DesignIntelligence Quarterly
2023

PRAGMATIC DESIGN

BALANCING PRIORITIES

DesignIntelligence® Quarterly

DAVE GILMORE
President and CEO

MICHAEL LEFEVRE
Managing Editor

BECKIE HAWK
Art Director/Webmaster

DesignIntelligence Quarterly is a publication of DesignIntelligence LLC which comprises the Design Futures Council, DesignIntelligence Media, DesignIntelligence Research, DesignIntelligence Strategic Advisory and DesignIntelligence Learning.

CONTENTS

Context: Priorities

- Michael LeFevre

In our expanding universe of infinite, unending, yet scarce quantities of time, entropy happens when systems fall into natural disorder. When we try to do too much or don't do the right things, things go into decay. One way to stem those kinds of collapses is to give our greatest gift - the gift of attention. Choosing where we spend our time, energy and resources is perhaps humankind's greatest challenge. Invoking ethics, morality, social mores and personal values, in life, and in business, we refer to the process as "setting priorities." The notion of "balancing" them is a false construct, since, by definition, when we choose one, we relegate another to a position of lesser importance – at least for the time being. As we know, things are likely to change - and soon.

This issue of DesignIntelligence Quarterly examines the provocative, oxymoronic theme of Balancing Priorities. Under our annual quest for Pragmatic Design and a return to applied action, how we manage, evaluate and set what is important is a matter of perpetual and ever-morphing concern.

As architects, our seeking solace within the edifices we know as buildings is a vestige of yesteryear. Now, we are challenged to see our structures as means to the ends of experiences and outcomes for the humans and organizations who use them. Priorities indeed. People. Results. Outcomes, Impacts. So much to focus on. How do we choose?

To better understand the subject, we have reached out to a dozen contributors. From the ranks of DesignIntelligence and our usual suspects we offer:

- Dave Gilmore, and his essay *Avoiding the Herd*, a look at bespoke leadership direction around "working from anywhere."
- Paul Hyatt's *Balancing Priorities*, in which he contrasts two industries.
- Paul Finch, whose piece, *The Wages of Synthesis* investigates the architect's duties and responsibilities to a spectrum of client types.
- Bob Fisher's experience-based advice in *The Work of Transformation*.
- Scott Simpson's *Time Crunch*, a look at the time we have and how we choose to use it.
- My reflection, called *What's Important Now?*, which shares time-tested tools for ranking actions.

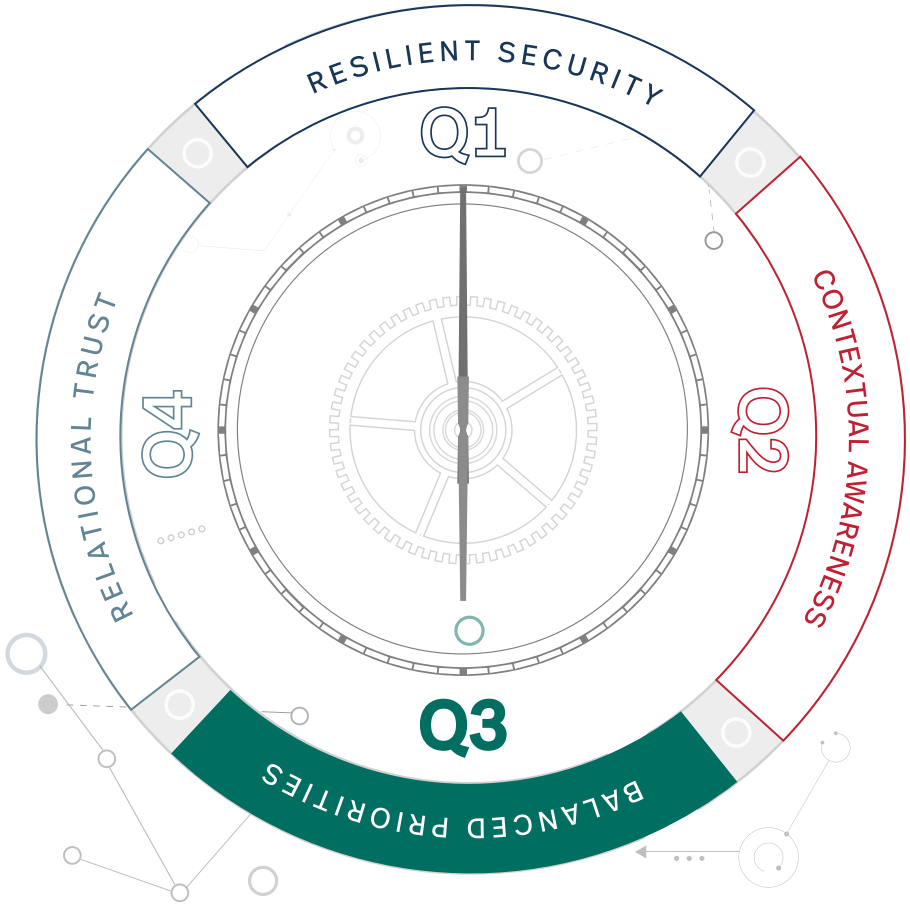
To broaden our outlook, this Quarter's guest contributions include distinguished written works from:

- Leading eco, health and well-being architect, Veronica Schreibeis Smith, from Vera Iconica Architecture, who offers a candid interview about her choice-making in Nourish the Soul.
- A two-part interview with self-avowed "very loud cheerleader", NOMA President, and Whitney M. Young Jr. Award winner, Pascale Sablan, who continues to effectively champion the eradication of racial injustice and inequity in our profession.
- Valerian Miranda, who, in his article, Are We There Yet?, takes a provocative, synergistic look at the priorities and relationship of architectural academics and practitioners.
- Vardahn Mehta and Dave Lemont, from Acelab, who offer Reimagining Decisions, a look at an emerging software solution for design product decision making.
- Bill Curtis Davidson, whose essay, Crossing Over: Inclusion in Physical and Virtual Environments looks at user interfaces, artificial intelligence and accessibility in digital and physical worlds.

In all, we hope this compendium of advice helps you and your colleagues cope with the ongoing, inexorable, everyday machinations – and hard work - of decision making.

Michael LeFevre, FAIA Emeritus, Managing Editor

2023 EDITORIAL ROADMAP:
PRAGMATIC DESIGN



To continue the discussion about Balancing Priorities, please contact us at mlefevre@di.net

DesignIntelligence®
Quarterly

AVOIDING THE HERD

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Avoiding the Herd

Dave Gilmore
President and CEO, DesignIntelligence

Dave Gilmore examines leadership choices around “working from anywhere.”

As we continue to reshape ourselves post-COVID, we welcome the arrival of a new world order in hopes that the worst of the pandemic is behind us. We will look ahead and eagerly anticipate new waves of prosperity and achievement to mark these times. Optimism is building, and we are mostly enthusiastic about the years to come. So, what have we learned and what will we remember and carry with us from the fearful and precarious near past into this promising future? Honestly, it’s a real question, begging for – or perhaps demanding – a real response from each of you.

What’s the “so what” of the past few years? Winston Churchill wrote, “Those who fail to learn from history are doomed to repeat it.” What lessons have our collective recent history taught us about ourselves as individuals, as neighbors, as communities? What have we learned about the design communities as we passed through this pandemic period? The way of work has altered, as have the patterns of coming and going to work. The traditional office is clearly in question.

“The collective annual cost of commuting alone could quite possibly end poverty in the world or fund do-good/do-well climate action investments.”

The paradigm of millions upon millions of knowledge workers joining a daily commute only to house themselves for eight to 10 hours in a cubicle or four-walled office box seems kind of silly, really. The collective annual cost of commuting alone could quite possibly end poverty in the world or fund do-good/do-well climate action investments. Think about the daily pre-pandemic spend on automobile gasoline or the total cost of vehicle ownership expended just to have a vehicle in which to travel back and forth to a work cubicle: down payments, monthly purchase or lease payments, collision insurance, license tags, tires, maintenance and more, mostly to travel from a home garage to an office garage and back. Really now, what are we learning and what will we change?

The way of human interaction has been altered as well. Our daily screen time as a substitute for sitting physically together with others has increased 50–70% since the onset of the pandemic. Though natural and a fine substitute as a means to connect and communicate, we’re discovering that remote work is not quite the same as physical proximity. Don’t get me wrong, I celebrate the tremendous rewards we are experiencing daily through advanced uses of digital expression. It is truly extraordinary what we’re achieving. But we mustn’t settle for an either/or simplicity, as a sustainable living balance is necessary to thrive.

As we move through the coming months and are faced with the choice of going forward or backward, we must choose forward. “Working from anywhere” is here to stay. The challenge to establish and maintain balance is both a person-by-person choice as well as an employer choice. It’s important for leaders to spend the time and effort to explore the multiple variables of healthy balance for those they lead in their specific group and individual contexts. Don’t go with the flow or popular trends. Weigh the priorities in play for you and your team.

Most are mindlessly following the herd of social media influencers rather than seeking to understand the close realities and work-life dynamics that directly impact their employees and the output of their work. Avoid the herd and lead your organization through the core values you've established.

Be the leader we all need you to be: Don't outsource your responsibility for organizational well-being.

What kind of leader are you?

> Be the leader we all need you to be: Don't outsource your responsibility for organizational well-being.

Dave Gilmore is President and CEO of DesignIntelligence.

DesignIntelligence®
Quarterly

WHAT'S IMPORTANT NOW?

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

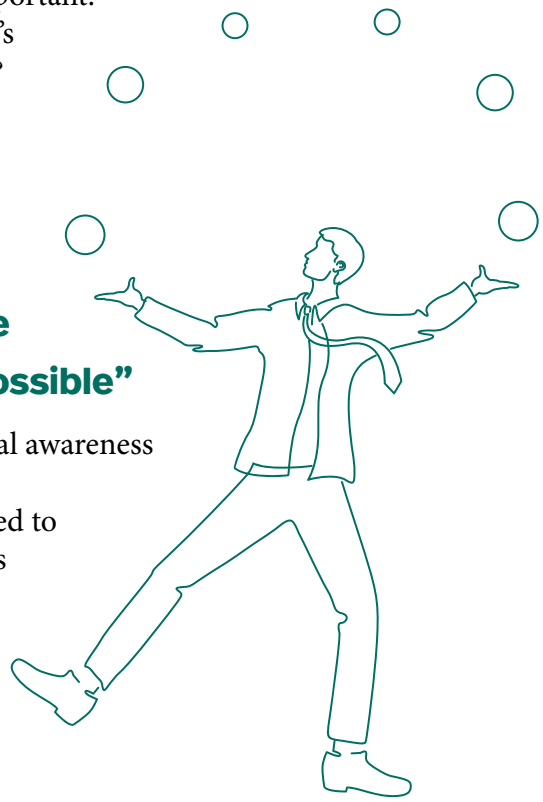
What's Important Now?

Michael LeFevre

Managing Editor, DesignIntelligence

Success is not about balancing priorities – it's about having them. How do we get better at setting priorities and reacting to change in an uncertain world?

In our quest to make sense of a frenetic world, the discussion often returns to phrases such as "work-life balance," "juggling balls," "spinning plates" and "balancing priorities." But here's the thing: Being successful and productive is not about "balancing" priorities, it's about having them. "Priority" means "this is more important than that." The word's root is prior, as in "comes before" or "is more important." Easy. But how do we decide what's important in an uncertain world? To begin, it might help to look at how we derive meaning and influences and assign values.



Context Matters: Where Good Ideas Come From – "The Adjacent Possible"

To continue our look at contextual awareness begun in Q2's DesignIntelligence Quarterly, we would be well served to understand that importance finds its meaning in context. Beyond and before assigning weights to things, in the creative fields

our challenge is often to expand the context and investigate countless alternatives. But in doing so, we only add to the list of things that must be prioritized. Yet, that's usually our job. To understand how and where we find new ideas, a helpful reference for designers working within many contexts is "Where Good Ideas Come From: The Natural History of Innovation" by Steven Johnson. Multiple contexts allow exploration of what Johnson calls "the adjacent possible" or opening the easily accessible combinatorial doors of nearby spaces. Johnson explains, "Good ideas are not conjured out of thin air. They are built out of a collection of existing parts, the composition of which expands (and occasionally contracts) over time." To find more parts we must push beyond the edges of our normally traveled routes, seek new inputs and enter new rooms. Johnson adds, "The trick to having good ideas is not to sit around in glorious isolation and try to think big thoughts. The trick is to get more parts on the table."

But how does new information flow? Per Johnson, in "liquid networks that become the medium for the flow of ideas and connections," media that allow fluid exchange create environments and cultures conducive to innovation. Johnson calls it "primordial soup." Only in such fluid environments can we go on "long and fruitful tangents" to achieve the random connections, serendipities and "generative chaos" innovation requires.

Serendipity is just one such state, a condition resulting from a hunch waiting to make a connection or being in the right place at the right time, sensitized and ready to receive the surprise, the "happy accident." One good way to break logjams and find surprises in our thinking is to go for a walk. History tells us that a good many discoveries were prompted only by leaving the work at hand and changing perspectives. How wonderful. One of the best ways to increase contextual awareness is to change our own context and take a break – to simply let "life" happen.

Some of these leaps and connections are possible, "but only because a specific set of prior discoveries and inventions had made them possible," per Johnson. This prerequisite often applies to ideas that are said to be "ahead of their time." The context and conditions are simply not ready to receive them yet.

> Explore the 'adjacent possible'

We can conclude, then, that the contexts of our time, our epoch and our predecessors are keys to contextual mastery – and setting priorities. We must know history and, sometimes, be patiently persistent.

Being "Wrong"

Another long- and well-understood principle in design circles, being "wrong" offers great benefit. The rituals of "investigating options," "exploring blind alleys" and "noodling with ideas" have long been part of design's trial-and-error method – a routine in which we learn from our mistakes and eliminate certain contexts. Steven Johnson suggests "transforming error into insight" as a more erudite way to describe the process. Just over a hundred years ago, in 1922, even T.S. Eliot wrote of the value of going in circles in his epic poem, "The Waste Land":

"We shall not cease from exploration

And the end of all our exploring

Will be to arrive where we started

And know the place for the first time."

-

T.S. Eliot
"Little Gidding" (the last of his "Four Quartets")

You won't find a more pragmatic and poetic example of contextual awareness (or knowing what's right when we see it) for the second time.

Exaptation and Stacked Platforms

Evolutionary biologists have coined a word that seems helpful to describe another mode of idea generation: "exaptation." The term describes appropriating a concept developed for one purpose and using it for another. Gutenberg's invention of the printing press is an example. By taking the screw press from winemaking and adapting for use in his printing press, "he took a machine designed to get people drunk and turned it into an engine for mass communication," per Johnson.

Here's some good news: Modern-day, contextually aware designers can now rely upon what computer programmers call "stacked platforms" to increase the velocity of acceptance and usefulness of their ideas. Think of them as stepping stones, tools or systems that rely upon one another to enable and accelerate work. Via stacked platforms, you no longer need to know how to write computer programming code on your own, how to design a computer or why. You simply use a friendly graphical user interface or the power of Google's search engine to do your research for you via connected, already-developed technologies. Think of them as nested "contexts" of their own.

Ranking Basics: The Eisenhower Grid

But back to our problem, having generated countless concepts and lists of things that could and should be done, how do we best approach the winnowing process to evaluate and rank our possible actions? One of the most widely used devices is an old chestnut called the Eisenhower Matrix, also called Box, Grid or Prioritization Framework. It was used by our former president Dwight D. Eisenhower. In this four-square matrix, possible actions are classified on two scales: urgent and important. Analyzing decisions and actions against these two axis scales helps you place possible tasks in the quadrants as one of four

types: things you'll do now, schedule for later, delegate or delete. Urgent and important things are placed in Quadrant 1 (upper left in the grid). Important but not urgent tasks such as long-range planning are placed in the upper right, Quadrant 2. Urgent but not important elements like interruptions, distractions and phone calls are logged in the lower left box. Finally, items that are not important or urgent (such as trivia, busywork and time wasters) are tucked into the lower right box. With this simple analysis tool, deciders can easily see which things to work on first.

A variation on this approach is to go through your list and triage it. Classify tasks as Priority 1s, 2s or 3s. Then, cycling through the list again, establish a rank order of urgency within each set of 1s, 2s and 3s. If you've done this digitally, say, using a spreadsheet, you'll find it easy to re-sort your items and clearly set one thing as the priority – the thing that must be done now.

What to do next? Hundreds of successful management experts from Peter Drucker to H. Ross Perot to Tim Ferris

have advocated one simple approach to the next task. Having classified and evaluated the possible actions, select the one most critical, the one you've decided must get done now or it will invoke dire consequences. Then, work only on that one until its done and then move on to the next one. One thing. Not two. Not six. Not 27. No distractions. Just what's important now.

Shift Happens

With such a seemingly simple system for setting priorities, why is doing it so hard? Because shift happens. Things change. No sooner than you've set your priorities and set about accomplishing that one thing you have deemed most important, a client calls ... there's a leak … we need your input on a business development proposal, the biggest project in firm history … your daughter has been in a car accident … What to do? How to react?

When someone introduces change into our well-laid plans, we are faced with a recurring dilemma: Do we do X, or do we do Y? A or B? You see, resetting and reevaluating priorities is the art and the science of setting them. It's the magic skill that requires judgment. How do we cope with such change?

Deciding Amid Dynamic Contexts

There is no shortage of expert planners who become frustrated and grind to a halt when their best laid plans get reprioritized by external unanticipated events. Shame on them. As leaders, we should know by now that, like rules, plans were made to be broken. Why then are we surprised when they inevitably, inexorably are? Clear thinkers set priorities, fully expecting to have them changed and fully prepared to respond when they are. Football teams fumble. Then they try to get the ball back. Things happen, and they expect them to. Be ready for it.

Contextual and Cultural Awareness

Perhaps the single greatest reason for failure of priority-setters is failing to include the right folks in their thinking and process. Priorities set devoid of context or unaware of the culture in which they will operate are doomed. Look around. Involve the right folks.

Best Practices

After a half-century as a successful priority-setter on Planet Earth, I've gleaned a few personal best practices. I'll share them here.

1. Vision and Values

To begin with, to know where we're going and to advance our progress, we need a clear, compelling vision. That vision must be a values-based, bold, aspirational, directional view of where we desire to go. Visions that don't stretch us, are directionless, vague and nonspecific are of little value, even harmful. Value-based visions can result in a strategy and set of tactics. At each turn we can ask: Does this action support the vision, the mission, the strategy? If not, we can assess if it's time to revisit the vision or to hold our ground. As leaders, making those judgments is what we get paid for. These leadership acts of seeking and anticipating change qualify us to lead. We must make them well.

2. Balance

Is balance required? Well, after decades of misdirected advice from countless experts, we've uncovered a few myths. First, there is no such thing as work-life balance. Work and life are inseparable and integrated. Or they should be. It's only how you choose to spend your time in your current context that matters. In this moment, a radical imbalance of work and life and might be in order because of a short-term deadline. Setting that as the priority doesn't mean you've changed your mind about the importance of your family and friends, just that you've set them aside for the moment. There is no work-life balance, they're all together in a great big mashup called "your life."

3. Single-Tasking and Focus

Despite what the youngsters would have us believe, there is no such thing as multi-tasking. Sure, we may have five programs open on our computer; we may have 11 file folders open on our desktops; we may be sitting in a boring Zoom meeting and daydreaming about another project or sitting in front of the television and reading the latest important news about Kim Kardashian on our iPads. But, in truth, experts tell us we can only focus on one thing at a time. Set your priority and do that one thing well, they advise. Be present for it (or them). If being on vacation is most important now, then do that well and only that.[1]

[1] *Author's Confession #1: A Personal Anecdote*
When cell phones became widely adopted in the 1990s I was a reluctant late-adopter. I feared being constantly connected would render my valuable personal time into a never-off-duty, faster-turning squirrel cage of business and cause an imbalance in the hypothetical "work-life balance." But, for me, the opposite was true. Even on vacation at an all-inclusive island resort, being connected via cell phone was hardly an intrusion. Surprisingly, it kept me easily connected to what was happening at work through quick occasional peeks at my email and voicemail messages. Being "in the know" armed me with real data and allowed me to stop wondering, forget about work and relax. Technology afforded me the luxury to remain true to my current priority: to recharge with family and friends.

Credibility Calls. Life Awaits.

While architects and designers are coveted for our abilities to wrestle with uncertainty, explore options and make creative leaps, we must learn to perform these skills under control, in moderation and at the right times. I have seen too many projects fail because their designers (myself included[2]) were unable to set priorities. In these instances, with the project on the brink of failure due to being over budget or past due, the lead designers and responsible parties whiled away their time doing frivolous handrail details. Needless custom confabulations were generated where other matters demanded attention first. No more. Until we learn how to set priorities like the rest of the world, we will keep ourselves firmly seated at the children's table of professional power and responsibility. Those of us who lack the discipline of critical thinking must learn it quickly or align ourselves with someone who already has it. In our daily human quests to make sense of the world and shape it into our own realities as leaders, making choices is what we do.

Life (and credibility) awaits.

They are important.

Now.

[2] Author's Confession #2: Having witnessed and studied the struggle to think clearly for decades, I took it upon myself to take a personal journey and share my findings. My legacy investigation, "Managing Design: Conversations and Project Controls for Commercial Design and Construction Projects" (Wiley, 2019), is a collection of interviews with leading industry thinkers on the subject. In this "Noah's Ark of perspectives," two voices each from a broad continuum of disciplines (architecture, engineering, construction, academia, trade contractors, technology, etc.) share their thinking on how to do the impossible: set priorities, think clearly and manage design. To coalesce the discussion, the book's second half offers a conceptual model for balancing the many considerations entailed in managing design. I call it the Project Design Controls Framework, a memory palace for cognitively mapping the many priorities – hard and soft – that affect managing creative processes.

> Plans were made to be broken. Why then are we surprised when they inevitably, inexorably are?"

Michael LeFevre, FAIA emeritus, is managing editor of DI Quarterly and principal DI Strategic Advisory. His breakout book, "Managing Design: Conversations, Project Controls and Best Practices for Commercial Design and Construction Projects" (Wiley 2019) was an Amazon #1 bestselling new release.

DesignIntelligence®
Quarterly

TIME CRUNCH

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Time Crunch

Scott Simpson

Senior Fellow, Design Futures Council

Scott Simpson explores an infinite, yet limited, resource.

Time is a funny thing. We can't see it, taste it, smell it or weigh it. It's not even a "thing." We know from Einstein that while time doesn't have a "size," it can stretch or shrink depending on the position of the observer, and so it can have different values based upon who's doing the measuring. Yet time – or the lack of it – seems to govern everything we do. How are we supposed to "manage" something so slippery?

The fear that we are running out of time is so universal there's even a special word for it in German: torschlusspanik. When it comes to managing time, there never seem to be enough hours in the day to get everything done. The best-laid plans can easily be knocked askew by a bombardment of phone calls, emails and various other interruptions, not to mention the leftover items from yesterday's to-do list. We often fall prey to unrealistically optimistic assumptions about how long it will take to get something done (especially when other people are involved!). It's a constant game of catch-up with no end in sight.

Yet the truth is that time is an abundant resource. Everyone on Earth, rich or poor, has all the time there is – the full allotment of 24 hours per day. Nobody gets more and nobody gets less. So, it follows that the problem is not the amount of time that we have, but rather how we choose to use it.

Time is like money in that it can be either spent or invested. Time spent is frittered away, but time invested leads to real progress. Choosing between the two can be tricky. Trying to do too much all at once is counterproductive, because in the

scramble for speed it's easy to make careless mistakes. A good rule of thumb is that if there are more than three priorities, there are no priorities. The rest are bugs on the windshield, serving only to obscure our forward vision.

While some people are good at "multiplexing" (working on several things simultaneously), most are not. They may flutter from task to task like a butterfly, creating an illusion of productivity, but in fact nothing really gets done with the care it should. Ironically, the best way to get fast results is to go slow. Take the necessary time to do things right the first time and you won't have to mop up the mistakes later. Another great way to save time is by deciding not to do something in the first place. Separate the wheat from the chaff and only take on those things that are truly necessary. The rest can be delegated or discarded.

When it comes to setting priorities, there are two kinds: the things that are most important and the things that must be done first. They are rarely the same things. Tackling a job without laying the proper groundwork pretty much guarantees suboptimal results.

With that in mind, what's the best way to organize the time we do have? A good tactic is to think backward. Start at the end: What is the desired result? Then work in reverse from there, step by step, until you arrive at the beginning. Now you have a plan: You know where to start and how to get from A to Z to produce the results you want. This approach helps keep things in focus, but can be counterintuitive for designers, who are fond of the "iterative process" of repeatedly processing several different options simultaneously until, whether by inspiration or exhaustion, the "right" answer finally emerges.

When it comes to design, it's relatively easy to come up with many intriguing options, but it can be devilishly difficult to choose the one, above all others, that will be carried forward

as the final solution. This is because choosing one requires forsaking all others, and designers tend to cling to any and all ideas that might eventually bear fruit. Yet to advance a project, decisions must be made. That is the only way to make progress; there must be roadkill along the way. (The "-cide" in "decide" has the same root as homicide, suicide and insecticide!).

While effective time management may seem difficult, it needn't be. Just know in advance there will be more things to do than you can personally tackle in a day. Choose the ones that matter most and do those first. Delegate the rest. Any tasks that do not make the first or second list are unlikely to be that important. Plan the day in reverse so you can focus on what's most important and why and keep the rest off your radar screen. Don't overload your daily agenda; trying to pack too much in will only create needless stress. Here it helps to be mindful of Parkinson's Law: "Work will expand to fill the time available for its completion." If a task is expected to take two hours, it will, but if just one hour is allotted instead, it's likely the work will still get done. Sometimes faster is better.

Time is the one thing we will never run out of; there is always more to come. It's a bottomless bank account. Learn to treat time as a friend, not an enemy. Think of it as enabling rather than restricting. Then think about Parkinson's Law in reverse: There's always enough time to do something right, but there's never enough time to do it over.

Time is the one thing we will never run out of; there is always more to come.

Scott Simpson, FAIA, is a senior fellow of the Design Futures Council and a regular contributor at DesignIntelligence.

DesignIntelligence®
Quarterly

BALANCING PRIORITIES?

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Balancing Priorities?

Paul Hyett

PPRIBA, Hon FAIA

Vickery Hyett Architects, Founder–Partner

Paul Hyett contrasts public safety in two remarkable industries.

Flying High?

When its front wheels first lifted off the ground, Concorde's engines had already consumed more oxygen during its acceleration down the runway than the entire Swiss nation breathes in a year.

Weighing a mere 70 tons empty, the craft would carry just 10 tons of people and luggage because its fuel load was a whopping 90 tons – some 113% more than the aggregate weight of the plane, passengers and luggage. Seen in this light, Concorde was little more than a highly engineered, beautiful, flying gas can[1].

[1] By way of comparison, a Boeing 747 – of which 1,574 were built – carries 106 tons of fuel, which is 45% of its combined weight and payload.

Figure 1

During takeoff and throughout flight, computer programmes would constantly redistribute the unburned kerosene to keep the plane "trim." Simultaneously, the remaining fuel was used as a coolant for the engine and generator, as well as for the hydraulic and air conditioning equipment. Seen in its entirety, the plane was conceived as a *system* and its design was incredibly sophisticated: At supersonic speed, parts of its external skin reached 127 degrees centigrade, and the fuselage expanded by up to 250 mm in length. Designing a "carriage" that would maintain life-support and comfort in such harsh, volatile conditions at altitudes of up to 60,000 feet and speeds of Mach 2, or 1350 mph, was a tremendous feat.

But the numbers in Figure 1 reveal an altogether dismal story: Only 20 Concordes would be built against the 250 sales required to cover the project's development costs and the 450 the manufacturer had expected to produce!

In preparation for the production run, four prototypes had been made and exhaustively tested (model numbers, 001, 002, 101 and 102). Subsequently, two preproduction models (201 and 202) were assembled for further development testing and design refinement.

Of the 20 produced, 10 Concordes were built in Britain and 10 in France. Prototype 001 was constructed at Toulouse, where, on 11 December 1967, it was wheeled out of its hangar for the first public showing in the presence of the then British Minister for Technology, Anthony Wedgwood Benn[2]. Finally, on 2 March 1969, after extensive ground trials, Concorde took to the skies under the captaincy of Andre Turcat, chief test pilot for Aérospatiale of France.

[2] *For a later, related, brilliant speech by Tony Wedgewood Benn on ethics and wartime bombing, see https://youtu.be/HfXmpJRZPYI.*

CONCORDE: ESTIMATED COSTS, 1962—1973

All costs in £ million at time made

Date of estimate	*Estimated costs*	*UK cost share*	**Increase in costs since last estimate**					
			Total	*Changes in economic conditions*	*Programme slippage*	*Revision of ests.*	*Additional development tasks*	*Other*
Nov. 62	150—170	75—85						
July 64	275	140	105	18	—	47	40	—
June 66	450	250	175	34	—	38	103	—
May 69	730	340	280	107	—	57	115	—
May 72	970	480	240	83	26	22	70	39
June 73	1,065	525	95	65	20	10	—	—
Total to 73		Amount	895	307	46	175	328	39
		Percent	100	34.3	5.1	19.6	36.6	4.4

Figure 2: Source: Peter Hall, "Great Planning Disasters," page 96.

Technological vs. Financial Factors

Around that time, as a junior air force cadet, I flew over Filton airfield in a two-seater de Havilland Chipmunk training plane. Far below, where the British prototype was being built, I saw her undergoing ground trials along the runways. Prototype 002 would first fly on 9 April 1969 with Brian Tubshaw, chief test pilot for the British Aircraft Corporation, at the controls.

The ongoing testing processes were painstakingly slow, and it would not be until some six months later that the French prototype would first break the sound barrier on 1 October 1969.

In technical terms the project was a great success: Supersonic flight was made available to the public for the first time, with the 14 production planes (nos. 203 to 216) completing 83,301 service flights between them, with a total flying time of 248,847 flying hours. In all, this constituted some 233 million miles of flight, during which over one million bottles of champagne were consumed.

But despite these successes, the project was a financial disaster: Between 1975 and 1979 only the state airlines of France and Britain – no doubt under duress – would purchase Concordes, and then just seven each. Thereafter production ceased[3].

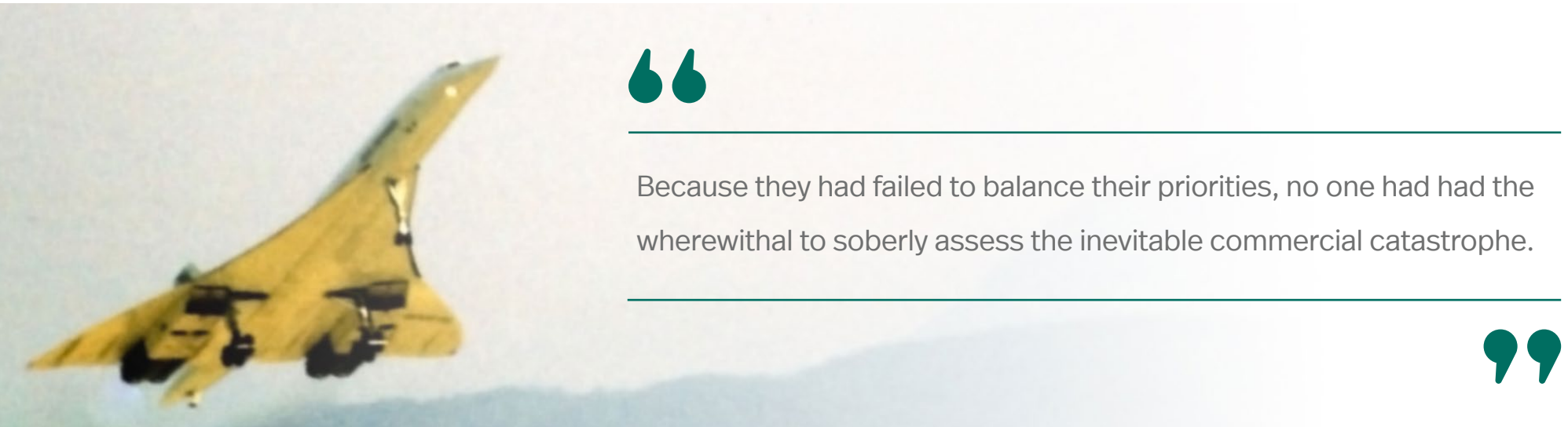
Incredibly, and long before the first production planes even entered service in early 1975, disastrous sales results had already indicated that the project was doomed to financial failure. Figure 2 captures the scale of the budgeting errors.

In short, costs escalated sevenfold during development and ultimately resulted in a twenty-eightfold increase. Under any rational review, the project should have been cancelled multiple times. Instead, the aspiration to get this extraordinary plane safely into the air became a sole priority, which overwhelmed any obligation to respond to commercial trends and market intelligence[4].

Because they had failed to balance their priorities, no one had had the wherewithal to soberly assess the inevitable commercial

[3] *For more on Concorde, see https://www.heritageconcorde.com/airframe-detail.*

[4] *By way of contrast, on 5 October 1930, the British Airship R101 had been launched ahead of clearing all testing on its maiden trip to India. It crashed at a mere 13 mph in France with the loss 48 of the 54 people on board, ending further British development of airships. Its R102 sister ship was also scrapped.*



Because they had failed to balance their priorities, no one had had the wherewithal to soberly assess the inevitable commercial catastrophe.

catastrophe that was in the making and "pull the plug" on the project. Consequently, the respective French and British governments collectively footed a bill of £4 billion for just seven aircraft a piece – a monstrous £14.68 billion or US$ 18.28 billion in today's currency.

Safety at the Fore?

Throughout all this, and notwithstanding the tragic loss of Air France Concorde 203 on 25 July 2000, the matter of safety remained at the fore of the entire endeavour, as it continues to do for all commercial aircraft design, construction, operation and maintenance.

Sadly, this has not been the case within the British construction industry, as has been brought into sharp focus by the horrific fire at Grenfell Tower in London on 14 June 2017, causing the deaths of 72 residents. Commercial priorities – speed of construction, "just in time" production information, poorly trained workforces, an irresponsible instinct for downstream risk transfer and inadequate checking regimes – had each been progressively promoted to a point where they ultimately took precedence over safety in design, product selection and construction. This sad situation was only exacerbated by the introduction, over decades, of a multitude of new materials and construction systems that had not been adequately tested. Against all this, building codes had not been sufficiently updated, and the authority of the state building control system had been gradually and relentlessly undermined.

In the immediate aftermath of the Grenfell fire, the British government instructed Dame Judith Hackitt to conduct a review of the building regulations for fire safety, and she found them deeply flawed and "not fit for purpose." Her report was published in May 2018. Paul Morrell and Anneliese Day KC were subsequently instructed to conduct a similar review of products used in construction, particularly focused on their testing and certification. Their findings and criticisms, published in April 2023, were again damning.

We now await the report of Sir Martin Moore-Bick, who was appointed by the government to lead an inquiry into the fire, but it is already clear from the Hackitt and Morrell reports that, for a long time, all has been far from well within the U.K. construction industry.

Tracing the Demise

I would trace the demise back to the 1984 Building Act, which introduced the 1985 Building Regulations. It was at this point that U.K. construction moved from a largely "prescriptive system" (as still operates in the U.S.) to a "functional system." The reason for this shift was allegedly to encourage innovation in construction methods.

Unfortunately, and however well-intentioned the switch to a functional system, the reality has been that the essential purpose of building regulations – public and user safety – was undermined as product manufacturers, subcontractors and suppliers increasingly sought to game the system by exploiting ambiguities in the government's (nonstatutory) guidance on compliance, testing protocols and the certificates under which products and components were marketed and sold.

In parallel with these changes, Design -Build emerged as a project procurement vehicle and delivery system. Contractors competing for business in an ever-harsher market were thus able to gain substantial control of the product selection and specification roles that had hitherto been the preserve of architects and specialist consultants.

The third major change came about through the introduction

of new construction techniques and technologies. High-rise construction had long been a driver towards progressively lighter materials and systems, especially in external walls, where an ever "thinner" construction was also in demand in pursuit of maximum lettable areas. But, from the 1980s onwards, the eco-agenda intensified the requirements for high performing insulation products – maximum "U" values against minimum thickness. This led to the extensive introduction of polymerics into external wall construction, even in buildings over 18 metres in height, despite being contrary to the advice of the government's guidance as given in "Approved Document B2."

Because priorities had gotten out of kilter, the U.K. construction industry has now found itself with a massive, unanticipated, overriding priority: the regaining of trust.

In sharp contrast, over the same period, the airline industry has never lost sight of the fact that its very existence depends on trust and, in consequence, has never allowed anything to take priority over safety.

Balancing priorities should forever remain a lesson to us all.

The reality has been that the essential purpose of building regulations – public and user safety – was undermined as product manufacturers, subcontractors and suppliers increasingly sought to game the system.

Paul Hyett is the founder of Vickery Hyett Architects, past president of the RIBA and a regular contributor to DesignIntelligence.

DesignIntelligence®
Quarterly

THE WAGES OF SYNTHESIS

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

The Wages of Synthesis

Paul Finch

Programme Director,
World Architecture Festival

Paul Finch examines the architect's duties and responsibilities to a continuum of client types.

Exactly what are the duties, responsibilities and liabilities of the architect/engineer/designer? And, perhaps more importantly, exactly to whom do they apply?

This is a complicated question and one reason why design and construction are a matter of interest to lawyers. But it is a question that involves more than the letter of the law, since it may also concern ethical and moral issues, which, if you are lucky, will not arise over the course of a professional career. On the other hand ...

One conventional answer embracing all the above is that the architect's first duty is to the client. After all, it is the client who pays the fee and sets or agrees to the programme. If you don't like that programme, then walk away. If you undertake it, the implication is you are happy with what is being proposed.

This is why various practices decline to work, for example, on prisons, nuclear power stations or houses for very rich people. Sometimes this extends to avoiding work for particular countries or political/religious regimes. In a free country you are free to pick and choose.

Does having chosen to work for a particular client on a specific project constitute the end of the story? Not really, for a variety of reasons. First come the demands of your professional institution, organisation or registration board. These generally refer to obligations to wider society rather than simply the person or organisation paying your fee. Such obligations may be quite specific or more general, especially with regard to the environmental implications of what it is you are designing.

These are not contractual obligations as such, but they raise a fundamental point about the relationship between designers and what might be described as the "real" client for the outcome of a project. That client is, of course, the users who occupy or make use of the building or facility, potentially over decades or longer.

I describe that relationship as being the "unwritten contract" between designer and users the designer has never met. The fact that is unwritten does not make it unimportant. Far from it, because it has greater significance for a much larger number of people than the initial client. Even where the client is a company or public body, the formal client will be those who sign off on the design. The users will be other people, sometimes in the thousands or, in the case of infrastructure projects, millions.

While a family house may see a close relationship between client and user, at least for a period of time, most other buildings or infrastructure projects affect people who had nothing to do with their creation. A developer creates an office building on behalf of commercial investors, but the users comprise the office workers who will occupy the space for decades. Doesn't the architect have a duty to these people as well as to their formal client? What about the users of a rail station, airport or shopping mall?

“These are not contractual obligations as such, but they raise a fundamental point about the relationship between designers and what might be described as the ‘real’ client for the outcome of a project.”

"Who cares about office workers, passengers or shoppers?" you may ask. But suppose the project is a school with a site bisected by a busy road and the project is to provide new accommodation on both sides. Is it acceptable to force children to cross that busy road if they need to use a particular classroom or facility? Or would it be safer and more appropriate to build a bridge? The latter is more expensive, but the risk of an accident involving pupils is eliminated. What should the designer recommend – or possibly resign over?

This is not just a question for the designer. Each of us might face the occasional moment in a professional career where moral and ethical considerations outgun the prospect of a commission and a fee. Think about that potential road accident involving children: It won't be the contractor who gets blamed or the engineer who designed the road crossing. It will certainly be the architect and possibly the client (who will probably have moved on).

Professional indemnity insurance exists because of a cultural assumption that professional decisions are not identical to those of a purely commercial nature. There are rarely requirements for contractors to be insured – this is an observation, not a criticism. It does, however, point to a different lexicon of priorities that apply to the various parties involved in the creation of our buildings and infrastructure.

These days, priorities around carbon emissions, health and safety, and future-proofing carry far more weight than they did a few decades ago, when there was a greater emphasis on

efficiency of form and operation, a reduction of structural strength to the minimums set in building standards and scant regard for the retrofit potential of what was being created.

Today's design priorities can be summed up in that splendid admonition in respect of what we should design for: "long life, loose fit, low energy." Coined in 1972 by the then president of the RIBA, Alex Gordon, it's as valid today as it was then and remarkably prescient.

When it comes to priorities, the biggest mistake public clients make is to assume that you have to make a choice between quality and quantity, especially in relation to housing. You need minimum space, volume and insulation standards, then designs that are excellent examples of working to a realistic or even tight budget given the context. Expensive buildings are not always well designed, but cheap ones can and should be.

Synthesis is the name of the game in respect of the balancing of priorities, which, we should always remember, are not simply a matter for the design professions. Without collaboration, we have nothing.

“Synthesis is the name of the game in respect of the balancing of priorities”

Paul Finch is Programme Director of the World Architecture Festival (WAF). He started professional life as a journalist in the early 1970s and has edited Building Design, Architects' Journal and Architectural Review, where he launched WAF in 2008. He has been co-editor of Planning in London since 1994. He was a founder-commissioner and later chair at the UK government's Commission for Architecture and the Built Environment (CABE) where he also chaired its design review programme, and its London Olympics design panel from 2005 to 2012. He holds an honorary doctorate from the University of Westminster and honorary fellowships from University College London and the Royal Institute of British Architects. He is an honorary member of the British Council for Offices and the Architectural Association. He was awarded an OBE for services to architecture in 2002.

DesignIntelligence®
Quarterly

CROSSING OVER: INCLUSION IN PHYSICAL AND VIRTUAL ENVIRONMENTS

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Crossing Over: Inclusion in Physical and Virtual Environments

Bill Curtis-Davidson

Senior Specialist, Cadmus

Cadmus' Bill Curtis-Davidson discusses inclusion and accessibility priorities in integrating digital, virtual and physical interfaces and environments.

DesignIntelligence (DI): Welcome, Bill Curtis-Davidson, Senior Specialist in U.S. Public Sector Strategy and Transformation for Cadmus. You assumed your position in 2020. Can you describe your role, your responsibilities and the company?

Bill Curtis-Davidson (BCD): Cadmus is a strategic and technical consultancy compelled to help solve challenging global problems with more than 1,000 consultants serving government, commercial and nongovernmental organizations around the world. I joined the company in Spring 2020 to help lead strategic technology policy initiatives for our U.S. federal government clients. I work with teams focused on helping organizations responsibly develop and implement emerging workplace technologies, such as those that leverage artificial intelligence (AI) or immersive/extended reality.

DI: Our theme for Q3 of 2023 is balancing priorities. In your work, it's the context of making decisions and setting priorities for people in hybrid work. As you integrate new technologies into today's post-COVID, hybrid workplaces, how do you

balance the organization's needs while creating compelling workplaces where diverse employee populations can thrive? What's driving this mission, and is there a strategy?

BCD: Over the last three to four years I've been involved in helping my clients navigate change through strategic use of existing and emerging workplace technologies to support the shift to remote, hybrid work, with a focus on accessibility and the needs of employees with disabilities. Globally, one in five people have a diagnosed disability, so it's a sizable population that overlaps with the many other human diversity factors.

This dramatic shift to telework was a boon to employees with disabilities who had long wanted greater location, flexibility and telework options as workplace accommodations. This led to higher employment rates of people with disabilities and helped organizations develop a more inclusive and diverse workforce.

A recent study of Microsoft employees found that the massive shift to remote work created new challenges.[1] Collaboration is more siloed and less interconnected, synchronous communication is decreased and it has been more difficult for employees to acquire and share new information in the workplace. This shift brought new accessibility challenges. Many leading telework platforms responded to these challenges by advancing the accessibility of their products, such as offering captions and transcription for virtual and hybrid meetings. The need for remote telepresence also was a boon to immersive or "extended reality" ("XR") technologies – an area I've specialized in – which have been more widely adopted to help employees communicate, collaborate and be co-present with each other in new ways.

Globally, one in five people have a diagnosed disability, so it's a sizable population that overlaps with the many other human diversity factors.

DI: What accessibility features of telework platforms help employees with disabilities participate equally in virtual or hybrid workplaces?

BCD: To have an equal opportunity to participate in telework platforms, people with disabilities need to be able to engage in synchronous and asynchronous discussions – as well as with documents and information – in formats accessible to them. For example, having features like automated and human-typed captioning and transcription in virtual meeting tools is important for those who are deaf or hard of hearing, who are neurodivergent and who are language learners. These features are also valuable for everyone as they access information on the go, on multiple devices like tablets and smartphones or when attending meetings in loud or quiet settings. Accessibility features like video pinning can help people who are deaf and lipread and/or communicate using sign language. Video pinning also helps keep an increasingly distributed workforce more engaged in virtual meetings.

DI: You mentioned how XR or immersive technologies are being used in hybrid workplaces to help employees connect and collaborate. How are they being used in physical, built workplace environments?

BCD: XR technologies are beginning to be used more in the hybrid workplace, for meetings and events, training and upskilling, communication and collaboration. There are three main types of XR experiences: Virtual reality (VR) replaces or occludes a user's reality with a new virtual reality setting, which can be fantastical or practical, such as a training warehouse. Augmented reality (AR) layers virtual content, such as digital objects or information, onto real-world images captured from a device's camera. Mixed reality (MR) blends the digital and physical worlds, empowering users to interact with both in real time.[2] While not yet mainstream, people can access XR content in an increasing variety of ways, including using head-mounted displays (HMDs), web browsers, mobile devices and systems integrated into physical, personal or shared workspaces. As XR technologies mature, we are seeing an increased convergence of physical and digital infrastructures that yield new ways for people to socialize, learn, build, conduct business and provide services.

According to Microsoft, "workspaces are being designed to put remote and in-person workers on equal footing. In the new world of hybrid work, teams anywhere can collaborate around virtual whiteboards, brainstorm in totally immersive environments and work productively together at the "office" – whether that's company headquarters, a satellite location or booked workstation, a cafe or airport, or your own home or car."[3]

Steelcase, a global workplace design and thought leader, has said that "all spaces are now video spaces," and organizations should offer a range of different spaces and technology experiences and pay attention to three key concepts to enable better hybrid collaboration: equity, engagement and ease.[4] Telework and immersive technologies are becoming part of four different types of foundational workspace typologies outlined by Steelcase that support hybrid collaboration, social engagement, personal development and learning.

DI: What are the unique challenges and opportunities of immersive technologies in these four foundational workspace types? What should organizations consider to increase equity and inclusion for workers in hybrid settings?

BCD: All four typologies – collaboration, social, personal and learning – include integrated technologies, so accessibility to them is critical to their successful use. Considerations include how co-located and remote participants enter and move around the space, how cameras and displays provide views of coworkers who aren't co-located, support for different modes of communication and languages and access to shared digital content placed in physical or virtual spaces.

In recent years, members of the disability community and accessibility experts have described how we must consider disability inclusion and accessibility when designing VR environments or physical environments where XR and immersive tech is more integrated. This can include considering accessibility for people with sensory, physical or cognitive disabilities when designing accessible social VR environments[5]

> All spaces are now video spaces.

– e.g., navigation paths, entrances and exits, functional spaces, task surfaces, social distancing, lighting, audible cues and more. Virtual and physical environments should consider where structural and task surfaces, communication spaces and people (sometimes represented by avatars) will be placed and how all participants can engage in the space regardless of whether they have a disability. We need to think about how someone who is blind or low vision, deaf or hard of hearing, or with a physical disability would enter, understand and participate in the space on an equal footing with others.

DI: So many considerations in designing tech-infused hybrid workspaces, whether virtual or physical. What else shapes thinking about how people – with and without disabilities – can communicate and collaborate effectively once they access the spaces?

BCD: A few years ago, Steelcase, in partnership with G3ict (the Global Initiative for Inclusive Information and Communication Technologies) published the report "Blueprint for Inclusive Workplaces of the Future." It posited: "Workplaces of the future must be compelling destinations where every team member can contribute – not despite their unique identities – but because of them."[6]

As we adapt our hybrid workspaces to integrate immersive technologies, directly engaging people with disabilities in the planning, design and development of the spaces is critical and will benefit everyone. Designing with access for people who are deaf in mind will help the audible components of hybrid spaces – spoken discussions, presentations, audible cues – be accessible to everyone, including people who are neurodivergent or language learners. Sharing digital content that can be accessed in visual, descriptive/audio or textual form will help everyone participate.

Community efforts like XR Access are engaging the talents and perspectives of people with disabilities to explore the connection between inclusively designed XR and effective hybrid work. In a recent report, XR Access' Business Case for Inclusive XR workstream assembled a diverse research team and conducted independent research on a variety of mainstream and newer startup technologies used in hybrid work settings. The resulting report offers research questions, recommendations and perspectives from actual disabled users to help guide us on a path toward more inclusion.[7]

We are making progress but still have much to do. The priorities are changing daily.

Bill Curtis-Davidson is a senior specialist at Cadmus and an experienced change agent, inclusive product designer and technology accessibility program lead with a stellar track record of over 20 years in the field. He focuses on complex and emerging technologies (such as AI and AR/VR/XR). In addition, Bill brings unique expertise in program design and management, user research, inclusive design methods, accessible product innovation, quality management and maturity modeling.

Culture and team building are central to Bill's success. He ensures clear communication at all levels while motivating and inspiring team members, uniting teams and helping them envision and develop creative solutions to challenging problems. Through this approach, Bill has become a trusted adviser and advocate for disability inclusion and accessibility. He supports numerous public and private sector efforts to develop accessibility standards, guidelines and best practices.

Bill is a ForHumanity Certified Auditor (FCHA) and Fellow who helped develop the first version of the ForHumanity Disability Inclusion & Accessibility audit scheme and co-developed and co-taught ForHumanity's auditor training course on the same scheme. He serves on the External Advisory Board of the Georgia Tech Human-Computer Interaction (HCI) Degree Program and is a volunteer mentor in the LGBT Tech PATHS Program, whose goal is to inspire and empower LGBTQ+ youth and young adults interested in careers in science, technology, engineering, arts and mathematics (STEAM) fields.

In June 2023, Bill was invited to become a member of the Partnership on AI's Global Task Force for Inclusive AI.

[1] *Longqi Yang, David Holtz, Sonia Jaffe, et al., "The Effects of Remote Work on Collaboration among Information Workers," Nature Human Behavior 6 (2022): 43–54. https://doi.org/10.1038/s41562-021-01196-4.*

[2] *"XR Use Cases Fact Sheet: Inclusive XR," XR Association, accessed May 22, 2023, https://xra.org/wp-content/uploads/2021/02/XRA_Slicks_Accessibility_V3.pdf.*

[3] *"How to Reimagine Workspaces for the Hybrid Era: The Right Mindset Can Enable Equal Access for Everyone," Microsoft WorkLab, accessed May 15, 2023, https://www.microsoft.com/en-us/worklab/reimagine-work-spaces-for-the-hybrid-era.*

[4] *"Collaboration in the Hybrid Workplace: A Guide for Designing Spaces to Support In-Office and Remote Collaboration," Steelcase, 2021, https://info.steelcase.com/hubfs/Steelcase-Hybrid-Collaboration-Guide.pdf.*

[5] *Thomas Logan, "Constructing an Accessible Social VR Environment: Interview with Pablo Cárdenas," Equal Entry, February 15, 2021, https://equalentry.com/constructing-an-accessible-social-vr-environment/.*

[6] *"Blueprint for Inclusive Workplaces of the Future: How to Create Inclusive, Safe, and Compelling Workplaces," Steelcase and G3ict, 2021, https://www.steelcase.com/research/articles/topics/people-planet/blueprint-inclusive-workplaces-future/.*

[7] *"The Value of Inclusively Designed XR Workplace Tools," XR Access, August 11, 2022, https://xraccess.org/bcxr-report/.*

DesignIntelligence®
Quarterly

ARE WE THERE YET?

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Are We There Yet?

Valerian Miranda, PhD, FAIA

Valerian Miranda examines the changing priorities and relationship of the academy and the practice of architecture.

Provocation

At a recent Design Futures Council summit, presenters comprised a representative mix of architectural academics and practitioners. In that event, several practitioners reacted with vocal consternation to a provocative suggestion by a national figure in architectural education:

"The sole purpose of architecture schools is not to train students for practice."

While the suggestion was timely, the resulting consternation was equally understandable. More importantly, the exchange and subsequent discussion highlighted a host of complex issues confronting current architectural academia and practice.

These days, architectural practices range from sole practitioners geographically focused on a single town to multi-thousand-employee, worldwide firms. Commensurately, project budgets and scopes vary from well under one hundred thousand dollars to well over one hundred million dollars. As a result, practitioners have different expectations around the essential knowledge and capabilities of graduates of accredited programs.

To further frame the discussion, consider that 125+ accredited architecture programs currently offer professional degrees that range from 150-credit Bachelor of Architecture degrees through

several Master of Architecture degree options to 210-credit Doctor of Architecture degrees. These programs are housed in a variety of institution types, from mammoth, research-intensive (R1) universities to single-unit specialty schools. One could easily visualize that this difference will affect funding levels, technological resources and other aspects. It follows that qualifications and performance expectations for faculty members at these institutions will differ considerably. All this despite the architectural profession's ever-present need for a level of uniformity in the minimum capabilities of students graduating with accredited degrees to support consistent standards of care in practice.

Exacerbating these inequalities is the existence of no less than 55 architectural licensing jurisdictions, many with different requirements. In the U.S., a country that has just one architect for about every 3,000 citizens (a low rank among developed countries), we still do not require an architect's services for a sizable portion of our non-infrastructure construction.

An Expansion of the Profession

Given the realities outlined above, and the fact that architecture billings are not growing at a rate commensurate with the growth of relevant spending on construction, rehabilitation, operation and management of the built environment, it is reasonable to suggest that a change in approach is due. One such plausible new direction is to consider expanding the traditional notion of architectural services to encompass other revenue-generating functions serving societal needs in designing, managing and experiencing the built environment.

Articulating the value of these services (beyond traditional ROI) and their broader societal benefits and implications may be an appropriate next step. A few leading firms and schools have already begun to move in this direction and are investing the resources to catalyze such developments.

The conversations and debates will continue, with no near-term agreement in view. And such a dialogue is positive! Beneficial change in architectural practice will likely be achieved with more speed, effectiveness and flexibility than can be currently achieved in academia because practice is free of the disciplinary and provincial baggage of the past and subject to the urgencies of life. Our more inclusive and connected society now demands services that will determine market demand and will self-select areas of emphasis and specialization in education. The profession of architecture – and the architectural academy that supports it – must change quickly, because in these fast-moving, fluid times, allied professions and fields are not waiting around to follow our lead. Beyond just encroaching, they are invading.

A couple years ago, at an academic conference, I overheard a discussion related to "where is the most appropriate place in the curriculum to introduce digital technology?" Really? Change in academia invariably requires the sacrifice of sacred idols. We've seen this movie before, over the two decades it took for digital media to become the norm. To succeed, the digital revolution had to contend with many personnel retirements, positions that could be replaced with more current and relevant expertise, along with concomitant changes in design process.

Curriculum Change Opportunities

In that conference, a cursory examination of a large sample of schools offering accredited degrees in architecture identified areas for change that could be generalized. These schools were not a random sample, since obvious outliers were excluded in advance. Common areas identified as offering potential included: curriculum, facilities, faculty, expertise and resources.

In fairness, it should be stated that current conditions for accreditation (which are regularly revised) are comprehensive and not prescriptive. They typically include required coursework in program criteria, student criteria and a self-assessment.

In all examples of the required curriculum examined, it was difficult to find any courses or content considered superfluous or unnecessary. Yet these curricula overwhelmingly did not include content that would contribute to more relevant future knowledge and capabilities. Typically, required courses occupy so much of the curriculum that there is insufficient time and space for elective courses. This is true particularly in allied disciplines, which are arguably increasingly relevant to a student's future in a changing world. Clearly, the importance of several "sacred" courses must be prioritized and reexamined for content and delivery method. Too much of current architectural education relies on outdated models such as the "sage on the stage" and the "studio master knows all."

The world simply doesn't work that way anymore.

Research Emphasis

Professional education now relies more heavily on research as a way of advancing knowledge and fostering innovation than ever before. This renewed emphasis on research is a culture that leading institutions are encouraging through design studios. Flipping through pages on the internet or doing Google searches and copying information does not constitute research! Such activities are mere information searches, scarcely more rigorous than the average layperson's scrolling for the latest Kardashian news. Hypothesizing, analyzing, concluding and documenting are all essential components of rigorous research that lend themselves to dissemination, replication and external review. They are also fast becoming essential components of design studios in schools around the world.

It is widely accepted that students are more knowledgeable and facile with digitally driven technologies than the current faculty in architecture schools. I shudder to think of the consequences of a similar situation in, say, medical education. There are several solutions, team teaching being just one, that can be used successfully. The notion issue that students should be encouraged and empowered to develop new skills remains vitally important but underserved.

Despite all the reliable tools that exist, it is not yet a priority that several aspects of design performance (beyond mere building energy use) are simulated to test their appropriateness and success in relation to alternatives. In other fields, simulation – in all its forms – is now a common component of any design endeavor. Sadly, in this regard, architecture remains the exception rather than an integral part of the emerging, higher-order rigor. Adding value through social and experiential relevance is a rapidly growing concept in several design and creative fields yet remains unattended in architectural pedagogy.

> Typically, required courses occupy so much of the curriculum that there is insufficient time and space for elective courses.

Elephants and Artificial Intelligence

Now, for the baby elephant in the room. Out of curiosity to see what an artificial intelligence platform might contribute to this article, I queried OpenAI's ChatGPT to identify issues currently facing architectural education. In three seconds, I received the answer, organized in seven clear, succinct points. Point seven was:

"Pedagogical approaches: There is ongoing discussion about the pedagogical approaches used in architectural education. Some argue for a more hands-on, studio-based approach that emphasizes design exploration and experimentation, while others advocate for a more research-oriented approach that integrates theory and practice. Balancing these different approaches and finding the most effective teaching methods is an ongoing challenge."

Reactions, Questions and Actions

I was gratified to see that AI did not infer that architectural education has the sole purpose of training students to serve practice. I was dismayed to see that the term "ethics" (near and dear to me) did not appear anywhere in the 450-word answer and could not be ascribed to any human source.

Collectively, we have much work to do and many questions to answer:

- Should we be encouraging students to lead the change?
- What is the role of practice in spearheading change?
- How do we inculcate values like ethics and empathy in design school curricula?

To weigh the repercussions of such questions and help us set priorities, it may be worth reexamining an often-quoted concept attributed to Bill Caudill, FAIA,[1] who in the 1950s and '60s

"ran his office 20% like a school and ran his school 20% like an office."

In a world that is increasingly inclusive and connected, we would do well to direct our gaze inward and outward. Only through a synergistic, symbiotic view of practice and the academy will we chart a new path forward.

We are a long way from "being there" yet, but with empathy and awareness, adaptation and action, we can make it.

[1] *William Wayne Caudill, FAIA, 1985 AIA gold medalist, was a founder of the innovative, mid-century firm Caudill Rowlett Scott (CRS) and dean of architecture at Rice University.*

> Consider expanding the traditional notion of architectural services to encompass other revenue-generating functions serving societal needs in designing, managing and experiencing the built environment.

Valerian Miranda recently retired from Texas A&M University as the Wallie Scott Professor of Architectural Practice & Management and director of the CRS Center. He currently serves as adviser to the CRS Center, IPAL & AXP.

DesignIntelligence®
Quarterly

RE-IMAGINING DECISIONS: SPECIFICATIONS, AI & BEYOND

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Re-Imagining Decisions: Specifications, AI & Beyond

Vardhan Mehta, AIA CSI

Architect & CEO, Acelab

Dave Lemont

Former CEO, Revit & Executive Chairman, Acelab

Supercharging design value with intelligent specifications.

The Current Landscape

Architects as Influencers

While an architect's standard of care can vary by project, certain roles remain constant: Consulting team leader, client domain expert, contractor guide and occupant advocate are some of the most common. In championing aesthetics, performance and sustainability, we strive to create buildings that are beautiful, functional and environmentally friendly — a better built environment for everyone. At the core of each of these functions is our ongoing need to make decisions. But how do we go about it? What are the priorities and processes to ensure good choices?

Decisions, Decisions

In all design phases, architects are charged with the evaluation and selection of the products, materials and systems that comprise our buildings. For thousands of years, we've used a largely intuitive and less-than-rigorous process to do it. Product selection — and their subsequent specification — is one of the most significant channels through which architects wield their influence and impact. Architects in the U.S. specify over $100 billion-worth of building products, materials and assemblies annually. Research shows that 73% of all products specified by architects end up in the project — a profound opportunity to maximize project success. But our specification workflows have only minimally evolved over the past three decades, while the number of building product solutions available in the market

has quadrupled. We have witnessed the transformational power of technology on design practice with CAD and BIM, but the way we discover, organize and collaborate on product specifications is outdated and inefficient. It's time for a revolution.

The Specifications Dilemma

While specifications shape the cost and performance of buildings, their workflow has been historically boring, tedious and time-consuming. From discovery to documentation, access to data is fragmented and siloed, making it difficult to find the information you need when you need it. It has also been difficult to collaborate on specifications, as different stakeholders often use different tools for research, spec creation, submittals and RFIs. This often leads to errors, delays and missed opportunities. Studies done in the U.K. suggest that 35 cents of every dollar spent on construction is wasted due to mistakes, errors and rework.

There is also an external challenge at play. As architects, we tend to rely on what we know. We're taught in school that our experience, knowledge and intuition are of great value. But with the rapid innovation in the building products industry, it's impossible to keep up with all the product options on the market. To put this in perspective, there are currently over 165,000 architectural buildings products being sold in the U.S. across 37,000+ manufacturers — and these numbers are only growing.

The next challenge is the generational gap. The majority of architecture students and graduates aspire to become design architects. Many lack interest in grasping the technical aspects of practice. This predicament is leading to a dire shortage of specifiers and spec writers to fully support the active project work at most architecture firms and a widening gap in the product selection discipline.

As a second-generation architect, Vardhan Mehta experienced this issue firsthand upon graduating from Pratt Institute in New York and entering practice. As a junior architect working on institutional projects for clients such as the State Department, MIT and Yale, Vardhan was constantly tasked with product research, comparison and reviewing specifications. At work, he felt like he was stuck in a time warp — his firm still relied on paper catalogs, brochures and sticky notes to specify.

Outside of work, he enjoyed access to digital tools that simplified access to the information required for daily life. He desired to grow his technical chops but lacked the right resources to do so. For instance, he realized that his firm constantly repeated product choices to stick to what they knew how to detail and visualize. Anecdotal evidence from architectural school friends confirmed that most firms select products that way. But it made him question his work. Was this the best way to find optimal product choices for projects? Are we performing our duty as experts to the client? Are we missing an opportunity to design beautiful, high-performance and sustainable projects because we lack knowledge or awareness of superior solutions — or have no way to manage the data? Sadly, the answers to these questions were yes.

Re-Imagining Specifications

Current market conditions have put enormous pressure on architects to find alternative products due to product substitutions and value-engineering activities. To cope, architects often recycle specs or copy-paste from previous projects, but many of those products are no longer available due to price, availability or being discontinued. This can lead to

delays and increased projects costs.

Most of the architect's time is spent on design documentation and coordination. In reality, product research can drastically affect achieving the project potential. Nine out of 10 small to mid-sized architecture firms in the U.S. currently lack a standard specification workflow or firmwide library. And after multiple revisions and price quotes, we have also seen product literature get lost across email threads, phone calls and sticky notes. All this has led to increasing errors and declining productivity. What can we do to right the product selection ship?

A New Toolset Emerges

Technology as Savior

Since the dawn of the digital revolution, we have witnessed its impact on our personal and business lives through intelligently harnessed data reuse and flow. But what about designers and builders? Perhaps our industry should explore IT's potential to help architects find optimal products on projects.

A few decades ago, Dave Lemont, as the former CEO of Revit and general manager at Autodesk, helped spark the revolution to improve how buildings are designed and documented. Through software, he helped the industry understand the benefits and agility afforded by a 3D parametric model. After many years as a CEO of four other venture-capital-backed startup companies, Mr. Lemont has returned to his passion for the AEC industry as the executive chairman of Acelab to help move the industry forward toward another revolution: a radical rethinking of product research and specifications that is sorely needed.

Curation by impartial experts and large data models could address the present specification challenges. Curation would collect and organize information from multiple sources. This would be analyzed and presented in an easy-to-use format. Large data models could identify patterns and trends in product data. This information could help architects make better decisions about which products to specify. For example, a large data model could identify products that are most likely to meet performance requirements.

The combination of curation and large data models would make it possible for architects to systematically compare different products and optimize their specifications.

> At the core of each of these functions is our ongoing need to make decisions. But how do we go about it? What are the priorities and processes to ensure good choices?

Current Product Research Workflows

Per the American Institute of Architect's data, 87% of U.S. architecture firms currently research and specify products thus:

- Data is saved on local servers, SharePoint and Google Drive — difficult to keep information up-to-date and organized.
- Architects get most of the information directly from manufacturers, who are, by definition, partial to their own products.
- Manufacturer websites are often difficult to navigate, unorganized or outdated.
- Legacy specification software only supports documentation, doesn't address product discovery or collaboration with suppliers leading up to it (no decision trail or tree).
- Specification platforms often only list products from manufacturers that pay them, limiting the architect's ability to comprehensively evaluate all available solutions.

What Architects Need

As an alternative to the disconnected current workflows described above, we believe the profession is ripe for a new toolset, one that enables and provides:

- On-demand collaboration with product reps and technical support teams, on the architect's terms.
- The ability to optimize specifications based on factors such as cost, availability, performance, aesthetics and sustainability.
- Transparency and comprehensiveness while evaluating products.
- Impartial insights from practicing professionals such as spec writers, fellow architects and discipline experts.

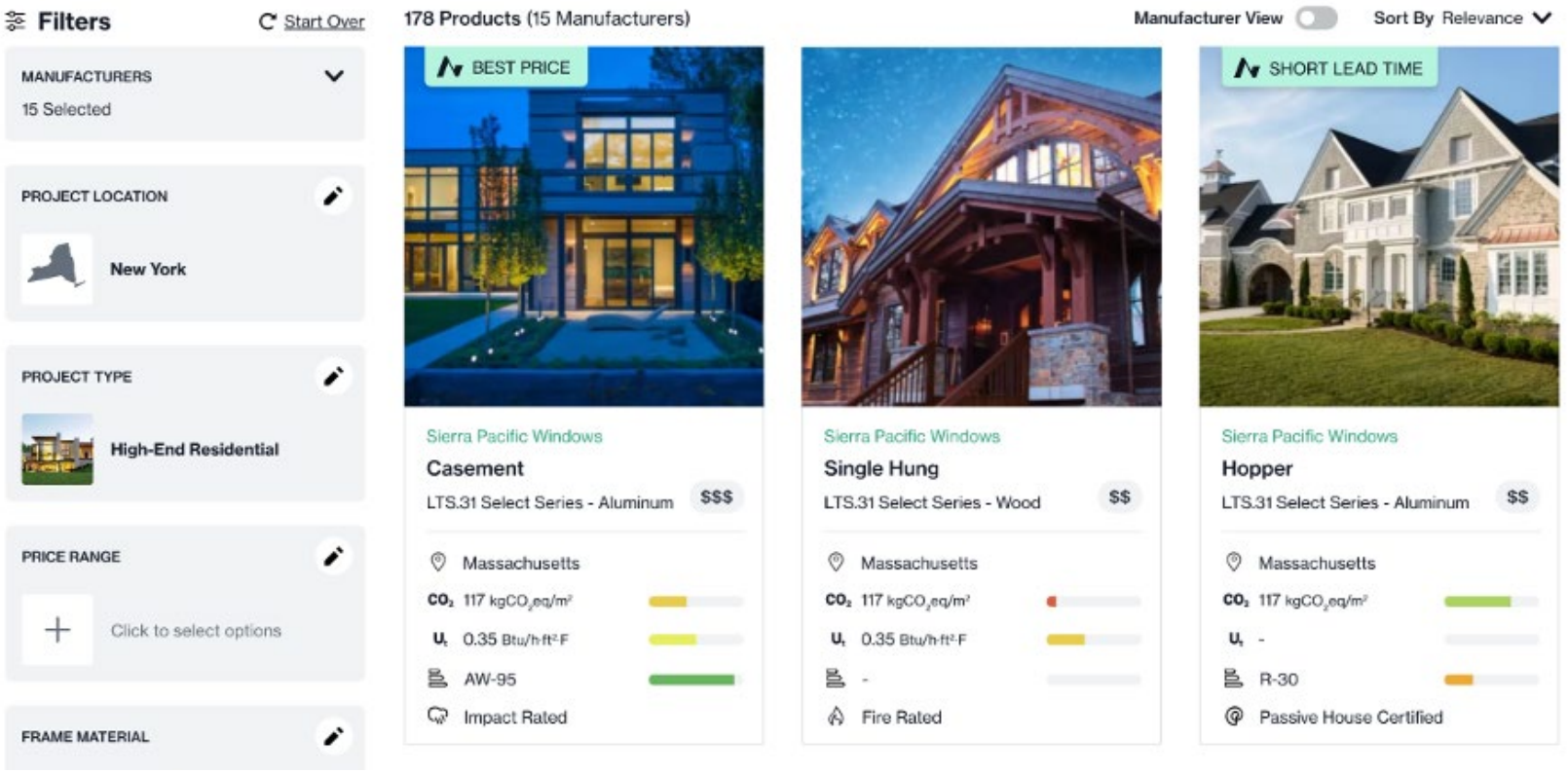


Image courtesy Acelab

Acelab: An Emerging Product Selection Platform Built for and by Architects

In response to this market need, over the past three years our team has collaborated with a group of architects to develop Acelab, a visual product selection platform that saves architects precious time on every project by allowing them to discover, organize and collaborate on product specs — all in one place.

Here is a sample screenshot of a typical project analysis for residential windows:

Acelab's platform is currently being used by over 9,000 architecture practices around the country, including well-known firms such as Gensler, SOM and Storybuilt as well as many small to midsize firms. Acelab's product database has also grown to over 39,000 products across categories such as windows, doors, cladding, roofing and insulation. The current website includes:

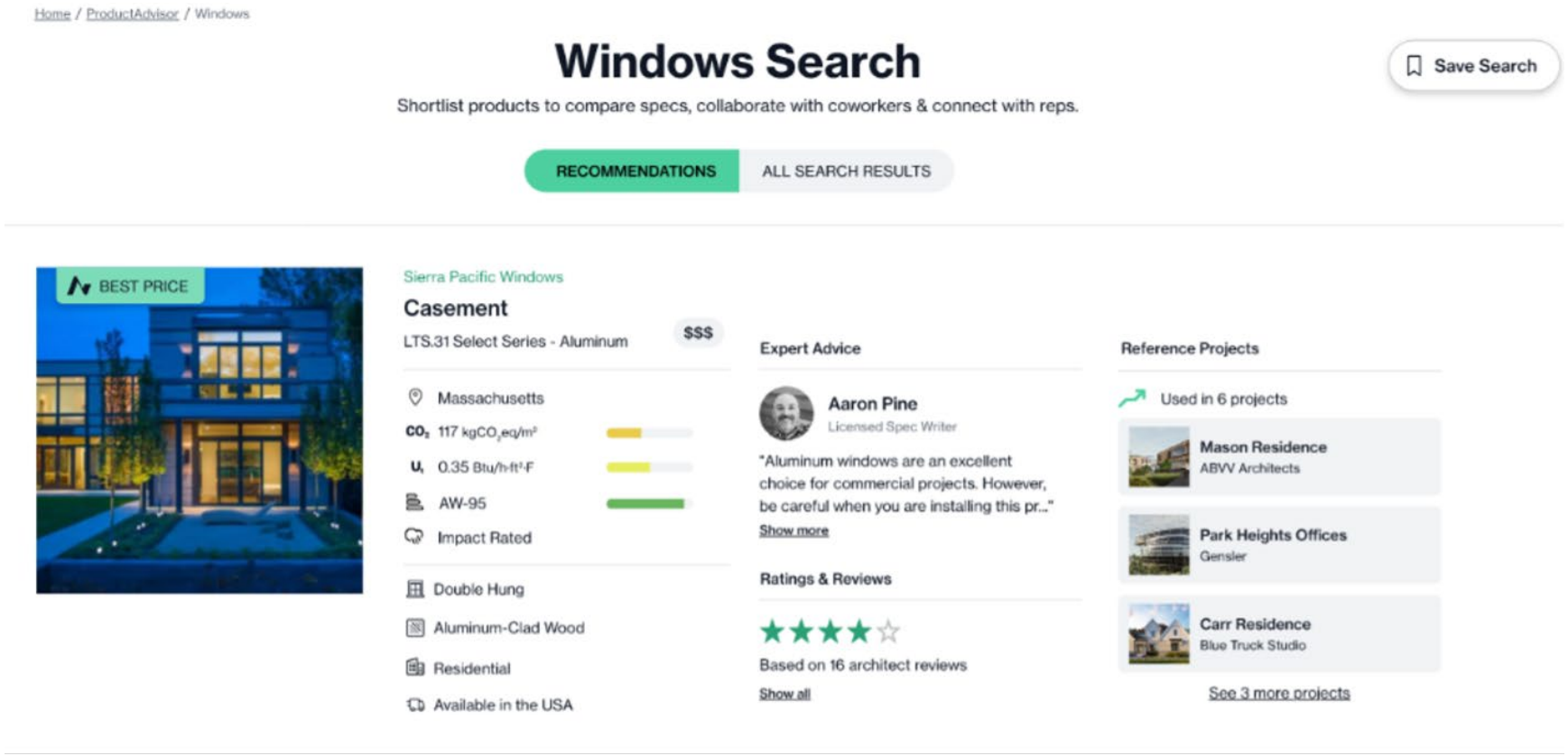
- ProductAdvisor: Acelab's proprietary search mechanism, ProductAdvisor, visually guides users through the building product ecosystem with the right questions to ask step-by-step.

- Project Workspace: Architects can organize their product shortlists in a personalized Project Workspace and share it with colleagues.
- Collaboration Portal: Acelab's new, in-platform Collaboration Portal allows users to connect on demand with an Acelab product expert or a manufacturer's specialist for critical product information, quotes and lead times.

[Welcome to Acelab]

Embracing the Transformative Potential of AI in Specification Workflows

Artificial intelligence (AI) and large language models (LLMs) are already beginning to transform how architects generate schematic designs. We believe these technologies have immense potential to streamline specifications. They are currently training an AI model capable of the following functions:



Recommending Products

These new technologies are training the AI model on a data set of building projects and their associated product specifications. The model will soon be able to recommend products to architects based on their project requirements, helping them optimize for factors such as price, availability, performance, sustainability and aesthetics.

Analyzing Trends

The AI model also analyzes product data trends. This information helps architects make better decisions about which products to specify. For example, the model identifies products becoming more or less popular. This information helps architects avoid specifying products that are becoming obsolete.

Generating Spec Sheets

Acelab's AI also generates spec sheets for architects. This frees architects' time so they can focus on other aspects of the design process. Spec sheets generated by AI and LLMs are more accurate and consistent than manually generated spec sheets.

Action Required

After thousands of years of winging it, it seems logical that the design and construction profession should join the digital age in how we process, evaluate and present product data. Our clients, collegues and constituents deserve it. Our buildings and planet do too.

Contact us at Acelab to continue the discussion.

David Lemont is an accomplished CEO, go-to-market strategist and adviser with over 30 years' experience guiding high-tech startup companies. He has extensive experience in SaaS business applications with keen expertise in construction technology, having managed five companies to successful exits to high-tech leaders such as Autodesk, Trimble, HP, Oracle, etc. Best known for his role as CEO of Revit, the predominant way buildings are designed in 3D today, he joined Acelab with a vision to change the way architects automate product research and specification, passionate about how blending technology and design could empower architects to create better, more sustainable built environments for their communities.

Vardhan Mehta is the co-founder/CEO of Acelab and a former architect. Originally from central India, he graduated from Pratt Institute School of Architecture in 2018 with a B.Arch and worked as an architect at Weiss Manfredi, a leading New York architecture firm. He was awarded the coveted Presidential Merit Scholarship and gold medal at the Asian Design Awards, among other travel and research grants. He has also won three international design competitions in France, China and Berlin. In May 2021, Vardhan graduated from the Harvard University Graduate School of Design with a Master of Architecture degree in Urban Design. During his time at Harvard, he co-founded Acelab, a vertically integrated building products marketplace connecting architects and manufacturers, based on his firsthand experience in professional practice.

DesignIntelligence®
Quarterly

IMAGINE A WORLD? PARTS 1 & 2

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

Imagine a World: Part 1

Pascale Sablan

NOMA Global President
Founder, Beyond the Built Environment
Associate Principal, Adjaye Associates Architects

Pascale Sablan connects advocacy and architecture.

DesignIntelligence/Michael LeFevre (DI): We're joined by Pascal Sablan, FAIA, NOMA, LEED AP, global president of the National Association of Minority Architects (NOMA) for 2023 and 2024, AIA Equity and the Future of Architecture committee member, AIA Whitney M. Young Jr. Award recipient in 2021, founder of Beyond the Built Environment and "Say It Loud," and an associate principal at Adjaye Associates in New York. An amazing list of accomplishments, and still going. Welcome, Pascale.

Pascale Sablan (PS): Thank you so much for having me. I really am proud to be here and am humbled by the opportunity to connect with your audience.

DI: Our annual theme at DesignIntelligence is pragmatic design. That is, post-COVID, let's stop talking about it, let's do it. Let's get real, get back to work and be practical. Under that annual umbrella, our theme this quarter is balancing priorities. From what I observe, that has a connection to your current pursuits and your mission in life. Would you agree?

PS: Balancing priorities? I don't know how effective I am, but yes, we're trying to find a through line that deals with the idea of

multiple things and create moments where we're able to amplify some when necessary, and at times shift the weight, attention, resources and priorities to be strategic. When I hear the word "pragmatic" there's something I want to push through. I want to make sure it doesn't limit the level of audaciousness we're trying to realize.

DI: I commend the intention and ambition.

PS: That's how the theme lands for me.

DI: You seem to have a clear, compelling mission: to raise awareness about the need for more Black women in architecture – and increasing inclusion in the profession in general. This has been an issue for 150 years, and it seems to be finally reaching a tipping point. At least in terms of awareness, it seems we are reaching a critical mass. But are we ready to be beyond the point of awareness to a place where we have achieved more integration and leadership? Back to being audacious, are we making a difference? Are we doing something? Are we still at the point of awareness? Where are the leverage points and where are you focusing?

PS: My focus has been about women and BIPOC designers – Black, Indigenous, people of color. We're trying to think about justice as it relates to society and the profession, equity, diversity and inclusivity. Regardless of the various hats I wear and the different organizations and firms I'm a part of, the work is consistent. The mission is always the same. It's just leveraging different vehicles, resources, tools and networks. In certain spaces, this is a moment of awareness, but in other spaces I've been occupying, it's part of our foundation and we've always been working toward action.

I used to have visceral responses or reactions to this question. But it's not finally, or just now, it's always been an important topic for me and for marginalized communities. It might just be something you are aware of now, but it doesn't mean we haven't been here doing this work. At NOMA, we are beyond awareness as an organization, the understanding and awareness of the issue. NOMA was founded and structured on the principles of finding equity and justice and action. Similarly, at Adjaye Associates, in the work we do and the communities we serve, that's been part of the model. But there are other professional

spaces I've participated in and organizations I've been engaged in where this is new. And we set some large, audacious goals as a result.

What has been inspiring for me to witness and be a part of is seeing people start to formulate strategies for how to achieve that. I saw those strategies, policies and structural changes start to be implemented. Now, as a leader in this space, I find myself in conversations about reporting on progress. One of the biggest challenges NOMA has been spearheading that increasing the number of African American architects in the profession. And this is something that goes to what are the issues that are limiting it.

NOMA is now part of the six Alliance organizations. They are the American Institute of Architects (AIA), the Association of International Architecture Schools (AIAS), the American Collegiate Schools of Architecture (ACSA), the National Architecture Accreditation Board (NAAB), the National Council of Architectural Registration Boards (NCARB) and NOMA. We meet twice a year, and our executive directors meet multiple times a year. Our common goal is to leverage our resources, share what we're doing and set goals and milestones that help each other track trends and report on how we're doing. Part of that work at NOMA is that we took over the production of the directory of African American architects originally started by Dennis Mann and Bradford Grant. In that work, we've been able to keep track of the number of African American licensed architects from year to year.

Mann and Grant started the directory under the University of Cincinnati. In January 2020, Cincinnati decided not to fund the directory anymore, and so it shifted, and NOMA took it over. We've also created the AIA Large Firm Roundtable (LFRT) and the NOMA 2030 Challenge, which was about doubling the number of licensed African American architects by the year 2030. At the time we started that pledge, we were at 2,299. As of today, I believe we're at 2,501. The goal is to get to 5,000 by the end of 2030. To further that initiative, we've created partnerships and have been working with firms toward that end. We've been leveraging that as the tip of our spear as we work with the other alliance organizations to move that forward.

What you're starting to see is these organizations starting to publish, share, document and implement policies that speak into the systematic issues that make it challenging for women and diverse designers to enter the space and how that's starting to transform the profession. A lot of us in this work have been well beyond awareness for a while and are now in the action mode. The group I think that's still in the awareness-raising stage is general society. There, I don't know if we've yet been able to successfully make the argument to everyone about the important roles they have in designing and deciding their built environments and spaces. That's why it's important to engage with us as a profession to help solve the issues plaguing their communities.

As it relates to the profession of architecture, I think we're past the tipping point and are now about action. We're evaluating which actions have yielded the best results and what tweaks and adjustments we need to make to our strategies to amplify those impacts or where we should pivot to find other ways of accomplishing the same goals. From a societal standpoint, that's where the awareness work still needs to happen, and we're still growing in that capacity. I would want the action to be tethered with that messaging so society can become aware of it and take actions and steps to engage in meaningful ways.

DI: I'm excited to hear you talking about the six organizations forming an alliance. As we talk about the growing

responsibilities in our profession, there's discussion that we've got to work in newer, bigger, systematic, transformational ways. You can't just do it on your own. You are doing that with clear goals, results reporting and an action focus.

PS: Collectively as a profession, we acknowledge it's not just the marginalized groups that need to do the work. We've all accepted our roles. Each of these organizations have programs and initiatives they've developed with their membership and leadership in mind. They're saying, in this large issue we are working toward, "This is our piece we can start to dismantle." There's a huge sense of urgency and accountability being leveraged to transform those organizations to move that mission together. That's empowering for me and fuels my passion to see this not fall on deaf ears. By sharing the story, by keeping track of these metrics and what we've been doing, by letting people know about resources, we're able to make changes and make progress. We are in a different place today than we were in 2020.

DI: Your passion is clear. I just saw your first address as NOMA president and your energy is infectious. Where do you get that energy? Can you talk about some of your mentors who helped and shaped you? How did you get here?

PS: I have always had a bubbly, happy personality. It's a great way to walk through life. The issues we're dealing with are serious, but it doesn't mean we can't have joy in the work we're doing. That starts to translate how I communicate my ideas or our ideas and how I engage different communities. It's not from a position of shaming or doom and gloom, but from a position of: It's okay, we can do this. This is within reach. This is within our lifetime to solve. Imagine a world where we've effectively unlocked these chains and shackles, when we didn't have to navigate and operate around ridiculous obstacles. What kind of freedom would it yield in the profession when people can be their authentic selves and be welcomed into the profession in meaningful ways?

Throughout the years, I've had incredible mentors. One of my first was a wonderful boss who transformed how I saw myself in a leadership role and empowered me to feel like a leader. That's Sadir Jean Baker. He was a partner at FX Fowle, now FX Collaborative. He was in charge of the international studio I was part of. He poured so much leadership skills and knowledge into us. When we had client meetings, he would say, "Okay, this part of the design, Brian did, and this is what Noble came up with, and this is the part Pascale did." I'm seeing him present to clients saying our names. It was never: "This is what I did." He was always so generous in acknowledging the team's contributions and was consistent and relentless about it. It was beautiful to see. It never dimmed his light.

The amount of time he was shining light on other people never took anything away from him as a leader. That made me respect, love and revere him even more. That started to frame how I saw myself as a leader in this profession where it wasn't and isn't about me, it's about everyone else. It's about highlighting that. I have nine siblings, so it's also about being different and being loved. You are not going to be identical to your siblings. You're going to need and want different things and be able to say, 'Wow, did you know this person did this and did you know what that person did?'" Being able to cheer people on as if it was your own win was fundamental.

The way I've been navigating with advocacy work has been about collective responsibility. Knowing sometimes I'm putting in the work that won't have a direct impact to me but will help someone else. That's something I've learned from my big family. In volunteering at AIA, NOMA and all these other organizations like the Mary Louis Academy, where I was a board of trustees member for many years, we worked so hard to dismantle sexism, racism and other forms of oppression. But I saw a gap. When are we celebrating? When are we elevating? When are we cheering? That's what compelled me to create Beyond the Built Environment, to specifically address that gap I was seeing.

Because I had participated in a meaningful way in these different organizations, I already had the network established. I knew who I was partnering with. We've hosted 36 "Say It Loud" exhibitions so far, which have elevated the work and identities of 918 incredible, diverse designers globally. These exhibitions are almost always in partnership with a local NOMA or AIA chapter – some local group that helps move the agenda and the mission forward. It's collective work we're all pitching into. I'm happy being the "very loud cheerleader" spearheading the effort, but it's really about elevating and singing about the accomplishments of women and BIPOC designers in the profession and making sure their diversity is documented to transform our profession moving forward.

DI: Did you have early leadership influence from your family, or did it evolve? There's a difference between a late-to-the-game leader who was lucky to find that spark and those seemingly born or destined to it, who had it genetically or environmentally. Where would you place yourself on that continuum?

PS: What a great question. I'm not sure I know how to answer it because I was always an artist. Always drawing and painting. I was commissioned to do a mural at the Pomonok Community Center in Queens, right across the street from Queens College, when I was 12. As I'm painting my jungle gym with this multicultural community, somebody walks by and says, "Whoa, you can draw straight lines without a ruler. That's a cool skill for an architect to have." The person was just thinking out loud,

> This is within reach. This is within our lifetime to solve. Imagine a world where we've effectively unlocked these chains and shackles, when we didn't have to navigate and operate around ridiculous obstacles. What kind of freedom would it yield in the profession when people can be their authentic selves and be welcomed into the profession in meaningful ways?

not necessarily even talking to me, but they said it and kept moving. And I thought, "That's it! Architecture is a profession where I can use my art skills and literally change the world. I'm so excited."

So whenever somebody asked me, "What are you going to be when you grow up?" It was easy. I'm going to be an architect! It was a done deal. There was no hesitation, no wavering or quivering in my voice. It wasn't until I was a junior in high school that I started to apply to schools and universities with this major in mind. My parents said: "Whoa! We have to be certain this is how you want to go. I don't think you fully know what it means to be an architect."

My mom found a "What's an Architect" seminar hosted at One Penn Plaza, in New York. When I got there, it was a boardroom of all boys and I'm the only girl. Of course, my mom came because she wouldn't let me go out by myself. She said, "Pascale, you see, you're the only one."

And I said, "Yeah, but I'm here."

It was such a great program. They took us to newly constructed projects, construction sites, architecture firms, model shops. They literally made the profession as tangible as possible. And I remember sitting in this tiny conference room hunched over this model. I couldn't believe we got to do this for a living. Yes! It gave me that much more confidence in the pursuit. That's why I was strategic about which schools I considered because I wanted schools known for architecture.

That level of confidence and being steadfast in your decision at a young age is rare. And so, I always say I was privileged with purpose. I was privileged to know early on what I wanted. I

don't know that I was privileged by knowing I was a leader. When I was in my second week of architecture school, the professor asked me and another student to stand and said, "These two will never become architects because they're Black and because they're women." That was the first time I realized when I walked into a room, I wasn't just representing Pascale, but I was representing much more. That's the moment I decided I couldn't just study to become an architect, I also needed to be an activist that pushed the profession to avoid those and similar experiences for other people.

I try to inspire other firm leaders to feel confident in empowering their staff who are inclined toward advocacy. To also say to them they don't have to choose between being an architect and fighting for a more equitable and just profession.

I have maintained that commitment in my current role. I am both an architect and an advocate and I believe that you can hold both of those identities at once. I try to inspire other firm leaders to feel confident in empowering their staff who are inclined toward advocacy. To also say to them they don't have to choose between being an architect and fighting for a more equitable and just profession.

DI: That's empowering to make it one thing and not a choice. I look forward to continuing this conversation.

PS: Thank you. So do I.

Pascale Sablan is a visionary architect, activist, and leader who has dedicated her career to making the built environment more equitable and just. With over 15 years of experience in the field, Pascale is a trailblazer who is breaking barriers and inspiring the next generation of architects.

Pascale has been recognized as one of the most influential architects of her generation, with a practice characterized by a commitment to excellence, innovation, and sustainability. She currently serves as an Associate Principal at Adjaye Associates, co-leading the team in the New York office and performing key roles on a range of major international projects. In addition to her work as an architect, Pascale is the founder of Beyond the Built Environment, a non-profit organization that seeks to empower women and people of color in the architecture industry. Through a variety of initiatives, including an annual conference and a mentorship program, the organization provides opportunities for education, mentorship, and professional development.

Pascale is also a leader in the National Organization of Minority Architects (NOMA), serving as the Global President of the organization. In this role, she is working to promote diversity and equity in the architecture profession and to ensure that the voices of underrepresented communities are heard and valued. Pascale's ultimate goal is to realize a just world, where everyone has access to the benefits of good design. She believes that architecture has the power to shape our lives and that by promoting diversity and equity in the profession, we can create spaces that are more inclusive, accessible, and welcoming for all people.

Pascale's impressive career and advocacy work make her an inspiration to architects and activists around the world. Her commitment to diversity, equity, and justice is a powerful reminder of the potential of design to create a better world for all people.

Imagine a World: Part 2

Pascale Sablan

NOMA Global President
Founder, Beyond the Built Environment
Associate Principal, Adjaye Associates Architects

Pascale Sablan connects advocacy and architecture.

DesignIntelligence/Michael LeFevre (DI): Pascale Sablan (PS): Congrats on your NOMA presidency.

Pascale Sablan (PS): NOMA has had an incredible lineage and legacy of powerful presidents. I think I'm the 35th president of the organization, and it's fifth woman president. I really wanted to make sure I was showing up to this leadership role with my unique skillset and talents. Success for me is making sure I walk away from this position as president leaving NOMA in a stronger, more organized, more powerful, more strategically positioned place than it was when I found it.

I want to make it better. I know I will not solve all things, but I want to make sure every member feels seen, heard and focused on. I want everyone to feel knowledgeable and informed, and I also want to make sure future leaders see a path into this seat and this position. I want the organization to leverage some of the structure and work I'm doing to facilitate and build upon the successes of all the prior presidents as well.

DI: I went to the AIA convention in Detroit in 1968 as a young intern architect. That event is part of NOMA's origin story.

PS: You were there when Whitney M. Young gave the speech?

DI: I've read it. I was not present at his speech, I just happened to be at the convention.

PS: Most of our NOMA founders were in the audience and heard that challenge. They got together three years later, in 1971, and formed NOMA. That got us going. That was what inspired the conversation: What are we doing to make the profession more just? That's why me winning the AIA Whitney M. Young Jr. Award in 2021 was so significant, because it felt like a full-circle moment as it relates to all the different avenues and parts of my life that came together.

DI: Let's stay on leadership, broadly. We've talked about how leadership came to you. As a profession, we have not been very good exemplars as leaders. We have been self-focused, and our culture has wrongly rewarded that. We have traditionally cared about our buildings, ourselves, our egos and not enough about our clients. There aren't enough leadership role models for architects. You're now carrying the mantle of leadership responsibility within your work in advocacy and inclusion, and in the profession. Where can we find more leverage to create more leaders? We're not very good at it compared with others, in my view.

PS: I'm challenged by the language that architects in general are not great leaders, because I think it's a generalization. What I am comfortable with saying is that we haven't historically challenged the profession to look outwardly enough. We've published or defined success and greatness in the profession of architecture, by standards that are a bit more self-serving, and rarely on metrics that impact greater society. I'll accept that. But I won't say the profession hasn't had good leaders because we are leaders in how we work. We are leaders in the way we structure our teams and educate our clients. We are leaders in the way we're changing the built environment and the work we're doing through advocacy. There are a lot of great leaders who've been doing great work at the core of the profession.

> Success for me is making sure I walk away from a position in a stronger, more organized, more powerful, more strategically positioned place than it was when I found it.

Developing leadership is an investment in individuals. It can't be simply: These are the tools we apply to everyone because they're equal. It requires understanding where people are and being able to identify potential paths of leadership in a diverse pool of people while not expecting every single person to be a leader. And having the comfort and grace to not only be leaders, but also to be amazing followers. There are a lot of spaces I walk into where I'm not the leader and I'm okay with that. There are a lot of places I step into because that's what's necessary.

The idea of being a leader isn't all-encompassing and permanent. It really is about the space, environment, people and mission you're trying to serve. Sometimes you acknowledge you are in a position as an apprentice. In this moment you are literally learning in the infancy of an understanding of the information and material. Sometimes you're in the position of mentor, where you are absorbing and sharing knowledge. And sometimes you are the leader making decisions not everyone will be excited about, but that you hold as the best option for the greater good.

There's also the position to teach, to identify the characteristics of leadership needed in certain spaces because it's not always going to be the same. The awareness of the nuances and multiple facets of leadership is important in defining that. Because the more you can showcase all those different elements, people can see themselves in different leadership positions depending on the chemistry of the issue.

In a position of leadership, I absolutely can step forward as it relates to issues about people of color. I feel confident stepping into that role as it relates to women or parents. I do not feel that role as it relates to people with disabilities or people who are LGBTQ+, yet I'm down for the mission. I want to help, but I can't be a leader in that space. I'm an apprentice or supporter or

> "I'm challenged by the language that architects in general are not great leaders, because I think it's a generalization. What I am comfortable with saying is that we haven't historically challenged the profession to look outwardly enough."

advocate in that space. Those tools are necessary, whether they be policy writing, public speaking or strategy development, and they can all be taught. Celebrating projects that are sustainable and give back to Mother Earth rather than extracting from it are other ways of diversifying what it is lead in this profession.

DI: I respect your redirection and reframing of my question. At DI we're spending a lot of time talking about those things, the growing realm of the architect's responsibilities. That's at the core of what I was trying to get at there. For too long we thought it's been about us and our buildings and it's not. It never should have been. Okay, the floor is yours. You've got all the billboards in Times Square. What do they say to get your message out?

PS: If it's in Times Square and I have the attention of society ... ?

DI: Going to context immediately …

PS: Yes. The message I would want out there is you have a role in designing and deciding your built environment and community. Architects are resources excited to work with you.

DI: When you say "you," you mean the world at large?

PS: Yes. The world at large.

DI: What else do you have going on?

PS: While I've I stepped down as executive director of Beyond the Built Environment, I'm still the founder. It now has an executive director and board in place and is officially a nonprofit of New York state that's continuing to do programs, events like "SAY IT LOUD" exhibitions, and it is working toward launching the augmented reality app and publishing a series of children's books that identify the work and identities of all the women and BIPOC designers.

Image courtesy of Pascale Sablan and Great Diverse Designers Library

“The door is open. Part of my presidential platform is taking NOMA global. We’re looking at communities across the world that could start and found NOMA chapters.”

With NOMA, and my presidency, it’s an organization that has been founded and has continued to advocate and fight for a just and equitable profession. We have an amazing conference happening October 11 to 15 in Portland, Oregon. We’re looking for sponsors, attendees, speakers and people to engage and network.

The door is open. Part of my presidential platform is taking NOMA global. We’re looking at communities across the world that could start and found NOMA chapters. Wherever this article is reaching you, please consider forming a local NOMA chapter that can be part the force that helps push our mission and our agenda in a way that allows us to share resources and to realize this beautiful future as quickly as possible.

I try to remain accessible, although I am all over the place. You can find me on social media on Instagram and on LinkedIn. I want to hear about people’s amazing work and contributions and always find the time to cheer on those who have recently become licensed and are working toward that. If you are an **African American / Black architect** who will become licensed and have not submitted your name and information to the directory of African American architects, I encourage you to do so, so we can continue to keep an accurate record of our progress that will help us continue to transform this profession and realize our 2030 goal and beyond.

One of our other programs is the Say It with Media Pledge, which tracks the number of women and BIPOC designers featured in media publications, digital, print and broadcast. Our goal is to increase the number by 5% every year until a minimum of 15% is reached. We use the platform to share the story about how architecture can be used to heal and how it has been leveraged. Here’s the link: **https://www.beyondthebuilt.com/say-it-with-media.**

It's online and there's no fee. It tries to leverage all this incredible content we're gathering with all these exhibitions like "SAY IT LOUD" to promote the identities and work of the people doing it. You can see the nine publications who've already taken the pledge. The Great Diverse Designers Library has the work and profiles of the 972 designers featured in our 37 exhibitions so far.

DI: Amazing. You are carrying a big load and we thank you for that. Looking at some future forwarding and visioning with the amazing early and midcareer you've already had, what do you look like in 20 years, in 2043? How might your view be different? Have you dreamed that far ahead?

PS: In 20 years, I'll be watching my son become a licensed architect. In 20 years, now that we've eradicated all these oppressions, we'll be imagining a new world and seeing it constructed in ways that are inclusive and just. We'll be living in a space where the built environment is emblematic of society, the policies and laws reflect that inclusive value. I dream that the built environment is audacious in realizing a changed society and the ways we govern that are emblematic of that system.

DI: A beautiful dream. Thank you. I have every confidence that if we're not there, we'll be well on the way. Here's hoping your dream comes true.

PS: Our dream. We're all doing it.

“In 20 years we'll be imagining a new world and seeing it constructed in ways that are inclusive and just.”

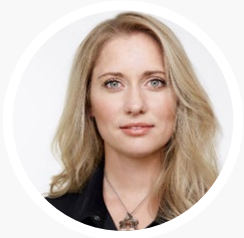
Pascale (Saint-Louis) Sablan FAIA, NOMA, LEED AP, is an associate principal at Adjaye Associates in New York, NOMA global president, founder of Beyond the Built Environment and "SAY IT LOUD," and the national American Institute of Architects' 2021 Whitney M. Young Jr. Award recipient. The award recognizes an architect who "embodies social responsibility and actively addresses a relevant issue, such as affordable housing, inclusiveness or universal access" per AIA's website. Award recipients are automatically elevated to the AIA's College of Fellows, becoming the youngest African American to reach this honor in the organizations 167 years.. A past recipient of the AIA Young Architects Award, Sablan has worked tirelessly to champion women in architecture and to elevate diversity and inclusion in the design profession. She has been featured in interviews on NPR and in Forbes magazine and is an Anthem Award Gold Winner. Her role at Adjaye Associates involves an integrated blend of advocacy and architectural leadership. She has prior experience at FX Collaborative and S9Architecture. In her mission to eradicate sexism and racism in the architectural profession she works passionately for change. She is a graduate of Pratt Institute and Columbia University.

DesignIntelligence®
Quarterly

NOURISH THE SOUL

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES



Nourish the Soul

Veronica Schreibeis Smith

CEO, Iconica

Vera Iconica's CEO Veronica Schreibeis Smith examines the balance of pragmatics and intuition.

DesignIntelligence, Michael LeFevre (DI): We are joined by Veronica Schreibeis Smith, CEO of Vera Iconica Architecture, a Jackson, Wyoming-based global design firm specializing in environmental design, health and well-being. In a short 13 years, you have enjoyed success in carving out a niche around wellness architecture. You have been featured in the Wall Street Journal, Forbes Magazine, Architectural Digest and the publication Twenty Under Twenty and are active in the Global Wellness Institute. Congratulations. Thank you for being with us. I'm looking forward to discovering a little of the magic.

Veronica Schreibeis Smith (VSS): Thank you for inviting me to have this conversation.

DI: Your firm is a relative rarity in the architectural profession these days: Amid a sea of relatively undifferentiated firms, you've managed to distinguish yours as having a clear focus and expertise in health and well-being. How did you choose that path?

VSS: It was serendipitous and perhaps meant to be. I wasn't sure what type of architecture I wanted to practice when I was in school. I finished my undergraduate degree in three years, so I lived abroad my fourth year, using a degree in German to do an

international exchange. I lived in Tübingen, Germany, and took independent studies in architecture. I designed my schedule with classes Tuesday afternoon through Thursday morning, so if I missed one week of school, I could get in almost three weeks of travel. I would do big loops through Europe studying historical and contemporary architecture. That was very influential.

I was living in student housing. Everybody had a flat, and the floor had a shared kitchen-living communal space. I loved my flatmates. We had 10-foot-high ceilings and beautiful, daylit views of the Neckar River Valley. It would have checked many of the wellness and LEED boxes. But I was miserable and hated being there. I couldn't put my finger on why at first. So, I moved to an old, timber-framed Fachwerkhaus in the center of Tübingen. It had tiny windows and no furniture. And I was infinitely happier.

That was when I started to realize the materials surrounding us and the objects in the atmosphere have huge impacts on our lives. The old student housing I lived in was an all-concrete building – a cold material. I didn't feel happy surrounded by that material. But every time I returned to the old house it felt more comforting. So, my master's work was about how an intuitive design process can lead to buildings that have soul and how the inanimate objects and materials in our lives have bigger impacts on us than we know. That was over 20 years ago. Those ideas have since been refined and are now focused on how design strategies can fuel health and wellness in people's lives.

DI: At DesignIntelligence we counsel our clients that the best strategies derive from values and vision. How did you come by yours? What experiences shaped your values?

VSS: Living abroad for those first few years of my career put me in situations with discomfort. Everything is foreign.

> Our rational or logistical mind should be in service to intuition.

Making friends and understanding a foreign language is hard. One person or the other is speaking a foreign language, so communication is a challenge right off the bat. There are different cultures, beliefs and ways of doing things. That leads to openness and nonjudgment about what people are doing – and perhaps a search for why they're doing it and a greater quest for universal truths.

When I went to design school, it was at the cusp between traditional means and methods of architecture, with hand drawing and model building, and the onset of computer integration. I realized I valued the dichotomy between these two different ways of designing. The popular architecture and the projects that scored highly in design school tended to be sharp, wild or digital. That was the cool thing. When I traveled, I saw works of architecture by Zaha Hadid or Frank Gehry, but I also saw the traditional buildings, which were not cool. In design school, we weren't pushed to design traditional buildings, we were steered to do wild, crazy ones.

I started to notice the timelessness, quality and beauty some of the older buildings and cities had. I also started to notice which contemporary structures were being well used and loved. Many were less than 10 years old because a lot of new construction happened after the Berlin Wall came down. As a result, in the 1990s, there was a design and construction boom in Germany. I started to notice how people were interacting with those more modern structures.

One value that occurred to me is that it's important as architecture develops to maintain the richness of humanity, a sense of culture and cultural identity – as we push for contemporary articulations and architectural expressions, that we hold onto what's true to the culture and local ecology. That we're not designing buildings where you can't tell if you're in Miami, Rome or Tahiti. As a firm, that kind of sensitivity to climate, ecology and culture has started to impact our design values in a big way.

DI: Interesting benefits of your larger worldview, revisiting local and regional aspects, with culture shaping your priorities at an early stage. Did you have any mentors?

> I realized many of the buildings we were building were so practical they hurt our well-being.

VSS: My first job out of school was in Lima, Peru. I worked for an architect named Luis Longhi. I met him as I was finishing my thesis. My thesis was called "Designed by Instinct," based on the idea that intuition can handle all sorts of complexity our rational mind can't. Our rational or logistic mind should be in service to intuition but needs an innate trust in what feels right as the correct design move. Because sometimes it's only later in the design or after the building has been executed that you can understand why that was such an important move. As a student, I had to find precedents in designing with intuition because my thesis was that the process creates buildings with soul and character, ones that we can fall in love with, that become timeless.

I was having trouble finding architects designing in that manner, as well as just having trouble putting my finger on what that meant or looked like. Luis came to Montana State University to give a lecture called "Living by Instinct," and it was a beautiful coincidence. When I saw his architecture, it was surprising and delightful, and it wasn't a style. It had a Peruvian undertone, very true to the culture and the place, but it didn't look like anything seen before. At the same time, it felt so appropriate and right. It wasn't just me. The whole audience was completely captivated by his work. His buildings felt like sculptures within the landscape more than buildings.

I worked with him for that year, and we designed a couple homes and some hospitality projects. He later went on to win the Architect of the Year Award in Peru or something like that. But what he became well known for was developing a contemporary Peruvian architectural style, because all his peers at the time were doing white, modern boxes – very Miami-centric.

That year I wrote a book about his set design work called "Architecture on Stage." We'd have these wonderful afternoon sessions where we would pick one performance at a time and talk about the set design and how he was led to the solution. I got an insider's look into how he was guided by feelings. If he had a notion, he acted on it. It wasn't a thought or something rational he was acting on. One of the most beautiful things he said was that design comes from two words: divine and sign. The idea was, as an architect, when you're in your flow state, connected to the site and to your client, there's something flowing through you that is beautiful or sacred. That's when you just let it be and you draw out what you're feeling in that experience.

DI: A fine counterpoint to our rational, objective-sounding theme of priorities. Your website says that you "design experiences" and that "architecture just happens to be our medium." This is a refreshing new posture in a profession that for 50 years was largely about its buildings, not their users. Was there a particular impetus that steered you to this realization?

VSS: I think it's having been sensitive to space and surroundings my whole life. Even when I was young, I didn't understand why there were so many ugly, uncomfortable spaces like strip malls. If I was going to my dentist or to buy my soccer cleats, I had to traverse some vast asphalt parking lot with toxic, stinky smells. I had to walk through it to some ugly building with an ugly façade. It doesn't have to be like that. If you look at older designs and urban planning, the shopping experience and moving through daily life was more beautiful. Architects and urban planners have been studying this. It's not news, but it influenced me at an early age.

Image courtesy Dan K. Haus

I realized many of the projects we were building were so practical they hurt our well-being. They have horrible lights that hurt your circadian rhythms. They're depressing. Environmental psychology has proven their negative impact. The person working there is worse off than me as a consumer going in to buy something. So, what impact are you having on the population by having ugly spaces and being only practical? "Just being practical" isn't practical because as humans, we're not robots. Other aspects of our lives are just as important. You can also realize on the bottom line how wellness design and thinking about experiences and all the dimensions of well-being can become the practical, financially viable solution. We can get there.

As a building industry, there are the very practical buildings. On the flip side, there are buildings that tend to be ocular. They photograph well or are intellectually surprising, but sometimes they don't feel very good. Many times, they're luxury for the sake of luxury. They might be beautiful, but something in them feels hollow. Some are well done and are amazing, and some just feel like an exotic version of trying too hard. At the end of the day, they didn't execute or achieve it.

As I go through buildings noticing spaces I love, sometimes they're high-end, luxurious and beautiful, and sometimes they're rustic and low-end. The questions I ask are:

- Why do we fall in love with this space?
- What makes us happy?
- What brings joy to our life?
- What ends up being that nostalgic sense that brings beauty and love and warmth to our life?
- What nourishes our soul?

Because at the end of the day, we're people. Not cold or austere, not just going after something, grinding or punching a clock. There's more to us. Our buildings need to reflect that. They need to nurture that aspect of our lives.

DI: Your flow across the boundary between practical and experiential, higher order issues is fascinating.

VSS: It's a prerequisite as an architect serving clients that the solution is financially sustainable. Because if you don't have financial health or financial sustainability, the project's not going to get built. Or if it gets built by some altruistic client, it's not going to survive. That's sad. You don't want to see your client or

Image courtesy Dan K. Haus

project fail. So, practicality and understanding financial models are prerequisites. But I believe they are pragmatic rational tools that serve intuition.

That's where we get caught up as architects. Too often we put those two in conflict with each other. We have an "either/or" mentality. Either we can do a beautiful, perfect, ideal building, or we can value-engineer it and make it financially feasible and lose all the good stuff. The other thing we do as architects and designers – or it's just human nature – is that we make things too complex. We break things down into little pieces so we can understand our one little piece. Now we have a million pieces, and we can't possibly understand them all.

DI: And then they're also disconnected, not part of their larger system ...

VSS: Exactly. We've had hundreds of years of history doing this in our education, science and processes, and those have been great exercises. Wonderful knowledge, but that science needs to inform intuition. We need to go back to being holistic. Being holistic is understanding the snowball effect of a design decision.

I'll give you a couple examples. If we want to specify something sustainably, if we have to read every SDS cut sheet there is before we specify that material and then have to learn about every chemical and product, we can't do that. Maybe there's a specialist, but even that person needs a 40-year career and still can't know everything.

Rather than trying to understand everything, our design philosophy is simplifying it and relating it to food. Michael Pollan had some catchy mantras. Something like: "Eat food, not too much, mostly vegetables."

Another mentor of mine is Paula Baker-Laporte. I met her through the Building Biology Institute. She shared her adaptation of that quote: "When you're trying to specify systems or materials in architecture, it's simple, don't overthink it. The closer to nature it is to its natural state and the less adulterated it is through the manufacturing process, the healthier it is going to be for humans and for the planet."

Instead of sorting through all the options out there, focus on materials that we understand where in nature they come from and see if they're sustainably harvested. The closer they are and the fewer processes there are getting them into their finished states, the healthier they're going to be.

It's just thinking about things in simpler ways and designing and detailing the building in simpler ways, with simpler assemblies. I try to avoid building assemblies that have layer after layer of synthetic material installed by different trades trying to fight nature and keep it out. How can we go back to materials that work with the local climate and integrate more passive design strategies with natural materials with physics that work for the performance requirements of the building?

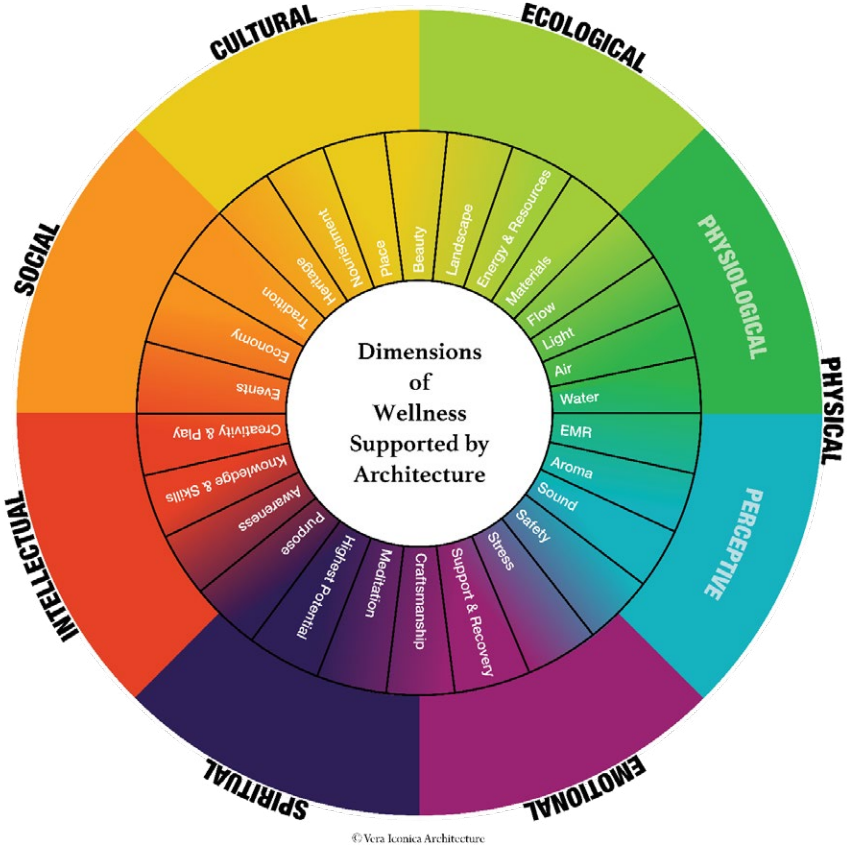
DI: Those are clear, simple ideas, but as your organization is growing and you're dealing with multiple offices and people, how is your design decision-making process evolving? How do you maintain that simple vision across the firm? More infrastructure, checklists, processes? Or is it just relying on the intuition of well-selected teammates?

VSS: The vision for our company is that it's a legacy company that can grow. It's not about a sole practitioner. Checklists are tricky business. A few organizations have done them well. But it takes a well-funded organizational beast to come up with

checklists. That serves some well, but what we're trying to do is what you said: hire the right people with natural talent and sensitivity in tune with their intuition. Because a lot of us have been taught almost to break away from it in a sense. Characteristics in our culture have suggested that intuition feels a little fluffy – not the right way to go about something. But it's just putting things back in balance, not being extreme in either way but looking at things from afar and understanding the design strategy from an evidence or science-backed position.

It's a combination of training our staff to understand the science behind wellness strategies and interpreting that science – the environmental psychology, neuroscience, biophilic design and circadian rhythms – so you understand how a design decision is going to impact somebody psychologically, emotionally, cognitively, performatively and biologically. Once you have that knowledge, it becomes a tool set in the background while you design. We do have two tools – not checklists – we've developed, that help us gut-check that we've been thoughtful about the holistic system. One is our Wellness Wheel. It's the seven dimensions of wellness. Inside that, we have spokes of design strategies: environmental, physical, emotional, intellectual, spiritual, cultural and social – different aspects of how the architecture is going to impact those areas of life.

The second thing we have also stems from building biology, which I have found to be one of the most comprehensive set of principles in designing for health and well-being. We've adapted that to 68 items we look at. The Wellness Wheel shows how this impacts humans. You put yourself in the experience and see how it's going to impact somebody. The other list is about the site. What are the site's health impacts? For example, is it near an airport? Is it under the flight path? That's going to have a negative impact. Is it near a freeway? There are studies on how loud noise has negative impact on the development of children and the psychology and emotional states of people.



Wellness Wheel image courtesy of Vera Iconica Architecture

We look at site and these other areas of design that might be more practical, that scientific, analytical mode of breaking it down into pieces. We look at things both ways as a gut-check to see that the design, when you experience the building in its executed format, has been thoughtful about all the ways it's going to impact the person and the local ecology, which then, of course, impacts the planet.

DI: With growth comes change. How do ensure your adherence to your plan in setting or maintaining priorities? Or do you? Perhaps it's more about continually reacting and going with the flow? The Zen and reading clients and contexts? In that balancing act, being on both sides of the line, a firm that's interested in science and pragmatics and also experiences and well-being, I could imagine your approach toward decision-making strategy is: We're just living in the now, we're just reacting to the data, or what happens, versus having a strategy. Because, as anybody who has a plan and a strategy knows, life and change happen. Where are you on that continuum? How do you approach planning?

VSS: I have big plans!

DI: Love it.

VSS: That's just the way my mind works. Vision is everything from what we want to create one project at a time to visions of where the company and brand goes at large. The Vera Iconica brand has multiple companies underneath it. Architecture is our cornerstone. We've started an interior design department within the architecture firm, with the idea being that if we're creating experiences, really what we're doing is we're designing from the inside out. In a way, the interior is more important than the shell of the building. It's about how people experience the spaces created.

We also have a company we're looking at launching in 2024 called the Vera Iconica Wellness Kitchen. It's a study of how we can reimagine kitchens to bring more joy and ease to supporting a whole food, nutrition-rich diet and how food can enhance other wellness areas. Things like social gatherings or behavior like reducing plastics packaging and waste, being a good shepherd of organic matter by composting it and sending it back to support local farmers and growers. That's another company.

We are also starting to look more at development and raising capital to do wellness-oriented projects, wellness real estate and communities. That's the focus of that company. We're looking at how we can vertically integrate our companies to bring this vision, experience, behaviors and ways of living into reality and to more people. Those are the big-picture ideas we're looking at building.

DI: Big plans indeed. Can you share an example of where something didn't go according to plan – a recent pivot, lesson learned or sudden change? How did you cope and what did you learn?

VSS: Ten years ago, we were a younger firm and tended to be more idealistic. If we designed something one way and it got value-engineered out, those felt like big hits or big blows sometimes. And now we have adapted to those situations and become more aware that we are here to serve our clients. We have tools and wellness strategies, but don't have to use all of them. We're not going for a perfect building. What we're going for is understanding the needs, pain points, lifestyle aspirations of our clients and what strategies are appropriate and have high value to them.

For example, if you have respiratory issues, how can we create a healthy building for that? That goes for everything from how we detail and specify the materials and the mechanical systems

to the programming. From a mechanical standpoint, we might have high oxygen in the bedroom, and from a programming standpoint, we might have halotherapy or a salt cave as part of a spa circuit, an elevated bathroom or bathing experience.

But there might be other areas where it's not ideal. For example, they might not be into photovoltaics, energy savings or net-zero. So, we offer them things at the beginning of the project to see what they value, and then focus on where the project wins. We don't view those other things as failures. "Well, it's not a net-zero building, so it's not regenerative. Have we failed?" No, the project hasn't failed. We celebrate those areas where we were able to serve the client with health and wellness. It's been a shift in attitude. That's how we've adapted to the idea that there's no ideal project out there, and it's also helping move the industry forward one step at a time. We share the wins with the rest of the industry because the next architecture firm might be able to see that, use it and take it another step forward. If we're growing as an industry, that's encouraging.

DI: Your shift from a self-focus to client-focus, and more broadly to an industry-focus and helping others, is a wonderful change in emphasis. Operating as a small business, to maintain an edge against larger competitors with more resources, do you employ an external support or advisory network? As Michelle Obama calls it, your "kitchen table."

VSS: Yes! We have the best advisory board in the world. We have Scott Simpson and Jim Cramer on our advisory board. Scott has coached me for several years and has been coaching our entire leadership team for 18 months. We are very grateful for the wisdom, experience and knowledge that has come from those two individuals with deep backgrounds. It's been invaluable, because we are a young firm with big ideas, and we are navigating how to get there. Thanks to them, we're doing it with more grace and knowledge. There are always growing pains and learning experiences, but enjoying learning and failure can propel you further. It's much easier to do when you have the counsel of great people.

I've been incredibly grateful to those individuals. Our whole team has. Some of our weekly highlights are when we get to meet with them and glean their wisdom. They always make it so simple. We realize we're overcomplicating things, or, as professional as we're trying to be, there's a little bit of emotion in there. Then Scott or Jim will shed some simple light on it, and we'll say, "Oh, yeah." So, it's great.

DI: Two heavyweights with over 100 years of collective experience. What are some of the highs and lows of leading a small firm? How do you cope personally? How do you balance the demands of running a firm with your desire to have a larger purpose and mission? To give back, volunteer and serve as a thought leader in the health and well-being design and construction communities and still be with your family?

VSS: It's hard. I struggle with it daily. It's better now than it was six months ago. In the last seven years, I've had three children. With each child the company has gone through incredible growth, failures and dips in the business cycle. As a woman-owned business during my family-building years, I'm happy to share that story with others. There has been nothing easy about it. When it comes to my health and well-being, after having my third child, I was just depleted physically after six continuous years of being pregnant or breastfeeding a child. Physically, I could feel I didn't have a lot to power the mental energy needed to run a company. During that time, our company was tripling in size. I remember having conversations with my husband saying the only things I was going to do were keep the baby alive and keep my company alive. I wasn't going to have time to do much else, including exercising or taking care of myself.

That was a conscious decision, one I don't resent or regret at all. I'm glad that was a conscious decision. But at that same time, an autoimmune disease presented itself, and I've had trouble gaining back some strength and balance in my life. So now I'm getting back to a place where I'm putting more time and energy into kids. We had a lot of help. And when you see your child being raised in part by somebody else, because a nanny has to pick them up, or your child comes home and says, "Mom, why am I the only kid whose mom doesn't pick them up?" that kills you.

There have been all sorts of hardship or sacrifice, but I'm happy to report that because of good advisers, intentional growth and sharing a vision with an extremely talented team that cares, nobody on our team is just showing up to their job for a paycheck. We're lucky because we are a smaller boutique firm with a strong vision and mission that's bigger than ourselves. We have a passionate team of people. I've been able to communicate where my capacity is, where I can best fit into the growing company and how other leaders can emerge and advance different aspects of the company. For the last six months, there's been a lot more balance between personal and professional life. All of us get just one life. There's not a personal life and a professional life. We get one life. So now my life is a little healthier because I get to pay attention to more things and not just those two things, keeping the baby alive and the company alive.

DI: I appreciate your vulnerability and willingness to share. You've been through some challenging times personally and as a company, but it bodes well for the future. Is there anything else I haven't asked you, a message point you'd like to get out as we close?

VSS: Well, there's the trajectory of wellness real estate and wellness architecture. The reason we have the label wellness is unfortunate. From the beginning of time, architects were designing to uplift humans. It was shelter, and it was love and beauty. As we moved up Maslow's Pyramid, there were always aspirational qualities to buildings that improved our lives. At some point in recent history, we had a few missteps and people stopped dealing with those things. Those missteps didn't happen on purpose. I'll give you an example.

Nobody meant to create sick buildings, but we did, and we created a lot of them. But what we were doing there was in response to the energy crisis and to needing our buildings to use less energy. We tightened building envelopes, we made windows nonoperable and we had a minimal number of air changes per hour that could heat or cool and keep the temperature comfortable. Those were all good things people were trying to do. Less than 10 years later, we realized we had created medical conditions with so many people that the medical profession coined the term "sick building syndrome." With all sorts of immune system, respiratory, cognitive performance issues happening, it was only when you left the buildings that you started to regain your strength or health.

We still have sick buildings today. My point is that we haven't thought holistically of what impact these design solutions were going to have. That design solution was always a response to an issue. Nobody's the bad guy out there, but we've had negative impacts happening. What we're trying to do with this wellness movement is to get back to creating healthy buildings. Nature's the gold standard. If we can create a building that functions, a place in which we have the same health and well-being as we do in the natural, unpolluted world, that's the goal.

The message is that wellness real estate and wellness architecture are nonnegotiables in the future because we're living in an era where, thanks to COVID, people are now more aware and more sensitive to the impact their space has on their health and well-being. Now everybody has smart devices they can wear, with inexpensive sensors and social media. So, when you go into a building you can measure things – and yourself.

DI: No one can argue with wellness as a nonnegotiable priority. Thank you!

VSS: It's been a pleasure. Thanks for inviting me – and for having me.

> All of us get just one life. There's not a personal life and a professional life. We get one life.

Veronica Schreibeis Smith AIA, NCARB, LEED AP, BBNC, is founding principal architect + CEO of Vera Iconica Architecture, a global design firm based in Jackson, Wyoming. Vera Iconica creates environments to support optimal living providing services in architecture, interior design, Wellness KitchenTM design and real estate developments.

Recognized for pushing the envelope on design and design theory, Veronica is a world-renowned expert on wellness architecture as well as a certified building biologist through the Building Biology Institute. Her international work experience in Peru, South Korea and Germany solidified the importance of cultural influence in her architectural practice. She founded the Wellness Architecture & Design Initiative for the Global Wellness Institute as well as the nonprofit organization Wellness Architecture + Design. She received the Leading Women in Wellness Award at the 2020 Global Wellness Summit, an award honoring a woman making a standout contribution in any of the wellness sectors. Veronica continues to work, write, speak and lead think tanks internationally.

DesignIntelligence®
Quarterly

THE WORK OF TRANSFORMATION

PRAGMATIC DESIGN

Q3: BALANCING PRIORITIES

The Work of Transformation

Bob Fisher

Balancing vision, imagination, knowledge and the grind to make meaningful change.

Despite being tortured by overuse, transformation is still a sexy word. It appeals to fantasies of a perfect future. For firms with ambition to improve and grow, the idea of becoming the best version of themselves is inspiring.

As one whose job is helping organizations make positive change, there is much I love about the promise of transformation. Properly channeled, it gives leaders the energy they need to envision bold futures for their firms and craft strategies for getting there.

But when transforming professional services firms — from developing new business strategies to fostering cultures that engage everyone in securing new work — problems often arise. The first is misplaced faith. Many leaders believe some insight, bit of practical knowledge or creative idea is the barrier between the firm and a brighter future. They expect transformation to come as an epiphany — the secret that, once unveiled, changes everything.

Here's the spoiler: There is no one secret, bit of knowledge, insight or single creative idea that is the tipping point for transformation.

That's not to say knowledge or ideas aren't important. Leaders need mastery of many things to guide the transformation of their firm. They must understand:

- The future of the markets they serve.
- How to develop bold visions for how their firms will evolve to remain relevant.
- How to evolve the firm's offerings and bring them to market effectively.
- How to attract, organize and retain talent.
- Finances and how to manage risk.
- How to select, cultivate and transition leaders.
- Their firm's relationship to data and technology.

All this must be done in ways that ensure creative and technical excellence in the firm's work.

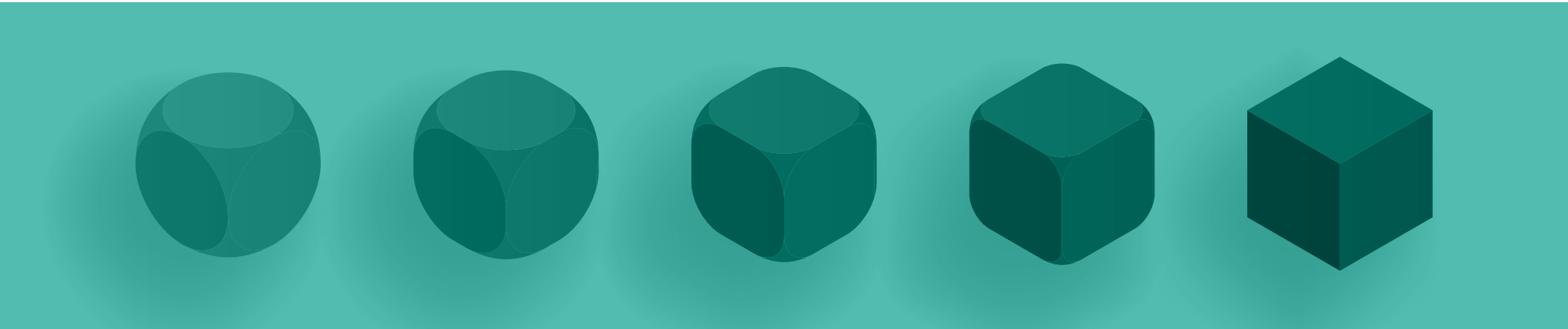
Given all leaders need to know to effectively run their firms, let alone transform them, it is easy to see why so many believe knowledge and ideas are the keys. In reality, an overemphasis on knowledge and ideas is precisely the thing that can sabotage transformation.

For creative leaders, especially in design professions, the fun part is generating, improving and sharing ideas about possibilities for the firm. When developing strategies, many leadership teams get stuck in a thrilling morass of discussion and analysis. Their minds are alive and inspired with visions of their ideal futures, but their actions don't change. They believe they are setting the firm on a new path when in fact they are reinforcing the status quo.

The process of real transformation can be seen as a mashup of two old chestnuts from Thomas Edison (about genius and opportunity). It's 1% inspiration and 99% perspiration, and most people miss it because it comes dressed in overalls and looks like work.

Where does the work come in? At the risk of oversimplifying, three activity types make meaningful change in firms:

1. Developing a vision for the desired state (what you want to achieve).
2. Creating an actionable plan for how to get there.
3. Implementing the plan.



Developing visions and plans requires diving deep, editing, making hard choices (mostly about what to leave out or stop doing), as well as building consensus and buy-in. Creating an implementable roadmap to the future requires creativity, persistence, structured thinking and the ability to bring the rest of the leadership team and staff with you.

Though complex and challenging at times, developing a vision and plan is the straightforward part. Implementation is messier.

A great vision and plan will only stick when it becomes part of the organization's culture. Why? Because culture is the force that guides the mindsets, beliefs and behavior of the people who comprise the firm. Their perception (and therefore, reality) comes from what they observe and experience — the values and purpose reflected daily in the actions of leaders and colleagues. Words about values and purpose can help or hurt, depending on how they align with the behavioral evidence.

In years of working with firms, I've seen large change initiatives succeed and fail. Yes, all that succeeded were based on well-founded and inspiring plans, but not all good plans came to fruition.

The make-or-break ingredient in all transformation attempts is culture change. Altering the way people think, speak and behave is the only way to ensure the vision and plan become the true drivers of the firm's direction. The bulk of the effort is not in a single grand gesture or inspiring speech about the change needed (even if the rationale is solid). Rather, enduring change comes from inspiring and guiding people to take innumerable small actions and break old habits. Leaders of successful efforts follow up, encourage, handle objections and continue to remind their teams why the future will be better as a result of their efforts.

In this stage and context, leaders are like athletic trainers. They help create a plan for change, then inspire or persuade (or occasionally wheedle and cajole) others to do their pushups and situps. They maintain their coaching as long as it takes. Fitness comes from repetition of exercises, performed regularly, increased at the right times.

The transformation process can feel like a grind because it requires consistency, persistent effort and faith that progress is being made before results are in. It may take six months for the new project management approach to stem a history of losses, or nine months before the new service offerings begin to capture clients' interest. The leader's job during that time is to hold the light of inspiration aloft through the dark slog, illuminating the direction and setting the tempo by example and action.

The success of the unglamorous work of transformation is sometimes best seen in hindsight. After three years of dedicated effort, you look back and see the firm's metamorphosis into the very embodiment of its aspirations.

> Here's the spoiler: There is no one secret, bit of knowledge, insight or single creative idea that is the tipping point for transformation.

Bob Fisher is principal with DesignIntelligence Strategic Advisory and a frequent contributor to DesignIntelligence.

OBSERVATIONS

> He who has a why to live can bear almost any how

- Friedrich Nietzsche

> Life is not about maximizing everything, it's about giving something back – like light, space, form, serenity, joy. You have to give something back.

- Glenn Murcutt

> Step with care and great tact and remember that life's a great balancing act

- Dr. Seuss

> Our prime purpose in this life is to help others. And if you can't help them, at least don't hurt them.

- Dalai Lama

> Life is as simple as these three questions: What do I want? Why do I want it? And, how will I achieve it?"

- Shannon L. Alder

> The Principle of Priority states (a) you must know the difference between what is urgent and what is important, and (b) you must do what's important first.

- Steven Pressfield, The War of Art: Winning the Inner Creative Battle

> Action expresses priorities.

- Mahatma Gandhi

> It is not a daily increase, but a daily decrease. Hack away at the inessentials.

- Bruce Lee

DesignIntelligence® LEARNING

Redefining an Understanding of Leadership

Learn More

88%

of current senior leadership admitted they didn't adequately invest in their own ongoing professional development

92%

of organizations were found to not adequately prepare their next generation for leadership

67%

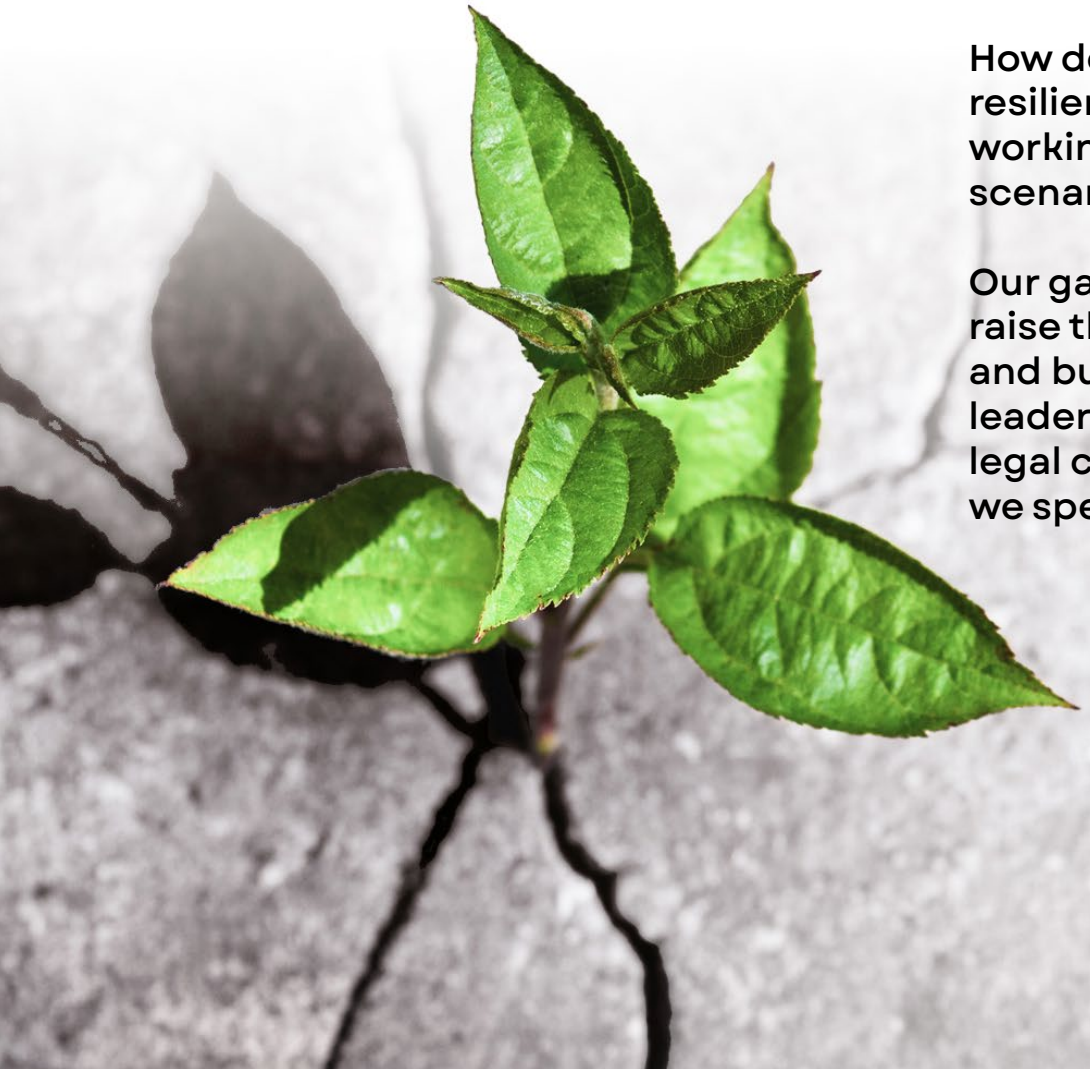
of senior leadership indicated their failure to demonstrate and demand collaboration across their organizations

di-leadershipinstitute.com

From Tricord/DI Organizational Dynamics Study 2013-2019

Design Futures Council

2023 LEADERSHIP SUMMIT ON THE BUSINESS OF DESIGN



Addressing Business Resilience

Atlanta, GA | November 6-7

How do we approach the critical theme of business resilience when the crystal balls don't seem to be working and the speculators are churning-out wild scenarios as if they were 100% certain?

Our gathering of leaders from multiple disciplines will raise the bar in understanding risk, scenario planning, and business resilience. We'll hear from investment leaders, Fortune 500 executives, economists, and legal counsels on their approaches and warnings as we spend time Addressing Business Resilience.

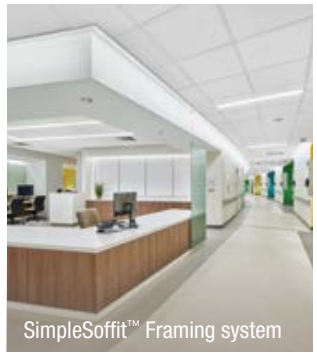
REGISTER TODAY

A growing portfolio...

More materials, shapes, forms and capabilities for healthy spaces

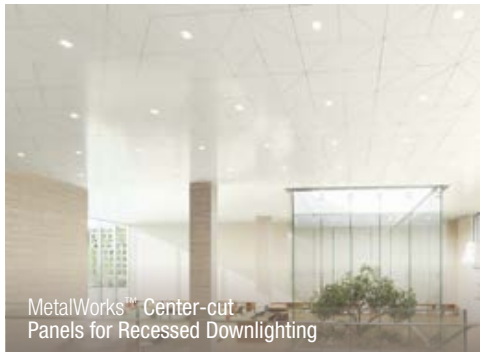
NEW ACQUISTIONS FOR PRODUCT OPTIONS

DETAILS MAKE THE DIFFERENCE



DESIGN OPTIONS

INTEGRATED LIGHTING



NEW OPTIONS FOR HEALTHY SPACES

Armstrong®
CEILING & WALL SOLUTIONS

DesignIntelligence® Quarterly

DesignIntelligence (DI) is an independent company dedicated to the business success of organizations in architecture, engineering, construction and design. DesignIntelligence supports the success of its clients through the Design Futures Council leadership events and network; public and privately commissioned studies conducted by DI Research; and the publishing of practical research and thought leadership through traditional and digital platforms in DI Media.