Global Strategic Management – TOPIC BRIEF

COURSE NAME/ID: Global Strategic Management (GSM) STR 7559-01 Section 1

COMPANY: NVIDIA CORPORATION

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<u>Introduction</u>

Nvidia Corporation is the 11th most valuable company by market cap and is expected to surpass Apple's valuation in 5 Years. A feat, which is primarily dependent on the \$15 trillion artificial intelligence economy where Nvidia is one of the pioneers. The stock has gone up by 335% from its value at the beginning of 2019 to Mid of 2022. (*Appendix: Figure 1*)

We will analyze what NVIDIA does at present and talk about NVIDIA's expansion strategy into China, its various acquisitions and partnerships and its plan to acquire ARM Inc.

NVIDIA's Current Business Model

Nvidia is an American software and Fabless manufacturing company with expertise in designing graphics processing units (GPUs), application programming interfaces (APIs) for data science and high-performance computing, and system-on-chip units (SoCs) for mobile computing and the automotive market.

NVIDIA has leveraged its Ampere architecture and A100 GPU to create platforms for high level scientific computing, data science, Artificial Intelligence, autonomous vehicles, and augmented and virtual reality. The A100 chip has been able to offer the largest leap in performance. (Appendix: Figure 2: Performance ratings). A100 is deployed by world's leading cloud service providers and system builders such as Alibaba cloud, Baidu Cloud, Amazon Web Services, Dell Technologies, Google Cloud platform, and Microsoft Azure, etc. for use in multiple countries.

Nvidia has collaborated with 53 different companies and acquired 16 companies for the diversification of its products spending a total of \$ 7.78B.

NVIDIA has a platform strategy, combining hardware and systems, software, algorithms and libraries, and services to provide unique value and then capitalizes on licensing and support costs. The entire ecosystem and the value for the customer is increased due to the large and growing number of developers across its platforms.

The company has moved into NVIDIA Omniverse in 2022, which is a cutting-edge platform for 3D design, realistic visualization and simulation which will play a foundational role in the building of the metaverse, the next stage of the internet.

NVIDIA's Comparative Advantage of Acquiring ARM Inc.

ADDING Framework

Adding Value

- Geopolitical advantage of Arm HO in UK
- Consolidating position in data center
- Better Penetration into Autonomous drivng & Industry 4.0
- Extremely valuable IP

Decreasing Costs

 Cost reduction because ARM powers 90% of world' s mobile processors/smartph ones.

Normalizing Risk

 Prevents other competitors from aquiring Arm Inc.

Improve Industry Attractiveness

- All solutions under one umbrella
- Advanced Industry
 4.0 (Omniverse) and
 Al capabilities.

Going Global

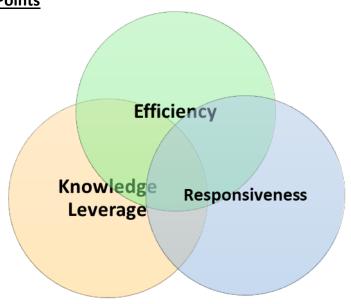
Generating and Upgrading Capabilities and Knowledge

- Power over its competitors
- Advancement into Robotics, Autonomous driving, Industry 4.0

Differentiation

- Owning valuable IP
- Advancement into Robotics, Autonomous driving, Industry 4.0

<u>Analysis of Competitive & Comparative Advantage for Expansion into China using</u>
Global Leverage Points



Responsiveness

Nvidia is a technology company that operates globally and is responsive to the China market in several ways.

Firstly, Nvidia has established a significant presence in China by partnering with Chinese technology companies such as Tencent to develop and market AI solutions, with Chinese automakers, such as Geely, NIO, and XPeng, to provide autonomous driving solutions.

Secondly, Nvidia has customized its products for Chinese market. The company has developed HGX-2, a GPU, that is specifically for China's data center market to support large-scale artificial intelligence workloads.

Thirdly, Nvidia has made efforts to comply with Chinese regulations and laws designing products and services that meet Chinese cybersecurity laws. Additionally, Nvidia has established a research and development center in China to ensure compliance with Chinese laws and regulations.

Overall, Nvidia is responsive to the China market by partnering with Chinese companies, tailoring its products to meet Chinese market needs, and complying with Chinese laws and regulations.

Efficiency

Nvidia is efficient in the China market in several ways:

Local presence: Nvidia has established a strong local presence in China, with offices, research and development centers, and partnerships with local companies, enabling the company to better understand the needs of the Chinese market and develop products and services that meet those needs.

Customization: Nvidia has developed products and services such as HGX-2 that are customized for the Chinese market.

Partnerships: Partnerships with several Chinese companies, including Tencent, Alibaba, and Baidu has enabled Nvidia to leverage the expertise and resources of these companies to develop and market its products in China more effectively.

Compliance: Nvidia has made efforts to comply with Chinese regulations and cybersecurity laws.

Overall, Nvidia's efficiency in the China market is driven by its strong local presence, customization of its products and services, partnerships with local companies, and compliance with Chinese laws and regulations.

Knowledge Leverage

Nvidia's knowledge leverage in the China market is primarily in the areas of artificial intelligence (AI), graphics processing, and high-performance computing (HPC).

Al technology: Nvidia's Al technology is used in a wide range of applications in China, including autonomous driving, voice recognition, and natural language processing.

Graphics processing: Nvidia's high-performance graphics processing units (GPUs), are used in gaming, virtual reality, media and entertainment, and architecture.

HPC solutions: Nvidia's HPC solutions are used in scientific research, engineering, aerospace, automotive, and energy sectors in China.

Overall, Nvidia's knowledge leverage in the China market is centered around its expertise in AI technology, graphics processing, and HPC solutions. These areas of expertise enable the company to provide cutting-edge technologies and solutions that are highly valued in the Chinese market.

Conclusion

Nvidia has been a leader in the graphics processing unit (GPU) market for many years and has recently expanded its focus to include artificial intelligence (AI) and data center solutions. These are high-growth segments with tremendous potential, and Nvidia's technology and expertise could position the company for significant growth in the coming years.

Since Nvidia has been making strategic acquisitions and partnerships, such as its plan to acquire ARM would further strengthen its position in the semiconductor industry and drive long-term growth.

Additionally, Nvidia's strong track record for innovation combined with R&D will enable the company to introduce new products and services that will capture a larger share of the markets like China and drive Nvidia's revenue growth.

Lastly, the global pandemic has accelerated the shift towards remote work and digital technologies, which has increased demand for Nvidia's products and services. If this trend continues, Nvidia could benefit from sustained demand for its products and services.

While these factors could potentially contribute to Nvidia's growth and valuation, it's important to remember that the market is complex and unpredictable, and there are many other factors that could impact the performance of Nvidia.

APPENDIX

Appendix: Figure 1

