

# THE FUTURE OF LIFE

## As Envisioned, January 2013

Peter Grant Johnson, Chris Rezendes, Stewart Skomra, Carrie van Heyst

At this point in time, we believe that people have achieved a great deal of progress with our investment of time, talent, and capital. And we can do so much more for so many more people. Not charity, but tools and training to enable people to create more meaning. And along the way, more markets for more meaningful experiences, more profitable pursuits.

We revere so much of what our grandparents and their forebears achieved. However, nostalgic reverence will not honor these achievements, advancing the human experience will. We have a once-in-a-century opportunity to impact the Future of Life on earth. We need a new leadership to define where we are going, and how to get there.

We need new vision, perspective, plans. We need new tools and methods. We need new metrics.

The grand experiments of the last quarter of the second millennium – free market economy and democratic government – have brought extraordinary advancement in the human experience. While perfect in their theory, free market economy and democratic government, in practice, depend upon evolving definitions of economy and government and citizen.

The GI generation – The Greatest Generation – carried the torch for what the United States liked to call 'Exceptionalism'. These Americans extended values of freedom and liberty abroad by stopping tyrants, and freeing enslaved peoples in Europe and Asia. The Greatest Generation was born in and around the Great War, World War I. They blew off steam through the roaring twenties; suffered immeasurably enduring through the depression; and then stood up to be counted by volunteering to roll back Hitler and Hirohito, check Stalin, and then fund and manage the reconstruction of war-torn communities, exploited colonies. That was a collective exceptionalism.

After the War to End All Wars, World War II, as we worked to rebuild the war-torn cities abroad in Europe and Asia, the United States factories of production that had been developed and perfected to produce weaponry were repurposed for a peacetime economy. Since there was no collective threat – apart from suspected threat of annihilation from global thermonuclear war – the Greatest Generation needed new threats, new challenges. The Greatest Generation was such an unstoppable force that it believed if it could stop individual tyranny that it could just as easily create individual excellence.

Just as in World War II, we created a new two-front war. Instead of wars in Europe and the Pacific, we chose instead to wage war for human rights and personal prosperity. We turned our sights to domestic injustice and inequality addressing human rights and personal prosperity. Unfortunately we measured our gains primarily through material wealth. This shifted our efforts toward a second phase of exceptionalism: collective was replaced by individual exceptionalism.

As the Greatest Generation moved into its retirement and decline, we have had our nation fixated on the pursuit of individual exceptionalism, largely in isolation. However, as we learned, often painfully, the advancement of freedom and liberty in the world does not permit a return to isolationism in the pursuit of individual exceptionalism. The world is indeed connected. And yet, too many are too unaware of how to be connected.

Our ignorance and/or arrogance in believing that America could pursue individual exceptionalism in isolation resulted in combined impacts of our legislative, regulatory, fiscal and broader policies, arriving us at an acute expression of winner take all. Me getting mine. You are on your own. Winner take all.

And the result has been a hyper-concentration of capital: financial, political, intellectual and more. And the hyper-concentration has created a number of conditions that arrive us at extraordinary levels of unsustainable imbalance and inequality. And that hyper-concentration is creating echo chambers. And instability. And in some domains, decline.

For the past 40 years, since the last draft of the Vietnam era, very little has been asked of the general population of the United States. Until the Great Recession in 2008. And we – or more to the point, our systems – have often shown our weaknesses.

The attempts at leadership succeeding the Greatest Generation has us fairly lost in a number of ways at this moment. We need new goals. New tools. New methods. These may be found through a return to and a rethinking of certain ancient values and virtues. And then a synthesis of those ancient values and virtues with a new level of knowledge, and transparency and intelligence that digital technology is creating.

Today's partisan leaders malign each other for irresponsible fiscal governance. One side decries the other's insistence on elimination of government-funded entitlement programs while insisting that administering these entitlement programs is, itself, meaningful work. The other side declares that government regulation imposes dependency that inhibits pursuit of individual excellence while downplaying the interdependence of individuals that is required to achieve any measure of individual excellence.

In all cases, disagreement emerges where values are not in harmony and the commodity over which fighting takes place is money. There is a need to return to the meaning of value and the purpose of money. Money is simply a substitute for time; time matters more than money. Knowledge matters more than accolades. Experience matters more than possessions. Doing matters more than being.

Grand challenges matter more than conveniences. Faces matter more than screens. People matter more than machines.

In 1990, there was virtually no cell phone market. Social media did not exist. Nor drones. Speech recognition, fiber optics and biometrics were science fiction if not fantasy.

In 2015, we will have more than 5 billion cell phones on the planet. What will we do with them? Play games? Selfies? Monitor our health? Monitor others' health? Augment classrooms? Achieve food security? Redress natural resource, energy and security policies? End gender inequality?

In 2020 perhaps 3 billion people will have mobile accounts, public profiles, presence on social networks. What will we do with them? Will we play Mafia Wars? Farmville? Exchange ideas, goods and services. Create a billion microbusinesses?

Before 2025 autonomously guided vehicles will be authorized to operate in public spaces. What will we do with them? Will they entertain us? Compete with us? Protect us? Serve us?

We are synthesizing the physical and virtual worlds. Carbon and silicon. Digital and analog. We are instrumenting the physical world. Some call it the Internet of Things. That is part of it, and only the tip.

Of all humanity's creations, only the digital realm rivals organized religion as a life shaping force. And we have seen nothing yet. The next great phase of the digital realm will be the Internet of Things and its progeny.

Lacking direction, today's younger generation of entrepreneurs has turned to screens. For entertainment. To escape. More comfortable in 140 characters than in conversation.

Instead of blindly following the current path we are on, we need to stop and define what we want the Future of Life to be. The future of our lives, our children's lives.

We need a vision. We need strategies. We need the tactics to implement the strategies.

We then need to identify, qualify and present examples. We need tools, and training and support.

The tools and technologies that spurred so much growth and prosperity for the developed world are now poised to change more than any could have imagined.

The IoT or Internet of Things represents the culmination of all the scientific and technological progress the world has achieved – big data, mobility, the cloud and more. The Internet of Things could enable or give birth to inconceivable new markets the beginning of which are presaged by autonomous vehicles, smart cities and digitally augmented people.

The Internet of Things is this powerful because it proposed to digitize the physical world. The real world. The world of carbon beings. People. Plants. Minerals. And the ambient environments defining our interactions with them – our planting, our cultivating, our harvesting, our collecting, our observation, our habitation. And the physical world is fragmented and messy and uncontrollable. It is the EXACT opposite of the double-entry bookkeeping that was the inspiration for virtually all of the world's enterprise information technology.

Enterprise IT was all structure. Social media was all clicks. The Internet of Things will be ... all everything.

A lot of people are struggling with a vision for the Internet of Things because they are limited by brittle models that have simply not kept pace with the potential in our latest releases of technology, or the truth about their model's structural limitations and inherent flaws. We are in some trouble right now, this race on this planet at this time because the Internet of Things and its related automations may simply accelerate ever-increased advancement toward a dystopia brought about through the blind pursuit of individual exceptionalism. And the physical world will be just another asset to be controlled and consumed for personal gain. And the hyperconcentration will continue.

Unless ...

We simply turn, once-again, toward collective exceptionalism, as we define and realize the instrumentation of the physical world through the Internet of Things. This 'turning' is not a 'returning to the past' – it is an approach to building the future. A synthesis. We need to synthesize the most durable of our ancient values and ethos with the persistent potential of digital technology. We need to do this in a manner similar to how the Greatest Generation extended values of freedom and liberty abroad; our generation must now look to extend values of human rights and individual prosperity. The tyrants that are now to be stopped are the failed leaders of the recent past who cling to their winner-take-all perspective and cling to their hyper-concentrated approach to capital formation -- fearing so much that what they may lose is in fact what they do not realize was never theirs to begin with.

The enslaved people we will liberate are those who are clinging to subsistence -- being exploited in manual labor arbitrage. The reconstruction we must fund and manage is the use of IoT to elevate economically under-developed communities quickly above and beyond the Agrarian and Industrial Ages to the post-Information Age where the IoT – the instrumentation of the physical world -- will catalyze a collective pursuit of human rights and personal prosperity.

Meaning and money.

The redevelopment of all those markets, and communities, careers and families in the 'Redeveloping World' – the vast majority of North America, and Western Europe --whose capital is being harvested to feed a superficial objectivism in the supercities will be nothing short of a revolution for all, painful for some, cataclysmic for others.

This is the new exceptionalism; again a collective exceptionalism. This time with more data, more facts, more intelligence about the physical world than any time on earth. We will know more each day than the last for a very long time to come ... and the availability of the evidence of this knowledge will not be hyper-concentrated.

And when we have so much knowledge of the physical world so readily available and ingestible and exploitable, we will have time to turn to face each other again. With more clarity. To create more meaning.

For however much time humans remain on this earth, we will be joined by all living things that God has created and we will be accompanied by the machines that God's creations have enabled. The digital realm. The IoT and its progeny.

If we are smart and good and true, we will develop and deploy the IoT toward a new collective exceptionalism focused on the creation of meaning. Meaning implies value and is essential for the use of time in diligent purposeful pursuits. Create meaningful time for people.

Meaningful work. More stability. More meaning. More meaningful lives.

If we are not, then we will further exacerbate the hyper-concentration of the last 40 years.

We need a vision. For the Future of Life in every domain of human endeavor – health care, education, energy, transportation/ logistics, industrial manufacturing and processing, retail and consumer packaged goods, national security, the environment and ecology, art, built environments ...

We then need to identify, qualify and present examples of people, products, programs and projects that show us the way.

We need strategies to break through false choices. To redefine success in terms beyond growth in shareholder wealth – we must define success in terms of stakeholder value. To value and demand and expect doing good along with doing well. Authenticity. Stewardship.

We need tools, and training and support for the next generation of leaders who will be entrusted with taking us all to the Future of Life.

The Future of Life aims to create the vision, strategies, tactics for the next generation(s) of leaders needed to realize our best future.