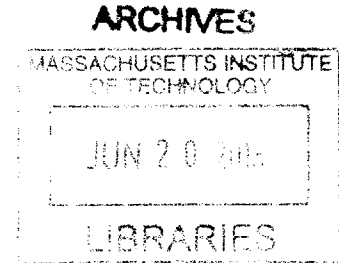


DISRUPTIVE BY DESIGN: THE PROMISE OF THE TECH-ENABLED DESIGN COMPETITION

by

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Submitted to the Department of Urban Studies and Planning
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at the
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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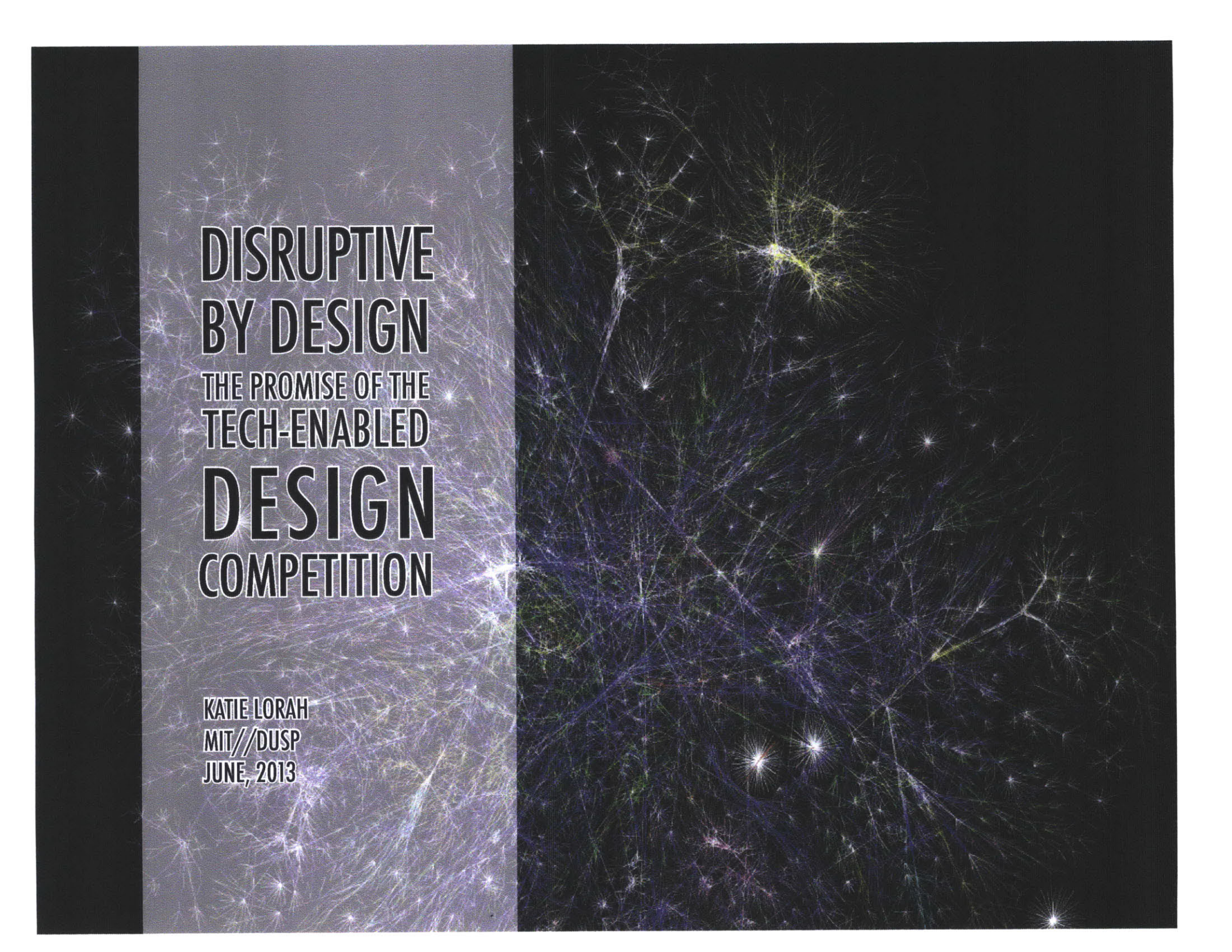
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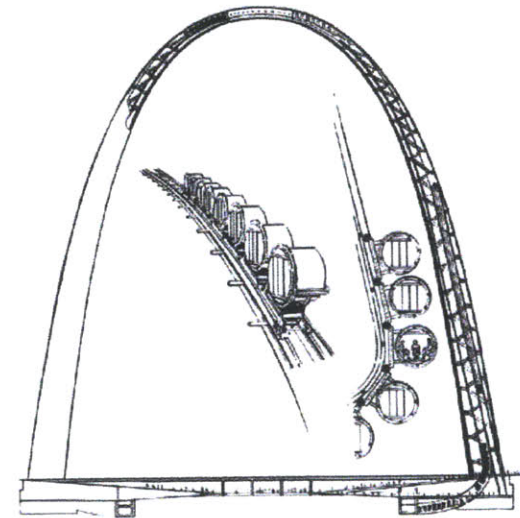
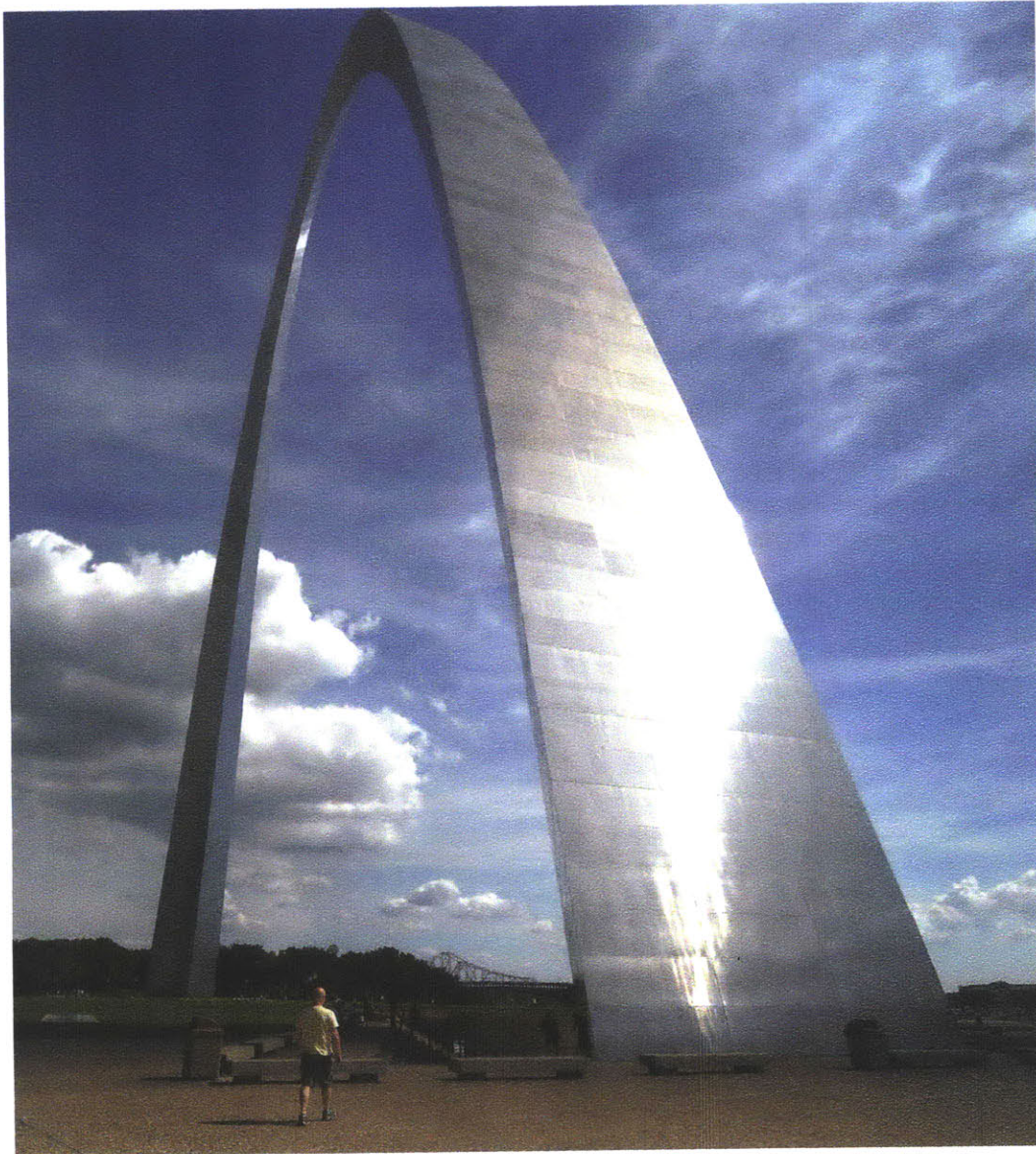


**DISRUPTIVE
BY DESIGN**
THE PROMISE OF THE
TECH-ENABLED
**DESIGN
COMPETITION**

KATIE LORAH
MIT//DUSP
JUNE, 2013

FIG 1: "The Competitive Hypothesis," an exhibition at the Storefront for Art and Architecture, New York City, February 2013, that explored the value of the design competition to the architecture profession





*FIG 2, FIG 3:
St. Louis' Gateway
Arch, a winning public
competition entry by
Eero Saarinen, 1947*

ABSTRACT

At their best, urban design competitions offer access to innovative design thinking for competition sponsors; high quality spaces for the benefit of the public; and career advancement for designers. However, many feel that competitions are falling short of these aims, frustrating organizers and exploiting designers while leaving the public largely out of the dialogue. This thesis explores the potential of web-based social technologies to improve the urban design competition model so that it better serves all parties. It establishes a current model for urban design competitions before examining some precedents for related processes that have been disrupted by emerging social technologies. The study concludes with a proposal for a new, tech-enabled urban design competition on the eastern side of MIT's campus.

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"Isn't there something fundamentally paradoxical about competitions as a method for urban design if we also claim that the essential nature of urban design is collaborative? While collaboration seeks convergence and communality, competitions seek divergence and autonomy. While the key to collaborative process is information, communication and mutual learning, competition leads to rivalry, isolation and withdrawal."

—Tridib Banerjee

"What advantages, or the reverse... have accrued to the [architectural] profession by the practice of Competition?"

- *Increases professional knowledge & experience?*
- *The only means of advancement without connection?*
- *Demoralising?*
- *Flashy style promoted?*
- *Loss of health & money?"*

—Royal Institute of British Architects' Survey on Guidelines for Competitions, 1872

CHAPTER ONE: AN INTRODUCTION

1.1

LOOKING AT “THE COMPETITIVE HYPOTHESIS”

In February 2013, New York City’s Storefront for Art + Architecture, a tiny nonprofit gallery space in Manhattan’s Lower East Side, held an exhibition titled “The Competitive Hypothesis.” The show, on design competitions, was a curious mix of celebration and lampoon. One section featured recent competitions that have helped spawn new architectural movements and vaulted architects into fame. Another section was essentially a tribute to architects who game the system by sidestepping the requirement for anonymity and other competition rules. And a third section featured a tongue-in-cheek canonization of the lowly architectural intern, whose blood, sweat and tears presumably lie behind every competition entry. As the review in *Domus* put it, “After visiting the exhibition’s four rooms we see what a competition press release would never mention: that the entrants’ anonymity was breached, that the firms’ presentation techniques were clichéd, and that the unpaid interns did all of the work” (Kubey 2013).

What the exhibition did not provide was any solutions – a transgression that can be forgiven by its 900 square feet of gallery space and the exhibition’s 2-week run. The very next month, Storefront, which often sponsors ideas competitions and small-scale built competitions, announced its next endeavor: “The Competition of Competitions.” Picking up where the exhibition left off, this meta-competition was launched with the premise that the structure of competitions is inherently flawed: they ask the wrong questions, they establish a servile relationship between designer and competition organizer, and the only potential for success they offer lies in breaking the rules. Storefront called for original competition briefs, essentially how-to guides for dismantling the design

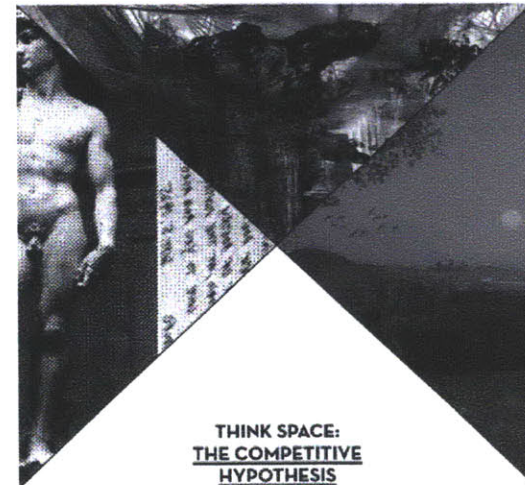


FIG 4: “The Competitive Hypothesis” exhibition
FIG 5: Exhibition catalogue

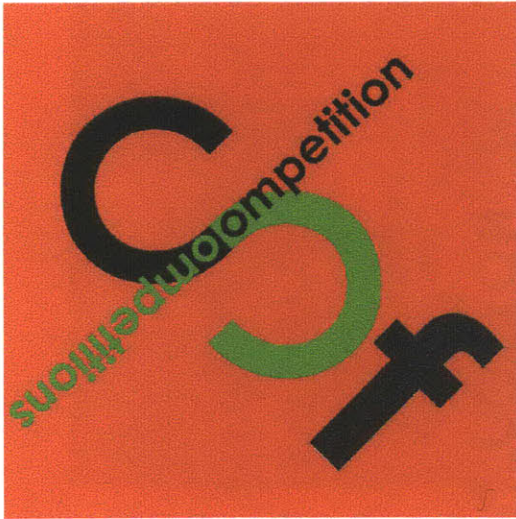


FIG 6:
Storefront's "Competition
of Competitions" brief

competition by the creation of an alternate model. According to the brief:

"The intention of "The Competition of Competitions" is to provide and deliver new and relevant forms of engagement and content to the economic, politic and social systems that currently act as the voice of authority for the development of our cities. "Competition of Competitions" asks architects, artists, economists, philosophers, writers, and citizens at large to create interdisciplinary teams to formulate the questions of our time and define the agents that should pursue the task to ask and commission the visions for the future in the form of a competition brief" (Storefront 2013).

While Storefront's new competition may serve mainly to prove a point, the gripes on which it is based, both from within the design profession and from without, are familiar and longstanding. Competitions can be grueling and costly, decisions are made in a seemingly arbitrary fashion, and it's easy to lose sight of the connection of the competition to its built environment.

The notion of reinventing the competition is worth some real analysis; a workable alternative is a worthy goal. After all, complaints about the competition model might be loudest within the design profession, but if the model is truly flawed, the negative impact on our built environment is felt by us all.

1.2 AN INTRODUCTION TO THE QUESTIONS

The results of design competitions are all around us, but most laypeople remain unfamiliar with the process. The physical evidence of design competitions for public places, buildings and monuments in the United States includes iconic landmarks from Central Park to the U.S. Capitol building to the Gateway Arch in St. Louis. More recently, high-profile competitions for such projects as the High Line in New York and Seattle's Olympic Sculpture Park have earned accolades for enabling cutting-edge design while simultaneously raising the profiles of little-known designers and cultivating design literacy and civic engagement in their communities.

While the urban design competition can be a great experience for design professionals, sponsoring institutions, and the public, it contains serious shortcomings as well, some known and others unmeasured. The model is frequently seen as exploitative to designers, as not resulting in the best designs, and as involving little meaningful public input. Opponents of competitions present them, as historian Helene Lipstadt asserts, “as either pointless exercises that exploit the creative and financial resources of experienced professionals and younger designers, or as pernicious and devious phantasms that provide an inadequate substitute for the direct cooperation of client and architect” (Lipstadt 2006, 9). Much of the criticism boils down to the lack of collaboration the model allows, and even more fundamentally, a lack of communication between its players.

Meanwhile, we’ve seen the rapid emergence of new technological paradigms in areas from journalism to commerce to democratic process. It’s difficult to overstate the impact of the Internet on virtually every aspect of public and institutional life, from the ubiquity of accessible information to the shift to real-time citizen commentary, to the nature of design itself. In light of all this change, the relatively stable—or stagnant—design competition model invites the question: How can new forms of communication and collaboration enabled by digital technology improve on the design competition as we now know it?

This study will explore what a new, tech-enabled competition model might look like that better rewards talent and creative problem solving; increases public awareness and support for planning projects; and builds better places. The study will address several questions:

- What are the ways in which the current, dominant model of urban design competition falls short of its promise, and how can we know?
- What are the specific technological tools that might apply to design competitions, and what evidence is there that they would be effective?
- What are the implications of this new model for design practice, client success, and the built environment?

The argument will build on that made by Jack Nasar in his book *Design By Competition: Making Design Competitions Work*. As the only comprehensive study of the current design

What might a new, tech-enabled competition model look like that better rewards talent and creative problem solving; increases public awareness and support for planning projects; and builds better places?

The study will produce a set of recommendations, and will conclude by proposing a new urban design competition model as part of a current planning process in Cambridge, Massachusetts.

competition model through the dual lenses of efficient process and successful outcome, Nasar's book is the jumping-off point for this study. Nasar proposes an alternative competition model that he believes is both more democratic and more likely to result in successful projects. Essentially, he envisions built-in processes for better communication among clients, designers, and the project's intended users¹. However, his specific focus on architecture competitions and his failure to anticipate the paradigm shift brought on by new technology means there is much room to expand on his argument.

Rather than suggest a new model as a merely academic exercise, the study will produce a set of recommendations, and will conclude by proposing a new urban design competition model as part of a current planning process in Cambridge, Massachusetts. By applying the proposed improvements to a real-world design problem, the aim is to better delineate the potentials and limitations of a new competition paradigm.

1.3

DEFINING THE URBAN DESIGN COMPETITION MODEL

What are we trying to improve, or "disrupt"?² There is little agreement on what constitutes a design competition, since the term covers a broad spectrum of process and outcomes. Competitions can be and are sponsored by anyone, can be open to a range of practitioners, can cover just about any physical site imaginable, and can be held with varying intents. Outcomes of a competition may range from a built result, to increasing public awareness, to spurring debate within the design community. This study will refer throughout to the "competition model," as a small subset of competitions within a much larger spectrum. By narrowing the model significantly, we can better pinpoint the elements within the competition process that would best lend themselves to change.

Specifically, this study will address the *open urban design competition for a public space, building or monument, offered by a public client or a nonprofit client working in the public interest, with the intent to commission the winning design team and build the project*. While limited, this model still covers a great number of competitions, and is perhaps the most common type. This model is perhaps best explained by putting each element of the definition in contrast. The competition model referred to in this study is:

Open, not invited. Calls for entries are advertised publicly, and there is no limit to the number of entries. Competition organizers might specify that a discipline or combination

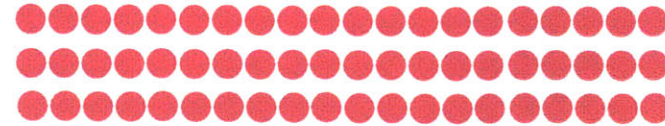
of disciplines make up each team (i.e. architecture and landscape architecture), but many others will not.

Concerned with urban design and the public realm, not just architecture. This distinction is about project scale, not entrant requirements; many architects enter urban design competitions. The distinction is that the focus of the project is within the built environment, but is not specifically about designing buildings. According to Tridib Banerjee, the distinction lies in the social complexity of urban design competitions, which “deal with public and private interests and domains, often in conflict and competition with each other. Urban design often involves in real or symbolic sense redistribution or regulation or territorial power, control and rights of different social groups” (Banerjee 1990, 125).

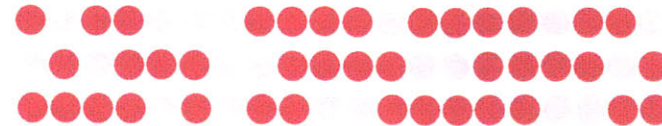
For a public project, not a private one. While the majority of competitions concern projects in the public realm, the number of private competitions has grown in recent years, according to architect and frequent competition entrant Gregg Pasquarelli of SHoP Architects³. As a major focus of this study will concern modes of public engagement, the model referred to will not include competitions for private projects.

Sponsored by a public client or a nonprofit client in the public interest, not a for-profit client. Competitions are often sponsored by a

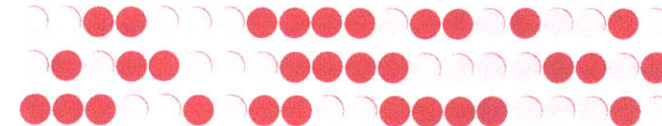
**ALL
COMPETITIONS**



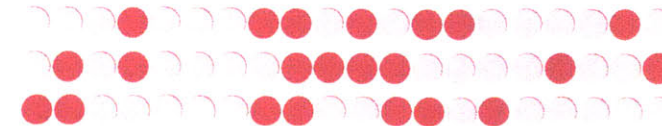
**OPEN
COMPETITIONS**



**OPEN URBAN
DESIGN
COMPETITIONS**



**OPEN PUBLIC
URBAN DESIGN
COMPETITIONS**



**OPEN PUBLIC
URBAN DESIGN
COMPETITIONS
WITH A PUBLIC
SPONSOR**



**OPEN PUBLIC
URBAN DESIGN
COMPETITIONS
WITH A PUBLIC
SPONSOR + INTENT
TO BE BUILT**

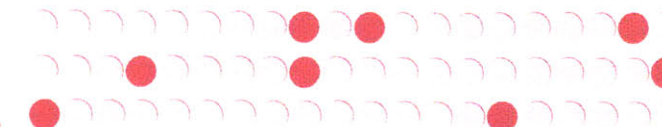


FIG 7:
Competition criteria

municipal government or city agency, though state-level and federal entities, including the National Park Service, have used competitions throughout their history. In addition, competitions are frequently sponsored by nonprofit groups, either in collaboration with or on behalf of a public partner.

Intended to be built, not for the primary purpose of generating ideas or raising awareness. This model excludes “ideas competitions,” which are meant to provoke dialogue among designers and the public around a particular place or design issue. While these competitions can fulfill an important role in public awareness and professional development for designers, this study is concerned with competitions with the end goal of implementation.

While this definition may seem restrictive, but it encompasses a large number of competitions with a combined tremendous impact on the built environment and the architecture profession. The following is a brief discussion of what are considered the major benefits and drawbacks of this competition model by entrants, sponsors, and the public.

1.4 WHAT DO COMPETITIONS PROMISE?

From the public perspective, the competition stands for an idealistic notion of democratically-oriented design. In the words of real estate expert Lynne Sagalyn,

“There is something very open, civic-minded, and public spirited about a design competition. It catches the fancy of lay citizens, draws the attention of the news and engages the interests of potential donors and philanthropists, stimulates young designers to devote their creative talents to developing innovative ideas, and so on” (Sagalyn 2006, 38).

Paul Spreiregen, whose 1979 book *Design Competitions* is still regarded as the preeminent work on the subject, is a vocal proponent of competitions. He asserts that “to think of design in the absence of competition is not possible,” and argues that competitions crystallize and formalize the best aspects of the designer/client relationship (Spreiregen

1979, 7). Architecture critic Joseph D. Murphy writes that “good competitions, well administered, well programmed, and competently and conscientiously judged, can result in great architecture today and tomorrow and can afford talented architects, young and old, the opportunity to create beautiful buildings, sites and cities worth enjoying and preserving” (In Spreiregen 1979, 2). Of course, the assumption that the competition will be “good” is a major one, and an attempt to establish criteria for what makes good competitions concludes the following chapter. But first, the question: What do competitions promise?

For the designers who enter, the open, anonymous competition represents a meritocratic alternative to the reputation-dependent direct-commission or RFP model. According to architectural historian Helene Lipstadt, the competition presents “an upside-down world relative to market conditions, in which the young, the inexperienced or the unrecognized triumph and inventiveness and excellence is recognized” (Lipstadt 2006, 10). In theory, it is a system of objective commitment to the finest in creative problem solving.

Lipstadt believes that participation in a competition is, for designers, a civic act, part of the profession’s obligation to the greater public benefit (Lipstadt 2006). Additionally, a well-publicized and high-profile competition has the ability to launch a young designer’s career, catapulting them from obscurity into a long line of prestigious and meaningful commissions. As Deyan Sudjic states, “Architectural cultures are a complex ecology, they require a mix of opportunity and ability” (Sudjic 2006, 58). Competitions, at their best, seem to unite the two. Whatever the high-minded aspirations of the competition for designers, perhaps a more widespread view is one similar to architect William Robert Ware’s 1899 assertion that “It is customary... in the profession to speak of competitions as a necessary evil, the only other opinion... being that they are an unnecessary one” (Ware 1899, 108).

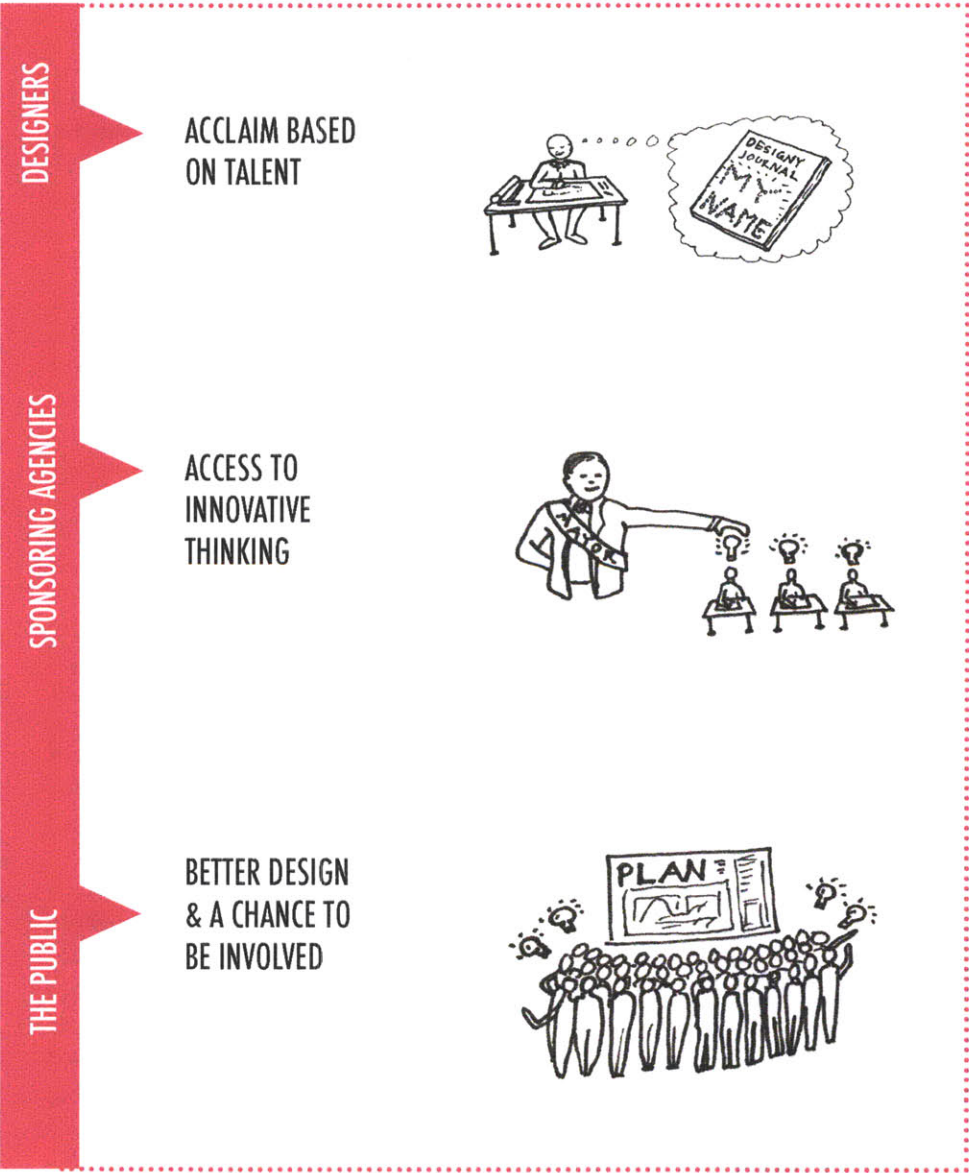
For sponsoring institutions, especially those in the public realm, the competition offers affordable access to design excellence as well as a way in which to build public legitimacy and support. As Catherine Malmberg puts it, “The competition, with its strong overtones of democratic process and meritocracy, carries widespread appeal from a civic point of view, and also gives public officials many different creative solutions to the proposed design problem for very little upfront cost” (Malmberg 2006, 3). Launching a design competition makes clear a public statement about a government agency’s or civic group’s

*“It is customary...
in the profession to speak
of competitions as a
necessary evil, the only
other opinion... being
that they are an
unnecessary one.”
-William Robert Ware*

PROMISE

"There is something very open, civic-minded, and public spirited about a design competition. It catches the fancy of lay citizens, draws the attention of the news and engages the interests of potential donors and philanthropists, stimulates young designers to devote their creative talents to developing innovative ideas, and so on."

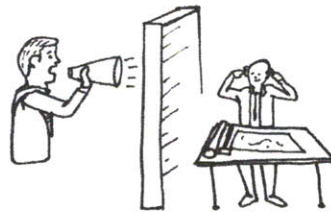
Lynne Sagalyn



WORK WITH NO
COMPENSATION



LACK OF
DIALOGUE
WITH DESIGNERS



LITTLE INPUT,
LOW RATE OF
IMPLEMENTATION



REALITY

The urban design competition is an outdated, exploitive and overly slow process suffering from a fundamental lack of dialogue between clients, designers, and the public. Though some competitions result in successful public places, it is just as likely that a competition will become a costly PR stunt that favors established firms and raises public expectations before falling victim to politics and producing unsatisfactory results.

FIG 8:
Promise vs. Reality

***"The results may be inspired, but in all likelihood they will not be inspired by the client's needs and visions."
-Helene Lipstadt***

"disinterested commitment to quality," in the words of Deyan Sudjic (Sudjic 2006, 55). For an organization looking to build good public or political will, a competition can play a powerful role.

The sponsoring of a design competition is an inherently political act. As Lynne Sagalyn states, "Urban design and planning competitions are about political issues as much as about new design possibilities, innovative solutions or design visions" (Sagalyn 2006, 33). Many sponsors are drawn to competitions for the promised political benefits, not the least of which is a low-resource demonstration of momentum surrounding a certain project. However, the politics surrounding the competition process can also undermine the primary goal of the competition, which is to generate a design solution that best meets the sponsor's needs.

Therein lies the problem. Helene Lipstadt asserts, "Competitors may aim at satisfying the juror's known or imagined preferences, and this may trump the demands of program or site. The results may be inspired, but in all likelihood they will not be inspired by the client's needs and visions" (Lipstadt 2006, 34). In other words, in an attempt to gain public and political legitimacy by leaving the selection to a panel of well-known jurors, the sponsor can unwittingly organize itself out of a position of decision-making power. While the organization might benefit from the publicity, this loss of power can have troubling consequences. Compounding this misfortune is the deliberate lack of communication between the sponsor and the entrants. Upon releasing the competition brief, which may not always define the design problem in a way that entrants fully understand, the sponsor is expected to recuse itself from the process until selection begins.

For the public using the place, the potential benefits range from the obvious – a higher degree of quality in urban design placemaking – to more long-term and diffuse social effects. As Lawrence Witzling points out, "Besides addressing a particular design problem, a competition can affect related projects, long-term urban development problems, public awareness, and public policy" (Witzling 1990, 91). Theoretically, competitions draw more people into the conversation about a particular design problem, and by extension, raise awareness for design as a discipline and a way of thinking.

Whether or not it is objectively true, urban design competitions are often seen as engaging the public more than closed commissions can. This perception may be due to competitions garnering more publicity, with several alternative visions made public often before a final selection is made. However, an increase in public awareness should not be mistaken for meaningful public involvement, which is often just as lacking in the competition model as it is in other planning processes.

There is clearly a disconnect between the promise of better physical projects and a more design-enlightened public, and the actual results. A common outcome, according to Nasar, is that “the competition-winning building, praised by architects and critics, does not work; and the citizens, whose tax dollars paid for much of it, do not like it” (Nasar 1991, 1). Nasar adds that there exists an inherent “clash between democratic and elitist values” within the competition model, which simultaneously seeks to impose a meritocratic system with a public benefit, and raise the profiles of individual architects within the profession, through a selection process typically involving a jury of architectural elites.

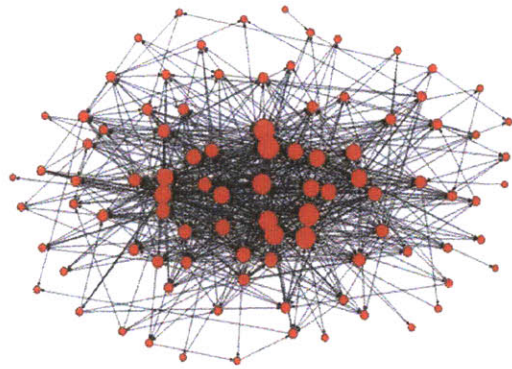
1.5 THE PROBLEM WITH METRICS

Here is where we must bring up an important caveat: many of the “successes” and “failures” of the competition model exist in the realm where metrics are murky or even nonexistent. Due to the heterogeneity of the competition model, and the varied motives of sponsors to hold them and of designers to enter them, measuring outcomes versus expectations among various actors in a comparable way would be practically impossible. The closest to an objective measure of the success of various urban design competitions was a survey of 51 competitions carried out from 1978 to 1984 by Lawrence Witzling, Ernest Alexander, and Dennis Casper, who shared their results in a special 1987 issue of *Planning* devoted to the competition. Even so, the authors began with a strong qualifier about the difficulty of measuring success, and their conclusions fall largely under the realm of common sense: clarity of the brief, active communication between the sponsor and the jury, and a wide pool of talent were all cited as factors in a successful competition.

Familiar griping aside, the design professional’s role in the competition has also largely not been quantified. A reader poll in a 1988 issue of *Progressive Architecture* revealed that 70% respondents believed that “the best design didn’t usually win,” and 69% believed

that “the process was exploitive to architects” (Boles 1988, 15-17). Jack Nasar polled architects and found that the most prevalent complaints were that competitions 1) fail to get the best solution; 2) exploit architects; 3) discourage dialogue with the client; and 4) end with unbuilt projects (Nasar 1999, 25-28). While this result generates a useful list of attributes to address, there is nothing in the way of quantitative data that might be used to measure the relative success of an alternative model. In an area where an objective study of outcomes does not exist, these perceptions are the best evidence that the current model is falling short.

Public benefit and quality of place are notoriously difficult to quantify, and no study has been carried out on the quality of public places created through competitions in contrast to other processes. Further, there is very little literature on the relative success of competitions to engage the public in a meaningful way. Because creation of this framework lies outside the scope of this study, it will be necessary to rely to a large extent on qualitative measures: interviews and reports with those familiar with the field and able to pinpoint and diagnose a phenomenon and identify success and failure.



*FIG 9:
Many-to-many connections, aided by
technology, make up a complex
social network*

1.6 THE PARADIGM OF THE TECH-ENABLED

While the competition model has remained relatively stable for the past few decades, much has been written about the transformative power of the Internet and information technologies to connect people, centralize data, and facilitate access to information. Their impact is difficult to overstate; as Robert Hassan writes in *The Information Society*, “Information technologies have been found...to be ideally suited to speeding up almost every realm of life, from education, to work, to our family and private life” (Hassan 2008, 223). The past twenty years has seen a paradigm shift in nearly every industry and sector, and these overhauls seem to be constantly accelerating.

Some aspects of the rise of information technology are particularly germane in the potential they hold for urban design. Chapter Three contains a more detailed discussion of some major trends that may indicate how these will affect the future of the competition model. They include:

- **Digital tools for civic engagement:** The Internet is changing the way citizens interact with each other, elect and communicate with their representatives, and learn about and engage in public policy. A rise in “digital democracy” has increased expectations about government transparency and quickened the pace and force of citizen-driven initiatives. In the classic planning framework, the nature of influence has become much more “bottom-up,” at least in appearance. Savvy governments and leaders have embraced these tools as a demonstration of commitment to an emerging model of civic participation, a tactic which could easily intersect with public design competitions.
- **Open sourcing and crowdsourcing for creative work:** The “open-source” concept has spread quickly from the programming circles in which it originated, and has grown into a rallying cry for the “free culture” movement, which advocates the free creation and distribution of creative work on the Internet⁴. At the same time, the crowdsourcing model has emerged as a fast, efficient and relatively egalitarian way to gather data, feedback and ideas. Finally, social technology has made it easier for those in creative industries to find, contact and arrange with potential collaborators.
- **Viral information spread:** User-generated information models have upended traditional promotions including advertising, public relations, and media-driven publicity. Campaigns promoting everything from consumer goods to nonprofits, and from politicians to public health campaigns, have employed social media, user-generated video, and blogs, with an eye toward campaigns “going viral.” The promise of instantaneous and cost-effective communication of a promotional message has brought social technology tools into the hands of those from all sectors and in all fields.
- **Crowd-funding:** In recent years, online user-funding platforms have begun to challenge traditional funding sources in creative industries such as film, music, fashion and art. With the rise of crowd-funding, realization of a creative idea is as simple as convincing a group of followers or fans to support the effort with literal buy-in. As more industries and sectors, including the civic sector, appropriate and adapt the crowd-funding model, it has become clear that the nature of implementation for all types of projects is in a moment of flux.

Each of these trends hold enormous potential implications on urban design generally, and the design competition process specifically. They are not a cure-all for the shortcomings of traditional decision-making processes. But they do enable more open communication, collaborative design, and inclusive decision making, and represent a step forward for the urban design competition model. Regardless of tools, a careful consideration of context, and the shaping of a process to match, remains the single greatest factor in a competition's success.

1.7 APPROACH

To provide a foundation for analysis, this thesis builds on a series of accounts of those involved in design competitions, as well as those familiar with information technology trends across multiple sectors. These narratives complement a diverse spectrum of literature about competitions, public processes, creative problem solving, and emergent information technology.

There has been relatively little written on the subject of open urban design competitions in the public realm, especially with regards to their success⁵. However, there is a respectable body of work that places the competition model in historical context and analyzes the projects that have resulted from it in the past. Additionally, there has been some discussion of the open design competition's role as a "necessary evil" for the architecture and urban design professions, particularly for emerging or early-career practitioners.

The study will argue for collaboration, facilitated by technological tools, as the most effective approach to urban design. Fundamental to the competition's premise is the principle that the simultaneous creative process of competing design professionals results in a superior level of engagement with the stated problem. As Karen Alschuler writes in *Planning*, "The jolt of intense, coordinated, creative thinking about challenging urban sites can stretch the concept of urban living in ways that public agencies may never be able to achieve otherwise" (Alschuler 2004).

Finally, the study draws from work, much of it recent, regarding the disruptive

potential of new media and information technology. With a particular eye toward the democratizing effect of open-source, crowdsourcing, and crowd-funding models on public opinion and public decision-making, the study extracts potential implications of such tools on the competition model. Rather than merely pointing to disruptive social technology as a panacea for the shortcomings of the current competition model, the study builds on the experiences of those in other sectors to recommend a new model for the purposes of increasing the efficiency, equity, and outcome of competitions.

1.8 ORGANIZATION

Overall organization of the thesis moves from discussion of the design competition model, to discussion of the evidence that social technologies offer a solution, to a theoretical framework for a new competition, to an application of that framework. This initial chapter has been an introduction to the research question and the arguments to follow.

Chapter Two: Begins with a brief historical exploration of the urban design competition, including short accounts of some of the seminal American competitions that have shaped professional and public understanding of the competition. There follows a more in-depth discussion of the “typical” competition process, including commentary from the literature and from practitioners on its promises and limitations. The chapter concludes with a presentation of the criteria for success for any new competition.

Chapter Three: First introduces the breadth of emergent social technology. The narrative then narrows to present three “proto-model” cases demonstrating the readiness of the urban design competition space for disruption, and suggests some of the means through which this might be best achieved. Each case is presented through analysis of its stated purpose, its function with regards to this purpose, and its implications on the new competition model.

Chapter Four: Draws together the previous chapters to propose an alternate urban design competition model. The competition is organized around five “inflection points,” four of which are part of the current competition model, and one, implementation strategy,

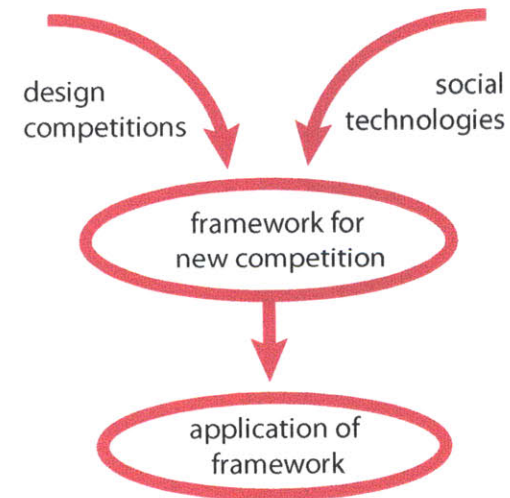


FIG 10:
Organization of thesis

is added. The discussion lays out potential application of information and social technologies at each of these inflection points, and concludes with a brief discussion of some of the caveats of this kit-of-parts approach.

Chapter Five: Applies the model to an actual urban design planning process, the MIT East Campus Gateway site in Cambridge, Massachusetts. Context is given in a discussion of the physical site, the major institutional roles and the roles of other stakeholders, and some of the main anticipated challenges. Applying the framework of inflection points from Chapter Four, a project plan for a new competition is then laid out. The chapter concludes with a brief discussion of the likelihood of implementation for this competition.

Chapter Six: Is both projective and cautionary. The discussion reflects on the potential implications of a new competition model going forward, and defines avenues for further study or development of the model.

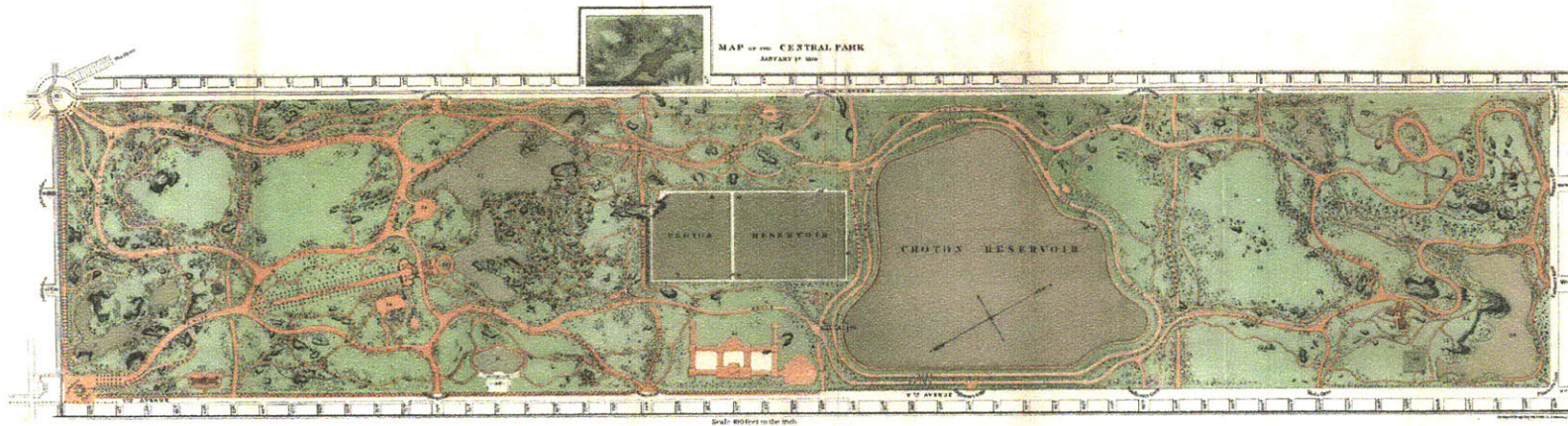
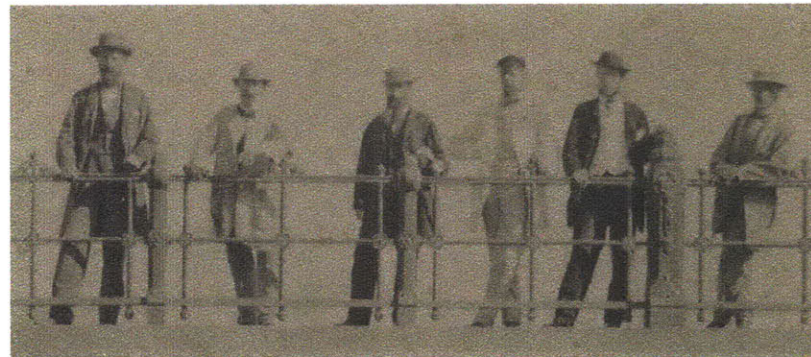


FIG 11:
Plan of Central Park, based on the Greensward Plan, the result of an 1857 design competition, the first major American competition for landscape architecture

FIG 12:
The park's design team, from left: Frederick Law Olmsted, Jacob Wrey Mould, Ignaz Anton Pilat, Calvert Vaux, George Waring, and Andrew Haswell Green



CHAPTER TWO: LOOKING AT THE COMPETITION

2.1

THE MEANING OF THE COMPETITION: A VERY BRIEF HISTORY

Competitions have been used to design public buildings, monuments and spaces for millennia; the war memorial on the Acropolis of Athens, in the 7th millennium B.C., was an early result of a competition, with entries by ten sculptors on public view prior to the selection of a winner (Nasar 1999, 29). In modern history, the competition has experienced waves of popularity, with Europe in general embracing the model far more readily than has the United States. In Europe, competitions have long been a prevalent mode of selecting designers for prominent civic buildings and spaces; Brunelleschi's dome on the Cathedral of Florence, Rome's Spanish Steps and Paris' Eiffel Tower are some of the most well-known examples. More recently, in 1980 Germany went so far as to mandate a design competition for every new government building (Nasar 1999, 22).

The competition has long been used as a way to demonstrate fairness. In the United Kingdom, another historic leader in the use of competitions, the introduction of the modern competition began with the 1832 call for entries to redesign the Palace of Westminster after Parliament was destroyed by fire. In the decades that followed, civic buildings and public spaces in the UK were typically designed by competition as a deliberate public statement. As architectural historian Deyan Sudjic writes,

"In Britain, the introduction of the competition system was a natural accompaniment to the reform of country's public administration, a reform aimed at rooting out corruption, nepotism, and incompetence, and the establishment in its place of a professional civil service open to the most talented, whatever their connections or origins" (Sudjic 2006, 57).



FIG 13:
St. Louis' Gateway Arch under construction

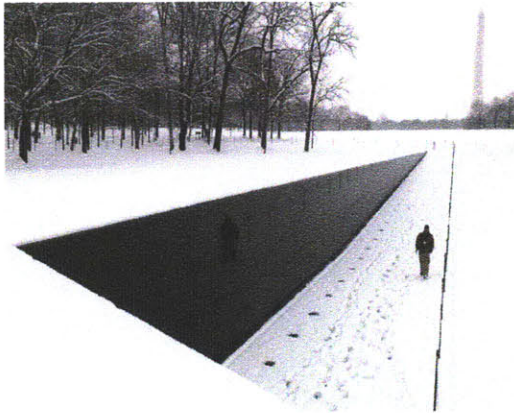


FIG 14:
Maya Lin's Vietnam Veterans Memorial Wall

In the United States, Thomas Jefferson was an early and vocal proponent of design competitions, which he considered consistent with the democratic and meritocratic principles of the newly founded nation (Sudjic 2006). Jefferson led an early competition for the original Capitol building in 1792.

There has never been a centralized record of American design competitions. A diversity of sponsoring institutions from all levels of government, as well as the nonprofit and private sectors, coupled with widely varying numbers of entrants, levels of success at promotion, and the fact that the majority of competitions do not result in any implementation makes their comparison, and even their comprehensive listing, difficult. Pamela Scott, a historian who maintains a list of design competitions for the Society of American Historians believes that her list represents only 10% of all design competitions (Scott 2004). However, a number of well-known American competitions have represented turning points for the ways in which design professionals, civic organizations and the public interact.

The rise of competitions in the United States contains an important narrative: their use has been an attempt to democratize the process of design selection, while giving civic sponsors access to a self-selecting pool of new design talent. The 1858 selection of Frederick Law Olmsted and Calvert Vaux to design New York City's Central Park was perhaps the earliest high-profile American competition. Though Vaux was an architect of repute with several major commissions to his name, Olmsted was almost completely unknown to the design establishment. The subsequent launch of his career into several decades of dominance in American landscape architecture, park design, and landscape theory seemed to perfectly illustrate the almost limitless power of the competition to impact the profession and the public realm (Beveridge 1998).

The competition for St. Louis' Gateway Arch, sponsored by the National Park Service and the nonprofit Jefferson National Expansion Memorial Association, and won by Finnish-born Eero Saarinen and Hannskarl Bandel in 1947, gained the project national attention for the innovation and boldness of its design. Juror comments on the form included "relevant, beautiful, perhaps inspired would be the right word" (Roland Wank) and "an abstract form peculiarly happy in its symbolism" (Charles Nagel Jr.), though others on the jury and in critical circles questioned its constructability (Brown 1984). Once the design was chosen, a series of regulatory, financial and legal setbacks delayed

its construction for twenty years. Whether its bold design by relative newcomers served to worsen the delay, or to ensure the project's completion despite the setbacks is a subject of some debate, (Brown 1984), though the impact on the architect's career, and the raising of national awareness to the project were most certainly results of the competition.

Maya Lin's groundbreaking 1981 design for the Vietnam Veterans Memorial Wall was the result of an open design competition. Lin, an unknown 23-year recent graduate of Yale architecture school, quickly became a household name when her somber and unadorned design was chosen from among more than 1,400 entries. At the time, while some considered Lin's design "transcendent," many architecture critics, politicians, and some veterans objected heavily, criticizing the design as "a black gash of shame," "a scar," even "a tribute to Jane Fonda" (Garber 2007). In the intervening years, the Wall has become one of the most well-known monuments in the world. As architecture critic Paul Goldberger describes it in *Up From Zero*,

"The unusual success of Lin's design, which both jump-started her career and influenced the design of an entire generation of memorials everywhere, has come to make architectural competitions seem like the only way in which to find architects for large-scale, symbolic civic projects of this sort." (Goldberger 2004, 209).

More recently, the 2003 competition for a memorial at the World Trade Center site, won by Michael Arad and Peter Walker, once again brought memorial design to the top of the public consciousness. In this case the planning process for the larger site was extremely complicated, and there were widespread complaints that the competition brief was too restrictive (Goldberger 2004). Nevertheless, the competition's record-breaking number of entries (more than 5,000 from 63 nations) and the high emotional and historical import of the site once again catalyzed the competition model in the public eye on a national level. An analysis of the stages of this competition follows in Section 2.2.

The 2003 call to design New York City's High Line is often pointed to as a prominent example of the power of the design competition to show momentum and gain support for a public project, while at the same time soliciting innovative ideas. The call began with an open ideas competition, which generated more than 700 concepts for the up-

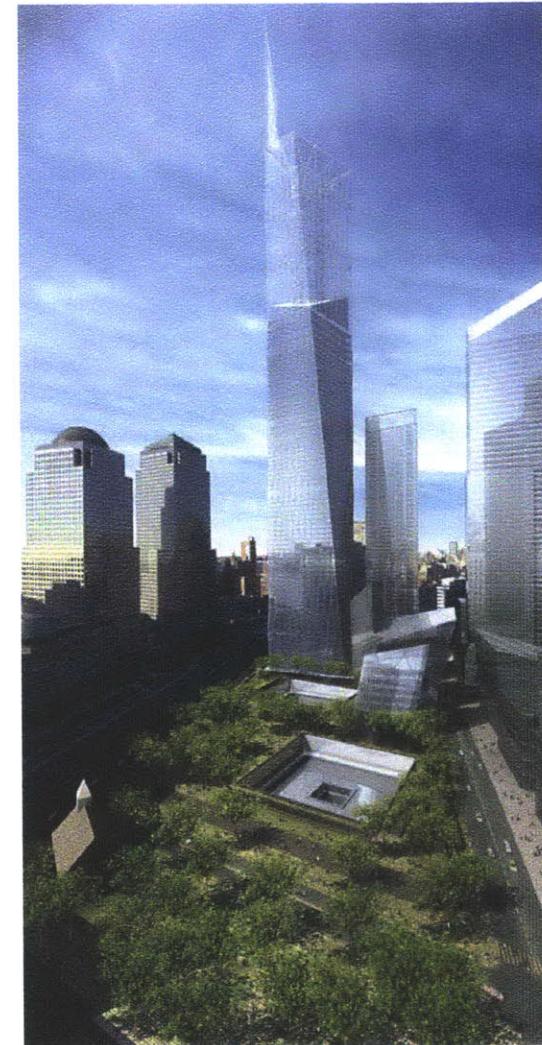


FIG 15: Michael Arad and Peter Walker's "Reflecting Absence," competition entry for a memorial at Ground Zero.

to-then little known project. This call was followed by an invited competition, which built on some of the broad themes generated in the earlier competition. Sponsored by the emerging nonprofit Friends of the High Line, the competition was an important mechanism to build public excitement, political support, and an “air of inevitability” around a project that had little funding and faced major legal hurdles. According to Robert Hammond, the High Line’s Executive Director, prior to the competition, “If you’d polled people, even my own Board, they would have said the project had about a ten percent chance of actually happening. But we went forward with the competition, and it gave us a lot of momentum.”⁶

2.2 THE COMPETITION PROCESS

An understanding of the typical urban design competition process is integral to understanding what works and doesn’t work. The following attempt to define a normative structure is informed by competition handbooks from the AIA (1988) and the National Endowment for the Arts (1980), as well as from Paul Spreirengen’s *Design Competitions* (1977), and Leentje Volker’s more recent paper, *Designing a Design Competition* (2012). The commentary throughout comes from architects and scholars who have been both laudatory and skeptical of what competitions can do.⁷

Sponsorship: Competitions begin with sponsorship. Sponsors, who may or may not be the same as the client, run the gamut of public agencies and governments at all levels, as well as nonprofit organizations working in the interest of the public or design. A major wave of public design competitions was brought about by an initiative of the NEA from 1978 to 1984. In that time, the agency gave thousands of priority grants for innovative competitions for public projects, an action which helped to bring public design competitions into the mainstream. The recipients of these grants included municipalities, city agencies, and nonprofits (NEA 1980). The federal General Service Agency has sponsored public competitions for civic buildings and spaces since 1949 (a discussion of their competition program for civic buildings is in section 3.2). Nonprofit sponsors include the AIA and the New York-based Van Alen Institute, whose mission is the promotion of architecture for the public good, and which has overseen a robust portfolio of public space competitions in the past few decades. Numerous other

nonprofits and foundations have also moved into the competition-sponsorship space in recent years.⁸

Problem identification and brief writing: The sponsoring organization defines the site, lays out the intended program, and encapsulates as clearly as possible the design problem to be solved. As the primary method through which the sponsor communicates with the designers, the competition brief is of utmost importance. According to nearly everyone who has written about competitions, an informed analysis of the site and its surroundings, and a clearly written brief, are key elements in a competition's success. Time spent on this phase varies, and Witzling et al cite a lack of adequate preparation time before the brief is released as a reason many competitions are unsuccessful. In the competitions they studied, many hastily-prepared briefs resulted in "the failure to resolve potential land use conflicts in the programming stage, a failure which became critical for utilization of the competition's results" (Witzling 1987, 38). Equally important for competitions involving the public realm is who is doing the defining. To paraphrase Karen Alschuler's article in *Planning*, how can a competition successfully address community issues surrounding a public project when the framing of the problem is not rooted in a dialogue within the community itself? (Alschuler 2004).

Releasing and publicizing: The competition is announced and publicized, both to potential entrants and to the public. Though it is not standard, many competitions announce the jury panel at this phase, in an attempt to raise the competition's profile within the pool of potential entrants. Architect Marc Kushner thinks many architects check the jury panel first when deciding whether to enter a competition⁹. In the past, competitions were announced mainly in industry publications targeting architects, such as the AIA's journal, *Architectural Record*, and the like. More recently, the web has offered an alternative way to reach potential entrants. Online listings on Competitions.org and Bustler.net, among others, provide a resource for designers looking for competitions. However, ensuring a critical mass of quality entries remains a major challenge for many competition organizers, and it's not uncommon for organizers to "seed" competitions by making personal calls to convince firms they would like to enter¹⁰. The competition may or may not be widely advertised to the general public at this point, depending on whether publicity is a key priority for the client.



FIG 16: Competition pamphlet, 2013



FIG 17: Advertisements for open competitions on bustler.net, an architecture website

*"[Competitions] provide the forum for struggles for one's personal best, team efforts forged in camaraderie, debilitating taxes on body and pocket, and, for the happy few, joyous public triumph."
-Helene Lipstadt*

Entrants: In a single-round competition, entrants are typically given a period of three to six months to produce a design. This intensive, concentrated creative process is seen by advocates of competitions as having enormous generative power in the way architects learn to solve problems. During the design process itself, Helene Lipstadt asserts that competitions "provide the forum for struggles for one's personal best, team efforts forged in camaraderie, debilitating taxes on body and pocket, and, for the happy few, joyous public triumph" (Lipstadt 2006, 9). Architect Peter Eisenman believes "In a competition, architects are pressed to do their best work" (in Nasar 1999, 182). Even when a firm does not win, the very process of competition work is seen by many to raise the bar for both the practitioner and the profession as a whole. However, others are skeptical that the design process for competition bears little resemblance to client-based work that pays the majority of the bills. According to architect John Pawson,

"Some people are able to make [competitions] feel as if they are real. A lot of studios are geared to do nothing but win competitions. And they do it by approaching them as if they were working on an individual commission with all the single-mindedness that implies. I find that difficult. A design produced in the circumstances of a competition would never be quite as grounded as working for a real client" (in Nasar 1999, 182).

Q&A period: It's typical within the design phase to allow entrants to ask clarifying questions about the site or brief. Often the only communication the designers and client are permitted, this back-and-forth is highly structured in an attempt to prevent unfair advantage. Many competitions set up a way of anonymously asking questions. The Q&A period might last for just a few weeks at the beginning of the design period. Typically, all entrants have access to all questions and answers. Once the Q&A period is closed, no further communication is permitted.

Jury selection: The assembling of the design jury may take place before the competition is even announced, or at the same time as the design process. The Witzling et. al study found that typical juries were made of three to eleven jurors, with the median number being four (Witzling 1987, 38). Of course, the makeup of the jury is crucial to the competition's outcome: as Steve Izenour asserts, "clients who use design competitions don't understand that by picking the jury you're in effect picking the architect. You've

given away the most crucial choice you have to make" (in Nasar 1999, 154). Jurors typically include at least one prominent architect; they may or may not include key stakeholders in the public project. Proper makeup of the jury, many critics argue, is one of the fundamental differences between a successful and an unsuccessful competition. As architecture professor Jeffrey Ollswang writes:

"It is incumbent upon the sponsor to ensure that there are representatives of the community on the jury. The input of so-called "lay persons" on competition juries has been invaluable ... to limit the composition of the jury to "design professionals" only is a mistake" (Ollswang 1990, 110).

Of course, since competitions also play the role within the design profession of advancing conversations about innovative and relevant design, competition sponsors face a challenge. To give over the jury too much to laypeople is to lessen the jury's power to make an informed and bold impact on the design profession through its selections.

Selection: The jury process begins with the deadline for entries, and can follow a number of different models. The majority of competitions include a protracted (often daylong or longer) in-person discussion among the panel, out of which a selection of winners, and sometimes honorable mentions, is made. Depending on the number of entrants, and the capacity of the jury and sponsoring organization, there might be an initial round of pre-selection, after which jurors might deliberate on the finalists. Jury deliberations are almost always private, closed-door conversations. How much detail to provide to the public about the criteria behind the selection is the subject of some debate. While the AIA's competition guide recommends against "open jury" processes (AIA 1972), i.e. giving the public real or virtual access to the jury's decision making process, others such as Deyan Sudjic see transparency in the process as crucial to helping to advance the conversation within the profession and for the public. Releasing a description of the jury's process, Sudjic argues, is "a way to trigger a debate about the characteristics of a significant project and to make clear the criteria by which a decision was made" (Sudjic 2006, 59).

Announcement: After the jury makes its selection, the sponsor publicizes the results. For many projects, the announcement of a design selection can go a long way towards building good will for a project, assuming the jury has not vastly misjudged public opinion



FIG 18: Jury deliberation, the National Park Service's Flight 93 Memorial Design Competition, 2004.

with its selection. Announcement of a winner is an opportunity to create what Witzling calls an “upbeat news items,” symbolizing public commitment to a project by showing tangible progress (Witzling 1985, 155). The announcement can also function as a “teaching moment” for the public about innovative design, drawing public attention to the design profession and building awareness about what designers do. The study by Witzling et al found that many competitions suffered from a lack of media attention, which undermined their impact on both the profession and public regard for design. This problem was particularly felt in AIA-affiliated competitions. Of these cases, Witzling writes, “There was no channel for communication of any ideas produced by these competitions to their intended beneficiaries” (Witzling 1985, 155).

Implementation: What happens to the design after the competition is over? While studies have found that more competition-based designs go unbuilt than are eventually built, (Nasar 1999), other evidence suggests the rate of implementation is roughly similar to other procurement processes (Spreirengen 1979). As Ollswang points out, “it could be argued that all competition results are implemented – only the manner in which they are implemented varies” (Ollswang 1990, 110). That is to say, once designers have gone through the process of attacking a design problem, jurors have debated and chosen a winner, and the public has been introduced to the winning selection through competition materials, the competition has had its lasting effect, regardless of whether the project is built. Unfortunately, the heightening of public expectations through competitions can backfire when the project is unbuilt.

2.4

CASE STUDY: WORLD TRADE CENTER MEMORIAL COMPETITION

New York’s World Trade Center Memorial Competition in 2003-2004 sponsored by the Lower Manhattan Development Corporation (LMDC) to design a memorial on 4.7 acres of the World Trade Center site, illustrates some of the complexities of a high-profile public design competition. The Memorial Competition was itself part of a larger redevelopment strategy for the 16 acre site, which included commercial, cultural, and transportation uses as well. The larger planning process was tremendously complex, involving City and State oversight, unprecedented legal and financial issues, and an extreme degree of public scrutiny.¹¹ Though the larger process was also structured as a competition, the competition-within-a-competition for the memorial design more closely resembled the model discussed here.

In January, 2003, the LMDC and the Port Authority, a joint state agency of New York and New Jersey, announced a series of public meetings to discuss the Memorial. There had already been tremendous public interest in the memorial design, including an informal call for entries by CNN, among others. Many in the early planning process for the larger site felt that that the entire 16 acres should be a permanent memorial, a sentiment that quickly lost traction as unrealistic from a real estate and planning perspective. In April 2003, the Selection Jury and competition guidelines were announced. The jury was made up of thirteen jurors including architects, City officials, cultural leaders and a representative of the victim's families²². The competition guidelines required the recognition of each victim, an area for "quiet visitation and contemplation," a separate area for victims' family members, and that the footprints of the original towers be "made visible." In addition to these requirements, there were a series of "guiding principles," including "convey the magnitude of personal and physical loss," and "evoke the historical significance of September 11, 2001."

By the June submission deadline, 5,201 submissions had been received from 49 states and 63 nations. An initial deliberation by the jury resulted in the selection of eight finalists, who were then finalists refine designs in response to jury's comments. In November, second versions of the 8 finalists went on public display at the Winter Garden, attracting much public and media attention (and a high degree of public disappointment). In January 2004, after pairing the young architect Michael Arad, one of the finalists, with Peter Walker, an older and more experienced landscape architect, the jury selected the pair's "Reflecting Absence" as the competition winner.

Criticism: The memorial design competition was heavily criticized by designers and others for having little coordination with the master planning process. By separating out the memorial into a separate process, many felt that it was being sidelined in the name of commercial activity, that "the master plan would leave a space, and the memorial would be fit into it" (Goldberger 2004, 146). There was no requirement that designers take the master plan for the larger, 16-acre site into account. Many judges found the master plan deeply flawed, and favored entries that purposely ignored its limitations. In the end, the master plan was changed to accommodate the memorial design, causing great controversy among those involved in the planning process.

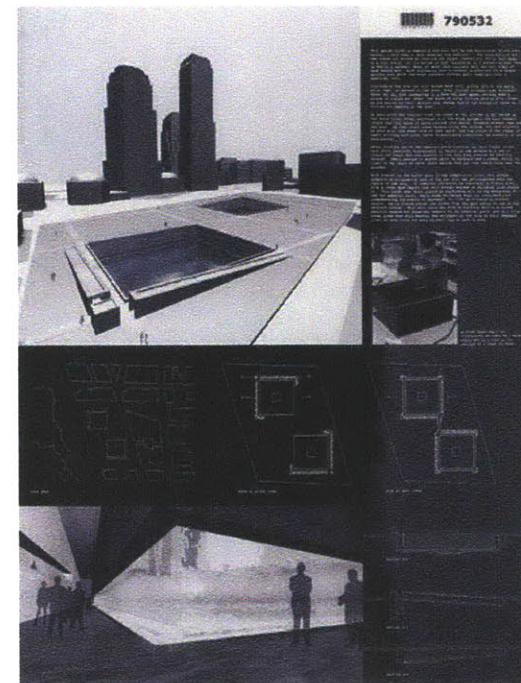


FIG 19: Original competition board, Michael Arad's "Reflecting Absence"

Many felt that the program for the competition was too rigid, leading to many formulaic entries. According to Paul Goldberger, most finalists had the “bland earnestness of a well-designed public plaza.” Governor Pataki called the finalists “discouraging,” and some suggested publically that the process should start over.

The degree of secrecy surrounding the competition was also criticized. Because of the highly politically-charged nature of the site, the decision was made that the jury should operate in total isolation. LMDC’s head of planning analyzed the finalist entries for their compatibility with master plan, but was not permitted to discuss his findings with designers, only with the jury. When the winner, Michael Arad and Peter Walker’s “Reflecting Absence”, was revealed, it was clear that they had not considered the site’s surroundings. Daniel Libeskind, the design lead for the master plan, hated the memorial proposal. In response to Libeskind’s criticisms, LMDC required Arad and Walker to change key elements of their memorial plan. Libeskind was also forced to give up important parts of the master plan. Following criticism that Arad was not experienced enough, LMDC solicited architecture firm Davis Brody Bond to oversee the memorial design.

The lack of coordination between overseeing agencies, private partners, and the design community during the memorial design process led to frustration, inefficiency, and a lack of public trust in the competition. This mistrust was fueled by heavy criticism in the media, adding to the perception that the final design had been created through a deeply flawed process¹³.

2.4

DETERMINING SUCCESS: WHAT THE LITERATURE SAYS

There have been many attempts to define the successful elements of competitions, but the lack of a standardized model, the dearth of scientific studies, and the vast difference in contexts and individual aims for each competition makes them difficult to compare. Design excellence itself is notoriously difficult to measure. However, the literature of competitions includes several criteria worth discussing.

The Royal Institute of British Architects (RIBA), which has sponsored design competitions in the United Kingdom for most of the past century, describes a “tried and tested process” for successful competitions. RIBA suggests that a hybrid two-stage model – combining an anonymous first phase, and a second phase that allows for the formation of client relationship – is the best

model. The organization also stresses well-written briefs, clear rules, efficient organization and "fair conduct" (RIBA 2009).

Urban development scholar Lynne Sagalyn stresses the importance of laying the groundwork for public competitions within the community that will be impacted. She suggests that successful competitions require strong and identifiable constituencies (Sagalyn 2006). The key takeaways from Witzling et al's survey of competitions in the 1990s were 1) that careful organization and management of the competitions has a direct relationship on their purpose and effectiveness; and 2) that the two most important stages to get right are programming and jury evaluation. Notably, the group saw a greater potential role for planners in the competition process: "It's time now for planners to start playing a more active role in shaping design problems, managing competitions, and facilitating the evaluation and implementation process" (Witzling 1985).

Historian Helene Lipstadt puts forth the intentionally tongue-in-cheek-named "intelligent design competition" model ("design competitions thought out by their creator"). She writes, "the 'intelligent design' of competitions renounces the idea that the competitions' ultimate purpose is the unveiling of some preexisting unique genius." Rather, "the well conceived and implemented competition is one that recognizes the inherent intelligence of the design process itself, and makes the competition an affirmation of such intelligence" (Lipstadt 2006, 22).

Jack Nasar cites the disconnect between the opinions of future users of the project and the "architectural elites" on the jury as predetermining some competitions to failure. He asserts that juried competitions favor "outsider experience" of a place, which is largely based on appearance, rather than insider experience, which contains levels of meaning unknown to design juries. He calls for the addition of an intermediary step, called "prejury evaluation," which is comprised of "scientific study of popular opinions about design entries prior to jury deliberations." Nasar also proposes "postoccupancy evaluation," a similar public opinion study to take place once the project is built (Nasar, 1999).

In discussing possible improvements to the design competition model, Tridib Banerjee calls for a more open process¹⁴. He asserts, "What might be useful is to think of fundamental changes in the structure of design competitions that could lead to capturing the essence of collaborative design: participation; sharing of information; constructive dialogue; and the like" (Banerjee 1990, 127). In essence, Banerjee is calling on competition organizers to move competitions into the twenty-first century.

2.5 NEW CRITERIA FOR SUCCESS

Keeping in mind the criteria others have stated for successful competitions, we set forth our own criteria by which competitions might function better than they currently do for designers, sponsoring institutions, and the public. The list below echos the ways in which the current design competition model is falling short, and by which the comparative success of the alternate model can be measured. The criteria also begin to anticipate the solutions offered by social technology. The successful competition will better:

1. Support the professional development of architects and designers

A competition should provide the opportunity for designers to improve their own creative processes; it should challenge them to produce ideas beyond the bounds of what a typical commission provokes. Entering a competition should give designers access to a rich and ongoing dialogue with their colleagues, clients and communities about the role of design in solving urban problems. Designers should leave the competition feeling they have expanded the range of their own design thinking, have made connections with potential clients and collaborators, and have contributed to the profession in a meaningful way. The competition will function in an equitable way for both small and large firms.

2. Promote design as a practice and a problem solving method

Designers should be able to consider a competition a reliable source of promotion of their own work, and of the field in general, to the public and potential clients. The competition should be a catalyst for communication between designers and the public, through which the public can gain a better appreciation for the kind of design problem solving that shapes the built environment. Overall, it should be an efficient design communication tool.

3. Meet the needs of the sponsoring organization

The sponsoring organization should be able to consider a design competition as a legitimate option to best meet their own and their constituents' needs. The competition should be structured to help the organization easily pinpoint and communicate its design problem, and gain access to a wide range of quality design solutions for a reasonable investment of resources.

4. Raise the profile of the sponsoring organization

The competition should serve a secondary public relations role by gaining the sponsoring organization public and political support. A competition represents a tangible point of positive momentum for a public project, and both the project and its related organization should benefit from the increase in public awareness. Ideally, the tide of public and political good will catalyzed by the competition can increase the likelihood of the project's smooth implementation.

5. Involve diverse stakeholders in a meaningful way

The successful competition will effectively integrate stakeholder values into the design process. The design of public projects must include some element of public engagement that participants consider meaningful to the outcome of the competition. Both project stakeholders and those within a larger community of potential project users should be given opportunities to engage in the design and decision-making process.

6. Create a public space of lasting value

The competition should result in a valuable built outcome that reflects the preceding thoughtful design process and an effective and communicative collaboration between designer and client. The project should be implemented expediently and at minimum cost. The public should be able to recognize the high value of the design, contributing to civic pride and setting a benchmark for future public projects.

Fundamentally, what these criteria have in common is the notion of better communication and collaboration between the various players in the competition. In the next chapter, we begin to explore the ways in which technology can facilitate changes in the model to bring competitions more in line with these goals.



The Educational Positioning System



FIG 20: Challenge.gov

FIG 21: Architizer

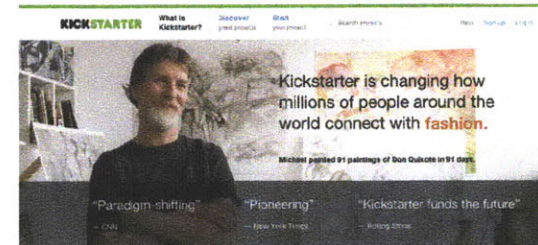
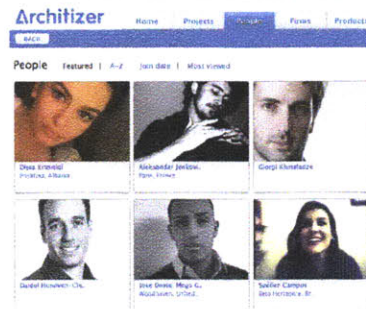


FIG 22: Kickstarter

CHAPTER THREE: TECHNOLOGIES THAT CONNECT

3.1 DIGITAL OPPORTUNITY

Digital technology offers key solutions to the problems plaguing design competitions. Enabling open communication and collaboration are what social and information technology have been doing in numerous other sectors over the past two decades. This chapter moves the discussion to the role of technology as a connector and a facilitator, and explores the applicability of a few technologies to the competition model.

The advance of the Internet has quickened the pace of communication, collapsed physical distance, and altered social interaction by allowing what Joichi Ito and many others call “Many to many conversations” (Ito 2005, 17). It has also fundamentally altered the landscape of areas as diverse as commerce, nonprofit and political fundraising, journalism, publishing, and education, to name a few. Though these upheavals can be traumatic for those associated with the old models, there is much optimism about these changes. As Steven Johnson writes in *Two Ways to Emerge*, the Internet holds practical promise:

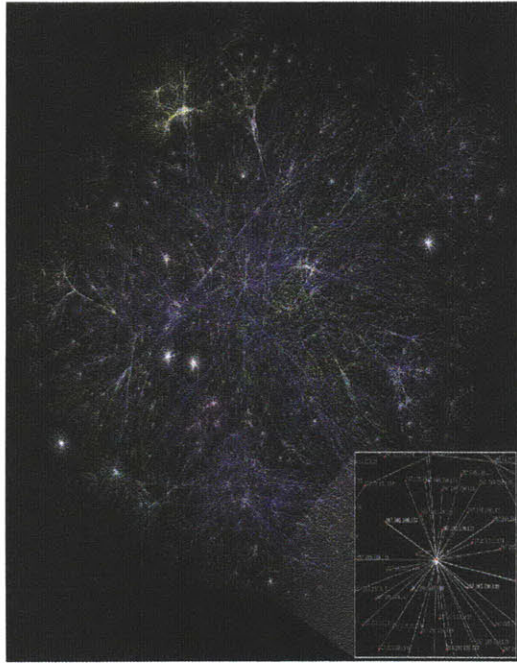


FIG 23: Visualization of the interconnected information on the Internet

“As a dimension of individual freedom; as a platform for better democratic participation; as a medium to foster a more critical and self-reflective culture; and in an increasingly information-dependent global economy, as a mechanism to achieve advancement in human development everywhere” (Johnson 2005, 2).

Disruption of familiar social, informational and economic structures by information technology has become such a familiar story that there is no need to rehash it here¹⁵. In fact, for processes that have managed to retain their pre-Information Age structure, there is often an assumption that their demise is imminent¹⁶.

The urban design competition is a perfect example of such a process. As a great simplification, designers work in isolation with limited information and access to their client, and the selection of a winning design is a process characterized by its opacity. The competition is in many ways anathema to the ethos of the Internet: speed, transparency, flexibility, and collaboration. As a model, it is ripe for disruption.

There is evidence that a new model for the urban design competition is on the horizon. This chapter discusses three “proto-models,” newly emerging technology-enabled processes that carry implication for the future of competitions. But first, a brief discussion of the ways in which information- and social technology has changed our culture: we look at changing patterns of social influence; civic participation; and cultural production.

3.1.a A NEW MODEL FOR SOCIAL INFLUENCE

Sociologist Mark Granovetter wrote in his seminal 1973 study “The Strength of Weak Ties” about social networks made up of many people with a series of “weak ties” of loose or context-specific acquaintances. Until then, social influence studies had primarily emphasized strong ties, confined within well-defined social groups, and the common wisdom was that the more tightly-knit the group, the stronger their mutual social influence. In fact, Granovetter found that it was the number of weak ties, rather than

the strength of the closest ties, that was a greater influence on an individual's behavior, perception, and ability to change. Further, individuals with many weak ties were found to be best placed to diffuse "difficult" innovation – new ideas that challenged conceptions and led to changes in behavior and values (Granovetter 1973).

Online social technologies have allowed these networks of weak ties to become more impactful on individuals and on society as a whole than Granovetter could have originally predicted. These networks have grown more extensive just as technology has allowed for the instantaneous exchange of information. Consequently, we all receive a constant flow of input from individuals in our network; when aggregated this information is incredibly influential on us. Those who have been able to successfully tap into the power of these networks – whether for advertising, swaying public opinion, or communicating information – have largely done so by reaching individuals with the most ties within these large, loose networks. However, it is the strength of the network, rather than the influence of any one individual, that has allowed for the increasingly rapid dissemination of information, and resulting changes in public perception and belief.

3.1.b CIVIC PARTICIPATION

The rise of this new model of social influence has a great impact on the power dynamics of civic life. Simply put, the Internet is changing the way we engage in politics. As Robert Hassan writes in *The Information Society*, "Power-geometry' is not longer so clustered around specific (and relatively stable) sites such as government and institutional politics as it was during much of the period of modernity." Instead, he asserts, it is more free-flowing, like a market commodity (Hassan 2008, 191). There has been much written regarding the Internet's distributive effect on traditional silos of power¹⁷. It is clear that any equalizing of power in a democracy relies on the free flow of information, something the Internet does particularly well. Matt Qvortrup writes in *The Politics of Participation*,

"The characteristics of the Internet which support e-democracy include: timeliness – the opportunity to participate in debates as they happen; accessibility – participation is less limited by geography, disability, or networks; and facilitation – individuals and groups can access information and provide input which previously [was] restricted" (Qvortrup 2005, 69).

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The ability to produce information, the compounding of which creates culture, has been put in the hands of anyone with access to the Internet.

The idea that technological tools are serving to open, equalize, and facilitate our democracy is an appealing one. Of course, many caution against the assumption that a quicker, more transparent-seeming process is necessarily better. As Howard Rheingold asserts, “Virtual communities could help citizens revitalize democracy, or they could be luring us into an attractively packaged substitute for democratic discourse” (in Hassan, 2008, 191). Despite the appearance of openness and accessibility, civic life remains plagued with the same inequities, prejudices and misinformation that it always has. Thus, the bar for positive change cannot be set at increasing citizen participation for its own end. Instead, empowering citizens to embrace information technology tools for civic action requires a certain level of political competence and ownership in both the process and the result. In the words of Asa Bengtsson and Henrik Serup Christensen, “It is not enough that citizens are active; they should also be able to act effectively” (Bengtsson and Christensen 2012, 133).

3.1.c CULTURAL PRODUCTION

Perhaps the most compelling shift brought on by information technology is neither the rise of the diffuse social network nor a shift in civic participation, but a fundamental altering of the landscape of cultural production. In simple terms, the ability to produce information, the compounding of which creates culture, has been put in the hands of anyone with access to the Internet. This principle is central to Yochai Benkler’s concept of the “networked information economy,” a more transparent, more malleable paradigm which he argues is replacing the socioeconomic structures of the past (Benkler 2007).

Benkler sees an “increasing role for nonmarket production in the information and cultural production sector, organized in a radically more decentralized pattern than was true of this sector in the twentieth century” (Benkler 2007, 3). Essentially, he argues, the removal of physical barriers on information production, enabled by technology, “has made human creativity and the economics of information itself the core structuring facts of the networked information economy.” This new model is characterized by nonproprietary production, and is infused with nonmarket motivators, in contrast to traditional models of production. Individuals, according to this theory, are contributing information for the sake of information itself.

The key implication is that the number, and definition, of cultural “producers” has changed. Creative solutions, small and large, can arise from anywhere and spread, through vast networks of individuals. Harkening back to Eric von Hippel’s notion of “user-driven innovation,” an original principle of the operating software Linux, Benkler notes that this concept “has begun to expand... to thinking about how individual need and creativity drive innovation at the individual level, and its diffusion through networks of likeminded individuals” (Benkler 2007, 5). This diffusion is fundamental to the concept of crowdsourcing.

3.2 SO WHAT DOES ALL THIS MEAN FOR URBAN DESIGN?

The changing patterns of social influence, civic participation and cultural production have created such a massive shift, it would be impossible for urban design not to feel their effect. So what are the implications of these emerging phenomena on the creative and decision-making processes of urban design? Good placemaking in the public realm has always required 1) active and informed public participation; and 2) creative and context-specific problem solving. Both of these are things information and social technology can do quite well. There is tremendous opportunity to incorporate these tools into place-specific urban design processes to better achieve both. As Steven Johnson asserts in *Two Ways to Emerge*:

“I think [a truly effective technology-based social movement] will first take shape, not as a political campaign, but as a more local, day-to-day affair: more *polis* than politics. With the right tools, local communities should be able to create emergent systems that help govern and shape their own development in new kinds of ways” (Johnson 2005, 7).

Urban design, with its tangible results and local scale, may be the perfect forum to apply these kinds of technological tools. Above all, urban design requires a network of individuals with some investment in a place. As Kevin Lynch wrote in *Site Planning*, “The appropriate model or urban design often invoked is that of collaborative design, if not cooperative or collective design” (Lynch 1971).

***Good placemaking
in the public realm has
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2) creative and
context-specific
problem solving.***

A scan of the social technology universe suggests that innovation is already occurring in urban planning and design, and that other sorts of competitions have already used these tools successfully. Many products and services related to physical planning have cropped up in recent years. These lie on a spectrum from the crowdsourced mapping of municipal service requests (as in the civic crowdsourcing platform SeeClickFix¹⁸) to specialized social- and professional networking sites for designers to show their portfolios and reach clients (as in the digital portfolio-sharing tools offered by Dexigner and others¹⁹). The following are three examples of the way urban design and social technology are already beginning to intersect.

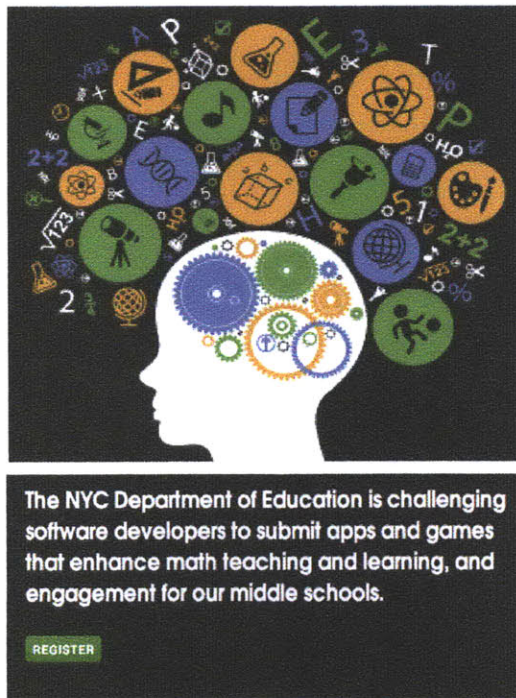


FIG 24: App challenge listed on Challenge.gov

3.3 PROTO-MODEL 1: CHALLENGE.GOV AND FEDERALLY-SPONSORED COMPETITIONS

The first case is not specific to urban design, but is a prime and high-profile example of how social technology tools can be used to organize and promote competitions as a source of creative solutions. Launched in 2010, Challenge.gov is a federal-government run online platform that is billed as providing “a forum for agencies to post problems and invite communities of problem solvers to suggest, collaborate on, and deliver submissions”, according to the agency’s 2009 White Paper. The platform is administered by the US General Services Administration, and is part of the White House’s Open Government Initiative.

The launching of Challenge.gov, part of the reauthorization of the America Competes Bill, demonstrates the Obama administration’s belief that developing technological tools is a good way to both spur competition and further the goals of public participation. The administration has placed emphasis on policies that encourage competition, both within the United States, and of the nation in the global marketplace. The stated objective of the Strategy for American Innovation, of which Challenge.gov is part, is to increase the capacity of the government to promote and harness innovation by using “high-risk, high-reward policy tools such as prizes and challenges” (Press Release 2010).

The 2009 White Paper announcing the program outlined three principles for bringing innovation to government decision-making: transparency, participation, and collaboration.

“Transparency promotes accountability by providing citizens with information about what their Government is doing. Public participation in decision-making strengthens democracy and ensures that Government makes policies with the benefit of information that is widely dispersed in society. Collaboration improves the effectiveness of Government by encouraging cooperation and knowledge-sharing within the Federal Government, across levels of Government and between the Government and private institutions.”

One unique aspect of Challenge.gov is the GSA’s partnership with ChallengePost, a private technology company that develops competition platforms for businesses, non-profit organizations and governments. Founded in 2009 by Brandon Kessler, ChallengePost originated in response to an earlier open software competition to create a way to run a Windows XP operating system through an Intel Mac. The competition was promoted online to software

programmers and potential funders alike, and once the winner was declared, more than \$13,000 in donations had been raised via Paypal as prize money (Kelly 2011). Kessler’s aim was to expand the online competition model to apply to software as well as open government – the company’s featured “challenges” include apps, open data platforms, videos, and product design, among others. The company gained early success when it was commissioned by Michelle Obama’s “Let’s Move” anti-obesity campaign to develop a challenge for an app promoting healthy eating. Soon thereafter, ChallengePost was brought on by the City of New York to source open platforms for City data. The company was chosen by the GSA out of a number of bids, and offers platform development and hosting of the Challenge.gov site free of charge.

A challenge, according to the website, is posed “by one party (a “seeker”) to a third party or parties (a “solver”) to identify a solution to a particular problem or reward contestants for accomplishing a particular goal. Prizes (monetary or non-monetary) often accompany

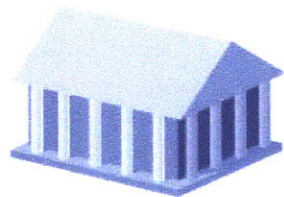
Challenge.gov is for everyone!

1 2 3 4 5

FIG 25: Challenge.gov

You are the secret ingredient.

Challenge.gov works when you tell people you care about an issue, or participate in a challenge.



Government posts challenges



Citizens share with their friends



Talented people find solutions to the problem

SIGN UP AND PARTICIPATE



FIG 26:
A NASA Centennial Challenge in
robotics

challenges and contests,” though the terms of the competition, including intellectual property rights, are determined by the seeker²⁰. The challenges currently listed on the site range from the creation of logos, videos, digital games and mobile applications and physical products, and in degrees of development from ideas, to concept designs, to finished products. The challenges are categorized (Defense; Economy; Education; Energy & Environment; Health; International Affairs; Jobs; Personal and Public Safety; Science & Technology; and Software) and as of March 2013, there are more than 200 challenges open. The federal departments and agencies sponsoring the greatest number of challenges are NASA; the Department of Defense; the Department of Health and Human Services; and the Environmental Protection Agency.

NASA: NASA in particular has been a leader in leveraging competitions for technological innovation using online tools. The agency’s Centennial Challenge program predates Challenge.gov and has been used for several years to procure applied technologies in robotics, excavation, materials, and nanotechnology applications, according to the program’s web site. In recent years, NASA has expanded their portfolio of challenges and prizes to include the NASA Tournament Lab, a mobile app development competition platform run in partnership with TopCoder, a leading organizer of programming competitions; and the International Space Apps Challenge, a two-day global technology-development event that uses “mass collaboration” to create and refine innovative solution in aeronautics-focused apps. It is clear from the range of competitions on these three platforms that NASA is using the technology-driven competition model to expand what competitions can produce (from advanced robotic technologies to crowdsourced and quickly developed mobile apps) and who can participate (from astrophysicists to software developers).

Design Excellence Program: In addition to Challenge.gov, the GSA oversees another competition program, this one specifically involving design for civic buildings. Organized through its Public Buildings Service, the GSA’s Design Excellence Program solicits architecture and engineering firms to submit portfolios in a two-stage bidding process to compete for public commissions. Once the stage-one Request for Qualifications has been fulfilled and the bids are in, the Public Building Service evaluates submissions and prepares a shortlist of firms. They then pass this shortlist on to a panel of jurors, which is selected for each project (the panel is typically a mix of architects, engineers, and civic leaders). In the second stage, the firms assemble multidisciplinary teams, the panel

reviews applications, interviews top candidates, and makes a final recommendation. In some cases, teams will be asked to submit design schemes during this phase. Although the Design Excellence Program also oversees public design charrettes, these events are only loosely tied to design solicitation; there is no standardized formal public participation component of the selection process²¹.

While this design solicitation model clearly resembles a more traditional RFP process, evidence that the GSA is, in fact, open to nontraditional elements for design competitions can be found in its 2010 partnership with *Metropolis* magazine for the publication's eighth-annual "Next Generation Design Competition". The competition "challeng(ed) emerging designers and architects to offer innovative ideas on how to take a midcentury federal office building and make it a model of environmental efficiency," according to its press release. An open competition as opposed to most in the Design Excellence model, the competition had a strong web presence and garnered much media attention.

That the GSA, and NASA, have in the past years embraced competitions in various forms speaks to the emergence of the larger competition model as a successful way to procure innovative solutions to a wide variety of problems in a cost-effective way. That many of these competitions have involved a strong online presence and tools to find, collaborate, and support these innovations indicates a growing enthusiasm for this kind of tech-enabled open public competition. And that so many of these competitions and platforms involve cross-sector partnerships shows the drive towards sometimes-unorthodox strategic collaborations. Clearly the desire, and the market, for tech-enabled competitions is there.

What is not yet fully developed in these cases is the integration of meaningful public participation, for example, the intersecting of online competition tools with online civic engagement tools. Good public urban design is inherently participatory, so a tech-enabled competition focused on placemaking would need to integrate this element and include measurable criteria for success. While this may be a tall order on a national-level project, the fact that urban design competitions are locally focused makes this kind of integration more feasible.

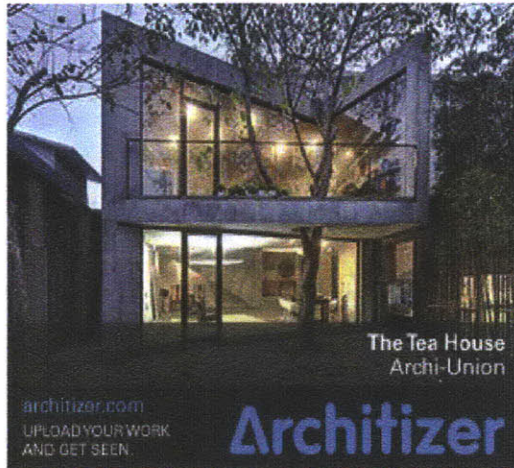


FIG 27: Project page, Architizer



FIG 28: AIDS Memorial Park design competition

3.4

PROTO-MODEL 2: THE NETWORKED ARCHITECT

The second proto-model shows the desire within the architecture profession to use social technology tools to find work, meet collaborators, and promote projects. Promotion is perhaps the greatest need; many architects complain of the difficulty of getting their work seen by potential clients. One contributing aspect is likely cultural within the profession; from 1909 until the 1970s, the AIA banned architects from advertising, and among the older generation the practice is still infrequent (Demkin 2011). For emerging architects with few or no completed projects, reaching clients has remained a puzzle, and it's logical to say that if this communication channel was improved, this profession would change substantially in favor of young and more untested firms.

Marc Kushner, a young New York architect, founded the website Architizer.com in 2009 along with Ben Prosky with the goal of "getting architects and designers actual commissions." The idea behind the site, Kushner explains, was rooted in personal experience:

"When I started my architecture firm, we thought we'd take the world by storm, but nobody knew about us, and there was no way for anyone to find out about us. The kernel of our idea was that there had to be a better way to speak to clients, to critics, and to the world at large. Too often we architects are just talking to each other."²²

Called "Facebook for architects" by *Fast Company* and "A hybrid of Facebook, Flickr and LinkedIn for architects" by *The New York Times*, the site allows architects to create free profiles with text, professional information, and images and links to built and unbuilt projects. These profiles function like standardized online portfolios, with projects searchable by project type, cost, materials, location and other variables. A 2010 article in *Fast Company* lauded the service as a user-friendly alternative to the common Flash-reliant and unsearchable architecture firm web site (Walker 2011). By encouraging architects to add content to the site, Architizer serves as a constantly-updating, accessible online architecture database for other architects, potential clients, and the public. In addition to individual exposure an architect or firm might receive, the profile-based site serves a broad public relations purpose for the profession. As Kushner

asserts, "The thing about architecture is that everyone's a fan of it without even knowing about it. And Architizer makes that link for people".²²

Active for three and a half years, the site currently lists more than 50,000 projects from more than 13,000 architecture firms. Cross-platform promotion has also been key to Architizer's success; the company has more than 700,000 followers on Facebook and 55,000 on Twitter, and uses its frequently-updated blog to promote relevant design content, in an attempt to drive and shape a larger web-based conversation about design. Architizer also hosts lectures, panels and other events and publishes an extensive list of architecture jobs.

In early 2011, in an attempt to extend the company's reach, Kushner and his team began running design competitions. The first, which Kushner admits was mainly a "ploy to get architects to put their work on the site," was a competition made up of losing entries to other competitions. In late 2011 the site hosted and ran a competition for the design of Manhattan's new AIDS Memorial Park on a small triangular site adjacent to the former St. Vincent's Medical Center in the West Village. The competition, and winning design, generated a great deal of positive media and public attention, although the winning design was eventually ignored by the project developer in favor of a private commission (Swalec 2012).

A+ Design Awards: Launched in 2012, Architizer's A+ Design Awards is the company's greatest attempt yet to make architecture appealing to the mainstream media and public. Organized in partnership with Recognition Media, the company behind the well-known Webby Awards for excellence on the Internet, the A+ Awards is Architizer's attempt to break out of the traditional award model, in which, according to the company's press release: "a jury of architects anoints an architect and then shares the news with other architects. This is what we call the architectural echo chamber." Besides the usual Architizer strategy of heavy social media marketing, the awards attempt to broaden the audience through the use of a "global jury of 200+ members, including cultural thought leaders, engineers and clients," and "entry categories that extend beyond standard building typologies." Additionally, the selection process includes a Popular Choice Award, wherein the "Architizer community" and the public select winners in each category. The awards offer cash prizes, but presumably the greatest reward is the wide exposure the selected designs will receive not just with the public, but with jurors.

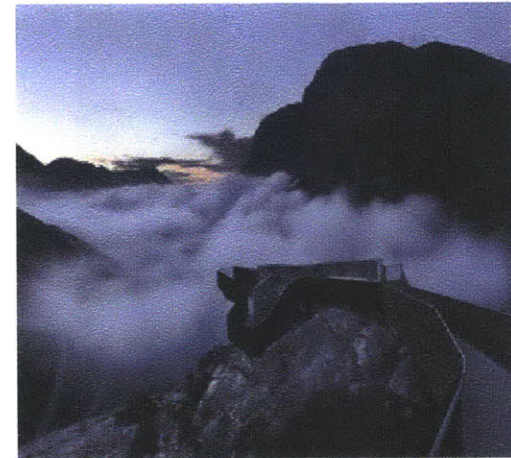


FIG 29: Finalist, Architizer's A+ Awards



FIG 30: Finalist, Architizer's A+ Awards

The awards' broad focus is their major selling point for designers; they are intended to be inclusive of many project types, both built and unbuilt projects, and professionals and students alike. The awards feature more than 50 categories, separated into "Typology" categories (built projects with different types of buildings and open spaces in more traditional categories), and "Plus" categories (built or unbuilt projects with overlapping categories including "architecture + collaboration", "architecture + communication", "architecture + self-initiated projects", and "architecture + urban transformation.") The high number of categories increases the probability of entrants becoming finalists or winning, and thus encourages designers to enter.

The large, nontraditional awards jury is another key feature of the A+ awards. More than 200 jurors make up the panel, and were selected to create a mix of dynamic thought leaders from the design world and beyond, as Kushner puts it, "architects and people who hire architects".²⁰ These jurors often range into the territory of "tastemakers," people whose opinions are influential to a broad audience, but who are not necessarily affiliated with design. Non-architect jurors include nonprofit leaders like Ben Flanner, the head farmer from the Brooklyn Grange; the filmmaker Morgan Spurlock; and Charles Adler, the founder of the crowd-funding website Kickstarter. With a jury this large, the selection process is necessarily much looser than other awards. While jurors are encouraged to vote in as many categories as they wish, they are not required to judge every category. Voting is individual, done remotely on a secure section of the web site, and jurors don't discuss or collaborate on selection, though the site has a juror discussion forum for any questions or topics jurors want to bring up. It's clear that Architizer believes the sacrifice of intimacy and conversation on the part of the jury is worth the boost in exposure that entrants get with a large and diffuse jury.

The public component, too, is designed to increase exposure for the designers and design awareness for the public. After the jury selects five finalists in each category, the public is encouraged to vote for a "public choice" award, which is separate from the final category award given by the jury. In this case, the "public" is largely comprised of Architizer's followers on social media, a self-selecting group of intentionally design-literate people, including many architects.

The model of Architizer, and of its A+ Awards program, is an acknowledgement of the need for design professionals to interface more with each other, potential clients, and

the public. This need is consistent with the criteria of successful design competitions; to some extent, these awards, if successful, will achieve the same end for their entrants in terms of publicity. However, the public in this context is a narrow public of architecture fans, and the projects, compared by type and not by specific location, are separated from their places. And while the jury and public choice selections can benefit the winning entrants, they have no direct bearing on the built environment. As awards, rather than a competition, the results are divorced from implementation. Thus, these awards are a useful precedent only as they relate to the design profession's desire for better visibility. For a model of more meaningful (and more place-based) public engagement, and design decisionmaking tied to implementation, we must look to other precedents.

3.5 PROTO-MODEL 3: CROWD-FUNDING FOR CREATIVE AND CIVIC PROJECTS

In just the past five years, crowd-funding has emerged as a true game-changer in the way projects of all kinds are realized. Industries from music to software to product design have used this structured and highly effective way to directly reach supporters and raise funds in a short amount of time while building a network of committed fans. The number of crowd-funding sites has seemingly exploded overnight, with more than 530 such services raising a combined total of more than \$1.5 billion in 2011, according to the industry website Crowdfunder.org. While some services are equity or lending-based, the vast majority either traffic in donations or gift-exchange in which financial backers receive rewards for their support²³.

Essentially, people with projects in need of funding can use a crowd-funding platform to promote their project to potential funders. The platform is standardized across projects, and the goal must be specific and attainable. The project creators have a short amount of time to fundraise, sometimes with some publicity help from the platform. On many platforms, when the time is up, the project does not receive any money if the funding goal has not been met. The crowd-funding platform usually takes a small commission, with 7% being the average in the U.S. (all stats via Crowdfunder.org 2012). The notion of "civic crowd-funding," using the model for community or government projects, has gained traction in the past year or so, with more and more civic projects being listed on established crowd-funding platforms, and a number of dedicated civic services arising. This section will discuss the success of design-based civic projects on Kickstarter, one of

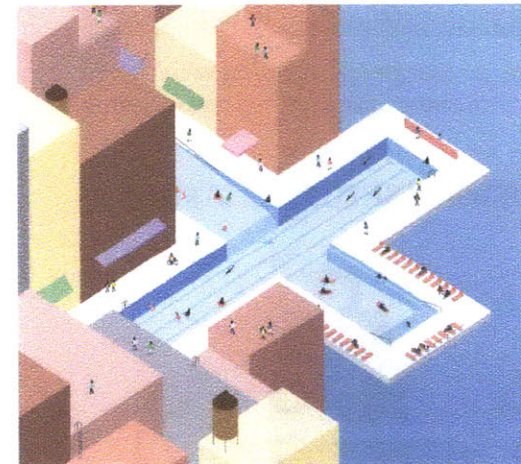


FIG 31: +pool, an early urban design competition on Kickstarter



FIG 32: *The Lowline*, a project which raised more than \$150,000 on Kickstarter

SIDEWALK SHEDS ARE STRONG

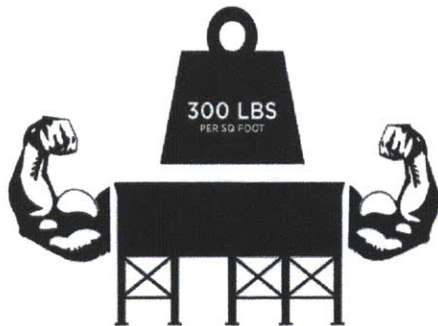


FIG 33: Illustration from *Softwalks*, a design project which raised about \$13,000 on Kickstarter

the largest crowd-funding sites, before touching briefly on some of the emerging civic crowd-funding services.

Launched in 2009, Kickstarter was one of the first crowd-funding sites, and remains the best known. A “funding platform for creative projects,” the site has helped more than 35,000 projects raise more than \$450 million from over 3 million people as of March 2013 (all stats via Kickstarter’s web site). Around 44% of listed projects are successful at meeting their fundraising goal in the allotted time, which is from four to six weeks. While most successful projects have raised less than 10,000, a growing number have funded amounts in the six or seven-figure range; twenty-one projects so far have raised in excess of \$1 million. The site’s founders are careful to point out that the funds raised on Kickstarter are not donations – product backers receive rewards, set by the project’s creators, in exchange for their support. These rewards range from a “thank you” on the project web site, to branded merchandise, to cameo roles in films. Rather than establishing backers as philanthropists, Kickstarter positions them as both patrons and strategic partners – backers are encouraged to spread the word about projects they are supporting via social media and word of mouth. In this way, crowd-funding plays an important publicity role for creative projects.

Kickstarter itself can be a useful tool for community-driven urban design projects. Among the project categories listed on Kickstarter, which include art, comics, film, food, music and technology, among others, there is no “urban design” category. However, Kickstarter officials say there has been a marked increase in projects that range into architecture and urban design as part of the “design” category in the past two years or so.²⁴ Besides being searchable by category, the site can sort projects by location, and for many types of projects, the vast majority of funding is raised locally. Additionally, of the cultural institutions that “curate” lists of open projects, several are planning or urban design related. These include Columbia University’s Graduate School of Architecture, Planning, and Preservation, Architizer, and New York’s Municipal Art Society.

A quick survey of open or recently funded urban design-related projects begins with +pool, perhaps the first major success of its category. An architect-led initiative to develop a floating public pool in New York’s East River, the project well exceeded its \$25,000 goal in the summer of 2011. Another proposal that year to build a massive public statue of Robocop in Detroit raised \$67,000. The Lowline, a plan for an underground

park on Manhattan’s Lower East Side, raised more than \$150,000 in 2012. Other recent urban design projects with smaller funding goals include:

- “Peace and Quiet,” a temporary public “dialogue station” for veterans and civilians for Times Square, designed by Brooklyn’s Matter Practice and endorsed by the Times Square Alliance (about \$17,000 raised).
- “Softwalks,” a kit of modular street furniture for transforming sidewalk sheds into temporary seating areas (about \$13,000 raised).
- “Brownsville City Farm,” design and construction of an urban farm in Brownsville, Brooklyn (about \$24,000 raised)²⁵.

Admittedly, urban design projects still comprise a very small percentage of Kickstarter’s totals in both project and funding numbers. And while it remains impressive that certain projects can raise six or seven figures on Kickstarter, projects in the built environment generally require more capital than a record release or a software prototype, not to mention political and regulatory buy-in. The money helps, but it is not enough.

Civic crowd-funding platforms: This is where the notion of “civic crowd-funding” comes in. Among the hundreds of newly-emerging specialized crowd-funding services, a few have set their sights on civic and community-based projects in an interesting hybrid of crowd-funding and online civic engagement tools. According to Jason Legaac, founder of the new civic crowd-funding site Patronhood, “The crowd-funding space is rapidly expanding, especially the civic niche of it, and while it seems that each platform is pursuing a slightly different strategy, it’s great to see that we’re not alone in thinking this could be the future of city planning” (Drell 2012). Other recently-launched civic crowdsourcing platforms include Brickstarter, Neighbor.ly and Citizinvestor.

The last is an example of a service specializing in local government projects, following the success of SeeClickFix in partnering with local governments. In its nascent stages, Citizinvestor is focusing on very small projects: repairing public fountains, planting street trees, and the like. Says Jordan Raynor, the company’s founder, “We’re really trying to focus on micro projects, that four- to five-figure range so we can have that early success, then scale up to larger projects in the future” (Drell 2012). The idea is that smaller projects are more quickly implemented and provide a lower barrier to entry for potential first-



RESTORE THE HISTORIC HACIENDA HOTEL

THE STORY BEHIND NEW PORT RICHEY’S HACIENDA HOTEL The Hacienda Hotel, on Main Street in the City of...

📍 New Port Richey, FL



FIG 34: Funding Campaign on Citizinvestor

time citizen investors, who Raynor calls “micro-philanthropists,” who will be carefully tracking the results.

Civic crowd-funding is poised to fundamentally change the way public projects are funded and realized. Certainly, the fact that the model brings together civic participation and project implementation is promising. Perhaps most compelling are the recent precedents in the urban design realm; they demonstrate that digital tools for civic participation can apply not only to everyday urban problems like broken traffic lights, but to truly visionary and transformative projects in public space.

A new model for more participatory design competitions could take several lessons from this emerging universe of crowd-funding for public design. Crowd-funding works best when its results are quick, direct, and tangible. The most successful projects are often the ones where creators are the most communicative to their funders about their specific process, timeline, and what the money will and will not cover²⁶. Funders, each typically having given a small amount, become a virtual community of constituents with a sense of ownership over the project. The money they give, whether a payment in exchange for reward, or a donation, is a vote of confidence in the decisionmaking of the project creator. This is a key point: those looking to use crowd-funding don't have to give up creative control to the “crowd,” they must simply have a good idea, a specific plan, and a keen ability to communicate and convince.

Of course, the implications of this model on urban design has its limits. The argument can be made that good urban design is too complex, that not enough money can be raised, and that the necessity of simplifying the message in order to broadcast it widely obscures the political and regulatory challenges that are a reality of most urban design projects. One could also argue that the nascent model of civic crowd-funding disincentivizes local governments from funding needed projects and improvements, and this trend might ultimately hurt poor cities and neighborhoods, with their limited crowd-funding capacity, the most. These points are valid. However, to ignore the crowd-funding phenomenon entirely is to fail to recognize a coming sea change in the way all types of projects are taken from idea to implementation. Urban design is already beginning to feel the effects of a more open, networked, and diffuse support structure. Smart planners of urban design processes, including competitions, will look for the most applicable lessons in this model and strategically adopt them.

3.6

TOWARD THE TECH-ENABLED COMPETITION

What do these three emerging proto-models—federally-sponsored technology competitions, social networking for architects, and civic crowdsourcing – mean for the future of urban design competitions? These cases offer strong evidence that creative sourcing, architectural practice, and civic involvement are all moving toward a more networked model emphasizing open collaboration and communication between professionals and the public. They offer examples of formerly-closed processes that have used information- and social technologies to become more efficient and equitable, or at least better known to the public. They show that these technologies are having measurable positive impacts on creative problem solving, communication, civic participation, and project implementation. And they demonstrate new ways in which designers, institutions, and the public can collaborate. All of these trends have the potential to directly impact the urban design competition.

The following chapter will discuss specific ways in which organizers of urban design competitions can use the lessons of this overall shift toward open processes to shape their competitions for better results. Certainly, questions remain. Among them is the challenge of enhancing a place-based community in a virtual setting. Just as there is sometimes simply no substitute for face-to-face communication, the real-world experience of place is crucial to its understanding. It would be foolish to believe that competitions should be completely virtual, or that citizen participation using digital tools can accomplish the same thing as a series of conversations between stakeholders with a longstanding relationship. Any application of social technologies needs to build on the strengths of existing places, communities and relationships, and not try to replicate them in a vacuum.

These cases offer strong evidence that creative sourcing, architectural practice, and civic involvement are all moving toward a more networked model emphasizing open collaboration and communication between professionals and the public.

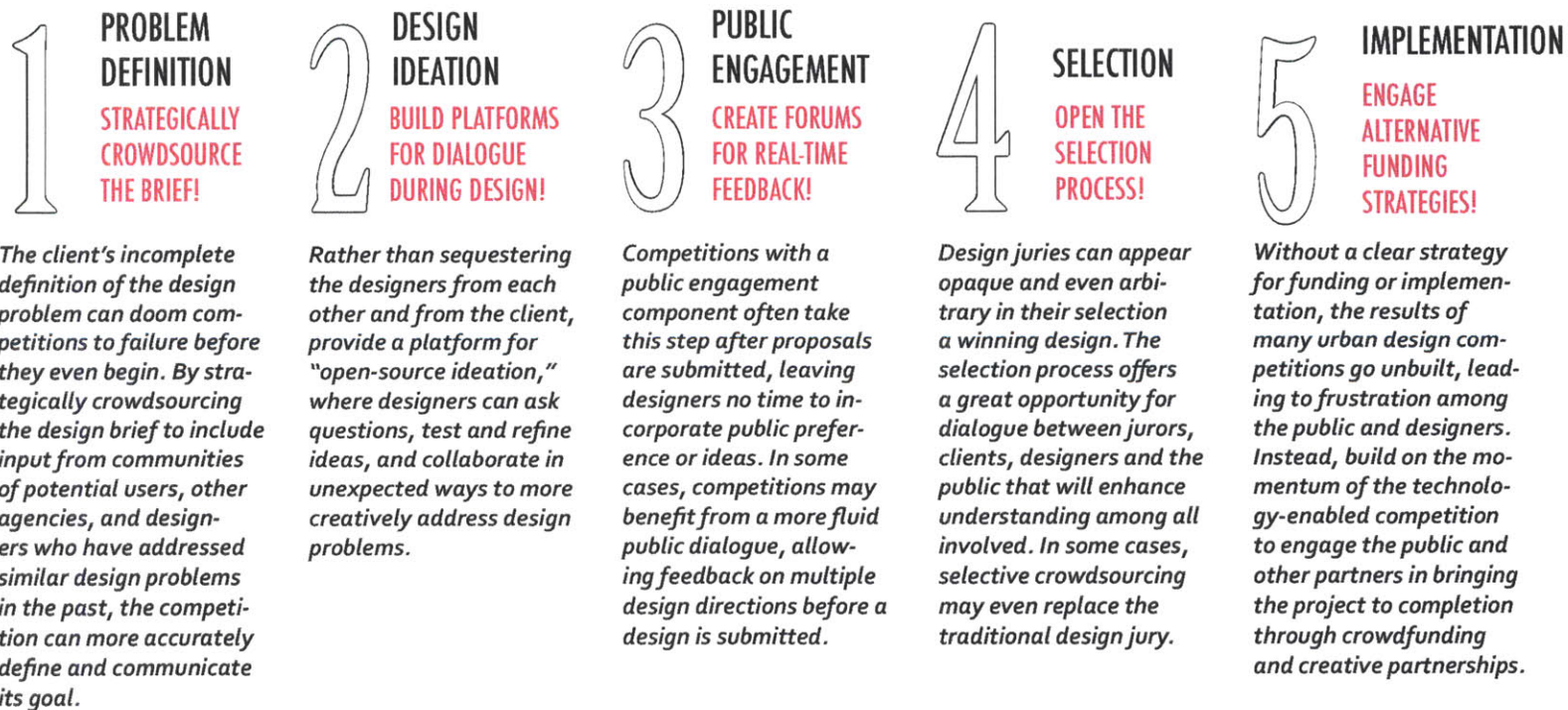


FIG 35: Inflection points

CHAPTER FOUR: ANATOMY OF A NEW COMPETITION

4.1

FIVE INFLECTION POINTS

There can be no single formula for the improvement of design competitions. Social technologies are tools to be used in context-specific ways. A successful tech-enabled competition will require careful analysis of context, as well as a clearly-articulated vision of expectations for the competition. While competitions vary, their comparable anatomy, as described in section 2.2, lends itself to a kit-of-parts approach. In this model, there are five potential “inflection points” to which technological tools may be applied. These inflection points are:

- a. Problem definition*
- b. Design ideation*
- c. Public engagement*
- d. Selection*
- e. Implementation*

The tech-enabled competition may make use of social technologies at one or more of these inflection points. The decision to incorporate social technology elements into each stage must lie with the competition organizers, and should be based on a thorough analysis of the competition’s context and the organizers’ goals. At the extreme end, a competition might incorporate these technologies at all five points; a project plan for such a competition is detailed in Chapter Five. But first, further explanation of the five inflection points.

4.1.a PROBLEM DEFINITION

A competition's success can hinge on its organizers' ability to accurately identify, define and communicate the design problem. The competition brief and other sponsor-produced materials are the essential tools for this exchange of information. Competition organizers may come from a range of backgrounds and perspectives. Their level of familiarity with the site, the sponsoring entities, key stakeholders, and communities of users may vary. Also potentially varied is their level of familiarity with the process of spatial problem-solving through design; they may or may not have a design background. Thus, the degree to which the brief accurately portrays the design problem can range tremendously from competition to competition. In the worst-case scenario, an ill-defined design problem can result in a widespread misunderstanding of the problem by designers²⁷, and unsatisfactory, unusable proposals at a great cost.

FIG 36:
Location-based mobile app survey



Strategic crowdsourcing for better competition briefs: To avoid frustration and wasted energies due to improper definition and communication of the problem to be solved, organizers should put at least as much time and energy into this initial competition phase as into selection of a winning entry. This phase should begin with an in-depth analysis of various stakeholder groups (with design professionals included, as they stand to benefit from the advancement of their field through the success of the competition); these groups should be seen as potential collaborators on the brief – a crowd from which to source. Once this pool of stakeholders has been identified, competition organizers should decide strategically how widely to cast the net for collaborators on problem definition and creation of the brief. This will vary from project to project, based on cost, likelihood of implementation, importance of public relations, and other factors.

Certain public competitions may lend themselves to the widest definition of crowdsourcing, that is, asking a broadly defined public with no special knowledge and no personal stake in the outcome to provide input, usually in the form of simple opinions that can be used as data points to indicate trends or overall feelings. For example, organizers might pose the question simply, either as a negative (“what is the problem with this park as it currently exists?”) or as a positive (“what are your favorite public places?”). Questions can be tailored to meet the specific needs of the competition, and can take the form of an online survey, or be integrated into a location-based mobile app or service such as Foursquare, where a “check-in” could prompt a place-specific

question. In this type of wide-net crowdsourcing, competitions organizers would likely want to keep public input simple, using it to create a database of opinions which would be accessible online, as part of the brief, to competition entrants.

Other competitions might better benefit from a more narrowly defined and better informed “crowd” from which to source input to the brief. This strategic crowdsourcing is still distinct from traditional brief creation in that it relies on the amalgamation of a wider array of opinions and knowledge in order to more accurately define the problem. Input from different groups of stakeholders might be weighed differently, but all input in its original form would be available in an online database as part of the competition materials. And rather than a simple survey, strategically-identified stakeholders – such as design professionals, elected officials, representatives of relevant institutions, and potential users – would have the opportunity to engage in a dialogue with each other about the problem to be addressed. This dialogue could be facilitated through the use of online forums, which could either be internal to the process, or open to access and comment from the larger public. The result of this crowdsourcing process is a more thoughtful, better informed brief, and a collection of raw data made available to competition entrants and the public, for the cultivation of a more nuanced understanding of the design problem.

4.1.b **DESIGN IDEATION**

In the current competition model, the designer is essentially sequestered during the process of design ideation. In the name of fairness, competition entrants are typically not allowed to communicate with organizers outside of a designated Q&A period, and are discouraged from interacting with each other. While this isolation is intended to level the playing field by ensuring equal access to information, in practice it can perpetuate misunderstandings about the site, the client, and the design problem. By relegating ideation to an echo chamber and disallowing collaboration, competition organizers can unwittingly limit creativity and stifle innovation.

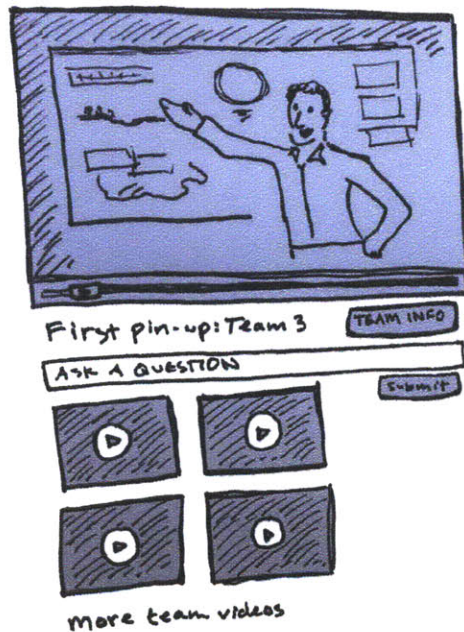


FIG 37:
Video pin-up

Platforms for dialogue during design: The tech-enabled competition promotes better design ideation through dialogue and collaboration, both between competition organizers and entrants and among entrants. Depending on the competition, organizers may also allow access to the design jury, or encourage teams to engage in dialogue with the public. By maintaining open communication throughout the design process, competition organizers can rely less on the brief as a static document. Designers can gain a more nuanced understanding of the current design problem by participating in a valuable exchange of ideas that may improve their competition entry in the short term, and enrich their professional experience and help build professional networks in the long term.

The design process can reveal questions that competition organizers and sponsoring institutions don't anticipate. By the creation of a centralized platform for communication during the design process, all entrants can benefit from this dialogue. Essentially, the typical Q&A period is extended for the length of the design phase, and questions and answers are given in real time, and accessible to all entrants. The level to which entrants wish to engage with this material is a matter of preference – some may prefer to work in relative isolation, while others may take full advantage of the dialogue and new information available on the platform.

Another potential opportunity for a more open-source design period would be for organizers to give entrants the opportunity to use online tools to work collaboratively. This collaboration could take the form of one or more informal mid-design phase virtual pin-ups, in which teams present their ideas and fellow entrants offer feedback via videoconference. Rather than struggle in isolation with similar design problems, teams would be permitted to collaborate to refine their approaches. In some instances, teams with similar approaches may decide to work together on one or more competition entries. Thus, by not duplicating efforts, teams would free up time to elaborate, refine, and delve deeper into design solutions. This arrangement, of course, would require flexibility on the part of the organizers with regard to entrant registration – teams would need to be allowed to shift, collaborate and combine up until the final deadline. The benefit to designers, of course, is increased access to collaborators, and the opportunity to be part of multiple teams to improve the chances of being selected.

4.1.c PUBLIC ENGAGEMENT

Too often in urban design competitions, engagement is a literal afterthought. That is, for the typical public project, the public is permitted to see the results of the competition only after the design jury has made its final selection. In an increasing number of cases, the public may have a role in the selection process, but this role is often nominal, such as the selection of a “people’s choice” winner, usually a fairly meaningless accolade that organizers present as evidence of public involvement. The unwillingness, or inability, of most competition organizers to engage the public in a meaningful way likely stems from a desire to control the narrative of the competition, and only release relevant details when they are sure to be a “PR win.” Unfortunately, by maintaining the competition as a closed process, organizers and entrants miss out on a rich source of feedback and information with the potential to improve competition entries, and ultimately, the built product.

Public forums for real-time feedback: Potential opportunities for public engagement lie at each stage of the design competition, from drafting the brief to identifying a proper course for project implementation. A revolutionary new competition could potentially engage the public at all five stages of the process, but it’s more likely that competition organizers would choose to dedicate energies to a concerted public engagement effort during one or two competition stages. Perhaps the greatest impact on competition outcomes can be made during design ideation and selection. The next section will discuss incorporation of public engagement into the selection process, but first, how can competition organizers bring the public into the ideation stage?

Rather than superficially seeking public reactions to jury selections or complete competition entries, the tech-enabled design competition would open the design process to the public in real time. Making use of an open, online platform for the hosting of competition materials and design work in progress, organizers could invite the public online to meet the teams as they work, and comment on design directions before they are finalized. This feedback could take place at a virtual mid-term charette, where all teams would present their work to the public in a videoconference or narrated animation, or teams could be available on their own schedules to present and live-chat with members



FIG 38:
Public design forum

of the public. Even if the event is held in person, a livecast feed can significantly broaden the public reach.

Beside vetting and refining ideas, this sort of mid-design stage interface has potentially great benefits to both designers and the public beyond the competition itself. It would force designers to concisely convey their problem solving process, providing beneficial experience in public communication. Likewise, it would introduce an interested public to design thinking, engaging them in not just the outcome of this thought process but in the process itself. By opening this early stage to public access and input, organizers could help breach the often-evident rift between designers and the public, and help to build trust in and respect for the design process.

4.1.d SELECTION

In the current competition model, selection of the winning entries can be a mysterious and opaque process. Judging criteria is only sometimes made public, and conversations among jurors typically take place behind closed doors and are kept confidential. Jury selection itself is often loaded with political or public relations significance. Jurors can be selected for their names rather than the quality or diversity of their expected contribution – and often, the more famous a juror is, the less time they will be able to devote to the competition. But perhaps the greatest shortcoming of the current design selection process is the lack of constructive feedback given to competition entrants, particularly those whose submissions are not selected. Entrants can be left feeling as if the time and energy spent in design ideation and submission assembly was sent off into the abyss.

An open selection process:The process of selecting a winner for a design competition can be “opened” in a number of ways. Most simply, competition organizers could involve jurors earlier on in the process to help set the selection criteria, then make it available to entrants and the public. The criteria could be set either in a standardized rubric, with numeric values attached to each category, or as a series of written or video statements from each jury member on how they plan to measure success. As a further step, so that entrants are given a more thorough understanding of their jury, panel

members could curate and annotate an online collection of projects they find successful or inspiring, hosted on the competition site. This would help provide entrants a more nuanced, qualitative understanding of their jury's preferences during the design phase.

In some cases, the selection process itself may be strategically crowdsourced. While some current competitions feature a "people's choice" selection, there is much opportunity to better integrate public voting in a meaningful way. At the outer extreme, competition entries might just be posted online for open public voting, with competition organizers trusting that participants in the voting are considering the set criteria and have a working knowledge of the site. Such a scenario carries obvious risks, however, and a much more likely scenario is a strategic and controlled form of crowdsourcing, where a limited number of public participants are given background on the competition and asked for their feedback alongside the typical design jury. The conversations leading to consensus among this "public jury" should be on record, and available to the design jury, competition entrants, and the public.

Regardless of the makeup of the design jury, the conversations regarding selection should be available to competition entrants when the selection is announced. This would provide a valuable opportunity for emerging designers to be critiqued by established professionals, civic leaders and potential clients, benefiting their future work regardless of the outcome of the competition. With the virtual competition platform, the need for a one-day jury deliberation in a room would be eliminated, and individual feedback could be given virtually, at the juror's own convenience. With the jury size not limited to a comfortable conversation in a room, the jury could expand to represent a wider variety of stakeholders, and individual jury members would be able to choose how much time and energy they spent on competition selection. This scenario would potentially benefit jurors as much as entrants; those who would not typically sit on a design jury would be brought in and exposed to design thinking.

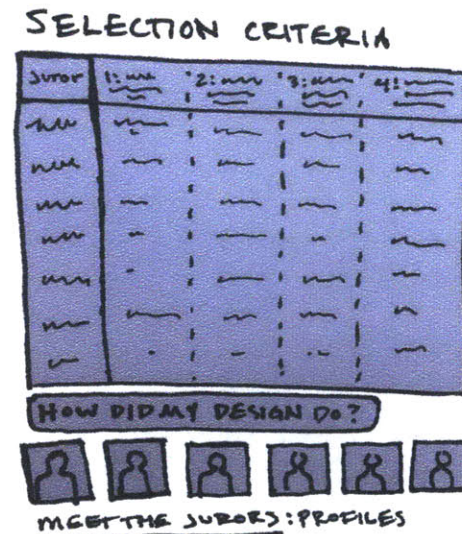


FIG 39:
Jury selection page

4.1.e IMPLEMENTATION

The current model for urban design competitions ends when the jury makes its selection and that selection is announced. This is often a major public relations opportunity for the winning entrant and the sponsoring organization, resulting in press and a boost in public recognition. However, this benchmark of success in the design process is somewhat detached from its next steps: project implementation. In fact, the public momentum gained during this last phase can lead to a false sense of hope for the project's implementation, when completion may be years, and millions of dollars, away. The end result, after the excitement over the competition dies down, is an eventual loss of public confidence in the project, which can in turn hinder its chances of success.



FIG 40:
Design database

Alternative funding and implementation strategies: The recent explosion of crowd-funding as a viable fundraising strategy has shown the power of diffuse, individual, low-level engagement to bring creative projects to fruition. In the tech-enabled competition, this type of engagement should be introduced into earlier competition stages, for the purposes of community-buy in and open information. It makes logical sense for competitions to build on the sense of public ownership that has been so carefully cultivated in earlier stages, and channel this momentum into fundraising and if needed, political pressure.

Organizers should construct their competitions with a secondary goal in mind: building a broad database of supporters and allies who may later make the transition into funders. The larger and more invested a community is brought into the competition process in the earlier stages, the greater the potential funding pool. And private fundraising, in particular crowd-funding, can be a highly visible way for a project to show momentum and leverage political support and ultimately, additional public funding. By incorporating fundraising into the final stage of the competition process, organizers can take advantage of the network they've built around the competition, and supporters are offered another way to engage with a project they may have been following throughout the competition. Public fundraising campaigns can also offer the opportunity for multiple parties to speak for the project. Thus, this process offers another opportunity for designers, sponsoring institutions, or civic allies to be seen publicly in a positive light.

Another innovation in this final competition stage would be the creation of a searchable, open-source database of all competition entries, and the promotion of these entries as ideas from which other emergent public projects might draw. For example, if another civic group lacks the resources to run its own competition but has a similar design problem as a competition that has been completed, its leaders may search the competition entries for possible ideas, and engage directly with the associated designers. Ultimately, this database may result in relationship-building between designers and potential clients, and even commissions. In this way, the end stage of one competition can be seen as the early stage of a new design process, and “implementation” can mean not only the advancement of the original project, but the ongoing professional growth of those who choose to enter competitions, and the advancement of public design as a whole. Finally, crowd-funding represents a significant opportunity to raise funds to compensate the designers who enter the competition, and to make the entire process less exploitive to designers.

4.2 CAVEATS

Social technology holds great potential for public urban design projects. An open dialogue during the entire process can help hone design problem-solving and result in proposals that are more innovative and more contextually appropriate. Community engagement can be forefronted during the design process, as opposed to being an obligatory afterthought. Designers, competition sponsors, and the public can forge important relationships that can benefit each well after the competition is over. And projects can build on the momentum of greater public enthusiasm to help fund and implement projects that might otherwise fade into obscurity.

Of course, the incorporation of many of these tactics into the design competition has its inherent risks. Obviously, crowdsourcing can complicate any process that is meant to result in a concrete decision—a deluge of individual opinions can dilute a strong design idea for the wrong reasons. By allowing dialogue between the parties, and involving the public early in the process, competition organizers lose a certain degree of control over both the narrative of the project and its potential outcome. There is a risk of encountering the unexpected, or even unwanted, result. By following a more democratic model, the

new competitions are left vulnerable to the inherent messiness and complication that are well-known components of democracy.

Social technology is not a cure-all; in fact, there are many examples of companies, municipalities, and other entities “jumping on the crowdsourcing bandwagon” to underwhelming, or even disastrous, result.²⁸ Regardless of the tactics used, the fundamentals of running a successful competition remain the same. The fruitful competition will always require a compelling site, a well-researched and written brief, a sizeable pool of talent, substantial public interest, and a fair and meticulous jury. Social technology is a means to build on and expand the potential impact of the competition, but it cannot be the only leg on which the competition stands.

Further, competition organizers will not likely want to integrate social technologies into every inflection point, but instead choose one or two points at the outset that are expected to yield the greatest result in terms of fostering dialogue, promoting innovation and building public support. Determining these points before any of the groundwork for the competition is laid is certainly easier said than done, but the reflective and projective exercise will force competition organizers to think deliberately and realistically about the competition’s resources and goals. This initial structured project thinking, including specification of expected outcomes, will almost certainly benefit the competition as a whole.

The incorporation of social technology into the competition model is likely to be adopted gradually, and this is probably the way it will be most impactful. Professional competition organizers might do well by familiarizing themselves with the inflection points and the arsenal of potential social technology tools and tactics. Once organizers have gained some degree of success in incorporating these tactics, their competitions will speak for themselves in outcomes, both in the built projects they produce, and in the professional development and relationships they foster.



FIG 41: The portion of MIT's East Campus that was recently rezoned. The Gateway surrounds the Kendall T station.

FIG 42, FIG 43: Views of the existing conditions at the Gateway site

CHAPTER FIVE:

A TECH-ENABLED COMPETITION AT MIT

5.1 SCENARIO

What might a truly new urban design competition look like? How might these changes apply to an actual site with real institutions, constituents, and an existing planning process. This chapter will introduce a planning scenario that might lend itself to adoption of the new competition model. For the sake of illustration, social technology tactics have been introduced at all five inflection points.

First, a look at the site and its context, both physical and social. The area of focus is a development site in Cambridge, Massachusetts, on the eastern campus of MIT. This 8-acre site functions as a de-facto entrance to MIT from the MBTA's Kendall station and the Kendall Square area of Cambridge, a largely commercial district that has seen the growth of many high-rise office buildings, primarily in the tech sector, over the past fifteen years. MIT facilities in the area include the MIT Medical Center, the Sloan School of Management, the Center for International Studies, and the two-building complex of the Media Lab. The site is also a conduit to MIT's main campus to the West, though it currently functions poorly, for reasons we will discuss. This is a drastically underutilized site; two large surface parking lots occupy the majority of the space, while a few nondescript formerly industrial buildings sit around the perimeter of the site.

The site's redevelopment has long been a goal for the Institute, which sees great potential for expanded facilities, as well as revenue-generating commercial development. The administration, along with MITIMCO, the private corporation responsible for real-estate

development at the Institute, has been pushing for an up-zoning at the site to allow for 300-foot commercial towers. In April, 2013, the upzoning was approved.²⁹

With the administration taking the leading role, but the majority of recommendations coming from MITIMCO, the planning process for the site has been divisive. Opposition to the MITIMCO plan centered on the development of commercial space on the campus, lack of campus or academic space or presence in the project, and lack of student housing. In 2012, a committee of MIT faculty members (officially the “Task Force on Community Engagement in 2030 Planning”) formed to analyze the process and make recommendations to the Provost for the site’s development.³⁰ The faculty task force was critical of many of MITIMCO’s recommendations, as well as the way decisions about the site had been made. In their report to the Provost, among other recommendations, they called for the creation of a new entrance to MIT, a “gateway” connecting the institution with its surrounding community and announcing MIT as a hub of innovation and future-oriented thinking. The successful programming of this site would involve the creation of a space that announces arrival at MIT, serves as a vibrant, welcoming public space for members of the MIT community and the public, and provides flexible space for a variety of programming. Task force Chair Tom Kochan asserts, “My hope is that whatever we do we have a gateway that says you are now at MIT; you’re at a really innovative and important place and it’s a welcoming feeling. That it’s a portal to MIT that’s really a learning portal, that people can understand the history of Kendall Square” (MIT Faculty Newsletter 2013, 22). The report also called for development of an East Campus plan with community input prior to any building that would take place under the new zoning.



FIG 44:
The site, situated on MIT's East
Campus, one block from the
Charles River

The MIT East Gateway site lends itself perfectly to experimentation with the new competition model. It is widely acknowledged as currently underutilized. It will serve multiple constituencies, both affiliated and non-affiliated with MIT. Its planning process is situated within the larger Kendall Square planning process, and will involve a large institution and a city government, MIT and the City of Cambridge, both of which have a stated commitment to innovation, and are therefore likely to embrace the introduction of social technology in the competition model. Further, there is both a historic and recent background of conflict between the community and MIT regarding the Institute's development, which has resulted in a highly invested sub-community interested in planning. A mechanism such as the tech-enabled competition, which promises to open the design process to ideas and input from the public, would likely be welcomed with open arms.

5.1.a PHYSICAL SITE

The site sits on two square blocks, bounded by Main Street to the north and Amherst Street to the south (with Memorial Drive and the Charles River one block further to the south), and Carleton Street and Wadsworth Streets to the west and east, respectively. Of the total site surface, over 40% currently

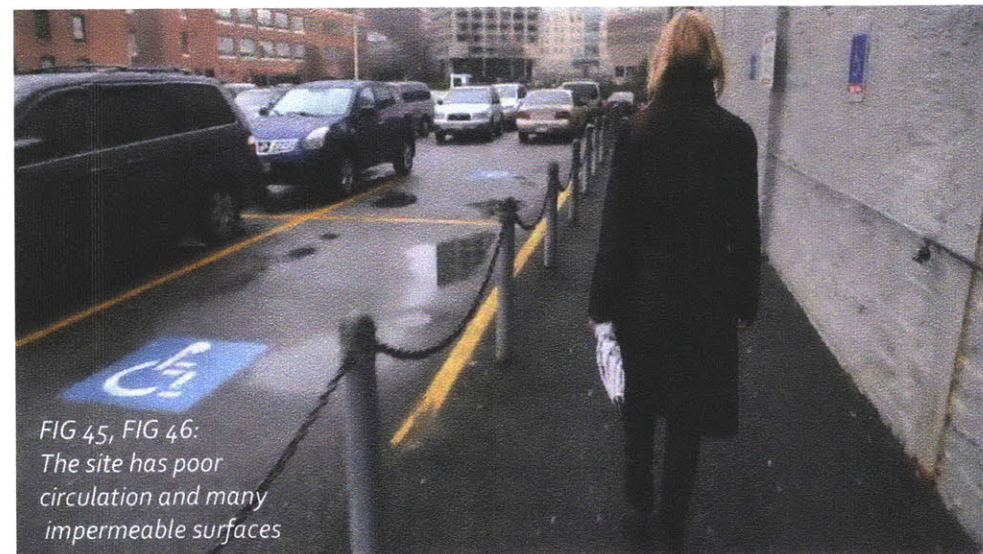


FIG 45, FIG 46:
The site has poor
circulation and many
impermeable surfaces

FIG 47:
View from the MBTA stop

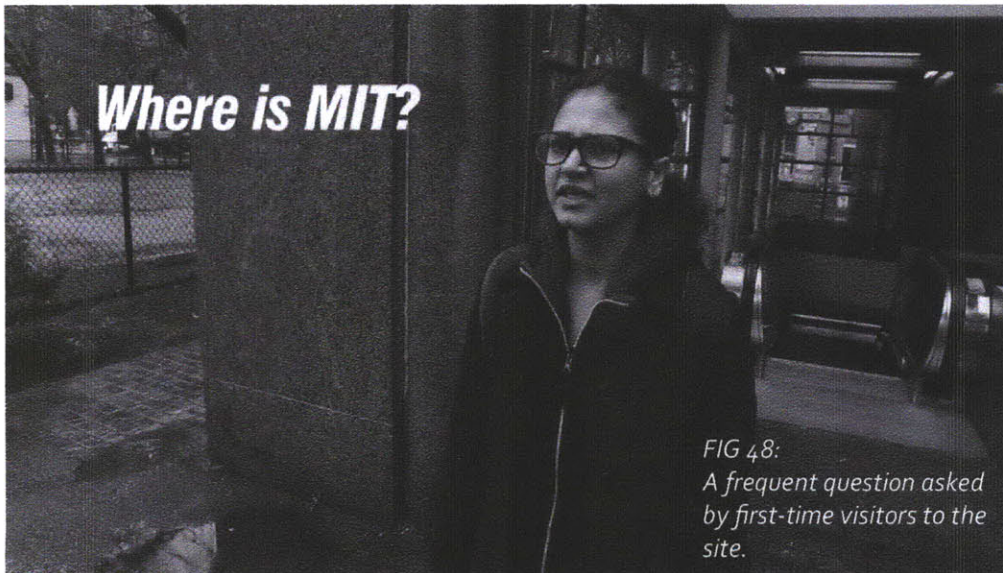


FIG 48:
A frequent question asked
by first-time visitors to the
site.

serves as surface parking. MIT-owned buildings on the site include two along Carleton Street, housing computing, research, and production facilities, the MIT Press bookstore on Main Street, and the Center for International Studies. Non-MIT facilities include two large commercial buildings fronting Main Street, and two unused industrial buildings on Carleton Street. Currently, pedestrian circulation and visibility on the site are major problems. Few people would describe the site as a “place” at all; it suffers from a lack of design signifiers such as surface materials, colors, signage or orientation of built forms to differentiate the site from, or connect it to its surroundings, or to identify it as part of MIT.

In addition to its spatial problems, the site’s ecological function is compromised. It is comprised of roughly 95% impervious surfaces: rooftops, parking lots, roads, sidewalks, and a small amount of compacted soil on high-traffic informal pathways. Planted areas are rare and seemingly decorative, rather than functional. Water runoff, carrying surface pollutants, enters the sewer system via a series of storm drains and is released directly into the Charles River via an outfall at the end of Wadsworth Street. The site has a high water table (8’-12’ below grade) and underlying soils characterized by poor drainage, the result of the area’s history as tidal wetlands that were filled in the 1800s.

Despite its shortcomings, the site is well positioned to become a vibrant public space at the intersection between MIT's campus and the growing innovation district in Kendall Square. Recently, Carleton Street has been used by several food trucks on weekdays, serving the MIT community and visitors. Customers often form long lines along Carleton Street's sidewalk, and gather in two small seating areas, which are overflowing in warm weather. This activity around the food trucks, as well as the site's location at the intersection of two main circulation corridors, demonstrates the need for a functional public space at this location, and illustrates that there is an enthusiastic potential community of users.

5.1.b MIT IDENTITY

In addition to the physical need, development of a successful public space at MIT's Eastern gateway has great symbolic potential for the Institute as it recasts its identity for the twenty-first century. Central to this recasting is the institution's relationship to its surrounding community – both locally and globally. With the inauguration in Fall 2012 of President L. Rafael Reif, the MIT community was given the opportunity to reflect on its history and think deliberately about its future.

During his inaugural address, Reif invoked what he saw as a central challenge to the Institute going forward: the tension between MIT's two opposing impulses. The first is the desire for the Institute to be inward-facing, cultivating technological advancement in a sort of meta-laboratory setting, and providing a space for unhindered innovation, apart from the realities of the outside world. The second involves the demands and responsibilities of an ever more connected world, where the boundaries between academic institutions and their communities are ever more blurred, and there is increasing pressure on leading institutions to take leading roles in positive social and environmental change.³¹ The central question the Institute faces today is: what combination of strategies balances these opposing forces to best fulfill the Institute's mission of "One community, together in service"?

One way in which the Institute has addressed this challenge is in its nascent digital learning program—including OpenCourseWare and MITx—which integrates publicly-

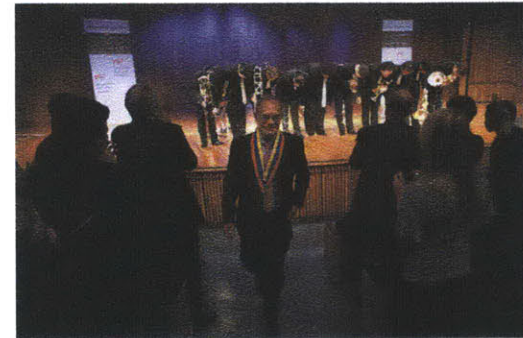
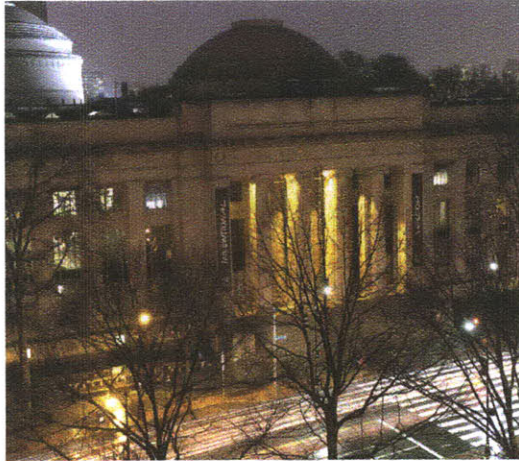


FIG 49: The inauguration of MIT President L. Rafael Reif in October, 2012



FIG 50: The Great Dome and entrance at Killian Court, facing the Charles River



*FIG 51:
MIT's entrance at 77
Massachusetts Avenue*

available online education into MIT's curriculum, and makes select MIT courses publicly available. Under the leadership of electrical engineering professor Sanjay Sarma, MIT's first director of digital education, the program was recently launched with the dual goals of improving MIT's residential curriculum through digital platforms and "sharing the full breadth of the Institute's curriculum freely and openly... for the benefit of educators and learners worldwide" (News release, November 2012). The program demonstrates the Institute's mandate to newly conceive of the "MIT community" in a broader global context while simultaneously searching for ways in which traditional on-campus life might be enriched.

MIT's campus currently features two main gateways, whose physical purpose and symbolic intent are clear. The first, built in 1916, is a classical and grand portico facing South to the grassy Killian Court and Boston, across the Charles River. This entrance, built as part of the first MIT complex after the institution was relocated from Boston to Cambridge, acknowledges MIT's past, and faces the seat of civic power. The second, built in 1939, is an equally imposing classical colonnade facing Massachusetts Avenue, the major arterial street connecting the Institute across Cambridge to Harvard. This entrance announces MIT as an important academic institution, and distinguishes it from its formerly industrial surroundings. The MIT East Gateway site provides an opportunity for another great entrance point at which the Institute can reestablish, through built form, its relationship to its surrounding community. By creating a public space as a symbolic entrance, MIT can signal its aspiration not only as a twenty-first century innovator, but as a partner to its communities, both locally and globally.

5.1.c THE PLAYERS

Any design decisionmaking process at the MIT East Gateway would involve several groups of stakeholders. The Institute's involvement would be led by the administration, with input from MITIMCO and a faculty committee similar to the Task Force that made the initial recommendations to the Provost. MITIMCO has had an important role in shaping the early stages of the planning process for MIT's underdeveloped East Campus, but many in the MIT community have called for greater involvement of the

larger Institute—faculty, students and staff. Overall, MITIMCO is concerned with creating developments of lasting value for MIT. Their criteria for value in development is four-fold: development proposals must be seen to be feasible in market terms, in legal/political terms, physically, and financially.³⁰The Faculty Task Force’s recommendation to increase community involvement in the process would essentially help to assure that there are other conceptions of “value” are taken into account—those of a more broadly defined constituency.

The Faculty Task Force has called for greater faculty oversight and community involvement in urban design.³⁰In their 2012 report to the Provost, the task force stressed the need for input from members of the MIT community specifically involved with urban design. In contrast to MITIMCO, a committee of MIT community members, led by urban design faculty, is likely to have specific recommendations regarding design for the gateway element. It would make logical sense for this committee to take the lead in drafting the design brief.

In addition to official representation by urban design faculty, of course, other members of the MIT community would be involved. Additional faculty members, administrators, staff, alumni and students affiliated with the departments and schools immediately surrounding the proposed gateway site might form a stakeholder group. These entities include MIT Medical, the Sloan School of Management, the Media Lab and the Center for International Studies. The entire MIT community as a whole should be given the opportunity for voluntary involvement in the process at a range of commitment levels (several of which will be discussed in the next section).

Of course, the design process for this new public space will also include the City of Cambridge, community residents, and others not affiliated with MIT. A series of public meetings around current and ongoing planning process around the rezoning and development of the larger Kendall Square area has already brought interested parties to the table, and this self-selecting pool of community members might serve as a starting place for the design process. Official representation from the City of Cambridge including the Planning Department and the Mayor’s Office would be crucial, as would involvement from the MBTA, as the site is so thoroughly tied to the Kendall T station. A starting list of potential stakeholders is included in this report, but as one of the primary goals of the social-technology enabled competition is to increase and improve stakeholder and public



*FIG 52:
Kendall Square briefing for the
MIT community, February 2013*

MIT GATEWAY COMPETITION: INITIAL STAKEHOLDERS

MIT:

- Administration, led by MIT Provost
- MIT Faculty, including Department of Urban Studies and Planning Faculty
- MITIMCO
- Graduate and undergraduate students

City of Cambridge:

- Planning Department
- Mayor's Office
- City Council
- Department of Transportation
- Department of Public Works
- Department of Traffic, Parking and Transportation

Community Groups and Civics:

- A Better Cambridge
- Area Four Neighborhood Coalition
- Cambridge Historical Society
- Charles River Watershed Association

Other:

- MBTA
- Developers

involvement, it's acknowledged that part of this public will only make itself known once the process is underway. It should be the goal of the organizers, therefore, to design the competition to allow various degrees of involvement from a variety of actors at multiple stages along the way.

5.1.d MAIN CHALLENGES

At this site, some of the expected challenges include the different conceptions of value held by entities like MITIMCO, the Faculty Committee, and the residential community; the long and relatively uncertain development timescale for development at the site; and the high potential for the design and planning process to become conflated with and mired in the existing politics of the ongoing planning process for Kendall Square and MIT's East Campus.

The ability of a new public space to establish an identity and create the greatest lasting value at this site will likely be a matter of some debate, especially for those primarily concerned with immediate monetary value of real estate development. Regarding MITIMCO's four criteria for project feasibility (mentioned above), the category of social value is lacking, as is an acknowledgement of the less tangible benefit of a popular public space to its surrounding land value. In the task force's report, on the other hand, a "gateway" is one key to successful development at the site, which would benefit from the deliberate imposition of the associated order and identity. A panel of MIT students, or community members unaffiliated with MIT, would be more likely to value a vibrant open space as a public amenity than a buildout scenario with little or no public space. Competition organizers may not be able to fully reconcile these different conceptions of value, but should recognize the disconnect when planning opportunities for stakeholder in the competition.

Full buildout of the entire site is anticipated to take up to 20 years³², so competition organizers will be tasked with making the case that development of the gateway public

space should be a priority. Of course, given the relatively intangible nature of the value created by public space, it may be a challenge to convince developers to prioritize this above the development of usable office, retail or residential facilities that represent an immediate return on investment. Competition organizers will likely need to make the case that the competition process is diverting some of the planning work away from the developers, thus freeing their resources for more traditional value creating projects. A public-facing competition will also likely result in greater press and public attention, which might help spur development in the larger site. By pitching the competition as a complementary process to standard planning and development, organizers can help ensure that public space design and development is more than just an afterthought.

The final main challenge will likely lie in the potential of the competition to be conflated with the larger Kendall Square rezoning and development plan, and thus carry with it all of the existing relationships, stagnations, and assumptions that inevitably result from such a complex planning process. The responsibility for differentiating the competition from its planning context will lie with the competition organizers. Social technology can offer great opportunities for even well-acquainted parties to interact in different ways, and if used successfully, will inject the competition with a collection of new voices to invigorate the process and set it apart from previous and ongoing efforts.

5.2

PROJECT PLAN: ADDRESSING THE INFLECTION POINTS

The following section details how the principles of the new competition might be applied to the MIT East Gateway site. Rather than beginning with a competition brief, the section serves as a project plan, with each step designed to build on the previous. The five inflection points outlined in Chapter Four serve to structure the project plan. Because the new competition emphasizes dialogue between multiple disciplines and stakeholder groups early in the process, and subsequent action based on the results of that dialogue, there is an acknowledged degree of uncertainty in the recommended steps. However, enough is known about the site, its built and social context, and the likely players to make an educated guess at how a competition scenario might play out.

The MIT East Gateway case is intended to illustrate an extreme example of a new competition. Thus, social technologies and new procedures are introduced at all possible inflection points. As mentioned, it is unlikely that competition organizers would adopt all of these methods right away in an actual competition scenario. The MIT site lends itself well as an example, however. As part of a larger site slated for development in the next decade, the Gateway site has been widely acknowledged as important in terms of interface between MIT and its community. It is owned by an institution that prides itself in innovation, not only in product but in process, and is willing to invest effort and financial resources in new ideas. And there is a diverse and clearly invested public surrounding the site, as shown from attendance and participation in the multiple public meetings regarding the Kendall Square Rezoning. In many ways, the site's context provides the perfect scenario in which to introduce the principles of the tech-enabled competition.

5.2.a

PRELIMINARY STEPS

Before the competition begins, a series of steps are taken to ensure the ongoing administration of and communication regarding the process. The Faculty Committee appoints a Competition Manager, a year-long position which transitions from half-time to full-time as the competition proceeds. The Competition Manager's work is supported by administrative and technical help from a team of two or three graduate research assistants, each working 10-20 hours per week. The competition process is kicked off with an introductory meeting between the Competition Manager and representatives from the Faculty Committee, MITIMCO, MIT administration, likely represented by the Provost, the Cambridge City Planning department, the Mayor's office, the MBTA, and community groups.³³ This initial group of stakeholders will be essential later in the process in identifying other parties who should be involved.

After the introductory meeting, much of the contact among this stakeholder committee will take place virtually, on a customized project web site. This may be a commercially-available site such as BaseCamp, or a specially-designed site, depending on the expertise of the administrative team. The Competition Manager and team are responsible for maintaining this web site and encouraging participation among stakeholder committee

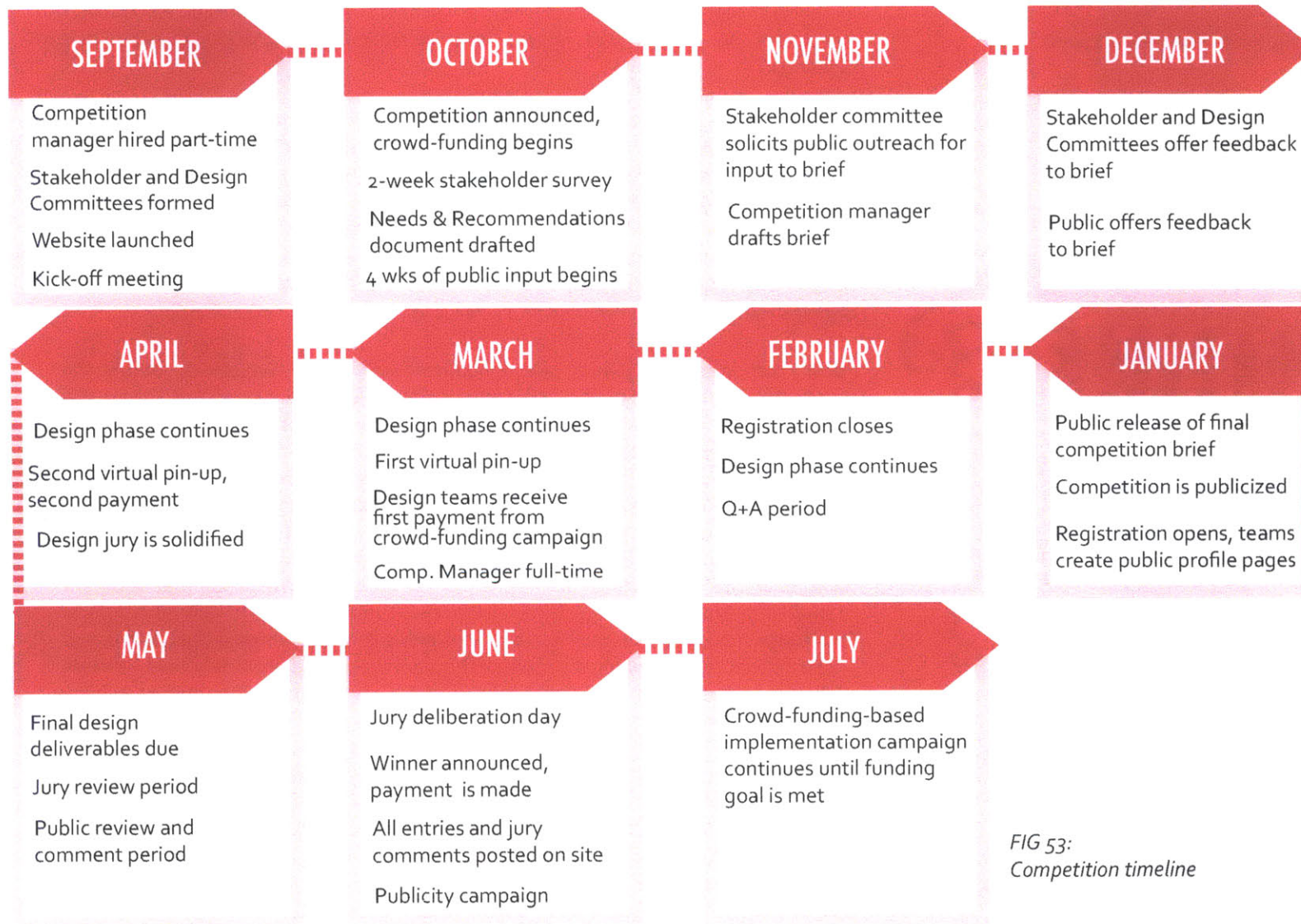


FIG 53:
Competition timeline

ADMIN TEAM



COMPETITION
MANAGER



WEB
MASTER



RESEARCH
ASSISTANTS

STAKEHOLDER COMMITTEE



MIT ADMINISTRATION, FACULTY, STUDENTS



CITY OF CAMBRIDGE



COMMUNITY + CIVIC

DESIGN ADVISORY COMMITTEE



ARCHITECTS + URBAN DESIGNERS

FIG 54:
*Competition
committees*

members throughout the process. The site will host the projected schedule and major milestones, documents, and records of conversations during physical and virtual meetings.

In addition to a competition schedule, the Competition Manager will share a rough schedule of stakeholder committee virtual briefings, roughly once every two weeks, during which the committee will discuss the competition's current phase and next steps. It's important that members of the committee be flexible with this schedule; some initially-calendared conversations might not be necessary, and others may arise and be scheduled on short notice. Real-time conversation is a critical aspect of the competition process, however, and commercial videoconferencing services such as Google+ Hangouts can be very helpful in facilitating convenient conversations.

Equally important is a public "soft announcement" of the competition before the process begins. The Competition Manager and team will be responsible for giving the competition some online presence – perhaps as simple as a public-facing section of the project management site, supplemented by presence on social media services such as Facebook and Twitter. The public-facing site should be a resource for background materials. At the same time, a public crowd-funding campaign is launched, the proceeds of which will be used to pay the designers who enter the competition. The simultaneous launch of the competition and the crowd-funding campaign will help build public interest in buy-in into the process. The Competition Manager may also want to solicit initial media coverage by relevant outlets catering to the MIT community, local Cambridge media, and blogs or online publications covering design, social media, and online innovation. A simplified version of the project plan and timeline should be made available to the media and the public to support the narrative of transparency, flexibility and accountability.

The competition organizer will also want to establish a Design Advisory Committee, a diverse group of ten to fifteen experienced architects and urban designers who may or may not be affiliated with MIT. Such a committee is being formed as part of the East Campus Planning Committee. This committee will play a large role throughout the process, both in judging and in communicating the design process to the public. Members need to be people who "speak design" and can communicate the value of design problem solving as it relates to the site.

5.2.b

PROBLEM DEFINITION

Once the competition is launched (administrative and stakeholder team has met, project schedule and website has been agreed on and activated, competition has been announced to the public), the first three months of the process are devoted to defining the problem and creating the brief. This process begins with a two-week-long call to members of the stakeholder team and design advisory team to identify individually: 1) what they see as the largest shortcomings of the site currently; and 2) their opinion on what the new design needs to achieve. Since this information will be aggregated as data and used in a first draft of the brief, answers can take the form of short statements in a series of 3-5 bullet points for each question. (A sample statement for question 1 might be “visitors to the site can never find MIT and have to ask for directions;” an unrelated statement for question 2 might be “there should be an outdoor place to have lunch and meet friends.”) Statements should avoid jargon and be easily understandable to a general audience.

The Competition Manager will then compile the 100 or so statements into a master list of “needs and recommendations.” There will almost certainly be some overlap; similar statements should be consolidated, with a number in parentheses to indicate how often the statement was made (ex: “There should be prominent directional signage or other wayfinding elements (4)”). Statements should then be listed in their order of frequency in a master list which will be used in the public crowdsourcing phase.

The next month-long phase involves generating reactions to the needs and recommendations list. The list is posted on the public competition website, along with some basic information about the site (location, dimensions, program requirements, etc.) and if possible, a brief video tour for those unfamiliar with the site. Emails are sent to those who previously expressed interest in the process, as well as relevant email lists such as MIT students and faculty, email subscribers to community media such as *Cambridge Day*, local design firms, and others, and an associated social media push is made as well. Participants in public crowdsourcing are invited to “vote up” the five statements for each question that they find the most important, and contribute their own observations in a separate section. Though these statements will again be aggregated to create the brief, all original public statements will remain online for the design teams to read during design ideation.

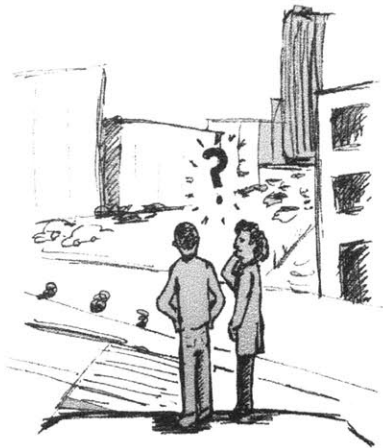


FIG 55: Problem definition at the Gateway site

Once this public input period is over, the Competition Manager will again compile the series of statements, with the most frequent appearing first, and a number indicating how frequently the statement was made. This list will inform, and serve as an important supplement to, the narrative brief. The next month will be devoted to the Competition Manager drafting and incorporating feedback into the narrative brief, which will be kept sort and simple. The brief will undergo an open comment period of one week for the Stakeholder and Design Advisory teams – comments can be given via the project website or in a videoconference conversation – followed by a one-week online open comment period. Understanding that not all comments can be incorporated into the final brief, and that some may be directly contradictory, the Competition Manager will incorporate comments wherever possible and make notes in the text of others.

At the end of the three-month period, the brief is finalized and “released,” although it has been publicly available in some iteration for the entire process. The public, and designers, are notified that the brief is complete, and the official process of design ideation begins. Of course, many design teams may have already formed, perhaps participated in the “problem definition” process, and may have even started ideation; rather than being unfair, this additional familiarity with the site is seen as an added benefit for those who choose to devote extra time and thought to site problem-solving.

5.2.c DESIGN IDEATION

The design ideation phase is four months long, and proceeds similarly to a traditional competition, but in a way that fosters dialogue during the process. Design teams will have one month to register for the competition; registration involves the creation of a team page on the competition site. Teams are not paid at the outset, but are given an honorarium from the crowd-funding pool after each “virtual pin-up,” to offset labor costs and encourage teams to remain in the competition. The page is developed as a template by the administrative team, so design teams are only required to provide the content: a digital portfolio of previous work, bios, and some basic team information. For the purposes of online conversation throughout the process, design teams can choose to speak as a group and create a single online “persona,” or each individual member may create their own persona. (Members of the administration, Stakeholder and Design Advisory teams, and members of the public will also create personas for the purposes of online conversation.)

The traditional Q&A session, in which teams can submit questions to the competition organizers during a set period of time, is replaced with a "Question forum," where designers can pose questions to the entire advisory team, or individual members with certain expertise. Designers can also directly pose questions to each other or to the public. Questions are answered at the convenience of whoever is being asked, and answers are available to the public. The competition site serves as a repository of design work – teams upload process drawings and other documents, and can choose whether to make them available to the Stakeholder and Design Advisory teams, or to keep them private. One motivation for sharing is to more completely illustrate design thinking during one of the "process pin-ups." The site tracks and displays records of user views and downloads of competition materials, so team members have an accurate picture of who is viewing their material.

Each team is required to participate in two virtual pin-ups during design ideation. One is scheduled for the halfway point, two months into the ideation phase. All teams are required to give a five to ten minute virtual presentation with graphics, which can be a video or narrated slideshow, detailing their design thinking to date and their planned approach. Stakeholder and Design Advisory teams watch the presentations live, and engage with each team by asking questions and offering initial feedback. Design teams are awarded an honorarium, from the pool of funds generated through the parallel crowd-funding campaign, for participating in the pin-up. After the pin-up, each presentation is available on its associated design team's competition page, and is open to comment from the public and advisory teams. At some other point in the process, design teams are required to give a second process presentation, this one a less formal five-minute video or narrated slideshow. The second presentation is simply uploaded to the designer's competition page, along with links to relevant design process drawings, and is then open for comments and questions. Teams receive a second honorarium at this point.

In the process pin-ups, designers are encouraged to reference conversations in which they have engaged during the design process, including conversations with other designers. By acknowledging that good design ideation is often a collaborative process with ideas coming from unexpected sources, designers can help dispel the myth that creativity in isolation is the best method for creative problem solving. And by involving stakeholders, in their process from the beginning, each party can gain a fuller picture of the thinking that went into each design submission once the deadline for entries rolls around.

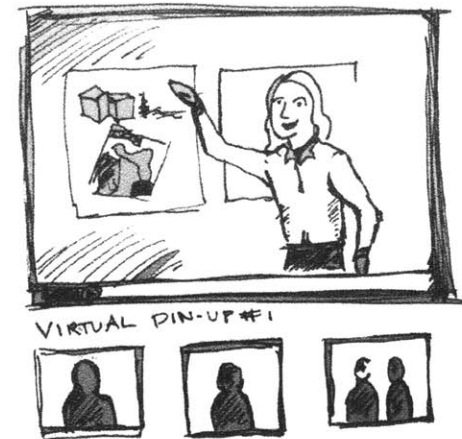


FIG 56: Virtual pin-up with Stakeholder and Design committee members

5.2.d PUBLIC ENGAGEMENT

The MIT East Gateway competition is being used as an illustrative example in which each social technology is applied in its fullest form to each of the competition's inflection points, opening up the competition to the greatest extent possible. For that reason, in this example public engagement is not limited to one point in the competition process. Instead, it is an underlying goal of each phase, designed to strengthen public support and understanding of the design process, both as applied to this site and in general as a way of thinking.



FIG 57: The risk of public engagement

The specific ways in which each phase of the design competition engages the public is integrated into the discussion of each of these phases. However, the ways in which the process can ensure that this engagement is of high quality, rather than mere quantity, merits some discussion. Many competition organizers, as well as proponents of digital democracy and other participatory practices, have cautioned against public engagement as its own end.³¹ It's well known that in virtual as well as physical settings, the loudest voices are often the negative ones, and thoughtful, constructive and creative commentary can be far from the norm.

Unfortunately, there is no easy answer regarding how to minimize the shouting and spotlight constructive participation. Virtual engagement is a nascent science, and each new model that is developed represents a step forward in the inevitable trial-and-error process towards creating a model that works. As the first competition of its kind, the MIT East Gateway competition will likely make some mistakes in its public engagement strategy; reflection on these efforts, and the ability to course-correct mid-process if needed, are essential to ensuring the public engagement strategy is constructive, not only for this competition, but for the tech-enabled competition model as a whole.

On the bright side, this competition holds several advantages in favor of promoting thoughtful, constructive dialogue between the public, and competition officials. In terms of proximity, its public is particularly educated and engaged. Many, especially those affiliated with MIT, are familiar with the creative process, have worked collaboratively, and have a strongly held belief in innovation. Others from the community have a familiarity with planning and design from following the Kendall Square and Central

Square rezonings or watching developments around Kendall Square in recent years. The public participation process in this competition relies on voluntary self-selection, and participants are encouraged to engage early and often in the process.

With recognition that design edification or selfless contribution to design excellence are not likely to be strong enough motivators for many participants, one possibility to encourage engagement is a points system, by which user comments are awarded points by other users, design teams, and the competition committees for their helpfulness. As users accrue points, their comments appear in public forums ranked by the ratio of points to total comments, so the voices of more helpful users appear at the top each time public input is featured (similar systems of user community-generated ranking are well-known in online communities from Yelp to Ebay). An added benefit could be the inclusion of top public users as “community advisors” on the official project team, or, as detailed in the next section, involvement in the selection process.

5.2.e **SELECTION**

For the MIT East Gateway competition, the jury will consist of any members of the Stakeholder team and Design Advisory team who volunteer, as well as a selection of community members who have distinguished themselves throughout the process by the quality of their participation. These public members can either be selected on a strictly numerical basis (i.e. whoever has the most points), for the diversity of their makeup, or through some combination thereof. The ideal makeup of the design jury is around five designers, five stakeholders, and five community members, a larger panel than in the typical competition model, but still small enough for a facilitated conversation.

The jury panel will be solidified one month before the design phase comes to a close, and jury members will each be responsible for providing a bio and statement of interest in the project, repository of their online comments to date, and relevant links, both to their own design work if applicable, and to projects that they consider successful. Design teams are encouraged to familiarize themselves with their panel members, and may contact members of the panel with questions if they wish. Likewise, panel members are encouraged to peruse design-in-process pages if they have not already participated in the virtual pin-ups. By gaining an understanding of each team’s design approach, the jury will be better equipped to analyze the final designs.

Final deliverables in the competition are not formatted on boards, but uploaded onto a team-specific web page on the competition site. Deliverables include written descriptions, a series of illustrative design drawings and explanatory diagrams, and a video or narrated slide show of no longer than ten minutes. The site also contains links to relevant drawings and discussions on the process page. Each team's page follows a standard, simple template for easy navigation and to avoid distracting the jury with web design. All final designs are made public at the time they are submitted; the Competition Manager, who by now will be employed full-time in administering the competition, will conduct another round of media outreach at this time to build public anticipation for (and participation in) the selection.

Jury members will have a two-week period in which to review the entries. Meanwhile, a parallel period of online public comment will occur in which the general public may post comments in favor of (but not necessarily rank) individual projects. Jurors will be responsible for reviewing each web page, watching each video, and making notes in a private section of the web site visible only to jury members. Each juror will recommend six projects for promotion. The Competition Manager will then compile all juror comments and distribute them to the entire jury. (These comments will be made public on conclusion of this phase.) At the end of the two weeks, jurors will convene in a daylong selection meeting, in person or via videoconference if necessary.



FIG 58: Virtual design review

At the selection meeting, the jury will devote time to discussing the most highly-recommended entries. Depending on the number of entries, this may be as many as ten. Online juror comments will form the structure of the discussion, with public comments serving as supplementary. If there is a clear degree of public support for an entry with no juror recommendations, the jury will discuss this entry as well. Jury comments, as well as a transcript of the selection meeting, will be made available to designers and to the public. The goal of the discussion is to build consensus to the greatest extent possible about the quality of each design approach before the voting, so the transcript will provide designers and the public a valuable look inside a high-level discussion of design quality. At the end of the discussion, each juror will choose one to three schemes. The design earning the most jury votes is the winner. All recommended designs will be given the distinction of "jury-recommended" and hosted on a web site encouraging other potential competition organizers or those looking to hire architects for similar projects to engage the recommended designers in their own design process. Promotion of this web site and its collection of recommended entries will be a top priority for competition organizers in this phase, so that designers are awarded some well-deserved publicity. All "jury-recommended" finalists will be paid from the crowd-funding pool on a sliding scale based on the number of votes they received.

5.2.f IMPLEMENTATION

Because MIT is a private institution with an endowment for capital projects, crowd-funding any significant amount of the capital costs for a project such as this is neither necessary nor feasible – as the first competition of its kind, there are too many unknowns for individual public donors to have enough faith in the process to provide the bulk of capital costs. MIT’s new gateway will most certainly be paid for by a combination of funds from MITIMCO, the City of Cambridge, and possibly the MBTA. MIT may also dedicate additional capital funding to the project or solicit corporate or high-level individual donors with naming rights. Additionally, as the primary capital investor in the development project, MIT will bear ultimate responsibility for the design, so the recommendations made in the competition process will technically be advisory.

Crowd-funding represents an important revenue stream for the competition process itself, in particular for designer compensation. In order to make the competition less exploitative, competition entrants can be paid for their work through a parallel crowd-funding initiative. Entrants will be paid in installments as described above. The winning team, would receive the commission, and the bulk of the designer funds, but all finalists would be compensated for their time. After the competition, this team would go on to work with MIT and the City of Cambridge to refine the design. Crowd-funding can also cover honoraria for jury members, and even partial salary for competition organizers.

Crowd-funding and public engagement go hand in hand – by soliciting one, competition organizers encourage the other. Supporters are urged to put their “money where their mouth is,” or their “mouth where their money is.” By seeking broad public involvement and input early on, the MIT East Gateway competition is able to build a base of supporters from the project’s inception. The Competition Manager and the administrative team should use frequent updates and multiple methods of contact to foster a sense of familiarity with the process and a sense of ownership over its outcome. As long as they feel they are truly being listened to, members of the public who have weighed in on the design process are more likely to contribute to the crowd-funding effort. Likewise, those who have contributed to the crowd-funding campaign are more likely to engage as public stakeholders in the process. Most importantly, a robust crowd-funding effort demonstrates to institutions and municipalities that there is broad public support for the

In order to make the competition less exploitative of designers, competition entrants can be paid for their work through a parallel crowd-funding initiative.

project. With the momentum of public favor clearly demonstrated, the completion of the project is likely to come more swiftly.

In addition to the benefits to the project's sponsors, and to its public supporters, the last phase of the competition can help ensure greater benefits to the designers themselves. Entrants will be compensated for their time and effort, using the funds raised through crowd-funding, in addition to support from MIT itself. As described in the previous section, all "jury selected" design teams' work will be featured in an online public repository, where its life will extend far beyond the end of the competition. This body of work will become a public record of design thinking by which future clients and competition managers may familiarize themselves with the diversity of approaches of each team, and may even contact teams for commissions. Thus, jury selected teams are able to elevate their public profile, reach potential clients, and at the same time foster a better public understanding of the design process, all the while being compensated for their work.

5.3 CAN THIS REALLY HAPPEN?

This new form of design competition presents several acknowledged unknowns; the success of the initial attempt is no matter of formula, but will depend heavily on intelligent, sensitive project planning and careful communication. MIT and the City of Cambridge, an institution and a city long synonymous with innovation, are uniquely qualified to commit to such an undertaking.

For MIT to invest its resources in a competition such as this is inherently risky; the Institute would be relinquishing some degree of control over the planning process for what is essentially a private development. However, doing so would fit within the Institute's current positioning as a global leader in more open, innovate processes and products. With the inauguration of its new president, MIT has recently reiterated its aim to be a leader in creative methods and tactics in many fields. Its newly launched open communication platforms demonstrate a commitment to new, more open ways to communicate and spread information, even if the full outcomes of such actions are unforeseeable. Cambridge has made a similar commitment to innovation, the

greatest evidence of which is the zoning of Kendall Square, which is to be developed in the coming decades as a deliberate hub of entrepreneurship³⁴. For MIT and Cambridge, the unorthodox, technology-driven, and community-powered approach to public space design represented by the new competition is consonant with these goals. The public attention typically given to high-profile design competitions, combined with the inherent likelihood that this competition's web-based content will "go viral" indicates that such a competition would go far in promoting MIT's public relations narrative of global innovation, while the very site-specific nature of the competition would demonstrate that MIT is committed to making change on a local scale.

For such an undertaking to be successful requires the full commitment of MIT's administration, including the embracing of a certain degree of uncertainty. It also requires the dedicated time and attention of a team of Institute representatives of various affiliations and backgrounds. Significant buy-in from the City of Cambridge (planning department and Mayor's office) is also a must, but MIT is uniquely qualified and has the human and financial resources to be the leader in this effort. Significant leadership among the faculty, in particular members of the Faculty Task Force that made original recommendations to the Provost, would represent a great step toward realizing the new competition plan. The competition planning and administration could be partly incorporated into a workshop course at MIT's School of Architecture and Planning, involving students in a constructive and meaningful project with great potential significance to the Cambridge community, and the design community as a whole.

CHAPTER SIX: THE PROMISE OF THE TECH-ENABLED DESIGN COMPETITION

6.1 IMPLICATIONS

Above all, the tech-enabled urban design competition is flexible; by design it can take many forms to suit its context, the needs of its sponsoring institution, and the public. And though an institution like MIT might be singularly qualified to run a competition that integrates social technology tools from beginning to end, some of these tools can be applied to any competition to help open the process. If the goals of the competition are to support architects and the design practice, communicate and meet the needs of the sponsoring organization, involve the public in a meaningful way, and create a successful public space, smart competition organizers will consider the arsenal of available technologies that are quickly revolutionizing civic life. They are changing the way we communicate, collaborate, professionally network, and participate in our communities. Needless to say, to ignore them would be unwise.

An intelligently formulated design competition would build on the lessons of tech-enabled competitions in other sectors, would fill the design community's need for greater public exposure, and would tap into the potential for civic engagement not just for its own end, but as a strategy to facilitate implementation. The creation of the tech-

It's clear that our more networked society has produced shifts not just in our social and professional lives, but in our built environment.

enabled competition model as a kit of parts, rather than a one-size-fits-all solution, gives competition organizers a toolkit from which to choose how best to achieve their competition's specific goals. The inflection-points approach laid out in Chapter Four, and applied to the MIT site in Chapter Five, was designed to meet the criteria of a successful design competition in a context-flexible way. Again, these criteria are:

- 1. Support the professional development of architects and designers***
- 2. Promote design as a practice and a problem solving method***
- 3. Meet the needs of the sponsoring organization***
- 4. Raise the profile of the sponsoring organization***
- 5. Involve diverse stakeholders in a meaningful way***
- 6. Create public spaces of lasting value***

The first five of these criteria are oriented around improving the competition process, and the focus on process is deliberate. Embedded within this list of criteria is a fundamental belief that a better process will lead to a better outcome; in this case, a "public spaces of lasting value" is the ultimate goal.

A tech-enabled urban design competition is an exciting premise partially because it presents an opportunity to test the experiments of digital civic engagement in a tangible form: the built environment. Conversations about tech-enabled collaboration and community participation tend to quickly drift into the realm of the theoretical, using the fuzzy metrics of "feeling more engaged" and the like as the only benchmarks that these technologies represent an improvement. As Brian Loader and Dan Mercea point out in *Networking Democracy*, "It is clearly necessary to avoid the utopian optimism of the earlier experiments in digital democracy" (Loader and Mercea 2012, 9). Urban design is an area in which concrete results can keep the conversation grounded in reality. While these tools are not instant cures, they "point to the potential of disruptive moments and actions." What better way to test the hypothesis that these tools are indeed disruptive, and that digital engagement is "working" than to end up with an actual built product, a physical manifestation of an innovative process? The best way to test for the "lasting value" of a place is to create a process that fulfills the first five criteria.

Physical space is already changing, due in part to these same technologies. It's clear that our more networked society has produced shifts not just in our social and professional

lives, but in our built environment. The very nature of public spaces has changed since the advent of digital technologies; they have shifted away from rigid, prescriptive, single-use spaces to become multipurpose, flexible. The lines between public and private, and workplace and leisure space, have both become blurred as cities adapt to new social and professional structures, or rather the breaking down of structures. What urban theorist Laura Forlano calls “the Open Source City” flourishes on “informal learning ecologies and communities of practice, which are believed to be important in education and innovation” (Forlano 2011).

Moving forward, it is important that the physical environment not impose formality, but rather reflect the paradigm of flexibility that characterizes the digital age. It is the responsibility of designers to do what they can to shape the urban environment in a way that encourages this kind of informal collaboration and innovation, in private, in public, and in the growing nebulous space in between. It is the role of institutions that sponsor design to create a process by which this design can be shaped in a way that serves communities in whatever form they take. And it is the role of the public to help shape their physical environment in ways that meet their own needs. A process that encourages communication and collaboration between designers, institutions and the public is only logical. An “open-source city” can only be brought about through an open process, and a tech-enabled design competition may be the perfect example of such a process.

6.2 FUTURE DIRECTION

Of course, there are limits to the tech-enabled design competition’s ability to transform how public spaces are designed and built. In projecting what the new model is capable of, it’s important to be very clear about what it is not.

As Paul Speirengen asserts, “Competition operates as well as a society operates” (Speirengen 1979, 2). Design, political decision making and public participation have long been, and will remain, chaotic. It’s not the objective of the new competition model to remove the chaos of the public design process; such a process relies to some extent

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on a seemingly disorderly mix of simultaneous processes of analysis, communication, creative ideation, and testing. To attempt to streamline this process is to risk oversimplifying it, and overlooking the nuance on which great design depends. Instead, the model's strength is in first revealing and communicating this chaos in real time, in an instructive way, and then inviting more participants into the fray in the belief that innovation comes from the unexpected intersection of disparate ideas.

The tech-enabled design competition is an experimental model whose potential implications won't be known until it is tested on a variety of projects in different contexts. Although the criteria for successful competitions set forth in Chapter Two was intended to be as widely applicable as possible, it may be that for some urban design projects, these criteria do not fully apply. The most likely scenario is that the requirement for meaningful public engagement is not as important – there may be urban design problems for which this engagement is not a priority, or it may take other forms outside of the competition itself. And certainly in situations where the site is particularly fraught with political meaning or controversy, the sponsoring organization may consider open public engagement too risky a proposition, and may choose a design model in which they retain control of information about the project. Likewise, the new competition model may be difficult to fully apply in a project with a high degree of technicality in the program. For these projects, there may come a tipping point where the resources expended in explaining technical requirements to the public in order to allow them to participate in an informed manner outweigh the benefits of engaging the public in the first place. In this case, an "open-information" competition may just appear confusing and frustrating to the public.

All these caveats aside, it remains impossible to think of urban design competitions in a vacuum, siloed from the effects of technologies that have changed so much about how we live, work, and participate in civic life. Even the most complicated, politically fraught, or technical design problem could likely stand to benefit from better communication between its associated stakeholders. For those working in public design, better access to relevant information, brought about with technological tools, can only be an improvement. And at its simplest, the tech-enabled design competition is merely a mechanism for a better mutual understanding.

NOTES

CHAPTER ONE: AN INTRODUCTION

1. Jack Nasar's *Design by Competition* is, to date, the most thorough investigation of the shortcomings of the competition as a process, and compilation of recommendations for its improvement. Nasar's argument rests on the disconnect between users of a space and designers, particularly regarding spatial meaning. His recommendations revolve around a set of evaluations by potential users before, during and after the competition process.
2. The term "disruptive," now in common usage regarding innovation and technological applications, stems from "disruptive technologies," first coined by Clayton M. Christensen and introduced in his 1995 article *Disruptive Technologies: Catching the Wave*, which he co-wrote with Joseph Bower.
3. Personal conversation, January 17, 2013.
4. For an in-depth exploration of open-source advocacy and the Free Culture movement, see Lawrence Lessig's *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, 2004.
5. Most of the competition literature concerns architecture competitions, and even this is a thin volume. While many parallels can be drawn between successful architecture and urban design competitions, a thorough exploration is lacking. A notable exception was a symposium on public-project competitions in 2005, co-sponsored by Princeton University and the Woodrow Wilson School of Public and International Affairs at Rutgers University. The resulting publication, *The Politics of Design: Competitions for Public Projects*, has been an invaluable resource to this study.

CHAPTER TWO: LOOKING AT THE COMPETITION

6. Personal conversation, January 16, 2013.

7. The two competition handbooks mentioned are intended largely for competition organizers, while Spreiregen's and Volker's works take a more holistic approach to analyzing success. The opinions of architects and scholars reflect personal experience as well as process analysis.

8. Media companies, both traditional and new, have increasingly begun sponsoring design competitions. These are most often design publications. The majority of media-sponsored competitions, and even nonprofit-sponsored competitions, are not built, and many are ideas competitions.

9. Personal conversation, December 20, 2012.

10. Gregg Pasquarelli, personal conversation, January 17, 2013.

11. Adapted from Paul Goldberger's 2004 book *Up From Zero: Politics, Architecture, and the Rebuilding of New York*

12. The World Trade Center Memorial Competition was made up of Paula Grant-Berry, victim family member, LMDC Families; Susan K. Freedman, President, Public Art Fund; Vartan Gregorian, President, Carnegie Corporation; Patricia Harris, NYC's Deputy Mayor for Administration; Maya Lin, artist/architect; Michael McKeon, Governor Pataki's Communications Director; Julie Menin, President, Wall Street Rising; Enrique Norten, architect; Martin Puryear, artist; Nancy Rosen, public artist; Lowery Stokes Sims, Executive Director of the Studio Museum in Harlem; Michael Van Valkenburgh, architect; James E. Young, Chair, Department of Judaic & Near Eastern Studies, UMass Amherst; and David Rockefeller, philanthropist.

13. In a *New York Times* article on November 23, 2003, Alan Feuer wrote "Over all, the eight proposals flunked -- miserably. If the 19 people in Room 402 of the Schimmel Center for the Arts were any measure, then the average New Yorker finds the proposals busy, dreary, stagnant, dehumanizing, overly funereal, depressingly similar, uninspiring, disconnected from the neighborhood and, frankly, boring."

14. Banerjee lists his six criteria for success as a set of questions:

1. Does a competition achieve an end product with a better “fit” to the needs of user-clients than commissioned design with dialogue?
2. Does a competition allow a more exhaustive search?
3. Is there validity to the assumption that the probability of a good fit between the site, social context and form is maximized?
4. Does it stimulate a more rigorous design process focusing on needs and values of the public? Can the lead to more fairness, equity, distributed justice?
5. Are they more democratic? Can they guarantee community participation?
6. Are they exploitive of the professional community? (Banerjee 1990).

CHAPTER THREE: TECHNOLOGIES THAT CONNECT

15. Literally hundreds of books and countless articles have been written on the impact of the Internet on society. A good starting place is Carla G. Surratt’s “The Internet and Social Change”, McFarland, 2001. An excellent data visualization, as good a description as any, can be found here: <http://mashable.com/2013/03/02/internet-infographic/>. A very interesting and less rosy take can be found in Nicholas Carr’s 2010 book, *The Shallows: What the Internet Is Doing to Our Brains*.

16. Daniel Burrus’ article in the online journal *Big Think*, entitled “20 Game-Changing Technology Trends That Will Create Both Disruption and Opportunity on a Global Level” is a good, recently-written introduction to some of the processes that are considered ripe for disruption.

17. A 2012 volume edited by Larry Diamond, entitled *Liberation technology : social media and the struggle for democracy* contains several good narratives on the Internet and political power.

18. SeeClickFix, launched in 2008, is a web tool that allows citizens to report local maintenance and other issues, which are communicated to local government, as a form of community participation. It is web-based and has a free mobile phone application.

19. There are more than 20 competitive design portfolio hosting sites currently on the web.
20. Personal conversation with Jenn Gustetic, NASA, December 5, 2012.
21. Personal conversation with Casey Jones, General Services Administration, January 19, 2013.
22. Personal conversation, December 20, 2012.
23. Many astonishing statistics about the scope and growth of the crowd-funding phenomenon can be found in crowdsourcing.org's 2012 "Crowd-funding Industry Report."
24. Personal conversation with Justin Kazmark, Kickstarter, November 17 2012.
25. Interestingly, Kickstarter's urban design projects have overwhelmingly hailed from New York City, where the company is based.
26. Kickstarter lists tips on a section of its web site called "Kickstarter School" (<http://www.kickstarter.com/help/school>.) These tips cover Defining Your Project; Creating Rewards; Setting Your Goal; Making Your Video; Building Your Project; Promoting Your Project; Project Updates; and Reward Fulfillment.

CHAPTER FOUR: ANATOMY OF A NEW COMPETITION

27. Tridib Banerjee writes a fascinating account of the competition for Pershing Square in Los Angeles in his article titled "Competitions as a Design Method: An Inquiry." In this case, the central design problem seemed to become lost in translation between the community's needs and the designers' proposals. Banerjee quotes Leon Whiteson, the architecture critic: "None of the competitors attempted to grasp or solve such pressing tensions as: whose park is it anyway—the derelicts or the office workers? The bums or the yuppies? What does the raw reality of LA's new downtown, where many Angelinos come to work, but refuse to live mean for the city's pride and promise?" (Banerjee 1990, 124).

28. Though there are countless instances of social media-based community engagement tactics falling flat, a prime example was the Twitter-based call for suggestions on balancing the California state budget during the economic crisis of 2009. The web page, which drew directly from a Twitter hashtag, was soon overwhelmed with spam, nonsensical contributions, and harsh criticism of the state government. Fearing the perception of censorship, the state had no choice but to leave the page up, causing embarrassment and ridicule in the press.

CHAPTER FIVE: A TECH-ENABLED COMPETITION AT MIT

29. From the April 9 edition of *The Tech*: “The revised petition, filed in December 2012, included significant changes resulting from the input of a faculty task force charged by Provost Chris Kaiser to examine MIT’s proposal, as well as from an urban-planning study conducted by the city. Changes included a significant increase in the proposed amount of new housing; a plan for conceiving a new “gateway” between MIT’s east campus and the city; and the inclusion of a “community living room,” for public cultural and educational programming, as part of the proposal.”

30. Members of the Faculty Task Force include Samuel Allen, Materials Science and Engineering; Xavier de Souza Briggs, Urban Studies and Planning; Peter Fisher, Physics; Dennis Frenchman, Urban Studies and Planning; Center for Real Estate; Lorna Gibson, Materials Science and Engineering; Thomas Kochan (chair), Management; William Wheaton, Urban Studies and Planning; Economics; Center for Real Estate; and Patrick Winston, Electrical Engineering and Computer Science. The report to the Provost is titled, “Report of the Task Force on Community Engagement in 2030 Planning on Development of MIT-Owned Property in Kendall Square.” It is available online at http://orgchart.mit.edu/sites/default/files/reports/20121012_Provost_2030CommEngageTFReport.pdf.

31. Reif’s address characterizes the challenge as a struggle between technological globalization of knowledge and the longstanding power of a residential research campus: “Society continues to need what the residential research university does better than any other institution: Incubate brilliant young talent, and create the new knowledge

and innovation that fuel our society" (Reif 2012).

32. Personal conversation with Maureen McCafferty, MITIMCO, November 20, 2012.

33. Provost Chris Kaiser charged the Task Force with, "advising me about decisions related specifically to the development of MIT property in Kendall Square and about the most effective ways to engage the MIT community in the 2030 decision process generally, going forward."

34. The Kendall Square zoning that passed in April 2013 contained an unprecedented requirement that developers set aside five percent of office space for start-ups. This rule mandates flexible lease terms, lower office rents, and amenities such as shared Wi-Fi service to qualifying start-ups. The initial requirement was made of MIT, but is expected to apply to other developers going forward. MIT has announced that it plans to double this start-up space to ten percent of commercial office space.

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IMAGE CREDITS

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- FIG 1. Storefront for Art + Architecture
- FIG 2: Wikimedia commons
- FIG 3: National Park Service
- FIG 4, 5, 6: Storefront for Art + Architecture
- FIG 9: Wikimedia commons
- FIG 11: Central Park Conservancy
- FIG 12: Wikimedia commons
- FIG 13: Missouri State Archives
- FIG 14: Mark Wilson/Getty Images
- FIG 15: Michael Arad and Peter Walker
- FIG 16: Reinventing Grand Army Plaza
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- FIG 18: National Park Service
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- FIG 20: Challenge.gov
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