

Hybrid studio: blending research, service and practice

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ABSTRACT:

Within the allied professions of architecture, engineering, and construction, there is an imminent need to creatively hybridize the disparate realms of research, public interest design, and *traditional* practice. This hybrid has the potential to reinvigorate these professions and shift the relevance of the industry in line with the current and future issues facing the built environment. Snow Kreilich Architects, has begun to combine these disparate realms of practice/inquiry into a hybridized studio model in Minneapolis, Minnesota. This paper will use case study methodology to document and summarize the process of forming such a hybrid. The topics discussed will include: (1) Drawing precedent for research-oriented and purpose-oriented organizations and from the fields of medicine, law, and technology. (2) The underpinnings of hybrid design organizations, drawing precedent from the University of Minnesota's Master of Research Practices in Architecture (MS-RP) program (3) evaluate and discuss the successes and shortcomings associated with hybridizing an existing studio-based architectural practice. (4) Discuss the potential benefits of combining these realms from a financial, operational, and relevance point of view. As a case study, Snow Kreilich Architects' existing architectural practice explored how research within the firm has potential to elevate the everyday work we do and also provide design services through alternative means to marginalized topics and populations, both domestically and abroad. Critically, both types of service are arranged logistically to behave in symbiosis. Within this evolving environment at Snow Kreilich Architects, the unlikely combination of research, architectural services, and public interest design agendas found common ground to be pursued through an innovative business model. Identifying alternative, recurring sources of funding was a critical step in forming an operational and budgetary plan for how research and pro bono activities could function alongside the existing structure of the firm. These two modes of practice were already an integral part of the way the studio worked but both research and pro bono projects were treated as entirely philanthropic activities. Leveraging interdisciplinary partnerships under the umbrella of a non-profit status allowed previously anecdotal research and philanthropic design projects to go further and have larger impact backed by calculated research methodology and dedicated research staff. The hybrid studio offers possibilities for the profession to broaden its lens, work with unlikely interdisciplinary partners, and design for segments of the population outside the profession's traditional reach. The hybrid structure piloted and evolving at Snow Kreilich Architects allows the studio the flexibility and capacity to deal with complex problems presented in the world. We see the opportunities for this type of hybrid operational model to expand its application and to grow in importance as the architectural profession, and other professions, are asked to creatively produce thoughtful solutions to urgent issues in the built and unbuilt environments.

KEYWORDS: Integrated, Practice, Hybrid, Public Interest

1.0. INTRODUCTION

The impetus for hybridizing the traditional architectural firm, or studio, is driven by two overarching agendas. The first is to uncover a purpose-oriented culture and work environment wherein architects and allied professionals are engaged in work that is personally fulfilling and professionally enriching. The second agenda, or goal of hybridization is to create an integrated

research-oriented workflow which informs both the product and the process of the architectural practice. By relating these somewhat altruistic agendas with a traditional, for-profit business model, a hybrid firm structure has the potential to create an environment in which the architect takes on multiple beneficial roles within and outside of the constraints of the profession.

1.1. Purpose-oriented:

The first goal in hybridizing the architectural studio was to orient a portion of the work towards clients, project types, and issues that were in service of pressing societal goals. This type of reorientation creates a new venue for architecture and allied professionals to have an impact beyond the building, and engage in civic activities. This has been referred to as the “civilian architect” by many but this agenda also engages these activities within the profession instead of as a service, with no recognition or value to the time spent. This type of work is a growing demand of top-level employers and the employees alike. For example, “In 2015, 28% of the U.S. workforce [was] Purpose-Oriented. They define the core role of work on their lives as providing personal fulfillment and contributing to society. These 42 million people work in diverse roles and industries from baristas to Fortune 100 CEOs.”ⁱ Beyond the obvious societal benefits that purpose-oriented architectural work inspires, the reasoning behind the integration of this work within the professional architectural realm is layered and faceted. While many benefits are realized, two factors are omnipresent and important to highlight within this study; (1) “Employees who are purpose oriented have: 20% longer tenure, 47% more likely to self-promote the company, 50% more likely to be leaders, 64% higher levels of fulfillment”ⁱⁱ and (2) “87% of millennials believe the success of a business should be measured in terms of more than just its financial performance. 46% [of Millennials chose their employer based on their approach to] Corporate Social Responsibility [and another] 32% [noted they chose their employer based on] Prestige”ⁱⁱⁱ. Further, these two factors are of incredible importance to the architectural profession in particular, as both create professional workplaces that thrive on diversity of thought and talent, capable of dealing with complex issues in the public realm.

1.2. Research-oriented:

The second overarching agenda for the hybrid studio is to leverage knowledge gained through research to improve process, product, and impact within the expanding scope of the architectural profession. Incorporating a formalized research agenda into an architectural office shows that the firm is concerned with the broader impact of design within the real world. It shows a firm’s dedication to creating design solutions that are based in inquiry and optimized by iteration instead of blind pragmatism or egotism. While the idea of integrating research within the architectural studio is not new, it is important within the confines of a nascent dialogue of hybridization, to reference the *tested* value and methods of research within the architectural design process.

“Before we start designing anything, we’re almost anthropological. Before we put mouse to pad, we have a really good understanding of how people will work in a given space and what the pragmatic and conceptual goals are.” -Stephen Cassell, Architecture Research Office (ARO)^{iv}

“Our commitment to research has provided a way for deep investigation to be conducted during design—and for the results to stimulate and augment the processes of designing and building at KieranTimberlake. As our research activities are engaged during pre-design, project delivery, and post-occupancy, our building sites and buildings are the test beds that provide substantive feedback for future solutions. A transdisciplinary research group with backgrounds in fields like ecology, chemistry, physics, anthropology, economics, and materials engineering, works alongside design teams to define and support project-based research initiatives, as well as independent research pursuits” - Kieran Timberlake Research Group^v

As these two quotations from well-known architectural firms describe, using research as an integral part of their process lends a wealth of opportunity and value to both the workplace culture and resultant architectural solutions. Further, there is reciprocal and hidden value in this duality. Research should not be considered a purely sacrificial activity to the architectural client or to firm leaders. Although sometimes the benefits of somewhat altruistic activities are

intangible or not directly quantifiable using traditional methods of evaluation, they exist. There is a similar dialogue occurring within the realm of ecological design wherein ecosystems evaluation proves to be tangled up in a multitude of factors, not discretely quantifiable but its benefits realized in multiple realms. The value of ecosystems, or in this case, intangible value of non-linear systems, is viewed, evaluated, and expressed differently depending on cultural conceptions, philosophical views, and schools of thought.^{vi} Therefore, within the context of this paper and the development of the hybrid studio model, research and informed architectural solutions were designed to work in concert, both financially and logistically. Research is given space to expand and inquire meaningful questions that often do not have a foothold within the design process. This type of applied research feeds design solutions with reason and a creative edge not present with a “straight-ahead” design process. As applications and agendas for project-based research grow in number within the hybrid studio, feedback loops from previous projects inform further inquiry and add credibility to findings. This feedback loop and the resultant body of knowledge has tangible benefits for both the firm and, more importantly, the allied design professions as a whole. Adding to the comments above regarding attraction/retention of top talent above due to purpose-oriented agendas, a research focus within top architectural firms is yet another means of attracting and keeping top talent who have aspirations to explore that part of the field while still being able to practice architecture, gain licensure, and create design solutions in a traditional sense.

2.0 METHODOLOGY: WORKING IN CONCERT

It is important at this juncture to reiterate that this project and its effect are nascent and have not been in existence for long enough to fully evaluate the strengths, weaknesses, opportunities and threats of such a business model. However untested, it is equally important to define a clear set of goals, document the underpinnings and logistics of this arrangement, and establish benchmarking strategies for evaluating the effect(s) of such a hybrid firm structure.

The idea and process of hybridization started with a simple set of rules or goals that defined the trajectory forward. (1) Leverage what the for-profit firm already does. (2) Expand our existing research capacity and formalize the process/products. (3) Use our architectural skill set to assist others outside of the traditional for-profit architectural scope, specifically within the public domain. (3) Reduce the cost to the firm for these activities by realizing value. (4) Increase the breadth and depth of the professional network through hybridization and, (5) Attract and retain new clients, partners, and employees that were invested in both the traditional firm model and a culture of research and purpose-oriented work. These five principles served as the basis to chart a course through new, and somewhat uncharted waters. At this point, it is necessary to cite the work of a group of architects and designers who have compiled a set of case studies that served as a menu of operations for this effort. Proactive Practice Research Collaborative^{vii} has assembled an online resource that describes in great detail, the business approaches of several design and architecture firms who have taken on research and/or public interest design work as part of their operational model. This resource, along with an extensive evaluation of the existing business operations served as a platform to contemplate how and why a hybridized firm structure could provide mutualistic benefits for a multitude of partners, clients, and affiliated organizations.

The process of designing the hybridized model was iterative and open ended. It involved looking at existing cash flows in and out of the for-profit firm over an arc of a decade. This included evaluating specific project fees, profit, loss, unrealized gains, and time dedicated to non-billable activities. Further, a deep investigation into what pro bono projects the for-profit firm had performed revealed that the for-profit firm was already donating a significant amount of time to non-billable projects/clients as part of its business plan. The existing firm structure consists of a somewhat traditional architectural model. This model provides a robust way for the firm to be nimble, versatile, and design oriented while remaining profitable. Individuals, corporations, and governments are the primary paying clients bringing profits to the firm. Pro bono design services are allocated as needed to support various activities that are either self-

initiated by members of the firm or by external entities looking for assistance. Further, research within the firm is handled in a similar way. Internally initiated research agendas are supported by the firm by allocating time and resources to these efforts without pay. The question became, "What if these research and design activities could be part of a business model that not only informs the studio's for-profit activities but, they could pay for themselves and offer myriad unrealized benefits to the firm?" As the investigation into the existing firm structure and operational model grew in detail, potential avenues for hybridization began to sort themselves and a system which blended certain elements while allowing others to remain completely separate rose to the top.

The resultant business model proposes to develop two separate and discrete entities, one within the existing for-profit firm structure and one outside of the existing structure. a separate 501(c)3, not for profit organization which operates independently. The existing business model is altered to include research as part of the normal operations, compensated partially by research and development tax credits. Research activities within the architectural design process are generally seen as expenses from a financial perspective, but when re-framed within the context of qualifying R&D activities, they begin to take on a new value - one that is an asset to the financial stability and knowledge base of the firm instead of an activity that is a financial drain with unknown potential. A 501(c)3 not for profit organization would operate outside of the for-profit firm structure and be managed by a diverse and discrete board of directors' majority without affiliation to the for-profit firm. This entity allows a combination of external funding generated by fee-for-service work and donations from traditional non-profit funding sources (Grants, private donations, fundraisers, etc). Grant-based funding for research initiatives within the 501c3 and federal/state R&D tax credits within the for-profit allows both of these discrete entities to dissipate the financial draw of these somewhat altruistic activities while allowing their effect to be realized within a formalized business model. Further, this process of dividing purpose-oriented and research-oriented work into two discrete entities with separate funding sources and leadership allows two main objectives to occur simultaneously. (1) The whole aggregation of for-profit and non-profit entities are able to conduct and formalize research and partially compensate the time/expense of such activities. (2) Allows a diverse group of stakeholders to be involved in an otherwise siloed collaborative.

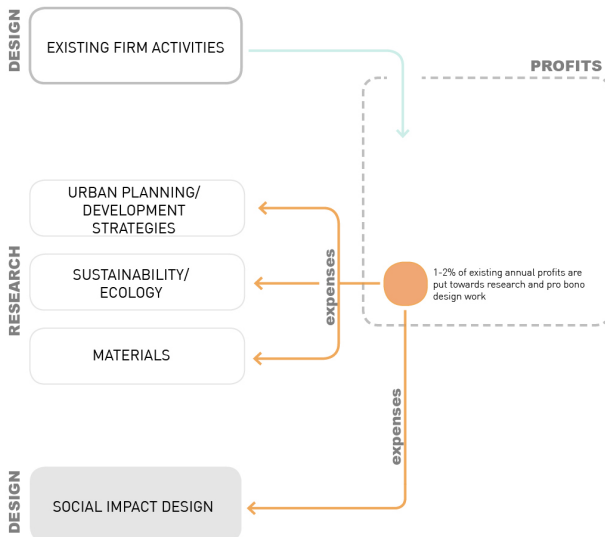


Figure 1. Existing business model showing flows out in orange and flows in as blue. Source: Matt Tierney, Snow Kreilich Architects (2016)

While the benefits of this type of firm structure could be limitless, adding complexity to a system that already runs well financially and logistically could create risk due to the process of meshing personnel and objectives within two discrete entities from a tax perspective. Strict boundaries,

rules and protocols are developed to keep R&D funded research and non-profit funded research/design discrete is paramount to the success of this hybrid. A clear support system and team of legal, accounting, and operational professionals who specialize in these niches is also of critical importance to reduce risk. Another critical item in the structure of this hybrid is to implement bookkeeping systems that ensure employee time is being allocated accordingly so activities can be tracked in detail.

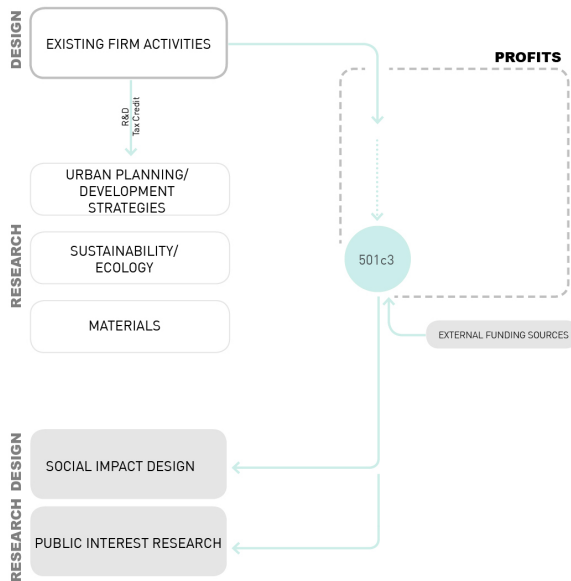


Figure 2. Hybrid business model showing flows out in orange and flows in as blue. Source: Matt Tierney, Snow Kreilich Architects (2016)

Through conversations with multiple firm leaders and within an internal evaluation of our records, it becomes fairly clear that existing internal funds within architecture firms are very often being allocated to internal research efforts and pro bono projects. Approximately 1-2% of the overall annual budget within the case study firm was being spent on non-billable research efforts and pro bono architectural projects annually. This step of self-evaluation is critical to the trajectory and magnitude with which a firm would hybridize its operations. Further, it helps establish baseline goals and types of work/research are already present in the interest of the studio. Within an existing architecture firm especially smaller firms without expensive and complex time card software, reports are often difficult to generate because there is not often a set system to track and monitor research, pro bono efforts and these efforts likely span over multiple project phases, if not over multiple projects. The goal of any such evaluation is to start to develop and quantify the existing contributions of time and resources towards efforts that are of philanthropic or public interest. This is a powerful exercise that led the case study firm to develop methods of formalizing both research and philanthropic work within the studio environment so that this type of important work could be managed and funded from a multitude of sources.

The goal is to establish the baseline and then imagine if these resources were still allocated to research and pro bono work but was managed differently and bolstered by a set of external funds that allowed for greater capacity, the impact could be significantly increased while bolstering the existing firm structure. By combining internal funding, new external sources made possible by a new 501c3 entity, and federal/state R&D tax credits, a substantial budget could be allocated to firm activities that both add value and knowledge to the work the firm already does and open doors to new arenas where architecture could have dramatic impact.

Some external sources of funding would need to be identified and courted, others would need to be handled within our financial/tax management.

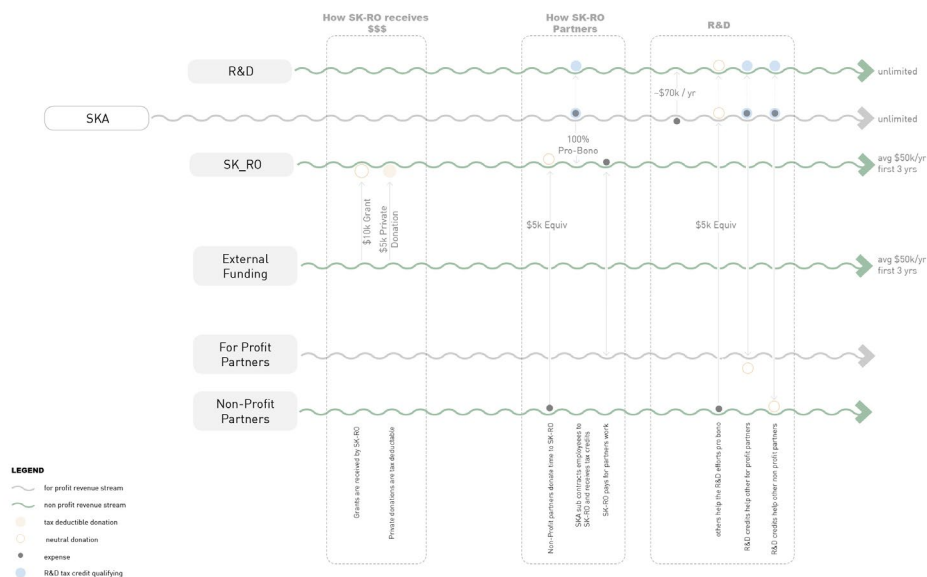


Figure 3: Hybrid business model showing multiple streams of discrete partnerships working together. Source: Matt Tierney, Snow Kreilich Architects (2016)

Benchmarking, and self-evaluation of a new operational model is critical to success. As stated before, this project is still being actively developed and will continue to morph and become malleable throughout its adolescence. With that in mind, scientific results will not be presented in this paper but rather, it is important to show a methodology for evaluation, in this case, based on the principles that were presented at the beginning of this section as markers. While certain elements of the evaluation such as resultant project wins, marketing potential, attraction of top talent etc. are intangible or hard to quantify, there are other aspects that could have a more rigorous and predictable scientific method. Each firm or set of partners will need to develop and modify the means of evaluation as part of the process. While there is not any conclusive evidence to report at this time, there is anticipation that by integrating applied architectural research and public interest design within and adjacent to an existing organization, there are wildly mutualistic benefits and relationships.

3.0 PARTNERSHIPS AND IMPACT

An overarching principle, and intrinsic quality of the hybrid studio involves, developing collaborative working relationships with a diverse group of professionals, clients, and stakeholders. These partnerships can and should be forged between and within allied professions, educational institutions, other not for profit entities, NGO's and multiple governmental agencies. All of these partnerships have the collective perspective and skills to positively affect the public realm through collaborative problem solving. With specific focus to the architect in this entanglement, collaborative partnering presents a limitless arena for architectural design and applied architectural research in which the products of such activities have benefit for all. The architect not only can provide skills and products that are in line with traditional modes of operation, (The design of buildings, interiors, programming, etc.) but it also allows the architect to serve as a creative problem solver and a hub within a radial arrangement of impactful partners. This type of collaboration requires a departure from traditional methods of forming design teams. It requires looking towards unlikely professions and project types that could benefit from a more interdisciplinary and collaborative working environment. One way to create a researched-based value proposition within the public realm is by leveraging a deep knowledge of place in a diverse group of team members. Having the

ability to navigate complex political situations in the built environment is an asset that clients seek. One organization that has managed to make this value proposition a reality is Utile in Boston, Massachusetts.

"Utile's progressive and entrepreneurial approaches help public-sector clients think about how to physically and legally shape their cities in ways that are mutually beneficial for governments and the public. While this approach requires more work in the early stages of a project, it allows Utile to win over potential clients by demonstrating the firm's deep knowledge of the underlying systems and constraints that a project must respond to"

Developing potential collaborative teams around real or hypothetical projects is an effective means of strategizing partnerships with consulting firms, non-profits, and educational institutions. In this projective exercise, each project could have a different team makeup of partners within a loosely formalized network where a project only calls certain ranks to participate based on their expertise and interest. Establishing this network of collaborative professionals, academics, and stakeholders at the onset of the formation helps increase the capacity of this initiative monetarily and logistically and would help cater the goals of research and social impact design to areas that could be tackled by such a diverse network effectively. Establishing this network of resources provides for ready-made project acquisition with teams that are equipped to deal with the complexity inherent in the public realm. Further, a diverse set of partnerships under one organizational agenda adds almost unquantifiable means of getting projects and attracting others to participate. In an developing an organization based on collaboration, it is omnipresent to have diversity and inclusion to be effective. The diversity of age, race, ethnicity, religion, gender identification and a host of other attributes of people who have an interest in the process and/or products of such an organization exponentially increase the odds of success for everyone. It is truly an organizational platform where there cannot be too many people or too much diversity.

4.0 CONCLUSIONS AND NEXT STEPS

This proposed addition to and divergence from more traditional models of architectural practice has many potential areas wherein the scope and relevance of the architect and her allied collaborators expands. This open-endedness, and invitation to collaborate across disciplines inspires a more resilient creative processes that seeks answers embedded in a multitude of perspectives. Within this pluralistic design agenda, architectural work could be presented in many incarnations and through many mediums having impact across the globe. While the discussion housed within this paper has focused on the reasoning and nascent application of these principles within a particular studio environment, further quantitative investigation into the success of such a hybridized studio environment needs to be carried out across multiple firms and across a longer time scale to realize the effects of such an addition. The work done by the Proactive Practice Research Collaborative and other organizations seeking to bring an understanding of multiple means and methods of integrating public interest design and research oriented operational models is the necessary first step in exploring this potential across scale, geography, and specialty. Continued monitoring within Snow Kreilich Architects, and ideally other firms, will bring greater understanding of both tangible and underlying effects of the research-oriented and purpose-oriented portions of the hybrid studio model.

ENDNOTES

ⁱ Impact Design Hub, An Introduction to Social Intrapreneurship, 2017

ⁱⁱ Imperative/NYU, Workforce Purpose Index, 2015

ⁱⁱⁱ NSHSS, Scholar Millennial Career Survey, 2015

^{iv} Philip Nobel, Interview with Cassell, Yarinski and Yao, Metropolis Magazine, The Research in Architecture Research Office is No Joke, March 1, 2013

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^{vii} "Case Studies", Proactiv Practices, Last Modified 2019, Accessed December 2018, Authors, G. Meron, M. Scharphie, N. McClintock, [ps://proactivepractices.org/](https://proactivepractices.org/)