

THREE VISIONARY WOMAN

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Abstract-

Women are increasingly occupying corner offices at technological organizations, indicating the enhanced encouraging policies for hiring of women employees. The present paper discusses the three inspiring women in technology, their passion for work, excellence on the job and the change they have brought taking them to the top of their game.

Keywords- *technology, inspiring, passion, woman power*

I INTRODUCTION

Women are the backbone of every society. The abundance of patience and wisdom in a woman makes her the ideal candidate to lead technological as well as cultural revolution. They are the leaders and esteemed contributing members of technological field [1]. The women lead in partnership with men in a way that springs from the true feminine: embodied, dynamic, and balanced.

Women have distinguished themselves in various fields of life as politicians, scholars, statesmen, orators, parliamentarians, engineers, doctors, judges, diplomats and ambassadors [2]. It is now a well established fact that women are more intelligent, hard-working, efficient and painstaking than men in every walk of life.

Women's empowerment through science and technology has the potential to enable them to realize their potential and determination to shape their life in accordance with their aspirations, and also to strengthen the advancement of science and wealth accumulation. However realization of this potential is challenged by many variables [3, 4, 5]. Empowerment is the core element of human development, and human development is a process of enlarging people's choices. Therefore, women empowerment is a process that involves changes over a period of time that widens the choices available to women while fully realizing their potential.

Science and technology, being the major drives of development, provide a window of opportunity for women to influence the

development process through participation in the advancement and application of the knowledge. Greater involvement of women in science and technology is of a vital interest for the society at large.

The world technology has always been very competitive, fast-paced and male dominated. But the equation is changing with time as a lot of women can be seen making a top level show at the top levels in tech world. There are many female personalities who have made their way up to the great positions. This paper discusses the three powerful women in science and technology who have crossed all barriers to reach to the top of their game. Through their lives they prove that there are no ceilings or limits for anyone-including women- to thrive in their dream job and career.

II SUCCESS AND INNOVATION

Kalpana Chawla epitomizes strength, struggle, dedication, hard work and success. The first Indian American astronaut and the first Indian woman in space, Kalpana Chawla was born on July 1, 1961 in Karnal, India. Her parent's names were Banarasi Lal Chawla and Sanjyothi Chawla.

Kalpana completed her Bachelor of Engineering in Aeronautical Engineering at Punjab Engineering College, Chandigarh in 1982. She moved to the United States in 1982 and obtained M.S. degree in Aerospace Engineering from the University of Texas at Arlington in 1984. She earned a second M.S. degree in 1986 and Ph.D. in Aerospace Engineering in 1988 from the

University of Colorado at Boulder.

That same year she began working for NASA's Ames Research Centre. She became a USA citizen and married Jean Pierre Harrison, a freelance flying instructor [6].

Dr. Chawla entered NASA's astronaut program in 1994 and was selected for flight in 1996. Chawla's first mission to space began on Nov 19, 1997 as part of the six astronaut crew that flew the Space Shuttle Columbia Flight STS-87. Chawla was the first Indian born woman in space, as well as the first Indian-American in space. She was the second person from India to fly into space after cosmonaut Rakesh Sharma who went into space in 1984 in a soviet spacecraft. On her first mission Chawla travelled over 10.4 million miles in 252 orbits of the earth, logging more than 372 hours in space [7].

In 2000, she was selected for her second flight as part of the crew of STS-107. This mission was repeatedly delayed due to scheduling conflicts and technical problems. On January 16, 2003 Chawla finally returned to space aboard Columbia on the ill-fated STS-107 mission over the course of the 16 -day flight. The crew completed more than 80 experiments. On the morning of Feb 1, 2003, the space shuttle returned to Earth, intending to land at Kennedy Space Centre. At launch, a briefcase-sized piece of insulation had broken off and damaged the thermal protection system of the shuttle's wing, the shield that protects it from heat during re-entry. As the shuttle passed through the atmosphere, hot gas streaming into the wing caused it to break up. The unstable craft rolled and bucked, pitching the astronauts about less than a minute passed, before the ship depressurized, killing the entire crew of seven. The shuttle broke up over Texas and Louisiana before plunging into the ground.

Kalpana's achievement is awe-inspiring. For millions of young women, Kalpana Chawla, is a girl from a small town who touched the skies, and became an inspiration. In a message that she sent from space shuttle Columbia, Kalpana said, "The path from dreams to success does exist. May you have vision to find it, the courage to get into it, the perseverance to follow

it". Kalpana through her life has proved that there aren't any shortcuts to the stars (literally and figuratively) without perseverance. She had demonstrated what women are capable of, what each and every woman can attain with determination and dedication. She always believed in the power of women. Her example inspires women to believe in themselves set up high goals and strive hard to attain them [8, 9]. Kalpana dared to dream big and had the self-belief to chase that dream. She chased it half way across the globe, caught up with it and then, lived it.

Chawla was modest about her accomplishments. She always insisted that one should do the things of one's interest because it makes one passionate and zealous towards that work. She was known for her extraordinary kindness and for strive for perfection. She had a terrific sense of humor and flying was her passion. She was beyond doubt a person with a peculiar independence of mind, strong determination and great will power.

Her message to women: Do something because you really want to do it. So even if it is a goal which is not necessarily within reach-it may be something which only a handful can do-but if you really like what you do, then you've never really lost anything. But if you're doing it just for the goal and don't enjoy the path, then you're cheating yourself.

III PROVIDING LEADERSHIP

As a Chief Technological Officer, Padmasree Warrior defines CISCO's technology strategy and drives innovation across the company, working closely with the senior executive team and Board of Directors. As Senior Vice President and General Manager of the Enterprise, Commercial and Small Business group, Warrior sets the vision and strategy for her organization's strategic priorities.

Warrior was born in 1961 and raised in the city of Vijayawada in the southern state of Andhra Pradesh. She received bachelor's degree in Chemical Engineering from Indian Institute of Technology, Delhi in 1982. She completed her M.S. in Chemical Engineering from Cornell

University in 1984. In 2007, she was awarded an honorary Doctorate of Engineering from New York's Polytechnic University. She is married to Mohandas Warrior and has an eight year old son Karna [10].

She is the 11th Most Influential Global Indian, recognized internationally as the thought leader who shaped the industry vision of "seamless mobility" for next generation communications. She is deemed as "Sharp as a RAZR" by the Chicago Sun Times, a "Rising Star" by Fortune Magazine, and "100 Most Creative People in Business" by Fast Company Magazine. In 2001, she was one of six women nationwide selected in US to receive the "Women Elevating Science and Technology" award from Working Woman magazine. In 2007, she was inducted into the Women in Information Technology International Hall of Fame.

Warrior's energetic, approachable and pragmatic leadership style integrates ideas from diverse sources, which include engineers, sociologists, technologists, marketers, policy experts, and others. Throughout her career, she has earned a reputation for establishing processes that tap a rich diversity of technical, business, and entrepreneurial IQ knowledge to nurture disruptive and breakthrough innovations, speed development time to market, and improve the way people work, live, play and learn.

Warrior serves on the boards of Chicago's Joffrey Ballet and Museum of Science and Industry, the Singapore Agency for Science, Technology and Research, Chicago Mayor's Technology Council, Cornell University Engineering Council and advisory council of Indian Institute of Technology [11, 12].

Padmasree Warrior is a woman of the engineering world. She is an inspiration for women, minorities and anyone having doubt on the possibility of achieving his goals. According to her: the key to success is "Think Big and Act Fast: A vision without a plan is just a dream".

Warrior's message to women in Technology: Be an expert in your field, know your stuff! Develop a clear, concise and distinctive communication style. Surround yourself with

giants - don't be intimidated by brilliance from others, leverage it. Lead with femininity and grace - you don't have to be "one of the boys" to be recognized as a strong leader. Be professional and always treat people with respect. Be well organized in how you deliver and be thorough in what you do. Take charge of your career. Don't wait for the perfect opportunity to land in your lap--search for it with passion and daring. Leadership is the ability to take people elsewhere. Lead with humility. Humility does not mean that one thinks less of oneself; it means that one thinks of oneself less.

IV MAKING AN IMPACT

An Indo- American astronaut and a United States Navy officer who holds the record for the longest space flight by a Woman Commander of the US Navy and NASA astronaut, Sunita Williams- an icon for youth all over the world, shows that nothing is impossible. She epitomizes the spirit as 'the sky is not the limit'.

Williams was born on September 19, 1965 in Euclid, Ohio. Her parents are Dr. Deepak Pandya, neuroanatomist from Gujarat and Bonnie Pandya. She is of Slovenian descent from her mother's side. She has done Bachelor of Science degree in Physical Science from U.S. Naval Academy in 1987 Master of Science in Engineering Management from Florida Institute of Technology in 1995. She is married to Michael J. Williams.

Daughter of an Indo-American father from Gujarat and a Slovenian mother, William is the second woman of Indian heritage to have been selected by NASA for a space mission after Kalpana Chawla and the second astronaut of Slovenian heritage after Ronald M. Sega.

Expedition 14/15 (December 9, 2006 to June 22, 2007): Williams was launched with the crew of STS-116 on December 9, 2006, docking with the International Space Station on December 11, 2006. As a member of the Expedition 14 crew, William served as Flight Engineer. While onboard, she established a world record for females with four spacewalks totaling 29 hours and 17 minutes of Extravehicular Activity (EVA). (Astronaut Peggy Whitson

subsequently broke the record in 2008 with a total of five spacewalks). On April 16, 2007, she ran the first marathon by an astronaut in orbit. Williams concluded her tour of duty as a member of the Expedition 15 crew returning to Earth with the STS-117 crew to land at Edwards Air Force Base, California on June 22, 2007.

Expedition 32/33 (July 14 to November 18, 2012): Williams was launched from the Baikonur Cosmodrome in Kazakhstan, along with Russian Soyuz commander Yuri Malenchenko and Flight Engineer Akihiko Hoshide of the Japan Aerospace Exploration Agency, on July 14, 2012. Williams spent four months conducting research and exploration aboard the orbiting laboratory. She landed in Kazakhstan on November 18, 2012, after spending 127 days in space. With 50 hours and 40 minutes, Williams once again holds the record for the total cumulative spacewalk time by a female astronaut. In addition, Williams, who has spent a total of 322 days in space on two missions, now ranks sixth on the all-time U.S. endurance list, and second all-time for a woman. Among the personal items Williams took with her to the International Space Station (ISS) are a copy of the Bhagavad Gita, a small figurine of Ganesha and some samosas [13].

Williams is a lady of firm decision, continuous hard work and struggle. She has proved that Indian brain have no alternative and is a mine of talents. She has proven that women may be weak physically to an extent but their nerves are as strong as steel. She is a real model for all those women who make themselves weak by being slaves to their weak mental strength. She believes in- when mind is strong, the body will follow, and when the mind is weak, the body will wither away.

Williams's message: "Get involved, try to be part of it, open up new doors and new opportunities. Women can do everything if they believe they can.

V Conclusion

The achievements of women luminaries in several fields of human endeavor have demonstrated the tremendous potential hidden in womanhood beyond all doubt. The

performances of woman in their respective fields are more shining and brighter than those of men. Certainly the future is with women as the past had been with men. The time is not far off when the birth of a girl will be an occasion for mirth and merriment in the household than that of a boy. Excellence in every field of life is no longer a man's preserve. Woman power is asserting itself surely and expeditiously.

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