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ASSIGNMENT – INTRODUCTION TO THE DIGITAL WORLD

DIGITAL TRANSFORMATION OF ADMINISTRATIVE PROCESSES IN THE INDIAN NAVY

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Introduction

The Indian Navy is a modern maritime force with highly skilled and trained manpower which is ready to meet any challenge across the entire spectrum of missions in the maritime domain. Manned by almost 10,000 officers, 60000 sailors and an additional 50000 defence civilians, the management of such a large human resource indeed poses significant administrative challenges in myriad domains pertaining to pay, allowances, clothing, leave, official movements, travel, housing, medical, gate entry applications, personal permissions, booking of transport, intra-IN public services etc. These challenges are further compounded by existence of manual or partial / standalone digital processes which result in significant '***wastage of valuable man-hours***' in pursuit of accomplishing personal / organisational routine administrative tasks. In an effort to mitigate loss of productivity of our human resource in terms of time and effort while undertaking the aforementioned routine tasks, the Indian Navy has harnessed '***information technology***' and '***software solutions***' to undertake a pioneering digital transformation of its administrative processes. The various aspects of this pilot '***digital transformation project***' are elucidated int the succeeding paragraphs.

The Technology

The fundamental framework of the digital transformation initiative is creation of an '***integrated work environment***' amalgamating and merging all administrative services and existing modules under one single portal (using MS SQL database with DOT NET UI). The Portal is backboned on the existing naval Wide Area Network, Metropolitan Area Network and Local Area Net Work to ensure '***last mile connectivity***' across the length and breadth of the country with a browser-based access enabling log in only through an individual digital identity. The portal provides '***end to end***' paper less processes with '***zero***' physical movement of individuals or paper from office to office. Some key features of the

technology include single sign-on, multi-factor authentication framework, real time replication of data base, disaster recovery sites, standard UIs for all modules which are hosted on the portal.

The Emerging Benefits of the Technology

The envisaged benefits of the establishing an '***Integrated Work Environment***' with lean processes were aimed at enhancing efficiency and eliminating unproductive effort in the execution of administrative functions. The introduction of the technology has resulted in reduction of waste in terms of time, effort, paper and man-hours thereby enhancing the value and productivity of the organisation as a whole. The introduction of the technology has also proved to be a 'game-changer' with respect to record keeping and access to data and at the same time bringing transparency of transactions in administrative processes which hitherto were mired with opaqueness and unaccountability. ***As an illustration, an officer who reports to a new station, can now log-in into the 'Administrative Portal' using his digital ID and can access all services as well as undertake functions including 'incoming formalities'. These tasks can be conducted from his work place without the requirement of filling and forwarding manual forms, taking prints as well as obviating physical movement to track and pursue administrative processes, which can now be achieved online due to the transparency afforded by digital technology***.

Technology Characterization and Impact on Decision Processes

The digital transformation of administrative processes, while on the one hand has resulted in significant savings of man-hours, it has also for the first time facilitated unprecedented big data analysis of administrative procedures wrt time, budget, financial implications, volumes, efficiency. This ability to be able to analyse administrative processes is a key enabler for decision makers towards optimization of resources and budgets, identification of weak and inefficient processes and bottlenecks. The introduction of this technology has also succeeded in bringing uniformity in platforms across different naval operational commands of the Indian Navy which are widely dispersed geographically. From a strategic perspective since administrative processes are integral functions of armed forces with a direct

bearing on their operational roles and missions, introduction of technology has expedited decision making processes thereby enhancing the overall efficiency and effectiveness of the organisation.

Risks

As with any Digital Transformation initiative, evaluation of risks is a critical element of the project and likewise risk evaluation of the Administrative portal reveal two main threats pertaining to security of the network and loss or corruption of data. Since the entire force would have migrated to the Digital module for conducting administrative processes and functions, cyber-attack or inadvertent breach of infosec norms can lead to corruption of the entire data or introduction of malware into the portal. The other main risk is physical damage or hardware breakdown /software corruption of the network leading to inaccessibility to users resulting in bringing administrative processes to a grinding halt with a residual and downstream adverse effect on the functioning of the organisation.

Lesson learnt / Future Development

Post initial utilisation of the 'Administrative Portal', a few '***lessons***' as well '***future pointers***' have emerged and these are elaborated ***ad seratim*** below:-

(a) Currently accessibility is restricted and is available only through limited nodes during working hours from offices or work places.

(b) The portal can be accessed only through desktop-based applications; there is no mobile based application since presently there are no secure WIFI zones to access the network.

(c) The efficiency and speed of access of the portal is highly dependent on the unrestricted and continuous availability, maintenance and sustenance of backbone network.

(d) Integrating legacy administrative modules developed on diverse software with newer modules on the 'integrated work environment' portal continues to remain an ongoing process with inherent technological challenges.

(e) As the Portal stabilises and all services migrate to the Administrative portal, the storage capacity would have to be upgraded to cater for the volume of data generated (on cloud or

servers). An associated issue related with this aspect is the ability of network to handle the traffic in terms of speed and volume with real time focus on upkeep/upgradation of Back up/ Data protection facilities.

Conclusion

The Digital Transformation model has been successfully applied to a few pilot projects thereby creating a digitally integrated work environment with intelligent applications enabling end-to-end paperless transactions for all administrative functions. Coalescing the power of information technology and digital transformation to replace human tasks, while providing data supported decision making enables the Navy to focus on its '***core***' functions with concurrent optimization of time, resources, energy and cost expended for its '***non-core***' functions. To conclude, migration to digital transformation of administrative processes not only facilitates effective human resource management of the Navy's large rank and file but also enhances the overall efficiency and operational effectiveness of the service.