

# IAF Transition towards a Network-Centric-Knowledge Based Force

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## Abstract

*The article is based upon a study done by the authors regarding Knowledge Management in the Indian Air Force (IAF). The study brings out valuable lessons regarding institutionalising the way to retain the knowledge base of the organisation keeping in mind that personnel moving out of the organisation is inevitable. Though the study is based upon the IAF the findings are of equal relevance to the complete military.*

## Introduction

**K**nowledge Management (KM) is getting the right knowledge to the right person at the right time. In a military environment, KM includes a strategic approach to achieve strategic aims by using the power of collective knowledge penetration into the processes of generating, gathering, organising, sharing and transferring knowledge to meet the military objective.<sup>1</sup>

Knowledge is power, therefore an asset for people and organisations. It has superseded traditional corporate assets and has become a strategic resource that drives the economy and provides a lasting competitive advantage<sup>2,3</sup>. Leveraging individual and organisational knowledge to boost efficiency and effectiveness has now become a popular management technique that has been successful across the globe. A survey conducted in more than 200 successful US firms revealed that 80% of corporations had knowledge initiatives. There is adequate evidence in numerous studies conducted worldwide that effective KM is beneficial to the

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organisation in saving cost and time, increasing innovations, efficiency, customer satisfaction, competitive edge, and organisational performance<sup>4,5,6,7,8</sup>.

Like any other organisation, the requirement of an effective KM in a contemporary military cannot be ruled out. Studies indicate that with the expansion of operational areas and sub-conventional warfare taking the center-stage, a large number of military organisations like NATO, US, UK, Israel, Canada, Turkey etc. have adopted KM in a big way. The cutting-edge technologies have resulted in dynamic, unpredictable and complex operations. This makes problem-solving and decision making more complex and essential than ever. These significant changes in the characteristics of warfare dynamics have forced the militaries in the world to reorganise their doctrines to include KM at the core<sup>9</sup>.

Aggressive KM initiatives also assumes a vital role for the IAF as timely, accurate, decision-ready and actionable knowledge is imperative for planning and conducting aerospace operations<sup>10</sup>. However, despite the best efforts, IAF continues to squander what may be its greatest assets in today's knowledge economy i.e. the wealth of experience, ideas, and insight of its air-warriors that are scattered across and deeply embedded within the organisation<sup>11</sup>. The IAF is required to move beyond the simplistic incorporation of the latest information technology (IT) hardware and software to a more deliberate KM strategy. There is a need to progress beyond the simple network-centric force to a network-centric-knowledge-enabled force to achieve knowledge superiority.

### **KM in the World's Military Organisations**

The available literature establishes KM as a force multiplier for the military establishments. Hence, in the 21<sup>st</sup>-century, military organisations of the world have no option other than to take cognisance of the fact and embrace KM in a big way to remain current and relevant. Some of the contemporary military establishments have already initiated necessary steps to incorporate KM in their doctrines and policies<sup>12,13</sup>.

The NATO Knowledge vision declares that "the NATO military structure will transform into Knowledge Centric Organisation. It will promote information and knowledge sharing and treat expertise,

experience and best practices as valuable assets to achieve decision superiority”<sup>14</sup>. The United Nations (UN) peacekeeping operations have developed a “Knowledge-Based System” to assist the UN Military Observers in the deployment country<sup>15</sup>.

The US Department of Defence directs the Joint Forces to be knowledge empowered and initiate actions to acquire, refine and share knowledge. KM was included in the US Army Regulations to emphasise KM as the means of supporting its strategy for the 21<sup>st</sup> century, which is of transforming itself into a net-centric, knowledge-based force. Similarly, the US Air Force Strategic Plan enforces Knowledge-Based Operations, which envisages effective use and management of information and knowledge across the Air Force<sup>16</sup>. The Israeli Defence Forces foresee knowledge as critical resources for current and future battlefield<sup>17</sup>. The Defence Research and Development Canada has also targeted KM as an area to support the futuristic military requirements in 21<sup>st</sup> century<sup>18</sup>. The Armed Forces of the Slovak Republic also believes in active KM for retention of necessary knowledge<sup>19</sup>. Thus, KM is being given importance by several militaries.

### **KM Status Check of the IAF**

Two of the major impediments faced by the military organisations in managing the organisational knowledge is the consistent knowledge loss because of soldiers’ exit and lack of formalised KM strategy<sup>20</sup>. Studies show that half or more of the best officers leave the military early, rather than serving for a full career<sup>21</sup>. Also, to keep their forces young and fighting fit, the military organisations by the policy itself have an option for voluntary retirement after 15 to 20 years of service. As per the statistics, 89% of the soldiers of all the armed forces retire young between 30–50 years of age<sup>22</sup>. To examine the status of IAF on these two aspects, a survey study was done to address the following questions:

Q1. The effects on the organisation’s knowledge due to the early retirement of its air-warriors?

Q2. Status of existing KM strategies and plans in IAF?

### **Study Methodology**

An inferential, descriptive study was employed to examine the status of KM in IAF. This was a quantitative study in nature,

utilising descriptive statistics to analyse the data derived from the KM survey. A survey instrument was designed to gather data from 250 retired air-veterans, comprising of 100 officers and 150 airmen. Since the complete population of air-veterans could not be ascertained, snowball sampling was used to select the participants for this study wherein each sample was requested to refer a friend or acquaintance air-veteran for participation. The survey questionnaire was divided into two sections, comprising of four questions in each. Respondents were asked to record the answers on a 5-point Likert scale ranging from (1) strongly agree, with (3) neutral as the midpoint, and (5) strongly disagree. Pilot testing was conducted to establish content validity and improve questions. Cronbach's Alpha reliability coefficient<sup>23</sup> was used to measure the internal consistency of the questions. The questions were found to be reliable with a 0.773 Cronbach Alpha coefficient for all the eight items. This study used SPSS 23.0<sup>24</sup> as major tools to analyse data.

## Results and Analysis

To better understand the characteristics of each variable, descriptive statistics analysis was used. The questions and responses are as under:

*Q 1: What are the effects of knowledge loss in IAF due to the early retirement of air-warriors?*

Response of sample population on various questions asked to understand the effects on the organisation's knowledge due to the early retirement of the air-warriors indicates:

(a) 93.2% of the respondents feel that the retiring air-warriors possess critical professional knowledge, the loss of which adversely affects the organisation's performance.

(b) 51.6 % feel that that the existing system and process in IAF caters to redundancies with adequate induction and training, so that early retirement does not have any significant effect on the organisations knowledge, while 34.4% don't agree to this fact.

(c) 84% of the respondents believe that early retirement by 20 yr of service, creates a vacuum at the senior supervisory level in a technology-intensive organisation.

(d) 50.4% of the respondents feel that early retirement is good for the organisation as it helps to maintain a young and fit workforce with greater adaptability and current knowledge, whereas 28% disagree with the facts and the remaining 21.6% remained neutral on this question.

*Q2: What is the status of the existing KM strategies in the IAF?*

Response of sample population on various questions asked to understand existing KM strategies and plans in IAF indicates:

(a) 51.6% of respondents believe that the organisation has comprehensive and documented KM strategies, while 30.4% disagree with the fact and the rest remained neutral.

(b) 45.6% of the respondents feel that the KM roles and responsibilities are clearly defined in the organisation while 34.8% expressed disagreement.

(c) Mixed opinion was received on whether the HR policies in the organisation support the proper management of individual and organisational knowledge. 42% agreed to the fact whereas 40.4% expressed disagreement.

(d) 71.6% of the respondents strongly believe that KM is an integrated part of routine work processes, but it is practiced without realising it.

Average Mean from Officers and Airmen indicated that Officers are more in disagreement on the existence of a formalised KM strategy in IAF as compared to Airmen.

## **Key Findings**

- Retiring air-warriors possess critical professional knowledge, the loss of which adversely affects the organisation's performance. It also creates a vacuum at the senior supervisory level. However, early retirement cannot be completely avoided as it helps to maintain a young and fit workforce. Therefore, the only viable option available is to capture and transfer the knowledge and expertise of these air-warriors.

- KM is an integrated part of routine work processes in IAF, however the same is neither formalised nor documented and practiced sparingly without realising it.
- Officers strongly feel a lack of KM strategy and plans in IAF as compared to Airmen.

## **Recommendations**

- Organisational and individual knowledge be treated as assets and it needs to be managed to attain knowledge superiority.
- The relevance of active KM needs to be acknowledged at the highest levels and driven down to all ranks through Policies, Doctrines and defined Roles and Responsibilities.
- Develop a KM strategy for the IAF that is closely aligned with the IAF's overall strategy and goals.
- Capturing and Transferring of knowledge needs to be emphasised and methods may be instituted to incorporate the same in the routine process.
- Knowledge audit may be conducted to understand the organisational knowledge needs, holdings and deficiencies.
- Efficacy of various KM Tools like Community of Practices, Lesson Learned, Knowledge Portal etc. for the IAF and need to be implemented in a planned manner.

## **Conclusion**

The departing soldiers at the peak of their ability and experiences take with them the most valuable knowledge they have gained over the years of their professional and personal lives. Their in-depth knowledge experience, aptitude to understand and integrate knowledge reduces the organisation's capability of innovating and problem-solving which invariably decreases the organisation's performance and profitability. It is in the strong interest of IAF to identify optimal strategies to leverage the intellectual capital of the organisation's workforce. The IAF, therefore is required to develop a KM strategy, to transform from

information-base to knowledge-based operation and turn into a net-centric-knowledge-based force.

## Endnotes

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<sup>23</sup> Cronbach's alpha is a coefficient of reliability (or consistency).

<sup>24</sup> SPSS® Statistics is the world's leading statistical software that is used to solve business and research problems.