

Comparing Media Labs Across Cultures, Industries and Organizational Boundaries: Case  
Studies of Five Media Labs in Europe, North America and Asia

Conducted on behalf of  
Magyar Telecom, Central European University and Kitchen Budapest

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## Executive Summary

Media labs, innovation labs, technology incubators, hacker spaces, coworking communities and new media art and technology centers belong to familiar terrains. Their business models, missions and goals, organizational structures, activities and projects are overlapping and inclusive yet, at the same time distinct in many ways. Thus, it is important that such organizations be considered in tandem with one another in order to understand the emergent best practices in terms of the opportunities for successful innovation, community-building and sustainability.

This report documents the work of five organizations from a range of business models, activities and geographies -- Citilab (Cornellà, Spain), Innovation Lab (Aarhus, Denmark), Xindanwei (Shanghai, China), Centre for Social Innovation (Toronto, Canada), Eyebeam (New York, USA) and Waag Society (Amsterdam, The Netherlands) – which are useful for understanding the context of media, art and innovation spaces around the world. Following preliminary discussions with a number of leading experts from academic and industry in the field of innovation, these five cases were selected in order to illustrate the advantages and disadvantages of a wide range of business models.

Specifically, all of the organizations except for Xindanwei are non-profit organizations; Xindanwei is private due to the complications of founding a non-profit in China and is funded by individual members. While Citilab gains most of their funding from the local city government, Innovation Lab is funded through private sector clients, the Centre for Social Innovation is funded by its 180 member organizations, the Waag Society receives funding from government sponsors and project-based clients, and Eyebeam is funded through individual, corporate and government donors. While Xindanwei was only recently founded in July 2009, the other four organizations were founded between 2002-2004 though Citilab did not officially move into their space until 2007. This longevity and growth illustrates the sustainability of the various models presented. The annual budgets for these organizations range from very little revenue for the newest organizations to several million euros for the more mature organizations; the Centre for Social Innovation boasts \$25 million Canadian dollars in revenue per year by their 180 member organizations, many of which are small one or two-person non-profit organizations. All five of these organizations draw on a range of activities including coworking, consulting, education and training and technology incubation.

While Citilab's mission is closely tied to the government, other organizations are driven more by their members and/or a wider range of funders including individuals, corporations, non-profits and governments. With respect to Innovation Lab, they hesitate to use language such as "mission" and "vision" and, rather, prefer to think of their organization in business terms such as "sales" because their primary philosophy is to focus on the implementation of new ideas and technologies. The Waag Society's mission is to develop technology for social innovation using "design thinking" methods. In the case of Citilab, the government's heavy-handed role in shaping the organization's goals and priorities, mainly through their ties with Citilab's management, has caused inertia and, as the economy has worsened, the government has scaled back their funding commitments, leaving Citilab without a sustainable model for growth.

All five organizations are extremely active in planning workshops, conferences, demos and exhibitions, which give their funders as well as a wider audience an opportunity to see their work in a more informal environment. For example, the PICNIC conference is a spin off project of the Waag Society. While some organizations, such as Citilab and the Centre for Social Innovation, produce formal documents and annual reports, other organizations such as Innovation Lab focus more on creating compelling projects that integrate a storytelling component in order to ensure that their work gets picked up in the mainstream press. With respect to conferences, these are incredibly important venues for communicating the methods, approaches and tools used by the organization to promote innovative ways of approaching problems. Funders and clients are able to participate in such events in order to better understand the work of these organizations.

None of these organizations have formal relationships to universities. Instead, they engage a wide variety of researchers, experts and scholars in their work on an ad-hoc basis and, on occasion, on a consulting basis in which they pay universities for individual projects and/or vice versa. None of these organizations engages in social science or other scholarly research explicitly but several organizations have visiting scholars, residents and consultants that they have worked with to document or evaluate their work. For example, the Centre for Social Innovation conducted a survey of their members in order to better understand their backgrounds, needs and interests. In addition, in 2009-2010, Citilab engaged anthropologists from Columbia University to study their organizational structure. The Waag Society has a range of university partners in The Netherlands with whom they partner for different capabilities depending on the project they are working on.

The majority of these organizations are relatively small with between three and 35 paid staff members. The Waag Society is perhaps on of the largest, with nearly 60 employees, the large majority of which are full-time. Typically, one of the founders is responsible for management and fundraising while other employees focus more on the implementation of projects and activities. All five of these organizations maintain a physical space in which their core staff members work. While Citilab exhibits the most top-down and opaque structure in terms of management among its team of 15 employees, other organizations are more fluid, open and horizontal. All of these organizations voice a very strong ethical commitment to open source modes of production including Creative Commons, open source software, sharing and collaboration.

When asked about some of their most notable, innovative and successful projects, four organizations specifically mentioned activities involving children, teens and young people. For example, Citilab's projects include a citizen-produced magazine and a teen soccer club that had created videos. Similarly, Innovation Lab is working with Lego and the Danish school system to create curriculum around digital literacy and knowledge, and Xindanwei's members created a group to translate the visual programming language Scratch into Chinese and offer curriculum for young Chinese students. Eyebeam's Digital Day Camp is another program offered for New York City students. The Waag Society's Scottie project is a technology that allows hospitalized children to stay in touch with their friends and families. However, it is not known to what extent the Centre for Social Innovation's members focus on children or education.

## Recommendations

This study of media labs generated the following ten recommendations, some of which are quite counterintuitive, based on the successful work of the five organizations that are profiled in detail in the report. Specifically, these organizations have adopted practices that conflict with traditional business models, methods and ways of knowing. As such they stand out as innovators that are actively engaged in leadership roles in their communities.

### 1. Business Models and Funding Strategies

a. **Diversify Revenue Streams:** *Attracting a broad array of projects, clients and funders is vital in order to build a sustainable business model.*

All of the organizations studied stressed the need for a broad array of complementary projects, clients and funders. While the organization may rely primarily on a few major funders, in most cases they had many individual or organizational members, corporate clients and/or philanthropic funders. For example, Innovation Lab emphasized the breadth of their client base as a key factor in their growth and success following their official break from but long-term relationship with the Danish telecommunications provider. Similarly, the Waag Society is supported by government funding (20%), projects requested by clients (40%) and projects that they incubate in-house (40%). According to Executive Director Frank Kresin, the fact that they do not rely on a single source of revenue has been important for their long-term sustainability.

Furthermore, Citilab has experienced significant cutbacks of 55-65% as a result of their sole reliance on the local government as a source of funding. Xindanwei, the Centre for Social Innovation and Eyebeam have a wide range of individual, organizational and philanthropic funders, which allow them to grow more organically and mitigates setbacks due to the global economic climate. In fact, Xindanwei changed their model to allow for more flexible pricing to accommodate a range membership types after the initial period of operation. They now offer hourly, daily, weekly, monthly, annual and full-time memberships, all of which are managed through a technology platform.

b. **Create Alternative Revenue Streams:** *Exploring membership, community-driven and coworking models is key to the cultivation of media labs as a community hub.*

Three of these organizations – Xindanwei, the Centre for Social Innovation and Eyebeam -- have exploited the opportunity for individual memberships and coworking memberships. For Xindanwei and the Centre for Social Innovation, coworking is an important part of their revenue stream and model however, they also function as local incubators for ideas by aggregating knowledge, practices and methods in their space as a result of their active membership. One way to implement

concepts around space-sharing within the context of Kitchen Budapest, would be to invite a range of complementary firms to share the space for the purpose of coworking.

While Eyebeam does not make a significant amount of its funding through individual memberships, they are important for signaling the network of people that are interested in their work. This community-building component is important for the success of the organization. While this model may not be appropriate in its entirety in the Hungarian context, it is worth exploring whether there are ways to create a form of “membership” that might work at Kitchen Budapest. Similarly, the Centre has focused on “activating” and facilitating the community as a core component of their management of the space. This echoes the findings of other coworking communities around the world; yet, unlike many coworking communities, the Centre is also the site of a successful incubator of social innovation non-profits.

2. **Conferences Generate Community and Cultivate Cutting-Edge Ideas:** *Adopting a conference model can help to broaden the audience and grow the community.*

All of these organizations cite their events, workshops, demos, trainings and conferences as important components of their strategy for communication with members, funders, clients as well as the general public and mainstream media. While the conferences themselves are not a significant source of revenue, Innovation Lab uses these venues to translate enjoyable, informal interactions into potential billable projects. The Waag Society’s PICNIC conference, an in-house project that became its own separate entity, helps to bring together a professional community around leading design issues in Amsterdam every year, which serves to keep the work of the Waag Society in the international spotlight.

3. **Adopt a More Flexible Organizational Structure:** *Setting ridged guidelines for employees can allow for greater flexibility and creativity.*

In the case of Innovation Lab, employees of this 35-person organization are given a large amount of control over their daily work in terms of when and where they work. Yet, at the same time, the organization follows strict guidelines when it comes to the number of billable hours that they are required to complete each week, which is 60%. These strict and clear guidelines help to allow for flexibility and freedom on an individual basis. On the whole, employees like to work at the office since it is social and enjoyable but, they are a totally mobile organization and make frequent use of technologies to manage their work (as described in more detail in the case). Similarly, the Waag Society’s employees must dedicate 45% or more of their time to billable projects but they often are able to work from home one day a week.

4. Research, Evaluation and Projects

a. **Collaboration is the Future:** *More Fully Embrace Open Source and Collaborative Modes of Production.*

All of the organizations profiled in this report are avid believers in collaboration and open source modes of production. Specifically, despite the contradiction with traditional business models, they believe that giving away methods, tools and knowledge is the best way to generate communities around themselves and their ideas. Yet, at the same time, they believe that it is necessary to constantly innovate to stay ahead and resist conforming to a single mission or vision statement. As pioneers of these new modes of production, it is necessary to continually test their methods on themselves in order to prove their value and worth.

**b. Build Interdisciplinary Teams: Bringing together diverse skill-sets is important for successful problem-solving and innovation.**

All of the media labs featured in this report emphasize the importance of bringing together a wide range of complementary skill-sets to work on projects. For example, technologists, artists, researchers and project managers frequently collaborate throughout the iterative design research process in order to come up with surprising and creative ideas and solutions for their clients. This unique combination sets media labs apart from traditional companies and organizations, which tend to silo their employees by department i.e. marketing, sales, engineering. However, it is possible that even more dynamic ways of organizing employees may result in greater knowledge sharing. For example, rather than having static project teams throughout a project, it is possible that different types of expertise could be brought in at different times during the design research process.

**c. From Products to Services: Move from Designing Products to Designing Services for Citizens.**

The organizations studied believe that there is great value in exploring the ways in which traditional products can be redesigned as services for citizens using a range of methods for user research and design. Specifically, there is a great opportunity to identify the problems that everyday citizens, particularly overlooked groups such as children and senior citizens, face when using products and services. For the past decade, such methods involving qualitative and ethnographic research and design thinking have been pioneered at companies such as Intel (People and Practices), IBM Research (Social Computing), Microsoft Research and IDEO as well as a range of smaller user research and design consulting firms. By discovering the overlooked needs of consumers, these companies have been able to innovate new products and services that better relate to the everyday lives of their customers.

**d. Create User-centered Mobile Applications: Mobile applications that increase communication with customers.**

From the perspective of consumers, telecommunications services around the world are notorious for their lack of transparency and complexity when it comes to understanding pricing, billing and fees. The use of user research and design thinking, which are common methods in media labs, could greatly improve the experience of

consumers. Furthermore, the integration of social media and games could provide additional platforms through which to build relationships with consumers. While such mobile applications would not be likely to have an artistic component, they could leverage the talent of Kitchen Budapest to solve real problems that are faced by a wide majority of the population.

- e. **Develop Kid-driven Innovation:** *Children and education are considered to be innovative areas for projects.*

Four of the organizations studied gave examples of innovative projects that they were working on related to children and education, which indicates that this is a priority area in the work of media labs. The development of project ideas that could be implemented in local schools in partnership with other government and private sector organizations offer great promise.

- f. **Cultivate a Complementary Project Portfolio:** *Create a portfolio of projects with different goals, timelines and metrics.*

Similar to the diversification of members, funders and clients across a range of levels, sectors, actors and industry's, it is necessary to create a portfolio of projects, some of which are longer, wider in scope, have larger budgets and more ambitious goals and others of which are shorter, narrower in scope, have smaller budgets and less ambitious goals. In this way, it is possible to ensure that resources – both financial and human -- are not overly burdened with the need to pursue a lot of large projects simultaneously. While Citilab's structure enforces a heavy handed control over annual projects, which needed to be approved in advance in order to gain funding, some of the more successful projects were those that grew organically in a more bottom-up manner. At the same time, Xindanwei's experience with the community-driven Scratch program proved hard to commercialize or scale up.

- g. **Evaluate and Iterate:** *Conduct regular evaluations and surveys to benchmark activities longitudinally.*

While few of the organizations studied conducted regular evaluations and surveys of their projects and activities, they all considered it to be important yet costly and difficult to implement. However, Citilab conducted a year-long ethnographic study and the Centre for Social Innovation conducted a comprehensive survey of their members. Most research was conducted on a more ad-hoc basis by visiting scholars and residents. Innovation Lab surveys the participants in their conferences to inquire about whether attendees gleaned any new, actionable ideas from the event.

- h. **Network, Network, Network:** *Create an international network of media labs in order to share knowledge and learning around the world.*

While media labs are generally aware of each other's activities, they are only loosely connected to one another. More frequent communication with one another would be

of great value to innovating their business models, methods and offerings and furthering their regional competencies. Since they do not compete directly with one another, it is possible that an international network will provide the necessary knowledge exchange to add value to each lab's activities in important and new ways. Furthermore, media labs have a lasting interest in helping their colleagues around the world cultivate sustainable business models in order to further their own local and regional agendas.

## **Background and Methodology**

Over the past several decades, hundreds of media labs, innovation labs, technology incubators, hacker spaces, coworking communities and new media art and technology centers have been founded around the world. Each has their own unique history and business model, in response to their local context, national culture and funding structure. While Kitchen Budapest is exemplary in their activities in a number of ways and internationally visible at art and technology festivals around the world, there is much that we can learn from the experiences of the media labs profiled in this report.

Specifically, many of these labs have been funded in part by local or regional governments in their countries. For example, Media Lab Prado is funded by the city of Madrid and focuses mainly on social networking technologies. Toronto's Designing Digital Media for the Internet of Things (DDMIT) was funded through seed funding from the regional provincial government as well as partnerships with the Knowledge Media Institute at the University of Toronto. Corporations are also important sponsors of the work of media labs though frequently this comes in the form of funding for specific projects and deliverables. For example, Spanish telecommunications provider Telefonica has funded events and workshops at a media lab in Latin America. Furthermore, Innovation Lab (profiled in this report) received their initial funding from the Danish telecommunications company Tele-Denmark Communications. Without their early funding of the model, the organization would not be successful today. Both Innovation Lab and the Waag Society receive 40-50% of their revenue from specific projects, which are funded by clients. Many of these projects take the form of design consulting, design research and product innovation, which are their primary services.

Media labs have many common interests and values as well as some similar challenges. First, media labs are inherently locally and regionally-based institutions. They do not compete with one another from country to country and, instead, form a powerful knowledge network and community of practice with a shared set of values and activities. Second, media labs have strongly embraced open source modes of production as well as using "design thinking" and design methods as a basic approach to their projects. Third, media labs are important knowledge hubs in their own communities through their workshops, conferences and exhibitions. Media labs are the focal point of an active and interdisciplinary network of artists, scholars and technologists that, without their engagement in projects, would not otherwise exist.

However, during the current economy, many government and privately-funded media labs have faced budget cuts yet others have steadily increased their projects, offerings and revenue despite the downturn. The purpose of the case studies covered in this report is to contextualize the activities of Kitchen Budapest within a larger, global landscape of collaboration and innovation. In particular, Kitchen Budapest is unique in Hungary and throughout Eastern Europe because of their focus on collaboration and collaborative and interdisciplinary modes of production. According to Nina Czlegledy, an independent artist from Canada, KIBU has been recognized as one of the most interesting initiatives in Europe.

While the case studies included in this report represent only a small sample of the hundreds of like-minded organizations around the world, they are representative of the landscape in which media labs are operating in many ways ranging from their business models, their activities and their organizational structures. These case studies were selected after initial conversations with selected experts around the world who are familiar with the important roles that media labs have played in their local economies to generate and share knowledge about emerging technology, new ways of working, design thinking and design methods as well as their role as a focal point for artists, technologists, researchers and entrepreneurs. Yet, at the same time, there is great reason to believe that these case studies are instructive since it is clear that media labs adhere to shared interests and values. In fact, with each additional interview, the lessons that emerged during the first several discussions became further reinforced and these additional examples greatly contribute to the validity of the report's recommendations. While it is not possible to do a comprehensive qualitative study of all of the hundreds of media labs around the world, this report serves to identify key themes for a further, more in-depth follow up study of Kitchen Budapest and related media labs.

Finally, while the most of the case studies profiled in this report represent success stories – in particular, Innovation Lab, Waag Society, Eyebeam and Centre for Social Innovation – one, Citilab represents a potential failed model due to the top-down management of the local government, and, another, Xindanwei, is too new to evaluate yet illustrates the global reach of the media lab and coworking phenomenon. While Citilab attempted to adopt many of the recommendations in this report into their model, their funding structure and management-style was ultimately too ridged to accommodate a diversity of projects and revenue streams, which are emphasized by the more successful and sustainable labs. That said, when it comes to the innovation of emergent organizational structures such as media labs, it is equally important to investigate the reasons for failed models as it is to learn from successful ones.

Finally, while three of the examples are from the European Union, one is from the United States, one is from Canada and one is from Asia. The purpose for including a range of cases from around the world is to illustrate the ways in which media labs share common understandings and practices while, at the same time, embedding their own local skill-sets, regional needs and national cultures. The fact that media labs exist in every major country in the world is strong evidence for their importance and for the scalability of the media lab model. However, it is important to note that no individual media lab dominates in the international context; instead, their activities remain relatively small and local due to their unique position as urban and regional hubs for collaboration and innovation.

Thought still a young organization, Kitchen Budapest's reputation and position within the landscape of media labs around the world is enviable. The organization has gain international acclaim though their frequent presentations at leading art and technology conferences around the world as well as for the well-known Prezi software, which was incubated at Kitchen Budapest. While each media lab has their own unique sponsorship and funding model, Magyar Telecom is among an international network of companies, government organizations and foundations that are committed to supporting the cutting-edge practices that are being incubated within media labs in order to generate advances in collaborative ways of working, interdisciplinary team-building, design thinking and design methods, and product and service innovation.

## **Case Studies**

1. Citilab (Cornellà, Spain)
2. Innovation Lab (Aarhus, Denmark)
3. Xindanwei (Shanghai, China)
4. Centre for Social Innovation (Toronto, Canada)
5. Eyebeam (New York, USA)
6. Waag Society (Amsterdam, The Netherlands)

## **Citilab (Cornellà, Spain)**

Citilab (<http://en.citilab.eu/home/>), a non-profit public foundation in Cornellà (about 20 minutes from Barcelona, Spain), is primarily funded through government sources including the Cornellà City Hall and Ministry of Industry, which have been providing annual support for the past three years. It is part of the European Network of Living Labs. Siemens and Orange have contributed in-kind donations such as technology and broadband access. The organization has some university partners such as the Polytechnic University of Catalunya with smaller financial commitments around 30K Euros per year.

The Cornellà City Hall has a large degree of control over the activities of Citilab due to its strong personal and political relationship with the organization's leadership, one of which is a local politician. Due to the close links between Citilab and the local government, the mission is tied to the government's interests and needs. The Ministry of Industry is less involved in the mission however, they provide ideas about the information society and other general frameworks that guide Citilab. The organization's Managing Director is the primary driver of Citilab's mission. In terms of communicating with the funders, Citilab invites the local politicians and executives to see the projects every year. It has been useful for the funders to participate in workshops where they can see the methods that Citilab is using first-hand. The organization currently has 15 staff members.

Citilab was founded in July 2007 with a 6 million Euro investment in the building, which is a former factory. However, due to the economic crisis, their funding has steadily fallen from year to year. In 2008, they had about 2.5 million Euros in funding; in 2009, they had 1.5 million, and, in 2010, their budget fell 55-60% to only 900K Euros due to a decrease in the public commitment to the organization. Their goal is to be sustainable within 5-6 years; however, this is proving to be difficult given the current economic climate. Citilab has suffered less than other similar organizations in Spain, some of which have had their budgets cut by as much as 80%.

In addition to the annual funders, Citilab has a number of individual projects that have been funded through competitive grants from the private sector. For example, their Expolab project received about 30K Euros to fund wages and travel.

According to Citilab's website:

Expolab is a new way to understand exhibitions. It is a laboratory devoted to researching and creating new exhibitions in the area of technology, innovation, science and design, which are the main focus of work at Citilab. Expolab raises the possibility of creating exhibitions with strong citizen participation and contribution from the very beginning of an exhibition, and not just using the audience as providers of feedback once the exhibitions is one.

Another area where there is a possibility of getting competitive grants is in training the staff of other living labs throughout Spain. Projects related to new kinds of professional profiles and employment categories such as community managers as well as education and training for children and senior citizens related to technology in the classroom and programming are also

being developed. One area that they have not explored is in telecommunications services for citizens.

On a project by project basis, Citilab pursues relationships with local universities for which they issue individual research contracts. For example, Citilab has ties with the University of Barcelona, Autonomous University of Barcelona (specifically, students from the university can use Citilab's media and technology facilities), Columbia University (social science research and evaluation), Technical University of Catalunya, Leister University in the UK and the University of Trondheim in Norway (projects focused on innovation with senior citizens).

One of the projects that originated organically at Citilab as an outgrowth of the training for children and senior citizens is a teen soccer club that has created a citizen-journalism project that uses broadcasting and social media. Another component of Citilab that has been successful is the community technology center (CTC), which focuses on providing access to broadband and teaching open source software and programming to children and senior citizens. As part of the CTC, 15-20 community members of all ages created an online magazine about their interests in six months and, in the meantime, learned a lot of new computer skills. The members including illiterate populations from Cornellà, where 20% of the community cannot read or write. Despite the fact that this project did not generate an economic return, it is considered to be a success in that it originated based on the interests of the community and created some amount of social impact in terms of literacy.

Typically, project ideas are submitted to the board for approval each year. Within six months of a project's launch, it is usually possible to have a sense of its potential and/or the associated opportunities or drawbacks. However, it takes more time to confirm or deny the project's success. Thus, as a result, it is necessary to evaluate projects regularly and provide longer timelines when necessary in order to allow projects to develop. In general, in order to be successful, it is necessary to maintain a portfolio of projects with different goals, timelines and budgets – some of which might be faster and some might be slower. In each case, the expectations, criteria and deadlines must be clear. For example, while a user study may take four months, it may take six to eight months to generate new ideas for design. Evaluation is also an important component of a successful project.

Citilab has partnered with two universities for social science research and evaluation of its activities and projects. First, a sociologist at the University of Barcelona has been studying Citilab's projects and, second, an anthropologist and a sociologist from the Center on Organizational Innovation at Columbia University have been conducting an ethnographic study of Citilab's work for the past year in order to evaluate their work and offer recommendations for strengthening the management structures and creating new opportunities for projects.

## **Innovation Lab (Aarhus, Denmark)**

Innovation Lab (<http://www.innovationlab.dk>) was founded in 2002 in cooperation with the local authorities and the Tele-Denmark Communications (TDC), the Danish telecommunications company, at the time when the company was transitioning from copper to digital networks. After four years, they began doing more consulting work for the private sector than for TDC. As a result, the co-founders became a non-profit organization with the goal of disseminating new perspectives on technology, contributing to new knowledge and input and making a living by “looking around the corner.” This allows the organization to be dynamic and adaptive rather than sticking to a single vision or mission.

Co-founder Mad Thimmer likens Innovation Lab’s business model to the human body. Specifically, the lab is an organ for innovation and the blood supply is the employees. He focuses on reinforcing ways to cycle the employees, knowledge and contacts through the lab. The organization has 35 employees in two locations (Aarhus and Copenhagen) and they maintain strong ties to the Bay Area through organizations such as the Institute for the Future. In fact, in some ways, they feel more closely connected with Silicon Valley than they do to their local communities because their focus on innovation allows them to gain intimate knowledge of the latest practices in the technology field. Furthermore, since their clients are often large companies that operate internationally with budgets exceeding 2 billion Euros, they are connected globally through the work of their clients.

The organization works across a broad spectrum of products, projects and services with respect to the implementation of new ideas and technologies. From the perspective of the founder, this broadness is a great strength because the variety of the work has allowed the business model to be more sustainable. Rather than basing their model on research or a “mission,” they have adopted a mentality more akin to a private company, despite the fact that they operate as a non-profit. Their culture and business model is similar to a small and medium size enterprise (SMEs) in which they focus on what they can do, what their unique offering is, and how they can leverage their broad portfolio of knowledge resources. In terms of budgeting, like other SMEs they focus on sales, budgets, expenses and income rather than a particular ideology or mission.

Innovation Lab works with a broad array of clients on a consulting basis. When they meet with potential clients, they try to understand what the company is asking them to do, and then steers them in the direction of conducting a user study in order to define the basic parameters of the work. Often, companies do not know what they actually want, so it is important that Innovation Lab try to understand what the client really needs. In order to do this, they view the problem from a variety of viewpoints including the consumer-perspective, a technology-perspective and a business-perspective as well as the overall setting for the project in order to create a new concept for the client.

Rather than doing public relations and marketing, Innovation Lab has found that it is more beneficial to get new projects and then integrate potential story angles into their work so that they can work with the press including television and radio more effectively to get attention for their work and build their brand.

The annual budget of Innovation Lab is a few million Euros per year, and they have seen this figure increase by 10-15% annually. In general, 80% of their revenue is from within Denmark and 20% is from outside of the country. Innovation Lab is also funded by a network of companies that pay a modest 500 Euro fee for membership and access to the organization's conferences, lectures and articles.

Innovation Lab maintains a demo facility in which they show their tools and technologies to clients. In order to gain insight and build trust in their approach, they test all new ideas and tools on themselves. Currently, their project work is comprised of approximately ½ projects that they originate themselves and pitch to clients and ½ projects that clients pitch to them. At any given time, they are working on 15-20 different projects, all of which are different and interesting but for a variety of reasons. This keeps them enthusiastic about the work, which employs a range of methods including workshops, magazines and posters, ideation methods, facilitation and business innovation.

Their international conference approach brings experts from all over the world to speak in a Danish context and furthers the strength of their global ties. As such, the conference is the "gateway to an international way of thinking," according to the co-founder. The conferences are very informal to promote free exchange of ideas. There are no ceremonies or seated dinners but participants feel that they are very valuable and participation in the conferences remains high. The goal of the conferences, which carry the slogan "for real," is to create "invoice-able relationships" through genuine sharing, enthusiasm and collaboration. The conferences do not generate a lot of revenue – only approximately 20% of their funding comes from their talks, meetings and events – but they consistently attempt to measure the impact of these activities using survey techniques. Specifically, they ask participants, "Did you get any concrete ideas or inspirations for changes within your organization as a result of coming to the conference?" In terms of research and evaluation, their activities are difficult to measure aside from the revenue generated from new products. They do not employ external partners to conduct evaluations as some public sector organizations commonly do.

One of their most notable and interesting projects at the moment is a project for public schools in which they are creating digital materials and tools for 6<sup>th</sup> to 9<sup>th</sup> grade students. The project, which was originated in-house by Innovation Lab, is predicated on the myth that today's youth are "born digital" so to speak. In reality, many students are losing out in terms of digital proficiency because the government is slow to adopt new curriculum related to digital networking and knowledge gathering. To solve this problem, Innovation Lab is partnering with Lego and Væksthus to conduct a pilot project with a local region in central Denmark in order to roll out the new curriculum, which includes micro-web tutorials for students based on open APIs. All schools in the region can join the project and teachers have access to a "teacher's lounge." The goal of the project is to move away from the pedagogical model in which teachers have an "I know it all" mentality and towards one in which students can partner with teachers to co-design and build potential solutions. Just as offices have moved from a cubicle model to an open office plan, Innovation Lab is focused on moving the Danish education system from the old hierarchical model to a more horizontal structure in which students can be equal partners in their own education.

Innovation Lab maintains two physical offices (Aarhus and Copenhagen) but they do not reinforce strict daily work schedules i.e. opening and closing times. Their office is a social, congenial and friendly atmosphere – they even have a Thai chef – which encourages people to work on site in the office since the facilities are pleasant. They are a very social organization and they often have parties to encourage informal interactions. They operate as an entirely mobile company with every employee relying on their mobile phone and laptops, with the exception of the graphics team who require desktop computers for their imaging work. They videoconference heavily in order to stay in touch on a daily basis. Rather than top-down management and supervision, they rely on ridged systems that allow their employees to maintain their freedom, flexibility and individuality. For example, in terms of the number of project hours worked per week, they set goals and targets of 60% billable hours and each employee is responsible for deciding how to prioritize their time within those guidelines. In general, Innovation Lab's employees are enthusiastic and passionate about their work, which is why they are able to sustain their project work without a lot of oversight.

The organization uses a tool called fourteenDayz (<http://www.14dayz.com/site/>) in order to track time worked on projects. Their motto is that they adjust schedules to what is realistic. They use Open Atrium (<http://www.openatrium.com>) as an intranet, which includes blog, wiki, calendar, to do list, shoutbox, dashboard and other tools, and Microsoft Sharepoint for storage. In terms of knowledge management, Innovation Lab uses a variety of structured and unstructured knowledge systems, which allow for constant real-time sharing. Specifically, employees choose a system that works for them such as Delicious and Yammer.

While they do not focus on research, they maintain strong relationships with universities. Their linkages with universities are very informal and unofficial, with the exception of an official relationship with the University of Cambridge, and primarily conducted on a person-to-person basis. They do not contract with universities on billable projects since these universities are primarily funded by the state. In fact, universities do compete with Innovation Lab in terms of courses and curriculum design but from a very different approach. For example, the Copenhagen Institute for Interaction Design's (CIID) model includes about 50% education and 50% consulting projects as well as international sponsors.

Many corporate research and development labs have suffered in recent years such as those within Bang and Olufsen (B&O) and Lego. Typically this is the result of the corporate pressures imposed on the research labs, which require big budgets and revenue generation. Either these labs tend to spin out of the organization or become sucked into the organization where they lose the ability to network and cultivate ideas. Innovation Lab considers organizations such as living labs, corporate research and development groups and private companies as their competitors. Specifically, Innovation Lab places its work in the context of other organizations in Europe and North America such as the Future Laboratory (<http://www.thefuturelaboratory.com/>), the Institute for the Future (<http://www.iftf.org>), Infonomia (<http://www.infonomia.com>), Hamburg Innovation (<http://tutech.de>), and ReD Associates (<http://www.redassociates.dk/>).

## Xindanwei (Shanghai, China)

Xindanwei (<http://xindanwei.com/>), 新单位 (Chinese characters for “new” “work” “unit” as opposed to the formerly assigned work units of the Chinese state-owned enterprises), is an online and offline network for freelancers and entrepreneurs focused on art, creativity, design, technology and social change. They combine online social media tools with offline events that are supported by members. For example, they host “chit chat” meetings on Fridays and regularly host a wide variety of meetings and events on weekends including dorkbot and barcamps in order to stimulate conversation between their members.

While the office space was opened in July 2009, Xindanwei has been hosting seminars on art and technology since April 2008 when the founder, Liu Yan Datong returned from Holland. Their physical space is rented from China’s creative industry cluster in old factories that have been refurbished by the Chinese government. The organization is registered as a business since it takes too long to register a non-profit organization in China due to the necessary links with the Chinese government. At the same time, they focus on a social enterprise agenda rather than operating as a commercial business. They began generating revenue within the first six months of operations. At first, they operated as a club with membership fees rather than as a space for rent. However, since then, the business and pricing model has changed dramatically; specifically, they shifted from a rigid membership model to a range of options including full-time, part-time, monthly and hourly rates. The organization currently has 50-60 paying members and an online platform in which over 2000 people participate in some way i.e. signing up for offline events.

In order to manage this model, they use a technology platform available on their website to allow members to check in as well as sharing information about who you are and what you are working on. While they have not yet broken even, they have been able to cover their ongoing operational costs using this model. They are also looking for private foundation funding as the founder was an art manager and curator in Holland and is well connected with Dutch foundations.

They are currently in the process of opening more spaces and managing the spaces and innovation centers of other organizations. In this way, they have become a sort of “create community service center” with expertise in consulting and space management. As Silicon Valley models such as Google’s open and flexible workspaces have become more widely known, there has been worldwide interest in the possibilities of combining work and leisure spaces and creating new possibilities for companies by opening new spaces outside of corporate offices that allow for interdisciplinary connections between employees, divisions and industries. This model is a new one for China and for the world in which they are learning by experimenting with technologies, spaces and organizational forms and gathering feedback from their members.

While they do not have any formal relationships with universities, they have many informal relationships with foreign academics. By the founder’s own account, Chinese universities are still far behind in terms of innovation and, thus, they are seeking to attract more innovative and open thinkers rather than university officials, who tend to be very traditional. They have many

active members who are academics that regularly attend their events such as their Urban Research Lab (<http://urbanresearchlab.net/>) out of personal interest in the topic.

Xindanwei currently has four full-time staff members, three of which are founders, a space manager, a graphic designer and two interns. They also have several visiting scholars, Silvia Lindner and Michael King, who are studying the organization from an academic perspective rather than providing a comprehensive evaluation of Xindanwei's activities. Liu Yan Datong's main responsibilities are fundraising and the curation of events; the second cofounder, who has studied creative industry policy, is responsible for daily operations including human resources, administration, government and taxes as well as connecting the organization with resources; and, the third is a new media artist with a computer science background that is a regular organizer of creative events in Shanghai such as the Chinese chapter of dorkbot in Beijing.

One of the organization's most notable projects thus far is the development of the Chinese version of the Scratch visual programming tool and curriculum, which was pioneered by David Lee, one of the parents in the space. After one introductory face-to-face meeting, a group of eight students, three tutors as well as an interaction designer from IDEO developed a three-month course about Scratch for Chinese children. Since in China, parents are accustomed to paying for their children's educations, families paid for their children to take this course. While there were plans to turn this activity into a commercial company in order to promote the material to a wider market, the group was not interested in long-term planning or commercial growth. Xindanwei's role in scaling up community projects is not yet clear. While, on the one, hand they would like to support creative projects, experiments and prototypes, they are also interested in strengthening the reach and scale of the projects. In this way, they must balance between their own goals and those of their members, who are not necessarily always interested in pursuing commercial opportunities and rather prefer an open source or Creative Commons approach to intellectual property.

## **Centre for Social Innovation (Toronto, Canada)**

The Centre for Social Innovation (<http://socialinnovation.ca/>) is a community workspace and incubator located in downtown Toronto that is focused on social innovation, new business models and methods. Their work is documented in *Emergence: The Story of the Centre for Social Innovation* as well as several other publications, which are downloadable Creative Commons-licensed books, on which this case study is based. The organization was founded in June 2004, and since then they have grown to a 23,000 facility with over 180 members. As a small social enterprise, the Centre has struggled to keep up with the demand for information about their unique model. The organization's philosophy is strongly based on the benefits of sharing and openness and in the spirit of the Creative Commons. According to Executive Director Tonya Surman, "We're part of a community that's building the spaces where change happens," (pg. 14).

Shared spaces have emerged for a number of reasons including the blending of for-profit and nonprofit approaches, the rise of independent and freelancers workers, the increasing cost of real estate, the increasing complexity of problems, the shift from global back to local and the incentives of cost-sharing. The Centre incorporates three different movements: co-location, coworking and incubation of social change projects. The organization selects their members based on their commitment to social innovation in a wide range of areas including art, culture, sustainability, and social justice. They focus on small initiatives with less than five members (most are only one or two members) that would benefit from having a physical space in which to work as well as a community of likeminded social innovators.

One of the most important aspects of the Centre's philosophy is its focus on "animating" the space rather than "programming" it. According to Eli Malinsky, Director of Programs and Partnerships at the Centre, animation "is the idea that we are curators of an environment— a physical environment, a social environment, a psychological environment — and that the magic is taking serious your responsibility to curate those three things," and to "spark instigation" between the members (pg. 78). The organization is constantly seeking new opportunities for learning, using informal and communal approaches rather than business models to encourage the members to interact.

In 2006, with only 35 members from 14 organizations in a 5,000 square foot space, the Centre needed to expand and scale up in order to be successful since they were only covering 60% of their operating costs. As a result, they opened another floor in the building with a wider range of workspaces including permanent desks, full-sized offices, "hot desking" (hourly rates for deskpace) and storage facilities. In 2009, the organization opened a third space with 3,000 square feet of offices, meeting rooms and desks. Later that same year, they opened an annex space with a loan guarantee from the City of Toronto, which allowed them to get a mortgage and access to \$1.7 million in financing. The Annex became a reality in May 2010. Currently, their 180 member organizations generate an estimated \$25 million per year in revenue.

However, while they are focused on space-sharing, their most important asset is aggregating people who want to be involved in a community of like-minded colleagues. For example, their

annual “Cookies and Cocktails” event in December is evidence of the shared-community at the Centre. They dedicate considerable time and resources to understanding collaboration, networking and systems change. The Centre has often been described as a venture capitalist for social change. They are very active in helping to incubate the social innovation projects pioneered by their members through management and advisory committees as well as networking and relationship-building. Their projects are entrepreneurial, cross-sectoral and based on leveraging the resources of networks.

The Centre does not have any formal connections to a university, however, in November 2008, they conducted a study and evaluation about their membership, which can be downloaded (<http://socialinnovation.ca/ssi>).

## **Eyebeam Art + Technology Center (New York, USA)**

Eyebeam (<http://www.eyebeam.org>), founded in 1997 by filmmaker John S. Johnson III, is a non-profit art and technology center and new media art gallery located in the Chelsea district of New York. Johnson is also the founder of The Pacific Foundation, which focuses on innovation in the arts, environment and social justice fields, and [buzzfeed.com](http://buzzfeed.com), a startup online media company. The wider Johnson family are also generous donors to the organization. Through corporate sponsorships from companies such as Con Edison (the local electricity and gas utility), Datacrum and Stratasys, an annual gala event, space rental for corporate events as well as foundation support, corporate and individual memberships, the organization hosts over 500 artists and technologists per year. Their three largest sponsors have donated over \$100,000 per year; however, they have a wide range of sponsor that have donated \$100 as well as those over \$25,000. They also count the New York City Department of Cultural Affairs, the New York State Council on the Arts and the National Endowment for the Arts among their top funders. They have not published an annual report for several years but their activities are well documented on their website.

Under the slogan “Think Make Share,” which emphasizes their belief in collaboration and open source modes of production, Eyebeam not only highlights the role of new media in cultural production but also expands the reach of art and technology to different audiences. Eyebeam regularly brings in fellows, artists and technologists in residence – having hosted over 130 fellows and residents since their founding. In 2009, they hosted 24 artists, 50 interns and eight teens in their programs. They also exhibited the art of 55 additional artists and ran countless educational programs such as the Digital Daycamp and Holiday Hackshop. Each year the organization opens approximately four exhibitions and hold over 40 events, including workshops, performances and events. The organization has twelve staff members, a thirteen member advisory council and eight board members in addition to the founder.

Eyebeam’s 20 resident artists and fellows work side-by-side in a studio/workspace within their 15,000-square foot Chelsea lab and gallery, where they develop new projects, technologies, programs and workshops. This “atelier” model allows for the exchange of ideas between artists, technologists, educators and students in an open, creative and stimulating atmosphere. Their research groups, which include Education, Open Culture, “Project Blackbird” (focused on the use of humor in art), Sustainability and Urban Research, allow residents that share similar interests to come together through weekly meetings. The research groups allow for more formal collaboration, joint field trips and lectures. Prior research groups have included Contagious Media, Middle East, Moving Image Studio, Open Lab, Production Lab and R&D Lab. Eyebeam’s reBlog (<http://www.eyebeam.org/reblog>) covers a range of topics and issues related to their evolving research interests at the intersection of art and technology.

While Eyebeam does not have official links with any particular university, they have a steady stream of people and projects from new media and technology programs such as New York University’s Interactive Telecommunications Program, Parsons The New School for Design, the School of Visual Arts and Columbia University among others.

Rather than commercially viable prototypes, Eyebeam focuses on politically and philosophically oriented art projects that employ technology to comment on the nature of our lives. Some of their current projects include: “The Omnivore’s Pleasure” (a cooking show inspired by Michael Pollen’s book *The Omnivore’s Dilemma*), “marketplace” (an investigation into the erosion of community interaction), “Alviso’s Medicinal All-Salt” (a cocktail of commonly used drugs), “Frontier Prime Space Suit” (a pressurized garment), “Ticket Machine” (a ticket machine with an imagination), “Unlogo” (a web service that eliminates logos from videos), *Collaborative Futures* 2<sup>nd</sup> Edition (a book project), “Silver Surfers” (an experimental video piece), “Just Another WordPress Site!!!” (a web interface that alters the layout of every page of a site with a new template), “Mary Mack 5000” (a game that encourages face-to-face interaction), “re:farm the city” (tools for urban farmers), “Floating in Dreams” (a sculpture), “Go For Broke” (a multi-player plinko game), “Sentient City Survival Kit” (a design research project about ubiquitous computing), “Bluetooth Beats” (a turntable emulator), “SADbot” (a solar powered drawing machine), “Curling Photo Booth” (a photo booth created for an Olympic-themed party) and “Opening Hardware” (a workshop on legal tools for open source hardware).

## **Waag Society (Amsterdam, The Netherlands)**

The Waag Society is a non-profit organization that was founded in 1994. The organization currently employs 60 people, about 50 of which are full-time and 10 of which are part-time and work about four days per week. Over the past 15 years, Waag has grown from a small group of five to ten people that were involved in the Digital City project in Amsterdam, one of the first Internet communities in Amsterdam, to 40-45 people by 2006. Waag has two venues including their private offices as well as spaces for public engagement such as a fab lab and “dialogue café”, which are used for external events. Waag is the host of the PICNIC conference, which is a spin off of the organization. While this event generates considerable visibility, it operates as a separate project, and, thus, is not a source of revenue for Waag. Since Waag operates primarily in The Netherlands, they do not have any clear competitors. While there is an international network of media labs, their projects are typically regionally oriented, which allows them to collaborate on projects rather than compete for them.

Waag relies on several different income streams including grants from the national government, long-term research projects, and self-generated projects. The government grants, which are from the Arts and Science department, typically run for four years and account for 20% of Waag’s operating budget. They are currently in their third round of funding from government sources. The long-term research projects, which are conducted with university and corporate partners, account for 30-40% of the budget. In addition, Waag develops their own projects, resulting in another 40% of the budget. These projects often include the materialization of services based on ideas that have been generated in the research. Overall, Waag’s business model is to diversify their income streams in order to continue to be sustainable despite difficult economic conditions. Approximately 50% of their projects are initiated by themselves with the other 50% being initiated by partners.

Thus far, the cultural field in The Netherlands has been exempt from budget cuts so Waag has been able to rely on government funding for a portion of their budget. However, they have also diversified their project areas, moving into high-growth fields such as healthcare. Overall, though there are worries about the economy, Waag believes that they will find new ways of sustaining the organization, especially since there are increasing demands for design thinking. Waag uses a humanistic approach to consider the perspectives of users in the design process. In one project for a museum, Waag employed an “embedded research” model by spending significant periods of time on site at the museum. The project timeline was organized into researching, making and testing and researchers from Waag went to the museum every Monday and Tuesday for three periods of three months each as part of this project.

Waag’s mission is to investigate technology, broadly conceived as both new media as well as tangible artifacts, for social innovation. They leverage a pool of created, motivated and interdisciplinary practitioners including designers, researchers and programmers in order to conduct user research, ideation, prototyping as well as other design thinking methods. This design research process is sold as a service to their clients. Waag also plays a role as an incubator and “products limited company” by working closely with entrepreneurs to create spin-off projects that might become larger and self-sustaining.

Waag has three senior employees dedicated to operations, management and legal affairs and four departments. The departments include the lab department (design thinking, user research and programming), operations (project leaders), office (facilities and finances) and programs (new programs). Waag employees have a designated number of hours that they must work on financed, projects, which is typically around 45% + hours that are billable to a client or project. But, other than that, Waag is quite flexible with respect to when and where people work. In general, people can work whenever they like; some people are very structured and committed to working consistent hours from day to day while others are more flexible. Many employees work from home approximately one day per week. The organization has scheduled meetings once every two weeks. Waag uses a variety of technology to support the organization including time-sheet software, e-mail, Skype, a calendar as well as server system and a customer relationship management (CRM) system, some of which have been developed in house. Currently, Waag has three project areas including education, healthcare and culture. The education area is about 40-50% of its operations but the healthcare area is growing.

In terms of their relationship to universities, Waag has partnered with many different organizations in many different fields i.e. strategic partners, project partners. Specifically, they have partnered with the University of Amsterdam and the University of Utrecht as well as three technical universities and the Free Universities to work on international projects with set deliverables and project leaders. The projects are “a way to materialize relationships,” according to Executive Director Frank Kresin. For example for design thinking projects, Waag partners with the Technical University of Delft. When necessary, Waag has partnered with social scientists at universities to evaluate their work and conduct effects studies as well as accessing relevant literature.

Several of Waag’s most notable projects are the Storytable (<http://www.storytable.com/html>), Scottie (<http://www.waag.org/project/scottie>) and 7scenes (<http://www.7scenes.com>). The Storytable, which was created by the artist Hans Muller in cooperation with Waag, is a table that allows elderly people to feel less lonely. The prototype was tested for six months in Amsterdam and, currently, there are 70 storytables throughout Holland, which have been produced by the Heutink company. Scottie, is a technology that allows hospitalized children to stay in touch with their friends and families virtually using non-verbal communication. 7scenes is a mobile storytelling platform that links media to places using GPS.

## **Appendix**

1. Interview Protocol
2. List of Background Meetings, Interviews and E-mail Correspondence
3. Additional Resources
4. Bibliography

## Interview Protocol

### Business models:

1. What is the business plan and what is the business model (non-profit, public, for-profit)?
2. What is the annual operating budget and how is revenue generated (projects, conferences, training etc.?)
3. Is the organization self-sustaining?
4. How long has the organization been in operation?

### Mission:

1. What is the mission of the organization?
2. Is the mission primarily driven by the needs and interests of funders or is it more disconnected from funders?

### Communication:

1. How does the organization communicate with the funders? How do the funders communicate with the organization? Is this a formal or informal structure for reporting, meetings, updates etc.?
2. How does the organization communicate with a wider audience? What role does the web site, conferences, workshops or other activities play in the outreach and dissemination about the organization's projects and activities?

### Relationship to Universities:

1. What is the relationship of the organization to universities?
2. Are these formal or informal relationships?

### Organizational Structure:

1. How is the organization set up and staffed? How many people work for the organization? Who is responsible for management, fundraising and project work?
2. Does the organization maintain a physical space or are the majority of the activities coordinated virtually?

### Research:

1. Does the organization engage in social science research?
2. How does the organization evaluate the impact of projects and activities?
3. Does the organization conduct impact assessments or evaluation by outside researchers or consultants?

### Projects:

1. What is the organization best known for and why?
2. What are some of the most successful or important projects that the organization has created?

## **Background Meetings, Interviews and E-mail Correspondence**

1. Anthony Townsend, Institute for the Future
2. Attila Nemes, Kitchen Budapest\*
3. Barnabas Malnay, Kitchen Budapest\*
4. Chew Lin Kay, Hackerspace Singapore (Singapore)
5. Denise Kera, National University of Singapore
6. John Borthwick, Betaworks (New York, USA)
7. Mads Thimmer, Innovation Denmark (Copenhagen, Denmark)\*
8. Marc DaCosta, University of California at Irvine
9. Nina Czlegledy, Independent (Toronto, Canada)\*
10. Pete Bacevice, University of Michigan
11. Ramon Sanguesa, Citilab (Barcelona, Spain)\*
12. Silvia Lindner, University of California at Irvine\*
13. Liu Yan Datong, Xindanwei (Shanghai, China)\*
14. Tony Bacigalupo, New Work City (New York, USA)\*
15. Tonya Surman and Eli Malinsky, Center for Social Innovation (Toronto, Canada)
16. Frank Kresin, Waag Society (Amsterdam, The Netherlands)\*

\*interview conducted

## Additional Resources

Hackerspaces [http://hackerspaces.org/wiki/List\\_of\\_Hacker\\_Spaces](http://hackerspaces.org/wiki/List_of_Hacker_Spaces)

1. Cbase (Berlin, Germany)
2. Singapore Hackerspace (Singapore) <http://diybiosingapore.wordpress.com/>

Living Labs

1. Open Living Labs (Europe) <http://www.openlivinglabs.eu/livinglabs>

Corporate R&D Labs, Academic Research Labs and Technology Incubators

1. Betaworks (New York, NY) <http://betaworks.com/>, <http://hackabit.com/>
2. Mobile Experience Innovation Centre (Ontario, Canada) <http://meic.ocad.ca/index.htm>
3. Rural Technology & Business Incubator, IIT Madras (Madras, India) <http://www.rtbi.in/>
4. Wavefront (Vancouver, Canada) <http://www.wavefrontac.com/>
5. iHub Kenya (Nairobi, Kenya) <http://www.ihub.co.ke/blog/>
6. Intel People and Practices (Portland, Oregon)
7. Microsoft Research
8. IBM Research Social Computing Group
9. Palo Alto Research Center (Xerox)
10. Y Combinator
11. The Technology Innovation Center (Evanston, Illinois)
12. The Ice House (Auckland, New Zealand)

Conferences, Events and Festivals

1. Arz Electronica (Linz, Austria)
2. Transmediale (Berlin, Germany) <http://www.transmediale.de/en/festival/all>
3. Mobile Film Fest <http://www.movilfilmfest.com/>
4. Zemos98 (Seville, Spain) <http://zemos98.org>
5. FutureEverything (Manchester, UK) <http://www.futureeverything.org/>

Coworking Communities <http://coworking.pbworks.com/Directory>

1. New Work City (New York, NY)
2. The Hub (London, Brussels, Madrid)
3. La Cantine and Parisoma (Paris, San Francisco)

Media Labs

1. Media Lab Prado (Madrid, Spain) <http://medialab-prado.es/>
2. Foam (Amsterdam, The Netherlands) <http://fo.am/taxonomy/term/141>
3. Mediamatic Lab (Amsterdam, The Netherlands) <http://www.mediamatic.nl/>
4. Palomar5 (Berlin, Germany) <http://palomar5.org>
5. Laboral (Asturias, Spain) <http://www.laboralciudadadelacultura.com/es>
6. Fondation Internet Nouvelle Generation FING (Paris, France) <http://fing.org/?lang=fr>
7. Institute for the Unstable Media V2 (Rotterdam, The Netherlands) <http://www.v2.nl/>
8. The Patching Zone (Rotterdam, The Netherlands) <http://www.patchingzone.net/>

9. The Banff Center and Banff New Media Institute (Banff, Canada) <http://www.banffcentre.ca/bnmi/>
10. Forum Virium (Helsinki, Finland) <http://www.forumvirium.fi/en/>
11. Designing Digital Media for the Internet of Things DDiMiT (Toronto, Canada) <http://www.kmdi.utoronto.ca/research/projects.aspx>
12. Proboscis (London, UK) <http://proboscis.org.uk>
13. Art Center Nabi (Seoul, Korea) <http://www.nabi.or.kr/english/main/main.nab>
14. Network Oasis (Helsinki, Finland) <http://www.network-oasis.com/etusivu/>
15. TwoFour54 (Abu Dhabi, United Arab Emirates) (<http://media.twofour54.com/en>)

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