COLLEGE OF DEFENCE MANAGEMENT

DATATHON - 2025

GENERAL INSTRUCTIONS

General

1.   Data analytics play a crucial role in military decision-making, empowering military leaders with insights into information related to operations, logistics and resource allocation. By analyzing data, military commanders can make more informed decisions. Additionally, data analytics enhance the accuracy and effectiveness of military intelligence by identifying patterns and trends in global environment, aiding in the estimation of future actions with greater assurance levels.

2.   The CDM started its journey of Data Analytics in 2017 by introducing it in the training curriculum. The inaugural Datathon - A Data Analytics Competition was conducted by the CDM in the year 2023 which was well received by the environment. On similar lines, the CDM is conducting 'DATATHON-2025' under the aegis of HQ IDS for all Armed Forces officers. The competition aims to proliferate a culture of data-driven decision-making at all levels.

Aim

3.   To promote the culture of decision-making based on data analytics and to identify new and more effective ways of analysing data, which can ultimately improve the accuracy and speed of decision-making.

Objectives

4.   Envisaged objectives are as follows: -

    4.1.   It will proliferate a culture of data-driven decision-making in the Armed Forces.

    4.2.   Identify and further develop new talent within the military, which can ensure the availability of skilled personnel needed to effectively analyse data and assist in informed decisions making.

    4.3.   Encouraging innovation and experimentation within the organisation, which can help us identify new and creative ways of using data to improve decision-making and operational effectiveness.

    4.4.   Identifying new techniques and approaches for analysing data, which can help us stay ahead of competitors and potential adversaries for better response in a contest.

Eligibility & Scope

5.   The competition will be open to all serving officers of the Armed Forces from all three services & will be organized in two phases. Participants will be provided with datasets under four different themes mentioned in para 6. They are also permitted to utilize any other open-source dataset pertaining to one of the themes. The aim is to derive maximum insights & recommendations as part of the analysis. The competition will be judged by an assessment panel of internal and external Subject Matter Experts (SMEs) who will evaluate the submissions.

Themes

6.   Aligned with the aim to promote the culture of decision-making based on data analytics and to identify new and more effective ways of analysing data, which can ultimately improve the accuracy and speed of decision-making, the selected themes are unclassified, contemporary and have potential to draw pertinent insights and throw open important lessons and recommendation for India in general and Armed Forces in particular. The themes for 2025 are as follows: -

6.1.   **Trade and Tariff- Changing Geo-Economics.**   The analysis of various trade relations, tariffs imposed by various nations can provide several insights into emerging market trends and opportunities, importance of international relations for protecting economic interests and impact of trade and tariff on economic policies and partnerships.

6.2.   **Dynamics in Global Mil Expenditure – Implications for India.** Participants can delve into the trends in military expenditure, shift of focus to newer technologies, technology development cycles in military equipment, focus areas of defence manufacturing, R&D and training to cater for changes, comparative threat analysis between countries.

6.3.   **Performance and Potential of Indian States towards Viksit Bharat 2047.** This theme for our data analytics competition invites participants to explore and analyse the complex landscape of Indian States and their relationship with the Centre. Sub themes like, interdependence of states, geographic hot spots of various sectors, focus areas of states to suit local demands, meeting development goals of Viksit Bharat, and predictive analysis for 2047 and beyond.

6.4.   **Meeting Energy Demands – Solutions for a Growing India.**   This theme for our data analytics competition challenges participants to provide solutions to identified areas which create energy demands. The data can also provide insights into availability of energy supply, development of renewable energy, and tech to monitor usage and predict future requirements

7. Participants are encouraged to explore and go beyond these, and present unexplored perspectives under selected themes. Participants will also be at liberty to use any other relevant datasets along with citation of source, to explain their insights as per the selected themes.

Methodology

8. The competition is proposed be conducted in the following manner: -

8.1. The datasets under relevant themes have been uploaded on the CDM Website, **www.cdm.gov.in**. Participants can access these datasets to download. All participant desirous of participating in Datathon 2025 have to register by informing to the Coord Officer on email **datathon.ids@gov.in**, along with personal details as per format at **Appendix A**.

8.2. Participants will have two months' time to submit their analysis containing details of insights & screenshots of data analytics software used. The solutions will be mailed at **datathon.ids@gov.in** in PDF format, along with output files in Power BI file (*.pbix) format only, along with personal details, earlier but not later than **30 Sep 25**.

8.3. Any queries or clarifications may be coordinated with the Coord officer on datathon.ids@gov.in.

8.4. The competition will be judged by an Assessment Team comprising of officers at CDM and external assessors detailed by HQ IDS. Top 10 selected participants will present their work of data analytics in front of panel of experts at CDM, tentatively, from **22 Dec 25 to 24 Dec 25**. At the conclusion of the event, on 24 Dec 25, awards will be bestowed upon the top five competitions by an eminent personality.

8.5. The criteria for assessment and proposed distribution of weightage is attached at **Appendix B**.

9. Datathon-2025 will be conducted in two phases – Online submissions followed by individual presentations by selected 10 participants at the CDM as per the following timeline: -

Event a.	Timeline b.	Remarks c.
Uploading of Data-sets on CDM Website along with General Instructions	01 Aug 25	
Data Analytics by Participants	01 Aug – 30 Sep 25	

Event	Timeline	Remarks
a.	**b.**	**c.**
Assessment at CDM (internal + external assessors)	02 Oct – 20 Nov 25	
Presentation by Select 10 Participants at CDM	22-24 Dec 25	
Finalization of Results	24 Dec 25	Top Five Participants
Felicitation of Awardees (presentation of sponsored awards)	24 Dec 25	

Conclusion

10.   In furtherance of the objectives laid down by HQ IDS, CDM will continue its efforts to foster management thought in the three services. Datathon 2025 is an attempt to promote a culture of data driven decisions in the Armed Forces.

APPENDIX A

(Refers to Para 8.1 of General Instructions)

INDIVIDUAL DETAILS

Service No:	
Rank :	
Name:	
Mobile No:	Calling No: Whats app No:
Email ID:	
Experience in Data Analytics (Yrs) including previous participation:	
Unit:	
Formation:	
Address with Pincode:	
Any other Platform/ Software being Used:	
Dataset chosen:	

(To be submitted on datathon.ids@gov.in)

APPENDIX B

(Refers Para 8.5 of General Instructions)

DATATHON: ASSESSMENT SHEET

Participant Information

1. Participant's Rank & Name :
2. Theme   :
3. Date of Assessment   :

Scoring Criteria

4. **Data Analytics (40 points)**

    4.1. Ability to understand and define the problem (08)   :
    4.2. Quality of data preprocessing and cleaning (08)   :
    4.3. Selection of appreciate analytical techniques (08)   :
    4.4. Depth and accuracy of analysis (08)   :
    4.5. Use of relevant visualizations and insights (08)   :

5. **Technical Skills (25 points)**

    5.1. Proficiency in pgme languages/platform/software (05)   :
    5.2. Utilization of libraries and frameworks (07)   :
    5.3. Efficient data manipulation and transformation (08)   :
    5.4. Application of statistical methods (05)   :

6. **Creativity and Innovation (20 points)**

    6.1. Uniqueness and originality of the approach (06)   :
    6.2. Creative problem-solving techniques (06)   :
    6.3. Innovative use of data and methods (08)   :

7. **Communication (15 points)**

    7.1. Clarity and organization of the report/presentation (05)   :
    7.2. Ability to convey complex ideas concisely (05)   :
    7.3. Engaging and information data storytelling (05)   :

8. **Overall Impact**

    8.1. Rate the overall impact on a scale of 1-10   :