

出國報告(出國類別：語言進修)

# 經濟部派赴美國喬治城大學受國際 經濟商務人員語言訓練(英文組)出國 報告

服務機關：經濟部國際貿易局

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出國期間：106 年 8 月 21 日至 107 年 5 月 11 日

報告日期：107 年 7 月 18 日

## 摘要

依據「經濟部派送駐外經濟商務機構商務人員赴國外接受語文訓練實施計畫」，為增進經濟部駐外商務人員外語能力，職於 106 年 8 月 21 日奉派赴美國哥倫比亞特區喬治城大學受語言訓練，訓練地點為喬大附屬之語言教育及發展中心，課程名稱為「專業英文研究課程」(Professional English Study)，受訓期間分為兩學期，上學期(106 年秋季班)以商用英文為主題，下學期(107 年春季班)以公共政策為主題。

兩學期的教學主要分為閱讀寫作、聽力口說以及課外活動三大部分，課堂教學的目的在於培養學生閱讀專業文章、撰寫報告以及會議記錄的能力，而課外活動涵蓋參與智庫演講、訪談非政府組織以及校內簡報等，希望藉由課外活動實踐課堂所學。

本報告主要內容為喬治城大學課程介紹、課堂成果發表以及課外活動紀錄，最後以個人心得與建議做總結。

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## 一、秋季班課程介紹

### (1) Written Communication in Business

本課程授課老師為 Glen Penrod，課程主要著重於寫作技巧以及閱讀能力，以階段性小考與成果報告作為驗收學習成果的主要方式，課程教材主要為“Business Communication Essentials”一書，該書學習方式主要為課堂討論，內容包括商業溝通基礎介紹、團體及人際溝通技巧，以及計畫撰寫商業文件等。除此教科書外，為增進閱讀能力及寫作文法運用，老師另以講義方式進行教學與團體討論。而在寫作技巧練習方面，每位學員皆需要一個禮拜完成一篇閱讀日誌(Reading Log)，並於課堂上就當周閱讀日誌與同學討論並簡單摘要。在 9 月課程開始數周後，老師開始介紹哈佛商學院個案研究(Case Study)及講解如何撰寫個案研究報告，並分別在 10 月以 Wal-Mart in China 以及 Coffee Wars in India 為主題之哈佛商學院個案研究(Case Study)作為課堂書面報告。在完成哈佛商學院個案研究部分後，11 月課程開始進入商業文件撰寫練習，一開始先針對 SWOT 分析文件作介紹並請每位學員選擇一間美國企業作 SWOT 分析，職依據先前工作經驗選擇顯示晶片大廠:Nvidia(輝達)作為分析主題(詳附件 1)，在結束 SWOT 分析文件撰寫練習後，職分別針對個人履歷、電子郵件(E-mail)、備忘錄(Memo)以及商業書信(Letter)完成課堂練習，

進一步地以微型貸款(Microfinance)為主題完成校園問卷調查並綜合該調查結果與相關資料完成組織政策備忘錄(Policy Memo)(詳附件 2)。在學期最後數周，老師要求每位學員撰寫商業計畫(產業背景，產品介紹及創業目標)，各學員就自身新創事業展開商業計畫撰寫，並結合相關內容參與期末創業募資比賽。

## (2) Advanced Communication Skills

本課程授課老師為 Heather Gregg Zitlau，本課程老師主要著重於聽力及口說課程，課程主要藉由多媒體聽力教材以及口語簡報來訓練學員的聽力及表達能力，9 月課程主題係針對 2008 年金融危機及商業道德規範進行教學，每位學員並完成 2 次口頭簡報及一次小考。10 月課程主題為談判(Negotiation)，老師同時針對簡報時如何回答聽眾提問以及簡報中轉換詞的使用進行教學，並希望學員就該教學內容結合先前 9 月 2 次個人簡報心得進行第 3 次個人簡報，在團體簡報部分，結合寫作課 Coffee Wars in India 書面報告進行團體簡報，該次團體簡報對象為來自世界各地的其他課程學員，簡報目標為讓英語程度不一的聽眾了解簡報內容並提問。11 月課程主要著重於簡報後與聽眾的互動，職以” Alexa, Are You Safe For My Kids” 為主題，藉由探討孩童心智發展過程中，人工智慧機器人對孩童的影響係正面或負面作口頭簡報，並針對簡報後的聽眾提問

作回應以達到與聽眾互動的目的，另一方面，結合讀寫課程(Written Communication in Business)完成一場模擬面試。12月課程主題為創業，課堂討論包括政府於產業創新扮演的角色等層面，老師並要求每位學員參與期末創業募資比賽，針對各國投資者(喬大來自各國的學員)進行1次口頭募資簡報。在期末創業募資比賽部分，募資主題為針對個人商業計畫書(詳附件3)所提新創產品進行募資，簡報內容主要介紹產品(虛擬實境結合地理教學)、市場評估及財務預測等各層面，並由各國投資者決定是否投資，口頭募資簡報完成後，職所提商業計畫獲得最多各國投資者注資。

### (3) Professional Networking in English

本課程為參與華盛頓特區各智庫等單位所舉辦之活動，除聆聽活動演說外，並藉由會後與其他與會者討論培養社交能力，並以會前準備以及會後心得完成活動日誌並繳交與老師，課程規定每位學員至少需參與8場智庫活動，並與其他課堂學員就如何參與華府智庫活動於10月底完成團體簡報，職在本學期總共參與10場智庫活動，其中，職在11月30日參加卡托研究所(CATO institute)以美國減稅政策對其經濟影響性為主題的議題討論中，提及些許要點可供我國未來經濟發展作為參考，該心得如下：

美國總統川普推出的減稅政策，已於 2017 年 11 月 16 日於眾議院獲得通過，預期將於 12 月初於參議院通過，該稅改案預期將對美國企業稅率及個人所得稅自 2019 年起提供減稅措施，直到 2026 年。各界對該稅改政策評價不一，部分人士認為政府稅收將會減少，對美國社會福利政策產生衝擊，會中探討該稅改政策未來可能產生的發展:

- 1 對整體經濟面的影響性:與會講者 Donald Marron 指出，稅改方案不應只針對政府收入減少作評論，應全面性檢視。在企業稅率減少誘因下，更多企業回到美國建立研發總部及製造中心，增加就業機會，並減少未來在智慧財產權及強制技術移轉等方面的貿易爭議，對美國社會有正面性影響。
- 2 對美國貿易經常帳的影響: 與會講者 William McBride 指出，在美國現階段對中國大陸等國家龐大貿易赤字下，企業稅率減少有助美國製造回流，以往海外製造美國購回銷售的產業鏈模式勢必往美國製造美國銷售模式調整，而該模式有助改善目前的經常帳赤字。
- 3 企業稅減少對其員工負擔的影響: 與會講者 Ryan Bourne 指出，近期相關研究指出，企業稅率其實約有 30%~35%係由其員工負擔，降低企業稅率所帶來的利益約 54%係由其員工受益，故該企業減稅方案不可謂僅獨厚企業，且該法案亦包含個人稅率下降，可望為每

個美國家庭增加平均\$4000 年收入。

根據預測，該減稅政策未來很可能對以往海外代工，美國銷售的產業鏈模式造成影響，而代工製造的產業型態過去係我國產業強項，該稅改方案未來勢必對我國產業造成衝擊，以面板製造為例，鴻海集團已於今年宣布在稅率優惠的條件下，預定在威斯康辛州投資建面板廠，該計畫將減少國內就業機會及投資額，未來我國稅改方案或可將此類效應納入考量。另一方面，在美國稅率優惠下，美商美光集團仍宣布於台灣建構 DRAM 製造中心，其著眼點就在於台灣晶圓代工實力領先全球，以及產業聚落帶來的研發製造方便性，此為我國未來增進海外直接投資著力點之一，亦為減少川普稅改方案對我國衝擊的契機之一，係屬我國相較中日韓等國在招商投資之優勢。

最後在學期最後一週，各學員針對 9 月到 12 月參加的議題討論中，擇一主題進行簡報(以海報形式進行口頭簡報)，職以”大數據對目前商務活動的利與弊” 進行簡報，並與各國學員針對其國內大數據相關議題進行心得交流，此外，並於社交群組網站 LinkedIn 上建立帳號並與相關群組(大數據)裡其他使用者進行交流。



## 二、春季班課程介紹

### (1) Professional Applications in Reading and Writing(ARW)

本課程授課老師為 Heather Gregg Zitlau，課程著重於寫作以及閱讀能力提升，以階段性小考及書面寫作報告作為主要驗收學習成果的方式，課程教材主要如下

- 1 “Organizational Behavior” :本書教學內容著重組織行為介紹、激勵、個人決策以及團體決策等部分。
- 2 “The Extraordinary Leader” :本書教學內容著重領導風格，提升領導力等部分。
- 3 “The American Law: An Introduction” :本書教學內容著重介紹美國司法體制，並藉由閱讀本書提升英語理解能力，同時為幫助學員了解書中內容，校方亦安排聯邦、州政府以及市政府等三層級司法機構參訪。
- 4 “The NGO Handbook ” : 本書教學內容著重介紹非政府組織 (Non-Governmental Organization)，老師亦要求學員在完成本書閱讀後，擇一非政府組織進行實地訪談。
- 5 課外閱讀講義:老師不定期要求學員閱讀課外教材，內容涉及閱讀

技巧、句型結構以及文法修飾等，並結合前述教材有提及的相關概念完成書面報告。

1 月課程主要為閱讀 3 篇探討 Google 內部領導力的文章，結合“Organizational Behavior”及 “The Extraordinary Leader” 二書做連結關係探討，並於第 4 周完成初步報告，並於該報告中練習如何標註引用資料來源之格式。同時，老師亦在文法部分講解如何運用複合句結構 (Compound Sentences)、關係子句、連接詞以及倒裝語法於英文表達。

2~3 月課程主題為美國司法系統介紹，課堂教材主要使用 “The American Law: An Introduction”，學員閱讀該書有關美國司法系統、正式法與非正式法、美國立法與司法介紹以及美國法律體系背景等相關部分，為幫助學員了解美國司法系統，老師於 2 月安排美國最高法院、美國國會及國會圖書館等參訪活動，3 月則安排參訪華盛頓市議會以及馬里蘭州議會。4~5 月課程主題為非政府組織，老師要求學員們在實地訪談一非政府組織後完成一篇團體書面報告，希望藉由團體合作落實課堂上有關領導力等相關學習。

## (2) Business Leadership and Discussion Seminar

本課程授課老師為 Glen Penrod，本次課程藉由許多個人簡報以及團體合作專案達到提升英語口語能力的目的，同時每周針對個人口語語調及輕

重音，與老師一對一進行調整。1~2月課程老師希望每位學員以”成功”為主題，擇一多媒體影片完成 10 分鐘課堂簡報，完成後再以領導力為主題做 30 分鐘簡報，本次簡報時間除了由 10 分鐘延伸為 30 分鐘外，老師還希望簡報者與聆聽學員能就問題討論來增加互動，除了課堂簡報以外，老師並要求各學員於完成” Professional Applications in Networking” 課程所要求拜會大華府地區專家後，彙整訪談紀錄與課堂分享。

在完成拜會後，職於課堂上完成口頭分享及書面報告。3月課程主要針對美國國家政策做討論，職選擇美國夢想法案( Dream Act)進行分析(詳附件 4)，該法案有關部分在美非法移民是否能合法居住以及獲得工作權，在分析該政策後，完成個人書面報告，並同課堂學員完成針對該政策的辯論練習。4~5 月搭配” Professional Applications in Reading and Writing” 進度進行非政府組織訪談，在訪談後並與合作學員完成團體口頭及書面報告。

### **(3) Professional Applications in Networking**

本課程除延續參與華盛頓特區各智庫等單位所舉辦之活動外，老師要求各學員於 1 月預計參與的智庫活動與機構訪談完成口頭報告(長度約 20 分鐘)。2 月老師鼓勵學員運用課堂所學針對位於大華府地區的專家進行

面對面訪談，職選擇華盛頓特區專利法律事務所 Cahn & Samuels, LLP 作為拜會機構，並與美國專利律師 Warren A. Zitlau 及 George A. Metzenthin 針對相關議題進行交流，相關議題整理如下：

- 1 依據美國專利主管機關(USPTO)發布資訊顯示，採取專利高速公路 (PPH)的美國專利申請案有明顯增加的趨勢，會中針對此議題，職分享過去與專利高速公路計畫相關的審查經驗，與會專利律師 Warren A. Zitlau 認為在申請經費及時間成本考量下，採取專利高速公路的申請案的確有增加的可能性。
- 2 針對中國大陸在美國專利申請案在近幾年據增的情況，美國企業在中國大陸設置相關機構以及中國大陸產業實力提升的確可成為該情況的部分原因，惟專利律師 George A. Metzenthin 認為仍需確認於中國大陸設置的機構型態，一般來說，研發中心較有可能產生專利申請標的物(發明與設計)，若為資料中心，在傳遞資料為主要目的前提下，較難有研發能量產生。
- 3 針對提升專利品質方面，Cahn & Samuels, LLP 與會專利律師均認為各國專利審查機關的資訊交流有其必要性，尤其是專利 5 大局 (IP5)，相關審查過程資訊透明化交流有助提升各國專利品質，同時，專利佈局的規畫能協助研發人員確認產業關鍵技術，對提升專

利品質有其幫助。該些見解與近來世界半導體理事會(WSC)與政府

間半導體會議(GAMS)針對提升專利品質的要點方向一致。

除了拜會機構進行訪談外，老師另外要求學員參與針對美國癌症研究為主題的募款活動，舉行地點為喬治城大學主校區。職於 3 月與其他學員完成該募款活動，並將募款所得轉致主辦單位 Relay for Life。4 月份本課程要求學員擇一非政府組織進行訪問，職與其他學員擇定位於維吉尼亞州的非政府組織” Lutheran Social Services” 進行訪談，機構主要與美國相關政府機構合作，協助外國難民於抵美初期適應各方面生活，透過訪談該機構負責人，職了解該會成立宗旨、運作機制以及面臨的問題，並於訪談後於課堂完成團體簡報。

此外，本課程另外要求各學員完成志工慈善活動，職選擇針對美國癌症研究為主題的志工慈善活動，主辦單位為 The National Foundation for Cancer Research (NFCR)，協辦單位為喬治城大學主校區附近的冰淇淋商家，在完成本次志工慈善活動，於最後一週於喬治城校區以海報形式進行口頭簡報。

### 三、個人心得與建議

本次赴美接受語言訓練實屬機會難得，對職來說內心滿懷感激。英語能力對經濟部駐外商務人員日後的駐外生涯是基礎能力，能夠在一個全英語的環境精進個人口說以及閱讀能力係屬難得，體認至此，職深感幸運能有此機遇，為了不僅在課堂上接受全英語訓練，職刻意在生活各層面盡量與當地生活接觸，除了安排與美國當地人當室友增加語言練習與互動外，不論是喬大主辦的課後活動或是社區節慶活動，職秉持著入寶山絕不空手而回的心情充分參與，希望能在語言學習之外，更可透過與美國當地居民互動了解其文化與價值觀，為未來駐外職涯做好準備。職主要心得與建議分述如附：

#### (1) 精進語言能力

本次語言訓練課程，在閱讀能力方面，透過大量的閱讀，職感受到自身不論在閱讀速度或是文章語意的掌握度上均較未受訓前有明顯進步，目前回國後因業務需求，每日均須接觸大量外文文件，提升過後的閱讀能力確實有助於目前業務；此外，在出國受訓期間，英語口語練習機會大增，職並充分利用喬大提供的語言交換計畫與當地美國學生練習英語，建議未來受訓學員可多加利用學校語言交換計畫或是參與社區當地活動，增加外語練習機會。

## (2) 了解各國文化

喬大國際學生人數眾多，本次受訓課程學員組成多元，除了職來自台灣以外，亦有來自巴西、俄羅斯、西班牙、日本以及沙烏地阿拉伯的學員，透過課堂團體合作以及課後交流，更讓職了解到各國文化以及對相同事件的不同看法；此外，也由於文化不同，在團體合作中更可了解每個文化習慣的做事方式與決策機制，相信未來不論是參與國際會議討論或是駐外時協助我國與外國相關單位洽談業務時，必會有所幫助。

## (3) 提升社交能力

本次受訓除室內課程外，尚有參與華府智庫活動等課外課程，在參與過程中，讓職對於歐美社會不同於東亞社會的人際互動行為有所了解，此外，該過程亦不失為一個與外國人互動的好機會，透過這些互動，職了解到美國社會各層面的價值觀與看法，更進一步瞭解到美國社會是由多元化層面組成。建議未來受訓學員能透過積極參與活動，深入了解當地文化與價值觀，俾利未來駐外與外國政府交涉或業務辦理。

總結來說，本次受訓不僅是在語言方面有所進步，更讓職在國際視野以及人際互動下有所學習，未來希望能將這段期間所學投入未來職涯，俾為我國國際經貿事務貢獻一己之力。

# 附件 1 SWOT 分析報告

## NVIDIA Inc.: A short SWOT analysis

Jason Liu November 03, 2017

### ➤ Background and History

In 1993, a start-up was founded by three engineers in Santa Clara, California. Its purpose was to design excellent graphics cards at reasonable prices for personal computer (PC) players.

In 1995, NVIDIA launched its first product, NV1, featuring with 2D/3D graphics core based on quadratic texture mapping, chosen by SEGA (famous game developer) as a critical component to run its 3D games. In 1998, it formed a partnership with TSMC, serving as their chip manufacturers. In 1999, NVIDIA invented Graphic Processing Units (GPU) which will started a revolution in visual computing. In the same year, NVIDIA announced its first initial public offering. From 2000 to 2017, NVIDIA acquired many companies holding novel technologies, such as 3dfx, media Q, HYBRID graphics and ULi. It also became important business partners for many famous enterprises, like Microsoft, Google and Audi. NVIDIA was successfully explored other areas as increasing the applications GPU, like space exploration and auto-mobile.

Now, as a leader in the market of GPU, its products are targeted at Artificial Intelligence (AI), cryptocurrency, and other novel applications. NVIDIA is trying to play an important role in the history of technology.

### ➤ Strengths

Market: NVIDIA almost dominates the market by taking the biggest market share in the world, around 70% of the discrete desktop GPU market. Its competitor, Advanced Micro Devices (AMD), is still struggling to keep its market share from losing.

AI application: Over the last few years, NVIDIA has been riding high on its impressive success in the area of AI. Scientists found that the parallel processing capabilities that make GPUs superb at image recognition also worked well for data processing in AI systems.



Financial performance: NVIDIA is focusing on four areas: gaming, professional visualization, datacenter and automotive offerings, which accounted for 85% of NVIDIA' s Q4 2016 revenue and increased impressive 23% year-over-year. Its stock has surged over 800% in the last three years and has shown no signs of slowing (Chart 1). According to a report published on Barron' s, NVIDIA is creating the industrial standard in AI computing. With the first-mover advantage, NVIDIA is unifying GPU architecture and a system level approach and it will be nearly impossible to replicate.

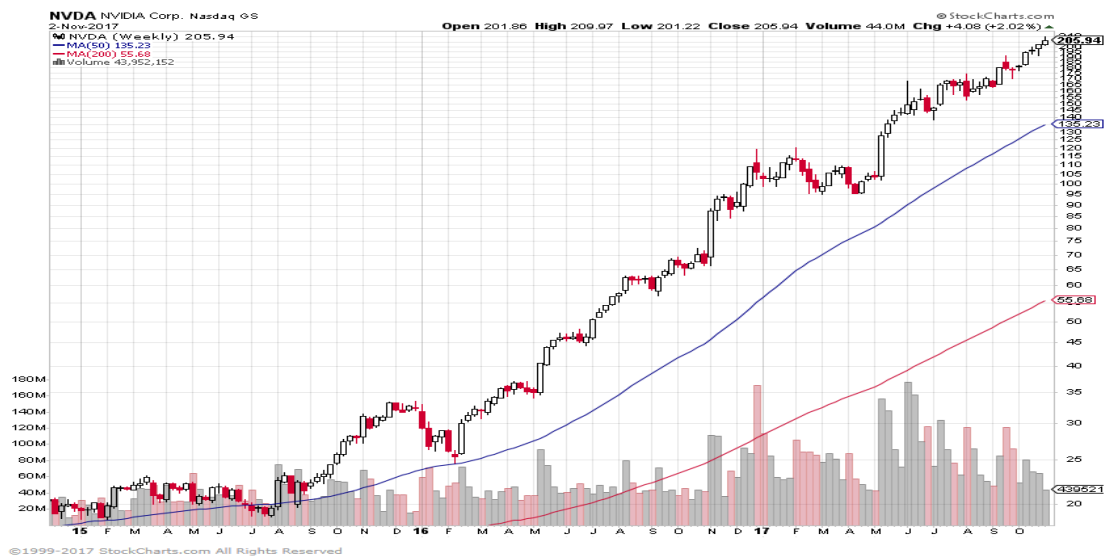


Chart1. Price of NVIDIA in STOCK

## ➤ Weaknesses

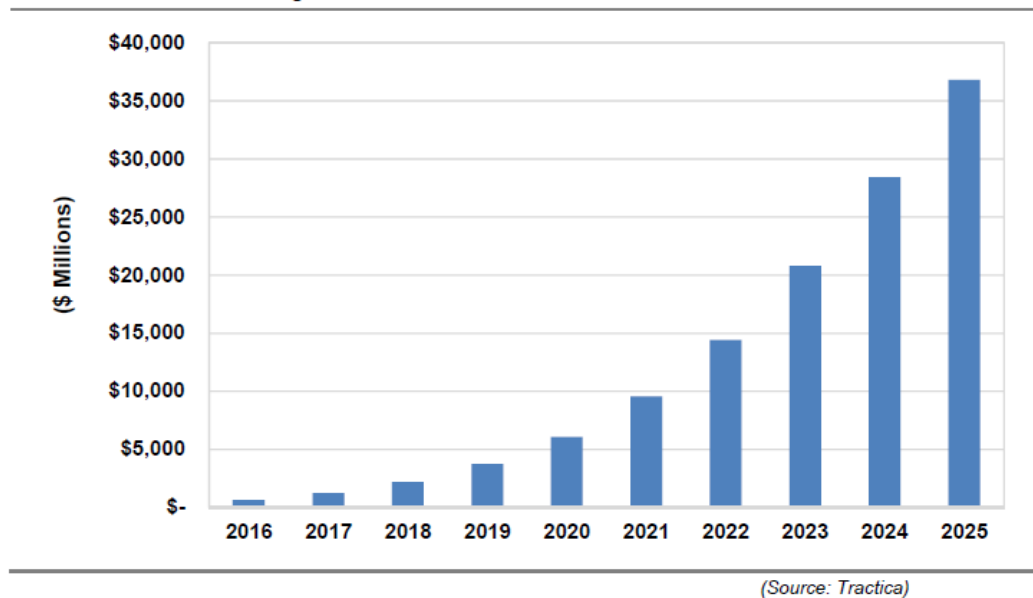
Less diversity of product: Although NVIDIA shows its dominating power over GPU, this power also indicates it' s a potential weakness: less diversities of its revenue in the past few years. It would be dangerous if one company only relied on one main product to earn its revenue. For example, KODAK, once a leader in the photography market, announced its bankruptcy in 2012. Through examining its financial report, we could discover out the main revenue of Kodak is only from films, nothing else. The invention of film actually brought a big future for Kodak and the intelligent properties (IP), like patents, really preventing other companies infringing its IP rights. But everything to Kodak suddenly changed after the invention of digital camera, Film became useless for amateur photographers. Kodak had no other products to bring equal revenue of films, and its failure came very soon. This story tells us how risky it is to put all your eggs in one basket. By examining NVIDIA' s financial report, we can find similar things as we found in Kodak' s. GPUs provide 84% of its revenue, and gaming produces 59% of revenue.

National policy: Moreover, the strong U.S. dollar lowers NVIDIA's main revenue in biggest gaming market of Asia. If the Federal Reserve System (FED) still keep the same trend of rates, the erosion of its revenue might be enlarged.

## ➤ Opportunities

New emerging market: Although NVIDIA only focuses on its core products, GPUs, it has found out many new applications as in the GPU market. For example, AI is an emerging market in the next few decades, full of momentum. According to Tractica, a famous technology institute, the value of AI market will grow over 600% in 2024. For Big data, a market full of requirement of datacenter, will grow over 150% in 2020. The requirement of parallel processing will boost the growth of GPUs. Not only within AI (Chart 1.) and big data (Chart 2.), the development of Bitcoin and robotics (Chart 3.) will ignite the engines of the GPU industry as well.

**Chart 1.1 Artificial Intelligence Revenue, World Markets: 2016-2025**



**Chart 2. The prediction of AI market**



Chart 3. The prediction of Big Data market

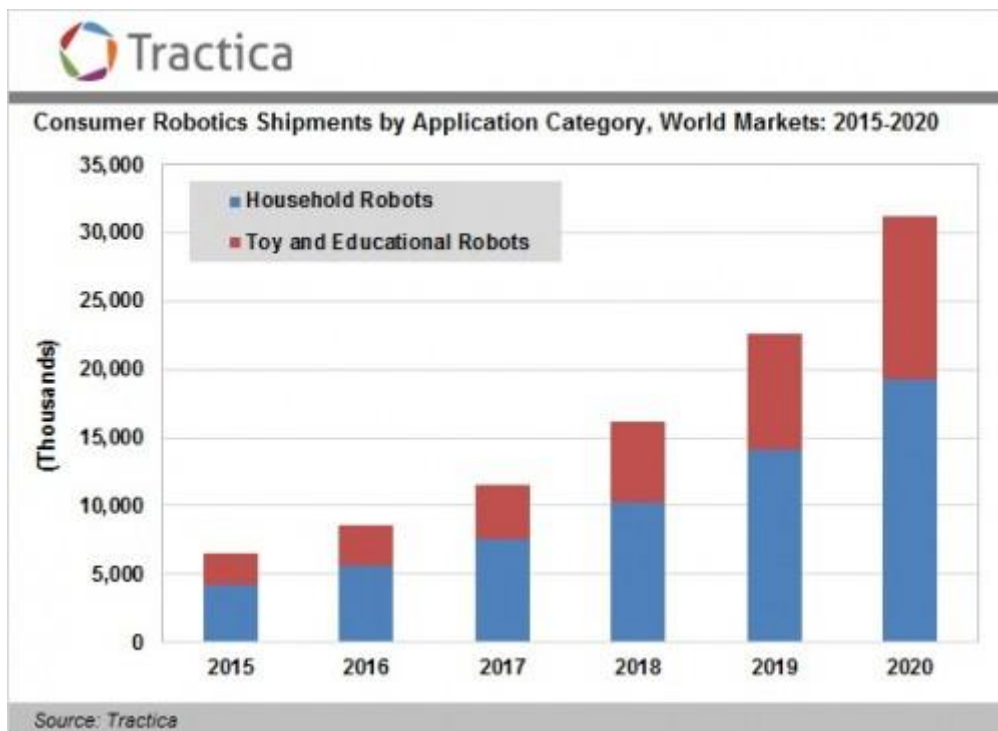


Chart 4. The prediction of Consumer Robotics market

### ➤ Threats

While NVIDIA still enjoys the biggest market share and found out plenty of potential markets for its products, it still faces many threats.

Government policy: The first challenge is government policy. The immigration policy of the Trump authority might decrease the head count of H1B visa for highly skilled workers, which are the main source for NVIDIA to hire their employees. If NVIDIA cannot hire enough highly skilled workers to refill its R&D energy, it might be risky for development of its products.

Competitors: The Second challenge is potential competitors, and even its current competitors. According to market reports, AMD took nearly 8% more of the discrete GPU market in the past year. AMD also made several big deals with some business giants, like Amazon and Baidu. The E-commerce giant, Amazon, announced that it will use AMD's Radeon Pro GPUs to run graphics software on its cloud computing platform. Furthermore, China's internet search leader Baidu announced it would collaborate with AMD for optimizing software for AMD Radeon Instinct GPUs in Baidu datacenters.

## ➤ Conclusion

In sum, the growth of NVIDIA is full of momentum for the future. The performance has shown impressive progress in the past few years. Although there are still some obstacles in front of NVIDIA, like less diversity of its products, risk of the national policies, potential competitors and so on, NVIDIA will still show its dominating influence in the GPU market in the future.

According its financial report (Chart 5.), the record revenue in 2017 is estimated to be \$2.35 billion, which is up 56 percent from a year ago.

GAAP EPS is \$0.92, up 124 percent from a year ago. The above data proves its rocketed growth. Based on the above analysis, I will rate NVIDIA as “strong invest.”

## Q2 FY2018 Summary

GAAP					
<i>(\$ in millions except earnings per share)</i>	Q2 FY18	Q1 FY18	Q2 FY17	Q/Q	Y/Y
Revenue	\$2,230	\$1,937	\$1,428	Up 15%	Up 56%
Gross margin	58.4%	59.4%	57.9%	Down 100 bps	Up 50 bps
Operating expenses	\$614	\$596	\$509	Up 3%	Up 21%
Operating income	\$688	\$554	\$317	Up 24%	Up 117%
Net income	\$583	\$507	\$261	Up 15%	Up 123%
Diluted earnings per share	\$0.92	\$0.79	\$0.41	Up 16%	Up 124%

Non-GAAP					
<i>(\$ in millions except earnings per share)</i>	Q2 FY18	Q1 FY18	Q2 FY17	Q/Q	Y/Y
Revenue	\$2,230	\$1,937	\$1,428	Up 15%	Up 56%
Gross margin	58.6%	59.6%	58.1%	Down 100 bps	Up 50 bps
Operating expenses	\$533	\$517	\$448	Up 3%	Up 19%
Operating income	\$773	\$637	\$382	Up 21%	Up 102%
Net income	\$638	\$533	\$313	Up 20%	Up 104%
Diluted earnings per share	\$1.01	\$0.85	\$0.53	Up 19%	Up 91%

Chart 5. NVIDIA' s financial report of 2018

## ➤ References

1. <http://www.NVIDIA.com>
2. <https://www.forbes.com>
3. <http://www.barrons.com/>
4. <http://stockcharts.com>
5. <https://www.cnbc.com>
6. <https://www.tractica.com>
7. <http://www.investopedia.com>

## 附件 2 組織政策備忘錄

### FINCA Policy Memo

To: Rupert Scofield, the CEO of FINCA  
From: Jason  
Date: 10/29/2017  
RE: Helping more people through better services

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In order to understand how FINCA can attract more people, including borrowers and donators, we lunched a survey targeted people in universities. The following paragraphs will shows some points found in the results of the survey and solutions to improve the qualities of FINCA' s services.

#### ➤ Problem

You can find most of the interviewees replied that they had never heard of FINCA in their survey. (Chart 1) The X-axis represents the ages of interviewees and the Y-axis represents the number of interviewees. This chart indicates an interesting point: most of our interviewees are under 20 and they never heard of FINCA. The same results also show in the age of 21~30 and 41~50. As we know, the donations or loans from the public are one of the main sources of funding. How are people willing to donate their money to FINCA without any realization of FINCA? We suggest that FINCA should put more efforts into its publicity, like website, online dissemination and public activities. The solution targeted people from 20 to 30 will be some social network frequently used by teenagers, like Facebook.

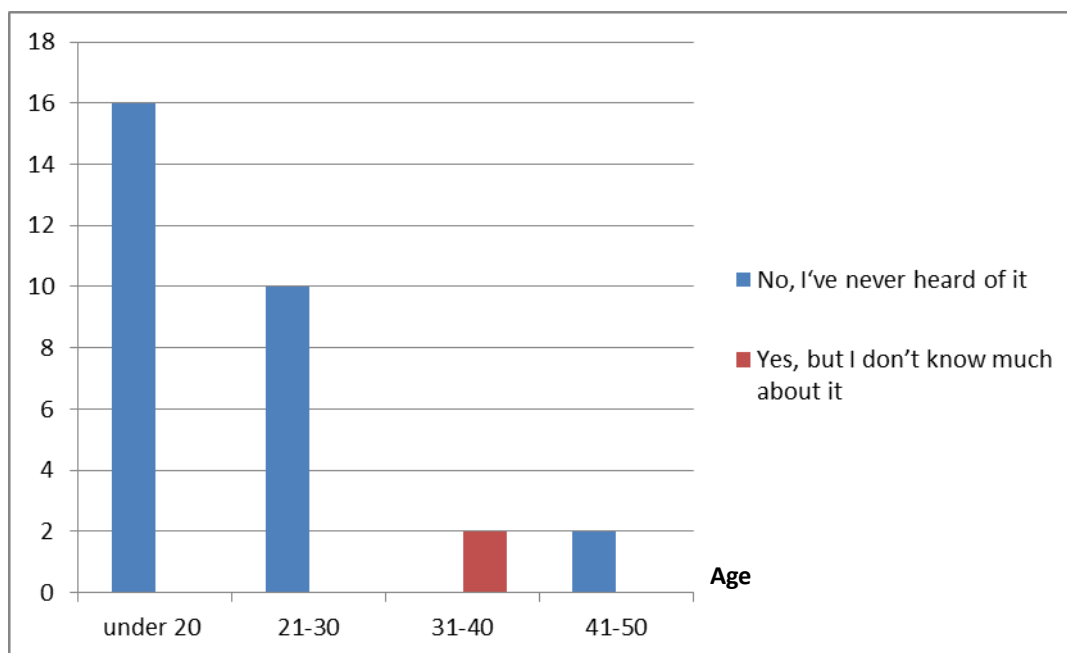


Chart 1: The result of “Have you ever heard of FINCA”

FINCA can build a group on Facebook to promote its ideas and attach a link of its official website for people to learn more about the details of microfinance. Not only some posts on the group, FINCA can also issue some online interaction with its supporters and followers on Facebook like Facebook Live, an online live activity. FINCA can invite the main characters of its successful stories in its online live activities. Nothing could be more useful than a real story to touch the hearts of people. Nothing could be more direct for people to learn a concept through a real person, instead of numerous slogans and papers.

More than that, Facebook provides some useful statistical tools for the managers of groups to analyze the interaction between the followers and managers. Through these tools, FINCA can realize whether their topics of posts actually add impetus to microfinance or not. FINCA can customize their contents delivered to audience in their live activities, like woman successful stories for female followers or environment-protect business for people are concerned by pollutions. Apart from posts and live activities, FINCA can encourage its follower to share posts they like with their friends. FINCA can leverage the function of social network through sharing on Facebook.

On the other hand, the responses from its follower can furtherly save a lot of its cost on promotion. For instance, FINCA can release information about what kinds of events will be held in the future, and its followers can select “going” or “not going” as their responses. According to these

responses, FINCA can predict how much resources should be allocated in each event, fewer expenses for fewer attendants. Furthermore, FINCA can adjust the direction of its outdoor activities or events to draw more attention from its followers, even people unfollowing FINCA.

In addition to Facebook, some professional social networks could also be a platform for people whose ages are from 30~50. People around 30~50 usually have initiated their career for several years. Hence, they would surf some profession social networks, like LinkedIn, more frequent than Facebook. FINCA can build a profession group on LinkedIn to deliver the concept of microfinance from several aspects, like purpose, approach and successful stories. It's very easy for FINCA to find other entrepreneurs having same core idea: help poor people from tiny helps from everyone. FINCA can cooperate with these groups on promotion. FINCA can easily access people following those alike groups, without too much cost. Following this strategy, FINCA can issue some social activities with alike groups and entrepreneurs, like a promotion with group related to foodbank. Even more, FINCA can invite those celebrities in microfinance write some articles in its group on Linked, it will draw much more attention from those celebrities' attentions.

## ➤ Conclusion

To sum up, FINCA faced one problem preventing it from progressing: Lack of well-known reputation. In this memo, we point out several ideas basing the targeted people's ages. For people who are under 20, FINCA can allocation most of its resources on social networks which teenagers' eye sights frequently stay on, like Facebook. The statistical tools provided by Facebook and interaction with followers will enhance the degree of publicity of FINCA.

For people whose age from 31~50, a professional network or website would be the best solution, like LinkedIn. Through the cooperation with other alike entrepreneurs and the articles written by other celebrities I this area, FINCA, a microfinance entity built more than 35 years, will be known by more people in the future.

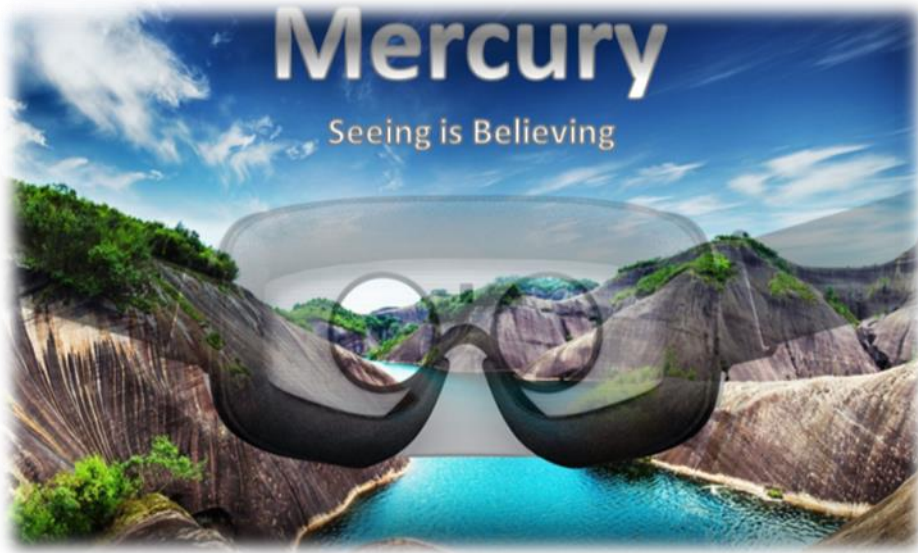


附件 3 商業計劃書

**Mercury**

Seeing is Believing

**Executive Summary**



Prepared by  
Jason Liu, CEO of Mercury

Presented to Venture Capitalists  
Georgetown University  
December 8, 2017

## Executive Summary

### Mercury

#### Background

Students and teachers are always seeking new ways to absorb more knowledge in a shorter time. In other words, they want to study more efficiently. According to some psychologists, the average retention rate through personal experience is 8 times greater than through reading. (Fig 1.)

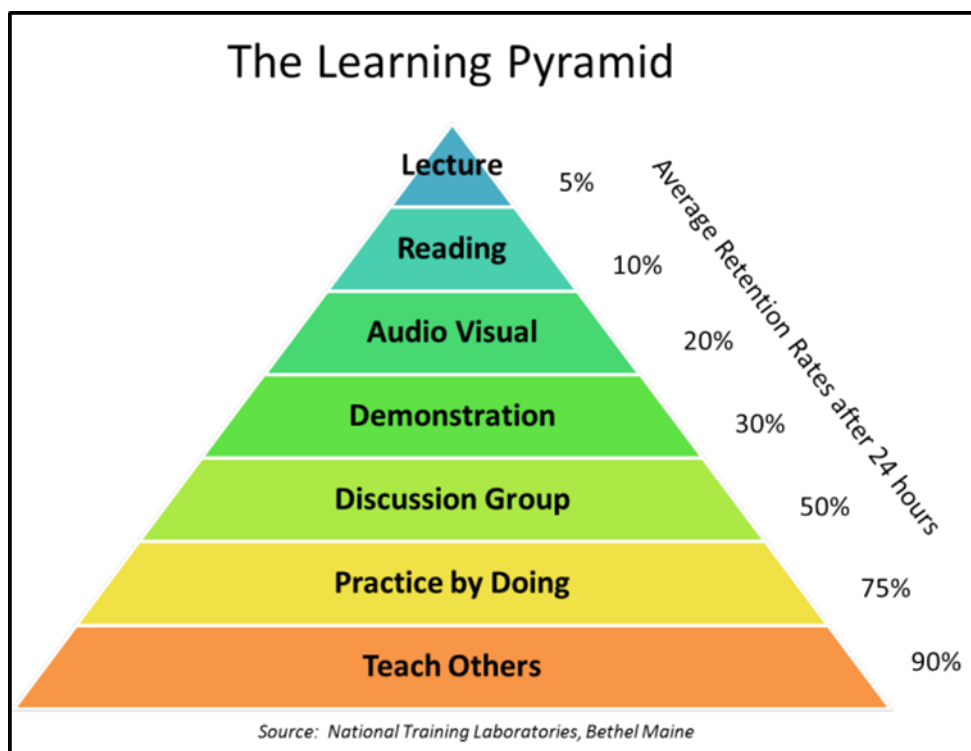


Fig 1.

#### Product

**Mercury**, like its original meaning, the god of travel, can provide vivid exotic experiences for customers. It is a simple wearable handset embedded with abundant digital information related to historical events, travel sites and famous geographical spots. Our cherished customers only pay a tiny membership fee to tour wherever they want to visit. They do not have to worry about upgrading their devices and updating new information repeatedly anymore. It will be a wonderful journey to

learn history and geography around the world without an exhausted spirit after a 15-hour flight.

## Goal

The reason that Mercury appears in front of students is to bring people better experiences of touring the world.

Mercury wants to bring students a novel learning curve instead of traditional heavy books. All they have to do is wear Mercury to learn more about what they have been taught in history classes and geography classes, like the amazing landforms in Grand Canyon National Park, the Muslim culture in Saudi Arabia and romantic atmosphere under the Eiffel Tower.

Moreover, this new experience will not bring a financial burden to our customers. It only costs 2~3 meals of SUBWAY per month, not more expensive than the membership fee of LA Fitness. Providing a richer life in study and travel with little money is the goal of Mercury.

## Key Customers

Mercury's key customers are 7<sup>th</sup> to 12<sup>th</sup> grade student in the US. We want to assist students to lift their proficiency in geography classes without too much financial burden. According to a general survey, nearly three quarters of 8<sup>th</sup> graders tested below proficient level in geography on the 2014 National Assessment of Educational Progress (NAEP). It's similar in prior NAEP assessments of 4<sup>th</sup> and 12<sup>th</sup> graders, approximately 80 percent of whom tested below proficient level in 2010. (Fig 2.)

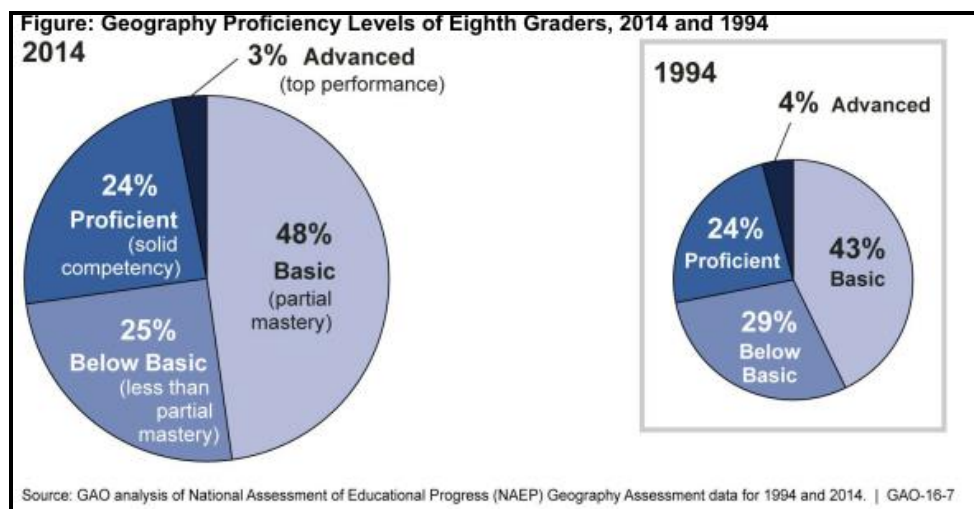


Fig 2.

➤ **Why that might be**

More than half of social studies teachers spend 10 percent or less of their time on geography. Due to the heavy emphasis placed at both the national and state levels on reading, math, and science, spending time and resources on geography education is difficult. Moreover, over half of teachers interviewed for the report indicated difficulties accessing enough high-quality resources for geography education. It is inevitable to lead to such a miserable situation because the nearly zero funding injected by the federal government. Based on data released by the US Department of Education (UDE), among nine core academic subjects in the No Child Left Behind Program, geography is the only one that has never had a dedicated federal program for teaching. (Fig 3.)

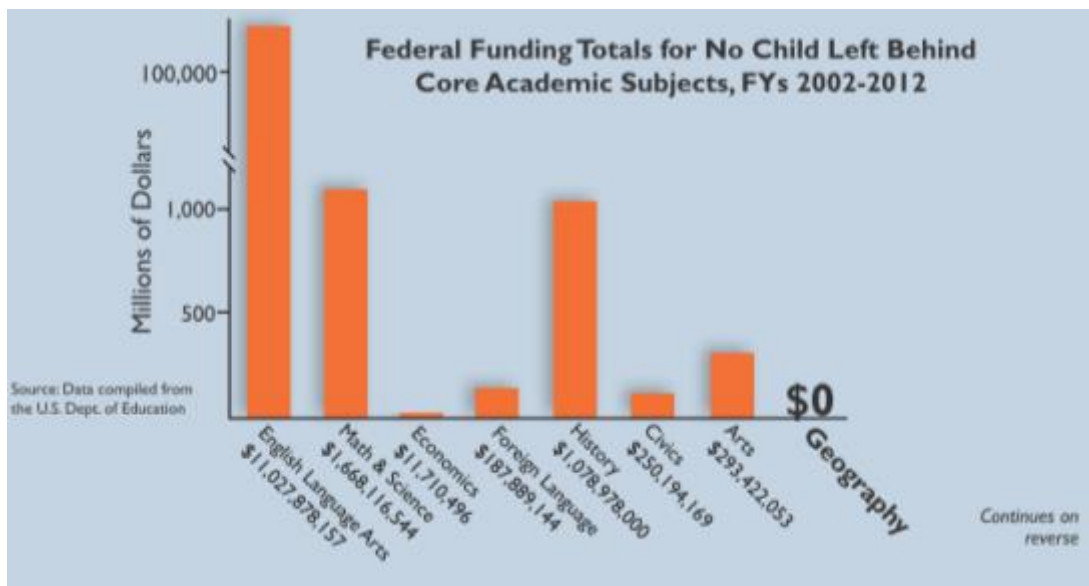


Fig 3.

### Market Potential

The statistical data from National Center for Education Statistics (NCES) shows that the projected enrollment of students in 2018, from 7<sup>th</sup> grade to 12<sup>th</sup> grade, was around 22,737,000. (Fig 4.) If only 10% of the enrolled students pay \$20 per month to use Mercury, the revenue would be \$45,474,000 per month, and the total revenue in 2018 would be \$545,688,000.

Table 203.10. Enrollment in public elementary and secondary schools, by level and grade: Selected years, fall 1980 through fall 2026  
[In thousands]

Year	All grades	Elementary											Secondary						
		Total	Prekin- dergar- sen	Kinder- garten	1st grade	2nd grade	3rd grade	4th grade	5th grade	6th grade	7th grade	8th grade	Un- graded	Total	9th grade	10th grade	11th grade	12th grade	Un- graded
2018	50,759	35,593	1,373	3,783	3,762	3,750	3,750	3,731	3,848	3,886	3,848	3,775	87	15,166	4,048	3,833	3,613	3,620	52
2019	50,843	35,657	1,384	3,812	3,764	3,735	3,763	3,742	3,739	3,864	3,912	3,856	87	15,186	4,056	3,859	3,637	3,583	52
2020	50,996	35,667	1,394	3,840	3,793	3,737	3,747	3,755	3,750	3,755	3,890	3,920	87	15,329	4,143	3,867	3,661	3,606	52
2021	51,152	35,639	1,404	3,867	3,821	3,766	3,749	3,739	3,762	3,766	3,780	3,898	87	15,513	4,212	3,949	3,669	3,631	52
2022	51,301	35,660	1,414	3,894	3,848	3,793	3,778	3,741	3,747	3,778	3,791	3,788	87	15,641	4,188	4,015	3,747	3,638	53
2023	51,455	35,815	1,423	3,920	3,875	3,821	3,806	3,770	3,749	3,763	3,804	3,799	87	15,640	4,070	3,993	3,809	3,716	53
2024	51,562	35,982	1,431	3,943	3,900	3,847	3,833	3,798	3,778	3,765	3,788	3,812	88	15,579	4,081	3,880	3,788	3,778	52
2025	51,632	36,156	1,439	3,964	3,924	3,872	3,860	3,825	3,805	3,794	3,790	3,796	88	15,476	4,095	3,891	3,681	3,757	52
2026	51,738	36,362	1,445	3,981	3,944	3,896	3,885	3,851	3,833	3,822	3,819	3,798	89	15,376	4,078	3,904	3,691	3,651	52

NOTE: \1\Includes students reported as being enrolled in grade 13.  
NOTE: Due to changes in reporting and imputation practices, prekindergarten enrollment for years prior to 1992 represent an undercount compared to later years. The total ungraded counts of students were prorated to the elementary and secondary levels based on prior reports. Detail may not sum to totals because of rounding.  
SOURCE: U.S. Department of Education, National Center for Education Statistics, *Statistics of Public Elementary and Secondary School Systems, 1980-81*; Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 1985-86 through 2014-15; and National Elementary and Secondary Enrollment Projection Model, 1972 through 2026. (This table was prepared December 2016.)

Fig 4.

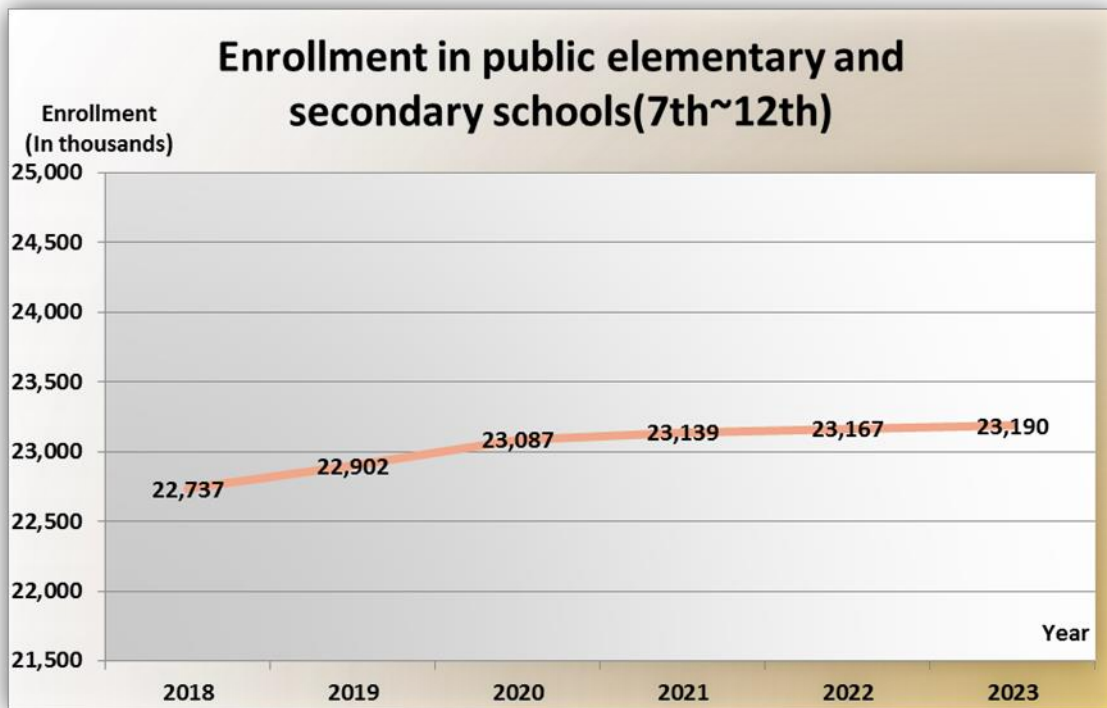


Fig 5.

➤ **How is the market in the next five years?**

The same reports also indicated that in the following 5 years (Fig 5.), the average enrollment of students will be 23,102,000, which means the average annual revenue will be \$554,448,000, a stable trend in the targeted market. An average annual revenue around \$550 million is a big, juicy and attractive market for Mercury. It would not be better if there were few competitors, even no competitors. In terms of the competition, we will analyze them in the following section.

➤ **Trend curve of VR**

In order to obtain a more comprehensive prediction, we also want to assure if there will be more people embracing VR technology. From the data publishing by BI INTELLIGENCE (Fig 6.), all of the main three VR headsets will keep growing in the following five years. The Smartphone-powered headsets, which will be utilized in Mercury, will grow the most in the future. On the other side, analyst Gartner positions VR rising up its “slope of enlightenment” in its 2017 Hype Cycle for Emerging Technologies report (Fig 7.). VR is still on its way of growth. As more students have their own smartphones, it will be easier for students to utilize VR in their study in the future.

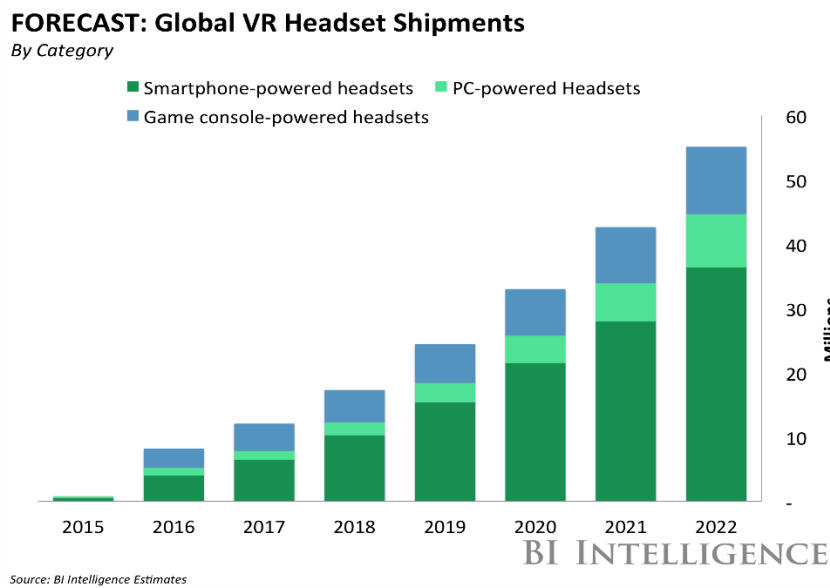


Fig 6.

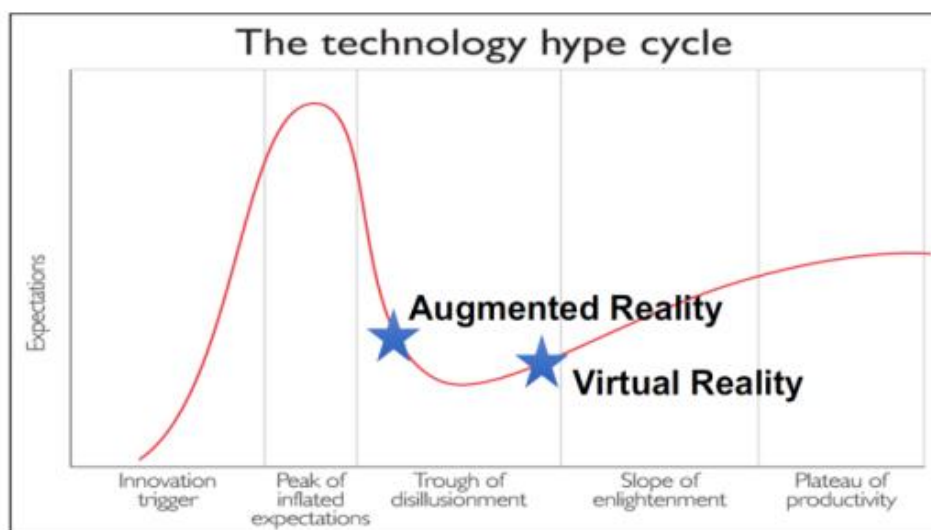


Fig 7.

## The Competition

### ➤ zSpace

#### ■ Business Model of zSpace

zSpace applications engage students in standards-based learning experiences that align with the curriculum. zSpace includes a monitor, polarized glasses and a stylus controller(Fig 8.). Students can pick up a whole package for a cost of \$3995 online. The device is not mobile and only for indoor usage. The main function of zSpace is to create virtual 3D objectives by utilizing Augment Reality (AR). Through these virtual objectives, students can enhance their learning curves, like disassembling a virtual motor to understand the theories behind machines or analyzing every tiny structures within a frog to see the breathing mechanism of the organism.

#### ■ Mercury V.S. zSpace

Compared to zSpace, Mercury provide dynamic digital information. Students will feel as if immersed within an exotic culture or American famous geographical sites. Moreover, Mercury is for geography classes and zSpace is for static 3D virtual model. The main target markets for the two companies are different. Another thing, zSpace cannot be used outdoors because it does not feature battery devices. The strong ambient light would reduce the visual effect provided by zSpace. Fortunately, Mercury does not have to face such difficulty like strong ambient light or limitation of working places. The students can deepen their impression of deserts by virtually staying in Arizona and comparing the digital information related to the Sahara desert in Mercury.

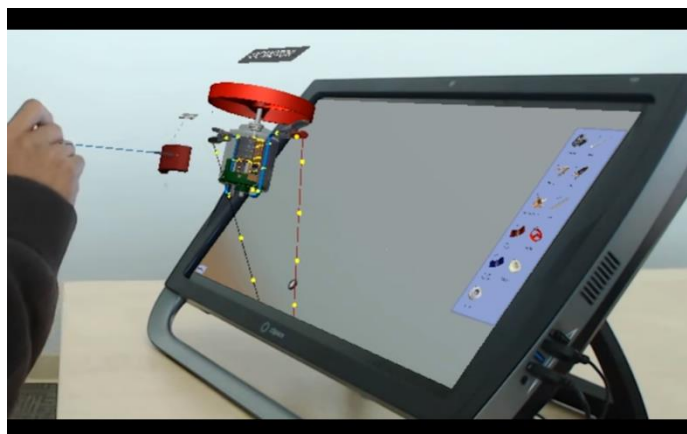


Fig 8.

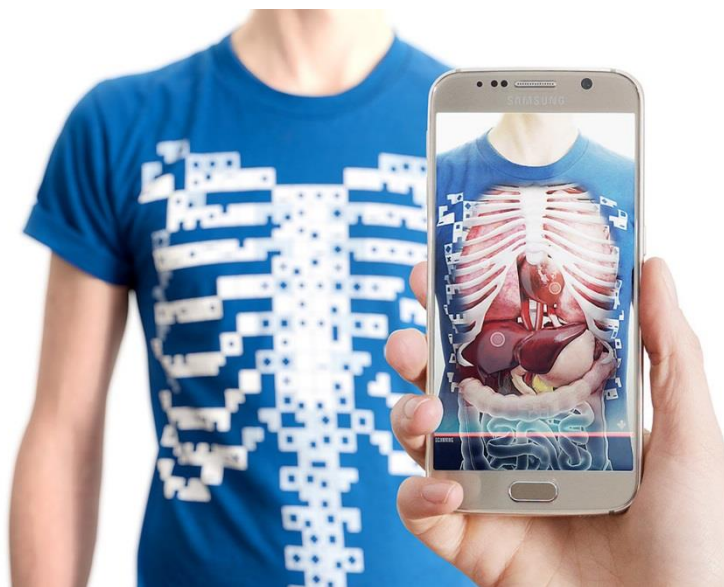
## ➤ **Curiscope**

### ■ **Business Model of Curiscope**

Curiscope provides a high-quality tee, Virtuali-Tee, combined with an app that brings anatomy to life with magical illuminating experiences for students. (Fig 9.) The extraordinary tee combined with infrared-light reflectors which can reflect signals to the lens embedded on smartphones. Students can use their phones to scan the spots on the reflectors and the corresponding 3d virtual information will appear on their screen. Through the vivid image on their screens, it will be easier for students to realize the relative position of every organ in the chest. Students can buy the Virtuali-Tee for a cost of 29.95 online and download the app for free.

### ■ **Mercury V.S. Curiscope**

Compared to Curiscope, the main target market of Mercury is different. Curiscope is for digital biology information, and Mercury is for digital geography information. Furthermore, Curiscope cannot provide its comprehensive function without Virtuali-Tee, which means students have to put the tee on others to scan every part of the human body they want to learn about. In this way, students cannot use the novel technology to learn by themselves. It would be a little bit inconvenient. On the contrary, students who want to enjoy Mercury only have to wear a VR headset for free on their head, which means they can visit anywhere in the virtual world by themselves, with no help from others.



**Fig 9.**



## Management Team

In order to grab the golden ball among the competitors in the educational market, we organized a comprehensive business team to conquer the tournament of high-tech educational market. Mercury will be brought in front of students' eyes by a professional team consisting of professionals from different fields. The following descriptions are about our A-team:

➤ **Chief of Executive Officer: Dr. Jason Liu**

Obtaining a master's degree of business at the Wharton Business School of the Pennsylvania University, Dr. Liu has initiated several successful educational businesses, like Kidcastle, Age of Learning and GPS Academy. With a strong background in education in the US, Dr. Liu will eliminate most of the unnecessary learning curves for Mercury.

➤ **Chief of Tech Officer: Dr. Do Fu**

Graduating from the Massachusetts Institute of Technology (MIT), Dr. Fu has a strong background in VR technology. After serving as a senior director to publish novel products in Apple, he decided to participate in the core technology for next generation: VR. After obtaining over 20 patents related to VR in the US and China, he is enthusiastic to show the new generation of educational gadgets for the future hopes of the US.

➤ **Chief of Operation Officer: Dr. Compass Yeh**

After selling his business to Google for \$5,000,000, Dr. Yeh finished his business program at Harvard University 2 years later. We are so glad to have Dr. Yeh to exert his advantage of business operations to level up Mercury. Due to his successful experience and solid knowledge in business, especially the close relationship with the Department of Education of the government and the whole education industry, we have no doubt he will play an indispensable role on the journey to success.

➤ **Chief of Marketing Officer: Dr. Sheldon Cooper**

Dr. Sheldon Cooper has been a well-known marketing star in the past decades in the US. After finishing his famous Hollywood career, he built excellent relationships in the mainstream media, marketing industry and public relations field. A great high-tech product cannot be a hit without a thorough marketing policy, and we believe Dr. Cooper will streamline the promotion of Mercury in the US.

## Financial Forecasts

Thanks to the low cost in hardware like headset and server, the cost of Mercury is not a heavy burden. In order to make sure Mercury goes well in the following 5 years (2018~2022), we have made a financial prediction table (Fig 10. ~Fig 11. ). In this table, Mercury can be profitable in the first year, and the rate of interest is around 96%. We make this table very financially conservative, with 20% of annual growth in sales, and only 10% of the total enrollment of our targeted students chooses Mercury as their educational tools. Furthermore, we disclose more detail of business in the first year by making another financial prediction table (Fig 12.). In the Q1 of 2018, with only 2% of our targeted students becoming our members, Mercury will still bring net income exceeding set-up funding.

Items/Year	2018	2019	2020	2021	2022
Sales	545,677,800	659,569,795	664,902,086	666,390,182	667,208,880
Cost of headset	18,189,260	18,321,383	18,469,502	18,510,838	18,533,580
Gross Profit	527,488,540	641,248,412	646,432,584	647,879,344	648,675,300
<b>Operating Expenses</b>					
rent of server	125	125	125	125	125
Solaries	750,000	250,000	250,000	250,000	250,000
Cost of video	452,000	0	0	0	0
Cost of App	100,000	50,000	50,000	50,000	50,000
Marketing	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
Total Expense	3,302,125	2,300,125	2,300,125	2,300,125	2,300,125
Net Income(Loss)	524,186,415	638,948,287	644,132,459	645,579,219	646,375,175

Fig 10.

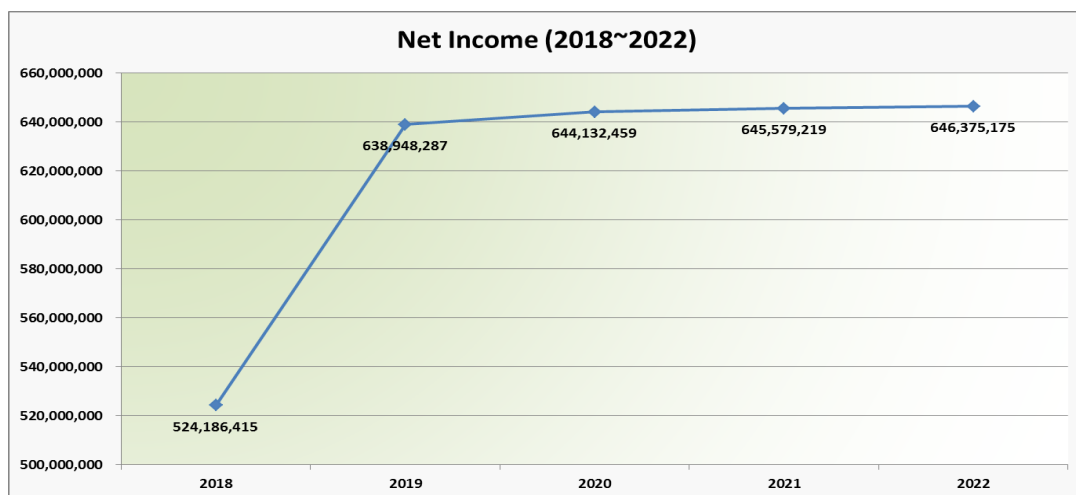


Fig 11.

Items/Year	2018Q1	2018Q2	2018Q3	2018Q4
Sales	105756013	182746391	315785764	545677800
Cost of headset	3525200	6091546	10526192	18189260
Gross Profit	102230813	176654845	305259572	527488540
<b>Operating Expenses</b>				
rent of server	125	125	125	125
Solaries	187500	187500	187500	187500
Cost of video	452000	452000	452000	452000
Cost of App	100000	100000	100000	100000
Marketing	500000	500000	500000	500000
Total Expense	1239625	1239625	1239625	1239625
Net Income(Loss)	100991188	175415220	304019947	526248915

Fig 12.

### Required financing

For assuring Mercury become hot among our targeted customers, we have to promote Mercury through various channels, like FB, Google and so on. In order to set up our business, we need \$3.6 million to build our comprehensive business plan in the first years. Fifty five percent of the set-up funding is for marketing, including hiring some YouTubers recording promotion video or purchasing Search Engine Optimization (SEO) project. Thirty three percent of the funding is for salaries and high-quality videos and 8% for initial inventory. (Fig13.)

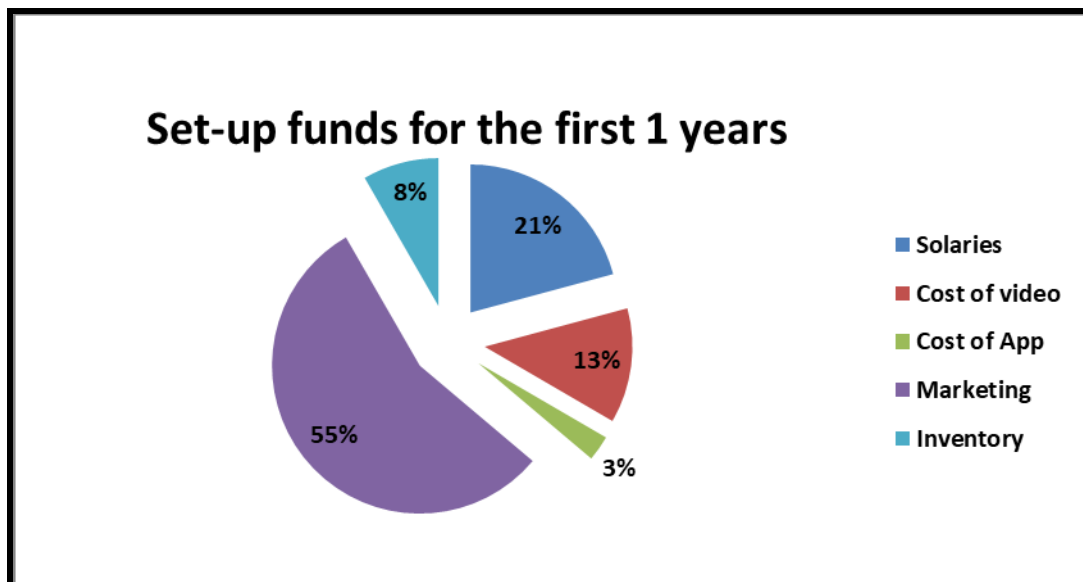


Fig 13.

## Exit Strategy

Mercury is ready to bring the real world to our customers, and we predict we can create nearly \$160 by investing \$1 in Mercury in the first year. For exit strategies, we classify our strategies into two parts: long-term strategy and short-term strategy. For the short-term strategy, selling Mercury to a similar group or business is our primary alternative because this benefit of Mercury could be leveraged in this way. For the long-term strategy, we will do our best to push Mercury into the next stage: publishing IPO on NASDAQ!

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## 附件 4 美國夢想法案分析

### Public Policy Issue Analysis

#### ➤ Background of Dream Act of 2017

In June 2012, the Obama Administration established a policy called “The Deferred Action for Childhood Arrivals (DACA)”. DACA is an immigration policy that allows individuals who came to the US as children to receive a renewable two-year period of deferred action from deportation and to be eligible for a work permit. Approximately 741,546 (88% of whole applicants) applicants were approved until June 2016. These individuals have their families, pursued careers and studies across the U.S.

After 5 years, the Trump Administration initiated to phase it out on September 5, 2017. The Department of Homeland Security (DHS) stopped accepting and processing any new applications. The implementation would be suspended for six months. According to President Trump, he and his government would solve the DACA issue through the lawful Democratic process.

Lindsey Graham, a Senior Senator for South Carolina, introduced a bill cited as the “Dream Act of 2017” (S.1615) on July 20<sup>th</sup>, 2017. This bill will prevent the approximately 800,000 applicants qualified in DACA from deportation.

Lindsey Graham indicated that these young people (Dreamers) who grew up in the United States should be allowed to contribute more fully to the country they love, and there is

support across the country for these Dreamers.

➤ **Summary of Dream Act of 2017**

According to the 1<sup>st</sup> session of the 115<sup>th</sup> U.S. Congress, all applicants must be:

1. Arrive at the United States when they are younger than 18.
2. Has been continuously physically present in the United States for 4 years before the date of the enactment of this Act.
3. Has not been convicted of any offense under Federal or State law.
4. Have completed high school or GED.
5. Pass a background check and English proficiency test.

Applicants who meet above requirements would be lawfully admitted for permanent residence on a conditional basis.

➤ **Arguments for the proposed legislation**

On July 21<sup>st</sup>, 2017, National Immigration Forum published one report to illustrate their point to support the proposed legislation. First, this Act was cosponsored by Republican and Democratic, which means it was a bipartisan legislative solution, an act accommodating more comprehensive arguments. Additionally, the act will boost the American economy. In the next 10 years, young undocumented immigrants having DACA currently will create approximate \$433.4 billion to the GDP \$60 billion in fiscal growth and \$12.3 billion in taxes to Social Security and Medicare. Last but not least, this act will prevent these young undocumented immigrants from deportation to a

country where they have difficulty in surviving. Because these young “Dreamer” have lived in this full-of-dream land for since their childhood, they are used to everything in the American society, including language, social system and route of career. In terms of human right and American economic growth, the contribution from these “Dreamers” should not be ignored; their rights should be protected by a strong and permanent solution, Dream Act of 2017.

➤ **Arguments against the proposed legislation**

On the other hand, there are several different sounds across the U.S inevitably. Congressman Bob Goodlatte said that DACA and Dream Act would encourage more illegal immigration of unaccompanied minors and families. Besides, Rep. Lamar Smith illustrated his point by stating that the The Immigration Reform and Control Act of 1986 (IRCA), which put an end to illegal immigration originally, but the amnesty only encouraged more in fact. Following the act's implementation, between 1990 and 2007, illegal immigration grew by 8.5 million. Moreover, The Center for Immigration Studies indicated that many Dreamers also commit work-related crimes, such as Social Security fraud perjury on I-9 employment forms, and falsification of ID cards. However, theses dreamer committing a wide range of crimes are still qualified because Dreamers are disqualified only if they are convicted of a crime, according to DACA or Dream act. Last but not least, Sen. Tom Cotton has claimed that more additional family members could indirectly benefit. He stated that The 2017 Dream Act is not limited to DACA recipients. In other words,

these receiving green cards will be able to sponsor their illegal-immigrant parents. The voices against the Dream Act of 2017 are as loud as the ones supporting Dream Act of 2017.

➤ **My recommendation**

In my point of view, the rights of these Dreamers, human rights, should not be ignored. They should not face the deportation, leading losses of everything they have built in the U.S. They passively arrived at the U.S. as children, without any self judgement and determination. In other words, they are innocent because they did not choose illegal immigration purposely.

However, what makes sense is prevent people taking advantage of the amnesty. According to The Center for Immigration Studies and Rep. Lamar Smith' s saying, the IRCA lead the increase of illegal immigration by 8.5 million, which is not the original purpose of this act. More significantly, most of the DACA recipients are still qualified even they commit a wide range of crimes, as long as they are not convicted. It is not hard to calculate the risky impact of such a huge population related to crimes becoming citizens of the U.S. Meanwhile, the current act not only limited to DACA recipients. Those who receive green cards will then be able to sponsor their illegal-immigrant parent, who might arrive at the U.S. illegally and purposely, for a green card. In this way, the act may functions as a channel of transforming illegal-immigration to citizenship.

In conclusion, my suggestion is to represent a more comprehensive act without against the main idea and purpose of the act, protecting the rights of these Dreamers. The more comprehensive act



can prevent people from take it as a tool of illegal immigration as protect the future of these Dreamers.

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