

Speech Topics by Thomas Frey

Expanding Our Vision of the Future

Much like dropping a rock into still water and watching the ripples form in every direction, situational futuring begins with a central idea, which grows into a series of rippling thoughts, issues, and questions expanding in every direction.

Unlike the study of macro or megatrends, situational futuring is a micro-futuring process that begins with a single invention, tiny idea, or what-if condition and expands from there.

The process begins with an initial scenario and asking some of the standard who-what-when-where-how-and-why questions. Probing deeper, questions formulated around things like timing, monetary implications, disruptive effects, symbiotic partners, who-wins-who-loses, wild cards, policy changes, and strange bedfellows will help expand your thinking even further.

This works particularly well in a brainstorming environment where thoughts and ideas can be quickly sketched out, described, or clarified so more can be added.

Inside these moments of micro-futuring is where the real treasures live. Companies wishing to expand their product line, service agencies seeking to streamline their processes, or design engineers wishing to gain a new perspective will all find this to be a valuable tool. - *Keynote, Workshop*

Micro Colleges and the Emerging Education Marketplace

The systems used to create colleges centuries ago seem justifiably primitive by today's standards. Learning formulas for nearly every degree are based on hours, one of the least important considerations when it comes to assessing talent.

Colleges today cost far too much, and they take far too long.

Just like many other industries, traditional colleges are being tasked to do more with less. But at this point they don't have a clear understanding of what "less" looks like.



MOOCs are offering a new way to produce and distribute lecture-style courses, but that only represents a piece of a much larger equation.

Because of their ability to instantly positions themselves at the critical cross-section of skill and commerce, far more new industries will be born through Micro-Colleges than through traditional colleges. - *Keynote, Workshop*

Future Jobs, Future Industries

We are entering into a world where driverless vehicles will eliminate millions of driving positions; robotic systems will work relentlessly day and night eliminating millions of manufacturing, welding, painting, and assembly positions; and things that seemed impossible to automate in the past will have computers and machines replacing people's jobs.

With these types of automation and AI (artificial intelligence) replacing human involvement, the discussion has focused on solutions like shared jobs, micro employment, and guaranteed income.

While those may be options, there's also great danger in preparing for "slacker lifestyles" where people feel less significant, less certain about their future, and less connected to the value they have to offer. As a society we risk becoming soft and lazy.

There is great value in the human struggle, and when we fail to be challenged, our best-laid plans tend to fall apart at the seams.

Today, the amount of time it takes to build ships and skyscrapers, create massive data storage centers for all our growing volumes of information, or produce global wireless networks for all our devices has dropped significantly. But along with each of these drops is a parallel increase in our capabilities and our expectations. - *Keynote, Workshop*

Future of Systems and Infrastructure

Much of the world around us has been formed around key pieces of infrastructure. Most see this as a testament to who we are as a society, and part of the cultural moorings we need to guide us into the future.

In general, infrastructure represents a long-term societal investment that will move us along the path of building a more efficient, better functioning, society. And usually it does ... for a while.



But infrastructure comes in many forms and as we build our elaborate networks of pipes, wires, roads, bridges, tunnels, buildings, and waterways, we become very focused on the here and now, with little thought as to whether there might be a better way.

Virtually every piece of infrastructure creates jobs, revenues streams, and investment opportunities, as well as new laws, regulations, and industry standards.

The longer a piece of infrastructure is in place, the greater the resistance there is to replacing it. Much like an aging tree, the root system that feeds it becomes enormous.

That said, the life-cycle of infrastructure is getting shorter, and teams driving the disruptive technologies are getting far more sophisticated.

Infrastructure projects represent huge paydays for someone, and the disruptors are determined to make it their payday. - *Keynote, Workshop*

The Future of Technology and Innovation

If Steve Jobs had never lived, would we still have the iPhone and iPad today? Similarly, if Walt Disney, George Lucas, and Pete Diamandis had all taken jobs on Wall Street instead of living their lives as true innovators, would we still have Disneyland, Star Wars, and the X-Prize Foundation today?

To put it more succinctly, if the visionary never existed, would we still have the industry?

Certainly, if Edison hadn't invented the light bulb, someone else would have. In many cases, inventors have lost out on a patent because of mere minutes separating the timestamp on a patent. So the invention was destined to happen regardless of whose name showed up on the patent, right?

Not so fast.

The systems we create help define the kind of people who will naturally rise to the top. And these leaders of innovation have decidedly different approaches for making things work. So what would a new system for innovation look like?

This talk helps listeners climb aboard a fascinating journey into the forces of change and how they will affect tomorrow's world of innovation. - *Keynote, Workshop*



Future of Transportation

Throughout history, speed has been synonymous with greatness. In sports, those who ran the fastest were heroes. In times of war, those with the fastest chariots, ships, planes, and weapons had a significant advantage. In the business world, a company's competitive edge has typically been formed around speed – quickest delivery, fastest transaction times, or speed of information.

With the aid of technology, we've found ways to speed up communications – voice, text, email, social networking, and even delivery systems. But we've only been able to achieve minor advances in the speed of physically traveling somewhere.

As we look closely at the advances over the past couple decades, it's easy to see that we are on the precipices of a dramatic breakthrough in ultra high-speed transportation. Businesses are demanding it. People are demanding it. And the only things standing in our way are a few people capable of mustering the political will to make it happen. - *Keynote, Workshop*

Will there be Libraries in Your Future?

At a recent conference on the "Future of Libraries" put together by the American Library Association at the Library of Congress in Washington DC, I proposed a rather unusual mission for libraries, that of becoming "liquid networks" for our ideas.

Unlike our not-so-distant-past, the world's most important information is no longer solely in books.

Whenever a great idea forms in our head, we look for a place to put it. Is it something useful, that we can turn into a product, add to a document, tell to our friends, include in a presentation, or attach with magnets to the front of our refrigerator?

Ideas, much like parasites, need a host. If we don't manage to gaff them before we slip into our next stream of consciousness, they will be forever lost. Without a host, these squirming little ideafish will have a very limited shelf life.

If we manage to cluster enough of them together, they have a bit more staying power, but they still need to somehow reach critical mass before they become noteworthy.



In the past we had very few options. We could jot them down in a notebook, mention them to friends, or make a few drawings or sketches. But even then, most ideas died of isolation. We had very few "places" to appropriately store these pockets of ingenuity.

Today our options have grown exponentially and good ideas can now go from zero to Facebook entry in 0.9 seconds. They can be fashioned into tweets, infographics, photos, podcasts, PowerPoints, LinkedIn discussions, Quora forums, YouTube videos, submitted to blogs, or turned into interactive charticles.

We literally have thousands of placeholders for our momentary flashes of brilliance. Much like planting seeds into the freshness of damp soil, these memes have the organic potential to spring to life bursting into a colorful bouquet.

However, even with our very best ways of posting and hosting ideas today, the reality is that most public and private companies tend to have a rather short life expectancy, and some concepts come with a far longer gestation period. That's where the more stable storehouses of information at public libraries comes into play. - *Keynote, Workshop*

The Future of Agriculture

Can better food create better people? Will a better food supply lead to healthier, stronger, better thinking people? This is exactly the premise that is driving many of the advances in farming today. To understand agribusiness in the future, consider a model that conveniently exists right now – in the human-food interface. Metabolism is a term used to describe the various chemical reactions that take place in every cell of the body. Intermediary metabolism is a vast web of interconnected reactions by the constituent parts of the cell. Every metabolism is different. Gaining an ability to read and monitor a person's metabolic reaction to the food eaten will cause the agriculture industry to evolve with great precision around the tiny niche demands of consumers.

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The Future of Money

Every transaction involves two sides - the payer and the payee. Throughout history businesses have lived or died on the timing and flow of money and deal brokers place a huge emphasis on controlling both sides of a transaction. All non-cash money transactions in the past involved a time float to allow time for the money to clear their respective accounts, and even cash transactions involved delays in getting posted to a bank account. Future transactions will be real-time and this seemingly minor change will revolutionize the shape and tempo of business. - *Keynote*