Defining and Harnessing Plurality of Thought for the Digital Age

To win in the emerging digital economy, progressive companies worldwide must look beyond diversity of personal identity and tap the creative and sometimes contrarian views of individuals across the organization and beyond to spur innovation, differentiation and sustainable advantage.
Executive Summary

To create a more inclusive order, emphasis is rightly laid on the plurality of identities – be they racial, gender or otherwise. While that’s a good starting point, we believe that the journey to a more inclusive order will be complete only by achieving real diversity of thought. This is critical because to win in the emerging fully digital world companies must not only rewire their hard operating infrastructure but also reimagine ways to tap plural thoughts and think and act innovatively to build sustainable competitive advantage. How so?

• **By focusing only on the physical dimension of inclusion, namely gender, race and sexual orientation, we may miss the more profound and subtle dimension of thought.**

• **Winning, innovative companies are adopting a mindset of problem solving.** Unencumbered by the baggage of conventional wisdom and compartmentalized academic thinking, many companies seek out solutions by breaking boundaries. For example, GE tapped numerous great minds globally to solve a jet engine design challenge (see page 7 for more).

• **Plural thinking has less to do with IQ and more to do with orientation.** It is akin to building an open source operating system that can play with any software on any device. It is a state of mind that can be cultivated through training.
This white paper lays out an agenda for business leaders looking to nurture plurality of thought in their organizations. It presents a variety of cross-disciplinary case studies on how individuals and institutions put plural thought into action. In our view, successful organizations ensure that plurality of thought takes root at all levels, from senior leaders to managers and individual employees.

Our analysis identifies blinders - received wisdom, cognitive biases and institutional biases - that cause diversity and plurality of thought to be neglected in the workplace. The words of Bertrand Russell, “The chains of habits are too light to be felt until they are too heavy to be broken,” are appropriate in this context. To break the chains of bad habit, individuals need to practice nurturing and advancing the cause of plurality.
Creating a Plural Identity

A diverse set of visible identities – such as race, gender and age – are promoted within today’s progressive companies. While this is a necessary starting point, we believe it is insufficient to truly advance the cause of diversity. The rapidly changing demographic mix within the U.S., and the exponential growth of the virtual, connected workforce worldwide, will soon make representation of plural identities a default phenomenon and a critical prerequisite for sustainable success. The focus will then shift to diverse perspectives and contrarian points of view.

Plural Thought Defined

The ancient Rig Vedic hymn, *Ekam Sat Viprāḥa Bahudhā Vadanti* (truth is one and the wise call it by many names), underscores the plural order of thought. Harnessing and nourishing plurality of thought – the essence of diverse identities – to innovate and solve complex problems is a crucial but often overlooked task for business leaders.

The critical questions confronting businesses: Are they ready to tap plural thoughts and the alternative perspectives that diversity of identities brings? Do plural identities automatically usher in plural thought?

We examine this idea by asking:

- Why does plural thought matter?
- What should we do to nurture plural thought?

Why Plurality of Thought Matters

We have identified two recent phenomena that illustrate how plural thought is assisting more evolved organizations to excel in today’s globally interconnected economy. First, we examine how contrarian thinking, a key dimension of plural thought, helped India avoid the 2008 banking crisis. Then we evaluate how plural thinking is helping GE innovatively solve design problems.

2008 Banking Crisis

What if Lehman Brothers had been Lehman Sisters? Would that have resulted in a different outcome for that firm? Ever since the 2008 financial crisis, this gender-angled probe has engaged bright minds in academia, media and financial institutions. While interesting perspectives have been advanced for both sides of the argument, we argue that moving away from the binary gender-centric discourse will support richer meaning-making.

One school in this debate posits women as more conservative and risk-averse. Therefore, more women [in the financial sector] = less self-interested greed = less imprudent risk = more solid asset values = healthier balance sheets. However, empirical research shows that female managers are not necessarily more risk-averse than men, and that female directors did not engage in fewer risk-taking activities around the crisis, and did not have lower risk than male-led banks.

While gender is a marker, what about other potentially more relevant factors such as schooling, values, role in the high-pressure banking environment, stakeholder interests, etc. that shape an individual’s worldview and actions? In that larger context, gender hardly seems to be a material driver of actions.

From a gender-neutral perspective, the alternative questions are:

- What if the Lehman Brothers and Sisters had been schooled in alternative schools of finance and economics?
• What if the Brothers and Sisters had rejected the efficient market hypothesis and other neoclassical economic models?
• How safe would the financial world have been had there been space for alternative theories and norms?

A more nuanced approach to diversity must transcend the physical – race, gender and age – and focus on thought. It must take into account the complex interplay of civilization, culture, religion, schooling and the very essence of identities. Extending this argument, a false proposition does not become true when professed and practiced by a diverse set of actors. After all, even today, the Flat Earth Society is active. This does not make its proposition valid, even if it can present diversity of every shade other than thought within its ranks.

**How Plurality of Thought Saved the Indian Banking System**

October 14, 2013, marked a major milestone for the cause of plurality of thought, when the Royal Swedish Academy of Sciences awarded the Sveriges Riksbank Prize in Economic Sciences for 2013 to Eugene F. Fama, University of Chicago; Lars Peter Hansen, University of Chicago; and Robert J. Shiller, Yale University, “for their empirical analysis of asset prices.”

Fama has made a career espousing the efficient market hypothesis (EMH), which argues that in an efficient market, security prices reflect all publicly available information about an individual stock and the whole market. Robert Shiller, on the other hand, has built his career on the thesis that markets are not efficient but prone to irrational exuberance, given that human beings are driven by greed and fear. Coming five years after the 2008 global financial crisis, a downturn largely blamed on Fama’s EMH theory, the awarding of the prize to Fama drew sharply polarized commentary. The business press drew parallels to the physics prize being awarded to Ptolemy (for his theory that Earth is the center of the universe) and to Copernicus for disproving it.

**A Tale of Two Thoughts**

**Eugene Fama**

To be fair to Eugene Fama, EMH is not his theory. The documented history of the EMH idea goes back to the 16th century. However, Fama’s review of this theory in a 1970 paper, “Efficient Capital Markets: A Review of Theory and Empirical Works,” gave it cult status. The utility of this market insight helped create what is known as index investing, which is now a multitrillion-dollar business. It would not be an exaggeration to say that over the past 30 years EMH became the Nicene Creed of the free market church, whose principal evangelist was Alan Greenspan, former Chief of the U.S. Federal Reserve.

EMH’s utility was eventually extended to a claim that markets are capable of self-regulation. This view soon became the market doctrine and all converts, be they legislators, regulators, central bankers or market players, swore by its tenets eventually leading to “light touch” global financial markets and to the crisis in 2008.

**Robert Shiller**

Robert Shiller’s analysis showed that markets and their prices are irrational, driven by participants’ greed and fear. His empirical studies post the 1987 stock market crash, plus his warnings in 1999 before the Internet bubble burst and in 2005 before the U.S. real estate bubble burst, were largely ignored by the establishment, which was hooked on the efficient market hypothesis.

This doctrinaire approach fueled by greed partially contributed to the spectacular financial market collapse in the fall of 2008 (see sidebar, next page).
Y V Reddy – The Contrarian

Dr. Y V Reddy, the then-Governor of Reserve Bank of India, India’s central bank, differed from this thinking.

He boldly called out the asset bubble building in real estate and dismissed the theory that markets can self-regulate. With the 1997 Southeast Asia credit bubble still fresh in public memory, he was aware of the perils of rapidly rising asset prices. He initiated tough counter-cyclical measures to cool down asset prices, increased risk weights for real estate loans and did not allow the trading of exotic derivative products. Thus, he saved the Indian banking system from the conflagration that singed much of the developed world. While he reined in the drivers of the asset bubble, he did not kill the real estate market with a regulatory sledgehammer. By drawing from the best of Fama’s and Shiller’s worldviews, Dr. Reddy pursued the middle path of prudence.

He made tough contrarian calls even in the face of vilification by the economic Flat Earth Society. Eventually, Y V Reddy won for the simple reason that he saw and acknowledged the truth that other central bank chiefs refused to see.

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**Quick Take**

**A Thought Morphs into a Cult**

**Stage 1: Regulatory capture:**
Glass-Steagall acted as a firewall between investment banking and commercial banking activities.

**Stage 2: Crush dissent:**
In a now-infamous encounter with Commodities and Futures Trading Commission (CFTC) boss Brooksley Born, Alan Greenspan allegedly said, “I don’t think there is any need for a law against fraud.” He stymied Born’s efforts to regulate credit default swaps.5

2001 – Mortgage Lenders and Securitizers.
When Fed Governor Ed Gramlich brought the predatory lending practices of the subprime mortgage lenders and securitizers to Greenspan’s attention, noting their power to destabilize the mortgage markets, Greenspan called them “financial innovators” who should not be burdened with regulation.6

**Stage 3: Cult hero:**
2001 – In Maestro, author Bob Woodward presented the Greenspan years as a gripping narrative, and helped create the Greenspan mystique.

**Stage 4: Live in denial:**
2008 – Subprime real estate bubble bursts.

2009 – Commodities bubble bursts.

When The New Yorker’s John Cassidy asked Fama about the efficient market hypothesis and the 2008 financial crisis, Fama responded, “I think it did quite well in this episode. Prices started to decline in advance of when people recognized that it was a recession and then continued to decline... That was exactly what you would expect if markets were efficient.”

When Cassidy mentioned that the credit bubble led to the housing bubble and ultimately the bust, the professor said, “I don’t even know what that means. People who get credit have to get it from somewhere. Does a credit bubble mean that people save too much during that period? I don’t know what a credit bubble means.”7
In 2013, the aviation engineers at General Electric solved the jet engine bracket (metal pieces that weigh 4.48 pounds) problem by tapping plural ideas. These metal pieces are used to support the 13,000-pound jet engine, and with reduced weight they were expected to save millions of dollars in fuel savings, according to GE’s calculations. GE knew the solution but either the engineers did not have the time or the know-how to reduce weight using advanced 3-D manufacturing.

GE then tapped into GrabCAD, an online community of more than a million engineers and designers, and posed this problem with a cash award of $7,000 for the winning idea. Out of 1,000-plus entries, the winning design was by M Arie Kurniawan, a young Indonesian engineer who reduced the weight by 84%, to .72 pounds.

“I'll never forget the day we presented this to Jeff Immelt [GE’s chairman and CEO],” says Steve Liguori, GE’s Executive Director of Global Innovation & New Models. “He was like, ‘Where did you find this kid, and how much aviation experience does he have?’ And you know the answer to that question? Zero.”

It was a triumph of plural minds and thoughts at work. For $7,000, GE tapped into the diverse, global brain trust to innovate its way out of a design problem.

How to Promote Plural Thought

In our view, fostering plurality of thought in a corporate environment must happen at three levels — individual, team and corporate group.

Individual Level

- **Nourishing plural thought is less about IQ and more about temperament.** One must diligently cultivate the mind and develop a mental apparatus that is receptive to multiple viewpoints.

- **Get over “difference anxiety.”** While it feels good to look for similarity, seeking similarity is also a rejection of difference and diversity. One must actively seek differences, and acknowledge and respect them. To begin with, it will be uncomfortable for many individuals. Many will need to be nudged to see the truth as it is. This is the first step in the plurality journey.

- **Accept that people are different, and that their “thought trajectory” is different and evolving.** That trajectory is shaped by a dynamic mix of culture, religion, schooling, grooming and social interactions.

- **The next milestone is the ability to respect each other’s positions and viewpoints.** Given that we are trained to compete, outwit and outsmart in the binary “superior/inferior,” “good/bad” paradigm, this transition will require a culture change. Such a change can be brought about by reiterating the previous steps: acknowledge that plurality is the new norm, get over difference anxiety, accept and respect differences, etc. This will help break the binary paradigm and foster a new culture.

- **Move away from lazy binary thinking. People are far more complex and their ideas are even more complex and dynamic.** For example, why should one be right or left, politically? Why can’t one base one’s position according to the issue at hand? A person may be pro-life in general but support...
Your colleague from a matriarchal tradition or from the Hindu culture with a tradition of worshipping women gods may have a very different take on the same idea you both subscribe to, and those shades will add colors to the feminist rainbow.

euthanasia for terminal medical conditions. These are dilemmas that we confront every day. Accept that dilemma and reality. That acceptance will thaw the artificially frozen mind.

- When you read about the general theory of relativity, remember to read about quantum theory as well. This conscious practice of “oxymoronic reading” will help restore balance. Remember, even when you agree or disagree with an idea, watch for nuances and degrees of agreement and disagreement. For instance, you subscribe to feminist ideas and have been brought up in the Judeo-Christian tradition. Your colleague from a matriarchal tradition or from the Hindu culture with a tradition of worshipping women gods may have a very different take on the same idea you both subscribe to, and those shades will add colors to the feminist rainbow.

### Plurality at the Team Level

A manager is well positioned to nurture plural thought. She can reason and persuade others in the organization to institutionalize plural thinking.

- **Groupthink is an open secret.** In a boss/subordinate culture, toeing the boss's line is a given, and alignment of thought is subtly encouraged and rewarded. A manager can delay stating her stance and thus delay the onset of groupthink and action. That delay offers a window of opportunity for out-loud thinking. Chances are such windows may throw up a golden nugget.

- **Managers tend to prefer echoes of their ideas.** Psychologists call this confirmation bias. Homogeneity of thought may cause one to take irrational decisions. The solution is to eschew supporting opinions and look for contrary views. This will build rational thinking and decision-making. It can be achieved with the help of what engineers call the failure mode effects analysis (FMEA). FMEA’s objective is to identify the ways in which one’s system/pet idea can fail - and its likely impact.

### Plurality at the Corporate Level

Senior leaders have the biggest stake in promoting plural thought since it can make a material difference to long-term competitive advantage. Consider the shareholder wealth creation opportunity and upside to stock option valuations if your company is able to retain the best talent, adopt the mindset of a student problem solver and seek plural thought. Some initiatives to consider:

- **Institutionalize the culture of experimentation:** Karl Popper™ framed this as the distinctive attitude of a student of a problem versus the student of a discipline. Why is this distinction important? Mounting evidence underscores an interesting phenomenon - students of a discipline or experts tend to view everything through the narrow prism of their expertise. Meanwhile, students of generic problem-solving display markedly plural thought and actions. They are more prone to experiment, dissent and seek multiple solutions to the problem at hand.

- **Go out and seek plural ideas, the GE way.**

- **Watch out for cults, groupthink.**
Looking Forward

Throughout this paper, we have touched on how plurality of thought is unfolding across industries, and indeed the globe. We believe additional work needs to be done to build on the key philosophical underpinnings to build a robust case for plurality of thought. There are promising indicators. For example, post the 2008 banking crisis, the neoclassical economic models and assumptions at the root of the global crisis are being reexamined. Efforts are on to make the study of economics more holistic.

Similarly, as the power of computing, big data and analytics unfolds, certain simplistic assumptions about normality and its near monopoly in underpinning analytical models in meaning-making and prognostication are being challenged.

It is imperative to study the forces that impede plural thought. As connectivity improves and the new virtual education model takes hold, the bastion of the knowledge creation supply chain will and must be challenged to make it more democratic, inclusive and fit for the purposes of a globalized world.

As advances in neuroscience break new ground, what was earlier labeled a disability (e.g., autism) is now being viewed in a different light. For example, SAP has launched “Autism at Work,” a program that ultimately aims to employ 650 people with autism, or 1% of SAP’s workforce, by 2020. We expect this trend to continue as more and more differently abled candidates with unique skills and perspectives bring in plural thinking to an increasingly diverse workforce.

As the digital era unfolds, it is imperative to rewire the hard and soft infrastructure to incubate plural thinking. As transformative solutions emerge, winning business constructs will invariably find support at the intersection of cross disciplines.

In an increasingly globalized and digital world, we see the ability to harness plural thoughts for innovation as the single biggest differentiator and a competitive advantage.

Footnotes

1 The Rig Veda is a collection of inspired songs or hymns and is a main source of information on the Rig Vedic civilization. It is the oldest book in any Indo-European language and contains the earliest form of all Sanskrit mantras that date back to 1,500 BC - 1,000 BC. Some scholars date the Rig Veda as early as 12,000 BC - 4,000 BC. The Rig-Vedic samhita, or collection of mantras, consists of 1,017 hymns, or suktas, covering about 10,600 stanzas, divided into eight astakas each having eight adhayayas, or chapters, which are subdivided into various groups. The hymns are the work of many authors or seers called Rishis.


3 “Lehman Sisters,” by Renée B. Adams, University of New South Wales, FIRN and ECGI and Vanitha Raganathan, University of Queensland, FIRN, December 2013.

About the Author

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