Why Computing Must Be Accelerated

Innovate for the AI era and beyond.
Across every industry, companies are using AI to derive meaningful insights, make predictions, and automate processes. This is occurring at a time when energy costs are on the rise, businesses are striving to achieve net zero, and traditional compute scaling is limited by physics.

To integrate AI workloads, computing throughput needs to be increased. This means that the amount of power the world needs in its data centers is growing. Figuring out how to do more while using less power is the key to driving flexibility, scalability, and sustainability. Given this, every data center in the world should be accelerated.

The Value of Accelerated Computing

**Accelerated computing** uses parallel processing to speed up work on demanding applications. By investing in accelerated computing, you give yourself the capacity to do more and to use that increased capacity for AI applications today and for other workloads in the future.

NVIDIA and our ecosystem of partners offer a general-purpose, accelerated computing platform. With this as your foundation, you can simulate climate science, deploy robots, build large language models, create stunning graphics, and more. The platform’s ability to be flexible while being extremely performant is one of its many benefits.

### Benefits of an Accelerated Infrastructure Strategy

<table>
<thead>
<tr>
<th>Utilization</th>
<th>Low TCO</th>
<th>Versatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you build infrastructure, the most important thing for you is utilization. If you’re a hotel owner, you can’t afford to have hotels that are occupied at 30 percent. The same thing is true for the data center—but even more so because it costs billions of dollars.</td>
<td>There are common misconceptions around the cost of acceleration and AI adoption. Because an accelerated computing platform can be used for so many things—from AI and data analytics to simulation and visualization—it's TCO is the lowest of all options.</td>
<td>NVIDIA has one architecture and is in every cloud. Whether you’re a startup or an enterprise looking to operate your service across the world, we make it possible—on premises, in the hybrid cloud, and all the way out to the edge.</td>
</tr>
</tbody>
</table>

Looking Ahead

Over the next 10 years, all workloads will be accelerated—and now is the time to seize the opportunity. By investing in accelerated computing, your workload costs will decrease, your energy efficiency will increase, and you’ll have the capacity to do more to innovate for the future.

Ready to Get Started?

Learn more about NVIDIA and accelerated computing.