Entrepreneurial leaders in the "VUCAH" age

By Jay Rao
Special guest

The world has faced great changes since the end of the 70s: the opening of Chinese economy after the death of Mao; the rise of the Asian Tigers; the fall of the Berlin wall, the disappearance of the majority of the military juntas that previously dominated Latin America, the emergence of India on the world stage, the "WWW" technology, digitalization and mobile communications whose coverage extends across the entire world.

These changes have produced higher levels of VUCAH: Volatility, Uncertainty, Complexity, Ambiguity and Hyperconnectivity. VUCAH is phrase that was made popular by the former Secretary of Defense of the United States, Donald Rumsfeld, and Hyperconnectivity was later added by my colleague, Professor Anirudh Dhabar. VUCAH has created unique opportunities, but also many challenges. Companies that do not face these challenges pay the price.

Think of the Fortune 500 companies in the United States. Only 202 of the companies that appeared on this list in 1980 remained in 2000. Those that no longer were listed were either acquired, merged, or divided up. In the 60's, a Fortune 500 'Goliath' remained on this list for an average of 60 years. That number today has dropped to 15 years. Things are not so different outside the United States. The top 1000 global companies are disappearing faster than ever. In most cases, the old "Goliaths" of the business sector have been removed from power or dethroned by fast, flexible and enterprising "Davids" such as Amazon, Google, Facebook, Netflix, Alibaba, Xiaomi, Haier, Huawei, Micromax, Airbnb, Uber, Workday, Spotify and others. In Colombia, we have D1 and Tostao.

It is not that Kodak, Sony, Nokia, Blackberry, Blockbuster and Sharp have not been able to see into the future. Many had the right technologies and recognized the fundamental changes in consumer needs. They had abundant human and financial resources and worked hard to maintain their dominant market shares. And yet, they disappeared, why? Some resisted abandoning their outmoded business models that had served them so well and for such a long time. Others took a long time to make the transition from analog to digital, and some even fell prey to the arrogance and inaction of its leaders.

The VUCAH age needs a new kind of leader - an entrepreneurial leader (EL) - a person who thinks and acts like an entrepreneur. Conventional leaders are 'risk managers'. They focus on the existing business - keeping it productive and on track - keeping current customers happy, meeting sales and profit goals, and studying what the well-known competitors do. Risk is an important issue for these leaders because they have a lot to lose. But by focusing their shortsightedness on the risks to which their existing business is exposed, they lose sight of the future. ELs also keep a watchful eye on their current business, as they should, but most of their attention is focused on what is after all an uncertain future.

Risk and uncertainty are fundamentally different. Risk refers to what is known and knowable, that is to say, current customers and competitors, current products and distribution channels, monthly production and sales figures, and today's technologies and business models. Risk management is fed with data from the past and uses historical data to calculate risk and make decisions. Spreadsheets, net present values, projections and analyses of potential situations are the preferred tools. Currently, there is no shortage of risk managers; any person who has a degree in business administration is prepared to tow this line.

Uncertainty, on the other hand, refers to the unknown: unidentified customers and competitors, unknown markets, immature technologies, new products and business models that have not as yet been tested, and for which there is no data. In the absence of data, uncertainty cannot be calculated. However, decisions must be made without the benefit of spreadsheets, the analysis of potential situations, or other conventional tools. However, entrepreneurial leaders do make decisions and act.

What are the characteristics of entrepreneurial leaders? How do they differ from conventional leaders and risk managers? An EL can fit into any of the commonly accepted personality "types" inherent to a leader: charismatic, extroverted, thoughtful and discerning, transformative, transactional, heroic, and so on. These labels have very little value. Research has not shown any one of these types to be more effective than the others. However, we can safely say that ELs are cognitively ambidextrous, that is say they are both "risk managers" and "navigators of uncertainty".

ELs do not get bogged down by endless analyzes and bouts of indecision ("let's hope we get more data"). They are also pragmatic and able to change course when required. They know when to analyze and act (analytical thinking) and when to act first and then analyze (creative action). An EL understands that the traditional method of analyzing and then acting does not work well when the VUCAH levels are high. Instead, they apply the "act-learn-build" approach that successful innovators use, by applying quick and inexpensive experiments to test their hypotheses. And once they find the right formula, they scale it up or down quickly. For example, when three social entrepreneurs decided that they would improve the schooling of low-income children in Kenya back in 2008, they designed, tested, redesigned and re-tested several school prototypes in the poorest area of Nairobi. When they found the correct formula, they applied it on a large scale. By the end of 2017, Bridge International Academy was operating at total of 500 schools throughout Kenya and parts of Uganda.

Questioning the status quo

An EL understands that there is always a better way of doing absolutely anything. Their tireless search for improvements inspires others to create and explore alternatives for "normal types of business." Where others see only obstacles, an EL sees new possibilities. Where others are cautious and seek certainty, ELs are able leave their comfort zone and squarely face ambiguity.

Take Fernando Fischmann, founder of Crystal Lagoons, based in Chile. Crystal Lagoons are enormous artificial bodies of fresh water, more than 200 times the size of Olympic swimming pools and, nevertheless, the clarity and purity of the water is maintained with less chemicals and filtration mechanisms than those required by traditional pools. The company had an unusual start. Fischmann had a large lagoon overflowing in the grounds of his property development complex. With the hope of being able to clean it up, he visited the top water management companies in the world, namely, GHD in Australia, Pacific Aquascape in California and Disney in Florida. They all said that water management had never been achieved on a scale such as he was imagining, and that what he wanted to do was probably impossible. Without losing heart, Fischmann spent almost three years seeking help. Since no help was forthcoming, he spent another four years doing his own laboratory experiments, failing frequently. But as ELs always do, he took responsibility for his failures, picked himself up, shook himself off and tried other approaches, until he finally succeeded.

Fischmann applied what he had learned in a small pool, and then to the large stagnant lagoon on his property. In the course of all this experimentation, he invented technologies, chemicals and systems that now use only 2% of the energy required for traditional pools.

Changing the competition and making a difference to society

As problem solvers, ELs bring fresh values to their clients and enhance the competitive position of their companies. Elon Musk knew that the cost of launching satellites and transporting cargo

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As problem solvers, Entrepreneurial Leaders bring fresh value to their clients **while enhancing the competitive position of their companies**

in space would be drastically reduced if multi-million dollar rockets could be recovered and reused instead of just allowing them to drop into the ocean never to be seen again. However, recovering booster rockets posed a daunting series of engineering problems: it had never been done and most people thought it was impossible to do. But the Musk SpaceX team accepted the challenge. After years of tackling the problems encountered and failing in the process, they finally managed to land the booster rockets back on the platforms from where they were first launched. The world was astonished at this feat and SpaceX fundamentally changed the economy of its industry, saving more than USD 60 million with each launch.

Pragmatic navigators
Like all good navigators, ELs are able to sail against the wind and changing currents. They are not married to their initial ideas or solutions. ELs are able to quickly modify or change their course. For example, Steve Kaufer's travel website, Travelocity, had a problematic start. In 2000, Kaufer created a search engine for travel sites or travel sections of entities such as Yahoo, AOL, and Lycos. His first client was the Lycos travel portal, with which he negotiated an agreement to split the profits from the advertising sold on the page. That strategy failed to provide enough revenue, and Travelocity was running out of funds. Kaufer switched to advertising banners on the Expedia travel site. He estimated that between 2% and 3% a click would provide the revenues he needed, but the percentage obtained at that time was just 0.3%. The future of Travelocity looked dark. Undaunted, he established links with hotels in specific cities and customers could use those links to directly make reservations. This provided an astonishing15% a click and gave rise to a truly sustainable business model. Travelocity had succeeded!

Being able to spotlight opportunities
When spreadsheets are inadequate or insufficient to persuade investors, ELs

use prototypes to tell their stories. When Abby Speicher tried to raise money for her drone school on Shark Tank, a popular television program in the United States, she asked one of the program's resident investors to operate one of her drones. When he realized that there was more to this than meets the eye, he and the other investors recognized that flying drones - a fast-growing activity - was neither easy nor intuitive. Therefore, a school for drone operators seemed like an excellent opportunity. There and then, the entrepreneur Mark Cuban gave Speicher USD 300,000 for a 10% stake in her firm.

Creating opportunities for experimenting
Some ELs create work environments in which employees can, without fear or reprisals, share their ideas and information, observe, ask questions, experiment, fail, and succeed.

The 3M Corporation, based in Minnesota, learned the importance of this type of workplace decades ago. In 1948, the company's thought leader and business philosopher, William McKnight, introduced a policy known as the "15% rule," which allowed employees to devote 15% of their work time to explore and experiment with any project they chose. Since then, the 15% rule has led to many of the 22,000 patents that 3M has registered along with its leading products in the market, such as the well-known and profitable Post-It-Notes.

In 1950, Mervin Kelly of AT & T encouraged a test environment for innovation at Bell Labs, that reunited thinkers and doers under one single roof. He gathered a team of physicists, metallurgists and electrical engineers to work in difficult ways. Theoretical scientists worked side by side with the experimenters and the manufacturers. The result was a stream of inventions and innovations that changed the world: the transistor, the silicone solar cell, digital communication satellites, cellular telephony, and the 'C' and 'Unix' computer languages.

In the early 1970s, professors Ivan Sutherland and David Evans were already legends in the field of computer-generated graphics. They were pioneers in the fields of virtual reality, printer languages and virtual reality hardware. The Department of Computing at the University of Utah became a magnet for brilliant students, many of whom would later create important technologies and businesses: Ed Catmull, co-founder of Pixar; Alan Kay, who would later invent the Smalltalk language, that pioneered object-oriented programming; John Warnock, founder of Adobe Systems; and Jim Clark, founder of Silicon Graphics and Netscape. Sutherland and Evans had created an amazing "sandbox" for innovation. They gathered students with different interests and gave them a roof and computer access. With very little guidance, these students were allowed to develop what they were passionate about. This was where individual and collective creativity flourished and individual excellence was driven by passion. These joint achievements were the result of a wide range of thoughts and talents prevailing in that environment.

Lastly, ELs are models for others. Like Sutherland and Evans, they inspire new ways of thinking and acting, and in so doing, they encourage an entrepreneurial culture that fosters productive change and innovation from all those present. So, we can see how Ed Catmull was able to replicate the environment enjoyed by the IT Department of the UT, when he founded Pixar. Sergey Brin, Larry Page and

Eric Schmidt have done something very similar with Google.

ELs are born and made
To survive and prosper in the VUCAH world, the "Goliaths" of today´s marketplace need more entrepreneurial leaders, not only at the top, but at all levels. A single person in a corporation, a division, a department, or even a team of staff, cannot see or act on every opportunity that presents itself when it comes to driving innovation and positive change. You need many eyes, many ideas, and many daring spirits.

Sadly, EL's are scarce. Few academic programs teach students to navigate uncertainty and behave like entrepreneurs. Most business schools produce risk managers who are good at 'running trains on schedule' but do little to extend the tracks into unexplored territory. Some people are lucky enough to be born with the skills and characteristics of an EL, but most are not. An EL´s capabilities must be, for the most part, developed and cultivated.

The good news is that large companies are eager to develop the entrepreneurial talents of their employees. And despite what many believe, entrepreneurial leadership can be taught through practical projects for creating new businesses.

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Entrepreneurial Leaders inspire **people to adopt new ways of thinking and doing.**