

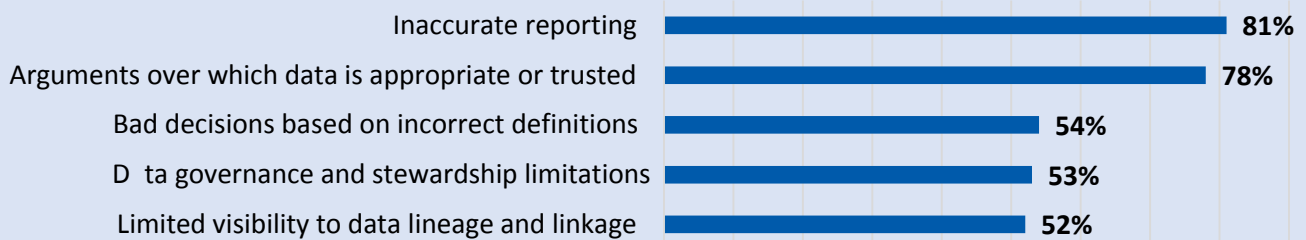


5 Steps for a Successful Migration to SAP HANA®

IT consolidation has become a prime objective for organizations seeking maximum efficiency at lower costs. Done correctly, database consolidation can have a transformative impact on the business. Migration to SAP HANA can deliver greater agility, enabling a company to respond faster to market changes and business events.

Forrester Research has estimated that companies that have undergone consolidation spend well below the industry average on their total IT budget, cutting costs by as much as 34%.

Top Reasons for Database Consolidation



Source: Data Warehouse Institute

But "data" migrations" require "solid "planning" and tight adherence to best practices in order to avoid huge financial and operational risks. You must begin the process by first identifying the knowledge level of migration " " in " your "organization" and "determine " what additional resources are needed to ensure project success. This is important, since m " internal IT teams have never done a major migration, and as a result many companies seek support from SAP Partners like Rolta, with a track record of successful migrations, to advise and support the process.

Fully vetting your migration plan saves time, effort and frustration at the end of the project. Yet a majority of companies fail to create and follow a best practice-based migration process. In fact, Gartner estimates that 7 out of 10 data migrations incur significant time delays or unplanned downtime due to improper planning.¹

Following are 5 steps that Rolta works through with organizations when managing a migration. Note the process takes companies through the planning stages, migration and beyond, because managing the new SAP HANA environment is critical to long-term success.

Steps for a successful migration to SAP HANA include:

1. Develop a Business Case
2. Conduct an Assessment
3. Plot out the Process
4. Execute the Migration
5. Ensure Long Term Success

Rolta SmartMigrate™ for SAP HANA automates up to 90% of migration efforts





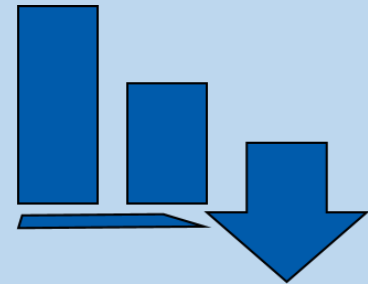
1. Develop a Business Case

Major migration projects require consensus and commitment among company leaders. To get everyone on the same page, before any specifics on how the migration will take place, there needs to be an understanding and agreement regarding *why* the migration should take place. A strong business case is often needed to justify the cost and effort.

SAP HANA is one of the fastest growing in-memory, columnar databases engineered to handle massive amounts of data and analytical workloads in real time. It can deliver many times greater performance over traditional disk-based databases. Its broad scope encompasses many potential use cases that can be incorporated into a strong business case.

In compiling a business case for migrating to SAP HANA, it's important to recognize that the outcome not only helps reduce costs but also increases capabilities and improves business processes. SAP estimates that 10-20% of the value of a HANA investment comes from reduced storage costs, consolidated server environments through landscape simplification and decommissioned software. Additionally, it projects 30-40% of the value results from increases in productivity of BI and application development, because SAP HANA eliminates layers in the architecture and delivers the ability to model virtually instead of physically, with faster loading, testing and reporting, thereby accelerating BI development cycles. Improving how business is done is key to competitiveness, and SAP reports that more than 50% of the value of migrating to SAP HANA comes from improved business processes.²

Analyst firm Gartner reports that for some use cases, SAP HANA “offers potentially dramatic performance improvement of several orders of magnitude over traditional disk-based databases. It also exploits in-memory computing technologies to offer massively parallel row- and columnar-based database operation. This enables full, real-time access to both structured and unstructured data, which potentially can reduce IT landscape complexity through reducing the number of systems.”³



To calculate the cost benefits of database migration and consolidation, consider the following:

- Reduction of energy costs
- Lower IT administrative costs
- Lower licensing fees



2. Conduct an Assessment

Rolta's Migration Assessment Report covers schema, data, SQL objects and composite complexity. It contains a summary of your existing data landscape and hardware sizing based on the source and target environment and workloads.

Begin by gaining a full understanding of the data requirements and scope of an SAP HANA implementation, and define all technical elements, including the key indicators that will be used to assess data quality once SAP HANA is up and running. Take a detailed look at applications, network requirements and dependencies. The assessment must take into account the overall architecture, database platform, business applications, and current SAP footprint (if one exists).

But as importantly, obtaining a clear understanding of the risk to business continuity must be a key part of the assessment. Because a poorly planned migration can impact an organization's finances and operations, an evaluation of risk factors should occur, with minimizing business disruptions a critical goal. Create a ranking of applications and plot out move sequences that would minimize risk.



3. Plot Out the Process

Once the decision has been made to simplify platforms and migrate to a single database, expect pressure to move quickly. Avoid the rush and keep to your plan. Without strict adherence to data migration best practices, you're likely heading for months of post-implementation headaches and unforeseen costs.

The transformational impact of migrating to SAP HANA requires companies to rethink how best to utilize real-time data on areas such as inventory planning, merchandising and financial performance. You need to have a solid understanding of how this new technology will affect the business — at all levels — from personnel, to resources, to processes.

Companies must assess IT readiness, identifying any shortfalls in the needed personnel and resources required to expeditiously migrate to SAP HANA with minimal disruption to the business. Decide how the migrated HANA environment supports the co-existence of other application environments, and how best to facilitate HANA upgrades

Technical personnel need to define specific attributes of their systems and data, and formulate a data conversion strategy, including data cleansing. Ultimately, decisions about which data should be eliminated and cleansed should be an executive decision.

Planning must also include a strategy for handling review cycles. Personnel to be involved at various stages must be identified, and a process for identifying “bad data” and making decisions about its disposition must be established. This is critical, as incongruence in data before and after migration can be catastrophic.



Rolta delivers a detailed report outlining the migration roadmap, effort estimation, as well as a list of objects that will be migrated automatically and those requiring manual migration.



4. Execute the Migration

Rolta SmartMigrate for SAP HANA has an interactive user interface that guides the overall migration process and allows the administrator to select the database migration steps to perform, skip or perform later. It additionally provides feedback on tasks requiring manual intervention before it proceeds to subsequent stages.

The migration process starts with extraction from the legacy data environment, profiling in the staging and testing area, and mapping host to target environment. Data rules are applied in the transformation phase, after which the quality of data is assessed. Rules and properties not supported by SAP HANA must be addressed on a case-by-case basis, resulting in a decision to either convert or omit the data. Once the data is approved, migration proceeds until the implementation is complete.

Reporting on the target environment should be in place to ensure performance criteria are being met.

Rolta SmartMigrate for SAP HANA reports on the SQL objects that did not migrate and marks out the sections and lines of code within the objects that need manual migration.



5. Ensuring Long Term Success

Post-migration efforts focus on ensuring a steady state in which all systems are working both technically and from a strategic business point of view. To guard against interruptions or data loss, legacy systems should be kept running as a backup for a period after the migration.

Monitoring, testing, validation and evaluation must be an ongoing process, and configuration data must be validated and reconciled for consistency as necessary.

Managed Services for SAP HANA

Managing and maintaining SAP HANA can strain resources, and mismanagement of the complex solution can lead to increased Total Cost of Ownership. Rolta AdvizeX offers Managed Services to free up your resources and budget for mission-critical, strategic business initiatives.

Rolta AdvizeX's Managed Services for SAP HANA manage and maintain your solution at par or better with industry standards. Services include:

- **Ownership of SAP HANA issues and pursuit of resolution of hardware-related snags**
- **Monitoring and administration of the database 24/7**
- **Conducting ongoing remote health checks to verify firmware, OS and software levels and upgrade**
- **Maintaining records of SAP HANA patches and updates**
- **Providing regular status meetings and reports for updates on issue resolution**
- **Technical support desk for SAP HANA customer problem calls**



Rolta is an SAP strategic OEM partner and recipient of its prestigious Pinnacle Award for 2014. Rolta SmartMigrate for SAP HANA is the ideal solution for enterprises seeking to migrate their existing analytic databases to SAP HANA in an automated manner, delivered through a comprehensive, end-to-end migration from assessment, discovery, to migration, and the availability of post-implementation support.

Footnotes:

1. "Data Center Migrations – Five Steps to Success," Gartner, March 2014
2. "[Building The Business Case for Your HANA Investment](#)," Andrew De Rozairo, SAP, Nov 18, 2013
3. "The Primary Use and Business Cases for SAP HANA Solutions," Gartner, January 2014

