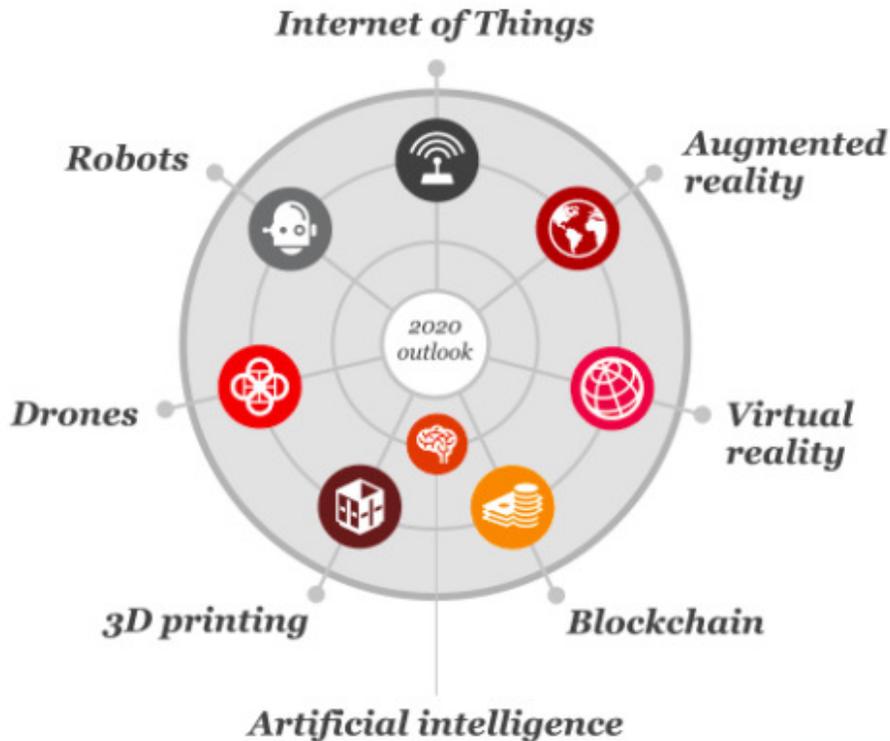


HEADING TOWARDS STRATEGIC INSTABILITY

The essential eight technologies



In late 2018, the government decided to **set up three new agencies** in order to address the new age challenges to national security:

- the Defence Cyber Agency,
- the Defence Space Agency and
- the Special Operations Division

Clearly, this is a timely effort from the government to have finally decided to set them up though they are **not yet in place**.

While this is indeed a useful step in the right direction, it is also important to note that the constitution of these **agencies is a far cry from the crucial recommendations given by the Naresh Chandra Task Force and the Chiefs of Staff Committee.**

Both of these suggested the formation of **three separate joint commands** to deal with **new challenges** to India's national security in the **cyber, space and special operations domains.**

But some argued that it is rather a lacklustre response to **major ‘futuristic’ challenges to our national security** raises a larger question of whether India is ready to face a war like situations and can win?

Above Question raises due to the following reasons:

There is a **revolution in military affairs** that seems to have attracted the attention of **strategic analysts and policy planners** across the world.

The current focus in military thinking across the world is increasingly moving away from traditional heavy-duty military hardware **to high-tech innovations:**

- artificial intelligence (AI), big data analytics, satellite jammers, hypersonic strike technology, advanced cyber capabilities and spectrum denial and high-energy lasers.

In the light of the **unprecedented capabilities** that these systems offer, there is also an increased focus on **developing suitable command and control** as well as **doctrinal concepts** to accommodate and calibrate them.

The arrival of these technologies might deeply frustrate **strategic stability** of any country as because of their disruptive nature.

Strategic stability in the contemporary international system: Inherent paradox vis-a-vis high technology-enabled military systems:

Disruptive technologies have the **potential to impact** growth, employment, and inequality by creating new markets and business practices, needs for new products & infrastructure and different labour skills.

- The most important being the **issue of survivability** of a **state’s nuclear arsenal** and its ability to carry out a second strike after a first attack.
- Once accuracies get better, **hypersonic glide vehicles** replace conventional delivery systems,
- **Real time tracking and surveillance** make major strides,
- **AI-enabled systems** take over,
- survivability of nuclear arsenal, which lies at the heart of great power stability.
- There was, for instance, an assumption that the naval leg of a nuclear triad is the most survivable part since it is hidden away in the depths of the ocean away from the adversary’s gaze.

However, the **potential ability of deep-sea drones** to **detect** ballistic-missile armed nuclear submarines or SSBNs may make this assurance a thing of the past thereby frustrating traditional calculations.

Arrival of these new technologies to the emerging strategic competition among great powers:

- The S.’s **withdrawal** from the **Intermediate-Range Nuclear Forces treaty** is perhaps an **indication of a potential arms race** in the offing.

- **China** has emerged as a **key actor** in the field of **emerging military technologies**. This is something that will concern New Delhi in the days ahead.
- Beijing is in the lead position in **emerging technologies** with potential military applications such as **quantum computing, 3D printing, hypersonic missiles and AI**.
- If Beijing continues to **develop hypersonic systems**, for instance, it could **potentially target** a range of targets in the U.S.
- While the Chinese focus is evidently on U.S. capabilities, which China interprets as a potential threat which can be the same case for India also.
- India might, in turn, consider developing some of these technologies which will **create dilemmas for Islamabad (Pakistan)**.
- The **cascading strategic competition** then looks **unavoidable** at this point, and that is worrisome. And yet, it might be difficult to avoid some of these developments given their dual use.

Conclusion:

However, there is a need to ask how **survivable India's naval platforms** are given the feverish developments of advanced sensory capability in the neighbourhood. It is in this context that we must **revisit the government's decision** to set up the agencies to **address cyber and space challenges**.

Moreover, reports indicate that the **Space Command** will be headed by the **Air Force**, the **Army** will head the **Special Operations Command**, and the **Navy** will be given the responsibility of the **Cyber Command**.

If indeed that happens, **their effectiveness** in terms of **tri-service synergy** will be much less than anticipated.

Even more so, given that the higher defence decision-making in the country is still **civil services-dominated**, despite the recent attempts to correct it, the **effectiveness of these agencies** will remain weak.

We can be sure of **exponential growth in disruptive technologies** and that the business landscape will shift faster than any year previous.

Therefore, **proper timely steps** must be taken by India to **act as a deterrent to avoid any conflict situations** with technologically developed countries.