Council: The Emergence of an IoT Think Tank

Rob van Kranenburg, Council

If you’ve searched online for the “Internet of Things,” then you’ve likely come across Council at www.theinternetofthings.eu. Here, I review how this think tank for IoT emerged from my own fears and concerns and grew into a resource with more than 400 members that now acts as a silent accelerator for IoT projects.

BEFORE THE CLOUD
Up until 2000, connectivity and data storage were too expensive to store anything but demos. In 1998, from my readings of arts and computer science literature and my interest in interactivity and interfaces, I stumbled onto the Intelligent Information Interfaces (I3) Research initiative, which aimed to develop new human-centered interfaces for interacting with information for a broad population. I3 had two follow-up programs. The first was the Disappearing Computer, whose mission was “to see how information technology can be diffused into everyday objects and settings and to see how this can lead to new ways of supporting and enhancing people’s lives that go above and beyond what is possible with the computer today.”¹ The second follow-up program was Convivio—a network for the people-centered design of interactive systems (http://cordis.europa.eu/project/rcn/67029_en.html).

I learned that this kind of thinking—of embedding an environment with algorithmic “intelligence” or feedback response—had a history in pervasive computing (see Mark Weiser’s work²) and ambient intelligence. At UbiComp 2002, I tried to raise the issue of animism and argued that objects already have affordances and connotations. I sincerely questioned why every tree should have an RFID tag. I wasn’t understood. The engineers and computer scientists, fully in their “optimizing = efficiency” paradigm, kept innovating within their own small reduction of reality, outsourcing all consequences (waste and any effects on jobs, learning, and society at large) to other actors.

As they kept innovating within two protocols—TCP-IP and HTML, which merely “pass on” the packet or link, respectively, with no looking back or looking forward and no reciprocity—it was easy for me to see that a new ontology was being born in a fully commercial environment. It had no ethics and didn’t care about its repercussions. But as we were still just talking about offline gadgets and demos, this ambient intelligence could still be mediated. Then the cloud hit the ground.

AFTER THE CLOUD
I soon realized that things were serious. I couldn’t believe that such a scenario of “connecting everything with everything” was now being put forward as a positive systemic framework for the entire planet.

Realizing that the desired outcome was individuating all objects and embedding reading and sensing capabilities in a subgroup, I started looking into the Electronic Product Code (EPC) Global Object Name Service (ONS) schemes of building an ONS for all objects and goods. I saw hardware costs fracture and hardware boards in cheap print, and I found myself in a very curious state from 2000 to 2004. Then RepRap, the brainchild of Adrian Bowyer (later giftwrapped by MIT as Fab Lab), hit the street, and open hardware 3D printing started taking over manufacturing.

In response, I cofounded Bricolabs in 2004 with Denis “Jaromil” Roio of dyne.org, Felipe Fonseca of MetaReciclagem, Bronac Ferran of the Arts Council England, and Matt Ratto (http://criticalmaking.com). Hackers and activists began to formulate positive visions of agency over this space (https://mailinglists.dyne.org/cgi-bin/mailman/listinfo/brico). One example of such agency is the Dowse network appliance (http://dowse.eu), a building-block resulting from the work of dyne.org. At the time, I would think to myself, “OK, there is a Matrix plan. It is un-hackable. It is like air. Should we go off the grid? Or do we have our own agency?”
I tried to raise awareness among my friends, artists, writers, thinkers, and makers. In a 2006 article, I wrote:

This is not about alerting the public any more. There is no more public. People just go from one scandal to another and could not care less if 12 cameras were installed in one afternoon. This is about us. Saving us a place, a space where we can breathe, discuss, think and dream manic dreams. We have two options: either we assist policy to ensure that at least some public space survives, or we build our own parallel systems.

I went on in that article to propose that we start a “mixed-reality corporation” with locative artists and become the “Microsoft of the 21st century.” I concluded by saying that it was “time to organize.”

I furthered my argument two years later in a report called “The Internet of Things: A Critique of Ambient Technology and the All-Seeing Network of RFID.” Margreet Riphagen summarized the report as follows:

[Rob van Kranenburg] explores the emergence of the “internet of things”, tracing us through its origins in the mundane back-end world of the international supply chain to the domestic applications that already exist in an embryonic stage. He also explains how the adoption of the technologies of the City Control is not inevitable, nor something that we must kindly accept nor sleepwalk into. In van Kranenburg’s account of the creation of the international network of Bricolabs, he also suggests how each of us can help contribute to building technologies of trust and empower ourselves in the age of mass surveillance and ambient technologies.

This time, I concluded by saying, “I have my window open wide.” I had changed that line at the last minute. My original conclusion had been more along the lines of “We’re doomed.”

It was a clear choice. On the one side, I could give in to the despair of a world-view of optimization and efficiency taking over resources and capabilities (creating a world in which everything would be “smart” based on a fraction of what constitutes intelligence). On the other side was optimism—the potential to use this new type of capability to build open source generic applications and infrastructure. I’m happy to say that I chose the latter.

Yet that report was very much part of a small niche, and little response came. However, Gérald Santucci, then head of RFID/IoT of the European Commission, liked the idea of plurality—going from privacy to privacies, from security to securities—as he realized that IoT meant a new social contract between humans, machines, and the immediate surroundings and everyday objects. In my many subsequent conversations with Santucci, I came to realize that there was a group of people on the “other side,” in government and industry who also realized that IoT was a new ontology, and that new forms of relationships between objects, people, and forms of organization were not only possible but also desirable and necessary.

My choice was between organizing a protest against the coming Matrix or finding the key people, resources, and capabilities to perform a “Baron von Münchhausen” by lifting the entire frame of decision-making onto a new plane with all the (hidden) potentialities of ultrademocratic bottom-up citizen agency in the protocols of the Internet spilling over into the real world. By hyping IoT, industry would realize too late it would go on a course where hardware and connectivity would become commodities, and institutions and governments would keep believing they could maintain control over sign and signifier, data and identity, people and machines. So I set up Council.

COUNCIL
The name was conjured up during the Radiator Festival in Nottingham in January 2009. I was having tea and sandwiches in Rosy Lee, next to where Radiator was kicking off, with Sean Dodson, who wrote the foreword to the IoT report I wrote; Christian Nold, the artist who created Biomapping (www.biomapping.net); Régine Debatty, founder of we-make-money-not-art.com; and Usman Haque, founder of Pachube (www.haque.co.uk/pachube.php). We thought the name “Council” would carry some weight, but the URL was not yet fixed. We considered things like “extremecommunity.com,” but then Kitty De Preeuw (the Council webmaster), suggested I look up “theinternetofthings.eu,” which, very much to my surprise, was still available.

I spent the next few months building news items. Then, Alexandra Deschamps-Sonsino (from Tinker) and I kicked off the official Council launch with a full day and evening of talks and workshops at the Interactive Media Art Laboratory (IMAL) in Brussels (see www.theinternetofthings.eu/content/council-launches-brussel-blogs-reports-and-videoclips).

The invitation to join Council, presented to people who attended the event, read in part,

The Internet of Things (IoT) is a vision. Yet it is being built today. The stakeholders are known, the debate has yet to start…. So what will really happen when things, homes and cities become smart?

The result will probably be an avalanche of what at first looks like very small steps, small changes. Currently IoT applications, demonstrations and infrastructures are being rolled out primarily from negative arguments. For logistics, it is anti-theft. For e-health, it is the lack of human personnel that requires the building of smart houses. From a policy view, it is the ensuring of safety, control and surveillance at item level and in public space. For retail, it is shelf space management.
Council thinktank aims to grow into a positively critical counterpart to these negativities in focusing on the quality of interaction and potentialities of IoT for social, communicative and economic (personal fabrication, participatory budgeting, alternative currencies) connectivity between humans and other humans, humans and things, and humans and their surroundings.

As Santucci wrote in his review of the event, it “brought together stakeholders from diverse backgrounds and perspectives, including industry, designers, artists, thinkers, regulators, etc., to form a new community of people committed and dedicated to exchanging and sharing their Internet of Things visions and experiences” (see http://media.digitalarti.com/comment/reply/100862/43889).

ECOSYSTEM MANAGEMENT AND NEW ENTITIES

Council has always been about emerging entities and capabilities. In the 2009 launch invitation, I wrote:

Council is a think tank for the Internet of Things. Forecasting then becomes prototyping. Forecasting by prototyping is a phrase of Ben Russell, the author of Headmap. We believe IoT constitutes a new ontology. Qualities and properties of citizens/endusers, industry and governance will merge to form new leading actors.

Russell published Headmap Manifesto back in 1999 (see http://technocult.net/technocult-library/headmap). I remember him in my study in Ghent provoking me constantly to see if I really got the urgency and depth of what was being engineered. At some point around 2004 or 2005, he decided that he didn’t want to be around what he saw coming, so he moved (or so I was told) to an Indonesian beach. I stayed on and carefully worked on the early Twitter (@robvank) and Council LinkedIn Group (www.linkedin.com/groups/2206279).

In “Key Elements and Enablers for Developing an IoT Ecosystem,” Omar Valdez-de-León concludes that the ecosystem will ultimately be the competitive unit in the digital transition. Building an IoT ecosystem, according to Valdez-de-León, “is a complex undertaking that requires many interconnected factors to be balanced. The challenge for businesses is to establish an IoT ecosystem strategy that is holistic, considering all the elements described above and adopt an ecosystem mindset that moves away from vertical value chains with one set of customers at the end of it.”

This means that it is vital that citizens become part of the full loop, from the beginning of asking questions about smart services in smart cities to feeling safe and secure with their home appliances. That is why in 2010, Council set up IoT Day on April 9th (iotday.org). The event has grown in scale and scope as IoT sinks more into everyday life. For the 2017 edition, there were 58 events across the globe, ranging from people in a bar talking about the changes that they see in their daily work, to panels and seminars and professional workshops. The purpose of IoT Day is to get an organic, local public debate going, resulting in larger groups of diverse people asking what kind of society they want. For the 2018 edition, Council will team up with the IoT Consortium (iotthings.org). Starting this fall, using the iotday.org/events link, you can upload events for 9 April 2018.

Council is a timely ecosystem. Although it is not yet viewed as a strategic powerhouse, having grown only slowly without any advertising, it will soon become more visible in that capacity. It is a small but decisive building block, building a new political decentralized system where transparency reigns, all nodes are equal, and earlier dependencies are eradicated.

REFERENCES


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