DePIN Ecosystem and

Global Impact

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1 Summary

Decentralized Infrastructure (DePIN) has emerged as a transformative framework for enabling distributed computing, storage, and manufacturing networks. This report explores key domestic initiatives, global growth trends, and future prospects across computing and manufacturing sectors, highlighting challenges and opportunities for widespread adoption.

2 DePIN Ecosystem and Global Impact

DePIN networks leverage distributed resources to deliver scalable solutions for industries ranging from AI to manufacturing. This section examines key developments in both domestic and global markets, focusing on growth drivers, real-world applications, and emerging trends.

2.1 Domestic DePIN Initiatives

Key South Korean players include ZetaCube (AI/Blockchain integration), DePINA (education/institutional partnerships), and DePIN Association Korea (standardization efforts). Challenges include regulatory gaps, limited use cases, and IPFS Korea's unclear entity status.

2.2 Global Growth and Success Stories

DePIN funding surged 326

2.3 Future Outlook for Computing DePIN

2025 growth hinges on differentiated services, supply chain innovation, and hybrid business models. Market consolidation is expected, with 3-4 dominant players emerging alongside large AI corporations entering the space.

2.4 Manufacturing Potential with DePIN

3DOS protocol enables on-demand printing, excess capacity utilization, and cost reduction. This decentralized approach democratizes access to advanced manufac-

turing while creating new revenue streams.

2.5 Future Manufacturing Trends

Expected adoption across prototyping, consumer goods, and large-scale production. Decentralized manufacturing lines could emerge by 2025, positioning DePIN as a foundation for global economic transformation.

3 Conclusion

DePIN networks are reshaping industries through decentralized resource utilization. While regulatory challenges persist, rapid funding growth and real-world applications indicate significant potential. Strategic partnerships and innovation will be critical to overcoming supply constraints and achieving mass adoption.