

# [Infantry battalions to mechanised infantry history essay](https://assignbuster.com/infantry-battalions-to-mechanised-infantry-history-essay/)

## INTRODUCTION

“ In the course of war we learned that man is supreme , that it is the soldier who fights to win the battles, that fighting means using a weapon, and that is the heart of the man that controls its use. “

– SLA Marshall, Men Against Fire

In a motorised world , where even the explorer has disregarded his camel for the Ford, the marching soldier is a relic from the past age . Napoleon’s axiom says that the effective force of an army is mass into velocity and Forrest’s accurate verdict that success in war is a matter of getting there “ first with the most ” It is a matter of pure common sense that men in motors can reach a spot before men who march.[1]

2. The concept of mechanised infantry is not new. Even in the ancient and Medevial armies the charioteers and cavalry carried suitably mounted and armed soldiers, who could keep up with the former and when required would dismount and

engage in hand to hand combat as infantryman. The modern day mechanised infantry can trace back its origins to Second World War when the Germans , as part of ‘ Blitzkrieg’ tactics used tanks and motorised infantry to telling effects in France and Poland.

3. Success in warfare comes from operational concepts- the set of schemes that describe how battles are to be fought at operational and tactical levels . Technology provides for the means to execute those concepts more effectively. Mechanisation is one such tool for execution of the military concepts in a decisive way.

4. Karl von Clausewitz’s concept of massing the combat power & fire power at a decisive point in battle is easily achieved by mechanisation. The operational concept was enabled and speedily executed in field by incorporating the technological advancement in military technologies. Through the mechanisation, battles and campaigns acquired degree of mobility that was never seen before in field of warfare. It was operational concepts that drove the armies to mechanisation.[2]

5. The Infantry today is motorised only for operational movement. But the line between strategic operational and tactical zones is fast diminishing . Thus infantry will naturally seek to retain the advantage of mechanised movement as long as possible, in fact until they are compelled to dismount by the effectiveness of the enemy’s fire. The logical deduction is to provide infantry with a vehicle which postpones their dismounting as late as possible.

## CHAPTER II

## METHODOLOGY

## Statement of the Problem

6. To study the feasibility of converting Infantry battalions to Mechanised Infantry in the plains and desert sectors as existing on our western borders.

## Justification of the Study

7. The future conflicts will be characterized by battle field transparency , mobility , increased lethality , precision and a short and intense war in a nuclear backdrop. In this battle field the employment of our forces will be with a view to launch a pre emptive strike in a pro – active scenario or blunt the enemy by a quick counter offensive or riposte in a reactive scenario. The infantry battalions of the future would therefore need to be suitably equipped to meet the new challenges and perform their tasks optimally

8. The study assumes an importance in present day scenario because of the growing strategic significance of the sub continent region and the growing instability in our western neighborhood. The way we equip and train the army of today will dictate the outcome of the conflicts of tomorrow

## Scope

9. By undertaking this study, it is proposed to study the evolution of mechanised infantry, the concepts of its employment as also the determinants of mechanisation. The study is more specific to the challenges faced by India on our western borders and the relevance of mechanisation to meet the military objectives of war.

## Methods of Data Collection

10. The information for the study has been gathered from various books, articles, magazines and sourced from the internet including the websites of various armies.

## Organisation of the Dissertation

11. The dissertation is laid out in the following manner:-

(a) Chapter I. Introduction.

(b) Chapter II. Methodology.

(c) Chapter III. The Evolution of Mechanised Infantry.

(d) Chapter IV. Determinants of Mechanisation.

(e) Chapter V. Future Battle Field Environment on our Western Borders.

(f) Chapter VI. Characteristics of Infantry and Mechanised Infantry and Avenues Of Employment .

(g) Chapter VII. Capability Matrix.

(h) Chapter VIII. Analysis , Deductions and Recommendations.

(j) Chapter IX. Conclusion

## CHAPTER III

## EVOLUTION OF MECHANISED INFANTRY

## “ Victory Smiles upon those who anticipate the changes in the nature of war”. Gulio Douhet

12. As the Armour graduated from a supportive role in World War I (mobile pill boxes in support of infantry operations in trench warfare) to being that of a lead player in plains warfare in World War II , The infantry required to fight in conjunction with armour underwent a similar transformation . The process of mechanisation of infantry commenced with the beginning of second World War owing to its pre-eminence in a volatile and Mechanised battle field.

13. To Mechanise a military force is to equip it with armoured and armed motor vehicle. Mechanised Infantry are Infantry trucks, Armoured Personal Carrier (APC) , or Infantry Combat Vehicle(ICV) for transport and combat. The transformation in the interim period of World War I and World War II saw a transformation from Armoued infantry(panzer grenadier) to lorried brigade and then to APC based battle taxi infantry to the present day ICV.

14. This transformation was necessitated due to the imperative that even though the armour could manoeuvre , had fire power and could destroy enemy but infantry was still required in requisite numbers to attack capture and hold ground, thus consolidating the gains made by the penetrating armour formations before the enemy could recover. Both the armour and infantry still retained their primary role but one complimented and enhanced the capability of other by forming task oriented .

## History

15. Mechanised infantry was introduced between World War I and World War II , when the French and later the German Infantry units were provided with custom built half tracked vehicles for their support units , thus resulting in mobile formations that could keep pace with armoured formations when exploiting breakthroughs in ‘ Blitzkrieg -style’ offensives.

16. The concept of an armoured force as the dominant arm of mixed military force of tanks, Infantry and Artillery first came into being in both Great Britain and Germany in the same time. In the former mixed battalions of tanks and motorised Infantry carried out tactical exercises in 1921 and 1922 as part of a temporarily assembled experimental brigade.

17. Panzer Grenadier is a term for motorised or Mechanised Infantry , as introduced during World War II. The term was applied to Infantry mounted on ordinary trucks , as well as to Infantry equipped with custom built half -tracked armoured carriers. The Panzer Grenadier divisions were organised as cpmbined arms formations , usually with six battalions of truck -mounted Infantry organised into two or three brigades , a battalion of tanks , and an ordinary division’s component of artillery, reconnaissance units, anti -tank and anti – aircraft artillery . Blitzkrieg -lightning war – a term made famous by media accounts of German training and early operations in World War II , was the serendipitous combining of considerable thinking by the Germans about mobility in war , tank and motorised forces, and remarkably talented force commanders. In blitzkrieg, mechanised formation moving at a rate at least four times that of dismounted Infantry was sure guarantors of tactical and operational success.

18. It is instructive to examine why, despite considerable numerical superiority, the Soviets were not able to defeat the Germans in the East much sooner then they eventually did? For most of the war, the Soviets had no mobile, Mechanised or truck mounted Infantry. Soviet tanks were, technically at least, as good as or better than German tanks. However, both at tactical or operational level, tanks alone could not succeed without Infantry. In a corps or division level battle, Soviet tanks would break through German defence and penetrate fairly deep. However, without Infantry , they quickly fell prey to German anti tank guns or reserves or both. The tanks having been separated from there supporting Infantry near the forward line of troops were helpless. German artillery the immobilised the unprotected Infantry . It was a pattern repeated several times.

19. The state of Mechanisation to the end of World War II found a part of army that was mobile in a rather dismounted army. The Mechanised army of the time was not truly mechanised as they were not fully armed and armoured. The dilemmas of mechanisation persisted ; the mix of units for a truly mobile warfare, the problem of bringing to battle behind armour protection and follow on support in high speed mobile operations.

## Mechanisation Post World War II

20. Following World War II, all surviving armies set to work on doctrinal , organisational , and equipment changes from their experiences derived from the just finished war.

21. Soviet Army The Soviets codified their experience into an offensive operational concept featuring mass , momentum and continuous land combat – mass meaning numbers concentrated in a small area momentum meaning the product to be achieved by combining mass and velocity, and continuous land combat meaning the offensive employment of successive echelons at a rate that in the end will simply overwhelm the defender. To execute these concepts there were, and are, tank divisions and Mechanised infantry and motorised divisions.

22. NATO and USA

## Indian context

23. Inheriting the British legacy of ‘ in -house Infantry’ protecting the armour in battle field , the mechanised ethos grew in the army much in the same manner as it did in the United Kingdom. The concept of ‘ In-house Infantry’ saw the armour as the predominant arm for decisive engagement while infantry provided protection.

24. The 1965 war was the catalyst for starting the process of Mechanisation of the infantry as a need was felt to create a matching mobile infantry that could keep pace with armour. This was the beginning of the motorised units- a stepping stone for future mechanised units. The first APC introduced was TOPAS. Some of the Infantry units were equipped with it . Then a number of variants as BTR-60, SKOT-2A were introduced. A total of 11 battalions were equipped till 1971

3. The Battalions converted remained with their parent Regiments. The jump from APC to ICV concept was a result of the Yom Kippur War and the exponential growth in design of A vehicles.

25. The Mechanised battle field envisaged at the time of expansion was based on ‘ The deep battle’ concept of the Soviets . The Indian variation and the Mechanised force structure that evolved was designed for rapid advance into the enemy territory with heavy concentration of armour with the view of defeating the enemy in both time and space thus leading to destruction of his strategic reserves. In order to do so , just infantry or lorried infantry was found inadequate . In defence the concept of blocking the enemy thrust lines by occupying blocking positions by piggy back infantry was also found tactically vulnerable. This led to the rapid growth of the Mechanised Infantry in our Army which provided for greater versatility , staying power, increased density of anti tank weapons and overall better capability in terms of both defence and attack.

26. The Battalions selected for Mechanisation were the elite units of their parent regiment that had proven their metal in previous combats . In 1979 it was decided to raise the Mechanised Infantry as the youngest Infantry regiment with its centre at Ahemednagar. As part of the just expansion units of the senior most regiment – Brigade Of The Guards were also converted to Mechanised Infantry in the 1980’s. The 1980s can be said to be the zenith of the Army , as the defence budget was at an all time high and modern state of the art equipment was imported into the nation. This was the era when the Mechanised Infantry saw expansion in India.

## CHAPTER IV

## DETERMINANTS OF MECHANISATION

1. After the World War II the world saw increased mechanisation both by the super powers and the developing world. The extent of the Mechanisation varied due to a number of factors. The structuring of army today will manifest as to how the states protect their national interests in the coming years.

2. Strategic Threats. The very basis of a national defence policy is determined by the strategic threat envisaged by a nation. A nation will chose a particular level of Mechanisation/ force structuring based on the threat envisaged in its strategic interests. The various threats a nation faces are ;-

(a) External Threats – Capability of the Adversary. As the conflicts are likely to be fought in the neighbourhood therefore a state that expects to confront an adversary with a more Mechanised force will also go in for a structure with high Mechanised component and vice versa. The states that live in a highly Mechanised neighbourhood may feel the need to mechanise to guard their interests and both may grow in capability in tandem. Israel is an apt example of a country with a large mechanised force also the ongoing acquisition of the main Battle tanks by India and Pakistan is an apt example of the same.(

(b) Internal Threats. A state with internal turbulences with threats of insurgencies may go in for a relatively less Mechanised component.

2. Domestic Institutions. As per a research by Todd S Sechser and Elizabeth N. Saunders ” A variety of alternate theory suggest that decision about military strategy and force structure are not dictated solely by strategic imperatives. The choices about defence policy are mediated by domestic institutions .”[4]The various factors are:-

(a) Democracies and Casualty Aversion. In democracies citizen’s consent is required for democratic countries to go far war and it is the citizens that form the soldiers . In addition to minimising the number of soldiers exposed to risks , Mechanised militaries support the adoption of manoeuvre strategies , which emphasise shorter and lower cost wars.[5]

(b) Influence of civil – military relation on arms procurement. When civil control on military is weak , the military interests – which tend to favour force structure that draw its strength from symbolic weaponry – and lead to a high level of mechanisation.

3. Economic Factors. Another major factor contributing to the extent of Mechanisation ids the economic factor. States allocate resources to defence in proportion of availability of capital and labour . The states with high capital -labour ratios should have highly capatalised militaries where as states endowed with labour will have labour intensive militaries.

4. Alliances. As states make choices of the military structure another predominant factor is the potential contribution of allies. The states may seek allies to fill in the voids inherent in their force structure. South Korea , did not require to match the Mechanisation levels of North Korea due to protection it enjoyed of the presence of highly Mechanised US army.

5 Terrain. A rough terrain interspersed with mountains and high altitude area is not suitable for employment of the Mechanised formations. Also such terrain is suitable for insurgencies to grow. A nation with such terrain needs to weigh inthe factor for its force structuring.

6. Force Projection Capability. A nation with interests beyond its immediate neighbourhood needs to have a force with a high a Mechanised component. Mechanised force due to its versatility and adoption to varied roles in un familiar territory is ideally suited for such roles.

7. To summarise the extent to which a Nation will poses A high ratio of mechanised army will be dependent on the following factors:-

(a) Threats. These will include both the external and internal threats

(b) Capabilities.

(c) Resources.

## Force Structure of the Major Military Powers[6].

Country

Infantry Div

Armoured div/Indep Armour Bde

Mechanised Div/ Indep Mech bde

Ratio of Armour to Mech

USA

CHINA

25 Div

9 Div

7 Div

FRANCE

1 Inf Bde

2 Air borne Bde

3 Bde

2 Bde

GERMANY

1 Mtn Div

4 Div

3 Bde

2 Div

1 Bde

IRAN

5 Div

3 Div

2 Div

PAKISTAN

17 Div

2 Div

7 Indep Bde

2 Div

5 Indep Bde

INDIA

## CHAPTER – V

## THREAT SCENARIO AND FUTURE BATTLEFIELD MILIEU

## “ We must promote a more entrepreneurial approach to developing military capabilities, one that encourages people to be proactive and not reactive, to behave somewhat less like bureaucrats and more like venture capitalists; one that does not wait for threats to emerge and be `validated’, but rather anticipates them before they emerge and develops new capabilities that can dissuade and deter those nascent threats”.

## US Secretary of Defence Donald Rumsfeld

13. While undertaking prognostication in the regional context, it will be imperative to survey the prevailing environment, nature and complexities of threats and how the leadership employs its national power to fight future wars. Consequently, the Indian Armed Forces will have to re-orient to the fast changing regional milieu, evolve doctrines and concepts that ensure synergy and maximise returns, through a process of calibrated transformation. As we scan the Asian Landscape, the centre of gravity of the international system is shifting towards this region due to its dramatic economic upsurge. At the same time, the continent is highly susceptible to turbulence with the arc of instability stretching from the Middle East to the Korean Peninsula. The region has emerged as an epicentre of terrorism with maximum concentration of nuclear declared states.

## Regional Security Matrix.

14. Our immediate neighbourhood on the Western borders i. e Pakistan continues to be characterised by political instability and spill over effects are highly possible in the future. The regional security mechanism is expected to remain volatile owing to a historical legacy of distrust, unresolved territorial disputes, ideological differences and differential military capabilities

## 15. Pakistan Military Strategy[7]is premised on the theory of war avoidance and continues to foment Low Intensity Conflict or proxy war within India’s tolerance threshold. The Kargil conflict demonstrated that there is space for calibrated conventional war within the nuclear threshold. A rapid deterioration of relations due to the proxy war and terrorist actions elsewhere on national interests may lead to relations with our neighbours spiralling out of control and hence, the likelihood of a conventional war with Pakistan remains a possibility in the near term. The likelihood of such a conflict in the medium to long term is unlikely to decrease due to the unstable governance in Pakistan and non-resolution of the Kashmir issue. Pakistan continues with its ambitious force modernisation programme albeit, with liberal assistance from China and USA. Alongside, it continues to upgrade its nuclear arsenal in a bid to seek parity with India. Thus prophesising for Indo-Pak relations in the foreseeable future may be difficult which could range from estrangement to turmoil or rapprochement. Overall, destabilising India remains an important component of its state policy.

## 16. Profile of Pakistan’s Mechanised Forces. A comparative analysis of the capabilities of the mechanised forces of India and Pakistan clearly stands out as one of both quantitative and qualitative advantage in favour of India as on today. Presently, a quantitative deficiency of 10-12 armoured regiments exists with the vintage of 85% of the inventory being old, comprising T-59/T-69 tanks. These tanks suffer from two major disadvantages of lower lethality owing to lower calibre main armament and poor night fighting capability. Moreover, the Armoured Infantry battalions when compared to the Mechanised Infantry Battalions are equipped with the APC 113S, which with limited firepower capabilities serve the purpose of battle taxis to state the least. Based on his indigenous MBT programme and planned procurements of AFVs, the profile of Pakistan Armoured Regiments is likely to have approximately 40% tanks on its inventory in the “ Maturing Technology” segment with upgraded night fighting capabilities and increased lethality of both tanks and ICVs. His equipping policy is likely to continue allocating additional reliance on the utilisation of Attack Helicopters and Anti tank Guided Missile Systems. Presently also, the mechanised forces of Pakistan enjoy a qualitative edge in holding of attack helicopters, Intelligence, Surveillance, electronic warfare and stand alone Air Defence systems.

19. The Nuclear Dimension. Any conflict with Pakistan will be fought under a nuclear shadow with Pakistan threatening to use its nuclear weapons as a desperate measure to stall our conventional offensive beyond a threshold threatening its very survival. The threat gets magnified in the event of Pakistan disintegrating into a failed state and the nuclear arsenal falling into the hands of “ Jehadi” elements. The only effective counter to such eventualities is maintaining an assured second-strike capability, which would deter Pakistan from embarking upon a nuclear misadventure. Short of a second strike capability, having potent and suitably structured mechanised forces with inherent NBC protection can provide a distinct edge over the enemy and can prove to be a major deterrent.

## Nature of Future Wars

20. With the proliferation of military theory and uncertain political conditions, the future strategic environment will be marked with considerable turbulence. The armed conflicts will take a hybrid form, covering the entire spectrum. Hybrid Warfare would be a mixture of phenomenon, involving a shifting combination of armed and unarmed, military and non-military, state and non-state, internal and international, and violent and non-violent means would be the most common form of the 21st century conflict[8]. The conventional concepts of deterrence and defence would need to be supplemented by new doctrines of pre-emption and prevention. The distinction between peace and war has merged. It is now time to recognise that a paradigm shift in war has undoubtedly occurred; from armies with comparable forces doing battle on a field to strategic confrontations between a range of combatants, not all of which are armies, and using different types of weapons, often improvised[9].

21. The doctrinal perspectives to prosecute future wars and the prevailing nuclear equations are all indicators that future wars in the regional context will be “ limited in nature and scope”. Given the simultaneous application of force in the entire spectrum of the combat zone, the future battlefield will be non linear. Speed and complexity of operations will blur the strategic, operational and tactical distinctions. Undoubtedly, the impact of technology will be far more evident in a future conflict. Firepower, Mobility and Force Projection will be key elements to ensure success in a limited high technology war seeking short and swift engagements.

## Summary-Factors that Will Shape Future Wars and Force Structures

## 22. The emerging geo – political environment will shape the way future wars will be fought and therefore the structuring of forces and the strategy adopted will have to cater for the prevailing environment. Some factors that impinge on this aspect are outlined briefly, as under: –

(a) India, in the short and mid term, faces challenges, which are traditional, non-traditional, international terrorism, asymmetric wars, natural disasters, scarce natural resources and internal contingency wars.

(b) Future wars will mandate use of higher technology, seek a quick end to war, demand expertise in hybrid forms of conflict, use of smaller bi / tri service task forces for integrated operations.

(c) Integration of technology with the force structures, which will help us to fight with precision. Precision and info, will replace numbers.

(d) Global importance and regional leadership will compel us to focus on Power Projection, Intervention, Pre-emption, Contingency Wars and Media.

(e) Emphasis will be on manoeuvre and exploitation of technology. The framework is non- linear hence no definable battlefields or fronts. Doctrine of pre-emption is infact the recognition of the need for change.

23. The Technological Imperative. The future battlefield will be highly dynamic, dispersed, non-linear and unbounded in time and space. An introspection of the current trends of warfare, the world over, reveals that future wars will be predominantly asymmetric in nature with technology and economic aspects reigning supreme. The availability of a wide range of new digital information technologies gives military commanders the ability to reach unprecedented levels of knowledge, speed, precision and synchronization. Advances in technology and qualitative improvement in weapons and support systems has altered the very nature of warfare and ushered in a `Revolution in Military Affairs’. There is a need to keep pace with the changing times and equip forces with the latest military hardware and software.

## CHAPTER -VI

## DOCTRINAL CHANGES OF THE INDIAN ARMY

## “ In war let your great objective be victory and not a lengthy campaign”

-Sun Tzu, The Art of War

24. From an analysis of the strategic security paradigm and emerging nature of future conventional wars, it is evident that single scenario strategies and rigid military structures have become a passé. For land operations smaller combat forces based on combined arms formations in the form of modular structures providing building blocks for task forces is the way ahead. As possibility of failure of deterrence remains high, reactive strategy has given way to proactive ones. The summation of characteristics of future wars demands a doctrinal shift to meet emerging challenges. Transformation of the Indian Army to meet the security needs of the future is an imperative. Transformation is a process that shapes the changing nature of military competition through new combinations of concepts, capabilities, people and organisations that exploit a nation’s advantages and protect its vulnerabilities[10].

25. The major ramifications towards a new war fighting doctrine would encompass the following:- –

(a) In view of a multi front scenario, a de-novo approach to mitigate this situation of asymmetry is needed. A strategic culture needs to be developed in the country and a force structure in consonance with the future threat perceptions.

(b) Capability Building. Future war fighting doctrine should be based on war prevention or deterrence, thus demanding speedy and calibrated responses. From a “ threat based approach we need to move onto a capability dominant mission based approach”. For effective capability building there is an urgent need to switch from “ incremental modernisation to Transformation[11]“.

(c) Technology vis-à-vis Doctrine. Technology will be a major factor to drive the new doctrine. However, despite Revolution in Military Affairs (RMA), being all important, the tendency to perceive RMA as the panacea to all military problems needs to be curbed.

(d) Conventional Force Structures. The forces structure identified for the various arms need to be in consonance with the future threat assessment.

(e) Nuclear Deterrence. With the nuclearisation of the sub-continent we need to develop a credible nuclear deterrence as part of our limited war doctrine. This will be a vital element of an effective response both in the conventional and sub-conventional conflict scenarios.

(f) Integrated Logistics. State of the Art infrastructure is the key to timely application of combat power and assumes greater importance given the scenario of wars being prosecuted at short notice in the future. This aspect needs to be addressed at the national level with a Joint Services perspective.

## New Indian Military Doctrine[12]

## 26. The Indian Army re-evaluated its doctrinal and strategic options for offsetting the strategic stalemate of Pakistan’s nuclear capability and unveiled a new war-fighting doctrine in April 2004 called the “ Cold Start” or the “ Proactive Strategy”. The major focus issues relate to the simultaneous integrated operations to unhinge the enemy and break its organic cohesion. The emphasis is on an “ Effect Based Capability” to degrade the adversary’s Centre of Gravity and to that extent can be compared to the “ Active Defence and Anti-Access Doctrine” of the Peoples Liberation Army, China. This doctrine is an ideal response to Pakistan’s proxy war strategy. Pakistan claims that the threat of a disastrous defeat or dismemberment would lead it to use nuclear weapons. By employing or threatening to employ the entire might of its offensive power, India would be signalling an intent that may be far disproportionate to its actual objectives.

## 27. The purpose of the new doctrine is thus to enunciate a strategy limited in objectives and bring about conflict termination before international intervention or before the war spirals out of hand into a nuclear exchange. The proactive doctrine seeks to make the deployment less predictable by taking the onus of initial offensives away from the Strike Corps and placing it on the forward

## deployed “ Pivot Corps”. The Integrated Battle Groups (BGs) configured through the key offensive elements deployed closer to the International border would thus be ca