

eScience Activities in ASTI: Updates from the Philippines

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ASTI R&D Roadmap, 2022-2032



Environment for Extreme Computing Performance, Networks & Data (EXPAND)

- HPC & Cloud Computing
- Advanced Research Networks
- Information Systems & Research Data Platforms



Emerging Research and Applications (ERA)

- Space Technology
- Wireless Systems
- Robotics and SMART Systems



Intelligent Systems Initiative for the Philippines (ISIP)

- Artificial Intelligence
- Advanced Systems Development
- Quantum Computing

A culture of innovation & collaboration steers R&D activities in the sector



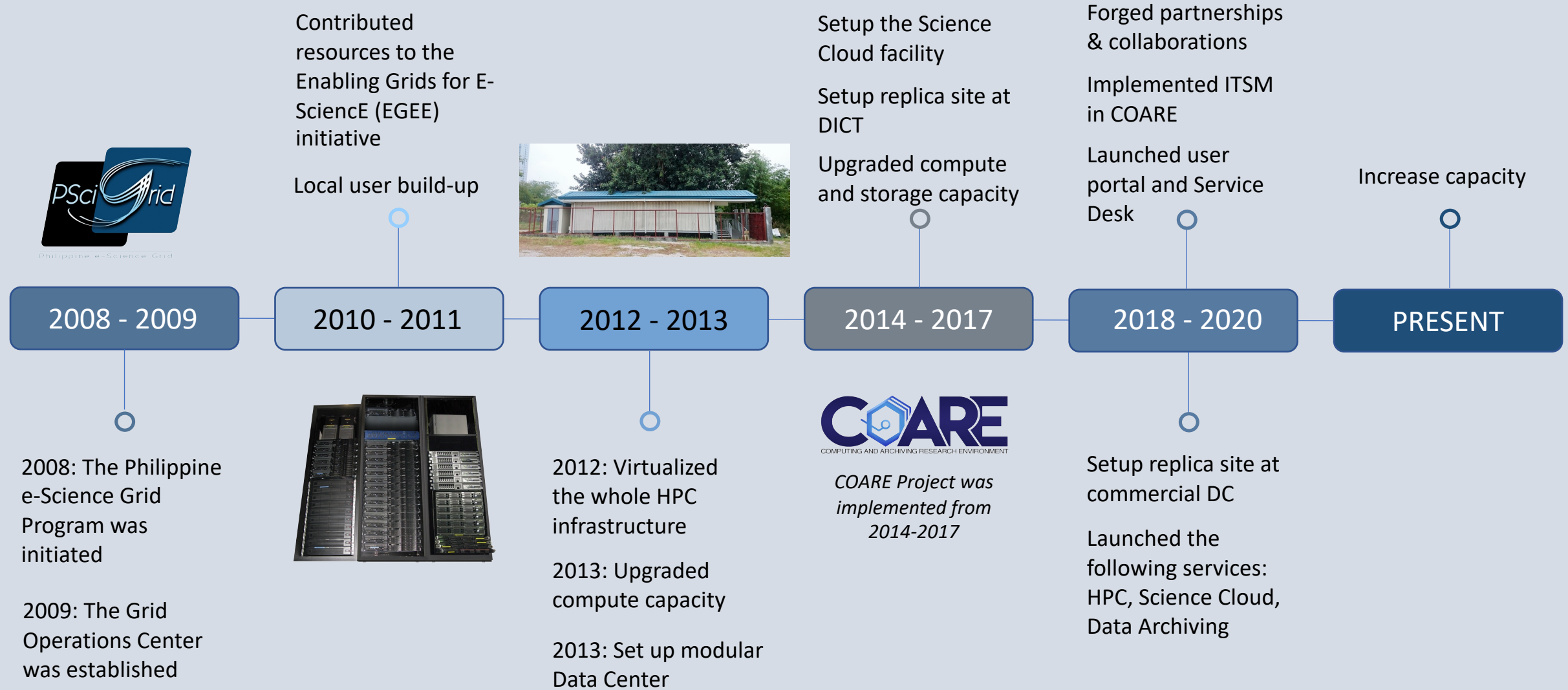
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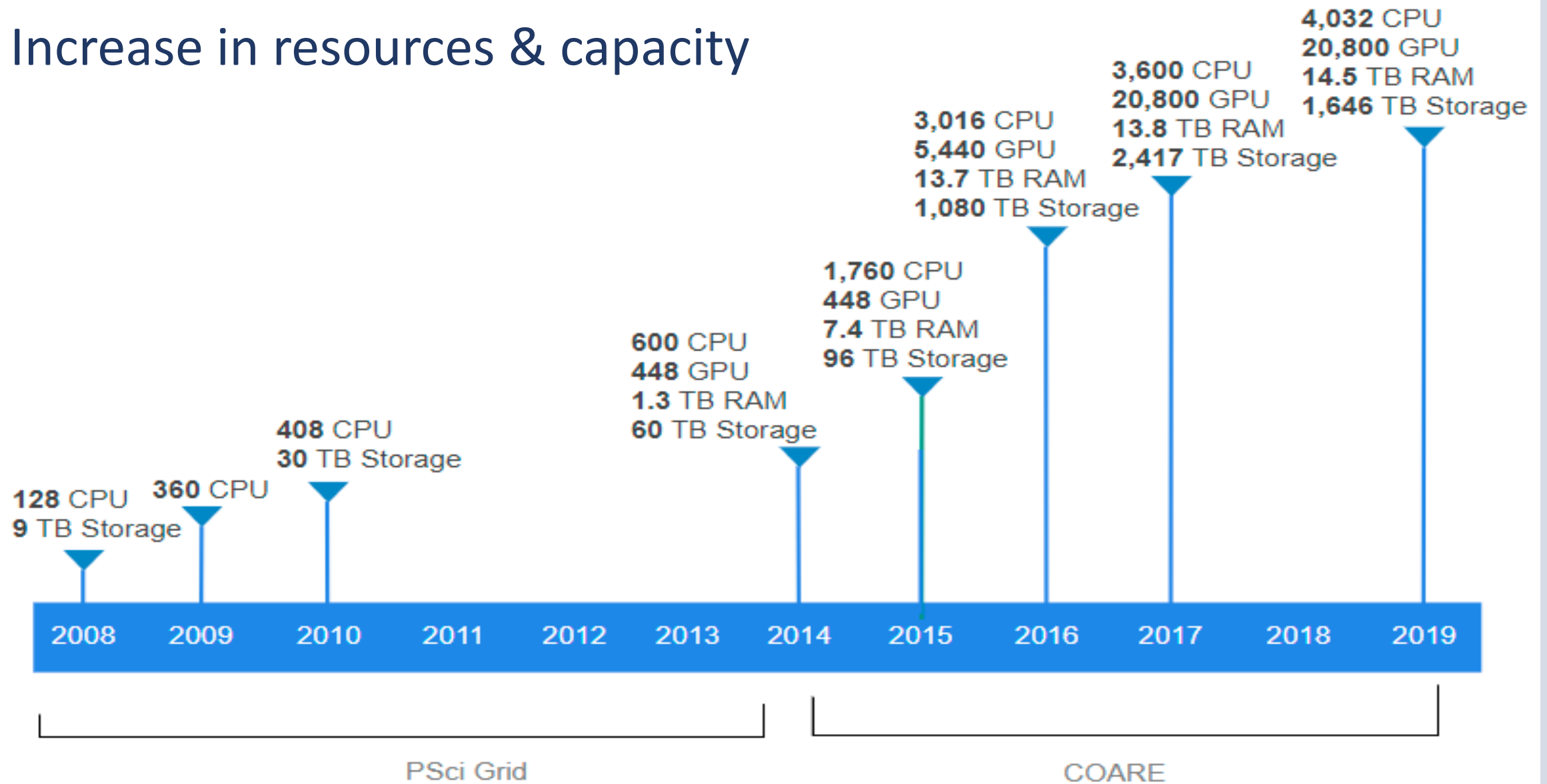
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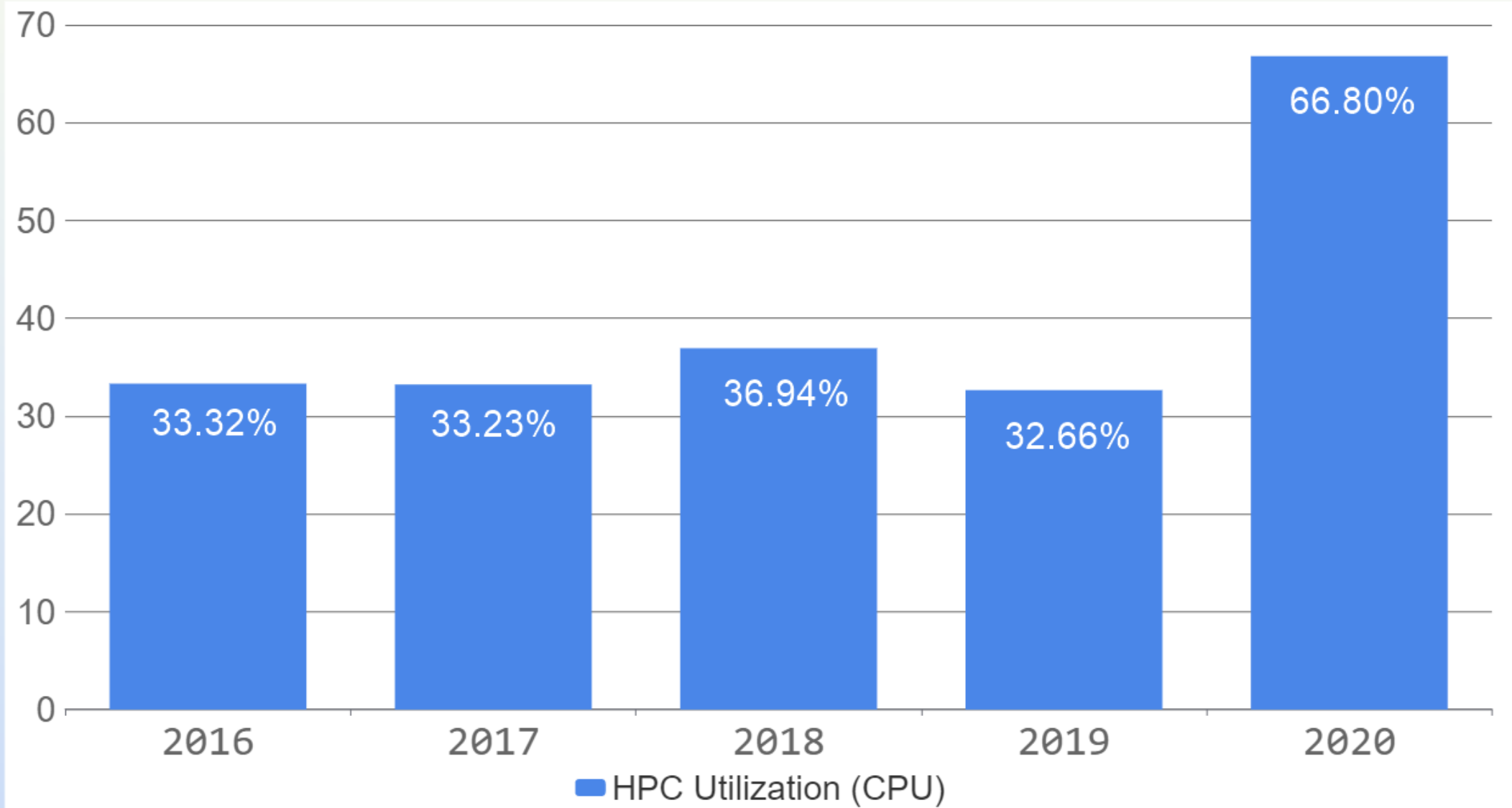


Timeline of ASTI eScience efforts



Increase in resources & capacity





High-Performance Computing (HPC)

Disaster Management/ Environmental Computing/ Weather Forecasting



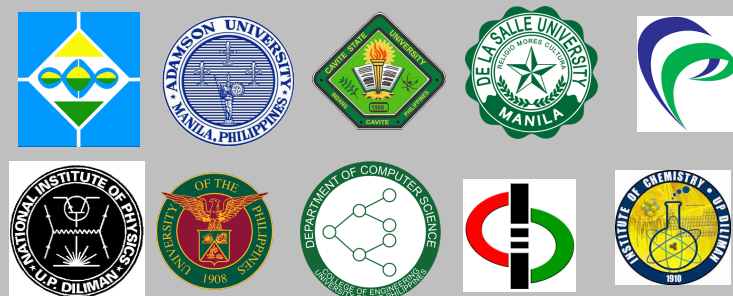
Bioinformatics/ Genomics/ Computational Biology/ Oceanography



COVID19



Computational Material Sciences/ Chemistry/ Molecular Modeling / Computational Fluid Dynamics/ Computational Mechanics



Advanced Technology

Artificial Intelligence and Big Data Analytics, Parallel & Quantum Computing, etc.



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Impetus for DOST-ASTI's HPC and Cloud Computing Efforts

Increasing need of local researchers & scientists for computing resources

More support pouring in (funding, policy, legislation)

Provides ease for which research collaboration is carried out



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Way Forward

- *Collaboration with Regional and Global eScience initiatives, i.e., ASEAN HPC Initiative, CERN, Copernicus mirror site*
- *Lead the initiative for a National Federated HPC*
- *More collaborations with academe and industry*
- *Work towards the creation of a National HPC Center*



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Thank you!

Contact COARE:



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