

CONCEPT NOTE

COMMERCIAL DRONE MARKET



DRONE FEDERATION OF INDIA
WWW.DRONEFEDERATION.IN



DRONE FEDERATION OF INDIA

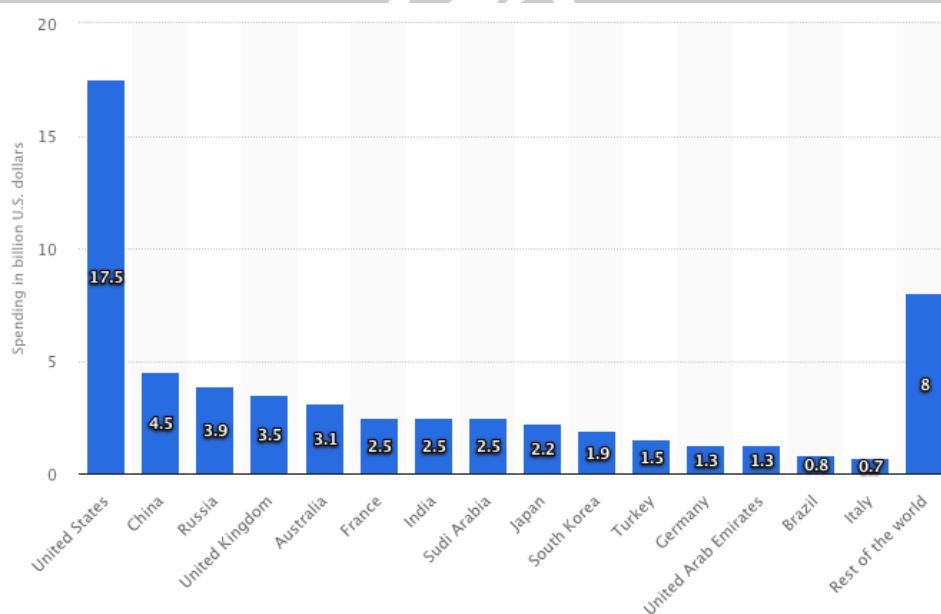
INTRODUCTION

RATIONALE

This concept paper outlines the potential of the UAV market, the global adoption of the technology and how industry trends may be extrapolated into the Indian scenario. As the voice of the UAV industry in India, the Drone Federation of India (DFI) is relentlessly working towards a sky full of drones where India is viewed as a leader and expert in the domain. With an increase in the adoption rate of the technology, the DFI wishes to enable the best possible churn rate in drone based transactions while bolstering all forms of traditional survey methods. The growth of the UAV market can stimulate the economy and help create jobs, increase skill base and increase the efficiency of industries across the country.

BACKGROUND

The spend on drones in India is estimated to hit USD 2.5 billion by 2021. A surge in the industry would mean more jobs and higher level of futurization across sectors. Industries such as agriculture, construction, defence, surveying, roads and railway, mining, aerial filming among others would be stimulated to a great extent.



As on Jan 2017, 10 million acres of land were mapped using the Drone Deploy app alone. 60% of these users created maps every week with revenues of USD 150 million being generated by way of drone surveys. Also it may be noted that 84% of all mapping happens on drones costing less than USD 1500. (Drone Deploy)

Enterprise pilots working on commercial surveys charge significantly more than hobby or filming pilots. Several large companies have incorporated drones into their BAU to streamline workflow and increase overall efficiency. Further, in India, top companies such as tech firms, big 4 consulting



DRONE FEDERATION OF INDIA

companies and heavy industries are building cohorts that harness talent in UAVs and IoT and engage upcoming firms for engineering surveys. Hence, while the global market expands rapidly, it is imperative that India works towards harnessing the best in the business.

GAPS IN THE INDUSTRY

Often, consumers view drones as a technology with an inherent risk factor. In order to alleviate this, it is important that regulatory frameworks are robust yet innovation friendly. In order to get the best reports from ground zero, frequent interactions, reports and feedback from industry players, chambers and associations and digital crowd sourced initiatives can go a long way in bolstering the UAV industry. Recently, the US Army issued a ban on DJI drones for military use (Popper, n.d.). In order to iron out issues in vulnerability, DJI crowdsourced a program where users were rewarded on reporting system vulnerabilities in order to overturn the embargo. Such initiatives help bridge gaps between governing bodies and the industry.

COMMERCIAL DRONE MARKET

IMPACTING FACTORS

AMBIGUITY ON REGULATIONS

Lack of clarity on the regulatory framework leaves UAV players on the back foot given the market demand and the sales funnel length. Most consumers are keenly interested in engaging UAV however, lack of a framework and the industriousness needed in obtaining police clearances are a deterrent.

DRONE FEDERATION OF INDIA SAFETY ASSURANCE

Limited number of underwriters for drone insurance schemes due to lack of clarity on laws

SURGE IN THE NUMBER OF ENTHUSIASTS AND EXPONENTS

1.5 million engineers (Mahajan) pass out of India each year leading to an increase in the number of UAV enthusiasts and hobbyists. Many of these players choose other avenues as the scope of the UAV industry remains unclear

MANUFACTURING LICENSES (DIPP)

Obtaining a DIPP licence takes up to 10 months. Due to this, keeping the faith of an investor or a mentor in a UAV startup can be difficult. Most UAV firms are young, bootstrapped for funds or are on the lookout of investments to propel their growth. Hence, firms that have obtained DIPP licenses have an extended advantage over the rest of the industry



DRONE FEDERATION OF INDIA

LACK OF CLARITY ON SCHEDULED AREAS

Areas close to airports, military establishments or politically sensitive areas are currently demarcated only on the basis of estimated distances from ground zero. Libraries that cover all prohibited areas would be a key feature in flight safety and privacy measures alongside overall UAV flight hygiene

COST DRIVE DOWN

The DJI drone traffic in India is immense with several small time players, maverick operators and film makers using these drones for their BAU. An increase in the interest levels and the number of UAV operators has increased manifold leading to a price war within the industry even before the formal issuance of a regulatory framework.

NEED OF THE HOUR

REGULATIONS

The absence of a regulatory framework keeps several drone players in the grey space. Some distributors have reported sale of up to 3 DJI drones per week. Such levels of demand would only increase the number of maverick operators who might continue to ply their business without registrations post issuance of the CAR. This would lead to issues in controls and compliance if the number increases.

COLLABORATION

The Drone Federation of India will be happy to assist the DGCA and the Ministry of Civil Aviation in the overall regulatory process. Should the incumbent CAR require amendments, the DFI is placed to provide an accurate view from ground zero given the combined knowhow and experience of the members.

COMMUNICATION

Frequent open houses and forums such as mygov.in where ideas can be crowd sourced and exchanged seamlessly will be of immense benefit. Also, webinars and white papers on a monthly basis can be enabled by the DFI to keep the community up to date on the industry developments

KEY PERFORMANCE METRICS

1. **Number of UAOPs and UINs issued**- A surge in the number of operator licences and number plates indicate the interest in the industry and the number of drones that are live
2. **Area mapped by UAVs across India**- An increase in data libraries and maps across the country that clearly demarcate scheduled areas and free to fly zones
3. **Industry growth**- The overall output of manufactures and total revenue generated by operators during mapping missions



DRONE FEDERATION OF INDIA

4. **Indigenous manufacturing-** Ratio of locally sourced parts to imported parts in the manufacturing **process**
5. **VC funding-** Surge in Venture Capital on drone startups across India

ARE WE PROGRESSING?

From a technological and capability perspective, the cream of the crop resides in India. Top notch manufacturers, thought leaders, entrepreneurs and engineers bring heaps of experience and expertise to the table. With India making it to the top 100 in the 'ease of doing business' list, (The Hindu Business Line) collaborations and interactions with experts and exponents are far easier and insightful. Associations and chambers such as the Drone Federation of India interact frequently with businesses and chapters and enable connects between top minds and the industry. Hence, a robust CAR will propel the industry to greater heights in the years to come.

CONTACT

Drone Federation of India,

404, Rosa Alba, Nahar Amrit Shakti Road, Chandivali, Mumbai-72

vignesh@dronefederation.in

T +91-98204-43826

DRONE FEDERATION OF INDIA

WORKS CITED

Popper, B. (n.d.). Retrieved from The Verge: <https://www.theverge.com/2017/8/7/16106810/dji-drone-banned-government-study-data-safety>

Drone Deploy. (n.d.). *Hubspot*. Retrieved from https://cdn2.hubspot.net/hubfs/530284/10M_Acre_Report_2017_.pdf?blog

Mahajan, A. (n.d.). *DazeInfo*. Retrieved from <https://dazeinfo.com/2014/10/28/1-5-million-engineering-pass-outs-india-every-year-fewer-getting-hired-trends/>

The Hindu Business Line. (n.d.). Retrieved from <https://www.thehindubusinessline.com/economy/policy/india-makes-it-to-top-100-in-ease-of-doing-business/article9935450.ece>