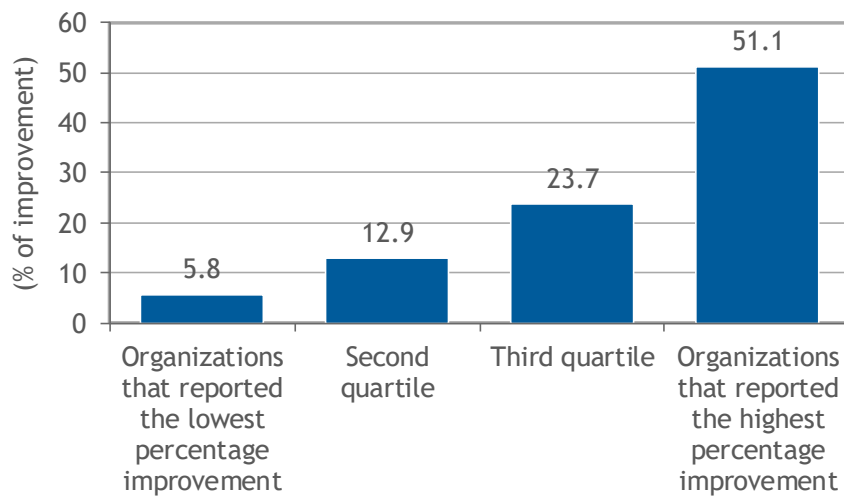
## RESULTS

As one would expect, performance gain varied, but overall, organizations gained about 20% across the measures that mattered most to them. The highest-performing quartile of SAP customers gained about 50% across all measures, and the lowest-performing quartile gained about 6% across all measures (see Figure 1).

### FIGURE 1

#### Overall Improvement by Quartile

Q. For the value drivers you said were important, please indicate a percentage change in performance compared with performance before the solution was deployed.



n = 951

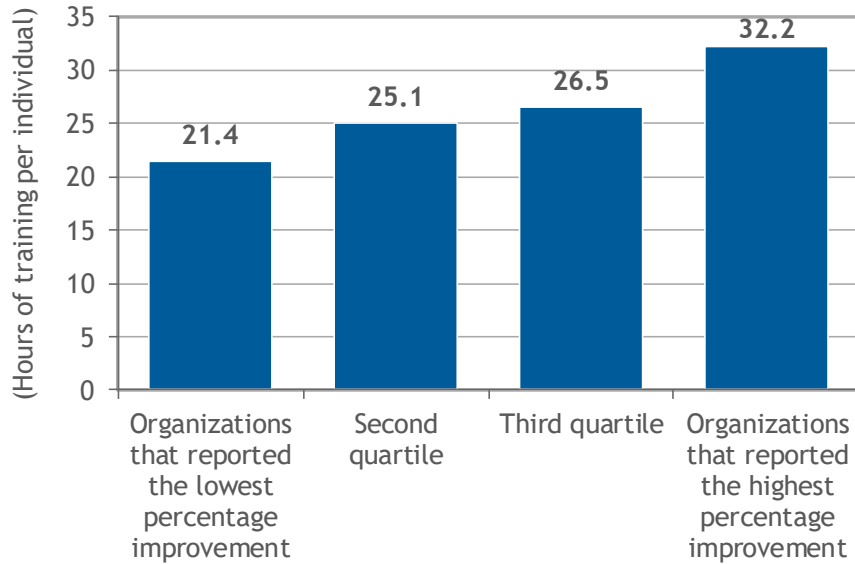
Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

Because this research focused on the impact of training, we further examined how much training organizations provided to administrators, implementation team members, and end users. While we recognize that "hours of training" isn't a perfect measure of learning or competence, formal training is something enterprises can influence and often use effectively to help learners understand the essential elements of their work. In fact, formal training, either instructor-led training (ILT), virtual ILT, or self-paced e-learning, was by far the most commonly relied upon approach for training administrators, implementation teams, and end users. Therefore, we used "hours received" as a proxy for the effort and focus the enterprise placed on knowledge and skill of the learners. We found there was a very strong correlation between hours of training provided and performance benefits received (see Figure 2).

**FIGURE 2**

**Hours of End-User Training by Quartile**

Q. Please estimate the approximate number of formal hours of training directly related to their job role that each individual received for the SAP solution?



n = 951

Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

**Business Benefit 1: End-User Training Improves Key Performance**

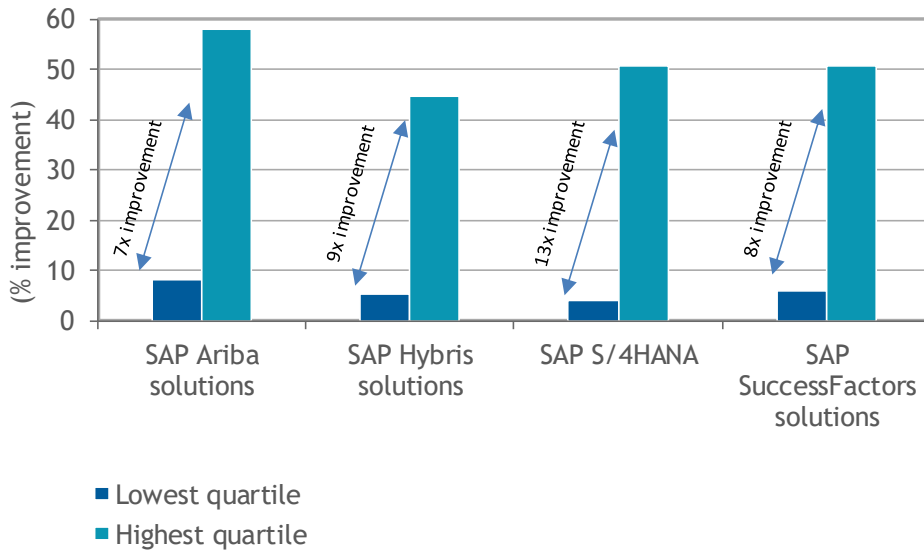
Depending on the SAP solution and respective key performance indicators, organizations saw 7-13 times improvement in key performance measures between the lowest- and highest-performing quartiles (see Figure 3).

Organizations in the "top quartile" of performance gains on average provided 32 hours of blended training to each end user, or about 50% more training per user than the lowest-gaining quartile.

**On average, organizations saw 7-13 times improvement in key performance measures.**

FIGURE 3

Improvement Comparing Lowest- and Highest-Gaining Quartile by Solution



n = 951

Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

Across solutions and key performance indicators, the magnitude of the benefits organizations received from having well-trained end users was impressive. What may be more impressive was that the improvement wasn't observable just between the lowest and highest quartiles. Organizations *in every quartile saw improvement from more end-user training*. In fact, a small amount of additional training over average yielded additional performance gains. For instance:

- After installing SAP Ariba solutions, organizations gained about 58% improvement across KPIs when end users each received about 33 hours of training, compared with an average gain of about 28% with only about 29 hours of training. That's an improvement of 105% with only about 4 more hours of training.
- After installing SAP Hybris solutions (now SAP Customer Experience solutions), organizations gained about 45% improvement across KPIs when end users each received about 41 hours of training, compared with an average gain of about 20% with only about 30 hours of training. That's an improvement of 120% in performance gain with 11 more hours of training.
- After installing SAP S/4HANA, organizations gained about 51% improvement across KPIs when end users received about 26 hours of training, compared with an average gain of about 22% with only about 24 hours of training. That's an improvement of 136% in performance gain with an additional 2 hours of training.
- After installing SAP SuccessFactors solutions, organizations gained about 51% improvement across KPIs when end users each received about 28 hours of training, compared with an average gain of about 23% with only about 22 hours of training. That's an improvement of 118% in performance gains with an additional 6 hours of training.

## **Best Practice: Provide 26-41 Hours of End-User Training to Maximize Business Performance**

Analysis of the performance improvement from over 950 organizations around the world suggests that to maximize the performance gains received from SAP solutions, organizations should provide end users:

- 33 hours of training or more for SAP Ariba solutions
- 41 hours of training or more for SAP Hybris solutions (now SAP Customer Experience solutions)
- 26 hours of training or more for SAP S/4HANA
- 28 hours of training or more for SAP SuccessFactors solutions

## **Business Benefit 2: Fewer Support Tickets and Critical Tickets**

When end users and administrators were more skilled, solutions worked more smoothly – there were fewer process errors, less rework, and fewer access or permission issues. Generally, the solution worked better, allowing end users and administrators to get on with their work and achieve the benefits the solution was built to generate.

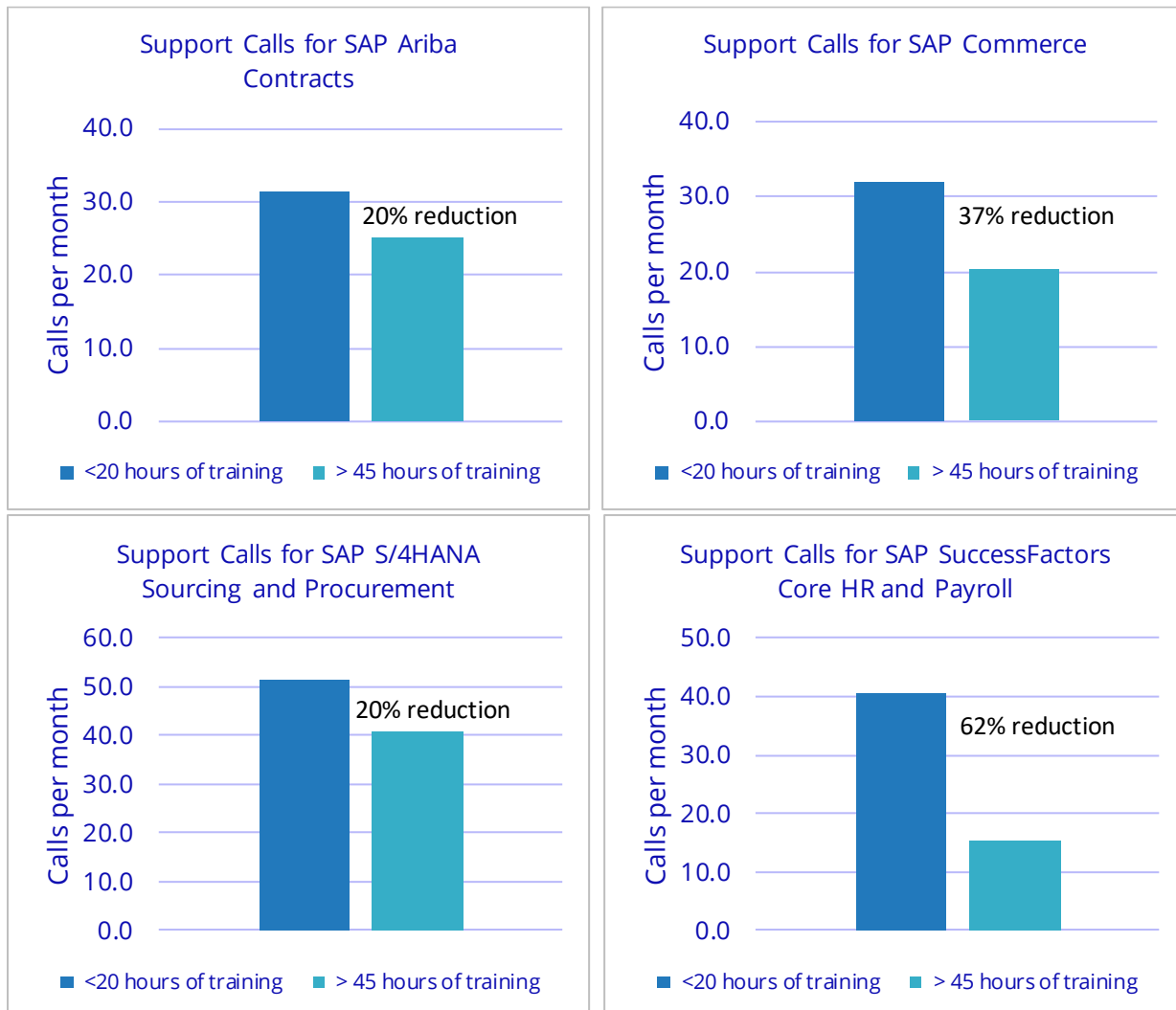
In addition to improved key performance measures, when system administrators were more familiar with the system they managed, there were fewer issues or problems that required intervention. The four examples shown in Figure 4 illustrate these findings. Administrators with more than 45 hours of training (compared with organizations where administrators received less than 20 hours of training) had fewer support calls after implementation:

- An average 20% reduction in monthly support calls for the SAP Ariba Contracts solution
- An average 37% reduction in monthly support calls for the SAP Hybris Commerce solution (now SAP Commerce solution)
- An average 20% reduction in monthly support calls for the SAP S/4HANA Sourcing and Procurement solution
- An average 62% reduction in monthly support calls for the SAP SuccessFactors Core HR and Payroll solution

**Administrators with more than 45 hours of training had up to 62% fewer support calls.**

**FIGURE 4**

**Examples of Reduced Support Calls by Solution (Calls per Month)**



Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

More consistently, when administrators had more than 45 hours of training, escalations to SAP were reduced by 27% overall across all solutions, compared with organizations that provided administrators with 20 hours of training or less.

When implementation team members had more than 50 hours of training, escalations were reduced by about 16% overall across all solutions, compared with organizations that provided implementation team members with 20 hours of training or less.

These gains are probably not cumulative. In other words, organizations wouldn't see 27% gain from training administrators plus an additional 16% gain from training implementation team members. But this shows that the best performance comes from sufficiently training both groups.

**Escalations to SAP were reduced by about 27% when organizations had well-trained administrators.**

## ***Best Practice: To Reduce Support Calls and Lower Escalations, Provide More than 45 Hours of Training to Administrators and 50 Hours of Training to Implementation Teams***

Analysis of support statistics across more than 2,000 SAP solutions in over 950 organizations suggests that compared with organizations that provide 20 hours of training or less, organizations that provide implementation team members with about 50 hours of training and administrators with about 45 hours of training have fewer support calls and fewer issues to escalate.

### **Business Benefit 3: Shorter Deployment Time**

Many factors influence deployment of significant enterprise solutions: solutions being implemented simultaneously, organization size, geographic location, configuration of infrastructure, target users, and existing data structure and location, among other factors.

Many of those factors are a "given" and cannot normally be influenced by the project team or the project stakeholders or sponsors. For instance, about 75% of SAP implementations involve more than one SAP solution being deployed simultaneously, further demonstrating that there are complexities and dependencies that can impact deployment time that are outside of the implementation team's control.

However, when implementation teams are sufficiently trained, they can better document stakeholder requirements, anticipate or overcome obstacles, and generally, better leverage the existing deployment tools and accelerators to reduce the time to deploy new systems regardless of the external circumstances that might be slowing their progress.

In fact, based on the more than 2,000 deployment projects covered by this research, when implementation teams had more than 50 hours of training, those implementations took 11% less time to deploy than implementations conducted by teams that had less than 20 hours of training (see Figure 5). Put another way, organizations saved almost a month in deployment with a little more than a week more of training.

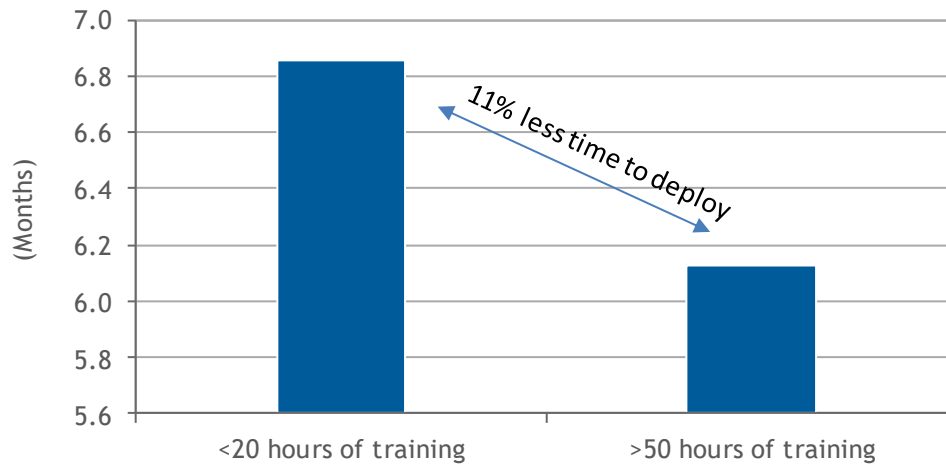
Less time to deploy reduces the time to value and helps increase the overall business value of the solution.

**Organizations saved almost a month in deployment with a little more than a week more of training.**



**FIGURE 5**

**Deployment Time**



n = 951

Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

**Best Practice: Provide 50 Hours of Training to Implementation Teams**

Analysis of deployment times across more than 2,000 SAP solutions in over 950 organizations suggests that organizations can deploy faster when they provide implementation team members with 50 hours of training or more compared with organizations that provide 20 hours of training or less.

**Business Benefit 4: Improved Satisfaction with the Deployed Solution**

When considering all the factors that might contribute to an organization's satisfaction with a new deployment such as change management, performance improvement, process disruption, deployment duration, support calls, and escalations, one might question training's impact on overall satisfaction. But the research results proved otherwise (see Figure 6). Organizational satisfaction with SAP solutions was about 15% higher when system administrators were "well trained," defined as 45 hours of training per administrator. Overall satisfaction was also higher when end users and implementation team members were well trained. For users, "well trained" varied by solution, as mentioned previously. For implementation teams, we found that satisfaction peaked at about 50 hours of training.

**Organizational satisfaction with SAP solutions was about 15% higher when system administrators were "well trained."**

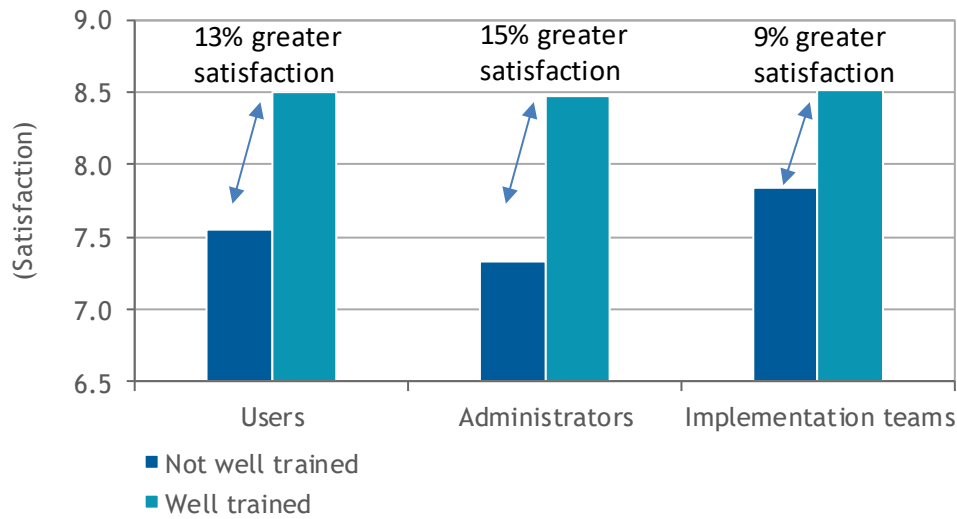
On reflection, this makes sense – when systems run more smoothly and end users get their work done with a minimum of process or system hiccups, satisfaction improves because the solution does what it set out to do:

- Improve business processing
- Reduce human errors
- Generate insights into business drivers and opportunities

Again, these gains are probably not cumulative but show that the best performance comes from sufficiently training everyone.

**FIGURE 6**

**Organizational Satisfaction with Solution Deployment**



n = 951

Source: IDC's *Impact of Training on Enterprise Application Success Survey*, 2018

**Best Practice: Train Users, Administrators, and Implementation Team Members Well**

Analysis of more than 2,000 SAP solution deployments in over 950 organizations suggests that organizations that train end users, administrators, and implementation team members have greater organizational satisfaction with the solution and its impact on business drivers. For end users, the amount of training depends on the solution and ranges from 26 hours to 41 hours of end-user training. To increase organizational satisfaction, organizations should provide more than 45 hours of training to administrators and 50 hours of training to implementation team members.

**EFFECTIVELY PLAN FOR TRAINING**

Enterprises are digitally transforming all portions of their enterprise activities to improve operations and remain competitive in a rapidly changing world. Line-of-business and IT leaders today are called upon to leverage digital technologies to transform and disrupt their businesses. The competitive strengths of the past – corporate size and history, brand strength, and market leadership – have given way to a "new order" where agility, technology savviness, innovation underpinned by creative skills, and acumen with big data, analytics, and design thinking rule the day.

Enterprises are adopting SAP solutions to power their digital strategy and improve user experience and functionality. But while the functionality and experience improve, business users, administrators, and implementation teams need to fully understand what the solutions can do.

"If a business user is not using the solution the way it was designed to be used, then you can end up wasting time, being less efficient, or even creating losses ... you can end up having a negative business impact," warns a technology training manager at a health and wellness company.

And while organizations will nearly always achieve business improvement from successful implementation, maximizing benefits requires organizations to create their own future and develop a learning strategy that considers the life cycle of organizational skills:

- **Planning:** With the rapid adoption of new technologies, business and IT leaders will prioritize their learning and development projects and sequence their rollout by answering several questions:
  - Which applications will deliver the greatest organizational benefit?
  - Which users are leveraging those applications, and how will their work process be different?
  - Which SAP and non-SAP applications will be impacted?
- **Deployment:** During migration and deployment, the training requirements shift to understanding user workflow and usage patterns. Business leaders and training specialists may need to understand:
  - How do end users work with the new applications (who are "super users" or "infrequent users," "mobile users" versus "desk-bound users")?
  - How do users progress through their workday? Have workflows changed?
  - Have new applications or processes created workflow or data problems?
- **Ongoing performance improvement:** After deployment is complete, the performance improvement journey doesn't end. Business leaders will need to uncover both the realized benefits and any ongoing challenges by asking:
  - Where has adoption of the new processes been slower than expected?
  - Is the system processing transactions at the expected speed?
  - How much has performance improved – by group, by application, or overall?
  - Are there opportunities to further improve workflow or performance?
  - What specific transactions or process steps result in errors or incorrect processing?

To effectively implement a learning and development program for the adoption of SAP solutions, organizations must make learning and development investment decisions based on planned impact. These practices include the following:

- Align learning and development initiatives to business goals.
- Reach agreement with the business sponsor on the expected impact of the learning and development initiatives.
- Execute and provide regular reports of progress.

Providing sufficient training to the right people, on the right topics, is essential to maximize the benefits organizations receive from their SAP solutions. To increase benefits in all areas, enterprises need to:

- **Train consistently.** Build a plan to maintain the skills of end users, administrators, and implementation teams. Quality training experience helps ensure that every learner gets the most from the technology. Offering relevant "training modules" will increase employee participation and adoption. "With the SAP Enable Now solution, we just record our class once and then we can produce different deliverables out of it; so we can make a simple demo where the users learn how to use SAP software or they can go in practice mode and can be guided by clicking a button or be in a test mode where the system tells them what to do," suggests a technology training manager at a health and wellness company.

- **Train practically.** Leverage e-learning courses and electronic performance-support modules to offer efficient and convenient delivery of high-quality training programs. Make use of vendor-supplied e-learning or live training events. "We want to train them right before they switch to the new solution. If we train them two months in advance, they won't remember it at all," recommends a senior manager of PMO and enablement at a food and beverage conglomerate.
- **Train everyone.** Investment in SAP solutions is significant. Training is a small incremental investment to ensure maximum business benefits. To achieve these benefits, organizations should establish a comprehensive blended training program. This includes functional and process training for end users and administrators and deep technical training for implementation teams. Further, all groups should understand both the expected near-term benefits and potential longer-term value of the new tools and processes. "Train everybody because it's end to end for us: It's not just about the tools; it's about the whole process. Overviews and the deep dives on how the process is done and implemented are important, not just for engagement but for the whole adoption because you have to manage change," recommends a technology training manager at a health and wellness company.
- **Monitor performance.** Use tools to monitor user performance and target appropriate interventions – training, support, or infrastructure improvements – when adoption or increases in performance stall. "Tools like [SAP User Experience Management by Knoa] provide real-time data on how people are executing the solution. [SAP User Experience Management by Knoa] can help you be much more data driven in your learning and training program – that's one thing that we're not doing [enough]," recommends a technology training manager at a health and wellness company.

## ESSENTIAL GUIDANCE

---

This research shows that while organizations can consistently gain performance improvement from installing SAP solutions, the improvement organizations realize varies widely.

While it is impossible to predict the precise magnitude of the benefits an organization may get from its SAP solution, this research suggests that to achieve the greatest impact, organizations should provide end users, administrators, and implementation team members with sufficient training.

This research found that the benefits were most pronounced when organizations provided:

- 32 hours of training to each end user
- 45 hours of training to each administrator
- 50 hours of training to each implementation team member

Additional research may suggest there are approaches for maximizing skill other than tracking "hours of training," but the message is clear: Focusing on the performance of the impacted end users, administrators, and implementation team members can help organizations maximize the value realized from an SAP solution deployment. This research has established a benchmark that other approaches will need to beat.

Most organizations should follow this simple best practice: increase the training provided to impacted team members implementing (or deploying) and using the application every day. If you do, this can create consistently greater performance improvement from your SAP solution.

**To achieve the greatest impact, organizations should provide end users, administrators, and implementation team members with sufficient training.**

## About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

## Global Headquarters

5 Speen Street  
Framingham, MA 01701  
USA  
508.872.8200  
Twitter: @IDC  
idc-community.com  
www.idc.com

---

### Copyright Notice

External Publication of IDC Information and Data – Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2018 IDC. Reproduction without written permission is completely forbidden.

