

## What are sunrise industries? Explain with examples.

### What Is a Sunrise Industry?

- Sunrise industry is a colloquial term for a burgeoning sector or business in its infancy stage showing promise of a rapid boom. Sunrise industries are typically characterised by high growth rates, numerous start-ups, and an abundance of venture capital funding.

### Examples

#### Digital infrastructure and connectivity

- The digital infrastructure and connectivity industry is comprised of the technologies and structures necessary for ensuring widespread internet connectivity in a particular region.

#### Why it's on the rise

- While the wider Asia Pacific region has some of the world's most digitally advanced nations, digital infrastructure is still lacking for many ASEAN members, therefore this sector is creating opportunities for the digital infrastructure industry to respond to the growing connectivity demand.

#### Cyber-physical systems security

- The cyber-physical systems security industry is composed of companies which provide cybersecurity for cyber-physical systems – systems which consist of both software and physical components – such as smart grids, autonomous cars, and drone fleets. Start-ups are expected to be the main driving agent in the growth of this sector.

#### Why it's on the rise

- Cyber-physical systems are becoming increasingly widespread, and their vulnerability to hacking creates opportunities for companies and firms in this industry.

### Challenges

#### Public policy has been inadequate

- Poor regulatory frameworks have certainly impeded the growth of the sector and **stymied private investments.**

#### Financial viability of the sector remains a concern

- Many starry-eyed start-ups, wooed by the apparent size of the market gap, have launched, burnt and crashed quickly.

#### Technology and customisation are equally critical

- A “one-size-fits-all” approach is doomed to fail.
- Lack of resources, practices and complementary assets
- Uncertainty surrounding technology, markets and regulation.
- Strong competition among entrants in structuring the industry

- Lack of broadly-accepted standards for the sector
- Lack of relevant data to back claims for investments + issues with exit strategies + Uncertainty and information asymmetries
- Lack of policies and regulations + lack of economic incentives for industries being relatively new
- Difficulty securing resources to scale up production + Increased firm competition, both incumbents and entrants

### Opportunities

- Entrepreneurship opportunities
- Ability to achieve technology leadership
- Opportunity to pre-empt key resources
- Potential high growth of firms
- Sustainable growth of the industry due to the increase in production size.

### Conclusion

Governments and other stakeholders must decide how best to capitalise on the benefits of the changing industry landscape.

### Two basic approaches for the same

#### Build architecture and remove barriers

- This approach involves creating a business-friendly environment by standardising regulations, addressing regulatory barriers, streamlining the business-founding process and investing in digital and physical infrastructure.

#### Strategically invest in a particular industry

- Another approach entails 'picking a winner' - choosing an emerging industry that is strategically suited to a given context and investing heavily in its development.
- This approach is higher risk - investments may fail, optimal market conditions may cease, or a competitor may move faster and establish a dominant industry. However, with the right industry and policy levers, the potential payoff is significant