# Assignment Title: **Business Model Canvas Assessment**

# Course Name: **Business Practices**

# Course Number: **DMIT1006**

# Section: A01

# Instructor Name: Cody Schellenberger

# Due Date: 2024-11-01

# Team Members: Tyler Socholotuik, Amélie Tremblay, Patrick Skinner, John(Chun-Han) Lee

# Team Company Selection:

|  |
| --- |
| NVIDIA Corporation |

# Customer Segment Title:

|  |
| --- |
| PC Gamers |

# Business Model Canvas Analysis for Your Customer Segment

# Section 1

## 1.1 Customer Segment – people or organizations that access value: users, paying customers

|  |
| --- |
| **Your research, analysis, and APA (American Psychological Association) in-text citations:**   * [Use multiple bullets to discuss the definition and features of your customer segment. You should discuss the concepts of mass and/or niche market approaches. You should also research other customer segment concepts and include all that apply.] * PC Gamers are considered a niche market as NVIDIA provides products that are specific for PC gamers. For example, NVIDIA’s GeForce Graphics Cards are specifically for desktop computers targeting PC gamers. [Graphics Cards by GeForce | NVIDIA](https://www.nvidia.com/en-us/geforce/graphics-cards/) * NVIDIA’s pc gamer falls in the segmented market approach by the tiered pricing and products. For example, NVIDIA has different GPU series based on performance and price points, with GeForce RTX series graphics cards ranging from 20 series to 40 series and price progressively increasing. [Graphics Cards by GeForce | NVIDIA](https://www.nvidia.com/en-us/geforce/graphics-cards/) * Job: PC gamers are trying to have game settings at a high quality   + Gains:     - PC gamers desire a fluid gaming experience.     - PC gamers want to experience the best quality settings of a game.   + Pains:     - PC gamers will lose out on the immersive experience of the game from slow hardware.     - PC gamers will face bottlenecks from the limitations of their computer. * Job: PC gamers want to be a part of a community   + Gains:     - PC gamers desire to participate in group events by joining communities.     - PC gamers desire a sense of belonging with like-minded people.   + Pains:     - PC gamers are pressured to commit lots of time from the community.     - PC gamers suffer anxiety from the toxic behaviors of a community. * Job: PC gamers are trying to have high frame rates   + Gains:     - PC gamers desire to improve responsiveness in a game.     - PC gamers desire to accommodate for future games.   + Pains:     - PC gamers stress about the slow visual experiences in games.     - PC gamers stress about spending time adjusting the visual settings. * Job: PC gamers are trying to have versatile machines   + Gains:     - PC gamers desire to future proof their investment in their computers.     - PC gamers desire to keep up with the latest hardware trends.   + Pains:     - PC gamers stress over the high financial costs of upgrading to performance hardware.     - PC gamers are emotionally stressed about keeping up with the latest hardware trends. * Job: PC gamers are trying to play AAA games   + Gains:     - PC gamers desire to engage in expansive gaming worlds.     - PC gamers desire a cinematic gaming experience.   + Pains:     - PC gamers stress about the optimization of their system for handling AAA games.     - PC gamers stress over the long download times for AAA games. |

## 1.2 Value Proposition

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * NVIDIA’s GeForce RTX 40 series graphics processing units offer PC gamers extremely high frame rates and low latency for a seamless gaming experience (NVIDIA, n.d.-a).They also have the best implementation of ray tracing, which emulates the behaviour of light to make games look more realistic. A unique selling feature of NVIDIA’s GPUs is their proprietary Deep Learning Super Sampling (DLSS), which uses artificial intelligence to enhance frame rates and resolution (NVIDIA, n.d.-d). The 40 series has 4 families: the 4060, 4070, 4080, and 4090. The 4060 family has the lowest cost, but the lowest performance, while the 4090 has the highest cost with the highest performance (NVIDIA, n.d.-c). * **Gain Creators:**   + The RTX 40 series’ DLSS 3 feature **allows** PC gamers to use the highest graphics quality settings in their games (NVIDIA, n.d.-d).   + The RTX 40 series’ Ray Tracing feature **provides** PC gamers with a realistic and immersive experience (NVIDIA, n.d.-g).   + The RTX 40 series’ Reflex feature **ensures** that PC gamers do not lose competitive games due to low latency and response time (NVIDIA, n.d.-f). * **Pain Relievers:**   + The RTX 40 series DLSS 3 feature **eliminates** the need forPC gamers to use low graphics quality settings. (NVIDIA, n.d.-d).   + The RTX 40 series’ Ray Tracing feature **prevents** PC gamers from feeling disconnected with their game environments (NVIDIA, n.d.-g).   + The RTX 40 series’ Reflex feature **reduces** the latency between a PC gamer’s mouse clicks and video output (NVIDIA, n.d.-f). |

1.3 Customer Relationship – the types of relationships we set up with our customer

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * + [Discuss the level of personalization you see on the platform with examples (consider the amount of information that the platform is using. That can be as simple as tracking online behaviour).]   + [Discuss the type of relationship building you see (short-term vs. long-term) and provide examples.]   + [Discuss the relationship building strategy (could be multiple) you see on the platform (Transactional, Personal Assistants, Communities, Co-Creation, etc.).] * <https://www.nvidia.com/en-us/support/consumer/>   In terms of customer support, there appear to be a couple of options.  Initially, they offer automated help with their Chatbot. It has rules on complete sentencing, and limited answers, with the opportunity to speak with a live agent if you would prefer. They are a short-term, impersonal connection to the customer.   * Contrary to the previous relationship, they strongly encourage relationships with developers with their <https://developer.nvidia.com/join-nvidia-developer-program> . They provide free courses for developers, connections to developer community forums, offer training and free access many of their tools and SDKs. This shows that they want a long-term relationship with developers and want continuous engagement with them. They want to build a community of NVIDIA developers and likely want to utilize their customers as co-creators, helping them develop their products, as many companies in the developer community tend to do. |

1.4 Channels – describe through which touch points we interact with our customers

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * Promotion   + NVIDIA uses the NVIDIA GeForce YouTube channel to advertise gaming only content like new promotions, features, products, updates, games and more directly to gamers. (NVIDIA, 2024d)   + NVIDIA sponsors and collaborates with content creators in the gaming and tech communities to showcase hands-on product reviews, in-depth analyses, and real-world performance tests of their GPUs. * Evaluation   + NVIDIA actively engages its community through forums and support platforms like GeForce Forums and reddit allowing gamers to share experiences and access peer-driven reviews (NVIDIA, n.d.-e) (NVIDIA, 2024b)   + NVIDIA leverages content creators to help consumers judge their products before purchasing. Sponsored creators, particularly in gaming and tech are given free rein to say anything they want about NVIDIA’s products. They will be honest and provide in-depth reviews, benchmarks, and performance tests of NVIDIA GPUs. * Purchase   + NVIDIA sells its gaming GPUs and gaming laptops, directly through its online store, often offering exclusive editions like the founders and pre-order opportunities for new products. (NVIDIA, n.d.-h)   + NVIDIA products are available globally through partnerships with major retailers and e-commerce platforms, giving gamers access to their products in physical stores and online. (NVIDIA, n.d.-h) (NVIDIA, 2024a) * Delivery   + NVIDIA uses AI to make warehouse operations faster and more accurate. They integrate robotics and automation to help pick, pack, and ship products efficiently. With NVIDIA Omniversethey can simulate their warehouses to improve processes and handle higher demand. They use AI to manage inventory and sort packages automatically. For last-mile delivery, NVIDIA cuOpt helps find the best routes using real-time data like traffic and weather, making deliveries faster and more reliable while reducing costs. (NVIDIA, 2023)   + NVIDIA uses partnerships with major international shipping companies to deliver their products. They collaborate with dozens of manufacturers and retailers, ensuring that gaming GPUs are delivered not only through NVIDIA directly but also through the networks of their partners. This allows coverage in areas NVIDIA might not directly service, ensuring availability across the globe. (NVIDIA, 2024a) * Support   + NVIDIA provides free access to GeForce Forums, Nvidia Support and Nvidia Drivers. These products offer help troubleshooting, driver updates, FAQs dedicated to gaming products, news, promotions and more. (NVIDIA, n.d.-e)(NVIDIA, 2024b)   + Gamers can get features like automatic game optimizations and driver updates via the GeForce Experience app, and the Nvidia Control Panel making it easy to maintain top performance. (NVIDIA, 2024c) |

1.5 Revenue Streams – how and through which pricing mechanisms the business model is capturing value

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * NVIDIA generates revenue through **asset sales** of their GPU chips to third-party manufactuers who create graphics cards using their chips (Michael Crider, 2022). * NVIDIA also manufactures their own Founder’s Edition graphics cards which can be purchased directly from them rather than a retailer (Crider, 2022). This is also **asset sale** revenue. * The GeForce NOW cloud gaming platform generates revenue from monthly **subscription**  **fees,**  or day passes (NVIDIA, n.d.-a). * Companies that use NVIDIA’s technology and intellectual property in their products provide revenue to NVIDIA through **licensing** fees (Haque, 2024). |

1.6 Cost Structure

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * Fixed Costs:   + [Discover all fixed costs and their descriptions, but do not include the dollar amounts] * Variable Costs [and their descriptions, but do not include the dollar amounts]:   + [Discover all variable costs and their descriptions, but do not include the dollar amounts. Describe how the cost is connected to the production or sales volume.] * Cost vs. Value driven model discussion and examples.   + [Use a paragraph to discuss the cost and value driven aspects of your business model.] * Economies of Scale discussion and examples.   + [Discover examples of economies of scale within your business model. Provide one example for each bullet.]   + NVIDIA AI and simulation solutions are delivering better-than-ever efficiency and intelligence to the supply chain, ensuring retailers never miss a beat and can meet customers expectations. With intelligent video analytics, robotics, automation, and management, operations become more efficient, process throughput accelerates, and warehouse robots deliver end-to-end visibility, increasing the accuracy of orders picked, packed, and shipped.   + Retailers are racing to adopt [generative AI](https://www.nvidia.com/en-us/ai-data-science/generative-ai/) to create content and images for brand campaigns, hyper-personalized shopping advisors, ecommerce product descriptions, customer service responses, and more.   [Explore NVIDIA Edify](https://www.nvidia.com/en-us/gpu-cloud/edify/) [Explore NVIDIA NeMo™](https://www.nvidia.com/en-us/ai-data-science/generative-ai/nemo-framework/) |

1.7 Key activities – the most important activities in executing a company’s value proposition

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * Value Proposition   + NVIDIA is focused on research and development to design architecture that enhances the performance of their GPUs (insert BMC 2024 citation). The development of their DLSS technology is a **production** activity that supports their value proposition. * Customer Relationships * Channels   + Promotion     - NVIDIA created a YouTube channel as a promotion **platform** that showcases their products’ performance in games, and explains features like Reflex and DLSS (NVIDIA, 2024d).   + Evaluation     - NVIDIA’s affiliate program provides commissions to content creators that evaluate their products. This gives potential customers a **platform** to indirectly evaluate products by reading or watching reviews (insert affiliate program citation).   + Purchase     - NVDIA sells products containing their technology on their Marketplace **platform** (insert marketplace citation). These products include graphics cards, gaming laptops with NVIDIA graphics, and G-SYNC gaming monitors.   + Delivery   + Support     - NVIDIA provides technical support to customers to **solve problems** through live chats with online agents, support tickets, and user forums (insert support citation). * Key Resources * Key Partnerships * Revenue Streams |

1.8 Key resources – infrastructure that creates, delivers, and captures value

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * Value Proposition   + The proprietary **(DLSS) Deep Learning Super Sampling** and the extensive **research and development** in creating this proprietary feature is a **key** **intellectual resource** in setting the NVIDIA GPU’s apart from it’s competitors. [DLSS Technology | NVIDIA](https://www.nvidia.com/en-us/geforce/technologies/dlss/) * Customer Relationships   + NVIDIA’s **Developer Program** is dependent on the **key intellectual resources** of their own tools and Software Development Kits (SDKs) to allow the fostering of a community of developers and co-creators. [Learn New Technical Skills | NVIDIA Developer](https://developer.nvidia.com/join-nvidia-developer-program) * Channels   + Promotion     - NVIDIA’s **GeForce YouTube channel**, having over 1 million subscribers, is considered a **key intellectual resource** in sharing proprietary content, brand recognition, and directly engaging with the gaming community. [Project G-Assist | Your AI Assistant For Games & Apps](https://www.youtube.com/channel/UCL-g3eGJi1omSDSz48AML-g)     - NVIDIA’s **budget for influencer and content creator** sponsorship is considered a **key financial resource**. The allocated funds help promote Nvidia’s products through gaming influencers. [NVIDIA Affiliate Program: Everything You Need to Know (2024)](https://getlasso.co/affiliate/nvidia/)   + Evaluation     - NVIDIA’s **moderators and technical support staff** are **key human resources** that help foster the community and support infrastructure on GeForce Forums.[Community | NVIDIA GeForce Forums](https://www.nvidia.com/en-us/geforce/forums/%7B%7Bcanonical%7D%7D/)     - NVIDIA’s **latest GeForce RTX 40 series hardware** is considered a **key physical resource** in maintaining the relationship with content creators. By providing this hardware resource, they can sponsor content creators and showcase their latest products at the same time.[The GeForce RTX 4070 SUPER is an amazing graphics card for gamers, con... | TikTok](https://www.tiktok.com/@arsen/video/7327220457617296683)   + Purchase     - NVIDIA’s **marketplace website** is a **key intellectual resource** that is used to help sell their products directly to consumers. [NVIDIA Marketplace United States of America](https://marketplace.nvidia.com/en-us/index1.html)     - NVIDIA uses their NVIDIA Partner Network, a **key Intellectual resource** in managing their global partnerships. [NVIDIA Partner Network (NPN) | NVIDIA](https://www.nvidia.com/en-us/about-nvidia/partners/)   + Delivery     - NVIDIA leverages their **key intellectual resource** of **NVIDIA Omniverse and cuOpt** to optimize their production workflow and increase production efficiency. [AI-Enabled Virtual Factory Solutions - Use Case | NVIDIA](https://www.nvidia.com/en-us/use-cases/ai-for-virtual-factory-solutions/)     - NVIDIA also leverages **key physical resources** from partnerships with companies like Best Buy and Memory Express to use their **brick-and-mortar stores** to extend their reach to more customers. [GeForce RTX 40 Series Graphics Cards | NVIDIA](https://www.nvidia.com/en-us/geforce/graphics-cards/40-series/)   + Support     - NVIDIA provides **software applications and updates** to the hardware which is a **key intellectual resource**. As they use this to provide support services after the purchase of their products. [Download The Official NVIDIA Drivers | NVIDIA](https://www.nvidia.com/en-us/drivers/) * Key Activities   + NVIDIA uses **key physical resources** through partnership **manufacturing facilities** globally to create their GPUs [Where Are Nvidia Chips Made 2024 - Is It Made in US?](https://madefind.com/where-are-nvidia-chips-made/)   + NVIDIA uses **key human resources** like **Research and development departments** to improve their GPUs and create new proprietary features. [Locations & Regional Offices | NVIDIA](https://www.nvidia.com/en-in/contact/) * Key Partnerships   + NVIDIA depends on the **key physical resource** of **semiconductors chips** provided by TSMC for making their GPU products. [TSMC and NVIDIA Transform Semiconductor Manufacturing With Accelerated Computing | NVIDIA Blog](https://blogs.nvidia.com/blog/tsmc-culitho-computational-lithography/#:~:text=TSMC%2C%20the%20world%20leader%20in%20semiconductor%20manufacturing%2C%20is,for%20the%20next%20generation%20of%20advanced%20semiconductor%20chips.) * Revenue Streams   + NVIDIA’s **licensing fee for usage** of their **key** **intellectual resource** in products is considered a key resource for receiving revenue from products they sell to other parties.[NVIDIA Virtual GPU Software Packaging, Pricing, and Licensing Guide - 2024](https://www.nvidia.com/content/dam/en-zz/Solutions/design-visualization/solutions/resources/documents1/Virtual-GPU-Packaging-and-Licensing-Guide.pdf) |

1.9 Key partnerships – who can help me leverage my business model?

|  |
| --- |
| **Your research, analysis, and APA in-text citations:**   * Partnerships with suppliers:   + Taiwan Semiconductor Manufacturing Company (TSMC) is a company NVIDIA partners and relies on to produce the semiconductor for NVIDIA’s GPUs.   + Samsung is a company NVIDIA partners with to supply memory chips for NVIDIA’s GPUs.   + Micron Technology is a company NVIDIA partners with to supply DRAM and NAND flash memory for NVIDIA’s GPUs. * Partnerships with non-competitors:   + Dell Technologies is a company that NVIDIA partners with to integrate their GPUs into their prebuilt gaming desktops and laptops.   + Lenovo is a company that NVIDIA partners with to integrate their GPUs into their prebuilt gaming desktops and laptops. * Partnerships with competitors:   + Intel is a competitor that NVIDIA partners with for processor integration in systems that use NVIDIA GPUs. This partnership is to ensure optimized compatibility and performance for gaming that uses both NVIDIA GPUs and Intel CPUs. * Joint alliances:   + Tesla is a company NVIDIA has a joint alliance with. NVIDIA provides Tesla with powerful GPUs so that drivers can play games or watch movies with great quality while charging their vehicles. |

**References**