‣ **DirecTalk** MUSINGS FROM THE 10TH FLOOR

API Blues

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Compress and release. Compress and release. Frank Lloyd Wright's winter home is special, so unique that it comes with its own name: Taliesin West. Located in Scottsdale, Arizona, it is universally considered an architectural gem. The residence is constructed largely of local materials that are thoughtfully assembled in a manner that ebbs and flows, reminiscent of a meandering stream. The doorways and entries into each section of the home are tiny, misleading the visitor into believing that they are entering the fictional home of a hobbit. That is the case until the true brilliance of the space reveals itself. Each room is thoughtfully designed to embrace the social nature of the human condition, a release from the confines of the entryway.

NEHA, too, is in an organizational compression moment, one defined by application programming interfaces (APIs). These software interfaces ostensibly thread together the various software systems we have in place: membership, credentialing, continuing education, and our annual conference content, among others. We are aggressively pursuing a single association website login for you to enhance your member experience. The aim is to ensure your user experience is frictionless and efficient. We are almost there (I can taste it) and now with the backbone program in place, we patiently wait for the APIs to be written, beta tested, and uploaded. The promise on the back end of this process is to release you and our staff from manual, time consuming transactions associated with NEHA so we can collectively spend more of our time on things we enjoy.

> *Our job is to illuminate the seemingly insignificant details.*

I'm struck by how Frank Lloyd Wright captured it: art imitating life. He was not, however, alone. Enter Moore's law. The law was first postulated in 1965 by Intel cofounder Gordon Moore. It suggests that the computational power of microchips would double every two years. The guy was prescient. Not only has the law proven true, it is changing the nature of the world in which we live. Half of the Fortune 500 corporations that have failed in the last 20 years did so because they could not keep pace with changing technology. Think about it. In my lifetime I typed my undergraduate term papers on a typewriter; saved my master's thesis on a 5.25-inch floppy disk; and saved my doctoral dissertation on a 3-inch hard disk. Today I mosey around town with a 128-gigabyte thumb drive slung around my neck.

It's not just technology, it's the manner in which the world operates. Consider that the largest taxi service in the world (Uber) owns no vehicles. The largest retailer in the world (Alibaba) owns no goods. The largest provider of sleeping rooms (Airbnb) owns no hotels. Cryptocurrency such as bitcoin belongs to no country. The changes we have witnessed since Moore's law was coined, as well as the speed of these transformations, lead me to believe that on most days I have "aged out."

I'm also left with the sober impression that each of us must wake each morning with the entrepreneurial mindset of a start-up business, scraping and fighting for every customer. But first we need to be in the game. To that end, NEHA recently submitted a formal request to become a member of the Joint Public Health Informatics Taskforce (JPHIT). JPHIT is comprised of nine national public health associations that help U.S. governmental public health agencies build modern information systems across a spectrum of public health programs. It attempts to integrate the expertise and reach of national associations to advance public health information systems. Environmental health is a foundational constituent of the public health enterprise and we feel our profession's contributions are essential to the health of the nation. We aim to become the 10th member of JPHIT.

I call on our members, the informatics vendor community, and the funding community to assist our profession in advancing its use of technology toward the greater good of timely decision making and public health. I envision data collection, analysis, and reporting that move beyond compliance and are used to predict, dare I say prophesize, where environmental health risks will exist in the future because of meta-analysis of trends conducted with data

we possess today. I foresee a time that clinicians will search out our data as they move upstream to identify the roots of their patient's health challenges. I dream of the day where there is an API that threads electronic health records with environmental data and public services data in support of standards of living improvements so that everyone can reach their potential.

I've seen glimpses of the architecture of this preferred future. The Centers for Disease Control and Prevention's Environmental Public Health Tracking Network provides a preview of the possibilities. Tennessee has or will soon migrate to a digital environmental health inspection and reporting system. El Paso County, Colorado, employs a sophisticated data management system for its land use planning activities. The GIS-mapping company ESRI has templates for digital story mapping.

Certainly there are many other initiatives underway. I sense each is a noble, not so random act of kindness that incrementally adds to the body of knowledge about what works and what doesn't work in industry and government. I sadly recognize this system is the fragmented nature of the decentralized, federated model of governance. At the same time, I feel an urgency to create a vision for what an environmental health system should

Taliesin West, winter home of architect Frank Lloyd Wright. Photo courtesy of David Dyjack

ideally look like. How will a data system inform practitioners with the right information at the right time and in the right place?

Frank Lloyd Wright felt it was imperative to shine a light on the subtle, rich details in our living environment. Our job is to illuminate the seemingly insignificant details of that environment before they become detrimental. I don't desire to change the core of the profession. I desire to preserve the integrity of our profession without it becoming

frozen in time. Let's move the center of gravity of the environmental health profession to harness the power of data and analytics.

Now then, back to the more mundane but essential business of those darn NEHA APIs.

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