

# The seven secrets of the Media Lab

---

This issue of the BT Technology Journal provides a window into the emerging research of the Media Lab, i.e. what we do. However, the how of the lab has always been a fitting object of equal concern to the what.

The Media Lab can be thought of as an ongoing experiment, both physical and intellectual, in facilitating innovation, collaboration, and critique. What is emerging is a way of working which is very different from most academic and industrial laboratories. In trying to explicate the secret recipe for how the Media Lab works, I have taken inspiration from the Far Eastern calendar which associates a different 'element' with each day of the week. The seven secrets of the Media Lab are: sun, moon, fire, water, wood, metal, and earth.

日 The sun is evocative of a light shining into every corner of the Media Lab. There are no dark corners hiding secrets and there is no compartmentalising of ideas; we strive for an unfettered exchange of ideas between students, faculty, and our industry partners. The open floor plan and clear lines of sight throughout the Lab are an architectural expression of this spirit. Our pooled intellectual property policy, which opens access to all inventions at the Lab, regardless of the funding mechanism, means that there are no legal or contractual barriers put between Lab partners and the work.

月 The phases of the moon represent the cyclical process of innovation at the Media Lab. In the 1980s we used to describe the first phase of the innovation cycle as 'demo or die'. John Maeda rephrased our mantra in the late 1990s to be 'imagine and realise'. Indeed, it is a violation of our cultural norm to have an idea and not build a prototype — in large part because of our deeply-held belief that we learn through expressing. Building a prototype also enables us to advance to the second phase of the innovation cycle — critique. The Lab, which has its origins in architecture (the founder of the Media Lab, Nicholas Negroponte, is an architect) draws upon the tradition of studio design critique; we have daily visits from our industry partners and other practitioners with whom we engage in an authentic critical dialogue about the work. In this exchange, the work is discussed within a broader context — ideas (and prototypes) are exchanged, improvements and alternatives suggested. We then advance to the third phase of the innovation cycle — iterate. Iteration within the Lab means returning to 'Step One' to push our ideas further. Iteration within our partners' organisations means taking a prototype towards real-world application. In both cases, we can learn from our mistakes (and successes).

火 Fire fuels the Media Lab. We invest in the passion of people, not their projects. It is the fire that burns in every student and faculty member that inspires and motivates them — love is a better master than duty. Innovation at the Lab comes from the bottom up. It is not regulated by a top-down process, but by continuous feedback from peers, the faculty, and our external collaborators.

水 Water brings to mind Plato's interpretation of Heraclitus: 'You cannot step twice in the same river.' Change is the only constant at the Media Lab; being a university laboratory, we have built-in churn — every year 25% of our research staff turns over, as students graduate and new students enrol; we are not tied to any one academic discipline or tradition, so we can quickly incorporate emerging themes and jettison tired ones; our emphasis on rapid prototyping means that our metabolic rate is measured in seconds, not quarters. There are new projects initiated daily.

木 Wood is used as a metaphor for the relationship between design and engineering. Design is often thought of as a surface attribute' i.e. the bark on a tree. At the Media Lab, design and engineering are commingled — one is not placed above or before the other; they are tightly interwoven like wood grain. All Lab members strive for the same high standards of excellence. Design and engineering belong in the same building.

金 The gold to be mined at the Media Lab comes from the collision of ideas. We are an interdisciplinary laboratory — we work on everything from parasitic power to karaoke. We are also an international laboratory — we draw upon students and sponsors from every continent. And we work with a diversity of industries — from telecommunications to toys. This diverse community, which expresses itself through critical dialogue, is how lead is turned into gold.

土 We ground academic research in the real problems of industry. The Media Lab is not a university on a hill, engaging in a monologue; rather we are in daily dialogue with our sponsors, who bring real problems and deep understanding to the discussion. We take intellectual risks while immersed in the purposeful and practical problems of industry.

Together, the seven secrets help us achieve a balance between the non-incremental innovations that improve the efficiency of what we already do, and help us go further (and faster) in the directions we are already heading; and enable us together to go to new, unexpected places, where we will find disruptions and, consequently, opportunities.

As Director of the Media Lab, I have little influence over the content of the research. My dual roles are, firstly, to keep at bay those forces that would disrupt the innovation cycle, and, secondly, to help provide the resources to enable the students and faculty to pursue their passions. I celebrate that passion and I thank the Media Lab sponsor community for its continued support. I thank Wen-Jean Hsueh, Dongman Lee, and Roz Picard for their help in refining the Seven Secrets. Finally, I thank Jeff Patmore, Steve Whittaker, Ian Dufour and the editorial staff of the BTTJ for giving the Media Lab the opportunity to publish this collection of papers.



Walter Bender

*Media Lab Executive Director and Senior Research Scientist*