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the magazine of military veterans in the corporate

INSIDE

Interview with a Military Historian
ForceNetPreneur

Author of the Month

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Data Science as a Career

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Book Review



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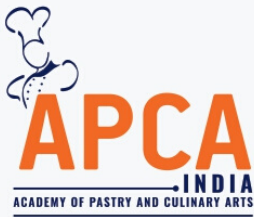
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From the Editor

Dear Reader,

I am sure that the threat of the corona virus, has not forced you into a state of inertia.

Challenges are what make life interesting, and worth living. They also force us to reinvent ourselves, lest we end with the loser tag. A similar situation prevails for those in the process of transition from uniformed life to Corporate, or those who have already transitioned. It is an ever ongoing process, and not a one or two step activity.

Change means, and involves reinvention. Reinvention is a big word for a reason, as it implies, *'The action or process through which something is changed so much that it appears to be entirely new'*. Each time a major shift happens in our lives, we have to choose who we want to become, or risk never reaching our full potential. Becoming entirely new is a big deal and the process begins with being prepared to start again. However, we always forget that we have to deliberately 'choose' reinvention as only then we can decide on our new path with a focussed foresight.

If you truly want to reinvent yourself, you need to be patient enough with just how long it is going to take. While no one can tell you exactly how long, it is going to take some time and probably longer than you expect. The time it takes to reinvent yourself is actually dependent on how much you are willing to learn in the process, and accept that you are responsible for everything that happens in your life.

Nothing worth doing, including the act of reinvention, happens in a flash. It takes blood, sweat, tears, and a real commitment that you are not prepared to break, no matter how tough it gets. There is no shortcut to reinvention other than the process itself. Recall, "When the going gets tough, the tough get going".

All that is required is that you convince yourself that there is nothing that can hold you back from being the person you always imagined you could be. The only thing which can stop you in your tracks, is the reflection when you stand in front of a mirror. So, decide who you are going to be, and mould yourself into that image. Define who you are and make sure everyone knows, and then prove it. Be convinced, that we at Forces Network are eagerly waiting to hear that.

Till we meet again next month, take care, stay safe, and keep reinventing.

Cheers to Forces Network - the Network that Works!!!

Regards,
Lt Col Ranvir Singh

Interaction

Tete-a-tete with a Military Historian

BY IQAL SINGH

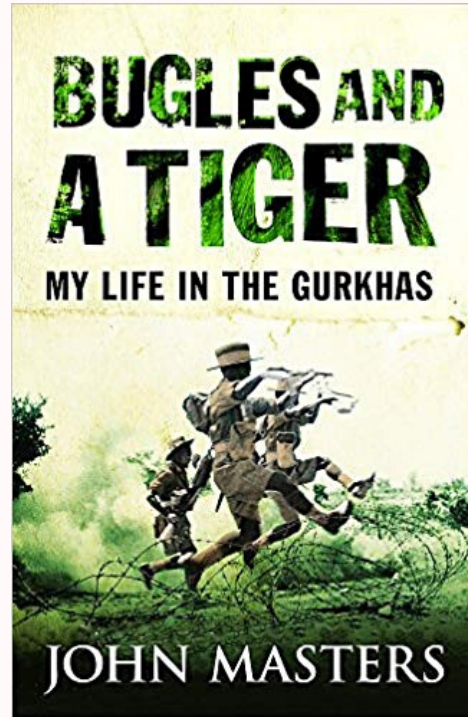
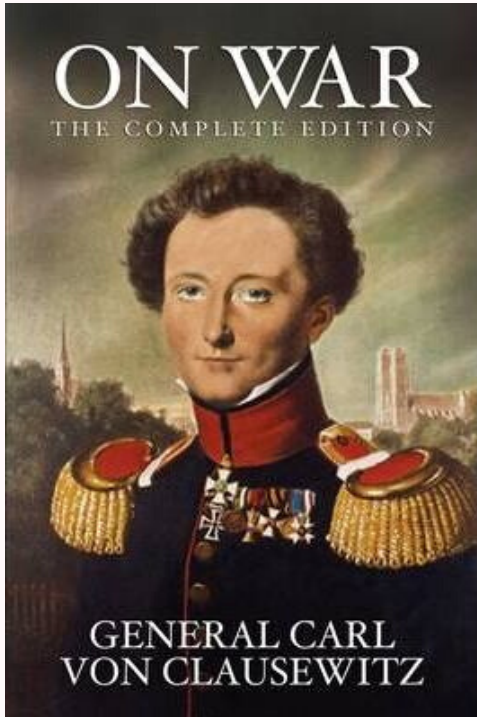
Mandeep Singh Bajwa is a well known military historian and military columnist. He is also the Director of the Military Literature Festival (<https://bit.ly/2x4EowA>). Despite never having himself served in the military his knowledge of military history is truly astounding and deep. His LinkedIn profile can be accessed at <https://bit.ly/32RmeKt>. Iqbal Singh met him at Chandigarh, and had an enriching interaction with him.



IQ: Tell us about your childhood, upbringing and early years as a professional?

MSB: I was born in an Army officer's family, at Jalandhar, My father was the late Maj Gen Kuldip Singh Bajwa. At the time I was born, he was serving with 13 Field Regiment. I got the opportunity to travel across the length and breadth of the country with my father. In 1967 my father was posted at Calcutta, I was fond of reading and had got a bit bored reading the usual Enid Blytons, Hardy Boys and the Biggles books. It was then that my father introduced me to his personal military library - a veritable treasure trove of nearly 2500 books.

The first book that I read was the classic on strategy '**On War**' authored by the famed nineteenth-century military strategist Carl von Clausewitz. It was a bit heavy for a boy of nine but the second book that I accessed from my father's library left me with a lifelong taste for military literature. This was the first book in John Master's autobiographical trilogy '**Bugles and a Tiger**' (the latter ones being '**The Road Past Mandalay**' and '**In the Pilgrim Son**'). This has some claim to be considered his magnum opus, covering the zenith of the British Raj in the 30s, also a period of political and social upheaval in India marked by the freedom movement. This book got me hooked to military subjects.



My father now introduced me to the HQ Eastern Command Library which had a large collection of WW-II books. My passion grew even further. In 1970, I joined Mayo College, Ajmer. I passed out in 1975 finishing college at Chandigarh in 1979. Then I ran a fertilizer agency, dabbled in agriculture, also tried my hand at running a pharmaceutical business. However, I realized that I lack business acumen and financial training. Thus, I took up my first love - writing and military research.

IQ: What exactly attracted you to military history, and what is it that which fascinates you the most?

MSB: While reading stories of various battles and valour I was fascinated by the camaraderie of the military. The military personnel stand apart, their work ethic is different, their commitment is unquestionable, and they are highly efficient. I remember, in 1989 while I was on tour of Kashmir on my jeep, at one time my jeep got stuck by the roadside, Militancy in the Valley was on the brink of starting, I was then helped by two Jawans of 11 RAJ RIF after I identified myself. It so happened that this unit had been part of my father's formation many years ago. An officer came and helped me, and hosted me for tea as well. These are memories which I still cherish. In fact, the MLF is organized to a large extent by volunteers, in which a large percentage are veterans. I am truly impressed with their devotion to duty and their work ethic.

IQ: Did you ever feel like joining the Army?

MSB: Yes, of course I was even selected for the NDA, IMA and even the TA, however I was medically unable to make it because of my eyesight. However, becoming a military historian allowed me to contribute in my own way. Even today many people think that I am a retired Colonel, some call me a retired Brigadier, and some even a retired General! (laughs...)

IQ: Do you think that not having served in the military helped you in any way as a military historian?

MSB: I think so. Since I was bereft of any regimental or other affiliations, I was able to view events objectively, bereft of any emotions and base my analysis accordingly. That allowed me to be more data driven.

IQ: Do you think that becoming a military historian can be a good vocation for veterans?

MSB: While becoming a military historian can be a satisfying career option, it may not be very rewarding in terms of financial remuneration. Only 0.5 % military historians are doing very well in monetary compensation terms. Indian TV channels, book publishers or the print media do not compensate well. However, internationally this career is much more financially rewarding. I have done 25 projects with the BBC and also some international short films, and they are quite rewarding.

IQ: The Military Literature Festival (MLF) is a beautifully conceived and brilliantly executed event. Can you take us through the planning and the preparation that goes on behind the scenes?

MSB: Oh! yes, there is a lot of planning and toil behind the MLF. Just to give you an idea of the preparation, the day MLF 2019 ended the very next day our team met to take stock of the event's feedback, lessons learnt and commenced planning for the MLF 2020. As regards the formal structure of the MLF Organizing Team, we have two Patrons-in-Chief i.e. the CM and the Governor of Punjab. MLF is a registered association as a SPV- Special Purpose Vehicle. The Chairman is Lt Gen TS Shergill, Vice Chairman is Lt Gen Chetinder Singh, and Maj Gen TPS Waraich being the General Secretary. Then we have coordinators which include me, Maj RS (Lally) Virk, Col PS (Parry) Grewal and Capt Amarjeet Bhattal. Then we have OICs for various events like wreath laying, Brave Hearts Ride, and venues. We also have Masters of Ceremony and Stage Secretaries. Now MLF is an established brand. We have reps now in Delhi and Mumbai as well.

MLF is organized largely by the volunteers who come from nearby schools like YPS (students and teachers), NCC, serving employees of Punjab government, and also a large number of military veterans. These volunteers are not paid anything including reimbursements for fuel, transportation, etc. yet they give their 100 % and are the real heroes behind the success of MLF. I would like to place on record the appreciation for all volunteers including the veterans. They commit and deliver. Most importantly, we're lucky to have General TS Shergill as our Chairman. He has a real vision; his dynamism motivates everyone and his knowledge of history and current affairs is truly inspiring!

IQ: In your experience what is it that makes the MLF panel discussions so engaging and deep?

MSB: We have already had three editions of the MLF. We have learnt several lessons.

Let me summarize a few of them, which are:

- Speaker/panellist selection is crucial. We really need very astute speakers who are not only knowledgeable but are also able to engage the audience. We deliberate a lot on selecting the right set of panellists. We like to get the best Subject Matter Experts (SMEs) from across the globe for the MLF. That has helped us maintain high levels of audience interest and appreciation. To quote an example, to speak on armour warfare during the Burma Campaign last year we invited two experts from the Tank Museum in the UK.
- The future of telling the story of military history is via the audio visual medium. This is our Chairman, General Shergill's view and readily accepted by everyone.
- The right mix of celebrities and SMEs is another important factor.
- We also include contemporary topics like the Balakot airstrike in 2019 or the surgical strikes in 2018.

IQ: What are the future plans for the MLF?

MSB: Yes, we have made several important decisions regarding that. Firstly, we have advanced the dates for the MLF 2020 from mid Dec to 20-22 Nov 2020, this will avoid the clash with the examination season thus encouraging more student participation. We also plan to have Bollywood participation in the MLF 2020. Capt Vikram Batra's biopic would have been released by then, Sidharth Malhotra who is the protagonist in the film is expected to be present in the MLF. We are also expecting to have the heroine of the film 'Gunjan Saxena: The Kargil Girl' (Trailer: <https://bit.ly/32NH3GQ>) Janhvi Kapoor to be present in this year's MLF. Dharmendra may also be present as one of the star attractions, and we may host his movie Haqeeqat as well.



We are in the process of signing a MOU with the USI to make them our Knowledge Partner. In the future we also plan to take MLF abroad especially to a destination in the Middle East.

MLF is now a brand, and all events this year will have MLF as a prefix like MLF Polo, MLF Shotgun, etc.

IQ: What do you think have been lessons from military history in the Indian context?

MSB: There are in fact several lessons that we can learn. I will share some of them.

- Technology: Keeping pace with technology in warfare is an extremely important imperative. One of the reasons for our loss in the First Battle of Panipat in 1526, was that the invading forces of Babur were equipped with artillery and we had no answer for that. In fact, it took some decades for Indian rulers and their armies to adopt artillery or the new combined arms doctrine in battle tactics

- Tactics: Battle tactics also must evolve continuously. In the Mughal Vs Rajput battles the Rajput Harawal (the advance guard) would make a bold dash to the enemy's centre. Over time this became a predictable pattern, their centre would give way and the Mughal armies would outflank them and attack from the rear. Predictability cannot win battles. Similar was the case with other Indian armies.

- Importance of Strategic Planning and Preparation: In 2021 we would celebrate 50 years of our 1971 victory. It has been India's only strategic victory in the past 10 centuries. In large measure sound strategic planning and preparation were the contributing factors in that victory.

IQ: What would you like your legacy to be?

MSB: As someone who contributed towards better understanding of military and national security matters and served the cause of national security. As well as somebody who contributed towards making MLF bigger, better and even perhaps taking it international. Also, would like to serve the society and military veterans to the best of my ability.

(Based on inputs shared by Mandeep Singh Bajwa with Iqbal Singh)

Stars of Forces Network

A Forces Network Star is a member of the Forces Network who has gone on to achieve glory in the his/her corporate/civilian avatar. The aim of this series is not just to celebrate our successes from the veteran community, which unfortunately we do not do enough, but also to inspire others. The ultimate goal is to set up a virtuous self-sustaining cycle of inspiration leading to more successes in turn inspiring many more.

BY BIDISHA PANDEY

Lt Col Mukesh Rao was commissioned into the 5th Bn The Sikh Regt of the Indian Army in March 1987. On completion of 21 years in service, he decided to go for the big switch and moved into the corporate world. Presently he heads the Lawful Interception and Monitoring operations for Reliance Jio Infocom Ltd. He has also spoken on subjects such as Digital Discipline and Digital Dieting at various forums.



Life in the Army

“Life as an officer in the Indian Army was both challenging and rewarding”, says Lt Col Rao. Interestingly, Lt Col Rao believes he has four birthdays. One was the day on which he was actually born and the remaining three are the products of his tenure in the Army where he faced near death situations. In 1989, Lt Col Rao was one of the fortunate three in the Indian Army expedition team, who managed to survive in a team of eight after summiting a virgin peak (Hathi Parbat, Garhwal Himalayas), and then got caught in a massive avalanche. The second incident was in 1995 when Lt Col Rao was posted in Siachen and suffered a severe High Altitude Pulmonary Oedema (HAPO) attack. The third time Lt Col Rao narrowly dodged death was when a grenade landed exactly three meters away from him, but turned out to be a faulty one and was diffused later.

The Corporate Switch

Lt Col Rao decided to change tracks after completing 21 years of service in 2007. He opted for premature retirement and proceeded to MDI Gurgaon for the Business Management pre-release course. He was offered jobs by DLF, HCL and Satyam but ultimately joined Vodafone (then Hutch) in 2007 as DGM (Nodal and Admin) for

Maharashtra and Goa Area. Based on his exemplary performance, he was offered the role of Regional Head (West) as the Vodafone Corporate Headquarters got restructured in 2010. Within 11 months, Lt Col Rao took over as the National Head, the Chief Nodal Officer for Regulatory Compliance and Physical Security. Later, in 2015, he joined Reliance Jio Infocom Ltd as the Head of Lawful Interception and Monitoring Operations.

LIM Operations

As per the mandate issued by Government of India, every telecom company is supposed to have a Lawful Interception and Monitoring division that supports law enforcement agencies to investigate cases. Lt Col Rao explains that this department in any telecom agency is very crucial as 98% of the crimes are solved using phone data in today's era. As the head of LIM operations in Jio, the head of every State reports to him on matters pertaining to interception in their respective area. He set up this vertical from scratch and today it's a team of 90 Resources.

Parallel Interests

Apart from his regular job, Lt Col Rao has spoken on multiple forums regarding Digital Discipline and Digital Dieting. It is a challenge for the young generation to use technology to not only improve their quality of life but also its purpose. He educates the millennials on Social Media and its impact on privacy and confidentiality. Lt Col Rao also guides students regarding Campus to Corporate transition.

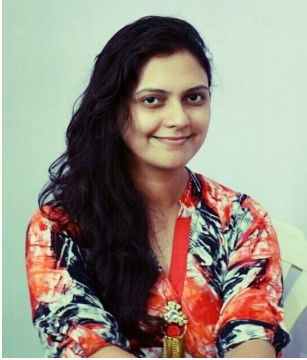
Family

He is happily married to Padmavathi, who works as a Volunteer with Kotak Education foundation, The couple has been blessed with two daughters. Megharanjani is a Lawyer and works for Shipping Litigation Law firm, and Manasi is a Journalist with First Post (Network 18). His family is his greatest strength and they are his driving force in all his endeavours.

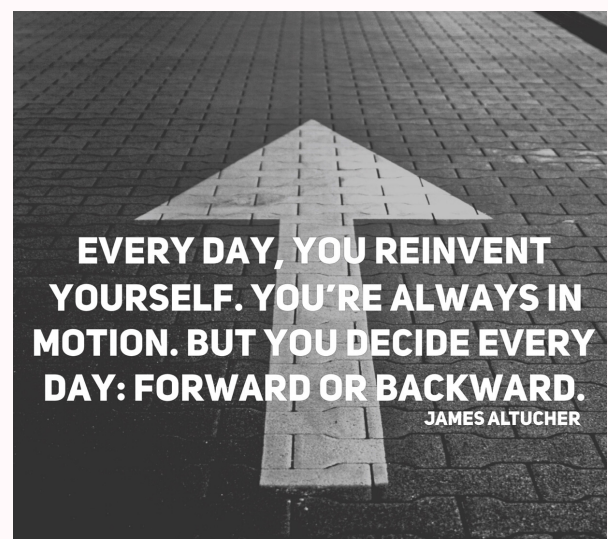
Advice to Fellow Officers

Lt Col Rao believes that the essence of a successful transition from the military to the corporate lies in knowing what to carry forward and what to change. Qualities like time management, uprightness, integrity, good dressing sense, confidence, excellent communication and leadership skills are expected from veterans and appreciated by everyone in the corporate. What needs to be learnt is that one needs to earn his/her authority by his/her attitude, impression and impact. Respect needs to come from within and is not something that can be forced. Secondly, being digitally savvy is not an option. The sooner we accept it and work towards it, the better.

Regarding pre-release courses, Lt Col Rao says that these courses do not guarantee placements, but they do teach you corporate terminology and fundamentals of business, which definitely helps, specially the Short Service Commissioned officers.



Bidisha Pandey is a blogger who believes every individual has a story and a lot can be learnt from every story. More stories and interviews by her can be read on her blog site www.sassyweekender.com



ForceNetPreneurs

In this series we plan to showcase a few entrepreneur members of Forces Network who have achieved a reasonable degree of success in their business ventures. The aim being to celebrate their success as also to learn from them with a view to motivating more amongst our community to take up entrepreneurship as a full time vocation. Finally - we do need job creators in greater numbers than job seekers.

BY RANVIR SINGH

Maj Vikrant Gulani, after his five years of service in the Army, did his post graduation in management from XLRI Jamshedpur. After working for a short while with an event management company, he dived in to start his own MICE venture assisted by two partners. Thus, iCON Planners was born, where Vikrant is the Head of Commercials and Operations. As one of the niche incentive and conference management companies, iCON Planners offers a unique global presence with multi-lingual staff to support associations, federations, government entities and other societies in organizing their incentive tours and conferences, and also weddings.



Vikrant has a very tight and hectic schedule, organising events and attending to his business requirements. The planned meeting thus got postponed a few times due to last minute urgencies. Finally, I was able to catch up with him when he came to Connaught Place for another business meeting. We sat down at Starbucks, and then had a wonderful time interacting. The conversation was so engrossing, that we did not realize that we had actually overshot the planned time. This is what he had to say about his involvement in his venture.



Ranvir: Tell us something about your family background, life prior to joining the Army, and your subsequent career in the Army. How did you decide to get into this venture?

Vikrant :Being from the defence background family, a third generation officer, I always wanted to wear the uniform. It is a dream for most of the youngsters when they see a person in uniform to wear it one day. I consider myself fortunate to fulfil my dream of wearing the uniform and re-living the life with my own experiences while in the Army. After schooling from the prestigious Army Public School, Dhaula Kuan, I graduated in Hotel Management from IHM. Though I had a choice of DU regular college, I chose a professional degree or course looking at it as a backup. Was lucky enough to be guided by elders in the family who discussed the upcoming service industry and scope in future years for a related profession. I had joined an organisation , was learning a lot with them, and based on my performance they were sending me for a course abroad. At that time, the military service beckoned me, and I made a conscious choice to take it. Then, served the Army for five years as a short service commissioned officer. At the time of hanging my boots, went to XLRI Jamshedpur for a PG Management course which was a good layer of management concepts over a mix of hospitality and fauji experience.

Year 2008 wasn't that great a time to be out in private jobs due to global recession, but learnt quickly - how to make your own space while using the skill set already with you. I approached companies for jobs that were in event management and MICE (meetings , incentives , conference , exhibitions). This was also an upcoming sphere in specialization within hospitality, focusing on bigger conferences and meetings and logistics behind it. Worked for a year and half with a renowned meeting management company when the bug of entrepreneurship bit me. Why not me? Another achievable dream which had to be fulfilled, and the gamut of understanding whether and how selling price minus cost price leads to profit, and was this so simple, was to be understood and learned. I then landed up opening and venturing into the field of MICE with help of two like minded civilians as partners who were very helpful in thinking not just in structured way but a profitable way as well.



Ranvir: Please give us more details about what you are presently engaged in?

Vikrant: Power of communication with face to face meetings, Incentives and Conference Planners LLP was born which is a niche MICE/PCO (Professional Conference Organiser) which is engaged in conceptualising meeting subjects, curate subject matter for discussions along with like minded Associations and corporates to get people to meet. This also gives us teeth to conduct events, rewards and recognition programs, social engagements, product launches, training, both in domestic and international markets. iCON Planners also focuses on incentive travel and highlights the transformational potential of travel experiences on individuals, enterprises and communities. We are also now proudly engaging in curating the subjects for associations using a fantastic speaker bank to engage the network and communities to more and more two way participative events .

Ranvir: What were the challenges faced in this entrepreneurial journey?

Vikrant: There were many, but where to start and when to end. Business journey has no start point and end point, it's a deep dive in ever evolving journey. Being a first generation businessman, every day is a learning experience. It's important to have a plan and focus on short term achievable goals with a larger mission in mind. Pain points are the cash flows and sales in ever reducing razor thin margins, yet being productive and profitable . NOW, do the math!



Ranvir: How did you overcome the challenges?

Vikrant: The ongoing process is to learn. Read, talk to existing business owners, overcome the fear of accounting and maths. Once you get to see the life line that is accounting and finance of your business, you shall overcome the challenges. Not just these, in the service offering, being ahead and being innovative in a saturated sphere is equally important. Keeping yourself updated with offering with lean, mean and strong team is another way to overcome challenges.

Ranvir: What do you think would be the prerequisites for anyone to meet, if a Forces Network member wishes to pursue a similar venture?

Vikrant: Grass on the other side looks greener, always! Within these sectors or any other, one needs to be focused . There are no two boats you can sail on, together. Yes, one leg on the ground is important to begin with. We need to put down our thoughts on paper or excel sheets and make a business model. Who are you going to address and why? HOW will you make money at the end of it? And once you are into it, there is no backing off, we may fail, but that's ok. I am ok failing, but rather not trying . Keep the faith, and patience is the key. We have to be a bit different and innovative in our venture, and always working on what is different in my business than the others? Or you strive to be the unicorn in your field, with a unique uber idea with scalable growth along with funding.



Ranvir: How do you find your entrepreneurial journey so far? Any regrets?

Vikrant: Bracket of business owners is good, and quite satisfying . It is also something we feel proud of contributing our bit of share to Nation building by contributing to the economy, building up our ecosystem and employing teams. Regrets may be in terms of not doing the process in a better way or manner, or the thought that could have done much better!

Ranvir: What are your future plans going forward?

Vikrant: As per our business continuity plans, we plan to weigh the options of scaling up in terms of focusing towards the core competencies. Intend to use the technology in our field of business and also provide training to our mean and lean team members to be equipped with both sales and service professionals.



Ranvir: There must have been great lessons during this tremendous entrepreneurial journey. Can you share a few from your experience?

Vikrant: Patience is the best lesson learnt! Keep patience and keep hope with confidence that yes, you can achieve. To keep trying, and in Indian business scenario I will not regret being shameless!! Business moves on numbers and outcomes based on figures, learn how to read them and interpret them.



Lt Col Ranvir Singh, a product of Rashtriya Military School and and alumnus of National Defence Academy, was commissioned into 2nd Battalion The Bihar Regiment in June 1988. He has served in all terrains of the country, held appointments at Armoured Brigade HQ, Area HQ, and HQ ARTRAC, and finally hung his boots in Jan 2009. Thereafter, as a Corporate Warrior, he has immensely contributed for last 10 years to recognised organisations like IL&FS Technologies Ltd, National Institute of Bank Management of RBI, and MMTC-PAMP India Pvt Ltd. He has a keen interest in the field of ever evolving Information Technology, and a flair for writing. He can be reached at ranvirsm@gmail.com

Author of the Month

Anit Mukherjee

IN INTERACTION WITH RANVIR SINGH

Anit Mukherjee is Deputy Head of Graduate Studies, and an Assistant Professor in the South Asia Programme at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University, Singapore. He is the author of *The Absent Dialogue: Politicians, Bureaucrats and the Military in India* (NY: Oxford University Press, 2019). He joined RSIS after a post doctorate at the Centre for the Advanced Study of India (CASI), University of Pennsylvania and a Ph.D. from the Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University. From 2010-2012, he was a Research Fellow at the Institute for Defence Studies and Analyses (IDSA), New Delhi. While in the doctoral program, he worked at the Brookings Institution and was a Summer Associate at RAND Corporation. He is also the co-editor (with Rajesh Basrur and TV Paul) of *India-China Maritime Competition: The Security Dilemma at Sea* (Routledge, 2019) and (with C. Raja Mohan) of *India's Naval Strategy and Asian Security* (Routledge, 2015). He has published in *Armed Forces & Society*, *Asian Security*, *Asia Policy*, *New York Times*, *The Caravan*, and *Indian Express*, among others. His article titled "Fighting Separately: Jointness and Civil-Military Relations in India" was awarded the 2017 Amos Perlmutter prize by *The Journal of Strategic Studies*. He is also Non-Resident Visiting Scholar at the Center for the Advanced Study of India (CASI), University of Pennsylvania and a Non-Resident Fellow at Brookings India. Anit Mukherjee has also won the RSIS Teaching Award for Academic Year 2017-18.



Ranvir: Tell us something about your background prior to joining the Army, and your subsequent Army career.

Anit: My father was a fighter pilot in the Indian Air Force and so I had a typical fauji brat upbringing. Went to Air Force Bal Bharti School in New Delhi and then joined the National Defence Academy in 1990. I was commissioned in June 1994 in 19 Armoured Regiment, and went through the paces as all youngsters do. Also served in 33 Rashtriya Rifles (5/8 GR) from 1999 to 2001, first in the Northeast and then subsequently in the Valley. It was actually one of the most interesting times of my entire career. I left the uniformed service of the Army in 2003.

Ranvir: Please give us more insight about what you are presently engaged in.

Anit: I am currently an Assistant Professor at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University in Singapore. My job involves teaching international relations, aspects pertaining to strategic studies and political science. Apart from teaching, I also conduct research broadly on India's foreign and defence policies. Most of my published articles are available on my webpage www.anitmukherjee.com

Ranvir: How did you get interested in writing books, and pursuing this literary field?

Anit: I actually had little idea what I wanted to do after I left the Army. However, once I attended the graduate school at the School of Advanced International Studies (SAIS) Johns Hopkins University in Washington DC, I realised that studying and academia was intellectually fulfilling. I enjoyed that aspect so much, that I stayed on to do a PhD and thereby got into this field. I am not sure whether I would call it a literary career as, so far at least, I have only written non-fiction, but who has seen the future!!

Ranvir: Tell us something about your recently published book, which has generated a lot of interest in the public at large.

Anit: This book, titled 'The Absent Dialogue: Politicians, Bureaucrats and the Military in India', published by Oxford University Press examines civil-military relations in India which, as I am sure you know, attracts a lot of opinions within the military community. I argue that India's model of civil-military has had an adverse impact on its military effectiveness. In order to make this argument, I disaggregate military effectiveness into its five main components – weapons procurement, jointness (ability of Army, Air Force and the Navy to operate together), officers' promotion policies, professional military education and defence planning. I also have a chapter, which relies on archival evidence, which describes the historical evolution of civil-military relations and another one which captures some of the contemporary events. Unlike what is popularly believed however I argue that while there are weaknesses on the civilian side (especially within the bureaucracy in the Ministry of Defence) but there is also a need for substantial reform within the military.

Ranvir: What were the challenges faced by you in this regard?

Anit: I took more than a decade to write this book, so there were lots of different challenges, both personal and professional. I think the biggest impediment for writing about the Indian military is the absence of primary documents. As we do not declassify our documents, per force I had to rely on interviews and secondary sources (biographies, personal account, newspaper stories, etc.). This is less than an ideal approach to take, and so was a significant barrier. However, I was able to overcome this, to some extent, by conducting a lot of primary interviews which led to my first, substantial piece which I am still very proud of, titled 'Failing to Deliver: The Post Crises Defence Reforms in India, 1998-2010'. Later on, I combed archives primarily in the UK and relied on the Mountbatten papers to write a journal article titled 'Fighting Separately: Jointness and Civil-Military Relations in India' on the lack of jointness in the Indian military.

Ranvir: How do you find your journey so far? Any regrets?

Anit: I think only when one is dead will there be no regrets! The journey, like most journeys, has been difficult. I was a poor student for the longest time but I am happy with the way it turned out later. I am aware that I am living my dream and so consider myself very, very fortunate. Of course it helped that I could always count on family and friends, including my fauji community, with whom I still maintain a very close connection. In the end, I think these social networks are crucial.

Ranvir: What are your future plans going forward?

Anit: I have no set future plans, let's see how my academic career pans out. I am open to doing anything and so really look forward to the next challenge. I like what I am doing right now, but am open to suggestions/ideas for another transformation, let me know if you hear of any exciting opportunities!!

Ranvir: There must have been great lessons during this tremendous journey as a writer. Can you share a few from your experience?

Anit: As a writer I found out that it really boils down to lots and lots of practice and hard work. People often think of writers as if they get an inspiration and then act on it. That's not how it is for me, instead I discovered that writing requires dedication and discipline and is a struggle on any given day.

Ranvir: Do you think this can be a serious career for veterans? What's the preparation, skill set and the sacrifices involved?

Anit: I am sure anyone can achieve anything they set their mind to. In this regard, by virtue of the nature of their profession, veterans can do anything they like. The teaching career is a natural fit although a PhD from a good university is a bit of a slog. With the education sector set to blossom in India, I think people should think of this as a serious career. However, first and most important of all, they should find a topic that they care a lot about. This is because research and PhD is a long, lonely journey

and so it's important to ask the age old question – what is it that you are most interested in? What excites you? Answering this is half the battle.

Ranvir: Most people leave military service very early to pursue a passion which is totally unrelated to the military. However, in your case this was not the case. How would you explain that?

Anit: It wasn't as if this was all according to a plan, and I think we must give credit to luck and fortune to explain the twists and turns in our lives. Hence, when I left the Army, I was not certain that this would be a career for me. It was only while I started doing my Masters that I realised that I enjoyed studying, reading, writing and teaching and so have slowly gravitated towards this field. Moreover I wanted to write on things I knew a little bit about, and that logically led me towards this career.

Ranvir: Thanks a ton, Anit. It was really enlightening to interact with you.

Anit: It's been a pleasure for me too. I am available to every Forces Network member, who would like any additional information or assistance on the subject.

(Based on inputs shared by Anit Mukherjee with Ranvir Singh)

*Writers are desperate people, and when they stop being
desperate...they stop being writers.
- Charles Bukowski*

*Writing is wretched, discouraging, physically unhealthy,
infinitely frustrating work. And, when it all comes
together...it is utterly glorious.
- Ralph Peters*

Knowledge Bank

Understanding the ISO 27001

BY VIKAS YADAV

The Need for a Standard or Framework

Implementing Information Security in an Organisation is a hard task as there are so many things to do. There are cyber attacks to be detected and mitigated, audits to be conducted, applications to be tested, systems to be hardened, employees be trained and periodic reports be sent to senior management. This large volume of work leads to overworked security staff and invariably missed deadlines and work. This in turn leads to a reactive approach to security rather than a proactive effort to protect the organisation from cyber threats and attacks while continuing to do the mundane yet important routine tasks.

Information Security Standards

One way to bring structure to this effort is to have an effective security program in place. This security program needs a structure and framework on which the program will be based. Across the world there are a number of security frameworks which organisations follow. The most important and widely followed are:-

1. ISO 27001 Information Security Management Standard
2. NIST Cyber Security Framework
3. CIS Critical Security Controls

A Brief Overview and History

ISO 27001 is a very widely adopted security standard in India with many organisations being certified on this standard. ISO 27000 is a family of standards which if implemented properly helps an organisation secure its information assets. In this, ISO 27000 consists of an overview and vocabulary, ISO 27001 defines the requirements for the program while ISO 27002, defines the operational steps necessary in an information security program.

ISO 27001

Provides a **framework of standards** for how an organization should manage their data — the seal of certification is a sign of a **more secure organization**.

ISO 27001 is the standard which defines requirements for an organisation to implement an Information Security Management System (ISMS) and is the main standard in ISO 27000 series. It describes how to manage information security in a company. It can be implemented in any organisation irrespective of its size or type profit or non profit, private or state owned. An organisation can get certified on ISO 27001 but it is not obligatory. One may choose to implement the standard first and get certified later when the organisation is compelled by regulations or wants to increase its trust among customers and clients. The standard was first published in 2005 and was recently revised in 2013.

Description

ISO 27001 has eleven short clauses 0 - 10 and an Annex A. The clauses describe the standard and set the requirement for information security system which must be implemented for an organization to be compliant with the standard. Annex A contains 114 security controls or safeguards grouped into 14 sections. The standard takes a risk management approach to protect the information security of a company. Risk assessment is done to find out potential risks to information and then risk mitigation is done to address them through security controls. The security controls used to address risk are in the form of policies, procedures and technical controls (Hardware or Software) to secure assets.



Benefits of implementing ISO 27001

ISO 27001 benefits organisations by implementing security in a comprehensive manner. It helps organisations comply with legal requirements, achieve marketing advantage by reassuring customers about security, lower costs by preventing incidents and be better organised by defining processes and procedures for a coordinated approach to information security.



How to Implement the Standard and Get Certified



For implementing the standard you need to first and foremost seek management support for the program by describing the benefits of the standard and implementing the security standard. The standard also lays down certain roles and responsibilities for the senior management by setting clear expectations and objectives for Information security, lay down an Information Security Policy on how these objectives will be met, designate responsibilities for various stakeholders, provide resources - finances and personnel and periodically review whether the objectives are being met.

As the standard is not prescriptive it does not specifically tell you what to do for each aspect of Information Security. It asks you to assess the organisation's risk and threats it faces and then decide the controls which are required to be put. For example Annex A has a control on physical security. However it does not specify which type of control has to be placed. Depending on the organisation's risk appetite and threats it faces it may put unmonitored access systems and CCTV or physical guards.

So how do you implement the standard ? Once you have a scope ready you do a risk assessment following any standard risk assessment methodology. This will help you find the top risk you face and then based on your assessment decide the nature of controls to be placed.



Challenges with ISO 27001

Unfortunately as it is not prescriptive, the standard is as good as the InfoSec team implementing it and the auditors auditing the standard. In both cases there has been a rapid deterioration in implementing it effectively. Even though organisations are certified on it there a number of basic gaps observed and there are multiple breaches and attacks. This happens because the standard is implemented only at the InfoSec team level with no support from the leadership team and other departments. The annual audit is the only time the other departments are involved and participate in information security activities. Most auditors are also not diligent in their audit and rarely are there any major Non Compliances reported or reflected. This is precisely the reason organisations are moving towards more agile frameworks like NIST or CIS Critical Security Frameworks as also effective Incident response mechanisms like Security Operations Centre.

The above comments do not diminish the importance of the framework or reduce its adoption. It only brings out the shortcomings which need to be addressed while implementing the framework in any organisation.

How to learn about the standard

The ISO 27001 standard is not freely available and has to be purchased either online or in paper form for reference and implementation. Advisera, a training and consultancy company, has a number of useful articles on ISO 27001 basics, implementation ideas and checklists. It also has two very useful and free courses on the standard. The first ISO 27001:2013 Foundations Course explains the standard and gives an excellent coverage of the standard in 6 modules of a total 8 hours. The second, ISO 27001:2013 Internal Auditor Course covers the basics of how an organization can be audited to ensure that the ISO 27001 standard has been implemented properly. Their website has a wealth of information on ISO 27001 and other ISO standards including blog posts, white papers, check lists, presentation, video tutorials and webinars. I would recommend everyone interested in the standard to go through their website comprehensively before taking any training or implementing the standard. In India BSI India and SQTC conduct personal training on ISO 27001 covering foundations, Lead Implementer and Lead Auditor courses.

Way forward

For all those interested in pursuing the standard I would suggest the following steps:-

1. Learn about the standard by doing a free course on Advisera.com
2. First do the Lead implementer course which teaches how to implement an ISMS in an organisation. Then do the Lead Auditor course for becoming an auditor for auditing the ISMS of various organisations.
3. If you find value in the standard to your career do a full 5 day classroom training from a certified training partner such as BSI, TUV or DNV.

I hope I have given a good general overview of the ISO 27001 standards. Please do comment and ask questions if you have any queries or suggestions. Reach me out at vikassinghyadav@gmail.com



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References:

1. ISO Standard - <http://www.iso.org/iso/home/standards/management-standards/iso27001.htm>
2. ISO 27001 reference website - <http://www.iso27001security.com/>
3. What is ISO 27001? - <http://advisera.com/27001academy/what-is-iso-27001/>
4. ISO 27001 Wikipedia page - https://en.wikipedia.org/wiki/ISO/IEC_27001:2013
5. Advisera - ISO 27001 Academy - <http://advisera.com/27001academy/>

Data Science as a Career

BY VINAY GUPTA

This is the third part of the six series article on the subject, starting from the Jan 2020 issue of the eZine

DSC 3 - What skills are required by a data scientist?

“We can’t solve problems by using the same kind of thinking we used when we created them.” – Albert Einstein

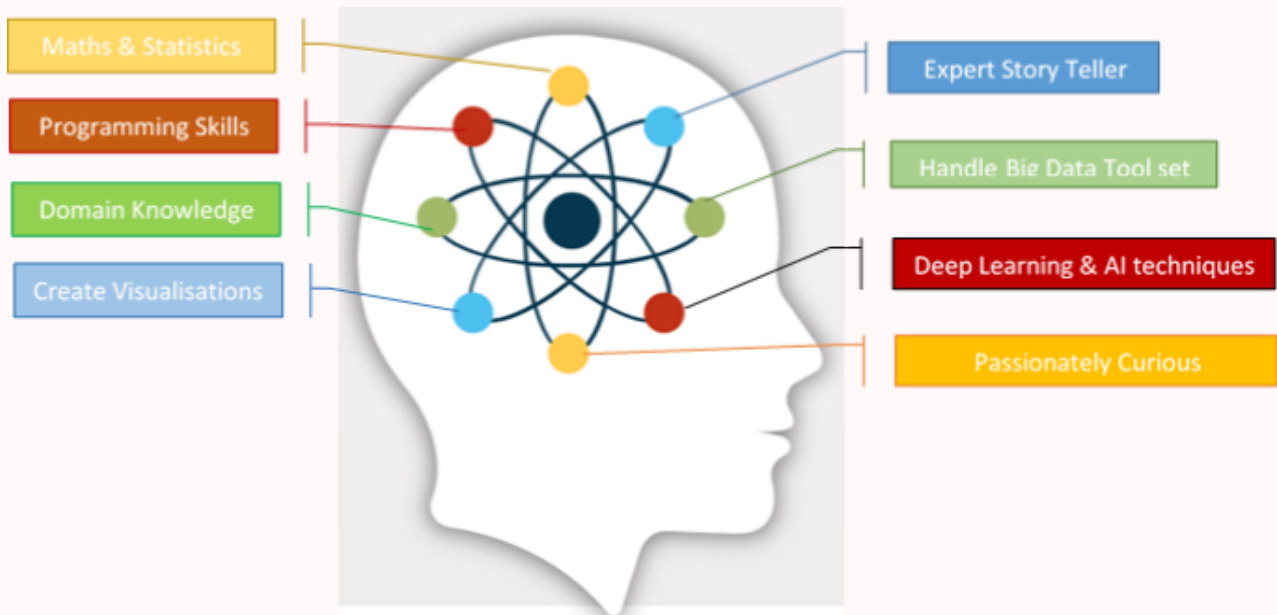
Data Scientist, a new term or career option is becoming a buzzword in last few years. It’s defined as “a person employed to analyse and interpret complex digital data, such as the usage statistics of a website, especially in order to assist a business in its decision-making.” Phew.. difficult to comprehend...

In order to simplify, if we breakdown this definition into its constituents, it emerges that Data Scientist is akin to Goddess Durga avataar. Goddess Durga is a super powerful deity ‘Shakti’ in Hindu mythology, known for benevolence and fierceness and worshipped in various forms corresponding to her. Maa Durga, as famously called is depicted in the Hindu pantheon as a Goddess riding a lion or tiger, with eight arms each carrying a weapon, often defeating Mahisasura (buffalo demon).



In a similar way, an ideal Data scientist needs to possess eight skills (or weapons) in order to meet the business expectations (demon of rising business and social challenges). These eight skills are:-

- Deep understanding of statistical models and inferences
- Good programming skills in Python/R/SAS
- Adequate business/domain knowledge
- Ability to create intuitive visualisation
- Expert story teller
- Ability to handle data ingestion and big data tool set
- Deep Learning and Artificial Intelligence techniques
- Passionately curious



Let's look at each of these qualities...

Deep understanding of statistical models and inferences.

Application of Statistical models forms the core of any data science initiatives. From simple regression, Exploratory Data Analysis, Percentiles and Outliers to Probability Theory, Bayes Theorem, Random Variables, discriminant analysis, Neural Network analysis, Optimisation techniques and many more.

Earlier the calculations/computations were being done using calculators or excel sheets, but now with the development of R & Python, the open source analytical programming language, these statistical functions have been coded into various libraries and in-built functions. Owing to this the complex computation happens in the background, easing the whole process. But this has the pitfall, of not understanding the basics of the same/understanding the significance of the outputs results. For example, in Survival analysis, the Weibull computation gives out the value of Shape, Scale & Size factors. What does these values signifies and how should I use them further in analysis/inference - it is very important for a Data Scientist to understand the underlying concepts to answer these questions. Similarly, there are various questions which need to be understood in the Statistical analysis before applying it to any business problem. Correct interpretation is paramount to linking the statistical results to business decisions. It is important to understand that the data science is being used to assist in business decision making process, so the data modelling, computation and thereafter its interpretation, assumes a lot of significance.

Good programming skills in Python/R/SAS

In order to build the statistical models and operationalize the same in an automated manner, programming skills of Python, R or SAS is essential. So, for a Data Scientist

apart from statistical and mathematical skills, there is a requirement of being expert in programming.

What drives data scientist to adopt R/Python? - is that it is easy to learn and code or it promotes an easy-to-understand syntax especially when compared to other programming languages, such as java/.Net and thereby leads to a shorter learning curve.

Python has a vast array of libraries for multiple roles. Also, the code-readability feature has made Python the most popular choice for Data Science. Solving a Data Science problem involves data pre-processing, analysis, visualization, predictions, and data preservation. In order to carry out these steps, Python has dedicated libraries such as – Pandas, Numpy, Matplotlib, SciPy, scikit-learn etc. Furthermore, advanced Python libraries such as Tensorflow, Keras and Pytorch provide Deep Learning tools for Data Scientists.

R is specifically dedicated to statistical analysis. It is, therefore, very popular among statisticians. It helps to have an in-depth dive at data analytics and statistics. The only drawback of R is that it is not a general purpose programming language which means that it is not used for tasks other than statistical programming. With over 10,000 packages in the open-source repository of CRAN, R caters to all statistical applications.

Like R, you can use SAS for Statistical Analysis. The only difference is that SAS is not open-source like R. However, it is one of the oldest languages designed for statistics. The developers of the SAS language developed their own software suite for advanced analytics, predictive modelling and business intelligence. SAS is highly reliable and has been highly approved by professionals and analysts. Companies looking for a stable and secure platform use SAS for their analytical requirements. While SAS may be a closed source software, it offers a wide range of libraries and packages for statistical analysis and machine learning.

Adequate business/domain knowledge.

In order to deploy the data analytics solution for the real business problem and derive the actionable insights, understanding of the business is a must. Else it will lead to incorrect interpretation and outcomes. The success or failure of Data Analytics initiative is not in its capabilities but in understanding the data set, using correct statistical model and interpreting the outcomes to take business decisions. That's why, the data science provide solution to Business Problem rather than Statistical problem.

The preferred methodology therefore is: *Business Problem > Convert into Data Science Problem > Build Statistical Models > Train and Test models > Run Models and obtain statistical results > Interpret and visualise the same > Apply it to Business Problem to resolve the same > Review the models.*

If analyst is building model related to weather forecasting, then knowledge of weather patterns, dominant factors, interrelationship and their behaviours is essential. This business knowledge can also be further categorised into two levels viz. Industry specific knowledge and Company specific knowledge. Industry specific knowledge can be obtained from the knowledge available in open domain but Company specific knowledge can be gained only by working in that company or working for that company.

Ability to use and create intuitive visualisation for the results

The data exploratory phase is an important and critical stage in Data Analytics model building. This step is essential to understand the datasets, correlation between factors, patterns and data spread. To effectively get this understanding, creation of graphs and visualisation is important. This aspect gains significance when the complex workflows, data sets and their analysis inferences are required to be explained to the management team, cross functional team or for own understanding of the data sets (as part of exploratory analysis).

It is important to understand that our human brain can get the sense of a visual scene in less than 1/10 of a second. Further, 90% of information transmitted to the brain is visual and visuals are processed 60,000X faster in the brain than text. So, creating visualisation from the data set is very important part of the Data Analytics model building process.

For choosing the correct graph, it is important to write the question, whose answer the data scientist/end-user is seeking to. These questions realm from KNOWN patterns/trends to UNKNOWN trends. Which region has the highest sales of senior citizen medical products in winter season? Or Has the defect rate of Solar panels gone down after modifications in Rajasthan area? Or What is the usage pattern of data traffic in semi-urban areas of Northern India? Or What is the correlation between the various elements of automobile oil viz. iron, Zinc, Manganese, Water, Nickel with respect to likely incidence of nearing failure?

Be an Expert Story Teller.

Next logical step after a good visualisation is telling the story on the process and outcome of data analysis. For effective storytelling, it is essential to have the continued focus of the business problem, which is being addressed to. Remember, Data scientist at this stage is interacting with the business leaders or Team Leader, who needs to take the next decision, which is likely to have impact on financial/operational/safety aspects.

Good visualisation helps in narrating the complex problem with ease. Mostly, it is the presentation of summary of hard work done by Data scientist team, so it's a make or break scenario. Visuals can often be more effective than words at changing/impacting people's minds. So, it's important to be careful and pay attention to this activity.

Knowledge of Data Ingestion and Big Data tool set.

With the advent of social media and IoT (Internet of Things), the volume, velocity and variety of data has increased exponentially. The data from connected machines are being sent to the servers using real time services or historical data services. Similarly the unstructured data is being generated by the social media and e-commerce web sites, at every millisecond basis. Drones, CCTV cameras and geospatial devices are generating huge amount of videos/images, which needs to be processed in real/near-real-time basis for taking decisions.

Storing, ingesting and analysing such data sets require shift from the traditional ERP (Enterprise Resource Planning) system approach.

In order to build the analytical models and deploy for business applications, there is a need to understand the varied nature of data sources, various options and characteristics of data ingestion methodology, storing and pre-processing the data sets. Data ingestion is the first step for building Data Pipeline and also the toughest task and requires specialised skill set. With the advent of various data types, data sources, data formats and application requirements, there is a need to have hands-on experience in this plumbing efforts. However, it's difficult or rather impossible for a data scientist to be proficient in all elements of this activity and be directly responsible for it. But, he should have the basic knowledge and skills to understand the complexity and various tools required for this purpose.

The flow and functionality of this task before commencement of analysis include the four steps viz. Data Ingestion, Data Integration, Data organization, Data refining. It is humanly impossible to learn these tools and work on it, but for a data scientist, it is important have knowledge on various types and capabilities, so that he/she can work alongwith his/her data engineering team to enable seamless integration and data flow.

Deep Learning & Artificial Intelligence techniques.

This forms the next level of hierarchy and expertise for a good Data Scientist. After handling the use cases with supervised and unsupervised learning, segmentation, classification and regression, it is important to graduate to next higher level of complexity. The Deep Learning and Artificial Intelligence based analytical model building requires greater understanding of neural networks, determinants/matrix operations, Optimisation algorithms and larger data sets processing.

In simplistic form, the difference between these terms, which are being interchangeably used are given below:

- Artificial Intelligence: Computers systems that perform task that would require human intelligence such as object detection, speech recognition, text interpretation, video analytics etc.

- Deep Learning: Algorithms that enable self-learning to mimic human intelligence, such as image analysis, prognostic analysis etc.
- Machine Learning: Statistical techniques that learn from a series of inputs and outputs, such as outlier analysis, power forecasting, trends etc

Tensorflow, Keras, PyTorch, Caffe & Deeplearning4j are few Deep Learning frameworks. Out of these the most popular software platforms being used by Data Scientists for Deep Learning is TensorFlow. Few use cases of Tensorflow are given below:

- Air, land, and sea drones
- Image & Speech recognition
- Predictive Maintenance
- Object tagging videos
- Self-driving cars
- Sentiment analysis
- Detection of flaws
- Text summarization

Tensorflow can run on various platforms viz. mobile/desktop/laptops to embedded devices, to cars and specialised machines/workstations.

Google's CEO Sundar Pichai had recently said "AI is probably the most important thing humanity has ever worked on. I think of it as something more profound than electricity or fire." Accenture research have projected that AI could double the economic growth rates by 2035 by changing the nature of work and creating new relationships between man and machine.

So, Data Scientist is rightly poised to ride this wave by acquiring the skill set, build proficiency, developing use cases, operationalizing the same and thereby making a difference in our lives.

Passionately Curious.

Data scientists most of the time operates in an uncertain, complex, ambiguous and varied environment. Most of the time business objectives are not clearly defined, data sets are complex to comprehend and really vast to have a meaningful understanding/overview. This operating environment is further exacerbated by large number of data ingestion, data preparation, data analytics and data visualisation tools and platforms. Choosing the correct combination requires great deal of trial and error, brainstorming sessions with experts, introspection, skill sets available with the teams and past technologies implemented/ experience.

In order to embark upon the journey of building a real life AI/ML/DL application, Data scientist need to be self-motivated and passionately curious. It enables him to ride through the difficult time of multiple iterations, ask the correct questions at every stage and communicate with the business experts.

There is a famous quote by Albert Einstein "I have no special talents, I am passionately curious".

Voltaire said, "Judge a man by his questions rather than by his answers." The famous WHY- WHY analysis and 4 Ws (What, when, where, why) and 1 H (How) methodology have been widely used in operational excellence. The methodology is applicable in solving data science problem, as well. This allows you create a structured way of doing this. But, for real affect this quality/ability needs to be in-built in the DNA of team.

The more you learn, the more you improve your ability to ask the interesting questions.

(Kindly share your comments/inputs/feedback at vinayeme@gmail.com to help improve the content and focus on the readers need and requirement.)



Vinay Gupta served in the Army for 22 years where he established the Centre for Data Analytics in MCEME Secunderabad and thereafter developing analytics driven Military Equipment Management system. He has participated as speaker/panelist in various international/national seminars/ conferences on Big Data Analytics, Industrial IoT and Renewable Energy. Presently, as Head Data Analytics & Business Excellence of Suzlon Global Services Limited, he is leading the Digitalisation & Analytics Program of wind and solar farm operations. A thought leader with 28 years of experience in the field of Predictive Analytics, Big Data Applications, IIoT systems, Telecommunications and Military Equipment.

Bibliography:

- <https://towardsdatascience.com/learn-the-art-of-data-science-programming-languages-of-the-decade-a2850830ab76>
- <http://soca.io/s/6-Reasons-for-Visualization-2jg8.pdf>
- <https://spotlessdata.com/blog/four-processes-getting-your-data-refined>

The true entrepreneur is
a doer, not a dreamer.

Nolan Bushnell

Continuity Planning Lessons From the Armed Forces

BY ARUN HARIHARAN

The basic definition of Business Continuity Management or BCM is, “a framework for identifying an organization's risk of exposure to internal and external threats. BCM includes disaster recovery, business recovery, crisis management, incident management, emergency management and contingency planning. It provides a framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand and value creating activities”.

However, considering my varied experiences during my stint in the military- and now in the corporate- I realized that BCM was inherently built into all the procedures and processes built in the Armed Forces. Be it at the highest level wherein a succession planning for commanders at all levels is always formally in place or at the lowest level where even during a Platoon Commander's briefing- he clearly lays out at the start the alternate location of his briefing and the responsibility to carry the cloth model/map to the alternate briefing location- in case the current location comes under air attack or artillery shelling. This is a necessity considering the risks and vagaries of war (and even during peace time) which unlike any corporate risk - put human lives and geographies of Nations at stake.

Starting from the bottom rung- let's take a 'Platoon Commander's Diary' - a document produced by a platoon commander to record relevant information concerning a duty or position on which he has knowledge and also details about each individual in his platoon. In the true sense of the word it a BCM document.

Though there is no formal requirement within the Army regulations for soldiers to produce a continuity document- such as a Platoon Commander's Diary; it's just something that's been handed down from individual to individual down the years and then the new Platoon Commander is expected to make his own. Also, in the Army- commanders at all levels have a formal 'Handing Over-Taking Over' at the end of which they formally sign off a HOTO document and responsibility and accountability rolls-over to the new incumbent and his predecessor makes a clean break.

The estimated annual rate of job turnover in FY 2018 in India was over 18%. This indicates that over the past 12 months, at least two out of every ten jobs were in some state of transition. With these levels of staff turnover what could the value be to organizations if "continuity handbooks" were embedded as part of routine job tasks throughout the enterprise?

Well according to Jack Welch, former chief executive of GE: "If you want to manage people effectively, help them by making sure the org chart leaves as little as possible

to the imagination. It should paint a crystal-clear picture of reporting relationships and make it patently obvious who is responsible for what results." (Welch, Jack; Winning- The Ultimate Business How to Book; ISBN: 0007197675; HarperCollins; 2005)

The process of defining the organizational chart often struggles with the details of the relationships and processes between groups on the organizational chart very often omitting 'real life' complexities and importantly, the experience of those in the front line of the organization in getting the job done!

Improvement in productivity would be significant if people could be skilled for roles more quickly and the benefits of building an adaptable, transferable record of organizational procedures, capturing the experience of your people, invaluable in many situations, and not just to those involved in BCM.

In the Army, there are a quite a few documents they use for this purpose- Standing Orders for War, Standing Orders for Peace, Operations Order (OO) etc.

An OO is a directive issued by a leader to subordinate leaders in order to effect the coordinated execution of a specific operation. A seven-paragraph format (famously known in the Army as Z-KITBAG!) is utilized to organize the briefing, to ensure completeness, and to ensure subordinates understand the order completely.

The seven paragraph headings are: **Z-Zameeni Nishan** (landmarks and environment), **K-Khabar** (Situation), **I-Irada** (Mission), **T-Tarika** (Execution), **B-Bandobast** (Service Support), **A-Administration**, and **G-Ghadi Milap** (Command and Electronics & synchronize watches).

Any mission must ensure that the environment is adequately understood. The environmental scan refers to the understanding of the business you are getting in, the limitations, entry barriers, competition, landscape and everything that ensures that you know what you are committing your time and money for.

The Situation paragraph provides a general overview of the battlefield, the big picture Mission is a clear and concise statement of the unit's purpose and task, in detail, giving the "who, what, when, where, why."

Execution contains the very detailed and precise "how to" information needed for accomplishment of the mission, consisting of three elements: concept of operation, subordinate unit subparagraphs and coordinating instructions.

Service Support contains all Combat Service and Support information, including transportation, supplies, maintenance, CASEVAC procedures, Enemy Prisoners of War procedures, personnel replacement, and so on.

Command consists of information and instructions relating to the commander. It includes the location of the commander, location of the Command Post and, if different from SOP, the operational chain of command. The electronics/signal portion of this paragraph addresses all communications information. It gives all frequencies, call signs, duress codes, pass words, communications windows, near and far recognition signals for day and night, pyrotechnics signals, and so on.



Upon receipt of an Op Order (OO) from one's superior, an officer prepares his own OO for distribution to his own subordinates. Each successive OO contains elements of the two OOs that precede it, thus ensuring subordinates have an awareness of the bigger picture objectives and their unit's part in it. Hence, by its very nature the document at each level is without prejudice to any individual and can be implemented by the next in line in case the particular leader is incapacitated due to some reason.

Obviously, such a document would need to be slightly altered to be appropriate for non-military use to make it work, however the initiation and maintenance of a continuity document scheme would need to be an important part of every worker's evaluation process, from the chief executive down to the lowliest support pro.

However, armed with an OO and a continuity document, any individual within any organization will know exactly what their job is, how to do it and what prioritization should be given to the tasks and goals assigned to them. However, with a plethora of collaborative working software now available it would be pretty easy for enterprises to relatively quickly detail and update its processes and procedures, capturing throughout the 'How to' aspects gained from experience of doing the job.

The value of this approach would not just be in the field of BCM, but would also help with many aspects of staff turnover, skills transfer or employees absence for any reason. The idea has some considerable merit, in my opinion and a couple of important outcomes: it is a simple and captures in a very straightforward manner

'institutional knowledge', it makes staff interchange a more straightforward process and can even help in working through organizational change making transformation tasks and goals possible.

Most importantly it ensures that no one is indispensable- a phenomena we find so common even in a big corporate where often the dependency of an individual tends to be very high and business greatly suffers once the individual transitions out without a proper hand over to his successor/sub-ordinates.



Though I have primarily delved on the human/leadership continuity process here, the same applies to all spheres- be it operations, supply chain management, logistics- there is an inherent redundancy and continuity planned till the last detail, for each contingency in the armed forces- study and drawing lessons from which would greatly benefit businesses and organisations.



Colonel Arun Hariharan, an alumni of NDA and DSSC, and a Fellow of the Institution of Engineers of India, has served in the Corps of Engineers for 22 years. Post premature retirement from the Army, he has had a rich corporate experience both in Industrial Security, Safety and Administration in large manufacturing units as well as Security, Safety and Nodal & Regulatory affairs in a large Corporate in the Services Sector. He is presently the National Head of Security, Safety and Nodal Affairs at Bharti Airtel Ltd. Arun also holds ISO Certifications in Information Security, Business Continuity and Occupational Health Management Systems.

Book Review

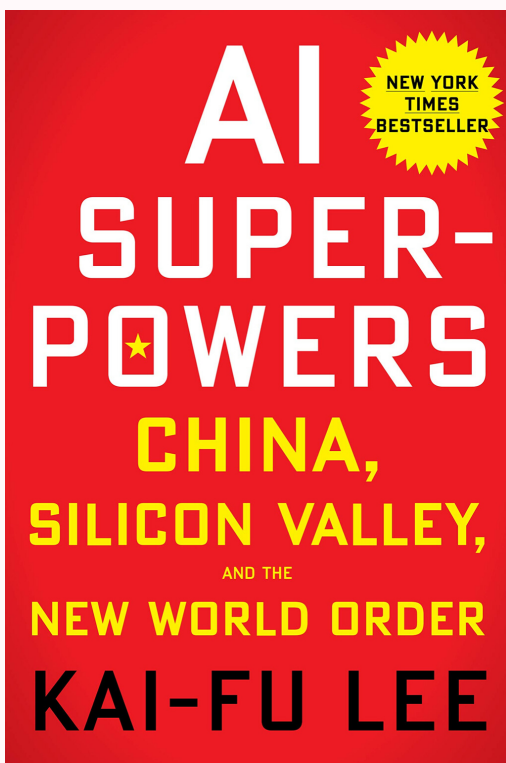
AI Super Powers: by Kai-Fu Lee

BY SURESH CHANDRA

I picked up this book since the subject of Artificial Intelligence (AI) is close to my heart and was one of the main reasons, I dived into computer science as a major subject of study way back in 1985. Back then, AI was divided in two camps the “rule-based”/“expert systems” camp and the other the “neural network” camp. Both these competing approaches did not see eye to eye and largely the rule-based camp prevailed till abundance of computing power and data catapulted the neural network approach to where we are today.

Born in Taiwan and educated in the USA, Dr. Kai-Fu Lee, is an eminent AI expert, a thought leader in the field and a venture capitalist (VC) heading Sinovation Ventures. Exposures with Apple, Silicon Graphics, Microsoft (created Microsoft Research in China) and then President Google China he is ideally placed to evaluate the two tech ecosystems in Silicon Valley and China.

There is no dearth of books on AI, but AI Superpowers: China, Silicon Valley and the New World Order, stands out since the book has been written based on extensive on ground experience of the author in the Chinese tech-ecosystem. Hence the book’s China perspective prevails throughout. At 232 pages the book is a fast and an easy read even for non-tech readers.



AI, is one of the key technologies affecting us in our everyday lives and there is no doubt that the best AI minds of the world are in US and China. The book can be divided in two major parts,

Part 1: The Rise of China as an AI superpower, the AI ecosystem in both US and China and how tech giants in both countries are competing for technical and economic advantage

Part 2: Economic impact of AI. The first part of the book is extremely informative and highly readable. I could disagree with many issues raised in the second part of the book where he talks about the economic impact of AI. His battle with cancer may have shaped many of those views on economic impact of AI. Though he derives his views on economic impact from various studies but, it would have been better if the views of professional economist were obtained to support his arguments

The book delves into Deep Learning, a branch of AI where given enough data and compute, the algorithms learn themselves and how this technology is being used in present day China. He correctly appreciates the usefulness of the technology and simultaneously debunks the myth around “Super-AI” and rightly says that at present it is science fiction and is a long way off, if at all feasible.

Lee, in his book discusses in detail as to how the four critical ingredients i.e. “abundant data”, “hungry entrepreneurs”, “AI scientists”, and an “AI-friendly policy environment” is helping the Chinese side to tilt the balance of power in AI Supremacy. He explains each of the four ingredients and compares them across US and China ecosystems. Abundant data, he says, is of very high quality given the ubiquitous Chinese super app “WeChat”. A key advantage to China in collection of large volume of data is that “companies are less constrained by government privacy rules” and “government itself helps with data collection” compared to West where stricter data privacy laws exist. Lee says “there’s no data like more data”.

As per Lee, “China’s start-up culture is the yin to Silicon Valley’s yang: instead of being mission-driven, Chinese companies are first and foremost market-driven”. Their goal is “to make money” and to achieve that “they create any product and adopt any model” to the extent of even “copying” successful business models across the world making Chinese entrepreneurs more aggressive than their western counterparts. I somehow disagree with his justification of the “copycat” philosophy, which in my view is plain and simple state sponsored intellectual property theft. Lee spells out how the Chinese government focus on AI has energised the provincial and local governments to spend on the support infrastructure to provide funding, incubators etc and compares it to the hands-off, market-based approach of the US.

From a learning standpoint for non-tech readers, the description of the “Four Waves” in which AI revolution will manifest itself is illuminating. These are First Wave – Internet AI, Second Wave – Business AI, Third Wave – Perception AI and the Fourth Wave – Autonomous AI wherein each wave uses the power of AI in a different manner. He also talks about “O2O” (Online-to-Offline) AI applications where online actions result in offline services and blended environments of OMO (Online merge Offline).

Coming to the economic impact of AI, Lee makes various points on job losses, loss of self-worth and rise of global inequality concentrating power in the hands of US and China. As far as job losses due to AI adoption is concerned, Lee peruses four studies which assessed the loss of jobs. First, 2013 study by two Oxford University researchers Carl Benedikt Frey and Michael A Osborne who predict automation of 47% US jobs in the next decade or two. Second, the 2016 research by Organization for Economic Cooperation and Development (OECD) which contrasted the Oxford prediction and said that just 9% jobs were at high risk of automation. This substantive difference was on account of “occupation-based” approach by Oxford and “task-based”

approach by OECD. The OECD team broke down each occupation into its many component activities and looking at how many of those could be automated. Third, the 2017, researchers at PwC used the task-based approach to produce their own estimate, finding instead that 38% of jobs in the United States were at high risk of automation by the early 2030s. Fourth, the McKinsey Global Institute study which was somewhere in the middle. As per them if there is rapid adoption of automation techniques 30% of work activities around the world could be automated by 2030, but only 14 percent of workers would need to change occupations. Lee discusses various reasons for the substantial difference between the studies and finally agrees with the PwC prediction. In a decade's timeframe other studies available in public domain peg the figure between 10-25% job replacement.

He also observes that virtually all the gains will go to a small number of wealthy tech titans and competitive markets will be overturned and we will "see greater and greater concentration of astronomical sums in the hands of the few." This is a debatable conclusion and I am sure professional economists would be having their views on this subject.

Many of the proposed technical solutions for AI-induced job losses, as per Lee, fall into three categories - the 3Rs - "Retraining workers", "Reducing work hours", or "Redistributing income". He discusses each one of them in detail including the concept of Universal Basic Income.

Finally, the key message in the book is that in the \$15.7 trillion global AI ecosystem, China is poised to be an AI superpower due to a focussed government, strong entrepreneurial outlook, high quality, large volume of readily available data and highly skilled AI experts. There are concerns regarding job losses due to AI adoption, but there are solutions to overcome them. He feels human-to-human jobs like caregiving and community-based work etc will emerge and create a better society.

Overall the book comprises Lee's insights about the US-China interplay of AI related technologies and paints an extremely rosy picture of China's strengths. In my personal view, such conclusions maybe premature, but one thing that is clear is that China is a serious player in the game and must be taken seriously.



Col Suresh Chandra was commissioned on 11 Jun 1988 in the 94 Field Regiment. He commanded 121 Light Regiment and superannuated from service on 30 Nov 2017. An MTech (CSE - IITD), he has been instrumental in the design and development of the ACCCS / Project Shakti. He was an instructor in School of Artillery and DS, JC Wing, Army War College. He has also served with the Wargaming Centre, SWC and was Col GS (Systems) Western Command. Post retirement he divides his time between mentoring underprivileged kids in Mathematics, Physics and Computer Science of Class XII level, and freelancing as a cyber security and data analytics expert. He is available at sureshchandra@protonmail.com

Stories

I am Not a Naughty Boy

BY SHANTANU CHAKRAVORTY

My Baba was dabbling as a single parent bringing me up, trying to balance being a doting mother and a disciplinarian father. Having lost my mother at the tender age of five, I fully exploited his states of emotion and was a very difficult child to raise to say the least. Tantrums and outbursts were the norm and between his travels for work, and me at being left to cater to my needs, I made him deliberately feel guilty. Fact is, I found such very liberating with no one to set the rules.

Frequently pulled up at the Carmel Convent, my school those days for being the brat I was, I used my emotional state of vacuum with the Nuns strikingly play acting, trying to extract every pound of Biblical mercy so that my tyranny would be seen as "Poor Child- My Child" syndrome.

I vividly remember the humid summer vacations of 1983 in Port Blair, I used to keep myself busy, catching every breath of nature had to offer on that mystical archipelago. While the fast approaching school reopening set a sense of despondency in me, that meant more homework and of course the "Cuts" - caning that was a ritual for me. Oh yes!! there was no sparing the rod moral brigade of child rearing, those days. However the bright side was the "List" of new books and uniform. Somehow not sure whether that still brings the kind of excitement for the New Gen today.

One such afternoon, Baba tagged me along to the shoe store to buy the prescribed "Naughty Boy" shoe at the local Bata Store. Well, Naughty Boy shoe was the uniform code of footwear for all urban school going boys I guess, across the nation. (Trivia - I recall footwear were one of the rare items that were the only things cheaper in those Islands compared to mainland India, for some strange Govt-Union Territory tax structure)

We entered the non-descript Bata Store in Aberdeen Bazaar, the prime shopping arena in Port Blair. After being subjected to the amusing chore of measuring my foot size on the brass brannock, the salesman got about to show me the shoe that fitted. No options, but one and only black laced Naughty Boy shoe.

The rebel in me, yanked out aloud to Baba, that I am not a 'Naughty Boy' and refuse to wear a shoe which branded itself as a Naughty Boy. Baba and the sales team were totally caught unaware by this obstinate demand. Multiple rounds of mellowed explanations having failed and my pitch levels of being very adamant of not accepting the shoe, finally tided over the threshold of my father and one tight rap, set things straight right away. My intention was to try cooking up something so that I could

blackmail him to get me a Cadbury. However, that was not my day, and Naughty Boy Shoe Size 6, Baba and me, had a silent journey back home.

School commenced, Me and my Naughty Boy shoe soon became a part of Assemblies and 'Stand Outside the Class' tribal culture. Long forgotten, the dusty, mud raked shoes were part of my ensemble, comfortable every morning to be worn without bothering to unlace them post school.

One day back from school, as I was busy setting up my cricket gear for a game, I found that old freckled Postman Uncle at the door of our modest DIG colony flat. Very nonchalantly I went to answer the door, as Baba was travelling to mainland for a week. I generally took the post, which mostly comprised of those registered Govt of India letters addressed to my father.

However Postman Uncle held an amusing large parcel, and said I needed to sign it as it was addressed to me. I could not fathom, as who would send me such a mammoth box, as I never even got a postcard other than First Day covers that I used to collect as a hobby. So here was I, dreamy eyed, scribbled my name on his receiving sheet and sauntered as fast my nibble legs could carry me to my living room.

Without wasting much time, I devoured the package like a pack of wolves, getting a meal after a fortnight of failed hunting. Not quite seeing what was scribbled all across the packet. On opening that huge package, I found a gleaming pair of black shoes – Size 6 . On the inner sole, neatly embossed in Gold letters were the words, “Good Boy Shoe”. On closer scrutiny, I found that the gift wrapping had the three words of “Good Boy Shoe” printed all across the packaging. Along with it was little note – **"Dearest good boy Shantanu, hope you would now wear them proudly to School – Regards – Tomas Bata."**

I didn't understand much of it, however was very excited to yet again get a new pair of leather mid term and the initial days like every other new shoe entitlement, rubbed it against the back of my trouser to maintain the gleam and yes, once in a while spitted on it, to give it a Cherry Blossom shine!!

Many seasons later, came to know the story behind all this mystery, Baba, during that silent walk post the rap on cheek episode at the shoe store, determined to not drown this innocent ask of his son. He wrote a letter to Tomas Bata, then Chairman, about the little forgetful episode that happened that fateful afternoon. Across the seven seas and I don't know how, but the letter found him and the parcel found me!!

Almost five years since that episode, when the World today talks about Customer

Empathy, I am amused, as those were not the days where the customer was made to sit at the pedestal and the Ivy leagues coining such appellations as 'Delight' - 'Ecstasy' so on and so forth.

I pen this tale, to say a silent 'Thank You' to an organization, which today epitomizes what truly stood up to the value of a little musketeer's episodic rant of tantrum, however valued as a Customer for Life by the legendary Bata!!!



Capt Shantanu Chakravorty, commissioned in 1993, joined G4S and handled their operations in Kenya and Dubai after six and half years of service. Having continually upskilled himself thereafter, he is now an independent Digital Learning Design and Leadership Consultant. He is a Certified Leadership Game Designer from NASAGA (North American Simulation and Gaming Association – USA) and a Master Coach and Facilitator from Eagles Flight – Canada, Performance Management Company-USA, Certified Professional in Behavioral Assessments (CPBA) & in a battery of Psychometric Tools.



Gratitude

Direct....From the Heart

A few days back an aged mother of an officer (posted out in field with poor communication) was to travel alone and needed assistance for the journey.

It was a brief two minute call in the morning requesting a ForceNet member if he could assist. No questions asked except that the flight and ticket details to be shared and rest assured all was arranged for by none other than Col Anuj Rampal.

I would fail in my duty if this not acknowledged. This mail goes out to acknowledge and express my gratitude to Anuj who was instrumental for the comfort of the lady during her travel..

Cheers to the Network that Works Wonders.

Thank you and Regards,

Kaizad B Bhaya

I would like to express my deep gratitude to Brig Mandhar for posting the jobs daily for our benefit.

I have been selected as DGM (HRM) by Indian Rare Earth Limited, a PSU under Dept of Atomic Energy, courtesy one of the links posted by Mandhar Sir. Thanks a lot Brig Mandhar.

Also, many many thanks to founding fathers of Forces Network for creating such a beneficial platform and selfless service to our community.

With regards,

Ashish Kulshreshtha



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