

# THE TRANSFORMATIONAL CIO

## Harvey Nash/KPMG CIO Survey 2018

### Construction/Engineering Industry Findings

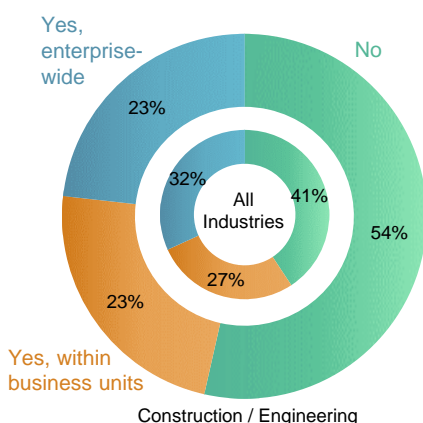


The Harvey Nash/KPMG CIO Survey is the largest IT leadership study in the world, with almost 4,000 respondents across 84 countries, representing over US\$300bn of IT budget spend.

**This Construction/Engineering industry snapshot provides survey responses from 118 IT leaders on some of the key topics, and highlights several areas where this industry's responses differed significantly from those across all industries.**

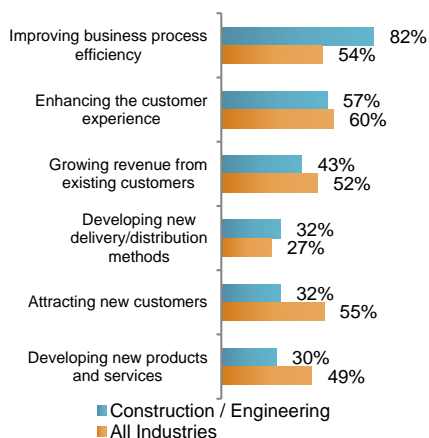
## Digital Strategy

**Does your organization have a clear digital business vision and strategy?**



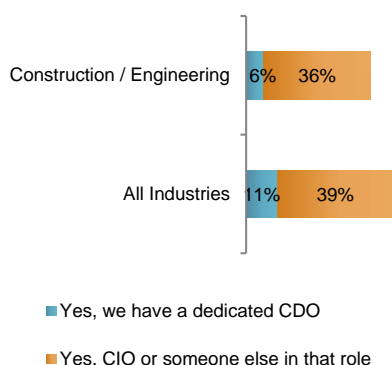
Construction/Engineering companies are **less likely to maintain a clear digital business strategy** than others, either enterprise-wide (23% vs. 32% for all industries), or within business units (23% vs. 27%). Overall, less than half have a clear digital strategy.

**Which are the most important goals when prioritizing digital technology initiatives in your organization?**



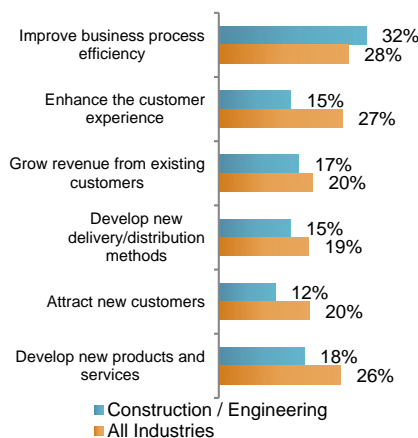
When prioritizing digital investments, Construction/Engineering companies **overwhelmingly focus on improving business process efficiency** (82% vs. 54% for all industries) and **enhancing the customer experience** (57% vs. 60%).

**Does your organization have a Chief Digital Officer or someone serving in that capacity?**



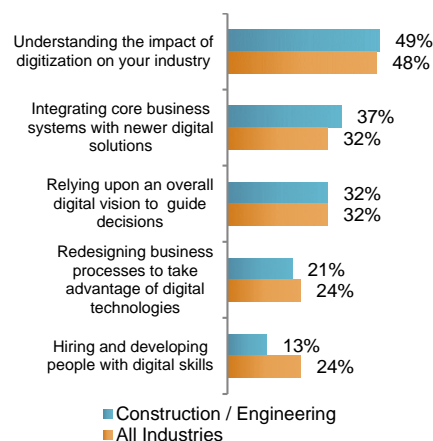
**42% of Construction/Engineering companies have a CDO or equivalent**, with 6% having a dedicated CDO, and 36% more having the CIO or someone else act in that role. Overall, Construction/ Engineering is less likely than others to have a single executive lead digital strategy.

**How effective has your organization been in using digital technologies to advance the following goals? (Very/Extremely Effective)**



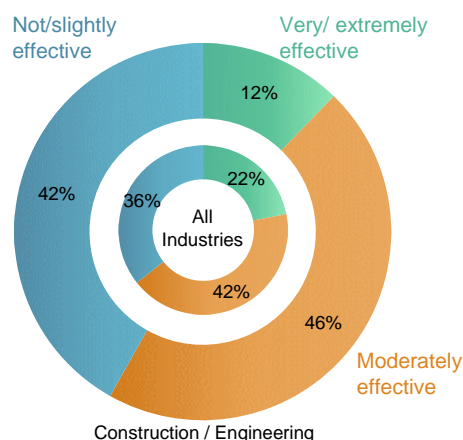
While Construction/Engineering companies **slightly exceed cross-industry peers in their effectiveness in using digital to improve business process efficiency** (32% vs. 28% for all industries), they trail other industries in achieving all other goals.

**How effective is your organization at each of the following capabilities? (Very/Extremely Effective)**



Construction/Engineering effectiveness in key digital capabilities largely reflects that of other industries. Construction/Engineering is **most effective at understanding the impact of digitization** (49% vs 48% for all industries), but **struggles with hiring and developing people with digital skills** (13% vs. 24%).

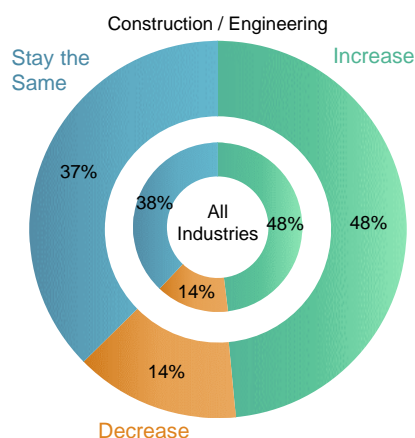
**Overall, how effective has your organization been in using digital technologies to advance its business strategy?**



Construction/Engineering companies **report extremely low overall effectiveness levels in their digital strategies**, with just 12% describing their digital strategy as very effective or better, and 42% describing it as slightly effective or worse.

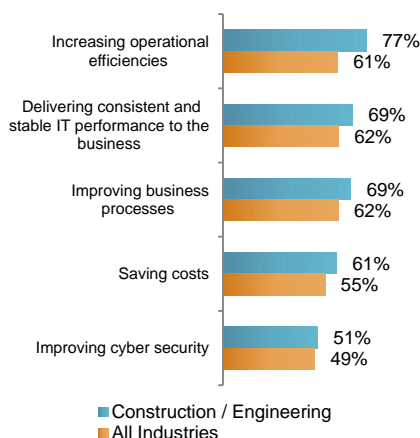
## Budget/Priorities

Looking forward, over the next 12 months, what do you expect your IT budget to do?



Construction/Engineering expectations for their IT budgets mirror those of other industries, with 48% expecting an increase in their IT budgets, identical to the cross-industry average.

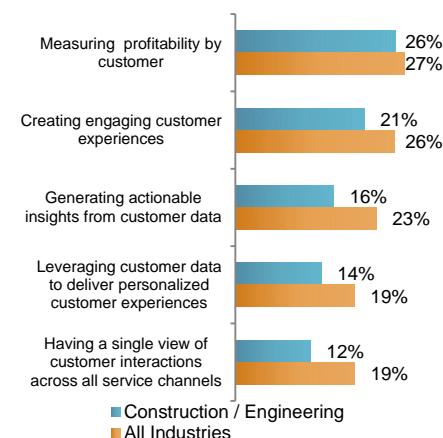
What are the key business issues that your management Board are looking for IT to address? (top 5)



Compared to IT priorities in other industries, Construction/Engineering management Boards more heavily emphasize cost-oriented goals such as increasing operational efficiencies (77% vs. 61% for all industries), delivering consistent IT performance (69% vs. 62%) and improving business processes (69% vs. 62%).

## Customer Capabilities

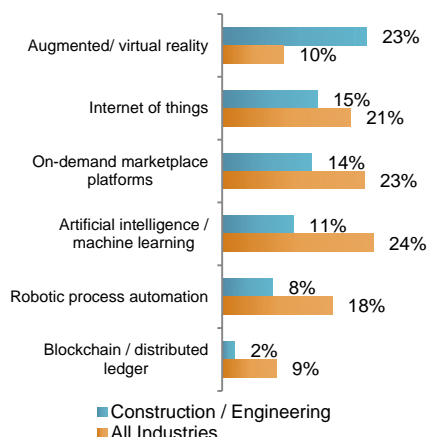
How effective is your organization at each of the following capabilities? (Very/Extremely Effective)



Construction/Engineering performs reasonably well in measuring profitability by customer (26% vs. 27% for all industries), but struggles with its effectiveness in other critical customer-focused capabilities, with no more than 21% rating themselves at least very effective at any, well below cross-industry benchmarks.

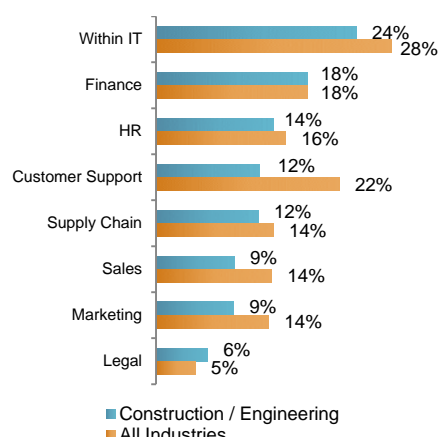
## Technology & Innovation

How would you characterize your investment in the following technologies? (Moderate/Significant Investment)



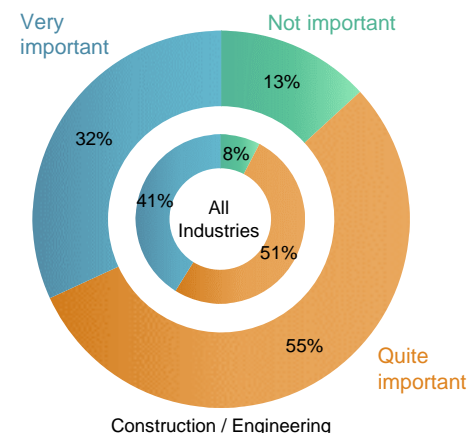
Of next-generation technologies, Construction/Engineering companies have invested in augmented/virtual reality much more than others (23% vs. 10% for all industries), with modest investments in all other technologies.

In which functions have you implemented digital labor / automation?



While digital labor remains in its relative infancy both in Construction/Engineering and elsewhere, Construction/Engineering has most focused its digital labor/automation efforts within IT (24% vs. 28% for all industries) and Finance (18% vs. 18%).

How important is it to have an innovative, experimental culture in your organization to ensure its digital strategy is a success?



Construction/Engineering companies view having an innovative, experimental culture as a less critical component of the success of their digital strategies than others, with 32% viewing it as very important versus 41% overall.

## Conclusion

Reinventing core business broadly through digitization and innovation, remains a key focus for Construction/Engineering firms as they seek to avoid disruption, and turn a lagging industry into a leading one.

It's clear the Construction/Engineering sector is making investments in some areas of technology, in particular, augmented/virtual reality. This is obviously due to the "bricks and mortar" nature of the business; however, despite these results, we're still seeing that many don't have a clear digital business vision and strategy. These elements are the cornerstone of innovation – and in order to be leading, Construction/Engineering firms will need to pick up the pace.

Overall, while we see positive progress since KPMG's 2017 Global Construction Survey (which focused on disruption, innovation and technology), Construction/Engineering firms need to continue exploring and leveraging technologies like advanced data analytics and readily available predictive solutions as a launching pad for further innovation. KPMG's 2019 Global Construction Survey (expected to be released in early 2019) will further explore these critical issues, and how Construction/Engineering firms can take a leadership role in the future of the industry and avoid disruption.

## Further information

**Geno Armstrong**  
Global Sector Leader,  
Engineering and Construction  
KPMG International  
T: +1 415 963 7301  
E: garmstrong@kpmg.com

[www.kpmg.com/ciosurvey](http://www.kpmg.com/ciosurvey)