

Faculty of Design

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## Design in Indian Army

Mandhare, Atharva, Khadia, Kriti, Patil, Sakshi, Raja, Viswak and Chaware, Yash

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Project Guides: Praveen Nahar, Director, NID, Sahil Thappa, Product Design Faculty

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# DESIGN IN INDIAN ARMY

Indian Army being the world's second largest military force in arms and strength, imports most of its arms, technology and innovation strategies. The gaga map is based on exploring different ways of co-creating opportunities, with a system design approach for the Indian Army. Understanding the Indian Army in terms of hierarchy roles, working capabilities and mindsets. Looking at how design thinking approaches can facilitate better decision making and planning for the future. Identifying what would be the role of designers and where could they fit in to best suit the army's requirements and to bridge the communication gaps between Indian Army and other organisations.



Initial Context and Strategies

Gn. Shimon Naveh  
Father of MILITARY DESIGN MOVEMENT  
( Israeli General Early Works

OPERATIONAL ART

Technical Rationalist Approach - Breaking problem into component parts before problem solving via linear reverse engineering of solutions.

APPLICATION OF MILITARY POWERS

It forms a bridge between strategy/defining the political aims of a war and tactics, fighting the battles of a war

Design Methodologies

Planning and Concepts

Experimentation

Improvement and Inspiration

SOD vs TRADITIONAL MILITARY OPERATION

Systemic Operational Design (SOD), was developed at the Israeli Defense Force. SOD was so dense with philosophical language and these very abstract concepts, it was hard to translate and to disseminate to lower level forces.

BEN ZWIEBELSON

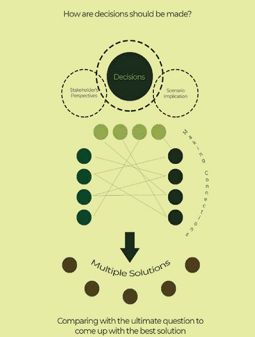
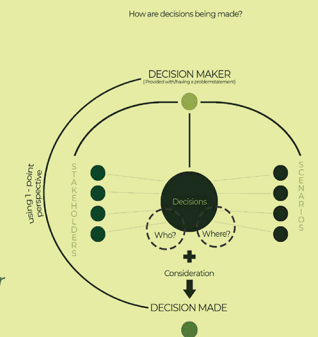
Aim of improving critical thinking in the design of operations by emphasizing on different concepts of organisations, methodology, operational art.

Trend analysis and Re-framing

FUTURE

Can design/innovatively survive as a mainstream tool of operational design or will it be relegated to Military niche?

Future Prospects



LEGEND

Military design journey

Group of Case studies

Solutions

Major aspects

Benefits

ARMY COMPENDIUMS

These are a list of engineering technology oriented problem sets related to the public by the Army Design Bureau. In the queue to bring out best possible solution.

VISIT TO AMRITSAR CANTONMENT

Amritsar Cantt  
Tibri  
Khosa  
Dera Baba Nanak

The purpose was to research about the army lifestyle and understand the working of the army as an organization. The agenda was to keep our minds open and our vision, broad. Our lens of research were design thinking methods and human centric approach.

DRDO (ToT)

The Defence Research and Development Organisation, DRDO develops technology for the armed forces and has been carrying out R&D to the defence industry for over 60 years.

DRDO signed 30 licensing agreements for transfer of technology with 16 Indian companies, including 3 start-ups.

Science Fiction in ARMY?

The French military wants to figure out what its combat forces might face in the future. To explore, it's gathering a group of people who are well-versed in imagining the future like science fiction writers and animators.

The RAND Corporation

After conflicts and armed nations must undertake military, political, humanitarian, and economic activities to make states. But these activities are not always successful. RAND has examined U.S. military, political, and economic activities to determine the principles for their success and draw implications for current and future nation building.

Kargil Review Committee

The KRC was set up by the Government of India on 20 July 1999. Its mandate was to look into the sequence of events and make recommendations for the future.

Seema Bhavan

The Seema Bhavan, an initiative by Indian Army will provide accommodation to the residents of border villages who are affected by their homes during the conflict.

Ganga Task Force

This is an army of ex-servicemen, who are designed to protect the Ganga. Keep it clean, stop people from throwing waste into it, and ensure the well-being of both military and civil society.

Canteen Stores Department

The aim of this systematic review is to examine the evidence and describe key components of effective interventions in terms of measuring body composition, dietary behaviors, and/or body composition among military personnel.

Weight management Interventions

Geo Concept

Government and international strategies offer a range of geographical information solutions covering all the needs relating to the preparation and operational management of military interventions.

APPLICATION OF SOLUTION

Showcasing National power via Innovations

Promotion of Make in India

Secured in-house production

Exchange of information and technology

Better business strategies

Lesser imports

Indian ergonomic standards - Comfort for Army personnels

Understanding changing trends of war

Improved connection with the stakeholders

ARMY MODERNISATION

Tactics and Strategies

Phonations

Imaginations

Training and Equipments

Information exchange with civil society

WHY DESIGN IN ARMY?

Army Design Bureau is seeking for organisations, startups & freelancers to work on the army projects. But due to the lack of communication of their requirements, it leads to delays in innovation process. This also reduces the efficiency to future forecast. They follow a solution oriented approach & expects quick outcomes.

DESIGN FRAMEWORK

LARGEST IMPORTER OF ARMS & TECHNOLOGY

ARMY CHALLENGES

Capacity and Retention of Infrastructure

Efficient use of resources

Healthcare roles

Organisational challenges

Higher levels of decision making

Imagination

Self reliance/ Self sustaining organisation

Customer requirements

Managing human capital

Supply chain

Efficient use of resources

Healthcare roles

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