# Debunking the 3 myths of HANA

centiq

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# Debunking the 3 myths of HANA

SAP is the world's largest Enterprise Resource Planning (ERP) software provider. Around for five decades, thousands of businesses now use SAP daily to automate their core processes and manage their all-important customer relationships.

In the next four years, the **global ERP market will be worth $41.69B** as businesses look to improve organisational efficiency. But nothing lasts forever. It's time for a new software platform for a new age. One to deal with leaner supply chains, better informed customers, tighter profit margins and greater global competition.

SAP knows this and now wants its customers to switch to its new flagship database, HANA, on which all its business applications will run. But why should you?

HANA is epically fast because it uses in-memory techniques. However, to date, HANA has been seen as a luxury rather than a necessity. Some have found defining a solid business case for SAP's newest offering very straightforward. Others have found it more of a challenge. Nevertheless, according to the Americas' SAP Users' Group (ASUG), HANA's adoption is growing.

No independent research, thus far, has adequately explained why HANA is becoming more popular. To solve this, Centiq commissioned Coleman Parkes to explore why HANA is gaining ground, from those who know most; its users. This research, believed to be the largest independent survey of HANA users undertaken to date, separates fact from fiction and disproves the three commonly held myths:

| 1 | HANA is too expensive |
|---|---|

| 2 | HANA takes too long to implement |
|---|---|

| 3 | HANA is only about analytics |
|---|---|

**Methodology**
This research, conducted via phone and email survey, polled 250 different UK organisations, ranging from 1,001 to over 10,000 employees, across eight different industries including Retail & Distribution, Financial Services, Public Sector, Utilities, Professional Services, Media & Entertainment and Technology & Telecoms. All had acquired HANA licences and had to be either users live on HANA, or looking to deploy HANA in the future.

# HANA is misunderstood

Firstly, a little context may help. SAP's software is vital for many organisations. Its value is reflected in the price point it commands **and the lucrative market** for those who specialise in installing and maintaining these business-critical systems. So it is understandable many assume HANA will also be a premium-priced, but high-value, proposition.

At its launch, SAP evangelist, Timo Elliott, characterised SAP HANA as a luxury item, like a Porsche or a Karl Lagerfeld dress, stating, "Even customers who fully understand the technical opportunity are wondering why SAP thinks an 'expensive' product like HANA could be suitable for a wide range of customers."

Others like Holger Kisker, Forrester VP & Research Director, agreed in a Computer Weekly article, "SAP HANA can be expensive, and organisations need to understand the return on investment before committing to a long-term strategy. Application development and delivery (AD&D) professionals need to understand what licence their company currently holds for SAP HANA (if any) and what licence is required for the first use case to get started."

Because HANA is in-memory and built to process data at speed, many feel it's a highly complex solution. They're not wrong. Doug Henschen of Constellation Research reported from an opening session at the Sapphire user conference that Bill McDermott, SAP CEO, had stated "It was a brave, and some would say incongruous, promise [of simplicity] coming from a company known for its complicated enterprise applications." The irony wasn't lost on McDermott, who acknowledged that SAP's technology has been "too complex" in the past.

Timo Elliott, made another point, claiming SAP HANA is useful for analytics but this is only part of its intended usage. Doug Henschen, echoed this, "Speedy insights are only required when people are actually in a position to do something with them. SAP is pushing ahead of the customer's ability to execute."

These assumptions about HANA's complexity, costs and ideal usage have so far dogged the debate. As the platform to perform database tasks at speed, as our research concludes, there is more to HANA than many at present appreciate.

# Myth one – HANA is too expensive

What are the buying criteria for HANA? SAP is the world market leader in ERP, so few IT professionals would expect it to be the lowest price option.  However, budget remains a major consideration on all Enterprise IT purchases.

"HANA is expensive. Of course, the discussion should be about HANA benefits and whether the migration is worth the ROI but many customers don't get to that stage; the investment itself is a barrier tall enough to prevent a migration, or delay the decision to some point in the future."
Melchior Du Boullay,
CTO, Hitachi

Our survey reveals licensing prices, chosen use case, and inaccurate budgeting will not hinder the deployment. Perhaps surprisingly, **HANA won't bust your budget.**

Of the 133 respondents who have HANA in production within their organisation, 98% came in on budget during their roll out. If you budget correctly and proceed with an appropriate strategy for migration, HANA bucks the trend for most IT transformation campaigns, by coming in on budget.

**How did your project perform with respect to time and budget?**



| On time, on budget | Late, but on budget | On time, but over budget |
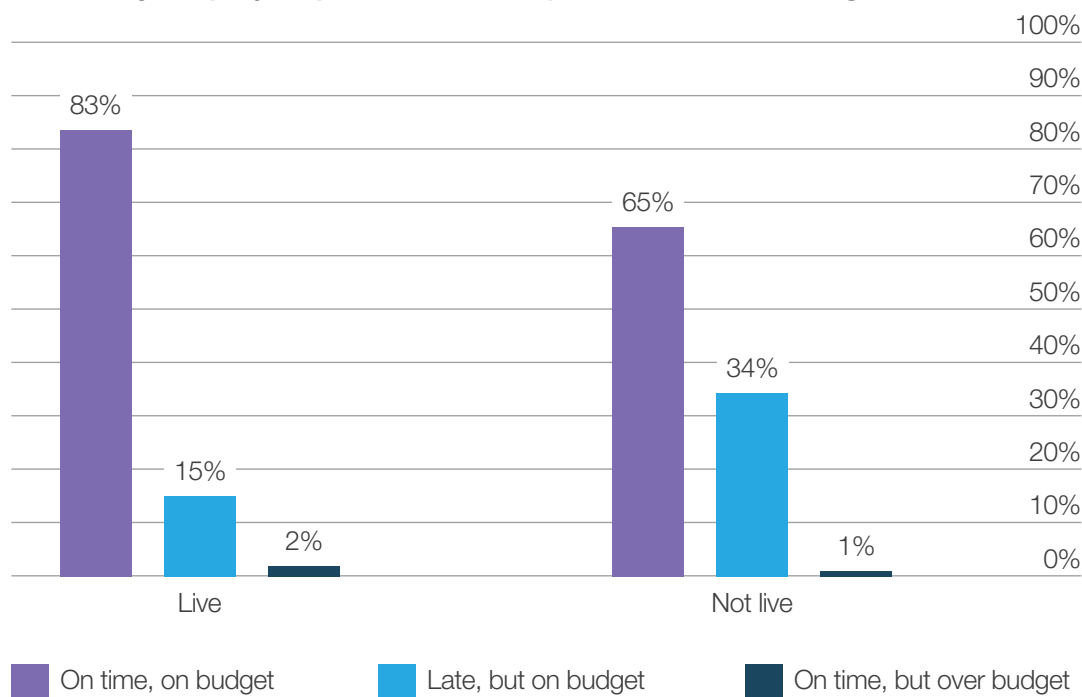
And this is not the whole story; 99% of organisations yet to get HANA into production are confident their project will come in on budget. This pleasant surprise is not the typical experience of previous generations of SAP buyers.

The fear of budget-busting remains. During the survey, respondents were asked about their major concerns. Unsurprisingly, the top three concerns for those on a journey to implement HANA related to costs. Of those questioned, 31% believed the chosen use case didn't justify the projected costs and 29% feared the consequences of inaccurate budgeting.

## Myth one – HANA is too expensive

However, some 41% of respondents, concluded their assumptions on licence costs were incorrect.

| | |
|---|---|
| Incorrect assumptions on licence costs | 41% |
| Chosen use 'case' does not justify the projected cost | 31% |
| Inaccurate budgeting | 29% |

Some believe HANA users should focus more on Return On Investment, or ROI, than up-front costs. As Melcior Du Boullay suggested, "The discussion should be about HANA benefits and whether the migration is worth the ROI". Thankfully there are plenty of statistics to prove the benefits of HANA.

For those with actual HANA experience, as opposed to those yet to go live, who have only expectations, there is a clear business upside. In fact, most respondents live on HANA believed it helped them save on internal costs. From the same group, 92% stated it decreased IT infrastructure expenditure and 87% using HANA said it helped reduce business costs.

**92%** of respondents live on HANA stated

HANA helps reduce IT infrastructure costs

**87%** of respondents live on HANA stated

HANA helps reduce business costs

Ultimately, organisations that felt the cost of HANA didn't justify the use case may be surprised to know HANA makes back its investment in business cost savings. Its ability to allow development teams to design and deploy intuitive applications to deliver the right information at the right time to business users is also clearly valued by those in the know.

**The Centiq take**
Glyn Heath, CEO of Centiq, believes, **"We can deduce certain things from the research which suggests, for the use cases in this instance, SAP HANA delivered on its promise. It is refreshing to see this new technology producing real business and IT cost benefits".**

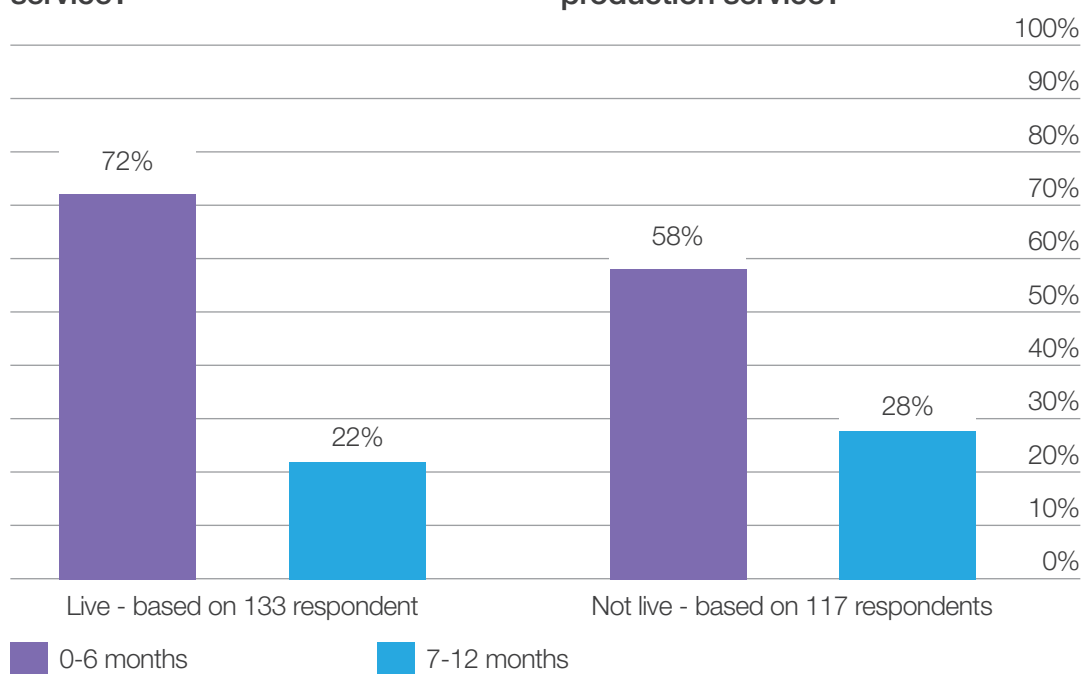# Myth two – HANA takes too long to implement

Next up is an issue recognised more by larger enterprises who may expect SAP projects to last two years or more. This myth concerns the hardest parameter to control; time. So is time really a stumbling block for HANA implementation?

The "too complex" argument is a mainstay of SAP's competitors' messaging who assert that being "too complex" also means long projects. In IT, long projects delay time-to-value, bust budgets and disappoint colleagues, meaning business sponsors lose patience.

So what about the 47% not live yet? It was not possible to determine the scope of migrations among the sample but, considering the sizes of organisations questioned, the amount of data and number of users would be substantial. Even 86% of those not yet live are confident HANA will be implemented within a year.

**How much time elapsed between project initiation and production service?**

**What is your expected timeframe from project initiation to production service?**



Live - based on 133 respondent          Not live - based on 117 respondents

72%    22%    58%    28%

0-6 months          7-12 months

Rapid implementation of HANA does vary across industries. Among the eight industries surveyed, the time to value diverged substantially. 80% of Utilities managed to get HANA transacting within six months while Public Sector was only 33%. Bureaucracy and complicated procurement may be the reason behind this disparity, although the size and variety of sources of datasets are other likely factors.

## Myth two –
## HANA takes too
## long to implement

### How much time elapsed between project initiation and production service?
### (by sectors)



Legend: ■ More than 2 years  ■ 13-18 months  ■ 7-12 months  ■ 0-6 months
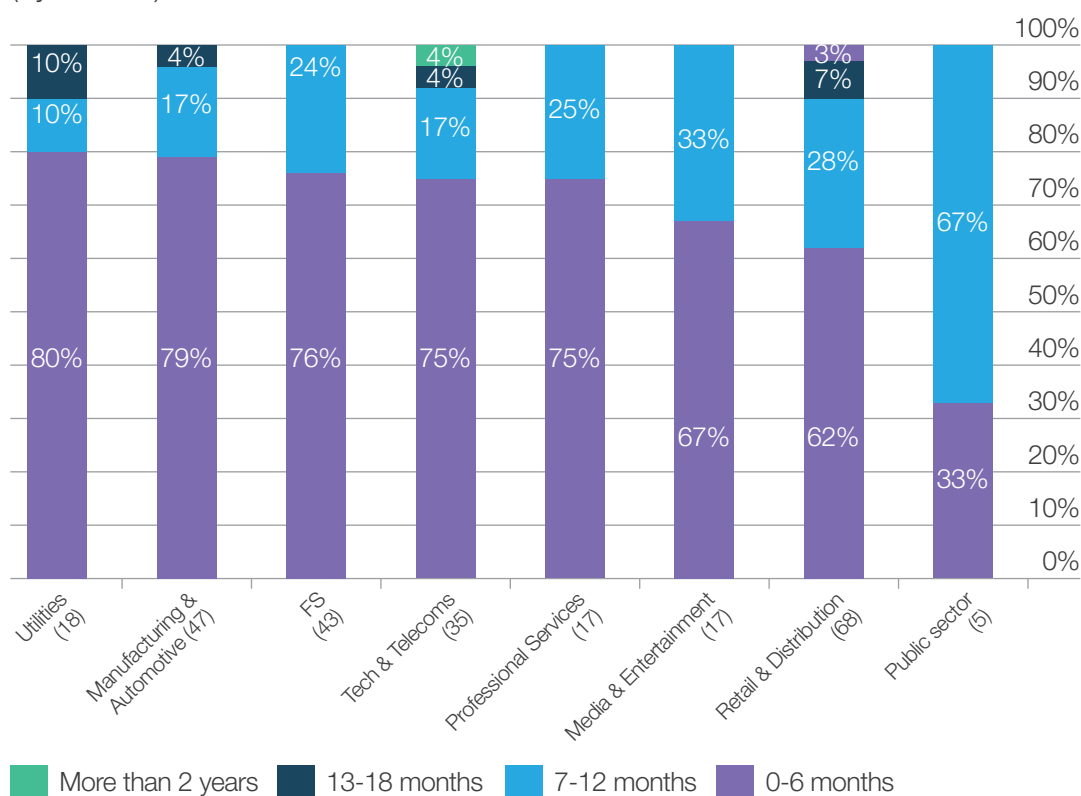
Perhaps surprisingly, Retail & Distribution organisations were among the slowest to implement with 7% taking up to 18 months and 3% more than two years, whilst 4% of Technology & Telecommunication organisations spent more than two years to go live.

Company size is another factor affecting the speed of deployment. Most deployed HANA within the six months' timeframe but some took a little longer than others: 70% of those with over 10,000 employees and 68% of those with 1,001-5,000 employees took up to six months to implement. The sweet-spot, however, is right in the middle. Organisations of 5,001-10,000 employees are quicker to implement, with 82% able to get the job done within 6 months.

Time-to-value is a universal measuring stick. It dictates budgets, business value and repeat custom. HANA has proven you don't need to spend two years moving the earth when migration can happen quickly, especially when expert support is available.

**The Centiq take**
"Each size company has different reasons for implementing HANA. Smaller organisations may be stretched for resources, whilst, in our experience, larger organisations often have trouble co-ordinating their ample resources and frequently outsource. There is more agility for mid-sized organisations, who are not held by the constraints of conflicting interests, which is perhaps why they fared best when it came to rapid implementation times. Notably, the rapid implementation across all organisation sizes contradicts the belief that HANA is an excessively complex beast."
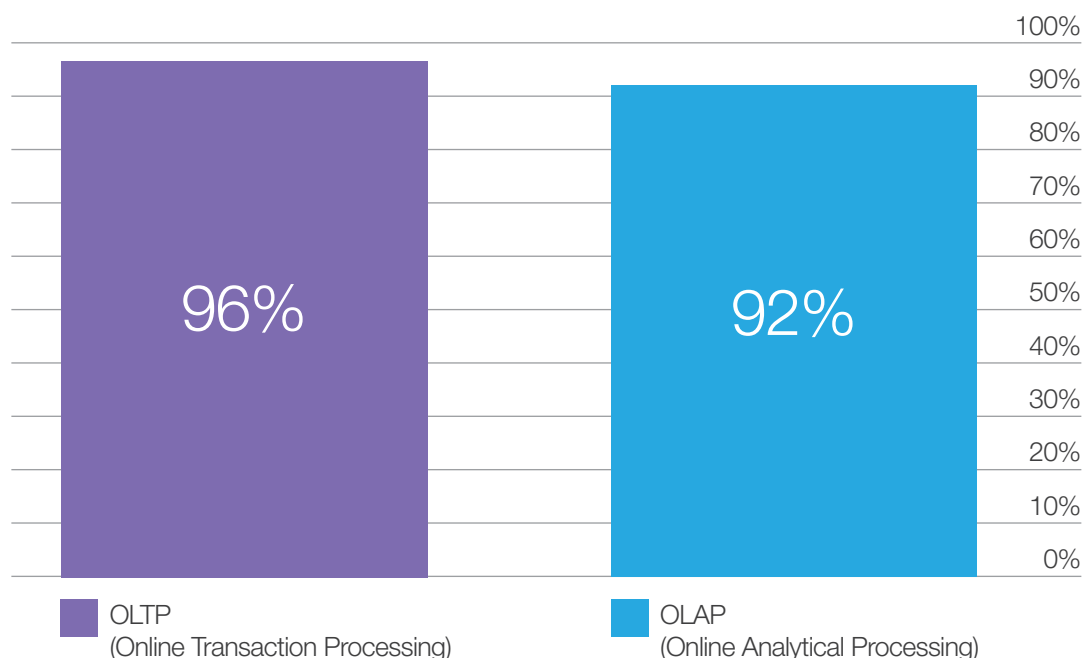
## Myth three – HANA is only about analytics

HANA exists to underpin the IT functions which drive today's businesses. Broadly, there are two types of usage for HANA: OLTP (On Line Transaction Processing) in the form of Suite on HANA and S/4HANA; and OLAP (On Line Analytical Processing) with Business Warehouse (BW) or B/4HANA.

In the past, HANA was considered a "luxury" used for big data "edge cases". Timo Elliott, SAP Evangelist, asserted, "deployments were focused on analytics, which typically involved large companies adding an additional HANA server to existing infrastructure to do things that were not feasible previously."

Analytics is at the front of everyone's minds and thanks to Big Data it's now even more so. For SAP's HANA product, analytics was certainly the most talked about but the research suggests **there is more to HANA than just analytics.**

In fact, HANA is more used for transaction processing than analytics; 96% confirmed their HANA deployment was for OLTP functions, whereas 92% stated they are more focused on analytics.

**Which of the following applications do you currently run on HANA?**



| OLTP (Online Transaction Processing) | OLAP (Online Analytical Processing) |

## Myth three – HANA is only about analytics

HANA's appeal is clearly broad and analytics are a major part of the equation. Though not the entire story. When respondents were asked to rank the elements which appealed to them most about HANA, the most popular, data compression, a concern for both data analytics and DataOps came in at 74% edging out the 'integration of all types of data' at 65%. The reason for using HANA varies between the different job roles of data professionals and operations professionals.

HANA's appeal also varies across company size. Organisations of 1,001-5,000 employees looked to deploy HANA for its ability to host the design and deployment of intuitive applications while those of 5,001-10,000 employees wanted HANA for its ability to enable faster operational reporting. Finally, organisations with over 10,000 employees deployed HANA for its high levels of data compression.

**Which of the following elements appealed the most to your organisation about SAP HANA?** (By employee size)



| | 1,001-5,000 employees | 5,001-10,000 employees | Over 10,000 employees |
|---|---|---|---|
| High levels of data compression | 75% | 67% | 76% |
| Faster operational reporting | 70% | 82% | 65% |
| Design and deployment of intuitive applications | 83% | 73% | 62% |
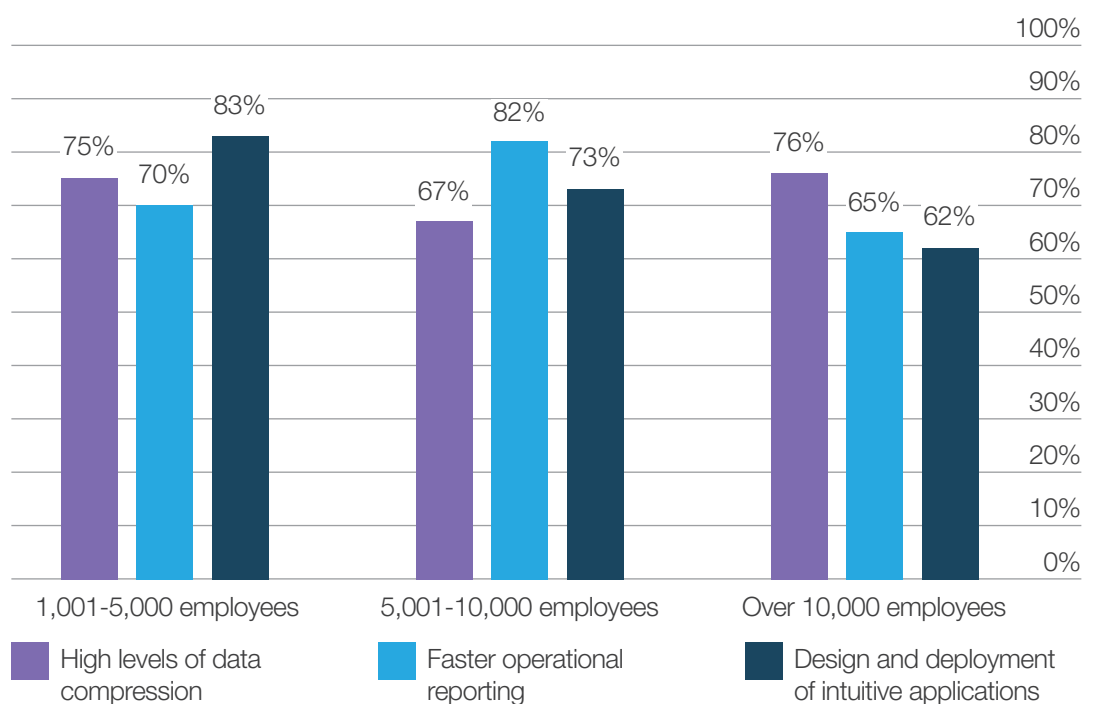
**Transact or Analyse?**
The versatility of HANA across differently-sized organisations is evident but its ability to cater to different job roles should not be ignored. Most would say data professionals stand to gain the most out of using HANA as the OLTP and OLAP platform but the research tells a different story.

## Myth three – HANA is only about analytics

Unsurprisingly, data professionals value HANA for its high levels of data compression and its ability to unlock insight, the mainstay of the analytics-based professions. However, operations professionals have a different, but similarly understandable reason, for their use of HANA. Its ability to save costs.

Data processing becomes less of a priority as organisations scale up, perhaps explaining why 90% of organisations with 1,001-5,000 employees choose HANA for its ability to process data at speed. Conversely, only 73% of bigger organisations (5,001-10,000 employees) choose to use HANA for its data processing.

**What was the driver for your HANA project?**



1,001-5,000 employees     5,001-10,000 employees     Over 10,000 employees
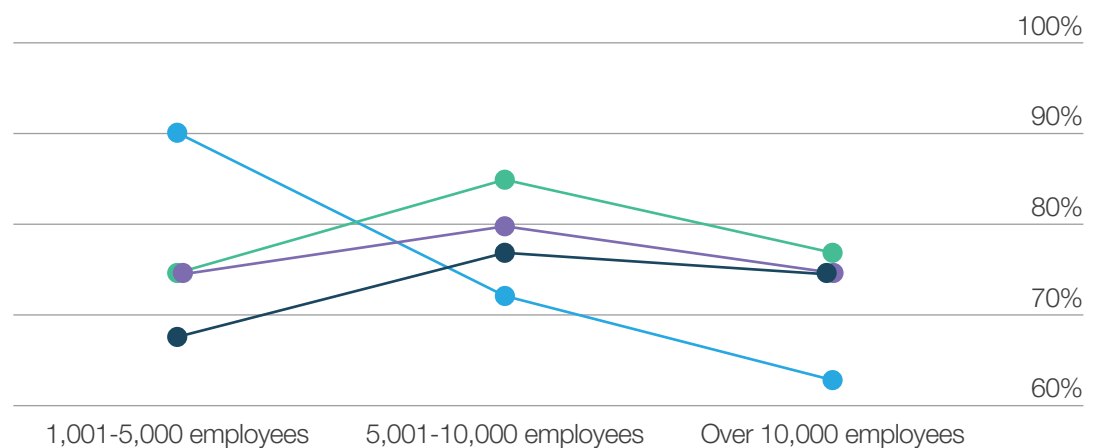
- To process the quantities of data within acceptable timeframes required a change in technology
- Part of a strategic application architecture plan in line with SAP's roadmap
- To consolidate the technology platforms we support
- It was driven by application functionality required by the business

Not only does HANA have the ability to save operational costs and implement quickly, but those using it in earnest and relying on its smooth running are reaping ample rewards. HANA notably levels the playing field for the smaller organisations.

**The Centiq take**

"The research critically disproves the myth that HANA is a 'one trick pony' and only appeals to those who need speedy analytics. In-memory databases are no longer a luxury item just for data scientists, they are now providing real world value. HANA is widely renowned for its analytical capabilities, but it's business transaction processing has been uncovered in this research to be equally as important. The combination of both transaction processing and analytical processing helps supercharge every-day business performance."
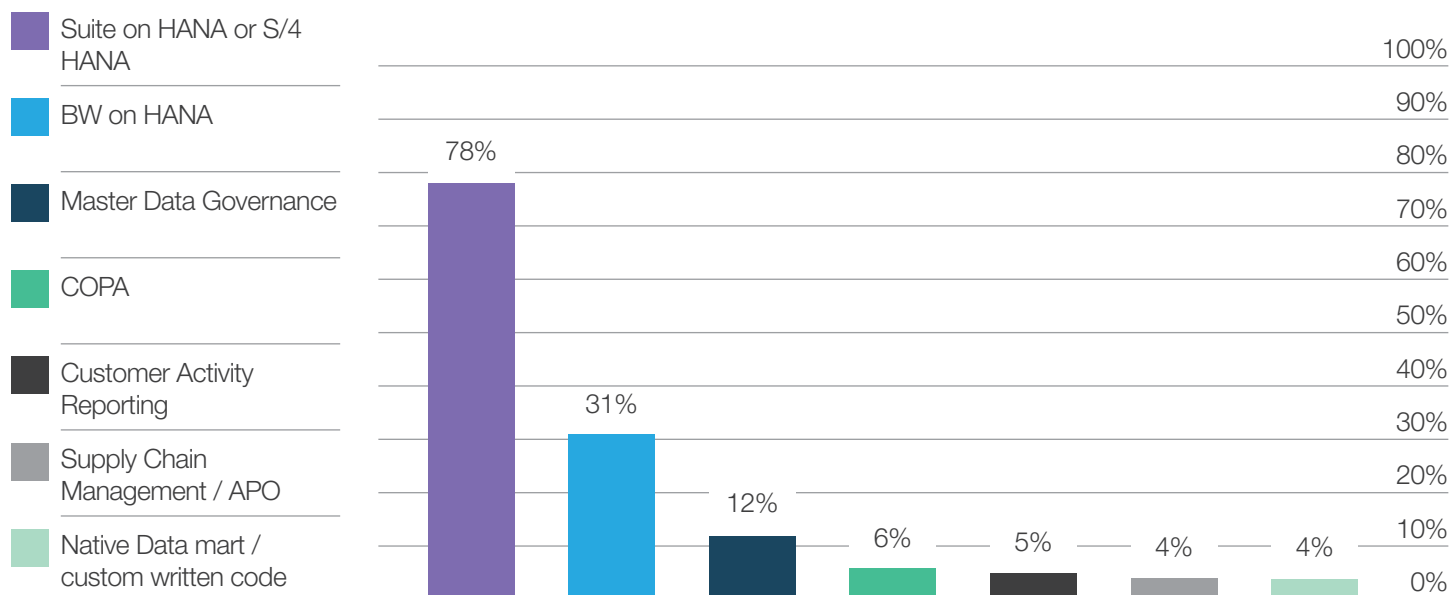
# The journey ahead

Our research indicates SAP HANA's future is bright. It recognises the perceived stumbling blocks for this platform are somewhat misplaced. The implementation of this game-changing technology shouldn't be a struggle when expert help is at hand.

S/4HANA and B/4HANA are set to be the main drivers for HANA adoption in the future. Both S/4HANA and B/4HANA can be deployed on premise as well as in the cloud and HANA will ultimately encompass all planned SAP Business Suite applications.

Across all respondents, 78% suggested they will be looking to adopt Suite or S/4HANA as part of their future roadmap. Business Warehouse, SAP's go-to analytics platform, is a distant second at 31%.

**Which of the following applications are next on your HANA roadmap?**

Suite on HANA or S/4 HANA

BW on HANA

Master Data Governance

COPA

Customer Activity Reporting

Supply Chain Management / APO

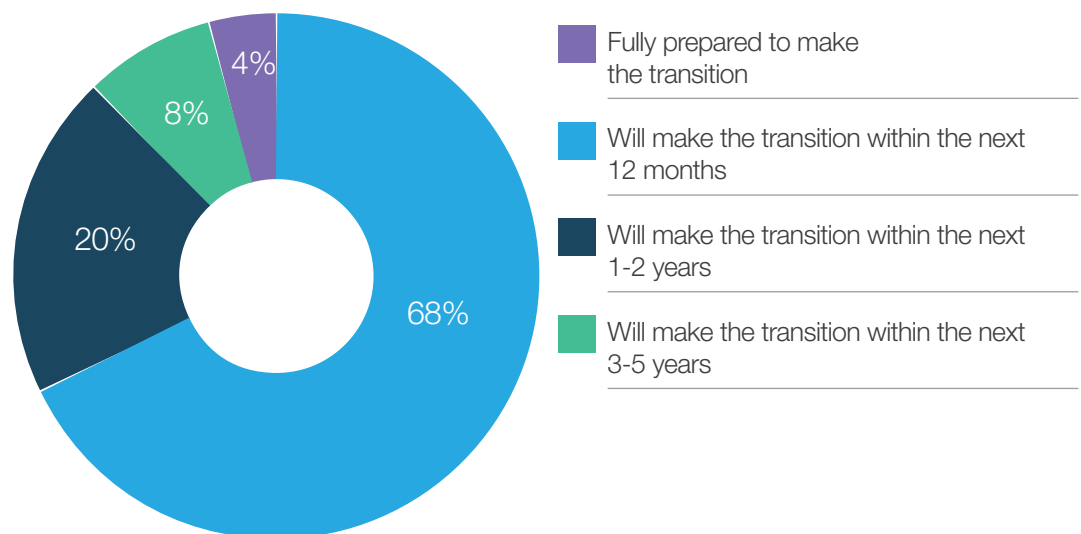Native Data mart / custom written code



78% 31% 12% 6% 5% 4% 4%

## The journey ahead

Both OLTP and OLAP are important for the future of the platform, but not equally. In making the case for S/4HANA adoption, OLTP as a driver was placed much higher than OLAP with 84% and 35% respectively, proving the claim HANA is not just an analytics turbo charger.

S/4HANA's value in different industries was also considered in this survey. Almost all respondents agreed transactional processing with S/4HANA was higher on their priority list than analytics, apart from Financial Services, which, perhaps tellingly at a time of huge change in this highly regulated sector, found more benefits from analytics.

The pent up and imminent demand for S/4HANA is set to continue over the next 5 years; of the organisations questioned, 68%, are looking to make the transition in the next 12 months. Furthermore, 20% will also be looking to deploy S/4HANA in the next one to two years, and ultimately all are fully prepared to make the transition.

**Is your organisation planning to move to S/4HANA?**



- 4%
- 8%
- 20%
- 68%

Fully prepared to make the transition

Will make the transition within the next 12 months

Will make the transition within the next 1-2 years

Will make the transition within the next 3-5 years

# Conclusion

This research clearly reaffirmed SAP has developed a game changer for most industries. The next evolution to S/4HANA and the ability to cater for the smaller players will also be a boon.

This study set out to clarify misconceptions. Many believed HANA was too expensive to even consider for their deployment or that their budgets would be stretched to the max by implementation issues.

The research concluded these fears were misplaced. Although in-memory computing may initially involve significant outgoings for the business, the Return On Investment needs to be weighed against this. HANA is beating its users' expectations in terms of business costs savings and reduced IT infrastructure costs.

Time-to-value was another deeply-held concern for those undertaking the SAP HANA journey. Many believe functional complexity inevitably results in lengthy deployment times - a natural assumption to make. Thankfully, with expert guidance, this is not the case and these findings show lengthy implementation times are exaggerated. Most of those questioned were able to deploy within half a year, a surprising short time period for any major IT project.

SAP HANA was designed to be a database that is epically fast. Many considered such speed useful only to attain faster analytics, but again the research shows otherwise. Its uses are twofold, transactional and analytical. Counter-intuitively, for most questioned, transactional processing was the main driver behind their HANA deployment. A nail in the coffin of those stubbornly attesting HANA is only for analytics.

Cautionary tales are the staple of competitor messaging, perhaps scared of what HANA is able to achieve despite some common misconceptions. In conclusion, SAP's HANA is the great leveller and will continue to improve those organisations who want, or need, massively capable DataOps to help them to get the job done.

**About Centiq**
Centiq proactively manages complex in-memory enterprise systems unlocking SAP HANA's potential. Its **Optiq Portal**, developed over 120 real-world HANA projects, offers DataOps best practices from concept through to business results. Centiq de-risks and optimises in-memory deployments for innovators who won't settle for Business As Usual. Centiq gets the job done.

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