



The American Institute of Architects Young Architects Forum

an AIA Member Group

/// FINDINGS ///

Table of contents

<u>04</u>	Foreword from Chair
<u>06</u>	Acknowledgements
08	Executive summary
12 12 16 20 24	Future practice models trends and themes: Building Networks Data-Driven Architecture Philanthropic Design Out of the Box
26	Afterword

Foreword

The architecture profession is in a perpetual debate concerning the issues that impact how we practice, the value we contribute as architects, and how our work can and should impact the world around us. As the chair of the AIA's Young Architects Forum, and a person that left traditional practice nearly a decade ago, I am keenly aware of the problems facing the next generation of practice leaders: inefficient practice models that lead to overworked, underpaid, and highly unsatisfied staff. Traditional practice mirrors the success of the construction industry, which means we only thrive when our clients are building. Now is the time to engage in a conversation about our firms business models and the necessary changes to successfully move the profession forward and retain talent. As the future leaders of the profession, the Young Architects Forum's voice with in the dialog is an important one.

In 2017, the Young Architects Forum hosted the first Practice Innovation Lab, looking to develop new practice models to evolve the profession and spark a new debate that could challenge the status quo in firm structure, management, and operations. The findings and themes from the Lab are recorded in this report. More notable than the individual proposed models, are the themes that ran through multiple models, which indicate shifts in values and likely places to explore disruptions.

The Practice Innovation Lab and this report are just the beginning. I urge you to take these ideas and push them to the limits. The future of architectural practice will ultimately look different. We can either react to the change that is already happening around us or shape what we want our profession to look like in the future. We hope the ideas from this Lab will plant seeds for emerging and current leaders to explore new opportunities in an ever-changing economy and continue to drive innovation within architectural practice.

Evelyn Lee, AIA Practice Innovation Lab Chair 2017 Young Architects Forum Chair

Acknowledgements

Practice Innovation Lab planning committee

Evelyn Lee, AIA Savills Studley Practice Innovation Lab Chair

James P. Cramer DesignIntelligence Planning Committee Coach

Lawrence Fabbroni, AIA Strada

Joshua Flowers, AIA HBG Design

Nicole Martineau, AIA Arrowstreet

Illya Azaroff, AIA +LAB architect PLLC

Speakers

Laura Weiss, Assoc. AIA Weiss Collaborative Moderator

James Patten Patten Studio

Susan Chin, FAIA, Hon. ASLA The Design Trust for Public Space

Andrea Sreshta LuminAID

Kathryn Meairs, AIA The RED Office

Gregory Kearley, AIA Inscape Publico

Report author

Shelby Morris, AIA Beck Architecture Georgia LLC Deane Madsen, Assoc. AIA

A huge thanks to my planning committee, who made the commitment to be on a call with me every two weeks for more than a year. You helped bring the right people together and set the stage for our participants to be engaged, aspirational, and innovative.

-Evelyn Lee, AIA

Executive summary

For the 25th anniversary of the AIA's Young Architects Forum (YAF), 60 emerging architects and designers were invited to develop new models of working within the profession at the Practice Innovation Lab, a three-day intensive summit held at startup incubator 1776 in Arlington, VA, from October 14 to 16, 2017.

The Practice Innovation Lab crammed an intense level of consensus-building into a short timeframe, and was designed to get architects out from behind their desks to strategize rather than theorize. Challenging participants to "make inspiration actionable," moderator Laura Weiss, Assoc. AIA, called upon those in attendance to "elevate the profession and move it forward."

Over the course of the program, attendees heard experiences and examples from innovators before forming smaller teams and brainstorming ideas to evolve architectural practice. Interspersed between these discussions, addresses on the topic of innovation demonstrated means of breaking new ground in fields such as interaction design and public interest design. The smaller teams later reconvened to pitch their proposals to each other before voting on the best practice models. Recurring themes that emerged from the 10 teams' proposals were those of networking, data, and philanthropic architecture. Teams envisioned networks of smaller firms banding together to compete with larger, multinational firms through shared resources. Other proposals envisioned smart architecture, with embedded sensors that would inform future projects as well as allow real-time building status analysis. And many of the teams incorporated not-for-profit ventures that would allow greater access to architecture for underserved populations.

For some emerging professionals, like participant Beau Frail, AIA, the future of practice will involve finding scalable ways to connect with people: "People care about changing the practice and shifting its values to the ones we have," he said. With so much discussion of smaller practices banding together to form networks, they might be the most imminent outcome from the Practice Innovation Lab, as these architects bring home new ways of thinking about the profession and what lies ahead. Some will begin to think more broadly about possible synergies between technology and practice. "Imagine this as a launching pad to engage whoever you need to engage to test the validity of the idea," Weiss said in closing. "And get inspired by what people tell you."

Introduction

Young architects and emerging professionals are uniquely positioned to challenge outdated modes of practice in architecture and related fields. From freshly minted architecture school graduates to newly licensed architects to those that are just starting out in their own firms, the rising cohort represents a generation of digitally savvy (if not native) practitioners unwilling to settle for traditional business models. Technological advances such as smart sensors have allowed buildings to collect and react to data automatically, and the digital realm is robust enough that practice can happen anywhere, without the physical confines of a typical office. Many emerging professionals recognize the growing needs of the world at large and seek to participate in public architecture, either rebuilding in the wake of natural disaster, or providing services to communities in need.

Yet idealistic views often bump up against the hard costs associated with doing pro bono work, or simply running a firm. Smaller firms may provide a higher degree of personal interaction with a client, but they might also have a difficult time competing with multi-national companies whose reach is broad enough that they can afford to hire specialists in-house. That's where proposed networks might come into play, allowing smaller firms to band together and act like larger ones, or simply to share resources across a wide variety of member businesses.

In the weeks leading up to the Practice Innovation Lab, attendees were encouraged to introduce themselves through informal communication networks, and to learn about strategies for practice improvement through exercises related to Ten Types of Innovation: The Discipline of Building Breakthroughs (Wiley, 2013, ed. Larry Keeley), a resource developed by Doblin and Deloitte to foster creative thinking.

Building Networks

Keynote speaker Susan Chin, who is executive director of the Design Trust for Public Space, emphasized the importance of community engagement in harnessing information to design a future that works. "You have to be connected with the community," Chin said, by "building relationships and demonstrating how you're improving people's lives."

Recognizing Chin's success in coalescing groups of people into drivers for action, several teams proposed networks that would allow smaller firms to remain small, but to share resources with each other. Some examples of benefits provided by these membership-based networks are that smaller firms would reap the benefit of expertise within the network without having to hire additional staff, and would also gain local footprints across the area covered by the networks. One team's proposed network would allow smaller firms to compete with larger, multinational firms through shared assets such as dedicated marketing staff.

NEW [net]WORK



Team members:

Lora Teagarden, AIA Katherine Darnstadt, AIA Jamie Crawley, AIA Jessica Deaver, Assoc. AIA Derik Eckhardt, AIA Emily Grandstaff-Rice, FAIA

Mission: The NEW [net]WORK provides access to experts and research to create a better environment by facilitating cross-disciplinary collaboration. As Emily Grandstaff-Rice noted, "Not all current practice models have capacity to employ specialists."

Where larger firms might simply hire a specialist for a project that needed one, smaller and nascent firms often don't have the same luxury of flexible overhead. But member organizations could share access to expertise in a variety of fields, thereby enriching their projects through multi-disciplinary partnerships.

JAMB Collective



Team members:

Desmond Johnson, AIA Katie Miller, AIA Christian Jordan, AIA Abigail Brown, AIA Mike Anglin, AIA Jared Edgar McKnight, Assoc. AIA

JAMB Collective started its pitch noting that firms with more than 50 people, which make up 5 percent of the country's 21,000 architecture firms, earn 51 percent of all industry billings. Firms of fewer than 10 people, which make up 77 percent of all of the nation's practices, face disadvantages related to their size: "It's hard for a small firm to invest time and resources into winning projects, without being able to support dedicated marketing staff," Katie Miller said.

"Technology resources are also more limited. As 3D printers, animation and virtual reality become the norm in our industry it is increasing difficult for small firms to keep up with the competition and the expectations of clients."

By sharing resources, firms are able to improve cash flow stability, gain local presence, and access specialized skills in technology, interaction design and visualization.



Design on Demand



Team members:

Margaret Tarampi, Ph.D. Kevin Singh, AIA Chase Kramer, AIA Benjamin Ward, AIA Ashley Clark, Assoc. AIA Ryan McEnroe, AIA

"Like Über, but for architects."

That's the short version of the pitch from Design on Demand, which aims to connect with potential design clients at the point of need. Wherever people are searching for design answers, whether it's with platforms such as YouTube, Google, or Amazon, Design on Demand would offer professional consultation. Small firm practitioners could run their own businesses, and join the Design on Demand network to supplement income by engaging with clients without waiting for word-of-mouth referrals.

"Our mission is to help people find innovative design solutions and make informed choices to improve their lives," said Ashley Clark. "We motivate and encourage others to advocate for unique, authentic, and emotive places by connecting individuals to each other and to their communities."

Data-Driven Architecture

Data and technology were the focal points of a speech from James Patten, founder of Patten Studio, who illustrated how microchips embedded into buildings can lead to self-aware architecture. "We're at the beginning of a convergence of two fields," Patten said. "Interaction design and architecture are moving toward becoming the same thing, [which brings] opportunity for interdisciplinary interaction and cooperation."

Several teams highlighted the importance of data in their presentations. With the ability to insert sensors in just about any surface at minimal cost, architects could potentially harvest data to better inform their subsequent projects as well as address issues in past ones in real time. One team went so far as to offer to give away architectural services for free, instead charging a subscription fee for aggregation, analysis, and response to data collected in its projects to inform better, automated design processes.

4PIE



Team members:

Hafsa Burt, AIA Jack R. Morgan, AIA Kelsey Kauffman Anthony Vanky, PhD Ricardo J. Rodriguez, Assoc. AIA Peter Atwood

Team 4PIE bills itself as a critical-thinking do-tank: "We are a multidisciplinary collaborative network that is solution-oriented," said team spokesperson Hafsa Burt.

4PIE's services range from products to spatial design, with R&D at the core of its practice. The team sees data and analysis not as trends, but as fundamental components to what it does. Funded by a tiered membership structure, the base level of service would allow access to its platform, with higher tiers focusing on specific problems to develop customized solutions.

"We're not in the business of selling hours," Anthony Vanky said. "We're in the business of selling value."

DATAIA



Team members:

Shelby Morris, AIA Jennie Cannon West, AIA Bradley Lukanic, AIA Carl Sterner Seth Anderson, AIA Ming Thompson

Team DATAIA began its pitch with a counter-intuitive proposal: "Let's give our architectural services away for free... and expand our reach."

By focusing instead on a subscription-based data analytic service model, DATAIA would shift the role of the architect from service provider to consultant, exploiting all of the data available through embedded project sensors both to automate design and to influence the way buildings operate. DATAIA would also offer services to municipalities, using smart code review to eliminate plans examiners in favor of more efficient, automated processes.

Vision: Architects will become practitioners of design thinking, expanding their role from the producers of designs and documents to the entire lifecycle of buildings, from defining a need through operation.

MOM+DAD



Team members:

Jason Dannenbring Akash Gaur Julie Zhang Larry Fabbroni, AIA Ian Merker, AIA Joann Gonchar, AIA

"The best relationships are long-term," said Julie Zhang in leading off the presentation for MOM+DAD, which stands for Monitoring, Operations, and Maintenance in a continuous feedback loop with Design, Analytics and Data. "Through activity in the experience, users become the conductors of their future. We nurture their process as MOM+DAD, allowing growth with constant support."

Through continuous data harvesting and analytics, MOM+DAD provides a better experience for the life of projects. Team members would be located in urban and exurban locations nationwide, in place where the network connections are important. As the project or experience needs modify or expand through time, the team's continued analytics anticipate new service.

Philanthropic Design

A panel that included Andrea Sreshta of LuminAID, Gregory Kearley, AIA, of Inscape Publico, and Kathryn Meairs, AIA, of The RED Office, exchanged views on humancentered design. Sreshta focused on listening to needs and developing appropriate responses. Kearley's model for practice includes a for-profit and a non-profit arm. Meairs advocated for eliminating the client; her company bills itself as being the architect, the builder, the owner, and the contractor as a way of controlling the process to produce better architecture.

This panel resonated with those in the room who see the need for more philanthropic architecture, but who feel hamstrung by the size of their businesses in terms of having the overhead available to take on pro bono work. "The underlying goals around our business model related to having a greater impact," said Teri Coates, AIA. "We wanted to be able to enable people to have a greater impact through aggregated community."

Covalence



Team members:

Beau Frail, AIA Liz Lessig Christa Wood Elizabeth Turner, AIA Kurt Neiswender, AIA Josh Flowers, AIA

Team Covalence highlighted an interest in protecting environmental resources, conserving cultural heritage, and empowering diverse neighborhoods. Its model proposed a dispersed collection of co-working spaces under a single company umbrella that would share resources and enable people to harness the power of a collective to advance their communities.

Mission: We connect designers in spaces and with resources that advance equitable social, economic, and environmentally responsible design solutions within their communities.

Daedalus



Team members:

Jeff Pastva, AIA Yu-Ngok Lo, AIA Teresa Coates, AIA Jason Winters, AIA Joanna Robinson Stephen Parker, AIA

People often want to take ownership of projects in their own communities to improve their environments-or at least that's what Team Daedalus is banking on. Daedalus is a service that enables equity partnerships of crowd-sourced funding and crowd-sourced designs to bring projects to fruition that would otherwise have little likelihood of success. The business would champion projects, offering project management in exchange for partial equity, while still allowing both design and development to be democratized so that everyone becomes a financial stakeholder in each community-organized project.

Re\Thread



Team members:

Illya Azaroff, AIA Nicole Martineau, AIA Peter Kuttner, FAIA Danny Rigg, AIA Deane Madsen, Assoc. AIA Nicole Hilton, AIA (not pictured)

Re\Thread aims to leverage its business model to have a for-profit arm driving its non-profit side. "We are proactive through our not-for-profit arm by connecting with communities and local experts," said spokesperson Danny Rigg. "Through our for-profit, we activate these communities through partnerships and we amplify the response through our global network of experts." Through its network, Re\Thread connects with at-risk communities to design solutions that guide future development strategies, looking at specific challenges to work alongside and within communities.

Vision: Connect creatives and communities to shape flexible, resilient futures by establishing connections between design generalists, specialists, and communities to create healthy environments.

Out of the Box

One outlier team focused on growing architecture, as opposed to building it, through genetic modification. Group spokesperson Eric Freed, AIA, pronounced that "construction hasn't changed in 200 years."

Instead of generating buildings that replicate the processes of the last few centuries, Freed and his team proposed architecture as the new biology.

"We are leveraging nature's technology to grow healthy and regenerative buildings," Freed said.

Prostruct



Team members:

Abram Sustaita, Jr., AIA Jennifer Taylor Matthews, Assoc. AIA Laura Beth Cochran, AIA Michael Thraikill, AIA Eric Corey Freed, RA

Prostruct wants to leverage nature's technology to grow healthy and regenerative buildings. "By tapping into this new technology, we combine architecture and development services to procure land, funding and community outreach to provide affordable and healthy homes," team member Freed said.

Prostruct's big idea is to target and select where to grow this new type of housing to deliberately counter the effects of gentrification and reverse the racial history of redlining. The team wants architects to create local communities that individuals and families can take pride and engage in.

Prostruct also scratched the surface of ideas like partnering with civic agencies that represent housing in order to develop a rent to own model that fosters a pathway to home ownership.

Mission: We'll make healthy buildings available to everyone. We'll manipulate biology to grow affordable homes to help empower lower/middle class stakeholders to create pathways to homeownership.

Afterword

Perhaps the biggest takeaway from the Practice Innovation Lab was that each attendee becomes part of the summit's network. Whether or not these new models of practice will be adopted, the YAF succeeded in distilling IO potential solutions that look ahead at what architectural practice might become. Participants can continue to develop these ideas, either by incorporating choice elements from the proposals into their own practices, or by using the new Practice Innovation Lab network to push hybrids of these models into fruition.

While the compressed timeframe of the event pushed teams into production mode quickly, speaker Susan Chin noted that that's how project teams come together in real life. When working on community projects, she said, ad hoc collaborations are the norm. "So many of you are going to be flown in, and will not know your team," Chin said. "How do you get there as fast as possible? [You must] quickly determine what your priorities are, and what has the most meaning."

The summit raised many questions about practice for those involved in it. "[This is a] great room of people with tenacity and patience to stick out this full day of idea-churning," Julie Zhang said. "It's the perfect group of people to do ask what is challenging our profession. [We need to] find those people who have personalities like us, and can think for communities versus just us."

Ricardo Rodriguez, for his part, suggested that the Practice Innovation Lab may have made him question the future roles of architects: "Picking out finishes or doing spec selections is a waste of talent and time," he said. "Some would think the value of architecture is in helping and rebuilding. Why are we doing what we're doing if it's about community?"

That is a question that many participants will bring home with them. The rising generation of architects yearns to assist communities in need, and to use their training to its fullest potential.

"We will evolve our practice or take something back, but I would hope that someone's going to start a new company," Anthony Vanky said. "One of the other value-adds of this event is not just to stir the pot but to kick it over."

With the ten proposals emerging out of the Practice Innovation Lab, consider the pot officially kicked.



The American Institute of Architects