

# **The Uplifting Power of Human Interaction**

**Garry Jacobs**

President and CEO, World Academy of Art & Science;  
Chairman of the Board and CEO, World University Consortium

**Janani Ramanathan,**

Fellow, World Academy of Art & Science  
Senior Research Associate, The Mother's Service Society, India

## **Creative Sparks**

Just as striking two flints together creates a spark, bringing together two or more ideas, objects, or people is a creative act. When two ideas are connected together, thought is born. Every progressive step in human development has been a result of making these connections. Early humans began by making elementary connections. They connected the sky with rain, plants and animals with food, the sun with light and warmth. This helped them survive. They concatenated different sounds to symbolize objects, thoughts, acts and feelings, and thus language was born. They devised corresponding written symbols for the spoken language, and writing came to be. With more advanced powers of thinking and the ability to communicate with others using language, they started making more complex connections. Climate was connected with seasons and good health was found to correspond with hygiene. The seed, soil, sun and water were understood as essential for agriculture. The physical act of impregnation was discovered as the cause for childbirth ten months later. The advantages of hunting in groups and belonging to a community were seen. With greater personal and communal interconnections, humans developed far more complex mental faculties, related cause and effect, and thus civilization developed.

## **The Parts and the Whole**

When one becomes conscious of connections and sees potential relationships between things, great discoveries are made. Newton made such a connection between the fall of an apple and the gravitational pull of the earth. He related a seemingly insignificant event in his personal life with a phenomenon of cosmic proportions and discovered a physical law of the universe. Until Newton, it was thought that an object at rest and an object in motion were two different phenomena. His laws of motion explained that the same principles are active in cases of both inertia and movement. When Einstein discovered the relationship between Matter and Energy, and Space and Time, when Maxwell related electricity and magnetism which were believed to be independent phenomena and reconciled them to discover electromagnetism, they were making these connections at the level of thought. Creativity is an act of becoming conscious.

Technical advancement too has historically resulted by the same method at the physical level. The ancient Scythians combined the foot soldier and the work horse to produce a mounted cavalry that enabled them to sweep over Greece and other countries that did not know the technique of horse riding. The technique of preserving food in bottles gave Napoleon's army great mobility and a strategic advantage over opponents who were dependent on provisions supplied constantly from behind the lines. Boats and the power of steam together allowed global sea trade. The combination of the horse carriage and the motor created automobiles. When the television screen, typewriter and silicon chip were linked, it resulted in the power of the computer. When the computer was linked to the telephone, it created the internet that has the power to impact all of humanity.

In this way, two or more forces combined rightly generate a power that is far greater than the sum of their parts. When salt, glucose and water are mixed together in a certain proportion, they constitute a simple but highly effective cure for dehydration caused by diarrhoea. This oral rehydration that was the remedy for an ailment that killed some 5 to 8 million children in developing countries was hailed as potentially the

most important medical advance of the 20<sup>th</sup> century. It saw mortality rate due to diarrhoea drop by 40% in India alone. Such a combination of three ordinary substances combined generates a power that none of them possesses alone. But the greatest combination of all is not the combination of ideas or objects, but of people.

### **Old and New Silk Roads**

The Silk Road may have been developed as a network of trade routes connecting regions in Asia, Africa and Europe. But it was not just Chinese silk, south Asian spices, Persian dry fruits, African glassware or European pottery that passed along the route. Ideas, religions, languages, syncretic philosophies, art, science and technology were transmitted. Economic, political, religious and cultural interactions between peoples resulted in faster and greater development of all regions. From before the time of the Silk Road upto the current period of the Belt and Road Initiative, the impact of human interaction has been the same – creative, inspirational and potentially mutually beneficial.

It took the combination of very different personalities - Churchill, Stalin and Roosevelt to win the Second World War; and Gorbachev, Kohl and Reagan to ease Cold War tensions. When different people come together, they bring with them different characteristics, skills and perspectives. The greater the diversity in the group and its characteristics, the greater the collective creative potential. This is also true for cultures. When Nixon went to China, a capitalist country and a communist country dedicated to opposite philosophies found a way to reconcile and initiate mutually beneficial trade. This uplifted hundreds of millions of people and changed the development climate of the world.

Buddhism and the Indo-Arabic numerals took centuries to spread along the Silk Road. But today, the speed of dissemination of ideas has been accelerating with the invention of the printing press, faster travel, improved communications and recently instantaneous transmission of multimedia. American Henry David Thoreau described Civil Disobedience as a means of protest. Half-way across the globe, Mahatma Gandhi

was inspired to use the idea to gain India independence from its colonial ruler. Martin Luther King Jr. was inspired by Thoreau and Gandhi to launch the Civil Rights movement in the US. Nelson Mandela took inspiration from Gandhi to fight for the end of Apartheid in South Africa. Protestors during the Arab Spring took lessons from King Jr.'s methods. Malala Yousafzai invoked Gandhi when she advocated girls' education in Pakistan. Ideas travel across the world today at the speed of thought.

Within a decade after India obtained independence, a dozen Asian and African colonies followed and became free. When Norman Borlaug developed hybrid seeds in America, and India adopted it to usher in Green Revolution, several African and Asian countries followed the example and created similar food surplus. The exchange of information and ideas today inspires and enables the replication of success in several places worldwide.

Be it in politics, civil rights, sports or entertainment, the dynamic of collaboration is unmatched. There are few top football teams in Europe that consist only of Europeans, most are made up of talented players from around the world. When Bjorn Borg and John McEnroe, or Martina Navratilova and Chris Evert met on the tennis court, they created a dynamic that thrilled fans regardless of their loyalty. It took Simon and Garfunkel or Paul McCartney and John Lennon to come together to create musical history.

### **Successful Partnerships and Corporations**

Global entertainment received another great fillip when four brothers came together and founded Warner Brothers, the famous motion-picture studio. Human flight was made possible another time brothers Wilbur and Orville Wright got together. Several other combinations have resulted in famous successes - Procter & Gamble, Hewlett Packard, even Ben and Jerry's! Larry Page and Sergey Brin together have given us the informational solution to all questions, Google. A modern-day classic in partnerships is the story of Apple Inc.

Steve Wozniak was the technical brain behind Apple's engineering marvels. But he had neither the interest nor the inclination to communicate, market, or make profit from his genius. It was the other Steve who gave the brand its appeal. Steve Jobs was not an engineer or a technical person. His genius was his ability to keep a pulse on the rising aspirations of society. He understood that most people were still afraid of the machine taking over the world and subjugating humans, and the intelligent machines - the computers - posed a risk to society. He branded the Apple computer, and the several hand-held devices that followed, as tools that would serve instead of subjugate. He marketed his products as utilities that empowered people. He packaged what was seen earlier as an intimidating machine as a status symbol. The technical genius of one man and the marketing genius of the other combined to create powerful and beautiful machines that serve us. Combining the complementary capabilities of Jobs and Wozniak gave birth to what would eventually become one of the most valuable companies in the history of the world.

Collaboration is an attitude and a value. It is an attitude when it is at the individual level. It becomes a corporate value when it is institutionalized in the organization. Jobs is often credited for innovation, but the spirit of what Jobs and Wozniak started personally has now become a part of Apple Inc. The Apple culture is one of creativity and innovation, the founders' leading characteristic has passed on to the company and become institutionalized. It continues to innovate and has recently taken up socially responsible initiatives, by introducing technology education in schools, bringing gender and race equality in the workplace, taking responsibility for sustainable practices throughout its supply chain and supporting philanthropic causes. In the measure that what the individual does is institutionalized in the company, it becomes a corporate value.

When more people are added to the equation, and can harmoniously fit in, as they did in the case of Sears, Roebuck and Company, collaboration raises one to the greatest heights.

A former railway station master named Richard Sears founded a mail-order business in Chicago in 1893 after he recognized that rural America offered a vast market. With little knowledge of business, finance and systematic operations, he tapped into the market with his marketing flair. Julius Rosenwald who joined the company recognized the need to be reliable in order to win the confidence of conservative rural folk and retain the market once it is captured. He introduced clear, factual descriptions of each product in the Sears catalog, and established the policy "Satisfaction Guaranteed or Your Money Back" in 1895. This policy that was based on the values of trust and reliability was highly instrumental in the growth of the fledgling mail-order business into one of the largest retailers in the world. To Sears' flair for marketing and Rosenwald's high ethical standards and keen insight into the needs of the market was added the mastery of operating systems in Otto Doering. Doering added the moving assembly line into retail operations, and the confluence of these three stars created an alchemy that resulted in a 23-fold growth of the company over twenty years.

Each man introduced an innovation and added a unique value to the group. Sears used a new delivery system to reach the customer with mail order catalogues. Rosenwald brought the values of trust and reliability, a psychological innovation. Doering brought in efficient logistics. Later, they were joined by Robert Wood who related all of these with the changing development of society – the rapid spread of automobiles and spreading of people from urban to suburban areas. Wood started large retail stores in suburban markets and malls, attracting the growing American population that was settling down farther and farther from the cities thanks to their new cars. These four different phenomena collaborating in space and time created the greatest retailer in the world for eight decades.

### **The Power of Organization**

The secret behind the success of collaboration is the power of organization. The greatest invention of humanity is not the wheel, steam engine, transportation, communication or the internet. It is the deceptively humble organization. Organization

is integral to all growth and success. People with energy and motivation need an organization to channelize their capacities towards accomplishing a goal. Energy is the source of productivity and the driving force of all growth. But it is the starting point, by itself it is not enough. Motivation can give direction, but it cannot fully utilize the full potential of everyone. In order for a group of people, family, community, company or any organization to function at its most collaborative best, it needs organization. An organization, with clearly defined qualitative and quantitative goals and systems that facilitate achievement of these goals is like the hydroelectric plant that converts the force of the waters of a raging river into usable electric power.

A child can be full of energy, but much of it is spent in constant movement and activity without accomplishing anything. A person without a direction or purpose can meander through the day or even an entire lifetime without achieving anything. Even according to the laws of Physics, it is when energy is given a specific direction that it becomes a force capable of accomplishing work. But direction is still not enough. A mob may have a high level of energy and a clear purpose. But it is generally not effective in any productive task. Just as in Physics a force must act through an instrument in order to accomplish work, directed energy must be channelled through an organization to become a productive power. This is achieved by the structure and systems of an organization. Then the skills, capacities and creativity in people are transformed into creative power.

A good organization, be it at the level of a family or a multi-national corporation, designs efficient systems and procedures. It clearly defines levels of authority and responsibility. It sets rules and minimum standards for people and their work. It distributes energy and resources throughout its operations and focuses them at those points where they are most needed. It optimally unites people's skills, authority, responsibilities and their shared goal. Archimedes once said, "If you give me a lever that is long enough and a fulcrum to rest it upon, I can lift the earth." Organization does this task of the fulcrum and the lever. It enables every individual to extend himself or herself infinitely over space and time, to perform actions and accomplish work on a scale impossible for any

number of people working separately. The better the organization, the better the synergy, coordination and integration of its people, activities and systems, and the greater the productive capacity of every individual.

### **Getting a Man on the Moon**

It required 400,000 people to collaborate on NASA's Apollo 11 mission before Neil Armstrong could make his statement about *One small step for man - one giant leap for mankind*. Engineers, scientists and technicians worked with systems and subsystems in an effort to accomplish something never done before, sending a man to the moon. It required the collective capacities, knowledge and experience of a large number of people, and perfect coordination among this vast network. NASA's civil service rolls grew three and a half times between 1960 and 1966, to reach 36,000 people. NASA also decided to rely on outside researchers and technicians. The number of these contract employees increased tenfold between 1960 and 1965, to reach over 370,000 people. These included people from private industries, research institutions, civil service, universities and the military forces. Among these were individualists who had to get accustomed to regimentation. Scientists had to mind the budget and not get carried away by their passion for research. Engineers had to deal with bureaucracy. NASA had the formidable task of melding all the disparate individual and institutional cultures and approaches into a unified organization moving towards a shared goal. The NASA leadership generally viewed the pluralism as a positive force and was able to work out a balance. Not just the work, even communication between the various stakeholders needed perfect coordination. It was the collective technical capability along with the management of complex structures and systems that helped humans reach the moon. NASA Administrator from 1961 to 1968, James E. Webb believed that Apollo 11 was more a management exercise than anything else. Five hundred contractors were working on the small and large aspects of Apollo 11. Five different companies built six individual spacecrafts for the mission, consisting of around five and a half million parts.

Collaboration brings the best of each group to the mission. There is also an emotional angle when people meet. The Apollo programme manager George Müller who had to manage the vast pyramid of organizations and people used the psychological impact of collaboration as well. He sent each astronaut selected for the moon mission to visit the factories making the parts. Each astronaut was a national hero, and his personal visit and interaction with the factory workers not only motivated the workers to give their best, it also made them feel responsible for the astronaut's safety. A single technical glitch on their part could kill the man they had met personally – this compelled each of these thousands of people involved to devote their all to the Apollo 11 mission.

Fifty years later, technology has pervaded every aspect of our lives. Technology combines with every existing system today, making it more powerful. Great businesses have resulted by combining existing models with technology, such as:

Automobiles + GPS = App-based transportation services

Music + Internet = Music streaming services

Stores + Website = Online retail

Hotels + Aggregator sites = Online travel booking

Teachers + Communication technology = Online tutoring

Classroom + Video recording + Internet = Massive Open Online Courses

The more and more we are able to collaborate, and the more disparate the individual systems we combine, the more powerful and creative the product.

### **Contradictions are Complements**

The meeting of two people or forces has enormous scope for tension and conflict. But it is at these points of contradiction that there is enormous scope for creativity as well. Reconciling contradictions gives birth to truths. It is only when we come into contact with people with different perspectives and priorities than our own that our perspectives widen. The difference between our way of viewing reality and what is

presented by a situation, a person, a viewpoint or by a culture are opportunities for creative thinking and action. Be it contradictory ideas, opposing theories or people with differing views, when we try to relate and harmonize two opposites, what results is creativity and innovation.

### **Perfecting Organization through Values**

People can work together only when a certain minimum standard is maintained, in appearance, manners, behaviour and character, by everyone. A certain level of work quality, ethics, harmony, integrity, patience and self-giving become necessary for teamwork. In this way, collaboration necessitates positive values. Values are essential for sustained success at any level, in any field. They are spiritual skills that cap physical, organizational and psychological skills.

Goals coordinate intentions. Organization coordinates action. Values are the ultimate instrument for the coordination of attitudes. Values effectively and creatively organize the concept of perfection that we strive for. When this uniquely human quality of positive values is combined to the productive power of organized human capital, we collectively become a limitless reservoir of creative power.

## **GARRY JACOBS**



Garry Jacobs is President and CEO of the World Academy of Art & Science (USA), an international think-tank founded in 1960 by eminent scientists and intellectuals working on strategies to accelerate sustainable and equitable global development. For over forty years, Jacobs has been engaged in research in social development, employment, education, psychology, human-centred Economics, organizational theory and management strategies. He is also a management consultant

and partner since 1987 in Mira International, a consulting firm providing management guidance to firms in a wide range of industries in the USA, Europe and India. The integrating theme in Jacobs' work is consciously applying the process of growth and development as it expresses at the level of the individual, organization, nation and the global community.

He is author of hundreds of articles on economics, business and global affairs and co-author of two business books on the process of corporate growth, a book on Indian development and a novel on spirituality and business. He is also the Chairman of the Board of World University Consortium (USA); Vice-President of Mother's Service Society, an educational and social science research institute in India; Distinguished Professor of Interdisciplinary Studies at the Person-Centered Approach Institute, Italy and an international member of the Club of Rome