

# MOVING

## THE NEEDLE

THE JOURNEY FROM POLICY  
TO IMPLEMENTATION



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## Primus' Key Events and Publications

Dear Readers,

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In the December 2024 edition of Moving the Needle, we take this opportunity to highlight the pivotal topics shaping our world today.

This month, we delve into India's "One Nation One Subscription" initiative, a landmark step toward democratizing access to global research and driving innovation across key sectors. We also explore the booming AVGC-XR sector, examining its potential to position India as a global hub for immersive technologies and economic growth.

Further, we assess the potential impact of Donald Trump's second term on Indo-US trade, QUAD strategies, and global geopolitics.

Flip to our Expert Speak section, where you'll hear from Shilpa Kolhatkar, Global Head of AI Nations at NVIDIA, on India's role in AI transformation, and Achal Singh, CEO of Glitterati Pearl Farms, on how innovation is revolutionizing pearl farming in India. Read on to uncover opportunities driving change across industries.

Happy reading and happy new year, folks!

Sincerely,  
Moving the Needle Team



# 1

## Policy Outreach

### #PolicySquare

To understand the more fundamental questions in policy making

### #LeadersSpotlight

To highlight opinions of sector/segment leaders

### #PrimusPodcast

To bring together policymakers & thinkers in areas of critical importance



Shilpa Kolhatkar, Global Head of AI Nations, NVIDIA, talks about India’s approach to AI, how AI will transform the world, the concept of AI factories, and much more, in a conversation with Sameer Jain, MD, Primus Partners and Deepsekhar Choudhury, @outlookbusinessmagazine. She says that the ability of a country to produce AI domestically and independently is “extremely important”.

# 2

## Technology

**'One Nation One Subscription':**  
Innovation Through Better Access  
to Research



The "One Nation One Subscription" (ONOS) initiative by the Indian government is a landmark step toward democratizing access to knowledge and driving innovation. By providing universal digital access to research journals and articles, this initiative eliminates the long-standing financial and geographic barriers that have hindered India's research capability. With ₹6,000 crore allocated over three years, ONOS aims to empower over 6,300 institutions and 1.8 crore students, researchers and faculty members, setting the stage for a knowledge-driven and tech-enabled future.

For a nation striving to be a global leader in technology and innovation, ONOS is a critical enabler.

Access to cutting-edge research is essential for advancements in areas like artificial intelligence, quantum computing, biotechnology and renewable energy, for a nation like India. Researchers often require up-to-date studies and interdisciplinary insights to build innovative solutions. With ONOS, Indian innovators can access the same global knowledge resources as their counterparts in leading international institutions.

This becomes even more important when we compare India's patent filings with those of nations leading in technology innovation. While India filed 77,068 patents in 2023 (26,000 by residents), it lags behind global leaders like China, with 1.7 million

## 2

## Technology (Contd.)

filings and the United States, with over 600,000. India definitely has talent but lacks access to high-quality resources. ONOS addresses this gap, providing researchers the tools they need to create, innovate and protect their intellectual property. Increased access to global research will directly contribute to a rise in high-quality publications, patents and tech-driven solutions. filings and the United States, with over 600,000. India definitely has talent but lacks access to high-quality resources. ONOS addresses this gap, providing researchers the tools they need to create, innovate and protect their intellectual property. Increased access to global research will directly contribute to a rise in high-quality publications, patents and tech-driven solutions.

One of the most significant impacts of ONOS will be on emerging technology sectors. In artificial intelligence, access to the latest global advancements will enable researchers to develop smarter algorithms, improve machine learning models and work on ethical AI frameworks. In biotechnology, it will accelerate developments in personalized medicine, genetic engineering and vaccine production. Research access in quantum computing will be crucial for India to make progress in areas like computing power and cybersecurity. This initiative fits well with India's efforts to build a stronger research and innovation framework. It focuses on turning knowledge into practical solutions rather than just gathering information.

ONOS will help building a culture of innovation powered by technology. Start-ups, tech companies and academic institutions, will be able to speed up the creation of latest technologies, when they will have open access to quality research. This will attract global R&D investments, strengthening India's position as a leader in innovation and intellectual property.

To place India as a global leader in technology and innovation the "One Nation One Subscription" initiative is a forward-thinking step. By giving researchers access to top-tier global resources, it will ensure that ideas can grow freely and not be bound by lack of information. This initiative is a step toward a future where India's tech ecosystem thrives on creativity, collaboration and cutting-edge research, strengthening its position on the global stage.



2

Technology (Contd.)

And then, there's the often-overlooked question of the credits themselves. In Africa, nations rich in renewable energy potential—like Kenya and South Africa—face a bitter irony: they are encouraged to keep emissions low to generate credits, which wealthier countries and corporations can buy. Critics call it a modern form of green colonialism, where developing countries are effectively selling off their future carbon budgets to allow the developed world to meet its targets. These countries are being nudged to prioritise carbon-saving projects over industrial growth, a trade-off with long-term implications for economic sovereignty.<sup>11</sup>

At the heart of this geopolitical tug-of-war is a stark reality: carbon credits have become more than just a tool for emissions reduction. They are now a form of currency, a lever for influence, and a means of control. The big players are angling to shape the rules, define the standards, and determine who gets access—and at what cost. As climate pledges grow more ambitious, the world is waking up to the fact that carbon credits are not merely market commodities but pieces in a larger power game, where the stakes are planetary, but the rules are all too human.<sup>12</sup>



<sup>1</sup> <https://eur-lex.europa.eu/EN/legal-content/summary/eu-emissions-trading-system.html>

<sup>2</sup> <https://www.bloomberg.com/news/articles/2023-10-02/how-eu-s-carbon-border-adjustment-mechanism-works-and-what-the-critics-say>

<sup>3</sup> <https://www.economist.com/europe/2024/04/25/carbon-emissions-are-dropping-fast-in-europe>

<sup>4</sup> <https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program>

<sup>5</sup> <https://www.reuters.com/sustainability/climate-energy/us-unveils-policy-boost-carbon-offset-market-integrity-2024-05-28/>

<sup>6</sup> <https://www.forbes.com/sites/energyinnovation/2022/04/18/chinas-emissions-trading-system-will-be-the-worlds-biggest-climate-policy-heres-what-comes-next/>

<sup>7</sup> <https://essd.copernicus.org/articles/15/5301/2023/>

<sup>8</sup> <https://ccci.berkeley.edu/news/2021/07/china-launches-world-s-largest-carbon-market>

<sup>9</sup> [https://cebds.org/wp-content/uploads/2023/06/CEBDS.Repositioning-Brazil-towards-Regulation-of-Article-6-of-the-Paris-Agreement\\_2021\\_EN.pdf](https://cebds.org/wp-content/uploads/2023/06/CEBDS.Repositioning-Brazil-towards-Regulation-of-Article-6-of-the-Paris-Agreement_2021_EN.pdf)

<sup>10</sup> <https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact/cop26-outcomes-market-mechanisms-and-non-market-approaches-article-6>

<sup>11</sup> <https://www.theguardian.com/world/2023/apr/23/un-indigenous-peoples-forum-climate-strategy-warning>

<sup>12</sup> [https://unfccc.int/sites/default/files/resource/sb2023\\_08.pdf](https://unfccc.int/sites/default/files/resource/sb2023_08.pdf)



## AVGC-XR

The AVGC-XR (Animation, Visual Effects, Gaming, Comics, and Extended Reality) sector has seen impressive growth and is expected to expand further over the next decade.

### Growth and Economic Impact of the AVGC-XR Sector

In 2019, India's AVGC sector was valued at USD 2.3 billion, representing 0.7% of the global market. The sector is projected to grow annually by 14-16%, driven by increasing content consumption and the rise of immersive technologies such as augmented and virtual reality (AR/VR). AVGC-XR industry's application and relevance extend beyond just media and entertainment, revolutionizing sectors such as education, healthcare, tourism, and e-commerce, offering interactive learning tools, immersive simulations, and virtual experiences.

Furthermore, the sector offers more than an economic promise; it holds the potential to promote Indian culture globally, connect the Indian diaspora, create direct and indirect employment, and benefit tourism and allied industries. Leveraging India's rich storytelling tradition and compelling narratives, celebrating India's heritage while engaging the global audience.

### Enabling Ecosystem: Government Initiatives

Recognising this potential, the government has taken several proactive steps to create an enabling environment for AVGC-XR. The sector is one of the

## Unlocking India's Potential in the AVGC – XR Sector: A Pathway to Economic Growth, Global Influence, and Innovation



12 Champion Services Sectors identified by the government. In 2022, the Ministry of Information and Broadcasting (MIB) formed a task force to promote sector-wide growth. The National Centre of Excellence (NCOE), approved by the Cabinet, aims to position India as a global AVGC-XR hub. A national policy and an AVGC-XR mission are also being worked on to support these efforts further.

At the state level, over 12 states, including Rajasthan, Telangana, and Tamil Nadu, have launched initiatives to establish themselves as AVGC-XR innovation hubs. These efforts include state policies, animation and gaming hubs, global collaborations, and dedicated skilling programs



**3**

**AVGC – XR (Contd.)**

**Skilling for the Future**

As India also embraces Industry 4.0, characterised by AI, machine learning, IoT, and automation, the importance of skilling and reskilling cannot be overstated. We must remain agile and responsive to global trends in immersive technologies. AVGC-XR sector, which operates at the intersection of creativity and technology, is creating a growing demand for specialised talent. The ever-increasing demand for highly specialised and specific talent in the AVGC-XR sector highlights the need for specific skilling and educational interventions such as incorporating AVGC-XR into curricula, establishing vocational training programs, and creating lifelong learning pathways- which will all address the sector’s skill gap and ensure a steady pipeline of professionals.

The NCOE, or the Indian Institute of Immersive Creators, will be a primary reference point for India’s AVGC-XR ecosystem. It fosters innovation, facilitates advanced research, and nurtures talent, creating industry, academia, and government. Such synergies will enable startups, established players, students, and professionals to experiment and build globally competitive brands and solutions.

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plans that align with both operational requirements and financial capabilities. Success will depend heavily on building strong partnerships for technology adoption and knowledge sharing among airports, technology providers, and industry experts. Equally important is the creation of robust monitoring and reporting systems to track progress and demonstrate value from sustainability investments. Finally, airports must invest in training personnel to effectively operate and maintain new sustainable technologies and systems. Through these coordinated efforts, Indian airports can lead the aviation sector’s transition to a sustainable future while maintaining operational excellence and supporting the country’s growing air travel needs.



4

## Geopolitics

### 'America First, Again: Navigating Trump's Second Term in a Multipolar World



The sweeping return of President Donald Trump to the most powerful office in the world has stakeholders ranging from allies to partners to businesses asking whether it will be business as usual.

With President Trump's return, India's External Affairs Minister, Dr S. Jaishankar, expects increased geopolitical hedging and accelerated re-ordering of supply chains. Despite 25 years of linear progression in the Indo-US relationship backed by broad bipartisan support, India will be pragmatic about Trump's polarising focus areas.

His election revolved around migration (including legal migration), domestic inflation, protectionist

trade, and tariff measures focused on bringing back manufacturing to the US, so countries and businesses may have to brace for the impact.

His statements during his campaign on 60% tariffs on Chinese imports and 10-20% tariffs on the rest of the world, if realised, can also impact Indian businesses importing renewable energy products to the US.

President Trump has been frank about his transactional approach to international relations and considers that trade-surplus nations should do more to achieve parity in bilateral trade. With a trade surplus of around \$40 billion,

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Geopolitics (Contd.)

India may be asked to do more despite its close technology and defence purchases, such as its recent \$4 billion deal to buy 31 Predator drones from US General Atomics.

While the rise of China’s economic prowess was met with punitive measures from both Presidents Trump and Biden, the Biden administration contained China through collaboration with allies and partners through friend shoring and nearshoring of global value chains. However, President Trump subscribes to Make in America and wants industries to return home, not to allies in Japan or partners in India.

That said, President Trump maintained cordial relations with India during his first term and was fully supportive of India during the Indo-China faceoff at Galwan Valley in 2020. India hopes that this positive posturing and the interest that the President took in reviewing QUAD during his first term and his articulation on the US’s Indo-Pacific Policy wherein he favoured ‘a free and open Indo-Pacific, where sovereign and independent nations, with diverse cultures and many different dreams, can all prosper side-by-side, and thrive in freedom and in peace.’

Even if the President seeks to continue this stance, he may seek increased monetary contributions from QUAD and Indo-Pacific partners.

Of course, there are looming issues of President Trump’s message to oil and gas companies of ‘drill baby drill’ as they can add jobs and chances that the US, the world’s second-largest emitter of greenhouse gases, may again withdraw from the Paris Climate Agreement after having made positive contributions at G20 and COP over the last four years.

President Trump’s tenure will also coincide with the US’s G20 Presidency in 2026. While it is too soon to predict what their focus areas and priorities could encompass, one hopes that India’s efforts to restore the centrality of multilateralism through G20 will find continuity with a focus on the Global South’s challenges requiring assistance from the Global North.



5

## Expert Speaks

**Achal Singh**  
Founder and CEO,  
Glitterati Pearl Farms



*Achal Singh, Founder and CEO of Glitterati Pearl Farms has a tete-a-tete with Ramakrishnan M, Managing Director and Practice Lead – Agriculture at Primus Partners. We speak about the opportunities in Pearl Farming, the role that government can provide, and how this space is evolving.*

**Q1: Can you please start with a brief introduction about you and your company?**

A: I am Achal Singh, Founder and CEO of Glitterati Pearl Farms. We are a pearl farming business. We started about 15 years ago. We focus on decorative pearls and not the regular round pearls. Last year we did ~50 Cr revenue. I believe we are pretty much the only organised player in this space.

**Q2: How is the global market for pearl farming?**

A: If you look at the global pearl market, China probably owns ~97% of the business. It is extremely skewed that way. India has a very small %; in fact, we import a lot of pearls because domestic production does not meet the local demand.

**Q3: Tell us about Pearl Farming in India – which regions have the maximum activities? Which regions are suitable? How does the supply chain work?**

A: Pearl farming can happen in pretty much all regions and all states; you just need to manage the water properties carefully. Since this market is currently run by small farmers and individuals, it is extremely difficult to determine which state has maximum activities. We are working across multiple states... personally, I am from Savai Madhopur (Rajasthan) and I feel bad I have not done much in my own state so far.

## 5 Pearl Farming (Contd.)

### Q4: How does a pearl farmer make more money?

A: You see there are two options. One, you can take a minimum pond size of 60feet long \* 80 feet wide \* 12 feet deep. You get trained in the basic pearl farming process, and then you manage water parameters, you manage the operations, and we are happy to eventually buy the pearls from you. We provide the oysters to you, we give you advice and then we eventually buy the pearls from you. You can easily make 40~60% returns in 24~30 months. The second option is like a financial product. You give us some money...and we do the pearl farming...we take care of the operations...and we assure you some returns.

### Q5: Who are some of the largest players in this business? Is it organised / unorganized?

A: Almost everyone in this business is a standalone individual or a small farmer. The whole space is unorganised. We are probably the only formal, structured, corporate entity pursuing such a business. There are many organised players in the pearl trade, but almost no one in the actual farming.

### Q6: Tell us about your most successful projects... what were the economics... how it worked...what made it a success

A: A few years back, we pivoted from our earlier model wherein we asked people to spend 5-7 lakh rupees. Rather, we took up one large chunk of land,

about 100 acres in size. We took this near Ghaziabad, UP, close to Delhi. And we said that we will manage the ponds. You can come in as an investor with as low a ticket size as Rs 50,000. Suddenly the farming business opportunity became a financial product offering. I remember we had one you boy from MP who invested approximately INR 32 lakhs in one go. And we gave him ~55% return in 2 years. That story became viral,,, and it really helped us scale up like crazy. Now we have investors across US, Canada, really around the world. Now we have one individual investor came in with a INR 4.5 Crore investment.

### Q7: Tell us about your challenges – where can things go wrong?

A: We have gone through a lot of difficulties while finetuning the business model and in streamlining the pearl farming. Maintaining the water parameters – ammonia - can be quite challenging. We had to adopt local solutions to make it feasible. We had many failures. But we took each failure, each challenge as a learning opportunity and chugged forward. I made money, I lost money, we learnt, and we moved along. It has taken me 15 years to learn pearl farming, and I continue to learn.

## 5 Pearl Farming (Contd.)

**Q8: You have collaborated with Government for a few projects; tell us how that have been...what are the success stories?**

A: We started working with the government in Chindwara, MP about 4.5 years back. We worked with the Krishi Vigyan Kendra (KVK) in Chindwara. They invested about INR 2.5 lakhs and we gave them a return of INR 8.5 lakhs in 2 years. It was a huge success story, it was all over the newspapers. We did a few more projects with KVK; we also engaged with National Rural Livelihood Mission (NRLM) for a pilot. We are very happy with the work we did in MP.

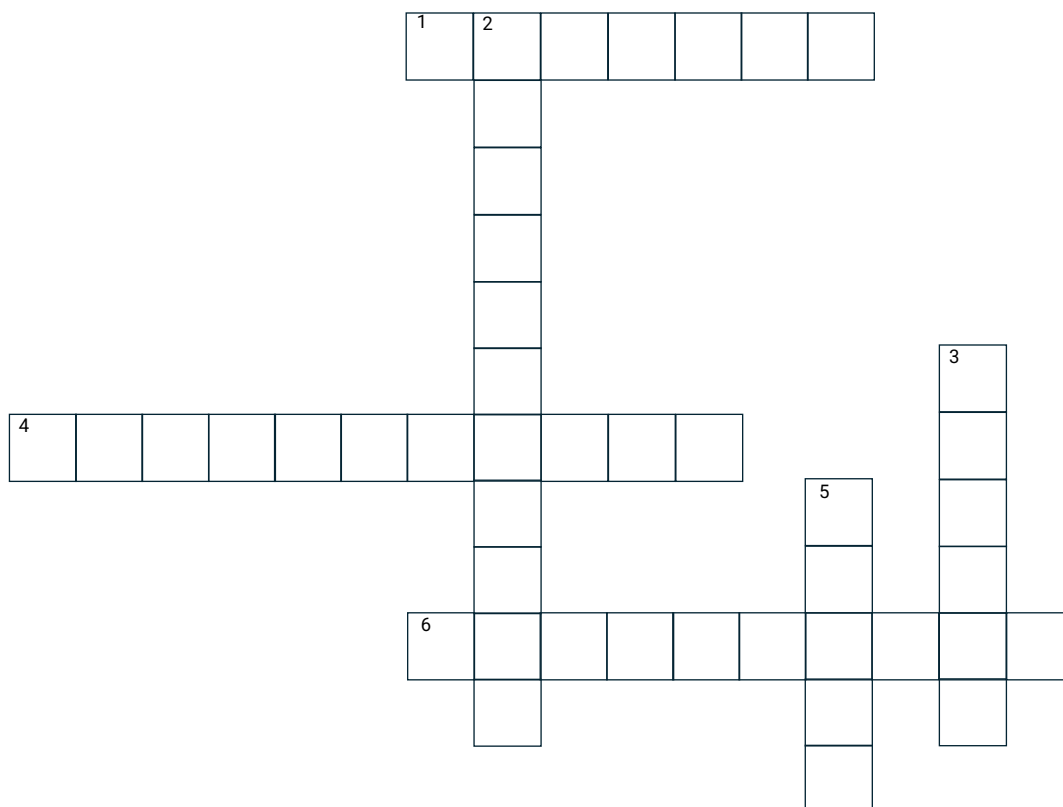
**Q9: What are your asks from the Fisheries department or the government? What can make pearl farming a big success?**

A: If each KVK can be made to do one pilot project for pearl farming... say 10,000 oysters...Each district has one KVK; and KVK does different kinds of pilot projects – across poultry, grains, hybrid varieties, etc. The idea is to make sure farmers generate higher income. Now the big advantage with pearl farming is that this is not impacted by weather. Farmer can get reliable income from pearl farming. Apart from KVKs, we have so many FPOs. They can also be encouraged to try this. NRLM can be engaged in this initiative too.



# 5 Pearl Farming (Contd.)

## Crossword



### Across

1. The practice of cultivating pearls from mollusks in controlled environments.
4. The industry that uses pearls and other precious stones to create decorative items.
6. Type of water in which freshwater pearls are cultivated.

### Down

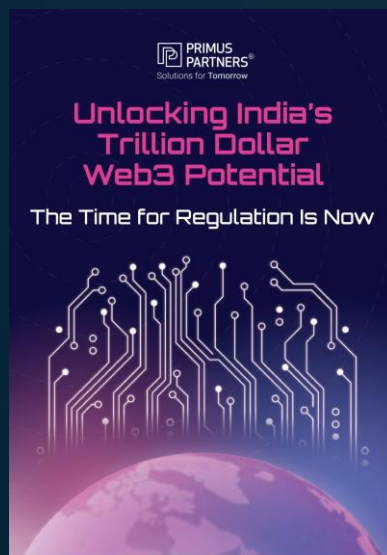
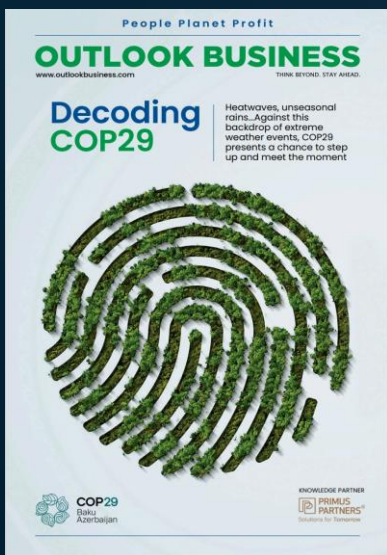
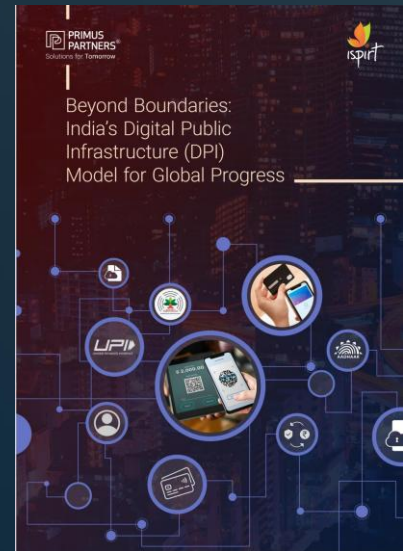
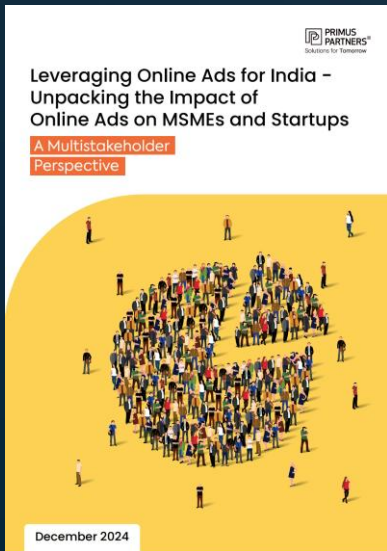
2. The farming of aquatic organisms, including pearls.
3. A type of mollusk commonly used in saltwater and freshwater pearl farming.
5. The valuable, lustrous object produced inside mollusks, often used in jewelry.

- Answers:
1. Farming
  2. Aquaculture
  3. Oyster
  4. Jewellery
  5. Pearl
  6. Freshwater

6

# Key Events and Publications by Primus

Key events organised by Primus and recent publications





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# PRIMUS

## PASSION

for providing solutions to help clients achieve their goals

## RESPECT

for all and alternate viewpoints

## INTEGRITY

of thoughts and actions

## MASTERY

of our chosen subject to drive innovative and insightful solutions

## US

representing the Primus collective, where each individual matters

## STEWARDSHIP

for building a better tomorrow



## PRIMUS PARTNERS®

Solutions for Tomorrow

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'. 'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability.

Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Established by seasoned industry leaders with extensive experience in global organizations, Primus Partners boasts a team of over 250 consultants and additional advisors, showcasing some of the finest talent in the nation.

The firm has a presence across multiple cities in India, as well as Dubai, UAE. In addition, the firm has successfully executed projects across Africa, Asia Pacific and the Americas.

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