How to Prepare for a Successful SAP HANA Transition
Planning for a Smooth Move

Anyone who has relocated to a new home can attest to what a challenge moving can be. If the expenses are coming out of your pocket, it can be even scarier. There are typically two options: You can hire movers to ease your burden, but this comes at an increased cost. Or you call on friends to help you, though they might not show up or work as hard as you’d like them to. A move can be utter chaos that turns your life upside down for months, or it can run like a well-choreographed performance with life quickly returning to normal at the end. How well you plan for the move makes all the difference.

What Happens When Tech Moves

When moving technology and infrastructure, similar options are available to organizations. They can hand the process over to a third party, or they can lean on internal resources to assist with a move. Organizations often prefer the latter option because of tight IT budgets and the desire to maintain control of their data. In partnership with Softchoice, ASUG research conducted a study in late 2018 that examined the key issues SAP customers need to consider prior to a tech migration, especially for the biggest shift in recent memory: the transition to SAP HANA.

A move can be utter chaos that turns your life upside down for months, or it can run like a well-choreographed performance with life quickly returning to normal at the end. How well you plan for the move makes all the difference.
Making Moves Before the Move

Most SAP customers are aware that SAP is planning to shut down support for SAP ECC, its base ERP offering, in 2025. This is part of a significant effort on SAP’s part to push customers toward SAP S/4HANA, the company’s new suite of business technology solutions. Among all the buzz surrounding SAP S/4HANA, one of the key facts that gets lost is that the ERP system only runs on SAP HANA.

SAP HANA is SAP’s in-memory database that prepares customers to process large quantities of data in real time. There are a variety of business reasons for adopting this database, including reducing IT workloads, enhancing data modeling, and simplifying administration. Its flexibility allows organizations to make changes within their data environments on the fly. In short, the expectation is that SAP HANA will drive business outcomes that are quicker and easier to measure, delivering better ROI over the long term. ASUG’s research will help you better understand the SAP HANA landscape, find your place within it, and determine how to get the most out of this technology if you decide to migrate.

Mapping the New Space

Despite these benefits, moving to and running SAP HANA is a seismic shift that has the potential to bring complexity and challenges to an organization. This is why preparation is key. For example, if you were moving to a new home, you might look at your new floor plans to determine whether your furniture will fit in the new space or whether you have the right pieces for each room. You might discover that you need a few new items.

Similarly, for companies that use Unix or Windows-based operating systems (OS), there are some infrastructure adjustments needed to prepare for the migration because SAP HANA requires Linux as its OS. As recently as May 2018, 60 percent of ASUG Members were running either a Unix- or Windows-based OS (Figure 1). These companies might not have their data centers properly set up to handle the transition to SAP HANA, and the expense to do a full refresh could be unmanageable for some.

Figure 1: Primary Operating Systems Used by SAP Customers

Among all the buzz surrounding SAP S/4HANA, one of the key facts that gets lost is that the ERP system only runs on SAP HANA.
Projections for SAP HANA Transitions

According to ASUG research, 20 percent of SAP customers are still evaluating SAP HANA or have decided to not use it. Almost half (42 percent) already are using SAP HANA (Figure 2). The term "current user" might be too loose of a definition for this group. Some of these companies might have purchased licenses they are not using because they have not migrated their systems either in part or fully onto SAP HANA.

The other 58 percent are planning a migration to SAP HANA, and 43 percent of that group are planning to adopt the database within the next two years. This means that conversations around proper support are going to heat up soon if they haven’t already. Based on the way the timelines look today, there could be a cluster of companies attempting to hire a finite number of external resources at the same time to help handle their migrations. You might have experienced a similar phenomenon, for example, if you’ve hesitated to hire movers and then found that they’re all booked because everyone else needs them at the same time of the month.

Having the Right Hands Available

When it comes to infrastructure, companies are facing a skills and staffing shortage. According to ASUG research, only a third of companies (35 percent) believe they are adequately staffed to handle new technologies adopted by their company (Figure 3).

---

**Figure 2: SAP HANA Migration Strategies**

![Diagram showing current and future users of SAP HANA](source: ASUG research, November 2018)

**Figure 3: How Prepared Are IT Teams to Handle New Tech Projects?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, we are adequately staffed</td>
<td>35%</td>
</tr>
<tr>
<td>We can take 1-2 more projects</td>
<td>30%</td>
</tr>
<tr>
<td>We can only deal with current projects</td>
<td>27%</td>
</tr>
<tr>
<td>Not at all; we’re understaffed as it is</td>
<td>8%</td>
</tr>
</tbody>
</table>

(Source: ASUG research, November 2018)
Those who self-identify as industry leaders in IT infrastructure feel significantly more prepared to handle new projects. However, only 27 percent of SAP customers place themselves in this group (data not shown). The majority (65 percent) believe they are on par with others in their industry, but the average IT team believes it is only capable of handling one to two more projects at a time. Something as complex as an SAP HANA transition is not feasible for most companies to take on with their in-house IT teams alone. Companies will need to hire staff, institute more efficient processes, or get help from external resources.

What this means for you: Now is the time to assess whether the skills needed to run SAP HANA exist within your company. ASUG research from May 2018 suggests that a third of customers planning to run SAP HANA have concerns that their current employees do not have sufficient Linux skills. Performing an audit of your IT team will help you determine whether you need to look externally for resources. If you wait until the transition is looming, the resources you want and need will have been hired by other companies.

Where Those Migrations Are Living

When you’re planning your SAP HANA migration strategy, you’ll also need to plan for the right environment to run the database. Current users gravitate toward on-premise implementations, but future users appear to lean toward hybrid and cloud options (Figure 4). In fact, a hybrid approach overtakes on-premise as the predominate strategy for implementing SAP HANA among future users.

Figure 4: Planned Environments for SAP HANA

Agility appears to be a large factor in cloud shifts, according to ASUG research. The top reasons driving the move to the cloud are to consolidate infrastructure, integrate cloud solutions, and promote innovation or business growth. The expected increase in cloud implementations of SAP HANA among future users aligns with these drivers of infrastructure change. Still, 73 percent are
planning to take an on-premise or hybrid approach, so there will be plenty of companies looking for the right hardware to add efficiencies between on-premise components and their SAP HANA implementation. Despite this, 58 percent of companies making the switch to SAP HANA in 2020 or later have not sourced any infrastructure providers for running SAP HANA. Many conversations will be happening concurrently, and some organizations might have to settle for less-than-ideal structures for their systems that don’t match their strategies.

**What this means for you:** If you are one of the 73 percent planning to take an on-premise or hybrid approach in the future, it’s essential to look for hardware that is optimized for SAP HANA. Many servers and infrastructure systems can run the in-memory database, but they might not allow you to take full advantage of the speed and real-time analytics that are typically the first indicators of a successful SAP HANA or SAP S/4HANA implementation. Reach out to your peers and business associates to help you find the right infrastructure providers who have the experience and expertise to fit the needs of your SAP HANA migration strategy.

**The Realities of an SAP HANA Move**

As organizations build their business cases for their moves to SAP HANA, it’s natural to assess the potential challenges and threats. Complexity, cost, and security are common concerns. When we asked participants in our research to rank concerns about their infrastructure, they placed security at the top nearly twice as often as any other (Figure 5). Specific workload issues are second on the list, while factors like networking, storage, and access to user controls generate far less worry. It’s not surprising that security ranks at the top of the list. When you receive the keys to move into your new home, for example, there’s a good chance you’ll change the locks and will need a trustworthy locksmith to help you do this.

**Figure 5: Top IT Infrastructure Concerns**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>45%</td>
</tr>
<tr>
<td>Specific workloads</td>
<td>24%</td>
</tr>
<tr>
<td>Networking</td>
<td>11%</td>
</tr>
<tr>
<td>Storage</td>
<td>11%</td>
</tr>
<tr>
<td>Access to user controls</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: ASUG research, November 2018

One fear that isn’t becoming a reality is the cost of implementing SAP HANA. When asking future users what challenges they expect to face with their SAP HANA migration, 63 percent mention cost as a potential barrier. This puts cost on the same level as the complexity of the transition and prioritization within corporate strategy. Among those who are current users of SAP HANA, however, only 13 percent rated cost as the biggest concern they faced with their transition. These users placed it far below complexity and prioritization, and even lack of skills was seen as a bigger challenge than cost.
What this means for you: Cost will obviously play a big part in any business case justifying the purchase of SAP HANA licenses, yet it should not be the key factor when deciding what support and hardware to use for deployment. Many similarly priced options actually deliver wide ranges of performance. Prioritizing performance and agility over cost will give you the best chance to get the ROI you’re looking to achieve.

How to Find Strong Migration Support

If you’re going through the trouble of moving, you’ve probably invested the time to make sure your new location has everything you could want and need for the future. Similarly, if performance on SAP HANA is a priority, you should know how to find the systems that are best equipped to give you an advantage and help you avoid unpleasant surprises. For those who plan to run some of their SAP HANA instances on-premise, the related challenges are best handled by a system that offers:

**Power:** A system that’s purpose-built and designed to handle big data and analytics workloads will best handle your needs.

**Out-of-the-box virtualization:** For flexibility, you’ll want to be ready to consolidate and run multiple workloads on the same system and share compute, network, and storage resources.

**Resiliency:** Your system should include high availability, failover and uptime, and predictive failure alerts. You should scrutinize these features and promises during your vendor selection process.

**Credibility:** Working with vendors who have a rich history and long-standing relationship with SAP will give you the confidence that you’ll be well supported in your decision now and in the future.

Start Packing

Now that you know more about what challenges are ahead of you—both real and imagined—it’s time to start making plans. Take the time to find and evaluate the hardware that is best suited to run SAP HANA. Your hardware should deliver strong performance while making your information secure and accessible. You don’t want to be one of the future users who is scrambling to find support—or waiting in line behind other customers—because the provider that’s suited for your needs is helping others make the transition instead. Just like a move to a new home, the further ahead you start planning your SAP HANA migration strategy, the more likely that your move will happen like clockwork and you’ll be back to business in no time.
ABOUT ASUG

Founded in 1991, Americas’ SAP Users’ Group (ASUG) is the world’s largest SAP user group, serving 2,300-plus businesses via company-wide memberships. ASUG’s mission is to help people and organizations get the most value from their investments in SAP technology. The Chicago-based organization accomplishes this by connecting and educating people through in-person and virtual events, delivering customer feedback to SAP, and advocating for its members. Find additional information at https://www.asug.com/about

ABOUT SOFTCHOICE

Softchoice delivers best-in-class technology combined with an insights-led solution approach that’s designed to meet your business’s unique requirements. Softchoice works with you to transform hybrid IT environments and govern them with agile infrastructure, data protection, and high availability.

By wrapping our arms around your traditional infrastructure, Softchoice can determine the best locations for your business applications, aid you in securely adopting the public cloud, and successfully transform your data center. With a Softchoice solution, you get a tailored road map to fit your unique workloads and expert mentorship every step of the way.

To learn more about Softchoice and to access additional resources to assist you in your journey to SAP HANA, visit www.softchoice.com/SAPHANA