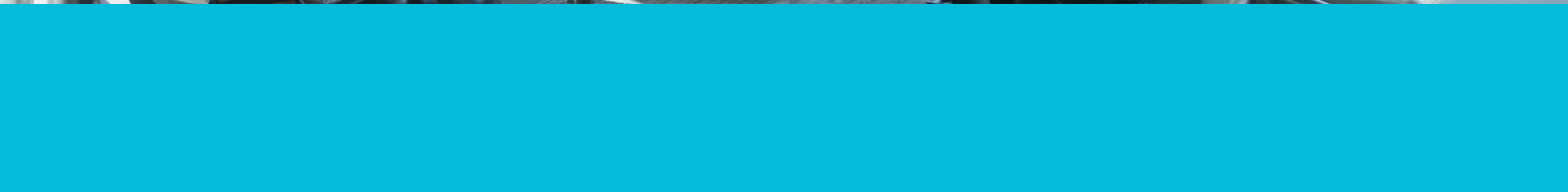


WHITE PAPER

# Training in the AEC and manufacturing sector: Are strategies changing?

The Symetri Annual Survey of training needs



# Contents

**Executive Summary: The top three considerations emerging from Symetri's 2020 Training Survey**

## Analysis

**Section 1: The need to stay focused on skills continuity: training investment**

**Section 2: The new training norm rises to the challenge**

**Section 3: Learning never stops**

## Conclusion

## Final Thoughts

### Introduction: Understanding your training needs

by Alan Skipp, Technical Operations Manager, Symetri

#### Building a training strategy

This snapshot of our customers' views on training in the construction sector comes one year on from our inaugural report in 2019. The purpose of the survey was for us to hear what our customers want; and how they decide what these needs are.

Symetri is always here to help drive your business forward. Our goal is to keep all our services relevant to your needs. Surveys such as this one, we believe, help us to do just that.

#### A year of change

What a year it has been. COVID-19 has shaken all sectors of industry, the economy and normal everyday life. At the mid-year point, commentators and officials were broadly speaking of the new normal we would all have to adjust to. Within months, the new normal was upon us. Many aspects of working life continue to be redefined, almost daily, and are likely to stay changed for a long time to come, if not forever.

Businesses are adapting; finding new ways of working where pre-COVID ways are rendered difficult or impossible. Meanwhile, technology moves ever forward.

New software releases and new products come to market frequently. Improvements and upgrades enable users to make another step forward every time. Keeping abreast of the new capabilities they bring to the business is about both keeping in touch with the evolution of new capabilities, and safeguarding the competitive advantage.

The respondents represent sample views\* which may or may not reflect your own. I hope you'll feel that our survey findings are useful in putting a degree of context around your own approach to training. Above all, I wish you continued success in the year to come and, of course, good health.

#### \*Methodology

In 2019, to make sure we carry on delivering and improving exactly the sort of services our customers need, we evaluated what the identified needs of a company normally were in triggering training. We asked about the importance attached to empowering the individual, the value of training in supporting continuous improvement, and how the impact and success of training was evaluated from a business point of view.

One year later we have revisited the topics.

#### Sample Composition

There were 73 respondents to this Symetri survey, comprising 75% for architecture, engineering, and construction, and 25% from the manufacturing sector. Among the job roles represented were CAD Managers and Technicians, BIM Managers and numerous other roles focused on BIM, Design Engineers, Civil Engineers, Surveyors, Architects, and a range of other decision makers.

More than half of the respondents have responsibility for determining the training needs of teams and/or approving and signing off training spending; 45% of respondents were users who attend training.

# Executive Summary

**The top three considerations emerging from Symetri's 2020 Training Survey are:**

- **The need to stay focused on skills continuity: training investment**  
Budgets of every description, in every sector, have been subject to more rigorous scrutiny as income streams have been disrupted. Around 35% of respondents reported a hold on training expenditure. Allowing a skill slippage in tough times, however, could create a situation where companies are less well-positioned to respond to new project requirements, or even adapt to new software capabilities, when the market environment is less restricted.  
  
This is recognised by 64% of respondents, who indicate that they have continued to invest in training; of this cross-section, 25% say their expenditure is not subject to any restrictions. Skills continuity is of overall importance. Quality people continue to produce quality results, but they need ongoing support.
- **The new training norm rises to the challenge**  
We are in a world where work is transitioning – more rapidly than it ever has done – to something you do, rather than somewhere you go. Virtual training is an approach that slots right into this world. As long as you can see on screen a guide through the techniques, functions and skills you are looking for, you can achieve the results required.
- **Learning never stops**  
When we asked, last year, what the key triggers were for training investment, self-improvement was highlighted by 21% of survey respondents. In this year's report the figure has risen to 62%. 'Keeping up with the latest software', has also gained in importance, from 18% in 2019 to 33% in 2020.  
  
This would appear to be a self-evident truth. Adversity is a challenge. Like all challenges in business, it is there to be overcome; not to be overwhelmed by. Continuous improvement is exactly that: Continuous, not contingent; core to business success, not peripheral to it.



# Analysis

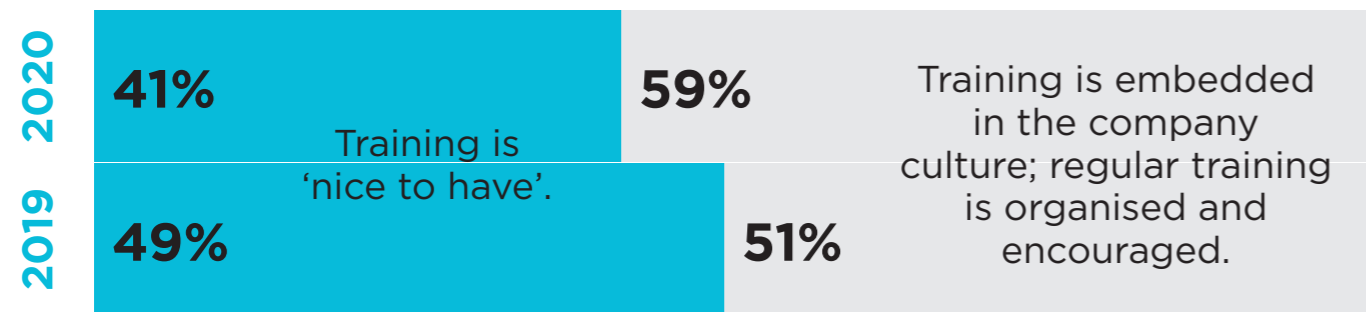
## The value of training in business success

### Section 1: The need to stay focused on skills continuity: training investment

The effect of the changes wrought by COVID-19 is a factor in everybody's thinking at this moment in time. While people look inward and reassess their own capabilities in an uncertain future, the evolving nature of training practices has made training more accessible, more easily assimilated into a working day or week.

The majority of organisations place a firm emphasis on training. Views on the value of training remain largely unchanged since 2019, with even a marginal increase in a core focus on training.

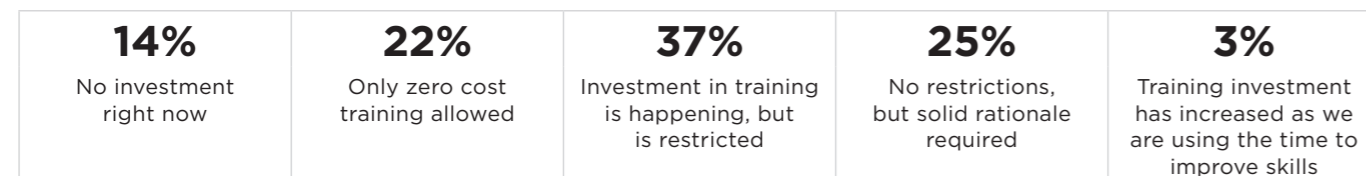
#### At the heart of the business:



#### Tough investment decisions

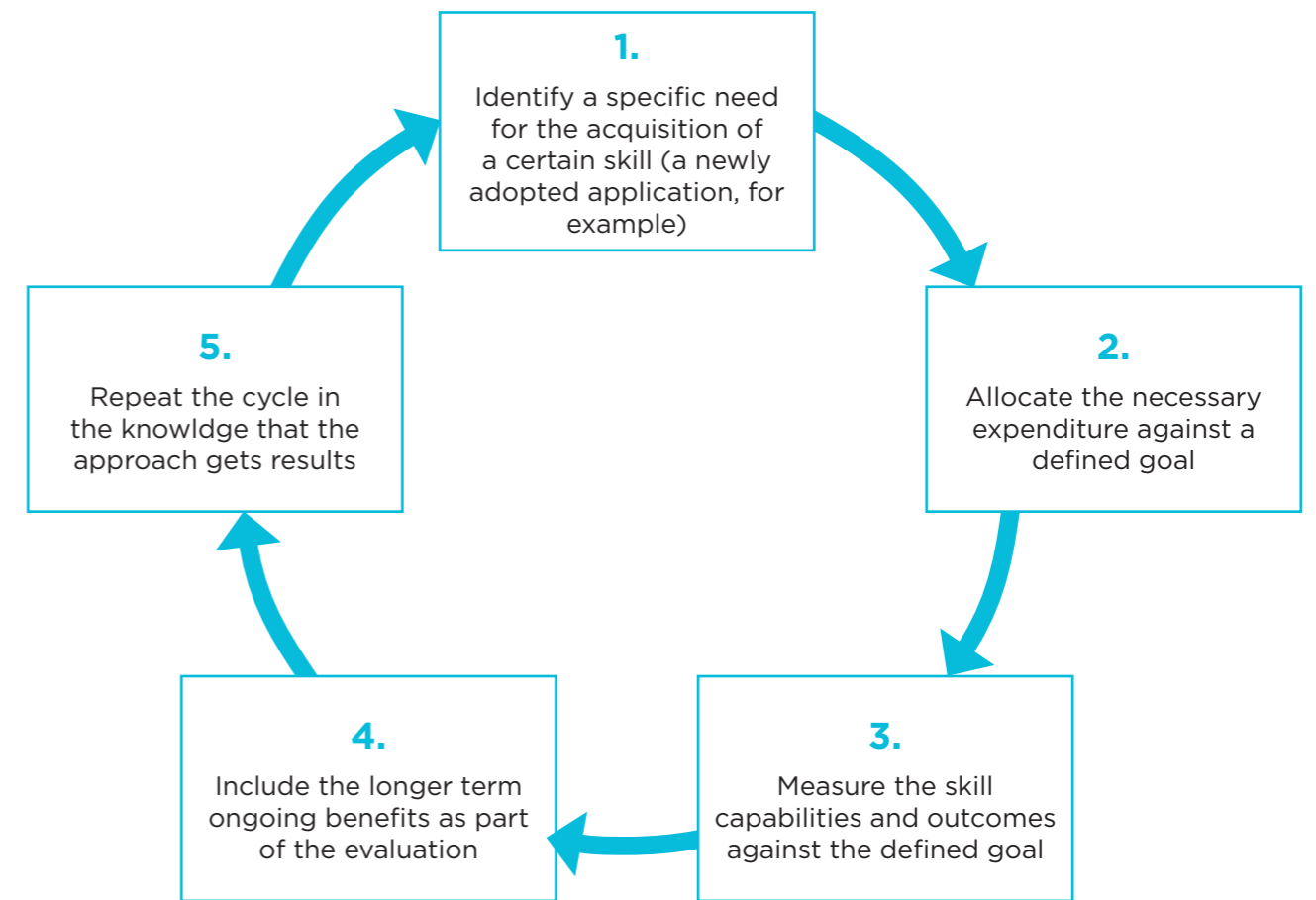
Given the understood value of training, any adverse effect on its continuance as an effect of COVID-19 could lead to an interruption. We found that 14% of companies had immediately put training on hold, presumably from the perspective of investment in this area being one of the easiest to stop when revenues are subject to disruption.

Whether on hold, or reduced, it is understandable that businesses apply scrutiny to any area of spending. The majority of respondents indicated continued availability of training funds but to a lesser scale than might otherwise have been the case. Others have continued to invest but only when there is a compelling business case for the training to be undertaken:



## Improving the return on training investment

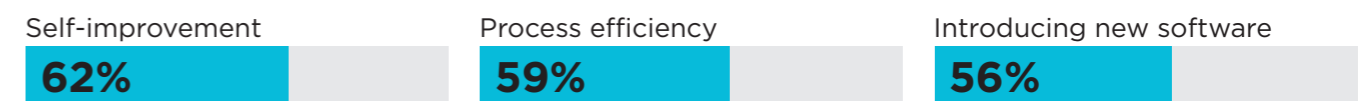
A sound rationale for training creates more fertile ground for the benefits that grow from the training. When the need is intense or immediate, expedient or directly project-related, then the results will be more readily measurable. They will more precisely pinpoint an operational need that has been addressed at a point in time, together with ongoing benefits that may come from repeating the cycle:



#### Upskilling is a win-win

When we asked what the main triggers were for training investment, there was a spread of opinions but three clear universal motivators.

#### The top three triggers for training



Any professional wants to feel that he or she gets better at what they do. This is both professional pride and self-preservation; staying ahead of the competition being usually as important for an individual as it is for a company. Self-improvement relates closely to process efficiency and introducing new software (followed closely by 'keeping up with the latest version of the software' which was ranked as a trigger by 33% of the survey sample); as technology evolves so must the people who use it and the companies that cannot function without it.

One in four respondents identified new projects as a trigger; one in three identified that BIM requirements were the trigger, and one in three identified consistency of work across the organisation. As the construction sector environment evolves so does the software that serves it, and the need for continuing adoption and ease of use of such software.

## Section 2: The new training norm rises to the challenge

Looking at the results so far, the value of training is recognised. The investment to support it is, for some, on hold, for others it's restricted. If funds were unrestricted, there would remain the precarious nature of our world in 2020, with limitations on social contact, group gatherings, office attendance when avoidable, and travel on public transport.

### Back to class?

**We posed the question:** Given the current COVID pandemic, when would you feel comfortable re-entering the classroom for training?

*It's too early to tell... 63%*

One in four would be comfortable now; and almost one in five believe that the earliest will be 2021. This is a view at a moment in time, and times change. At time of writing, the response to COVID has necessitated lock-downs of varying degrees at different times in different countries, regions and even cities. Naturally, the considered response is to lean towards caution, which shows itself in certain understandably restricted behaviours.

Together, we all face a challenge in this regard. Effective training in how to use a software product can only be delivered by hands-on interaction with the product. To grasp firm understanding of functionalities, shortcuts, and an approach to interacting with the software that gets efficiently to the desired endpoint or outcome – without twists, turns and delays along the way – needs guidance from someone experienced with the software. Traditionally, the classroom has been the place to receive this guidance; it allows group participation and interaction, and a directly responsive delivery of course content from the trainer.

As participation and interaction become increasingly redefined, ways round the problem come into play, making it less a problem and more simply a way of perceiving the emerging value of alternative training delivery mechanisms.

### The internet knows everything

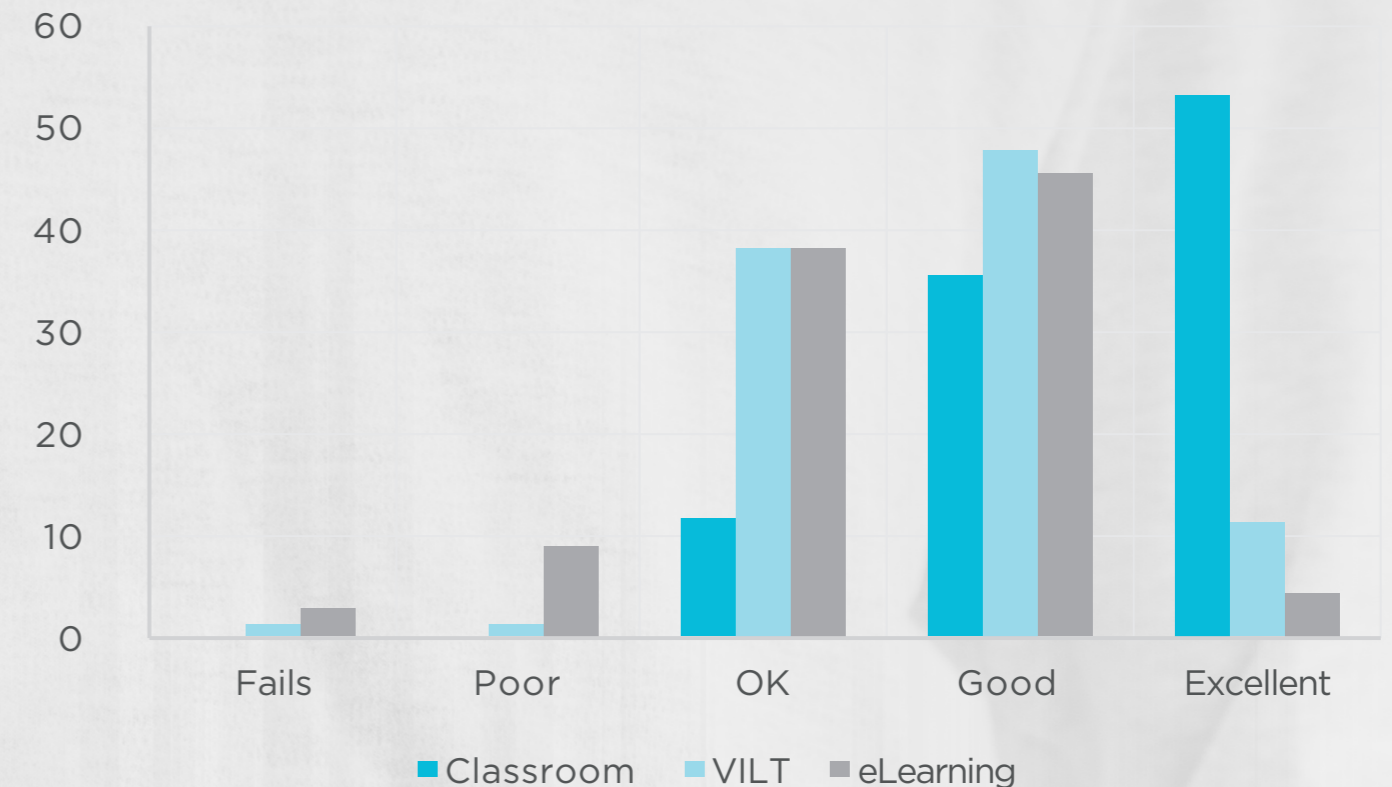
What alternatives present themselves? Going straight to the internet, it is not difficult to find videos or blogs that might address the issue. They're also all free. Could this not suggest that any skill can be picked up just for the sake of a little Googling?

The nature of searching for information on the internet is that results appear in their millions. Choice abounds. The accuracy, reliability and recency of information pertaining to specific professional/software skills is not always obviously verifiable. The added complication is that, rapid though search results may be, conducting, refining, and evaluating the search takes time in itself.

Far better simply to have pinpoint accuracy in going straight to the input needed, at the time it is needed, with no need to cross-check its reliability.

### How do you train people then?

It was no surprise to find a level of indifference to free training. The notion of 'asking a colleague' was marginally preferred but generally, where training is casually available and accessed, its perceived value is diminished. We asked people to rank the effectiveness of different paid training delivery methods. Here we see that eLearning and VILT (Virtual Instructor Led Training) scored similar, with VILT slightly favoured. As last year however, classroom training is the overall preferred, and deemed effective, training method. No-one who responded rated classroom as "fails" or "poor". Results were consistent with those seen last year.



It is often said that there is no substitute for face-to-face classroom training, but there is a valuable complement.

Virtual training offers greater flexibility to delegates. It gives the flexibility to learn, without being out of action for a number of days. They can put their new skills into action – strengthening the learning process. Participation can be just as interactive given the preponderance of online communication and collaboration platforms. The same expert trainer who may have previously been present in person is now present online; as we mostly all are in our work roles.

## Section 3: Learning never stops

Our current new world order creates a new context for work. It does the same for training. The trick is not to confuse the message with the medium.

### How do you ensure the training has been effective and that staff retain the knowledge?

Responses to this question support the message/medium hypothesis:

Measuring training effectiveness			
Visible improvements in project quality	How the individual feels about their skills	Manager observation	Skills assessment tool/questionnaire
70%	59%	44%	27%

Effectiveness is measured most critically by seeing the results in action and by the confidence staff show relative to the new skills they have acquired.

It is a case of the ends justifying the means. The industry is in that balancing period where new ways of doing things are being tried and tested. Classroom training remains an option, while virtual training gains currency and viability.

## Conclusion

*“Necessity is the mother of invention.”*

- English proverb, possible interpretation of “Our need will be the real creator,” from Plato’s ‘Republic’.

### Customer satisfaction

Whatever triggers to training a company identifies, one goal pervades and contextualises all others; delivering the perfect project, the desired outcome, to the satisfaction of the customer. This is the necessity.

The ‘invention’ arises from alternative thinking, in a period where such thinking is essential. This is the ‘real creator’. As we look to 2021, the only truly reliable prediction is that much will continue to change, while values and goals will remain the same. From a training perspective, we expect change, more use of virtual training, but the time-honoured value of professional excellence will be a reliable constant.

### Staff motivation

Great people produce great results. Training is not only the conduit to continuously improved personal skills; it is also a motivator. When a business cares for its people, the feeling is reciprocated.

### Natural evolution

Is virtual training the way forward now? It would appear that, even if only temporarily, it is. Businesses are not wanting to make plans to re-enter the classroom until the pandemic is a lot more under control. It is a stepping stone; both between the skills an individual may have and further wish to acquire, and between the current training norm and the next one. Until then, need will be the real creator.



# Final Thoughts

At SYMETRI, We empower our customers with expertise, leading edge technology and services, so they can enjoy the journey from product concept to implementation.

We work with you to tailor digital BIM, product design and lifecycle solutions to help you work smarter and do more with less. That's why our partnerships are long lasting.

With over 30 years' experience, more than 10.000 Customers worldwide we work together as a trusted partner and extension of your team.

Our 450 people strong team work from 27 locations around the world, across vertical industries, delivering a premium service with a global infrastructure and a local presence. We adopt the latest technology and agile methodologies so, even as technology changes, our relationships last a lifetime.