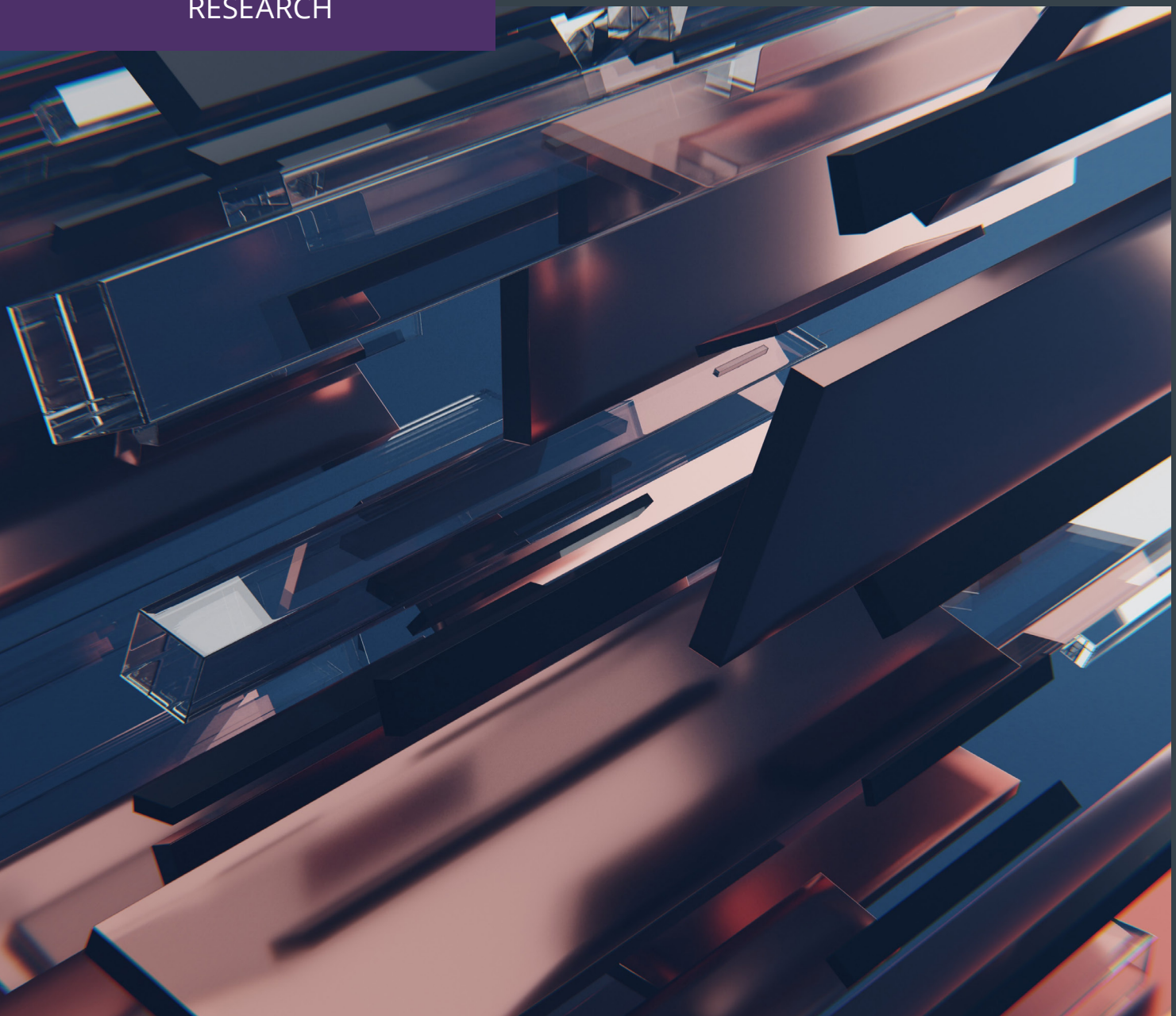
Digitalisation in construction report 2022

RESEARCH



Digitalisation in construction report 2022

May 2022

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Published by the Royal Institution of Chartered Surveyors (RICS)

Parliament Square

London

SW1P 3AD

www.rics.org

Based on RICS Global Construction Monitor survey, Q4 2021.

ISBN 978 1 78321 470 9

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1 Forewords

Data and technology fuel our personal and professional lives, mainly leading to positive outcomes. Never have we been so saturated by data and reliant on technology as both become more and more ubiquitous. The rapid pace of technological change and the scale of its impact always has the potential to disorient and overwhelm us. However, as professionals working in the built and natural environments, we have a special duty to ensure that increasing digitalisation positively contributes to everything we do, ultimately enriching and enabling the communities that we serve. But how can we best achieve this aim?

The construction sector is seeing a significant acceleration in technology adoption and can leapfrog to more efficient production processes, business models and value chains. Using the mantra of 'measure to manage and improve', this report makes a timely intervention in this important and ever-evolving conversation. It shows the status and impact of digitalisation in construction, giving encouraging signs of progress to date but highlighting how far we still have to go before we can realise the full benefits of digital transformation. In addition, it reveals the barriers we must overcome to drive positive change and sheds light on how digitalisation can support collaboration, a vital element in unlocking societal and commercial value in the complex, multi-disciplinary work of quantity surveying and construction project management professionals.

Furthermore, by charting changing sentiment among professionals as part of RICS' Global Construction Monitor, future survey iterations will generate valuable insight into the scale and pace of adoption, pointing the way towards a digitally-enabled future in which the work and lives of everyone who uses the built environment are enhanced.

Read in combination with other RICS insight – most notably the recent annual Sustainability Report published around COP 26 – the findings of this report also highlight the pressing need to leverage digitalisation to address other significant challenges of our generation. I refer in particular to climate change, where we can only hope to avert the worst risks and deliver a resilient societal model if we use all the tools at our disposal.

For professionals working in construction, which multiple studies identify as the single area of human activity that accounts for more carbon impact than any other, the stakes could not be higher. We have a unique responsibility to ensure that data- and technology-driven practice plays a positive role in our future and that of the communities we serve.

I therefore welcome this report as providing a first set of bearings to help us navigate the future successfully. I hope you find it as illuminating as I have, and I look forward to working with you to apply its insights to delivering for the public advantage.

Clement Lau FRICS
RICS President

Over the past year, we have seen an ever-increasing push and pull begin to dominate the narrative around the built environment sector. The increasing demands for project certainty, cost efficiency and – most importantly – decarbonisation represent a continued shove from owner-operators, contractors and clients that is becoming increasingly hard to resist. At the same time, the inexorable draw of digital continues at pace, with many projects seeming to evidence that digital ways of working are beginning to be fully embedded, thus representing an opportunity to truly transform the delivery of major programmes.

Digital disruption is here to stay in construction; it is no longer simple enough to view this as the province of the BIM practitioner, or exclusively view digital as something that can be model based. Data and technology offer a new opportunity to connect. Recent reports such as the Infrastructure and Projects Authority's Transforming Infrastructure Performance Roadmap and the Centre for Digital Britain's Value of Information Management in Construction emphasise the growing body of evidence that digital can disrupt across all aspects of the project delivery life cycle – from design, to construction, all the way through to social value.

Digital represents an opportunity to truly connect our industry globally, but this requires a fundamental transformation in the way we work, moving away from the historical paper-based processes of old to a new way of working that is truly digital in nature, exploiting data to improve speed and certainty of outcome in decision-making. These new disruptive methods will require different approaches to value, where scale is leveraged across multitudes of programmes to exploit data, and impact procurement methods and commercial contracts as much as they do ways of working.

A focus on skills is a fundamental enabler, from transforming and upskilling the professionals of today to bringing in the digital natives of tomorrow. Leaders in the sector must look to the future and consider how the workforce of tomorrow can drive the changes the construction and infrastructure sector needs. The time to act is now and – for the bold – the opportunities presented are almost limitless.

While many firms are seeing the increased costs associated with digital adoption as a blocker, it is no longer an excuse to wait for clients to create demand. Disruptive new firms are entering the marketplace, and businesses will need to ensure their future services blend together the expertise and skillsets of the last century with the capabilities of the next to deliver certainty of outcome, and – most importantly – increased value for clients.

The following report shows an admirable mixture of these two forces, with unsurprising lagging indicators of adoption, particularly in the UK, married with a forceful and important call to arms from the RICS. It is critical that as an industry we rise to the challenge.

Jon Sealy, BSc FRICS
CEO Faithful+Gould Engineering Services

2 Executive summary

While the pace of digitalisation across the built and natural environments continues to gather momentum, there remains a significant opportunity for the construction sector to invest more widely in adopting model-centric and data-driven work processes and practices. The benefits of digitalisation (the adoption of digital technologies, defined for the purposes of this report as BIM and digital twins) are well understood by many market participants. Still, many barriers to adoption remain across a sector that is fragmented, under continual cost and time pressures, and frequently criticised for spending less on research and development than comparable industries. In addition, to support traditional construction processes such as cost estimation, prediction, planning and control; progress monitoring; and health, safety and well-being, the sector is now having to address other practices with some urgency. These include incorporating environmental, social and governance (ESG) principles; designing and measuring social value; implementing whole-life and whole-asset thinking; and carbon footprint calculation, benchmarking and reporting across projects.

To understand the sector's current thinking around digitalisation, four additional questions were added to the RICS Global Construction Monitor (GCM) survey, which is produced every quarter. This report analyses the global responses received during the Q4 GCM 2021 survey, which closed on 20 January 2022. The results represent a snapshot of current sentiment and behaviours (see Figure 1) from a sample of the sector. RICS' professional sentiment monitoring has been found to accurately foreshadow market movement, and the GCM is a resource to be considered alongside other sources when assessing market trends or conducting market analysis. Monitoring market sentiment around digitalisation in construction supports a level of confidence in both assessing current levels of adoption and predicting the direction of travel for the sector. By repeating these new survey questions on an annual basis, RICS will be able to demonstrate the continued pace of adoption and the nature of the continuing barriers and challenges being faced by the sector.

The results point to a globally consistent level of digitalisation. They show a current focus on the well-established needs of the sector, but also indicate growing use of digitalisation in construction around the emerging themes of ESG, social value and whole-life concepts. There is also a consistent understanding of the barriers to further adoption. While other data and technology approaches have already been applied across the sector, it is the power of building information modelling (BIM) with its higher dimensions of time (4D), cost (5D), facility management (6D), sustainability (7D) and health and safety (8D), coupled with digital twins, that has the potential to provide the most additional value over the coming years.

Much has already been achieved and implemented by many market participants. However, to address the profound impact of construction on our world, the sector must move even faster to reap the benefits of BIM and digital twins. In this digital transformation journey, RICS professionals – particularly those working in quantity surveying and construction, project management, building surveying and infrastructure pathways – can play a significant role.

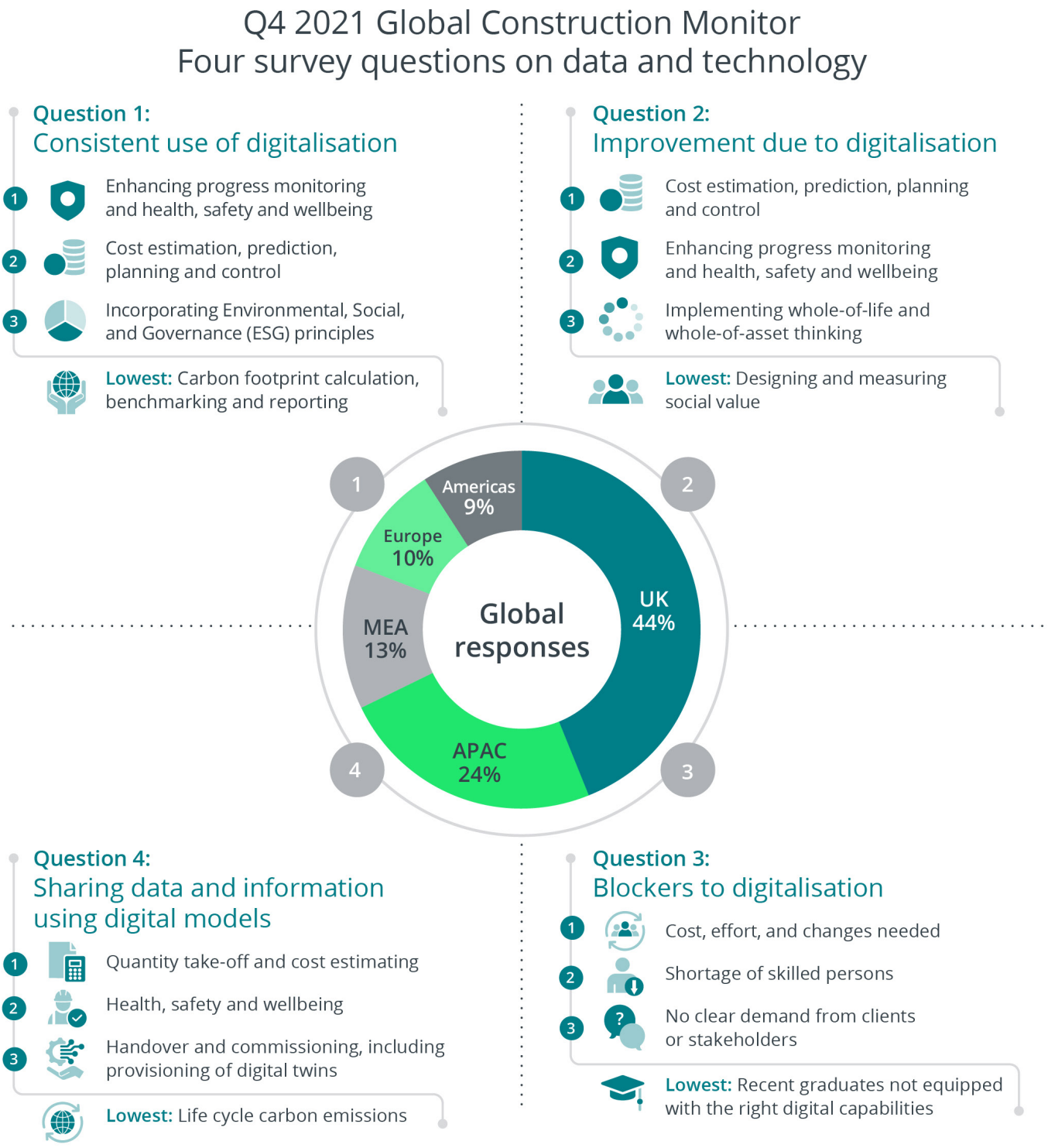

Figure 1: Summary of responses to and findings of the digitalisation questions

3 Introduction

The RICS GCM is the leading indicator of market conditions in the construction sector. In Q4 of 2021, in addition to the regular set of questions, the survey sought the opinions of thousands of professionals about the pace and impacts of digitalisation across the sector. Contributors were asked to share their thoughts on four aspects of digitalisation in construction:

1. **The degree of adoption:** Contributors were asked to state in how many of their projects (on a scale ranging from all projects to no projects) their organisation consistently uses processes and practices driven by digitalisation (defined as BIM or digital twins) across the following six functions:
    - cost estimation, prediction, planning and control
    - enhancing progress monitoring and health, safety, and well-being
    - implementing whole-life and whole-asset thinking
    - carbon footprint calculation, benchmarking, and reporting
    - incorporating ESG principles, and
    - designing and measuring social value.
2. **The resulting improvements driven by digitalisation:** Contributors were asked to state their level of agreement with the statement 'processes and practices driven by digitalisation (defined as BIM or digital twins) help or are likely to help my organisation improve…' from 'strongly agree' to 'strongly disagree' for the same six functions.
3. **Blockers to adoption:** Contributors were asked to rate the following blockers by the extent to which they think the blockers hinder the digitalisation of design and construction processes and practices (from high to low):
    - cost, effort, and changes needed
    - ability to influence the building information model or digital twin parameters
    - no clear demand from clients or stakeholders
    - lack of data standards
    - disciplinary silos
    - inconsistent approaches adopted by supply chain partners
    - difficulty in realising benefits
    - shortage of skilled persons, and
    - recent graduates not equipped with the right digital capabilities.

4. **The current state of data and information sharing using digital technologies:** Contributors were asked to select whether they provide and/or receive data and information with other team members about materials, products, and systems via digital models across the following five areas:
    - quantity take-off and cost estimating
    - health, safety, and well-being
    - handover and commissioning, including provisioning of digital twins
    - production and fabrication, and
    - life cycle carbon emissions.

Survey questionnaires were sent out on 9 December 2021, with responses received until 20 January 2022. The regional distribution of respondents is shown in Figure 2 (MEA denotes Middle East and Africa; APAC denotes Asia-Pacific).

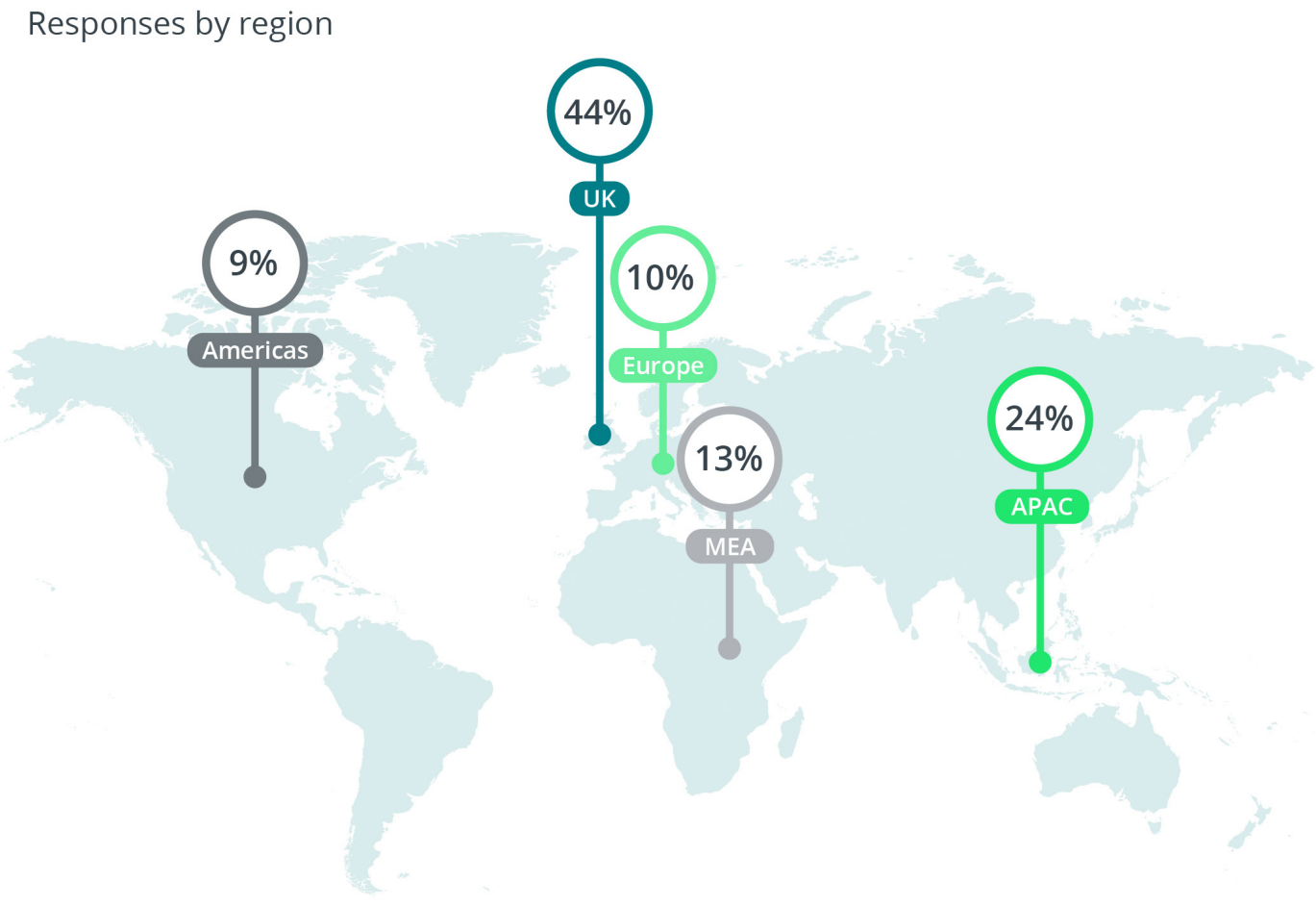

Figure 2: Regional responses

4 Consistent use of processes and practices driven by digitalisation

Digital technologies are used extensively in design and construction workflows. However, their level of use varies according to the functions performed by various project teams. The first question added to the Q4 GCM survey was designed to gauge this variation and understand how consistent the use of processes and practices driven by digitalisation is. Contributors were asked to state in how many of their projects (on a scale ranging from 'all projects' to 'none of their projects') their organisation consistently uses processes and practices driven by digitalisation (defined as BIM or digital twins) across six functions (see Figure 3).

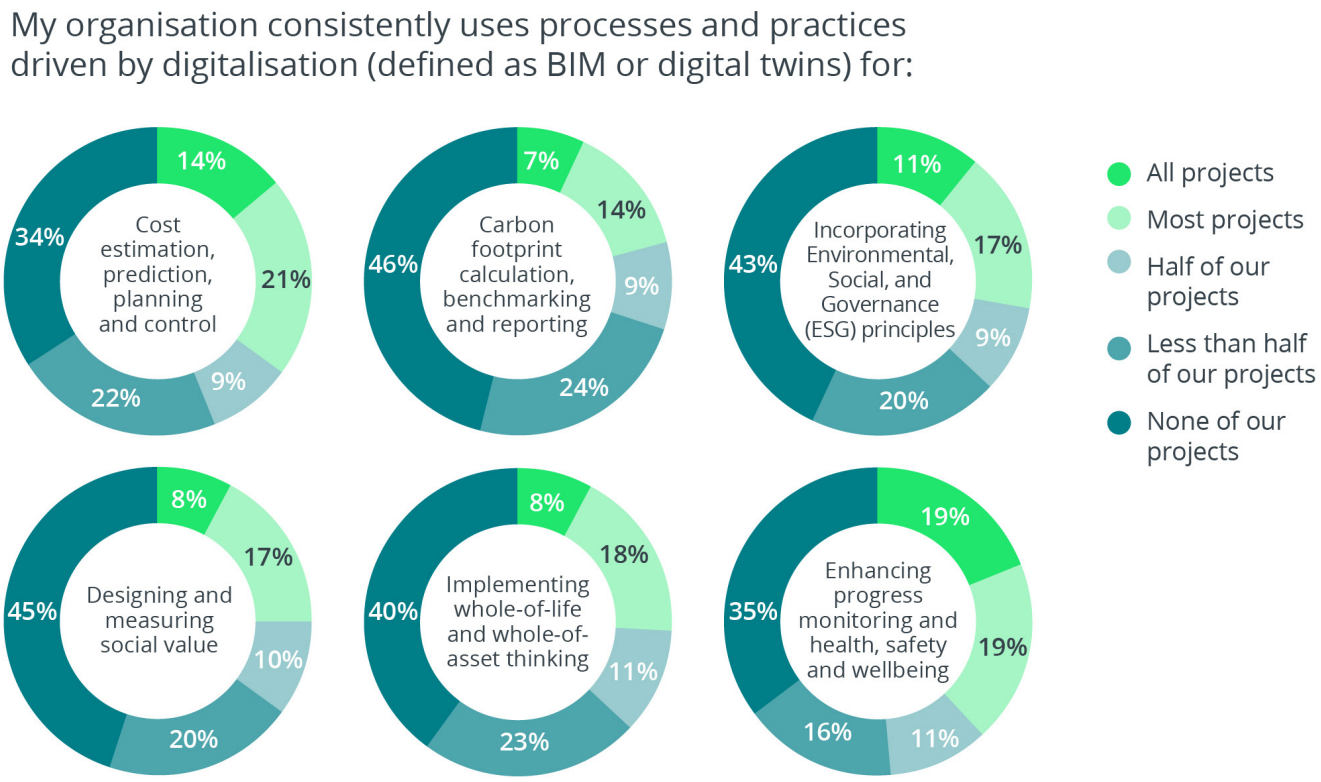

Figure 3: Consistent use of processes and practices driven by digitalisation

An average of 40% of all respondents reported that they are not using digital technologies on any of their projects across the six listed functional areas. At the other end of the spectrum, only 11% of respondents reported that they use them on all their projects and 18% on most of their projects. As expected, there is variation in usage across the six functional areas. The top three areas where digital technologies see the most reported usage are:

1. enhancing progress monitoring and health, safety, and well-being
2. cost estimation, prediction, planning and control
3. incorporating environmental, social and governance (ESG) principles.

Contributors reported the most consistent use of digital technologies for 'enhancing progress monitoring and health, safety, and well-being'; well over one-third (39%) reported using digital technologies for this function across most or all their projects. However, even for the functions with the most consistent use of digital technologies across all projects, a high proportion of respondents still reported using digital technologies on less than half or none of their projects. For example, despite having the second most overall reported usage of digital technologies, 'cost estimation, prediction, planning and control' is also the function where just over a third of respondents report no use of BIM or digital twins for this purpose on any of their projects.

Contributors reported the lowest levels of use of digital technologies to manage environmental factors. Almost half (46%) of respondents reported using digital technologies for 'carbon footprint calculation, benchmarking, and reporting' on none of their projects, and only 7% of contributors reported using digital technologies for this function on all their projects. Similarly, under one-third (28%) of respondents reported that they used digital technologies to incorporate ESG principles on most or all their projects, while well over one-third (43%) of respondents reported no use of digital technologies to incorporate these principles on any of their projects. 'Designing and measuring social value' was another area in which contributors reported low levels of usage, with 45% reporting no use of digital technologies for this on any of their projects.

Viewing this from the perspective of positive adoption, more than one-third of respondents reported that they used digital technologies for all or most of their projects when looking across 'cost estimation, prediction, planning and control' and 'enhancing progress monitoring and health, safety, and well-being'.

Applying the relative importance index (RII[1]) to this data shows a clear ranking of adoption as follows:

1. enhancing progress monitoring and health, safety, and well-being (RII of 0.54)
2. cost estimation, prediction, planning and control (0.52)
3. incorporating environmental, social and governance (ESG) principles (0.47)
4. implementing whole-life and whole-asset thinking (0.46)
5. designing and measuring social value (0.44)
6. carbon footprint calculation, benchmarking, and reporting (0.42).

[1] Holt, G.D. (2014), 'Asking questions, analysing answers: relative importance revisited', Construction Innovation, Vol. 14 Issue 1

It could be argued that this ranking reflects the market drivers, regulatory landscape and barriers that have led participants to focus on different process and practice areas to a greater or lesser extent. When looking at different global regions, only respondents in Europe deviate from this ranking. Contributors from Europe reported the highest level of adoption of digital technologies for 'cost estimation prediction, planning, and control' (RII of 0.54), while 'enhancing progress monitoring and health, safety, and well-being' came second (RII of 0.51). At the other end of the spectrum, responses from Europe also ranked 'carbon footprint calculation, benchmarking, and reporting' (0.42) slightly higher than 'designing and measuring social value' (0.41). Another way of analysing the data is to compare the highest level of use (all projects or most projects) with the lowest level of use (no projects) and the gap in adoption levels, as shown in Figure 4 and Table 1.

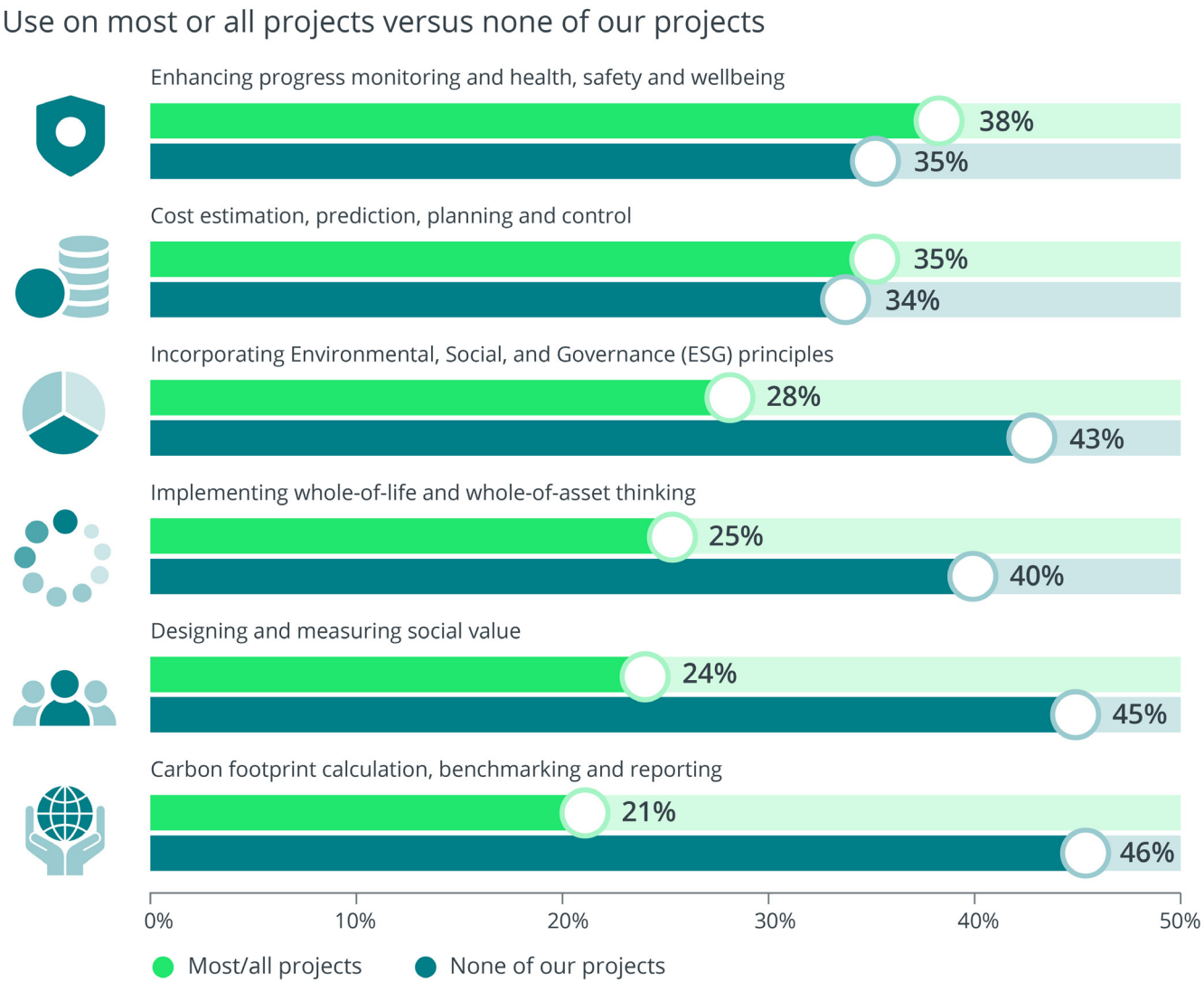

Figure 4: Use on most or all projects versus no projects

Uses	Gap between high usage and no usage (%)
Cost estimation, prediction, planning and control	1
Enhancing progress monitoring and health, safety and well-being	3
Implementing whole-life and whole-asset thinking	-15
Incorporating environmental, social and governance (ESG) principles	-15
Designing and measuring social value	-21
Carbon footprint calculation, benchmarking and reporting	-25

Table 1: Gap in usage levels

While overall adoption remains low across all process and practice areas, the low usage level of 'carbon footprint calculation, benchmarking, and reporting' is particularly concerning. The sector needs to urgently address its negative impact on carbon emissions, which requires a whole-life perspective. Therefore, there are still considerable challenges – but also concurrent opportunities – in the use of digitalisation to manage this issue.

5 Improvements driven by digitalisation

Respondents were next asked to state their level of agreement with the statement 'processes and practices driven by digitalisation (defined as BIM of digital twins) help or are likely to help my organisation improve...' from 'strongly agree' to 'strongly disagree' across the same six functions. The global responses (see Figure 5 and Figure 6) across all six functions show a very low level (between 7% and 10%) of disagreement (strongly disagree and disagree). The results generally align well with the rankings of these six functions in terms of levels of use or adoption, indicating that perceived improvements or benefits correlate strongly with usage levels.

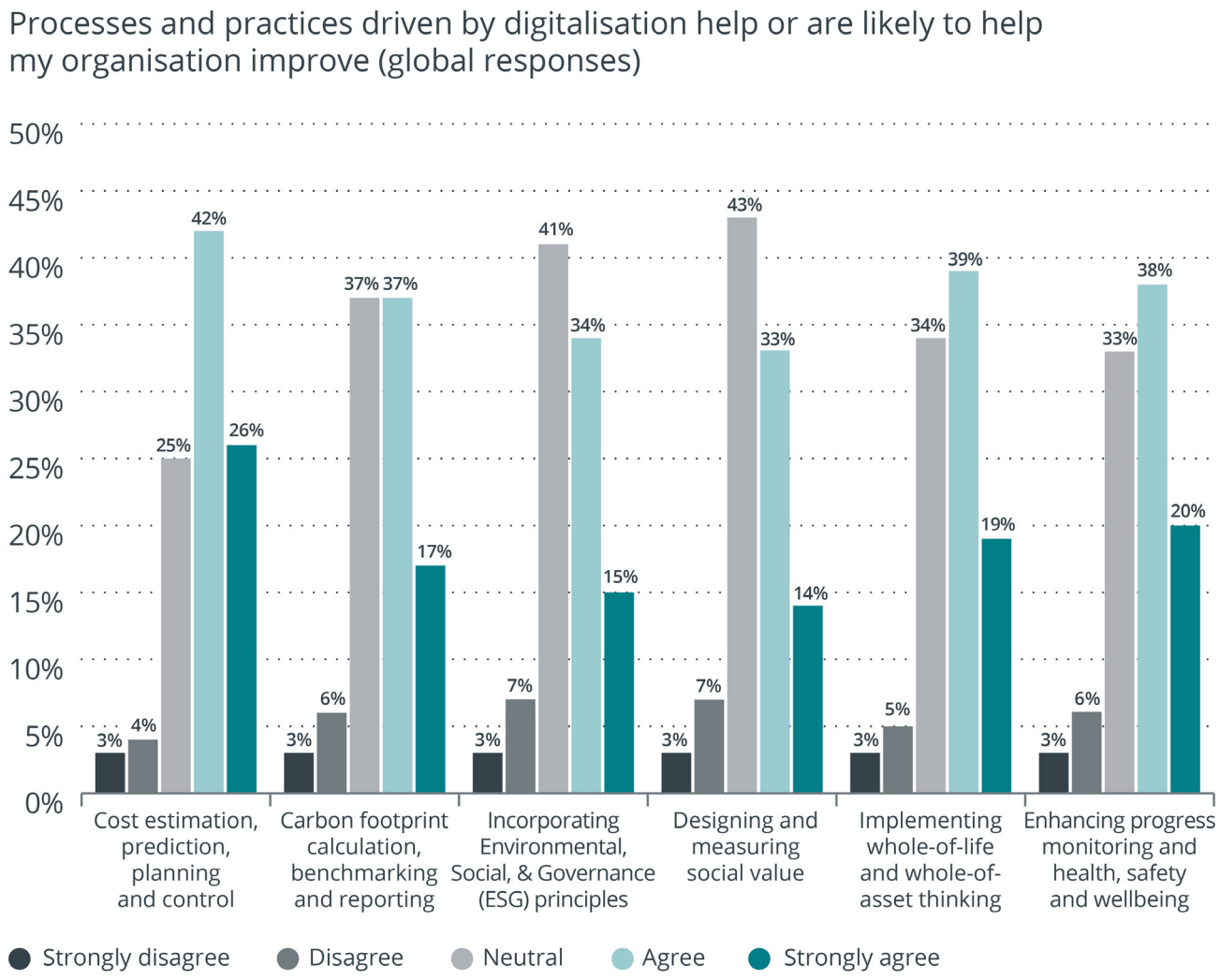

Figure 5: Responses to perceived improvements driven by digital processes and practices

Across regions, a broadly consistent picture is seen when considering the improvements from digitalisation. Of the six regions, MEA reported the most favourable view of the realisation of improvements.

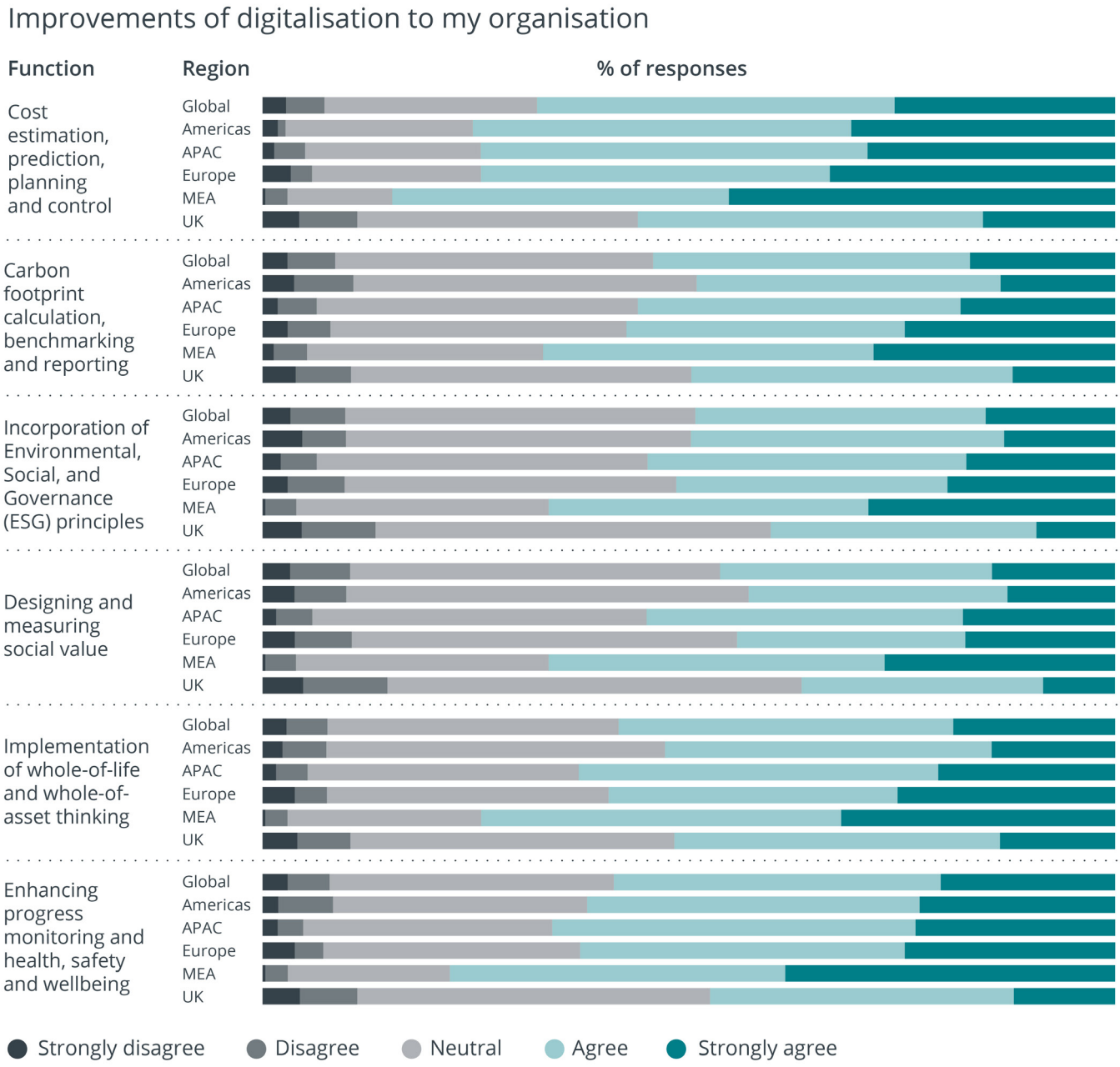

Figure 6: Perceptions of improvements by function and region

Considering the 'strongly agree' and 'agree' responses for improvements by function, a ranking similar to the level of usage emerges. This is shown in Figure 7. In terms of improvements, 'carbon footprint calculation, benchmarking, and reporting' was ranked higher by respondents than its ranking in terms of level of usage.

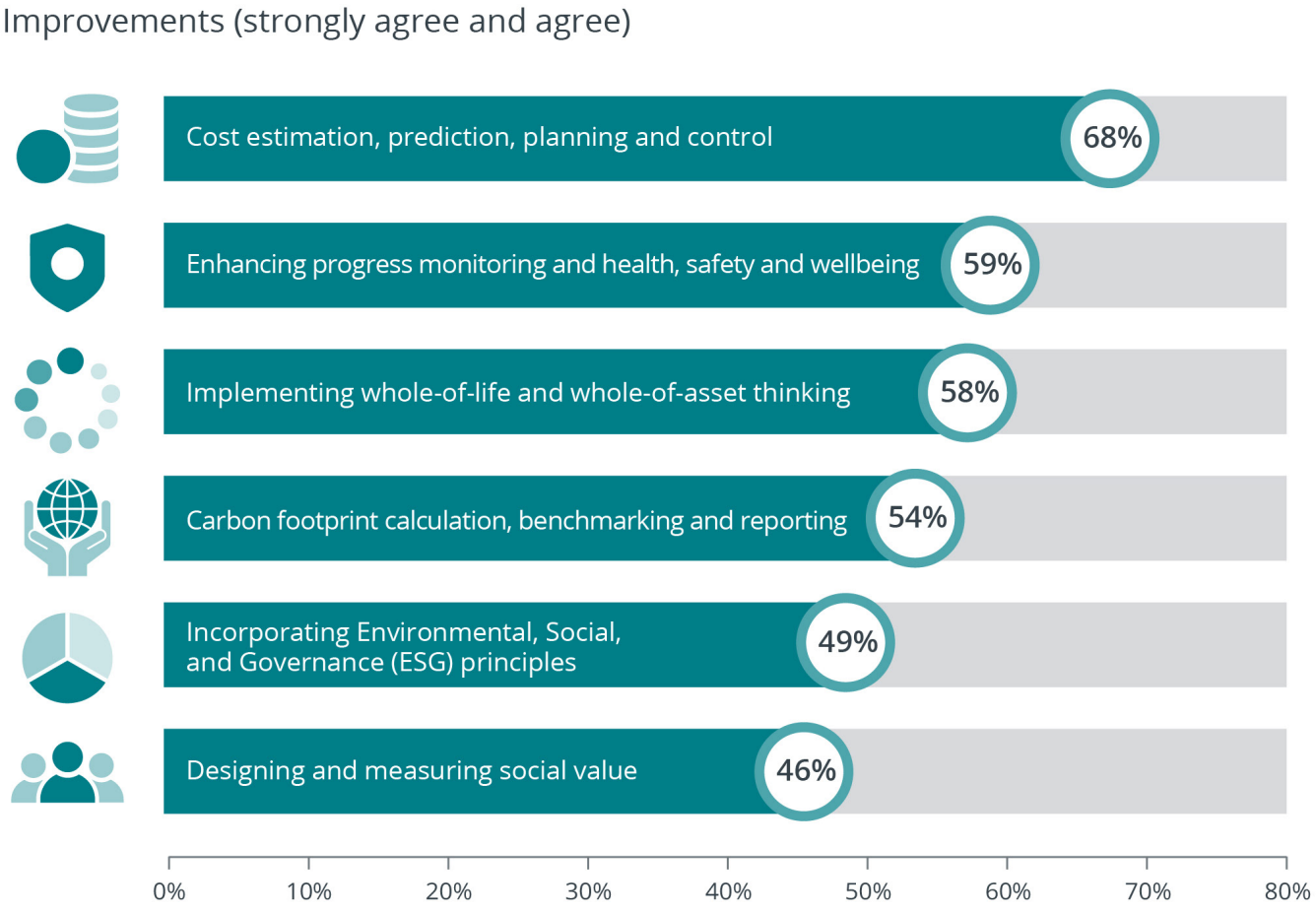

Figure 7: Ranking of improvements

	Positive bias towards agreement (strongly agree minus strongly disagree)
Cost estimation, prediction, planning and control	23%
Implementing whole-life and whole-asset thinking	17%
Enhancing progress monitoring and health, safety and well-being	16%
Carbon footprint calculation, benchmarking and reporting	14%
Incorporating environmental, social and governance (ESG) principles	12%
Designing and measuring social value	11%

Table 2: Difference between strong agreement and strong disagreement in responses related to improvements

Table 2 shows the positive bias toward agreement on the improvements associated with digitalisation. Respondents view digital tools to benefit the six work processes with a positive bias ranging from 11% to 23%, with 'cost estimation, prediction, planning, and control' showing the most promise.

6 Improvement versus adoption

Looking at the gap between adoption and favourable views of the improvements of digitalisation (see Figure 8), there appears to be a considerable 'pull factor' that should drive more adoption across all process and practice areas, with even the more established areas of 'cost estimation, prediction, planning, and control' and 'enhancing progress monitoring and health, safety, and well-being' showing a significant gap between adoption and perceived value. There is also a considerable gap, and thus pull, for 'carbon footprint calculations, benchmarking, and reporting', providing a degree of optimism that this area will see further adoption soon.

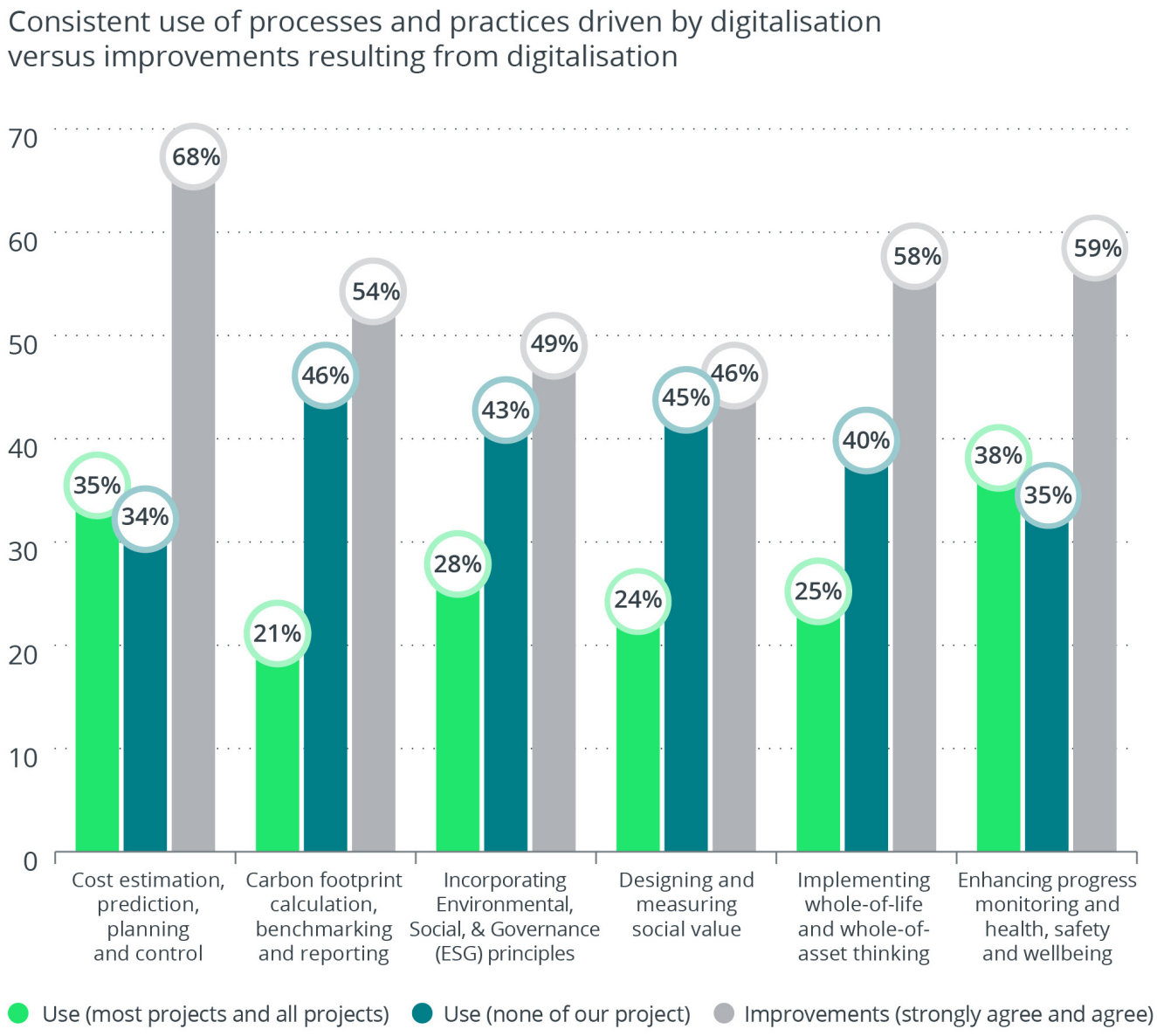

Figure 8: Level of use versus improvements

7 Blockers to digitalisation

The gaps highlighted in the previous chart lead naturally to an examination of the barriers to adoption cited in the survey responses. The third additional question in the Q4 2021 GCM survey asked respondents to rank nine blockers using a scale of high, medium, and low. Figure 9 provides a ranked listing of these blockers with 'cost, effort, and changes needed' as the highest ranked blocker and 'recent graduates not equipped with the right digital capabilities' as the lowest ranked. Unsurprisingly, the 'cost and effort to make changes', 'shortage of skilled persons' (rather than recent graduates) and a fundamental lack of 'clear demand from clients or stakeholders' are cited as the most significant barriers. As is true of many change initiatives, there is an issue with the realisation of improvements, which is compounded by the fragmented nature of the construction sector and limited use of data standards.

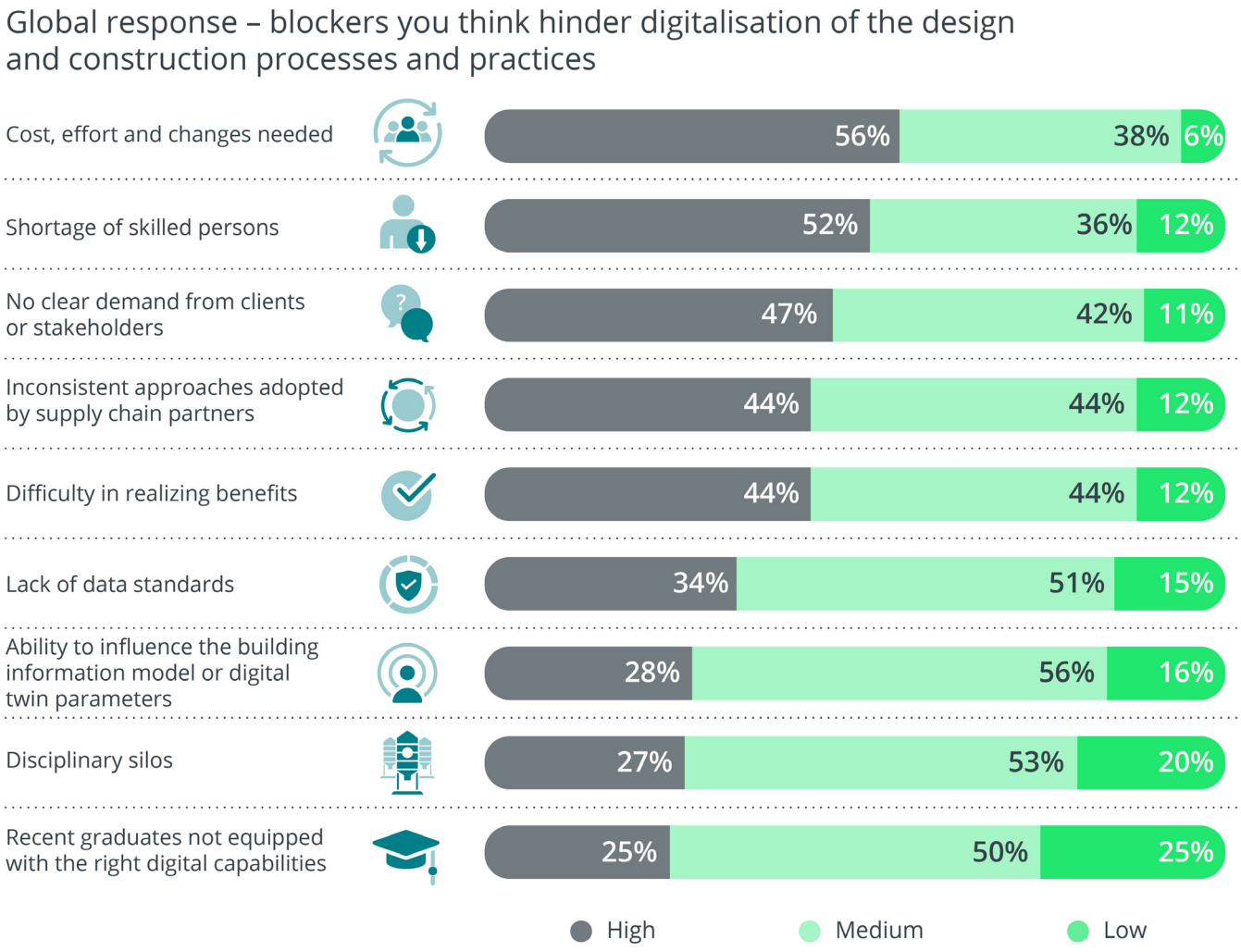

Figure 9: Blockers by function

Figure 10 shows the top three blockers with regional responses. Over 56% of respondents ranked 'cost and effort to make changes' as high on their list of blockers. Half (50.1%) of respondents ranked 'shortage of skilled persons' as high and 46% did the same for 'no clear demand from clients or stakeholders'. Regional variations are insignificant in this assessment of the blockers.

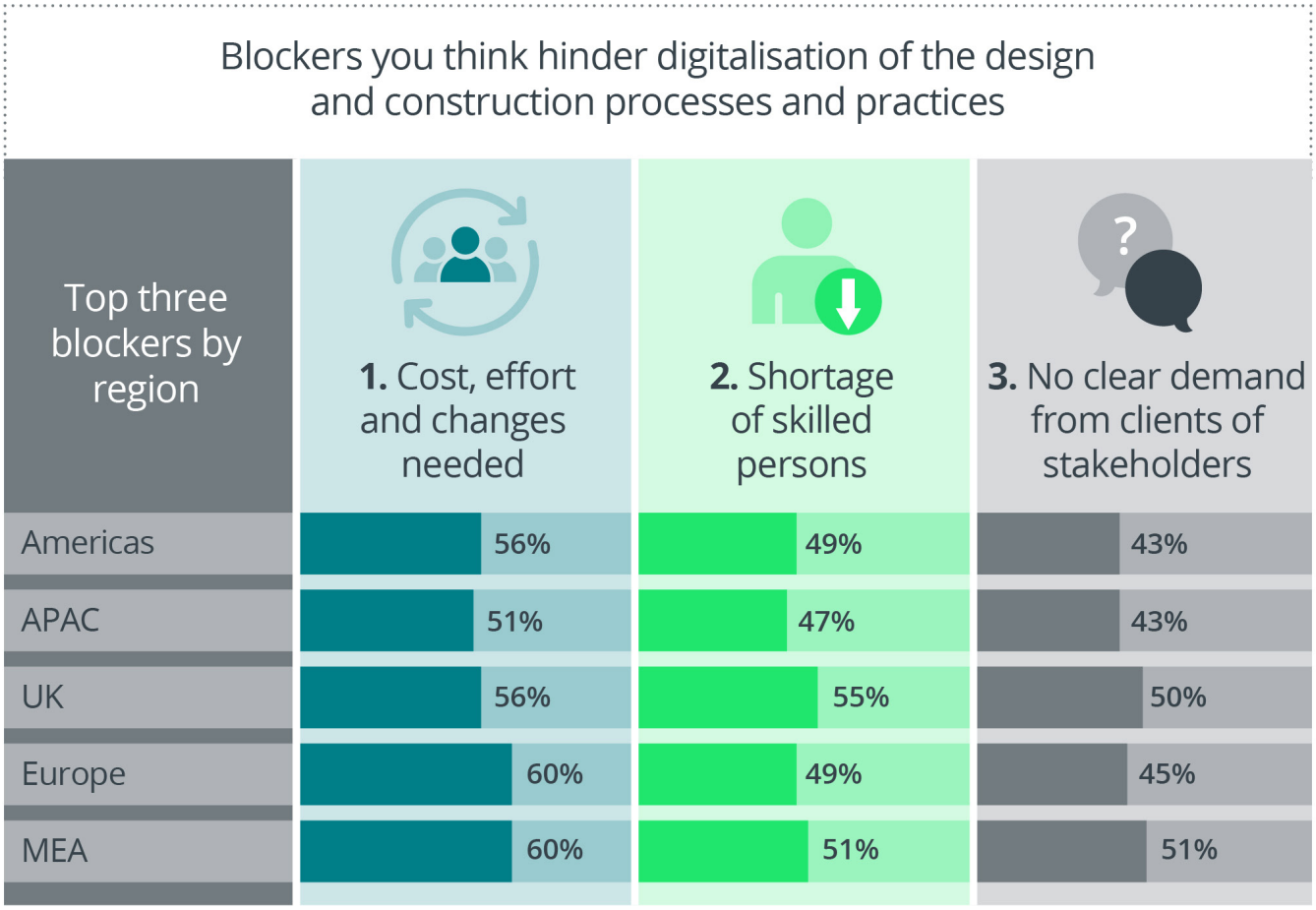

Figure 10: Top three blockers

8 Data and information sharing

A higher level of adoption of digitalisation by project team members should result in enhanced information exchange between those members. While this exchange is dependent on several factors, including interoperability, contractual arrangements, and information management processes, an uptick can be attributed to greater use of digital technology. To assess this issue, respondents were asked to provide their views on the degree of sharing of data and information with other project team members (provide and receive, provide only, receive only and none) about materials, products, and systems via digital models in their current projects.

Figure 11 shows regional responses ordered by global RII value, indicating the highest level of data and information sharing for 'quantity take-off and cost estimating' and the lowest level for 'life cycle carbon emissions' related workflows. Figure 12 has a summary of these responses arranged by function.

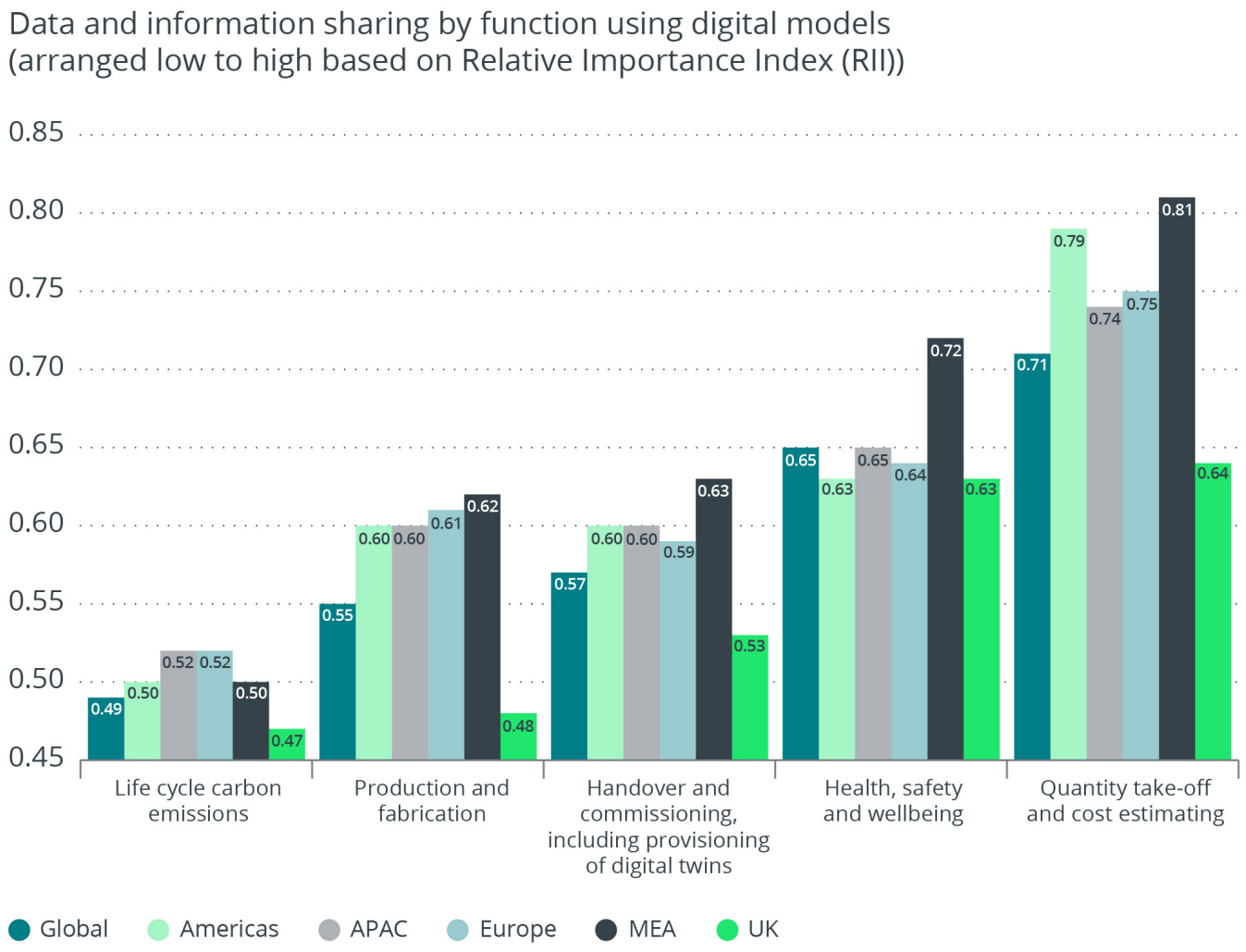

Figure 11: Regional ranking of data sharing by function

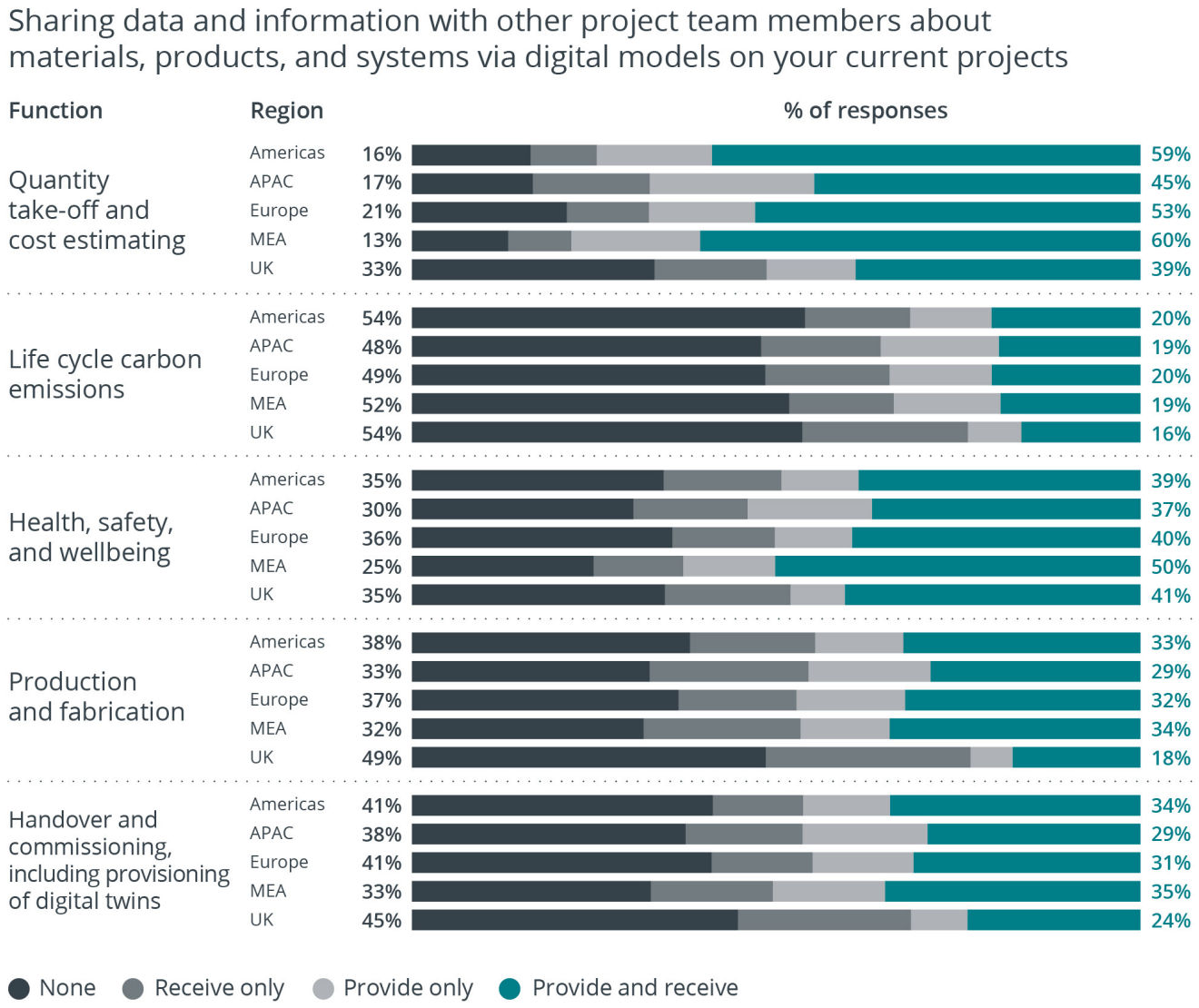

Figure 12: Data and information sharing by function and region

In the core function of 'quantity take-off and cost estimating,' approximately 50% of respondents report that they provide and receive data and information via digital models. The UK shows the lowest level of information exchange (see Figure 13).

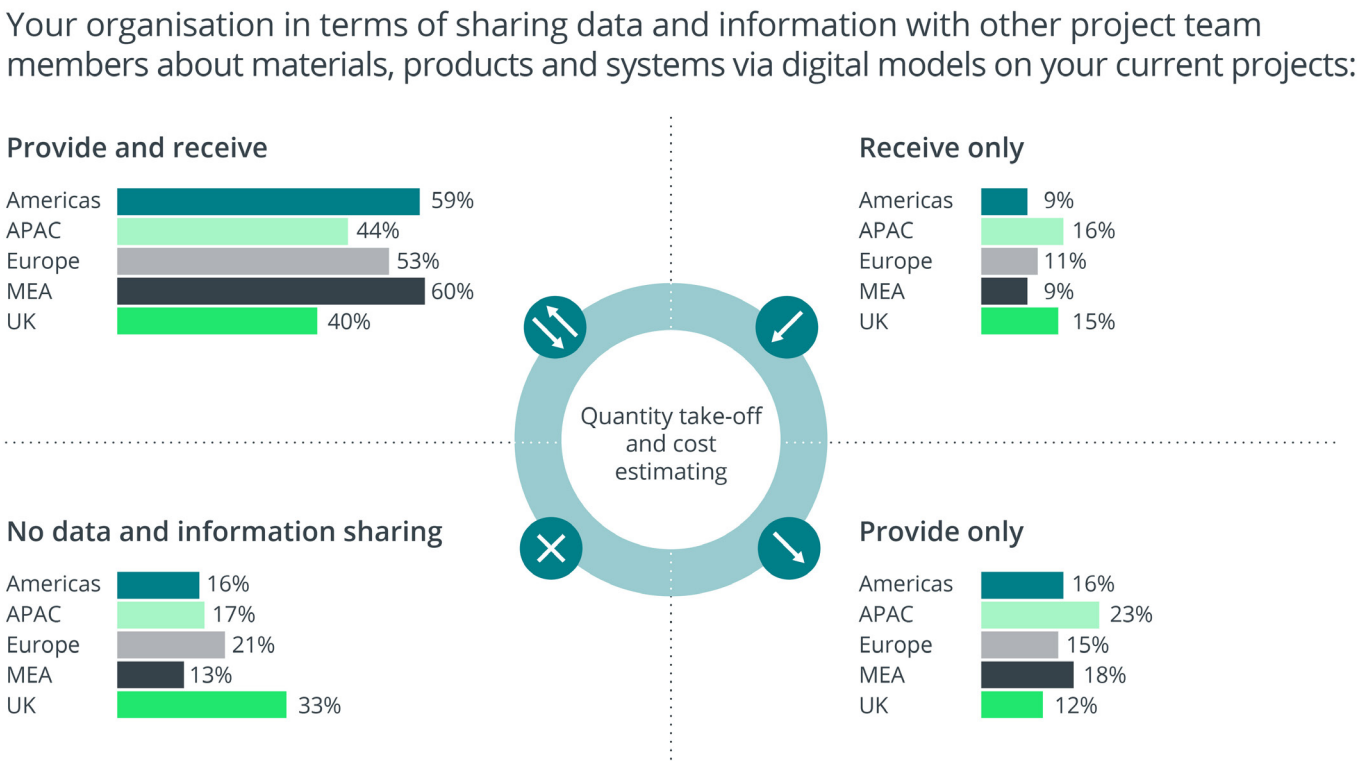

Figure 13: Data sharing for quantity take-off and cost estimating

In line with the overall low level of adoption around carbon calculations, only approximately 20% of respondents share data and information in both directions for this function, and approximately 50% do not share in any way. Figure 14 shows the sharing of data and information for measuring and reporting 'life cycle carbon emissions.'

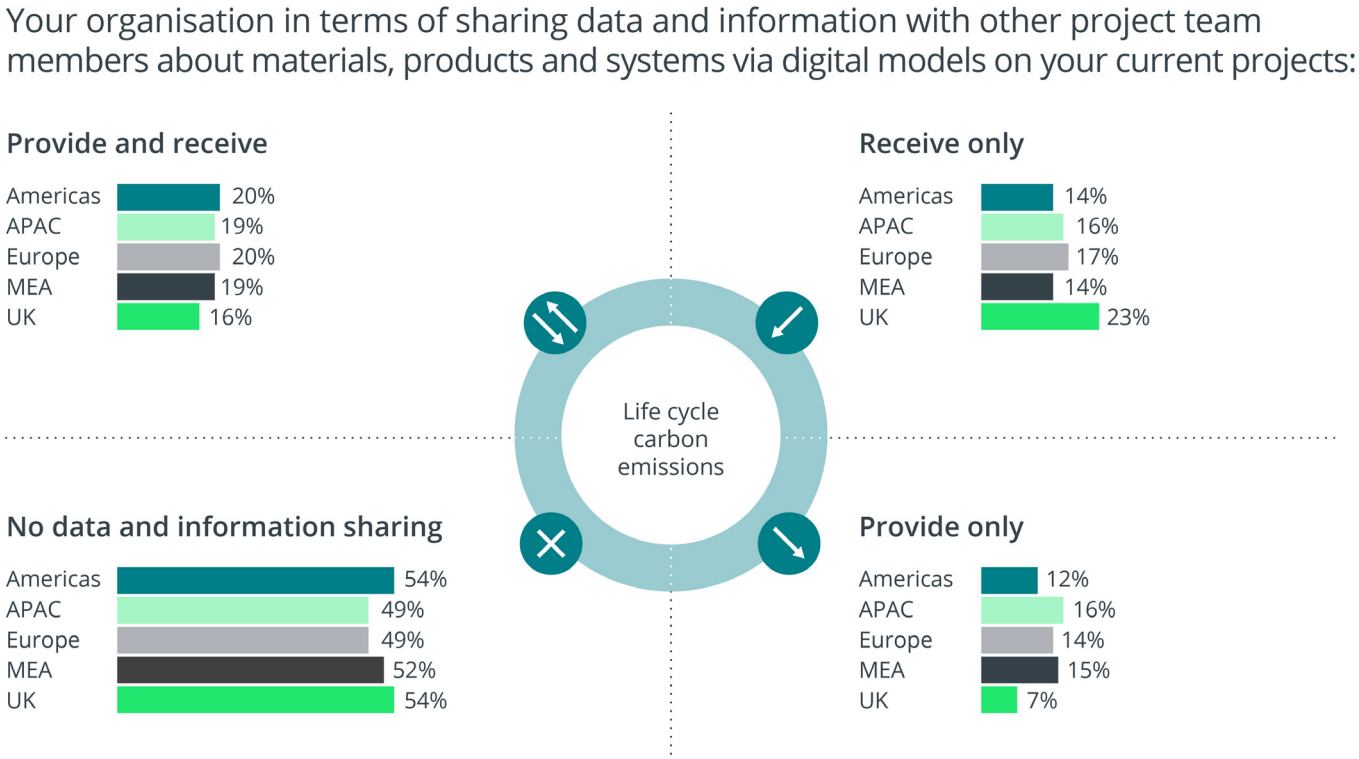

Figure 14: Data sharing for life cycle carbon emissions

The picture for 'health, safety and well-being' is broadly similar to 'quantity take-off and cost estimating'. However, the UK is no longer an outlier, with a similar level of data sharing to other regions (see Figure 15).

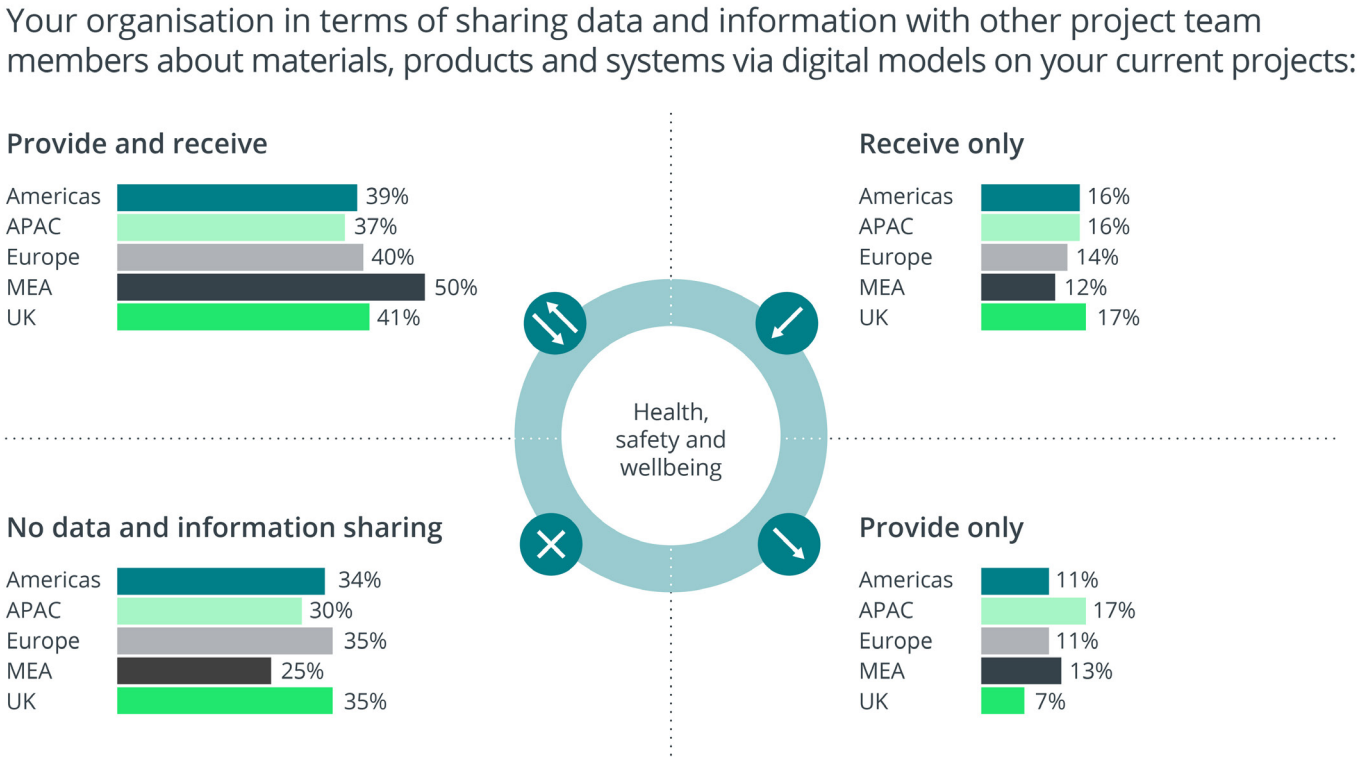

Figure 15: Data sharing for health, safety and well-being

For production and fabrication, approximately 30% of respondents provide and receive data and information, with the UK once again showing a disappointing result with 49% not sharing data at all (see Figure 16).

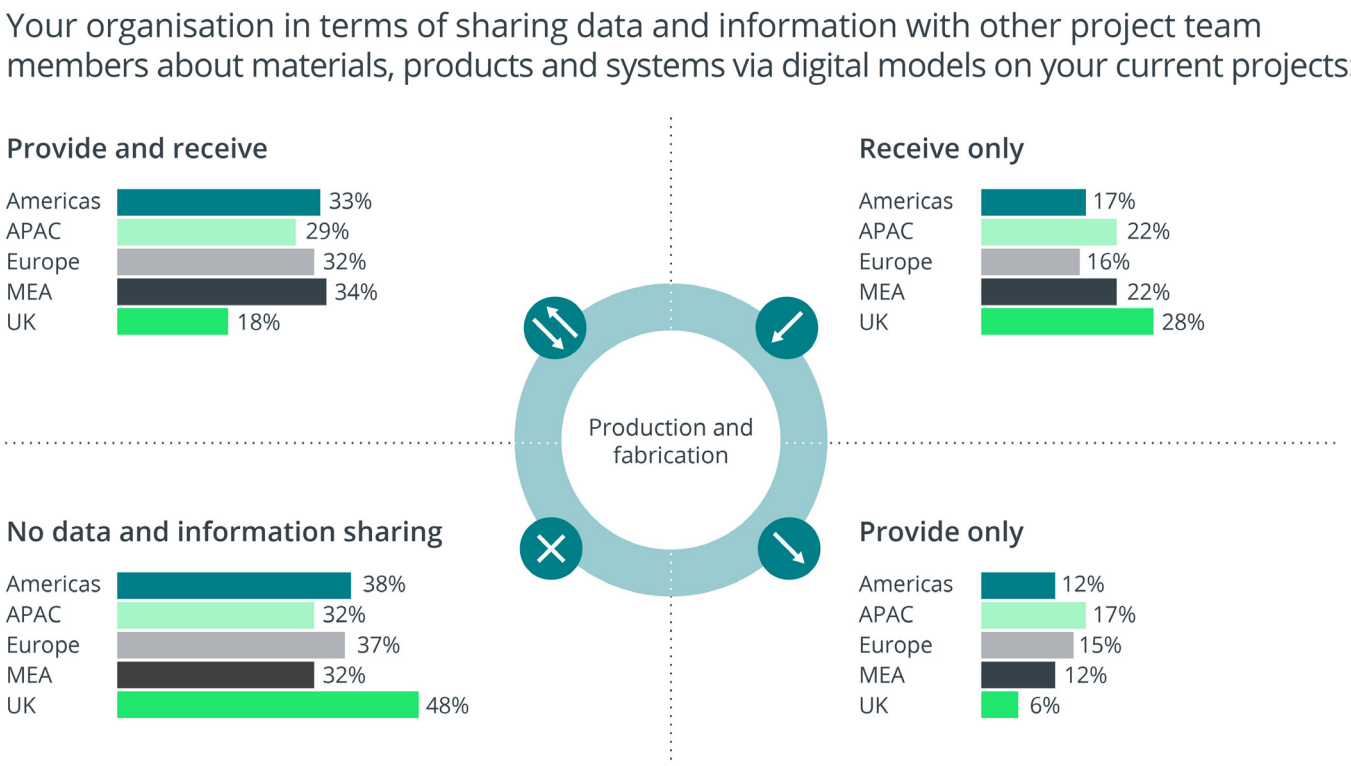

Figure 16: Data sharing for production and fabrication

The final question on data and information sharing – on 'handover and commissioning, including provisioning of digital twins' – is especially important because it is connected to whole-life and whole-asset thinking. It also supports successful soft landings, where a new or refurbished asset is handed over to the operation phase of the asset life cycle. For BIM to deliver on the promise of 6D (facilities management) and 7D (sustainability) over the asset's entire life cycle, data transfer into a digital twin is an important precondition for success.

Figure 17 shows the state of data and information sharing for handover and commissioning, including the provisioning of digital twins. The UK appears once again to be a negative outlier, albeit with the highest score for receiving data. This might reflect respondents who are responsible for the operation phase receiving data on handover, with the UK government's 'Soft Landings' policy driving adoption in this regard.

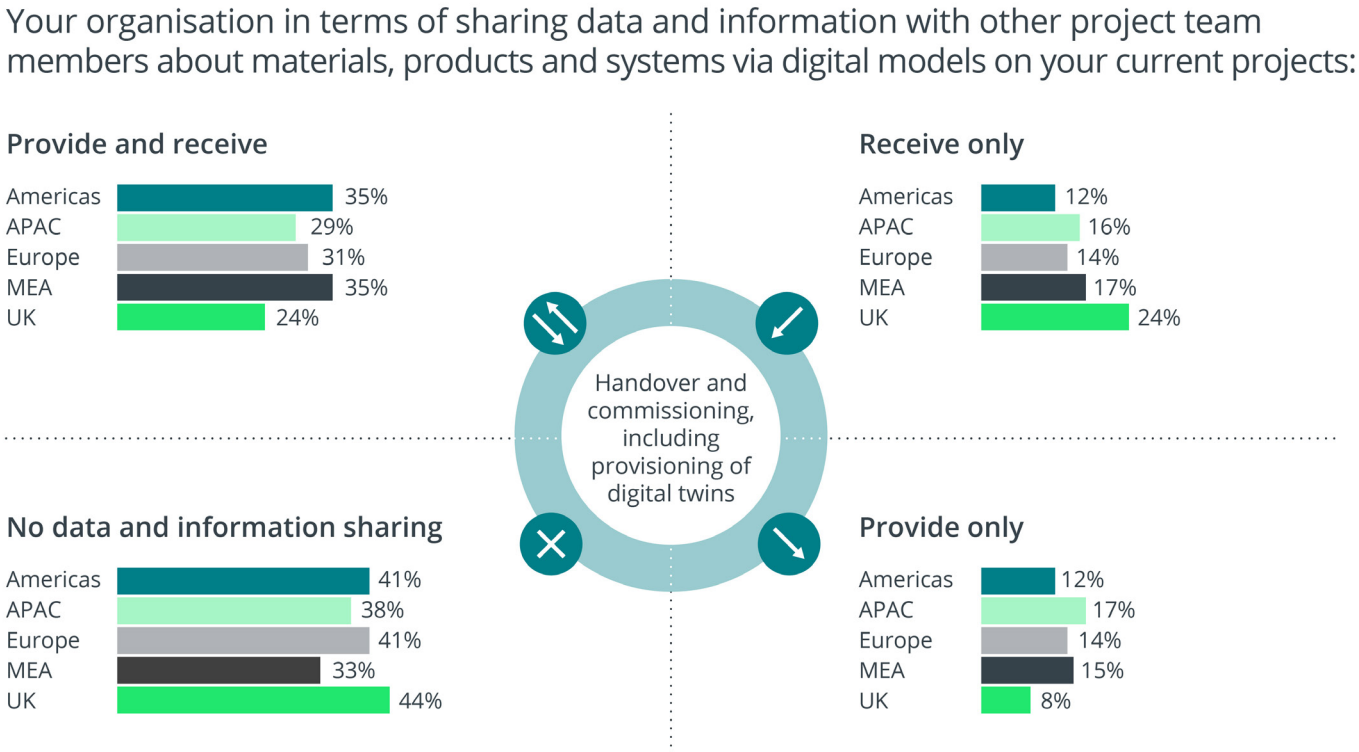

Figure 17: Data sharing for handover and commissioning

9 Summary and conclusions

Digitalisation is the fuel that powers project success and delivers built assets that ultimately provide improved social, environmental and economic outcomes. Recent global developments have accelerated the adoption of processes and practices driven by digitalisation. The construction sector is shifting towards using model-centric and data-driven workflows, and BIM and digital twins are becoming central to the crucial functions that construction project teams perform. Therefore, it is important to measure and monitor the progress being made by the sector in the use of digital technology. This report captures progress by benchmarking the current usage levels and other linked measures of adoption in 2021. In the future, similar annual surveys are planned to update the findings and document the progress being made by the sector globally.

The responses to the Q4 2021 GCM survey questions on digitalisation show the highest use of digital technology for traditional functions of 'cost estimation, prediction, planning, and control' and 'enhancing progress monitoring and health, safety, and well-being'. Emerging service areas relating to ESG, whole-life and whole-asset approaches, social value and carbon measurement have relatively low usage levels.

Contributor perceptions of the improvements of using digital technology show a similar trend. Respondents stated that using digital technology for 'cost estimation, prediction, planning, and control' and 'enhancing progress monitoring and health, safety, and well-being' provides the most improvements. Interestingly, the findings show that 'carbon footprint calculation, benchmarking, and reporting' ranked number four in the improvements ranking, as opposed to sixth when ranking actual current use of digital technology for this function.

As expected (see, for example, the findings in the recent RICS WBEF industry paper Digital twins from design to handover of constructed assets), the responses show the following three highest-ranked obstacles to the use of digital technology in the sector:

1. cost, effort and changes needed
2. shortage of skilled persons
3. no clear demand from clients or stakeholders.

A summary of the data and information sharing responses also shows that the ranking of functions by usage (Q1), improvements (Q2) and data sharing (Q4) is consistent for the more established functions of 'quantity take-off and cost estimating' and 'health, safety, and well-being'. The UK can be seen as a negative outlier across most process and practice areas, but this could possibly be explained by the greater number of responses from the UK.

It remains to be seen whether the uptake of modern methods of construction and prefabricated construction drives greater data sharing across production and fabrication, and whether the imperative for carbon calculations and whole-life thinking drives a similar uptake for life cycle carbon emissions. This finding is congruent with the 2021 RICS Sustainability Report findings that environmental and sustainability issues are beginning to influence the industry, but that important implementation gaps remain. The sector must explore several interconnected solutions, presented below, to promote the increased use of digital technology for carbon measurement, ESG and whole-life and whole-asset approaches.

9.1 Carbon footprint calculation, benchmarking and reporting

Globally, over half of respondents (54%) agreed that net-zero carbon initiatives could benefit from the use of digitalisation, but 46% reported not using them on their projects. The industry can use international standards such as the International Cost Management Standard (ICMS) to integrate the measurement, recording, analysis, presentation, and comparison of life cycle costs and carbon emissions of built assets. This integration allows the design and cost management workflows to work harmoniously in a data-enriched way. With the help of the RICS Data Standard and the soon-to-be-operational Built Environment Carbon Database, data and digital tools can make this integration stronger.

9.2 Implementing whole-life and whole-asset thinking

Implementation of digitalisation to promote whole-life and whole-asset thinking requires the industry to embrace value-driven procurement and enhanced levels of collaboration. Furthermore, the use of data-driven approaches, suggested by the recently launched International Building Operation Standard (IBOS) in conjunction with ICMS to measure and manage how built assets perform, can drive adoption and benefit realisation. Integrating with BIM and digital twins will enhance the implementation of whole-life and whole-asset thinking.

9.3 Designing and measuring social value

Consistency of metrics and data is essential for designing and measuring the social value of constructed assets. As reported by RICS in Measuring social value in infrastructure projects: insights from the public sector, digitalisation can enhance access to databases that provide historical information on social impacts for recording, comparing and benchmarking social value. Model-based and data-driven workflows can help incorporate social value into decision-making and ensure it is considered an integral part of the construction process. Yet 45% of respondents do not use digital tools for designing and measuring social value.

9.4 Incorporating ESG principles

Measuring and reporting ESG metrics are hampered by a plethora of measurement frameworks. This is perhaps a reason why 43% of respondents do not use digital approaches to incorporating ESG principles into their projects. Digitalisation can help overcome this problem and integrate ESG principles into asset design, construction, and management.

9.5 Overcoming the blockers

While the industry, in collaboration with government and academia, searches for strategies to increase the adoption of digital ways of working, there is also a need to develop solutions for overcoming the blockers to adoption, and RICS members can play a significant role in overcoming these challenges. The three main blockers to adoption can be overcome by bringing various industry stakeholders together. RICS is building an ecosystem for technology providers, under the umbrella of the Tech Partner Programme, where some of these blockers can be addressed. Through these programmes, the industry can document use cases showing clear benefit realisations from the adoption of digital technology across the six functions. Competency and skills issues can also be addressed collectively.

In summary, RICS recommends the following high-level measures to promote digitalisation in construction:

- mandating data-driven processes and systems for projects and built assets to deliver social, environmental, and economic outcomes
- using digitalisation to drive horizontal (across disciplines), vertical (across project and asset phases) and longitudinal (across projects and assets) integration in projects and organisations
- investing in skills and competency frameworks for people with diverse backgrounds and career aspirations
- promoting whole-life, whole-asset and whole-industry thinking, and
- adopting and adapting digital technologies after careful consideration of use cases and cost-benefit analyses.

Delivering confidence

We are RICS. Everything we do is designed to effect positive change in the built and natural environments. Through our respected global standards, leading professional progression and our trusted data and insight, we promote and enforce the highest professional standards in the development and management of land, real estate, construction and infrastructure. Our work with others provides a foundation for confident markets, pioneers better places to live and work and is a force for positive social impact.

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