OCS

Ontario Construction Secretariat

2020 Contractor Survey

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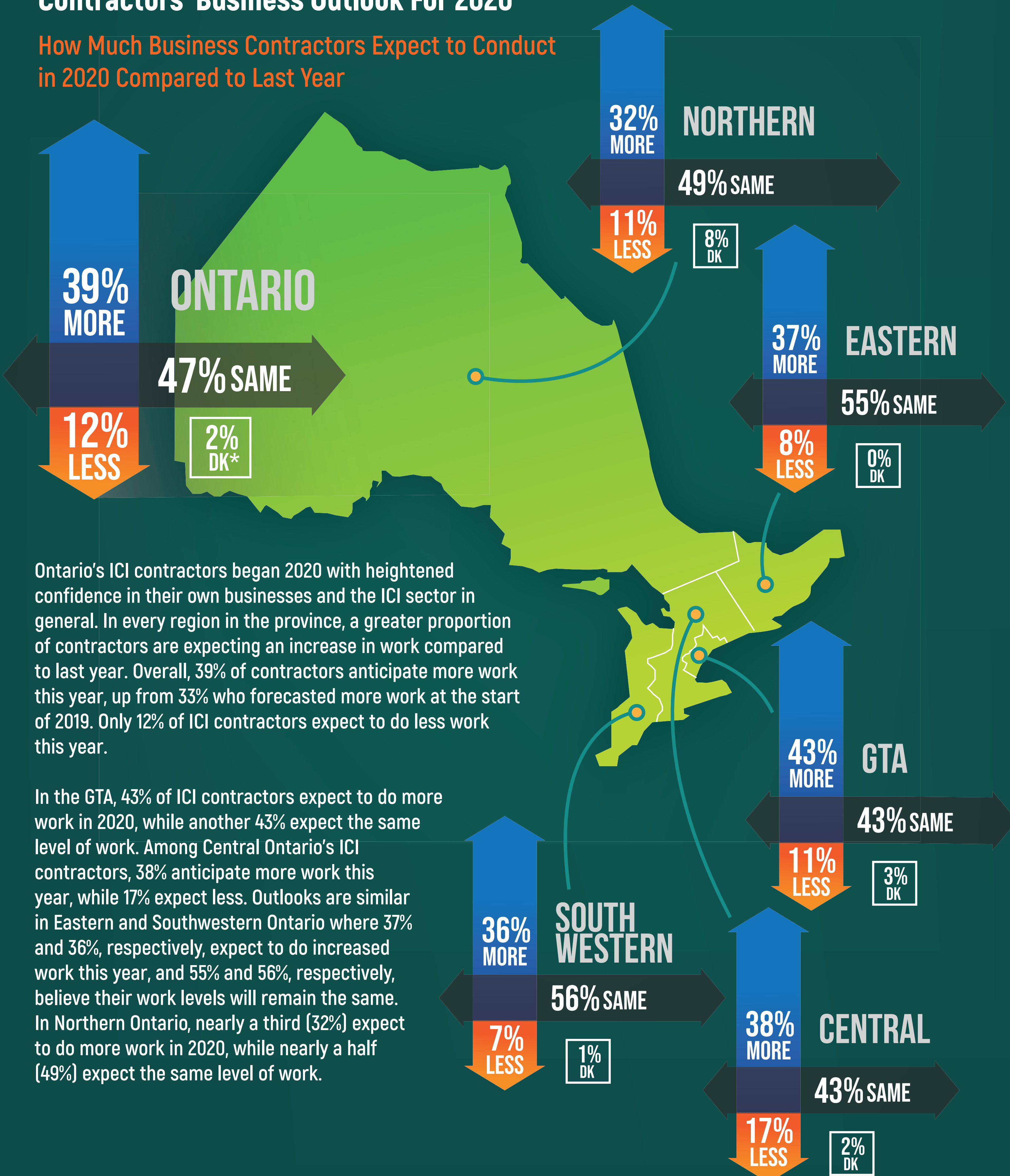
Methodology

The Ontario Construction Secretariat's (OCS) annual Contractor Survey polls Ontario's ICI contractors to gauge their business expectations for the year and capture their views on salient issues in the industry. The survey includes ICI contractors from every region in the province and from all labour relations models, including union, open shop and alternative union.

This year's survey was conducted via telephone with 500 ICI contractors from across Ontario between January 14-February 3, 2020. The margin of error for a sample of 500 is +/-4.38%, 19 times out of 20. Sixty-six percent (66%) of the contractors surveyed were trade contractors and 32% were general contractors. The regional breakdown was as follows: Central Ontario 26%, Eastern Ontario 15%, GTA 37%, Northern Ontario 7%, and Southwestern Ontario 14%.

Contractors' Business Outlook For 2020

How Much Business Contractors Expect to Conduct in 2020 Compared to Last Year



Ontario's ICI contractors began 2020 with heightened confidence in their own businesses and the ICI sector in general. In every region in the province, a greater proportion of contractors are expecting an increase in work compared to last year. Overall, 39% of contractors anticipate more work this year, up from 33% who forecasted more work at the start of 2019. Only 12% of ICI contractors expect to do less work this year.

In the GTA, 43% of ICI contractors expect to do more work in 2020, while another 43% expect the same level of work. Among Central Ontario's ICI contractors, 38% anticipate more work this year, while 17% expect less. Outlooks are similar in Eastern and Southwestern Ontario where 37% and 36%, respectively, expect to do increased work this year, and 55% and 56%, respectively, believe their work levels will remain the same. In Northern Ontario, nearly a third (32%) expect to do more work in 2020, while nearly a half (49%) expect the same level of work.

* DK = Don't Know

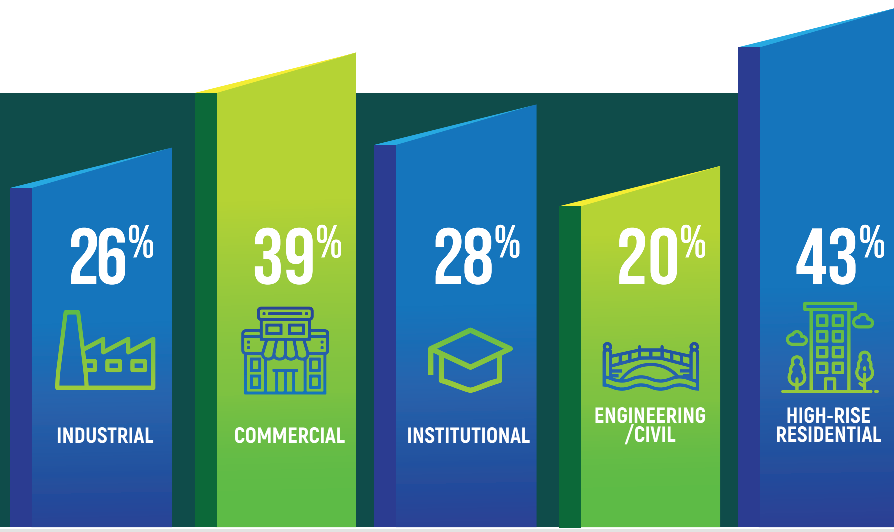
Industry and Sector Outlook for 2020

As most contractors work in multiple sectors, survey participants were asked if they expect more or less business compared to last year in each of the sectors in which they are active.

Commercial contractors (N=403) are expecting the sector to have the biggest increases, with 39% anticipating more commercial work in 2020 and only 18% expecting less. The high-rise residential (N=208) outlook is similar, with 43% of contractors expecting to do more work in the sector this year and 22% expecting less. It is noteworthy that compared to the outlook in the 2019 survey, the proportion of contractors expecting more work in these sectors increased by at least ten percentage points. At the start of 2019, 29% of commercial contractors and 32% of high-rise residential contractors forecasted more work in the respective sectors.

In the institutional sector (N=250), 28% of contractors anticipate more work in 2020, while 26% expect less. Among industrial sector contractors (N=309), 26% foresee more work in the sector this year, with 25% expecting less. The engineering/civil sector (N=182) is the only one where contractors are forecasting a net decrease in work in 2020. Twenty percent (20%) anticipate more work in the sector this year, but 34% expect to do less.

Percentage of Contractors Expecting More Work in Each Sector



Outlook for Construction Activity in Ontario's ICI Sector in 2020

In addition to asking contractors about the outlook for their own businesses, we ask about their expectations for Ontario's ICI sector in general. In 2020, 44% of contractors forecasted that ICI activity will increase in the province. This is a substantial jump compared to the start of 2019 when only 31% of contractors forecasted an increase in activity. Forty percent (40%) of contractors expect ICI activity in 2020 to stay at the same level as 2019, and 13% expect activity to decrease.

44%

OF CONTRACTORS EXPECT INCREASED ACTIVITY IN ONTARIO'S ICI CONSTRUCTION SECTOR IN 2020

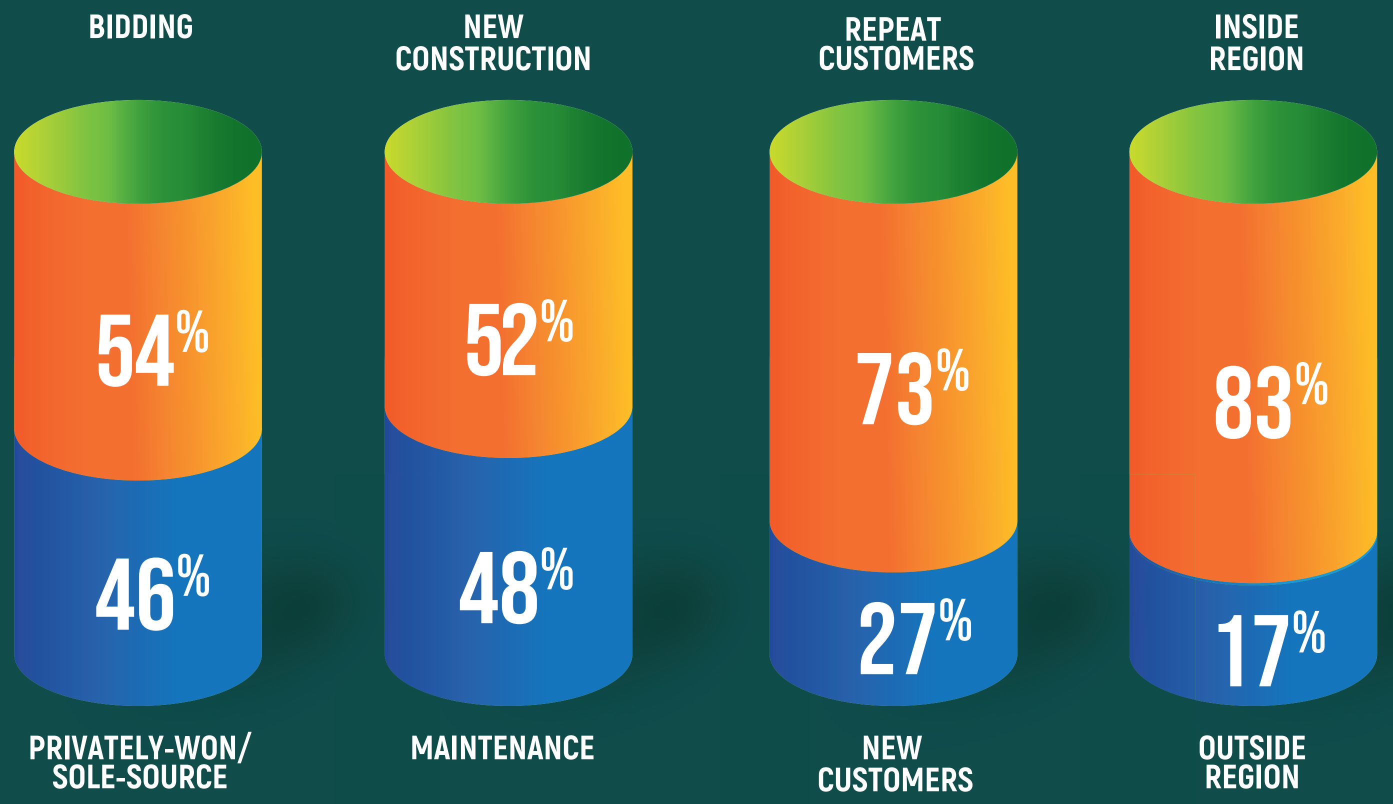
Work Picture for 2020

For the first time in the four years that the OCS' Contractor Survey has tracked the industry's work picture, ICI contractors are expecting the majority of their work to come from **bidding**. This is the most noteworthy change in this year's work picture. Contractors estimate that 54% of their work will come through bidding, with 46% of their work won **privately or sole-source**. This is the inverse of what was observed last year when privately-won or sole-source represented 54% of contractors' work. There have been significant increases in expected work from bidding in three regions: Central (51%, up from 41% last year), Eastern (57%, up from 43%) and GTA (55%, up from 43%). In the remaining regions, the procurement balance for 2020 is essentially the same as last year.

ICI contractors are expecting 52% of their work to come from **new construction** projects in 2020, with 48% coming from maintenance work. Last year, contractors were expecting 49% percent of their work to be new construction. While this is a small shift for the province as a whole, it has been driven by more conspicuous changes at the regional level. In Central Ontario, ICI contractors are expecting 53% of their work to be done on new construction projects, up from 45% last year. In the Southwest, contractors anticipate doing 60% of their work in new construction, up from 52% in 2019. In the remaining three regions, expected levels of new construction and maintenance work were the same as last year.

When it comes to who their work is coming from and where work is done, ICI contractors are expecting the same proportions as observed in previous years. **Repeat customers** are expected to be the source of 73% of contractors' work in 2020, with 27% of the work coming from **new customers**. Contractors anticipate that they will do 83% of their work **inside their region**, with 17% of their work being done **outside of their region**.

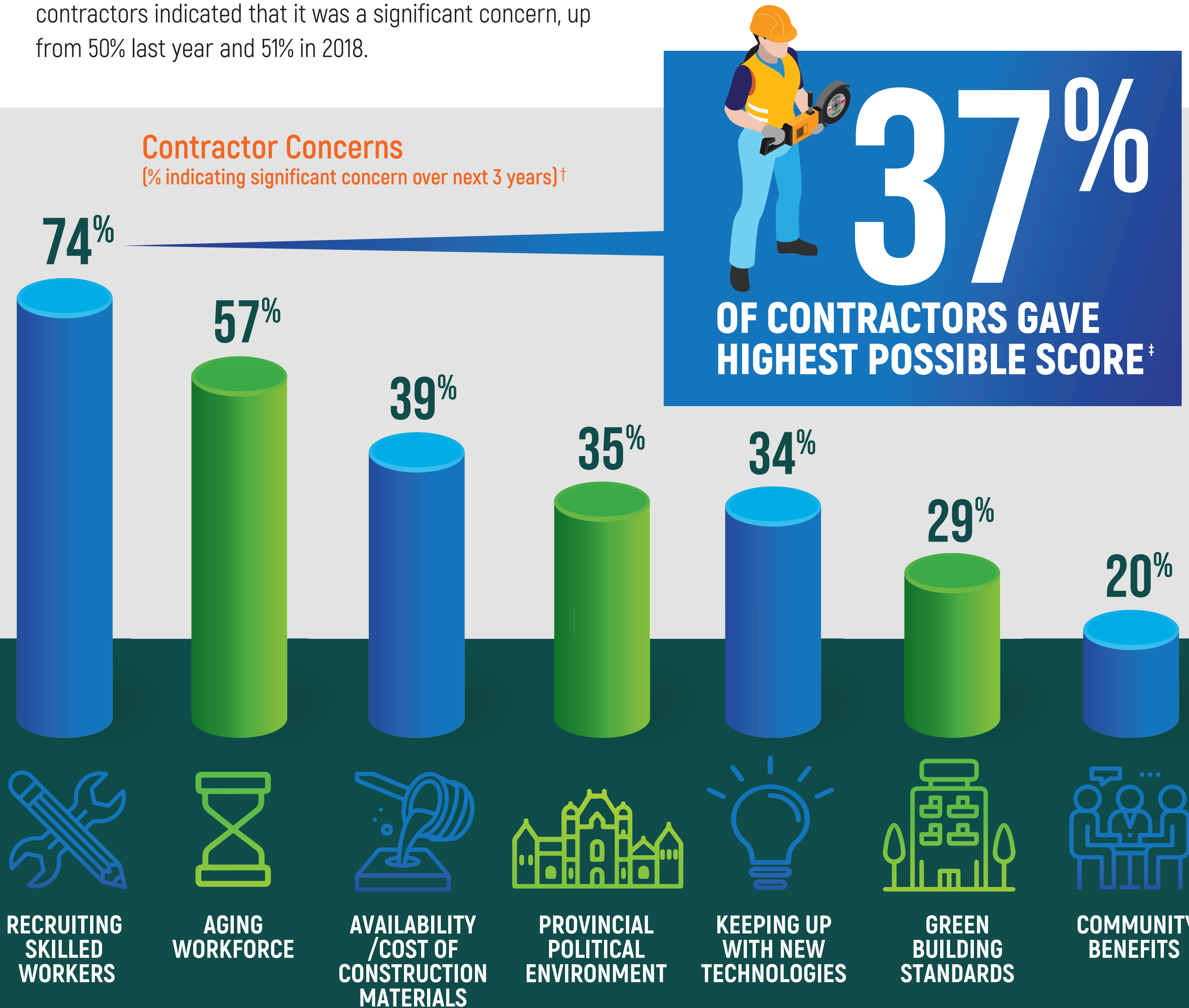
Contractors' Sources of Work in 2020



Construction Industry Challenges

Every year, this survey asks ICI contractors to rate their level of concern over the next three years with a series of potential challenges. Among the seven potential challenges that were put to contractors, recruiting skilled workers continues to be their greatest concern, as it has been in previous years. Nearly three-quarters (74%) of contractors indicated that this was a significant concern for them over the next three years (a significant concern being a score between 5-7 on a 7-point scale). This is slightly higher than previous years (72% in 2019 and 71% in 2018). With a related issue, the aging workforce, 57% of contractors indicated that it was a significant concern, up from 50% last year and 51% in 2018.

Among the other challenges that contractors were asked to rate, availability or cost of construction materials was a significant concern to 39%*, followed by the current provincial political environment (35%, similar to 34% observed last year), keeping up with new technologies (34%, up from 30% last year), meeting green building standards (29%)* and meeting community benefits expectations to win government work (20%, similar to 19% observed last year).



* Not asked in previous surveys † Percent giving a score between 5-7 out of 7 ‡ 7 out of 7

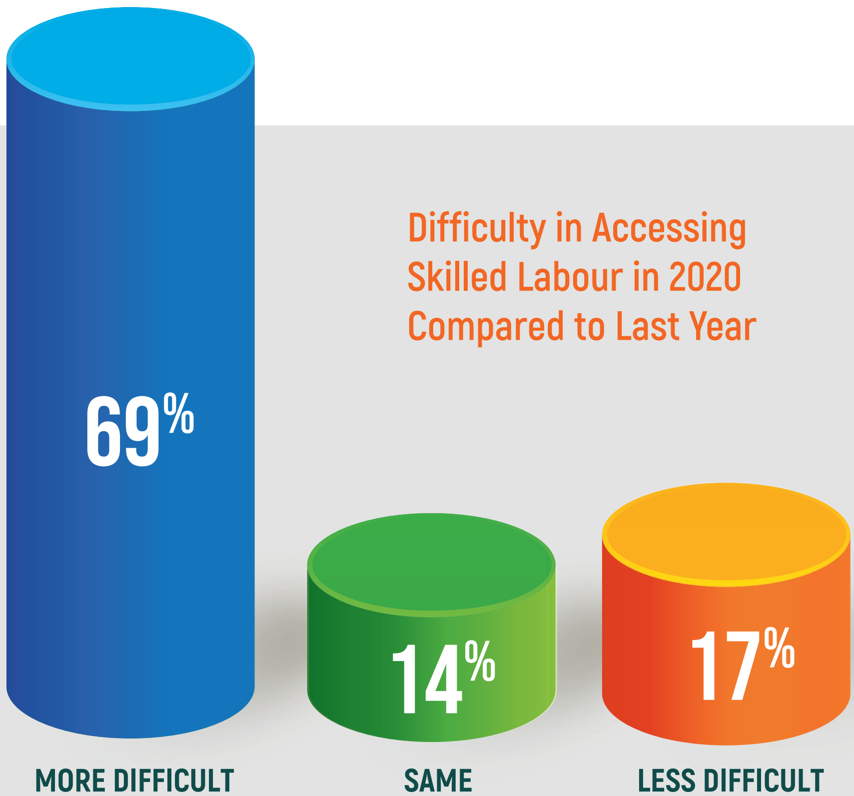
Skilled Labour and Apprenticeship

ICI contractors were asked about their recent experience with potential skilled labour shortages and their expectations for whether or not it will be more or less difficult for them to meet their labour needs in the coming year. Sixty-nine percent (69%) of contractors anticipate that in 2020 it will be more difficult for them to access skilled labour. Fourteen percent (14%) expect to have the same level of difficulty as last year, and 17% believe it will be less difficult. Sixty percent (60%) of ICI contractors indicated that they'd been affected by skilled labour shortages in the past three years. This is similar to last year's survey, when 62% of contractors reported experiencing skilled labour shortages in the previous three years.

60%

OF CONTRACTORS EXPERIENCED SKILLED LABOUR SHORTAGES IN THE PAST 3 YEARS

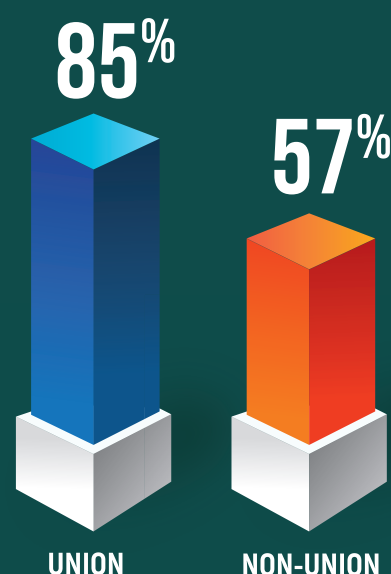
Difficulty in Accessing Skilled Labour in 2020 Compared to Last Year



The unionized ICI construction industry has always been a leader in apprenticeship and training investment. This year, 85% of union contractors indicated that they employ apprentices, the highest level in the twelve years that the OCS' Contractor Survey has tracked apprentice employment. Only 57% of non-union contractors indicated that they employ apprentices.

85%

OF UNIONIZED FIRMS EMPLOY APPRENTICES



New Technologies in Ontario's ICI Construction Industry

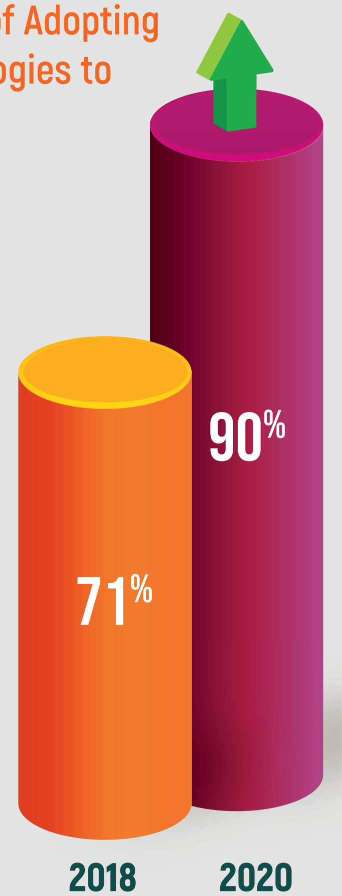
In the 2018 Contractor Survey, the OCS undertook an initiative to explore the role of new technologies in Ontario's ICI construction industry. This year's survey updates that initiative to find out which technologies contractors are adopting, and how contractors' perspectives on new technologies have changed.

This year 90%, of ICI contractors said that adopting new technologies is important to the future of their business, up from 71% in 2018. Breaking down the 90% figure, 38% of contractors said adopting new technologies is very important (up from 27% in 2018), and 52% said it was somewhat important (up from 44%). It should be emphasized that in 2018, 29% of contractors said new technologies were not important to their business, but in 2020, that number has fallen to just 10%. This escalation in perceived importance appears to transcend the ICI industry, with similar increases found among general and trade contractors, as well as union and non-union firms.

Importance of Adopting New Technologies to Firm's Future

9 IN 10

CONTRACTORS NOW BELIEVE NEW TECHNOLOGIES ARE IMPORTANT TO THE FUTURE OF THEIR BUSINESS



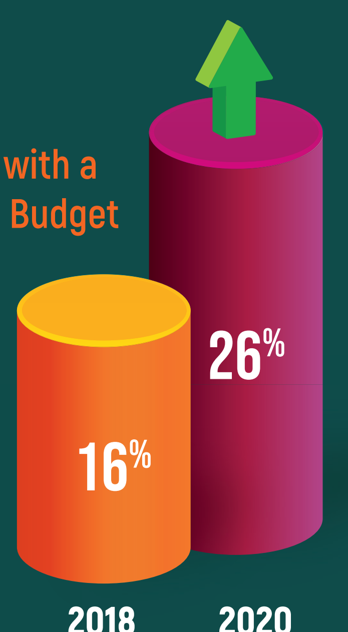
General Contractors Lead the Way in New Technology Investment

Another way of measuring how important new technologies are to businesses is whether or not they have a dedicated budget. In 2018, 16% of general contractors had a dedicated budget for new technologies. Two years on, in 2020, that number has increased by more than half to 26%. The percentage of trade contractors with a new technology budget has remained roughly the same, with 11% in 2020 having a budget, up slightly from 10% in 2018.

1 IN 4

GENERAL CONTRACTORS NOW HAS A BUDGET FOR NEW TECHNOLOGIES

GC's with a Tech Budget

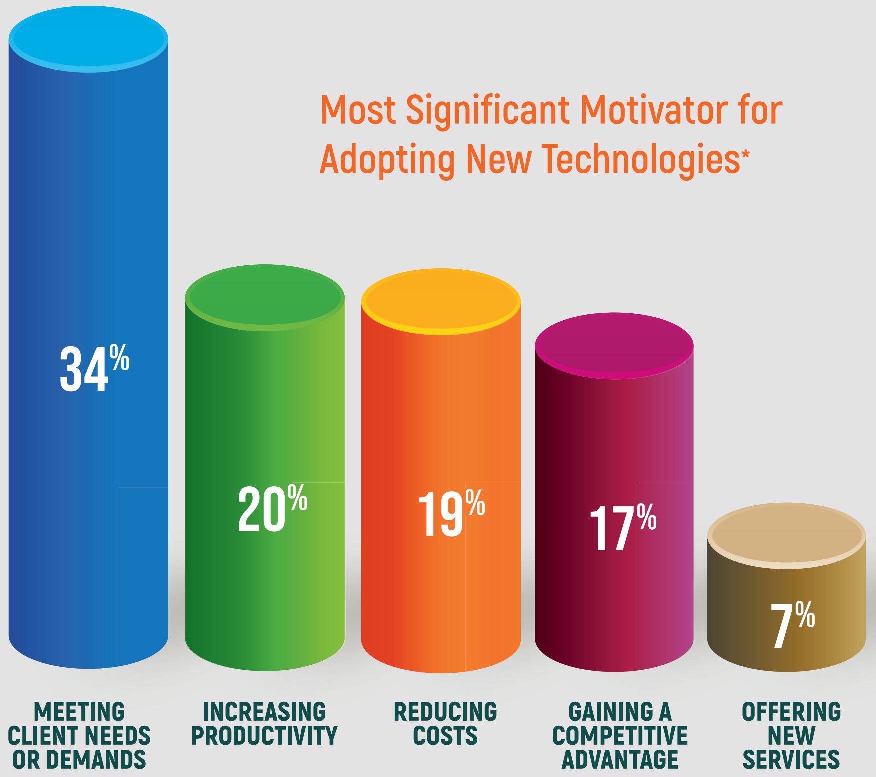


Owners Are Still The Biggest Driver of Technology Adoption

Contractors were given a series of potential motivators for the adoption of new technologies, and asked to select which was the most significant to their firm.

Meeting client needs or demands was the top motivator, selected by 34% of contractors. The lowest scoring motivator was the ability to offer new services, which was selected by 7%. The remaining three motivators had similar results: increasing productivity (20%), reducing costs (19%), and gaining a competitive advantage (17%).

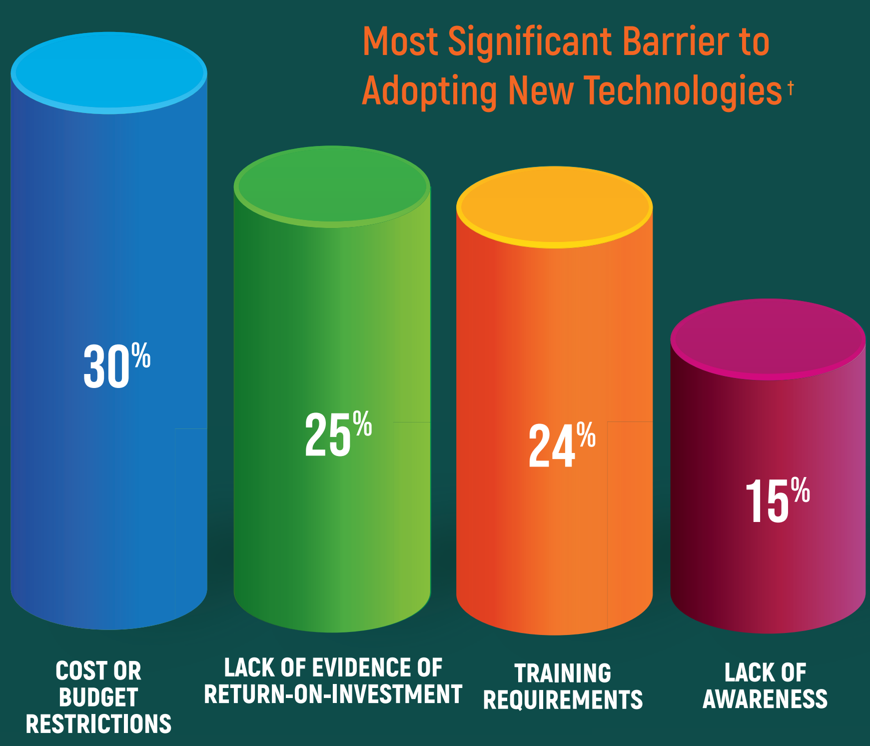
It should be noted that these responses are similar to the 2018 survey, indicating that contractors' reasons for adopting new technologies have not changed over time.



Cost is Still the Greatest Barrier to Adopting New Technologies

Contractors were also asked which of a selection of potential barriers to new technology adoption was the most significant to their firm.

Thirty percent (30%) of contractors said that cost or budget restrictions was their most significant barrier. This was followed by lack of evidence that new technologies will bring a return-on-investment, selected by 25%, and training requirements, which was identified as the most significant barrier by 24% of contractors. At 15%, lack of awareness of new technologies was the least commonly selected of the four. As with the motivators, the barriers to adoption were similar to those seen in the 2018 survey.

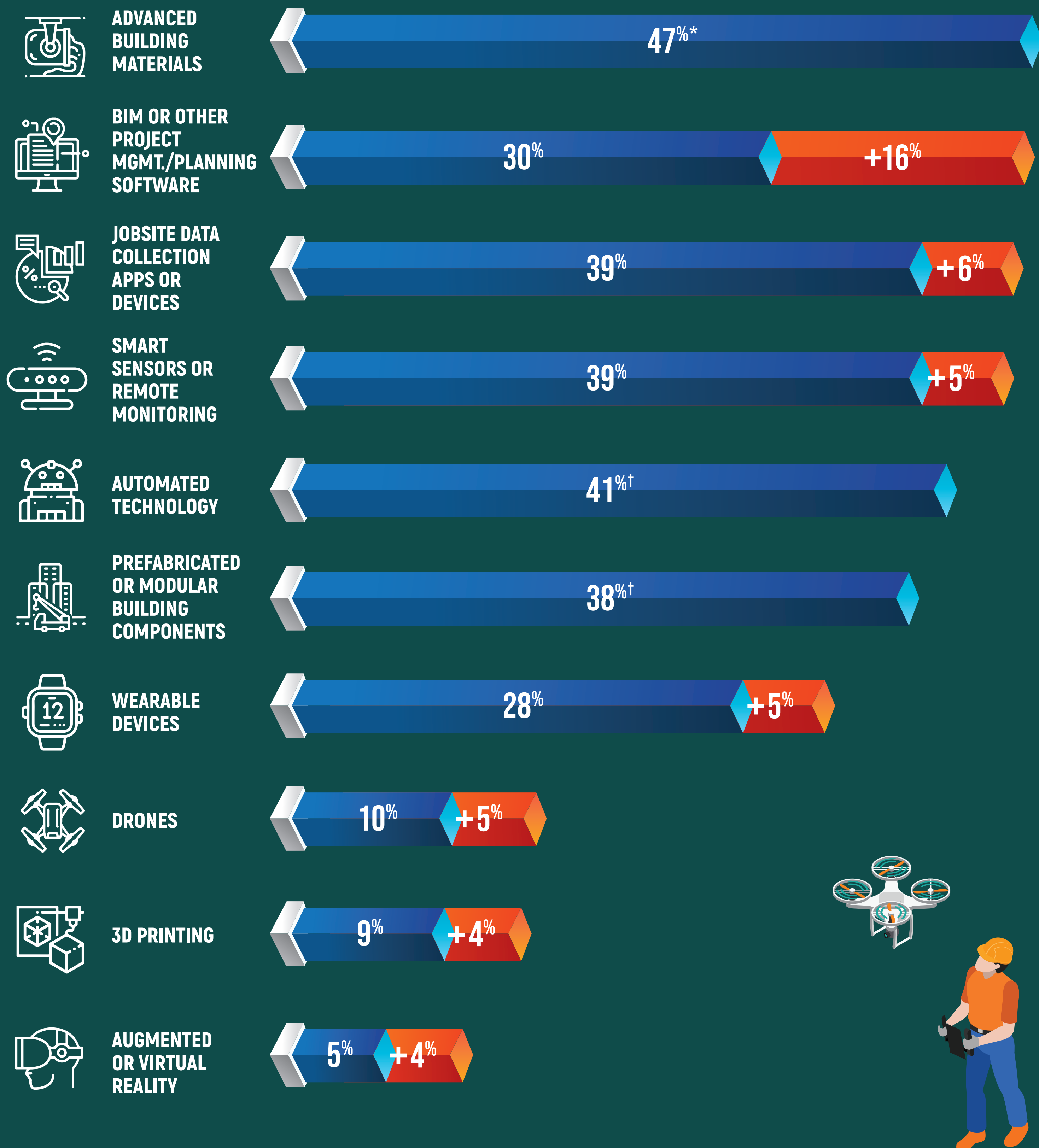


* Remaining 4% responded "other" or "don't know"   † Remaining 6% responded "other" or "don't know"

Contractors' Experience with New Technologies

Percentage of firms that have used new technologies compared to 2018

2018 | 2020



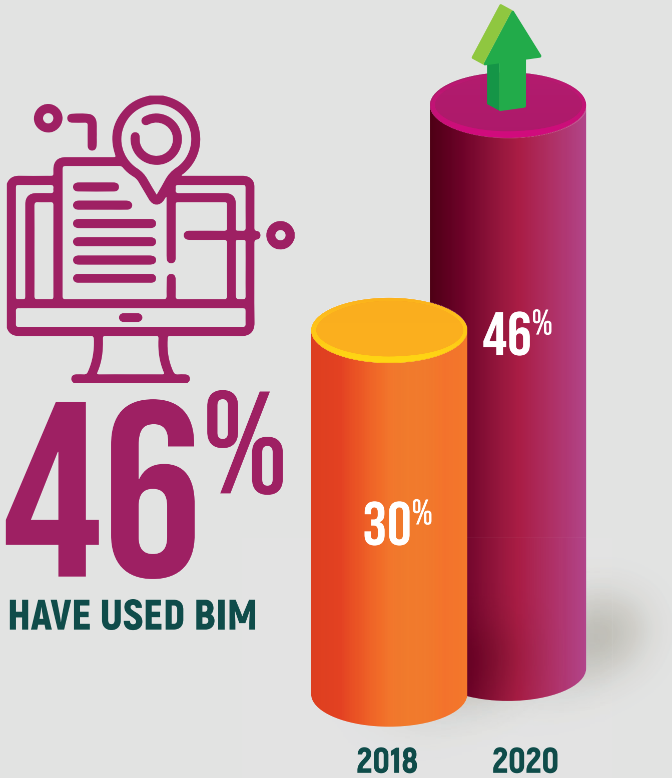
* Unchanged compared to 2018 † Less than in 2018

Which Technologies are Contractors Using?

ICI contractors were asked about their firm's experience with ten categories of new technologies. They were also asked to assess the likelihood that they would use these technologies in the future.

The Rise of BIM in ICI Construction

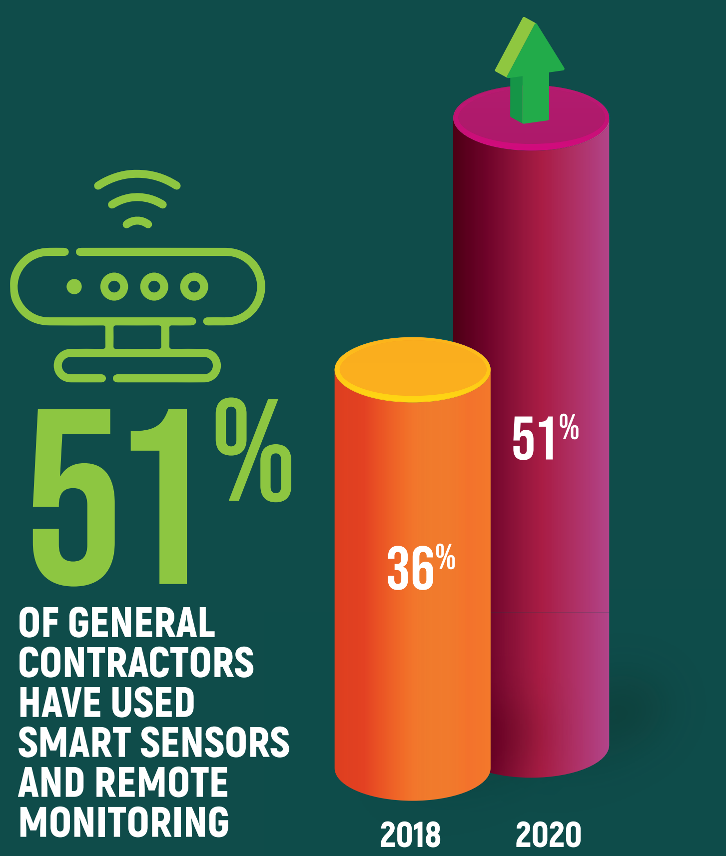
BIM has seen a dramatic rise in the ICI industry over the past two years, with adoption increasing by more than half from 30% in 2018 up to 46% this year. This appears to be an industry-wide leap, with increases of similar magnitudes observed among general and trade contractors, and union and non-union firms. The extent that the industry is embracing BIM is underscored by looking at the proportion of contractors that said they would not use the technology. In 2018, 35% said it would be very unlikely they would use BIM in the next five years, this fell by ten percentage-points in 2020 to 25%, the biggest decrease among the ten technology categories.



General Contractors Embracing Smart Sensors and Remote Monitoring

Among ICI contractors overall, adoption of **smart sensors and remote monitoring** increased from 39% in 2018 to 44% this year. This advancement is entirely due to general contractors. The number of trade contractors using smart sensors and remote monitoring did not change in the intervening two years, but among **general contractors, usage has increased dramatically from 36% to 51%**.

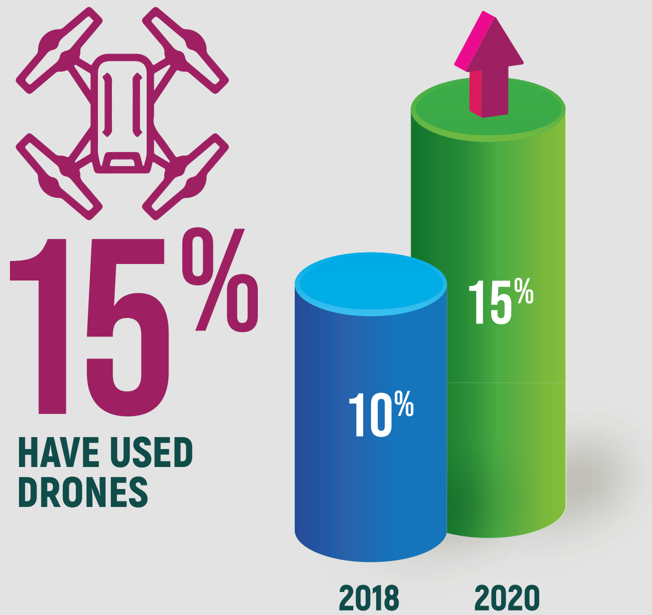
The second biggest increase in adoption overall has been with the use of apps or devices for **jobsite data collection**. In the 2020 survey, 45% of ICI contractors had used devices or apps for data collection, up from 39% in 2018. **Wearable devices** also had a noteworthy increase, with 33% of contractors reporting in 2020 that they had used wearables, up from 28% in 2018.



Contractors Coming Around to Drones

Drones, 3D printing, and augmented and virtual reality were the least commonly-used of the ten categories in 2018, but each of these technologies has seen increased adoption in the intervening years. **Drones** had been used by 10% of ICI contractors at the time of the 2018 survey, and this rose by half to 15% in 2020. Among general contractors, the use of drones is even more widespread, increasing to 27% in this survey from 16% in 2018.

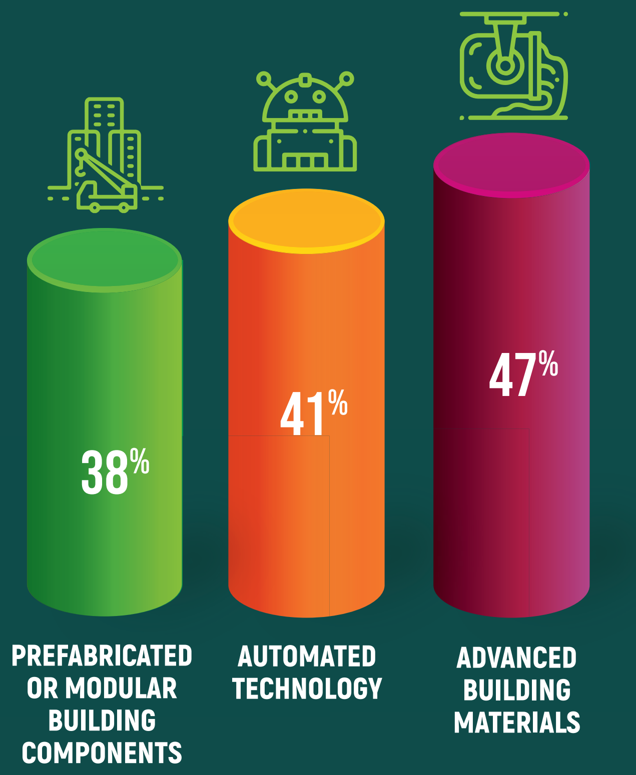
3D printing has now been used by 13% of ICI contractors, up from 9% in 2018. **Augmented and virtual reality** remain the least commonly-used technology of the ten categories, but adoption has increased from 5% in 2018 to 9% in this survey.



Advanced Materials Have Reached A Plateau

Among the ten categories of new technologies, **advanced materials** were the most commonly-used by ICI contractors in both 2018 and 2020. The level of adoption however did not increase over the past two years, with 47% observed in both surveys. This suggests that advanced materials are more well-established in the industry than other technologies, and may have reached a plateau. The same could be the case with other more-common technologies: **automated technologies** (used by 41% in 2020), and **prefabricated or modular building components** (38%).

These three technology categories have also seen the lowest increases in the percentage of contractors who expect to use them in the next five years.



About the Ontario Construction Secretariat (OCS)

The Ontario Construction Secretariat (OCS) represents the collective interests of the unionized construction industry in Ontario's industrial, commercial and institutional construction sector. A joint labour-management-government organization, OCS is dedicated to enhancing Ontario's unionized ICI construction industry by developing relationships, facilitating dialogue and providing value-added research. Our stakeholders include the twenty-five unionized construction trades and their contractor partners.

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