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# Art Loop Open: Designing for the Intersection of Art and Technology in an Urban Public Exhibition

**Anijo Punnen Mathew**

Institute of Design  
Illinois Institute of Technology  
350 N. LaSalle St, 4<sup>th</sup> Floor  
Chicago, IL 60654  
anijo@id.iit.edu

**Abstract**

In this case study, we explore the design and implementation of Art Loop Open, a city-wide art exhibition with a cutting edge technologically mediated experience. The case study will enumerate the design process, the collaboration between different decision making entities, as well as the technology layer and the experience design of the exhibition.

**Keywords**

Urban informatics, social computing, design planning, prototyping

**ACM Classification Keywords**

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**General Terms**

Design

**Introduction**

Art Loop Open (ALO) is an innovative city-wide art exhibition designed with the intention of mobilizing the general public to engage with art, artists and each other [2]. Modeled on the very successful ArtPrize in Grand Rapids, Michigan [3], ALO had 200 unique pieces of art juried and exhibited across 13 different venues in

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the city of Chicago. The venues were selected from the 200+ merchants in the Loop district of Chicago and included high profile stations such as Macy's Flagship Store, the historic Palmer House Hotel, the Burnham Hotel, the Hard Rock Hotel, Merchandise Mart, among others.

The target population for the exhibition is the millions of people who work in and visit the Loop including more than 65,000 students, 500,000 office and retail workers, 50,000 theater goers, and countless conference attendees and tourists. Audiences were invited to begin free registration in September, visit venues and vote on the artwork during the week of October 15-29, 2010. During the first round of voting, viewers could vote for as many artworks as they like. During the second round, viewers were only able to vote once, and select from the Top Ten Finalists' pieces.

The organizers of the event, the Chicago Loop Alliance, and the Chicago Artists Coalition worked closely with the IIT Institute of Design to plan and implement the experience design for ALO. This case study explores this relationship; enumerating the research and planning that went into the design of the experience. The case study also describes the several technologies which resulted from this research and enabled audiences to engage with art, artists, and venues. Technologies which include innovative mapping tools, social media applications, virtual user generated content, as well as continued extensions to the art and artists beyond the event. We will also explore how the different participant organizations worked together to construct the experience and what role each partner played. In conclusion we will explore the learning from

these interactions and how these can be translated into other projects of this magnitude.

### **Motivations**

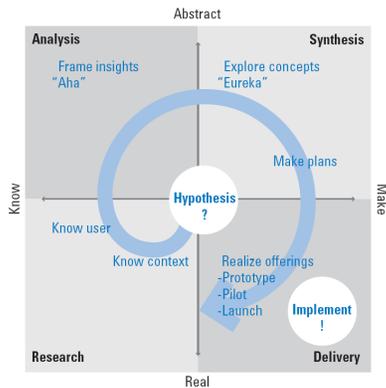
#### *Bringing art to the public*

One of the primary motivations behind ALO is to bring art into the open and to communities who might not otherwise go to the art. What better canvas to do this than the fabric of a city? The choice of using high profile venues in the city (such as Macy's) is to ensure that accidental interactions [4] with art and the technology occur. In short, the intention was that people, who come to shop, should stop to view the art; and people who come to see the art, should move into the Loop's many venues to shop and eat. Additionally we also wanted to the public to participate rather than just view. To do this we took intentional steps to extend the experience at the art exhibition. Since the technology had to be implemented within a short time frame, we decided to go with reliably tested techniques. We also wanted the experience to extend beyond the event itself through user generated content and located interactions that can be continued through virtual extensions.

#### *Interactive "placemaking"*

There was a significant interest from the very beginning to make this event technology rich. One purpose of this was to use the platform to study how the urban population in the Loop would react to interactive "placemaking" [5]. "Placemaking", within urban design, is a term that describes the process of creating urban spaces which attract people because they are pleasurable or interesting. It is a process that fosters the creation of vital public destinations: the kind of places where people feel a strong stake in their

Kumar Model



The Kumar model [1] used as the basis for design development for ALO

communities and a commitment to making things better. With the coming of interactive technologies and ubiquitous computing, the notion of “placemaking” has evolved as have people’s sensibilities and expectations. Today, “placemaking” is a composite arrangement of space (the geographical and physical construct); place (the aesthetic and memory construct); and technology (the social and connective construct). Thus one important design criteria for the design of ALO was that technologies must bring people to the Loop to physically view and interact with the art and the technology. From an academic point of view, ALO was an opportunity to study user behavior around technology mediated environments in urban contexts. The large population that visited ALO provided a rich and diverse group for the study of interactions, and behaviors, both individual and group, as well as the ability to compare these behaviors across multiple interactive and reactive technologies.

### Designing the Design Process

Art Prize, the event on which ALO is modeled, is promoted as part arts festival, part social experiment; an international art contest is decided solely on a public vote. The schematic of the Art Prize was made available as an open source model for others to appropriate and transform based on their specific context. When Chicago adapted this model, significant changes were made to distinguish ALO from Art Prize:

1. The art would be selected through a formal jury process which included renowned art critics in the city.
2. A programming committee would assign art to the different venues and work with the venues to adapt spatial conditions to the display of art.

3. Technology layers would be used to enhance the overall experience of the event – not just in the voting, but also the extension of the experience beyond the exhibition.

For the purpose of this discussion, we will focus on aspect 3. A technologically rich approach demands complex design and implementation planning from the early stages of the project. In the following sections, we will explore this design process.

### Designing for ALO

The period of design for ALO was about 6 months, from beginning (when the project was announced) to end (period of the exhibition). Most of the planning process was conducted during the summer months (June, July, August) in a team of 4 graduate students led by a faculty member. During this period we used recognized design frameworks [1] to set up our design process. The framework allowed us to move iteratively and quickly along two spectrums – Know (users and context) to Make (prototypes); and Real (developing implementation plans) to Abstract (rapidly modeling experiences) (see Figure 1). In the following sections we will break down the design process into each of these composite nodes. It must be noted that while a linear scheme is used for the presentation of the process, the actual process was non-linear and iterative.

### Step 1: Observe

#### Inspirations

We started off by looking at inspirations in both the art world and the technology space, specifically for different art exhibitions around the world employ technology. Exploring approaches taken by other projects with similar goals to ALO provided us with



**Figure 1:** The design process showing the time frames for each phase

valuable inspiration, and informed the design of the concepts later in the design process.

### Observation

Simultaneously we also conducted fly-on-the-wall observational research. Watching people interact with their physical environment revealed valuable clues about a range of tasks that they perform and problems associated with them. In turn, we were able to design appropriate systems and methods for enticing and engaging individuals over the course of the two-week event. Observational research took place, but was not limited to high density areas as Daley Plaza, Millennium Park, NeoCon Conference, and the Pop Up Art Walk. In addition, observing people pass by Pop Up Art windows, another art initiative in the Chicago Loop district, provided us with insights into why people stop and how they engage with the art. The insights from this study took three forms:

1. *Potential for intervention* – example: Every morning, tourists gather in front of the Broadway in Chicago theatres waiting for the box office to open. What are they planning to do till then?
2. *Directions for design* – example: At the NeoCon conference, a blackboard and chalk gave people an opportunity to express their opinions. A wonderful variety of results emerged (see image on the left).
3. *Open Questions* – example: At Millennium Park, no one seemed to be interested in brochures. Was it the placement of the brochures or was it that nobody really cared enough to learn more?

### Interviews

Following the observation phase, we interviewed people. Interviews were of two types:



Blackboard at NeoCon showing the aggregated commentary generated by users



Figure 2: A sample persona and a scenario of engagement

1. Intercept interviews were a broad range of short interviews, usually a few minutes in length, that take place "in situation" with the users. These quick impromptu interviews typically target prospects at a specific time and place with the intention of finding prospective direction for design.
2. Semi-structured interviews were conducted with a fairly open framework, enabling a focused, two-way dialogue. They were used both to give and receive information. The interviewer used a structured framework of themes to be explored with the intent of keeping the interview flexible, while also allowing new questions to surface during the conversation. In general, semi-structured interviews were conducted with stakeholders who we felt could offer valuable

insights from the perspective of artists, curators, and participating venues.

These observations and interviews allowed us to develop an understanding of the user. From this on-the-ground view, we moved into a higher level where we abstracted these insights into meta-level artifacts that could help us in the design process.

## Step 2: Abstraction

In this phase, we abstracted observational and interview data from Step 1 into higher level insights that could then be used to develop solutions or direction for the project. The abstractions took three characteristic forms:

1. People insights - example: "old elderly people often travel in groups which share interests. They

depend on the people in these groups to construct their experiences.”

2. Technological insights – example: “a large number of the visitors and residents in the Loop use smartphones. Loop workers are more likely to use Blackberry’s than iPhones or Androids.”
3. Location insights – example: “the Loop has defined districts, some of which are perceived as more open to visitors than others.”

These insights were developed through group discussions and recorded on color post-it notes, using color as a way to distinguish the character of the insight (see image on left). These abstractions were primarily used to develop “personas” and “scenarios” (see Figure 2). Our method involved arranging color post-its according to their affinities on a persona “mannequin” – a foamcore cut out. This way a mannequin could be composed mostly of people insights or a combination of technological and location insights, or other such groupings. Using different colors to distinguish the post-its allowed each member of the team to look at a mannequin and see what insights constituted a major part of the persona.

At the persona development stage, a fourth layer was added – the fictional component which allowed us to construct the character of the persona. This allowed us to further filter the affinities into identifiable personas as well as develop potential scenarios in which the personas might approach and engage at ALO. At the end of this process, we had 8 unique personas, each representing a personality type of the population that would potentially attend the conference. The personas also spanned from low tech to high tech in terms of their technology use and device appropriation. The



Persona development showing the clustering of different colored post-it notes



Figure 3: at the structured brainstorming workshop

scenarios were based on Conifer Research’s 5 E’s [6] model divided into ways in which the personas might be *Enticed to Enter* into the event; how they might *Engage* at the event, *Exit* from the event and *Extend* their experience after the exit (see Figure 2).

### Step 3: Synthesis

A synthesis phase followed the abstraction phase, during which we put together the insights into workable directions for the project. During the first half of the synthesis phase, we brought the observational research and our abstracted insights to the major stakeholders involved in the project. We did this through a structured brainstorming [7] workshop with about 25 participants. Participants were invited based on the role they had to play in ALO – they were from the organizing agencies, development partners, sponsoring organizations, or artists from the Chicago area. In short, the participants formed a cross section of the user group – artists,



Figure 4: Mapping Personas on the Initial Experience Map

critics, venue owners, funders, technologists, designers etc. During the workshop, participants were divided into teams of 4 or 5 and asked to brainstorm ideas on how to entice, engage and extend the event experience based on specific personas provided to them at the beginning of the workshop (see Figure 3). The personas were switched periodically such that each group worked with at least 3 personas through the course of the workshop. At the end of the workshops, the groups were asked to cluster their ideas according self-assessed affinities. The results of this structured brainstorming workshop allowed us to derive an overall understanding of where primary stakeholders felt the event should move towards in terms of technology and experience. We also got an idea of what resources might be available to us as we started to develop some of these ideas.

Following the brainstorming workshop, the second half of the synthesis phase was an attempt to come up with a cohesive experience map. Using the principles of the 5 E's model [6], we sorted through ideas from the workshop, further categorizing them according to experiential (finding out about the event) clusters or level of technology (suitable for a low tech user). These clusters were then filtered through the lens of feasibility in terms of time, budget, and available resources to come up with a schematic experience maps (see image on left).

We invited the organization team to evaluate these schematic maps in terms of what they thought was feasible within the timeframe of the project. Based on the critique we received at this session, our team was able to define an initial experience map for prototyping (see Figure 4). The experience map tracks persona trajectories on to the experiences they might have at



The schematic experience map developed after the brainstorming session, showing the gradation of concepts from low tech to high tech



ALO – or in short, show diagrammatically how different personas might engage with the ALO experience differently even though only a finite set of experiences were implemented.

#### Step 4: Prototyping

The longest part of the design process was spent in the prototyping phase, At the IIT Institute of Design; we see prototyping as critical to the fuzzy front end of design rather than the end of the design process. In short, prototyping occurs continuously throughout the design process. We don't just prototype concepts, we also prototype our user studies; we prototype our communication; and we prototype our strategies and plans. For example, before we organized our structured brainstorming workshop the design team prototyped in physical space the progression of the workshop – everything from how to arrange the space, how to set up groups, how groups would interact, to how ideas could be communicated and presented. We ran through several levels of prototypes to see which format worked at what point in the workshop.



Once the experience map was developed, prototyping kicked in at full swing. At this point, we invited several outside participants. The participants were invited to echo the different personas created in the previous step. Participants were selected from workers in the Loop, students at different schools, technology partners working on different aspects of the design. Each of these participants was asked to engage with quick and “dirty” paper prototypes. With the lower resolution prototypes, we invited experienced users to test out and provide feedback. At this point, users were encouraged to “destroy” our prototypes to present their own ideas of what should be done. As the resolution

Increasing resolution of the prototypes used for testing and design evaluation

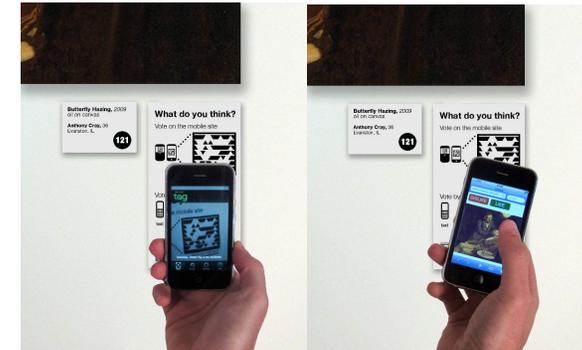


Figure 5: prototyping mobile tagging

increased, we were able to invite less experienced users to test out the system and the experiences. These engagements provided us with insights to develop the design ideas from the synthesis phase.

#### The ALO experience

The four step design process led to a cohesive ALO experience map, filtered based on time, budget, and user experience. To describe the entire ALO experience, let us see it through the eyes of one of our personas:

There are few jobs that would suit Tina better than office manager at a mid-sized marketing consulting firm in the Loop. With her no nonsense, mother-hen demeanor, keeping the troops energized and organized is the perfect fit. But it's rarely easy. Getting her co-workers to bond and act like a team can be an exercise in futility and she's always looking for new, cheap ways for the office staff to connect. Tina takes her job quite seriously, but she has a sense of humor, and knows how to set limits. When the clock strikes 5, she slips on her tennis shoes and heads for home – a cozy, well accented apartment in Lincoln Park. After a brisk walk



The different technology interventions in Hub37

around the block with her adopted dog, Lulu, Tina forages for dinner and consumes it while watching a couple hours of inspiring reality TV – Extreme Makeover: Home Edition or The Biggest Loser. At least once during the week, and definitely on the weekends, Tina meets some girlfriends for drinks (always something that ends in “-tini”) and/or dinner at Ben Pao. Tina has assigned herself the responsibility of “keeping the girls young” and like her other responsibilities, she doesn’t take it lightly. She communicates – mainly through Facebook – with her sister’s teenage kids to make sure she’s listening to the right music and up on all the right trends. Tina and the girls are always looking for new things to do in the city, but since her friends are all involved in relationships of various seriousness, it falls on single (and loving it!) Tina to do the planning. Her need to organize and plan, coupled with an addiction to her Blackberry make her the ideal candidate for the job. Perpetually dieting, Tina brings her lunch to work – Lean Cuisine and a Diet Coke – and takes a 15-20 minute walk during her lunch hour to get some fresh air, clear her head, and get the blood flowing. It is during one of these walks that Tina sees a sign for ALO. As soon as she is back in the office, she checks out the website. Tina and her friends have committed to hanging out on Saturday afternoon, and she believes ALO would be the perfect activity.

On the ALO website, Tina is able to develop an agenda for her trip using the Microsoft Pivot application. Using Pivot she can categorize the 200 pieces of art based on a few selective criteria. She re-arranges the pieces based on medium, venue, artist information etc. and a combination of criteria. One of her officemates has developed a new interest in photography, so she sorts

the art work to make sure she hits all the photography pieces at the exhibition.

On Saturday, she arranges to meet her friends at Macy’s where they begin their journey. As they move along the different art pieces, Tina notices that she can find out more about each piece by scanning the MS Tag with her Blackberry. Tina’s friends whose technical skills range from “I have a smartphone but do not know how to use it” to “I am pretty good at using my iPhone” are all able to download the tagging application. On the micro-site of each art piece, Tina finds information about the art, the artist, and comments that other users have started to generate about the piece. Tina uses her Blackberry to scan the tags of pieces she likes to vote. Some of Tina’s friends decide that using a smartphone to scan tags and vote is too tedious and opt for the SMS option.



Figure 6: Hub37 as seen from the mall



After lunch, Tina and her friends make their way down to the Pedway level of Block37 where the central hub is located. Since the pedway is also a transit corridor (connecting two subway lines), most of them can catch a train back home after checking out Hub37. As Tina and her friends walk into Hub37, she immediately notices the Array Wall with all 200 art pieces, arranged by venue – so all the pieces in one venue are of the same color and grouped together. The arrayWall is designed to give a broad picture of Art Loop Open and see all the pieces in relation to each other. Tina walks up to the array and realizes that she can interact with the pieces. Each piece of art has a corresponding magnet, which can be peeled off and taken to the (analog) commentWall. Here Tina notices messages left by others who used a specific magnet as the starting point of a discussion. Some comments talk about Art Loop Open in general, while others are about a particular piece of art. Tina is immediately interested in the comments which pull together two (or three) pieces and draw connections between them. She adds on a comment to a (already large) pool of comments about her favorite piece.



She then peels off one of the magnets and takes it to a Microsoft Surface table located in Hub37. Placing the magnet on the table pulls up information about the piece and comments generated around the piece. Her friends, intrigued by the technology join her at the table. Soon they are sharing information with each other by pulling off magnets from the wall and moving the magnet towards each other on the table. As they talk about the different pieces they saw at the exhibition, an elderly couple strikes up a conversation with them. The couple excited by what Tina and her



**Figure 7:** The TwitterWall showing the collective art created through tweets posted by audience members

friends tell them, note down interesting tips and tricks of how to navigate through ALO.

After a while, Tina and her friends decide to head out. As they start to walk out they notice a large video screen which is zooming in and out from a large art visualization. Upon further enquiry, they find that the art visualization is an aggregate visualization constructed from tweets containing #ALO. With her curiosity piqued, Tina pulls out her Blackberry and tweets a comment about one of the pieces she saw today. The TwitterWall pulls up tweets about ALO as they are posted but also recognizes a tweet's "temperature" (positive or negative), number of characters, and the "influence" of the tweet (how many followers they have), changes the size, color, and quality of the new tweets that appear. Tina and her friends try out various options and try to figure out with

Activity in Hub37 showing analog interactions at arrayWall and commentWall

some of the other passerby's what difference each tweet makes on the wall.

On her way back on the train, Tina picks up her Blackberry and revisits some of the sites she had bookmarked. She notices that others have added onto her comments. She also notices on the ALO website that her tweets are part of a Tweetdeck, generating new discussion. She continues to engage with ALO long after her visit, returning in week two to see which pieces made to the top 10 and learning more about art in general.

### Breaking down the experience

The design of ALO and its associated experiences provided us an opportunity to implement and test several layers of technologies. At the event, we have a combination of physical and virtual interactions. There are two types of technologies at play here:

1. **Located:** Located technologies are interactive systems that have "place". These technologies are interconnected in such a way that their specific location adds meaning to the interaction. Located technologies help us to understand behaviors in place. We are specifically interested in crowd behavior, interaction trajectories at a technology rich space (Hub37), the preference of an urban population for analog vs. digital media (surface Tables, commentWall vs. TwitterWall) etc.
2. **Distributed:** Distributed technologies are non-located, essentially distributed either in physical space or in virtual space. These technologies are intended to polarize non co-located people around specific interests. The MS Tag and SMS



**Figure 7:** Art plaques with MS Tags for virtual content

voting system, the commenting system for each art piece (see Figure 7), and the Twitter content are examples of distributed technologies. Distributed technologies allow us to understand how user generated content is constructed in urban contexts and at specific events, like art exhibitions. We are also interested in seeing (if/) how these experiences are extended over time.

It is also important to note that different interaction models were used in the design of the ALO experience to accommodate a range of potential population. Since we wanted all audience members to interact with the exhibition and the art, it was important that there were places and technologies which allow them to do that. These range from the completely low tech (the analog commentWall), to the medium tech (SMS voting, the surface Tables that are technology enabled but still intuitive), to the high tech (MS Tags and TwitterWall).

### **Breakdown of the organizational structure**

Three important organizations played leadership roles in the design of the ALO experience. The Chicago Loop Alliance was primarily involved with venues and spaces for the event; the Chicago Artists Coalition worked at the artists and jurying process; and the IIT Institute of Design worked on the technology and experience of the event. Of these the former two are corporate non-profits and the latter is an academic organization. In addition to these organizations, five other partners played important roles from a technology experience perspective). Microsoft provided very critical support for design process from the very beginning – this included access to innovative technologies, as well as critique of the design process on a periodic basis. Other development partners helped us with the thematic design of the exhibition and all associated experiences - the design of place based technologies (Microsoft surface, TwitterWall, and commentWall), the design of distributed experiences (MS Tag and SMS voting system), and the aggregated content generation system (mobile webpages for the art and the associated commenting system).

This organizational structure played a very important role in the success of this project. IIT Institute of Design was provided practically a free reign in the control and implementation of the technology and experience design of the project. The same flexibility was provided to the two other primary organizations. All the other organization played the role of critic, making sure that the activities were synced across the three spectrums of the project.

### **Testing and Implementation**

Since all the technologies planned for the event had to be in place by the start of the event (October 15, 2010), a rigorous testing and implementation phase followed the design phase. In this phase, we worked closely with our development partners to specify and deploy technologies and associated locative elements such as the arrayWall and the commentWall. Since Microsoft was a strong supporter of the event from the beginning, a lot of emphasis was placed on the testing of advanced Microsoft products over other available products and services. Take the choice of MS Tags for example; we understood that that MS Tags are not in prevalent use (most people we interviewed did not have the MS Tag application on their smartphones), we evaluated several alternate technologies for the tagging of art work - barcodes, QR tags etc. In the end, the decision was made to go with MS Tag because only MS Tags supported recall of deviceIDs. This was useful in generating a backend system to track and limit votes (based on specific event criteria) for a particular smartphone.

### **Learning from the Project**

In the following section, we will explore some of the take-away learning from the project:

#### *A free, but controlled, reign*

This project represents an interesting collaboration between corporate non-profits and an academic entity. In many instances, such collaborations tend to be one sided with the corporate side allowing the academic entity to develop ideas independent of practical constraints. This however was a “real” project with a tight deadline. From the very beginning, the design team was given a free reign on what to do and how to



do. However regular meetings enabled reality checks to be placed in by the two corporate entities. The project moved forward, largely because of this combination of innovative ideas with proper grounding in practical concerns. Another interesting learning from the project was the role of a proper space in brainstorming and prototyping design ideas. The space assigned to the design team at IIT Institute of Design was a large workspace with whiteboards and pin up spaces. This allowed the team to brainstorm ideas, develop these ideas, prototype the ideas quickly and without concern, and bring stakeholders and users into the space periodically for testing and presentation.



#### *A structured design process works*

None of the stakeholders and decision makers involved in the project were familiar with a structured design process. In most cases, their interactions with a designer happened at the end of the design phase when all the important strategic decisions are made and the designer is only brought in to visualize and implement these decisions. This project however was different – the design team picked up the project from the very beginning and used a structured design process to not just come up with a direction for the project but also involve users throughout the development process. In the beginning this was a little disconcerting for the parties involved as it meant giving up control. However this being an experimental project on all fronts, the organizations were willing to experiment with this “new” process.

What worked for the design process was transparency. The design team provided updates to the major stakeholders at a regular interval. We did this through a regular project blog which charted the progress of the



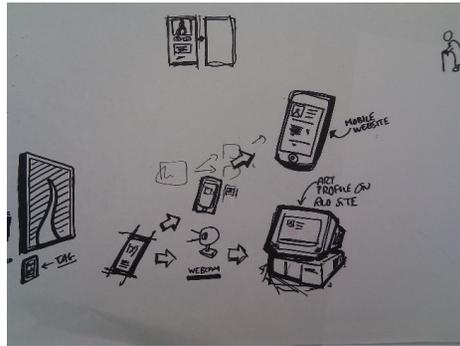
project; periodic review sessions where the stakeholders would be brought in to critique progress or observe a user study; and project report at the conclusion of every phase of the project (the final report is attached as supplementary material). Furthermore the use of familiar and intuitive communication artifacts such as experience maps [6] allowed the stakeholders to see how the concepts evolved over time. In this manner, the stakeholders were slowly able to understand the once unfamiliar design process and appreciate the ability of the process to provide strategic guidance based on user centered information.

#### *Stakeholders must be brought in early*

For a project of this size, several stakeholders are involved and have decision making abilities. One of the things we realized early on is that it is important to involve these primary stakeholders throughout the progression of the project rather than at the end of the process. The design team would interface with all the major stakeholders at periodic interval. One of the downsides of this is that at the beginning, there is very little to show and stakeholders often question the process. However involving the same people throughout the project meant that they saw the artifacts and concepts develop, they were part of user studies, they evaluated the concepts among themselves, and in general were able to project a trajectory for the design.

We also involved a majority of the stakeholders of the project in a brainstorming exercise – asking them to use data from initial user observations and personas to develop ideas and design directions. These included venue owners or managers, sponsoring agencies,

Using space for idea generation, for quick prototyping, and generally messing around



media partners, and general benefactors of the project. Since this was done early on in the project, the same people were able to see “their” ideas developed, prototyped, tested, and implemented. This provided for a sense of ownership among the stakeholders and an implicit intent to make the event successful. Perhaps, one of the drawbacks of our process was that we excluded development partners from the idea generation phase. This was partly a problem of resource allocation as we were not clear who these partners would be until later in the process. However if these partners were brought in at the abstraction or synthesis phase, less testing and implementation issues would have come up.



#### *Prototyping early is important*

There has been a renewed interest in prototyping and early stage design methods within the field of Interaction Design [8, 9]. One of the reasons for this renewed interest is that the types and complexity of problems that designers now tackle are expanding. Designers are no longer concerned with the object alone but must represent interrelated services and environments as a holistic design solution. When prototyping often happens at the end of the design cycle, the automatic response is to revert to a representation method (wireframes, looks-like prototypes etc), wherein the prototypes serve as props for constructing narratives – either from the perspective of the designer and/or from the perspective of the user. The problem with this approach is that all the core design decisions within the design process have already been made, and as a result the prototype often does nothing to elicit new design ideas. Early stage decision-making is the most critical part of the design process. Engaging prototyping and sketching



Quick and dirty prototyping throughout the design process; users were encouraged to “destroy” prototypes

methods at this stage allows designers to create numerous generative, evaluative and narrative prototypes, each adding to the design process [10]. In our project, prototyping early in the process allowed us to develop and dispose of ideas quickly and without effort. Moreover users were asked to “destroy” our prototypes to create ideas of their own – and the low investment in resolution suggested that these prototypes were meant to be written upon, torn up to make new ideas, in general be messy and creative. Prototypes also served as communication artifacts to describe the design concepts to the primary stakeholders and development partners.

#### **Future Work**

Both the primary organizations, CLA and CAC see Art Loop Open 2010 as a success. All the organizations involved are committed to doing the event again in 2011. The design and implementation process described in this case study has laid the ground for experience design of future ALO iterations – this year, the teams have started to work early on breaking down the experiences, understanding what went right and what went wrong, in order to create a better version of Art Loop Open for 2011.

The ALO design process also allowed us to use innovative technology to bring art to the urban population of Chicago while evaluating several theoretical concepts around user behavior and technology appropriation at the same time. The various lessons from the project provided us with information to move into other collaborative projects of this nature including several street level technology mediated “placemaking” prototypes.

### Conclusion

In this case study we present Art Loop Open – a user-centered art exhibition in the Loop district of Chicago and the collaborative design process that led to the development of the technology mediated experience of this event. We discuss in detail the process that was followed for the project. We also discuss the positive and negative aspects of collaboration in such a large project, especially one with multiple decision makers and development partners. The case study explores how experience maps and prototyping were used as critical elements of the design process and how these enabled communication through with the primary stakeholders. The interactions with an academic institution provided the stakeholder organizations confidence to try other new initiatives around technology and interactive “placemaking”. Several such projects are in the design and planning phase – all because of the successful planning behind Art Loop Open.

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