
Modernising the Military Mind

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The only thing harder than getting a new idea into the military mind is to get an old one out.

— Sir Basil Liddell Hart

Introduction

Over the centuries, warfare has seen dramatic changes. Great victories, more often than not, have been won not so much by the larger armies with bigger guns but by those armies which were prepared to adapt faster to new ideas and concepts of warfare. In Christian mythology, when David slew Goliath, a much larger and stronger foe with a slingshot, it was in effect a vindication of the physics of war.¹ In the physical world, Force is a product of Mass into Acceleration ($f = m.a.$). This physical concept can also be applied to conflict situations. The physical components of the armed forces such as the number of soldiers, quantum of weapons and equipment, ordnance holdings and the like constitute mass. The speed of decision-making, battlefield transparency and battlefield innovation, intelligence, operating range of weapon systems, mobility and the like contribute towards acceleration which is defined as the rate of change of velocity. As kinetic energy is the product of mass into the square of velocity ($2ke=mv^2$), it follows that increase in velocity will have a far greater impact on energy levels than increase in mass. Mass is important too, but only if supported by adequate acceleration content to produce the requisite force. In the example given of David's slingshot,

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the energy produced at the point of impact was tremendous, despite the small mass of the projectile. With the element of surprise created by the innovative use of a new weapon as an add on, the quantum of acceleration stood greatly enhanced resulting in a force many times greater than Goliath was able to muster with his mass. While Goliath may have been a bigger and stronger person, he really had no chance against an enemy who was prepared to adapt existing technology for war-fighting. The same could be said of Rommel's victories in Africa against a much larger and better equipped foe. In modern times, the larger mass of Saddam's army was defeated comprehensively by a smaller US force possessing greater acceleration through the application of air power. And when the nature of that particular war turned into sub-conventional conflict where US air power could not be applied, victory quickly turned into a stalemate. Similar examples abound in Indian history, such as the victory of Alexander over a much slower albeit stronger Porus, the Battle of Panipat in 1526 which established Moghul power in India and Clive's victory in the Battle of Plassey in 1757 which was the starting point to the events that established the era of British dominion and conquest in India.

The lessons for the Indian Army are clear. Mass is important, but winning battles would require much more than mere mass. Though the army is moving towards change, in many respects this change is more in form than in substance. While attempts are being made to modernise the army through purchase of big ticket items like artillery guns and surveillance and reconnaissance systems, mindsets still remain rooted to doing things as they have always been done over the decades. All armies have institutional inertia and the Indian Army is no different. It is this inertia that is the most debilitating factor in war. This in effect is the challenge we face. How do we change mindsets and mobilise minds for achieving quick and decisive results over the spectrum of conflict? This aspect will remain the defining test for the army in the years ahead. A few thoughts which could propel the army to move in that direction are discussed in this article.

Developments in the Corporate World

A lot of thought has been given in the business world to the concept of mobilising mind power as a winning strategy for the 21st century.² The previous century saw the evolution of different organising models with their own advantages and disadvantages to counter the high costs of interacting and transacting business. As interaction costs have considerably reduced in the

present century due to today's global digitised economy, newer models are being formed which have vertical and lateral information flows. While hierarchy remains an efficient tool for setting aspirations, decision-making, task assignment, resource allocation and people management and for ensuring accountability, it is large scale collaboration across the entire enterprise, enabled by digital technology that is

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the new element that opens the 21st century corporation to a greater potential to create wealth. Most corporations, however, still face complexity constraints because they were designed for another time. They were built for the 20th century model but are required to operate in the 21st century. They were built to mobilise their labour and capital assets – not the intangible assets which accrue from exploiting the brain power of their employees. Some of the corporations have moved in the direction of mobilising the mind assets of their employees with considerable success. The rest will have to follow suit if they wish to remain competitive and improve profitability. While the business model has certain functional differences in both needs and desired end states to be achieved from that of the armed forces, there is no gainsaying the fact that the Indian Army can derive great exponential advantage by adapting ideas from the business world in changing its organisational structure so as to leverage its vast reservoir of brain power to effect changes in work habits, procedures and rules to meet its goals of managing conflict both now and in the future.

Organisational Design

Organisational design is a strategic imperative impacting on battlefield efficiency. Putting a new organisational model in place is certainly no easy task and will take years of sustained effort. But from this will flow strategic capabilities which will enable leveraging the considerable mass of the armed forces to achieve operational goals. Let us consider the Indian response to the attack on Mumbai by armed terrorists on November 26, 2008. By any yardstick, the response was sluggish and decision-making was slow because appropriate decision-making structures either did not exist or were not designed for swift response. Getting back to the physics of war, while the requisite mass was available to counter the terrorists and terminate the operations within twenty

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four hours or less, lack of acceleration content represented by decision-making procedures and information flows hampered response which, in turn, led to delays and heavy cost overruns in terms of lives lost and property destroyed. Similar examples abound in the many conflicts in which the Indian state has been engaged since independence. Unfortunately, the right lessons have still not been learnt. Additional units have been created and placed at strategic points to counter future threats and reduce response time for application of force. [An example is the creation of new National Security Guard (NSG) units subsequent to the Mumbai attacks or raising scores of Central Reserve Police Force (CRPF) battalions in response to the Naxal threat]. This is mere increase in mass. History is bound to repeat itself unless appropriate structures are

created to increase the acceleration content of the force which lies in the field of information flows, decision-making procedures and single point authority and accountability. We still do not have those organisational structures perhaps because organisational design work is hard and time consuming and organisational change usually requires dealing with difficult personality issues and internal politics within the organisation. Also, organisational inertia is considerable in large militaries. This is why leadership at the highest level is more comfortable in making a major acquisition than attempting major organisational change. It also perhaps explains why we still do not have a Chief of Defence Staff (CDS) or why the entire logistic support system in the army has not been overhauled in keeping with the challenges of the 21st century. If we wish to have a potent fighting force, it is imperative that both the national and military leadership focus its energy and mind on making the armed forces more effective through appropriate organisational change.

The digital age should have reduced complexity but the opposite seems to have happened. When computers made their entry into military units, it was presumed that automation of data and records and use of word tools would greatly reduce workloads, enabling shedding off unnecessary clerical staff. Not only has this not happened, but the unedifying spectacle of additional

manpower being attached to handle the computers has led to headquarters becoming bulkier and not leaner. We now have officers burdened with e-mail and voice-mail overloads, endless discussions and pointless meetings, with no end state in sight, delays in decision-making, too much raw data and not enough information and fresh challenges in getting the knowledge one needs because of organisational silos. (This aspect is particularly noticeable between headquarters and between different branches of the same headquarters most of which are loath to share information with each other). The result is long hours at work, too little time to contemplate and think, continuous firefighting on getting routine activities done and strained interpersonal relationships. At the end of it all, there is little to show for in terms of progress or productivity. This too is a manifestation of continuing to use a 20th century organisational model on an army which is rapidly getting digitised. The problem is that as interaction costs head towards zero, the volume of interactions is headed towards infinity. (Interaction costs involve searching for information and knowledge, coordinating activities and exchanges, and monitoring and controlling the performance of others). The key to creating value is not just in providing top-down direction, vertically, but also in enabling and motivating staff and commanders to work at the lateral level. A major barrier to doing so is the fact that existing organisations are self-contained structures with boundaries around their vertical authority. These boundaries have hardened into thick silos which act as an impediment to collaboration. These vertical structures are ill suited in the digital age and throw up the necessity for enabling horizontal collaboration to enable mobilising the mind power of the officer cadre to achieve organisational goals.

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Let us consider some aspects of logistic support for the Indian Army. At a very basic level, let us consider an example of issue of clothing to troops. In the present system, this involves a large number of holding units and depots along the supply chain, each having its dedicated staff and attendant paper work as also holding a certain quantum of reserves. At times, the net reserve stocks held for routine common use items which are manufactured in the country and are freely available in the open market, add up to holding stocks for two years. Such

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systems may have had their use in the days of the British Indian Army but are an anachronism now. Let us say this system was replaced by a three tier system comprising the manufacturing unit, holding depots at the divisional or equivalent level and the user unit. This would lead to economies of scale, enabling supply at cheaper rates, quicker response time to unit demands, savings in manpower and more importantly a reduced logistic footprint. When such principles are applied to all aspects of logistic support for the field armies, reduced logistic drag would enhance the operational capabilities of the

force by impacting positively on the acceleration aspect of 'force'.

A similar argument could be developed in the field of ammunition management, where the criticality is dispersed location of ammunition depots in relation to likely operational roles of the field force, stocking levels based on anticipated wastage rates and ability to sustain production levels and adequate communication infrastructure in the forward areas to reduce logistic drag. Ammunition management must support the army's proactive operational philosophy otherwise the logistic drag will hinder operations and make the proactive policy undoable. Indeed, logistics management is a vital component of force enhancement and adds great synergy to operations. Execution of such strategies would require an organisational set-up which is enabled to carry out such functions. We need to rethink and restructure the entire logistic chain of the army and make it compatible with the digital age. Otherwise, we shall be condemned to operate in the 21st century with a 20th century mindset. But leaving operations aside, such principles are a must for normal routine administrative functions. Wars are infrequent and many a soldier may retire without getting an opportunity to engage in conflict operations. On certain issues like canteen services, the Walmart model could be used. Structures used by business could also be adapted for use by some of our welfare organisations like the Army Welfare Housing Organisation which is gradually losing the confidence of its clientele. Even on issues as mundane as land management, lessons are available in plenty where most state governments have digitised their records but the armed forces still have an inadequate data base of land holdings. This is simply a result of dysfunctional organisations with little or no accountability.

Training Aspects

Training also plays an important part in mobilising mind power and changing mindsets. At the commissioning level, thrust on training of potential officers is based on developing leadership skills, combat ability to enable effective command at sub-unit level, physical fitness, discipline and military ethos. The emphasis, however, is on instruction. The teacher instructs, the student complies. Free thinking and developing a questioning attitude rarely forms part of the curriculum. While such an approach has its advantages, it loses relevance over a period of time, stifles creative thought and leads to a status quo mindset. In units, customs become haloed, never to be questioned. Why such customs originated in the first place is lost sight of. Following unit customs, however, is advantageous in that it promotes a sense of group identity and helps in developing camaraderie and *esprit de corps*. On operational issues, however, conformism leads to restoration of the status quo mindset. Standard drills and operating procedures have their advantages and this article is in no way espousing that they should not be heeded. Indeed, they are an integral part of army teaching and more often than not, have been perfected and honed over the years. What is being advocated is that all activities must be understood based on a rational explanation as to why things are being done in that particular manner. The aim is to enhance understanding and relevance related to assigned tasks rather than repetition for the sake of form. This could lead to better and more innovative ways to do things which were earlier being carried out in a different manner. In any event, a proper understanding of the issue at hand will further reinforce existing procedures if the logic to such action is unassailable. This will lead to enhancement of combat power rather than its curtailment. On the other hand, changes in weapon systems and communication capabilities may dictate that changes are necessary. More often than not, however, old procedures still continue as rules have not been changed or drills have not been amended. Inculcating a climate of questioning will enhance professionalism in the force and give it much needed dynamism. Training institutions for officers must also look into this aspect of encouraging and developing creative thoughts on matters military. This would require a drastic reorientation of course curriculum but would pay rich dividends in the long run.

For young and middle level officers, doctrinal issues and concept formulation is rarely the focus of discussion. Training in military art is restricted to the tactical level at various schools of instruction. Operational level concepts

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are formally taught only when an officer does the Higher Command Course at Mhow. It is, hence, incumbent upon officers to carry out self-study in operational art and strategy from the time they get commissioned and not wait till they assume higher level ranks in the army. Generalship demands a lifetime of study and such study must be encouraged amongst our young officers. This will lead to a change in mindsets as also enable formulation of doctrines and concepts for force effectiveness. As an example, the need for defensive positions based on a line fortified by a ditch-cum-bund needs to be questioned. Is there a better way to defend our western borders? Can our borders be defended without resorting to line defence?

Are anti-personnel mines useful as tools to strengthen a defensive position? How should artillery support be delivered in combat and in what quantum? How can insurgency be curbed at the inception level itself? Is there a better methodology of fighting insurgency than that being advocated and practised? The list of questions is endless and such issues should be the focus of discourse if we wish to mobilise the army's mind power for force enhancement.

Conclusion

In today's day and age, war-fighting is not about individual battles but the ability to look beyond the battle at the end state to be achieved. A focus on short-term goals is reflected in the inability to look beyond the battle, and prevents appropriate long-term strategies being evolved. This perhaps is the reason why we are still being bled by insurgency in the northeastern parts of India since the middle of the last century as also in Jammu and Kashmir for over two decades as of now. Our handling of left wing extremism is following a similar path. Lack of appropriate strategies has also emboldened Pakistan to continue with support to terrorist groups operating from Pakistan against India and has encouraged China to take up a virulent stand on the border issue. Development of a long-term vision and operating philosophies is, hence, essential to combat the threats that India is currently facing and will continue to face in the future. Mobilising the mind

power of the army to achieve this aim, hence, assumes great significance.

To achieve the above, we need to invest in designing and building strategic organisational capabilities which would have hierarchy for organising work as well as adequate scope for lateral interactions to promote and maximise the growth of mind power. What would be required is to find the right mix of hierarchy and collaboration as well as the right mix of individual and mutual accountability while creating new organisational structures. Hoping that our 20th century organisational structures will evolve through serendipity is an inadequate response to the changes being brought about in the military in the digital age. Organisational design can no longer be an afterthought. We need to look into how the army is required to function in the next few decades and create organisational structures which can deliver on making our nation strong and secure.

Notes

1. The idea of correlating the laws of physics to the domain of war has been taken from the works of Richard Simpkin and Robert Leonhard. These works have been used for all references to the physics of war. For an indepth understanding of the subject, a study of *Race to the Swift* by Richard Simpkin (Lancer Publishers and Distributors 1997, ISBN 81 7062 276 X) and *The Art of Maneuver* by Robert Leonhard (Dehradun: English Book Depot, First Indian Reprint 1998) is recommended. While no direct correlation exists between the laws of physics and the dynamics of war, the study does come up with interesting comparisons which could be effectively applied for force enhancement.
2. All references to the business world in this article have been taken from the book, *Mobilizing Minds* by Lowell L. Bryan and Claudia I. Joyce of McKinsey and Company, (McGraw-Hill,2007, ISBN-13: 978-0—07-149082-5).