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A Declaration of War: A Case of Competition in The Video Game Industry

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BACKGROUND OF VIDEO GAME ENTERTAINMENT

Video Game Entertainment (VGE) is currently one of the largest video game producers in the industry. It has roots in California when it was founded, funded, and incorporated in 1982 by Jim "Hawk" Stevens.

With the cash he earned from a lucrative IPO, Stevens incorporated VGE and personally funded VGE for the first six months. Stevens wanted to properly credit and compensate the talent that produced games, giving them the same respect that artists in other media enjoy. He envisioned VGE as a publishing company that would be known for its quality and professionalism, working with the best independent talent to make the computer game industry equivalent to film, books, or music.

By the 1990s, VGE had grown significantly and began to acquire successful game developers. This practice allowed VGE to "gain development expertise, proprietary technology, intellectual property and a competitive advantage," rather than rely on independent game development companies.[1] And even more importantly, it prevented other publishers from obtaining the content from the best developers. The developers benefited by gaining access to resources (including funding for new game development), new technology, and extensive marketing.

ACQUIRING DIGITAL CREATIONS AND ITS *TrueWar* SERIES

TrueWar is a video game series created by German video game developer Digital Creations, which was started in 1988 by four developers who came from the same town. They were still in college when they made their first video game and did not even intend it to be a commercial product. Instead, the game turned out better (and more popular) than they expected.

Years later, in 2000, Digital Creations bought another Germany-based developer, Gold Medal Games, which had just developed and released a first-person shooter (FPS) action game. FPS is a video game genre that centers the gameplay on gun and projectile weapon-based combat through first-person perspective. For instance, the player experiences the onscreen action through the eyes of a protagonist, which differs from the third-person, over-the-shoulder onscreen view used in third-person video games. Gold Medal Games already had its next FPS game under development when Digital Creations acquired the company. This game became the first game to use the name *TrueWar* and was Digital Creations' big breakthrough.

It took only the first two games of the series, *TrueWar Allies* and *TrueWar: Bravo Company: Jungle*, to attract VGE's attention. In 2004 VGE publicly announced its intent to purchase Digital Creations. The acquisition process began in 2003 when VGE started acquiring the bulk of Digital Creations' stock through open market purchases in 2003, 2004, 2005, and 2006. And in 2006, the acquisition of Digital Creations for $93 million was complete.

VGE had published all of Digital Creations' *TrueWar* titles and acquired Digital Creations so that it could become a "fully integrated VGE studio dedicated to growing the *TrueWar* franchise and developing new products for the PC, next-generation consoles, and other new platforms." Digital Creations' CEO Patrick Mandorff felt that "being part of the VGE studio team is a great step forward that will help us continue to deliver new games and new franchises to Digital Creations' fans."

A DECLARATION OF WAR

Speaking at an advertising conference in New York City, Jonathan Sebastian III, CEO of VGE, went on record stating: "This November, we're launching *TrueWar III*. It's going up against the next *Active Duty*, which is presently the number one game in the industry, a game that last year did $400 million in revenue on day one. *TrueWar III* is designed to take that game down." He continued by comparing the upcoming holiday's battle between the two games to the Red Sox/Yankees rivalry in baseball and said gamers can expect to see massive advertising campaigns for both titles. "Everybody loves a heavyweight fight, and that's what this is going to be. We are here to compete. We know we have a big competitor, but we have the superior game engine, superior development studio, and a flat-out superior game."

These statements represented a veritable declaration of war against the most successful video game franchise in history. It certainly began a war of words with the CEO of *Active Duty's* publisher, but Sebastian's words clearly represented a statement of intent to compete more vigorously with its largest competitor. How large? Developed and published by Calling Card, the most recent game in the series, *Active Duty: Code Black*, that was released the prior year had tallied more than $650 million in worldwide revenue during the first five days after its release. This feat bested any prior release of any entertainment product, including movies, books, and video games. It took Code Black six weeks to reach sales of $1 billion.

A VGE EXECUTIVE MEETING

The week after Sebastian's declaration of war with Calling Card and *Active Duty*, VGE executives met to discuss financial results and to evaluate the performance of its video game developers. The VGE Executive Committee members were well aware of the inherent riskiness of the industry. Additionally, they were familiar with the performance of their competitors—the enormous profitability of Calling Card and the substantial losses of Serial Games (SG), another big competitor. Also present at the Executive Committee meeting was VGE's Executive Vice President and CFO Jerry Brown.

During the meeting, Sebastian suggested that VGE was in an excellent position. "Our traditional games with consoles and PCs remain a growth business, growing at the high single digits to low double digits, while social and mobile games are seeing explosive growth in the double and triple digits."

But, Brown was concerned—very concerned, in fact. He was concerned that the charismatic and sometimes impulsive CEO had, in such a public way, challenged the most successful video game franchise in the history of the industry and its publisher. He was concerned about the added pressure this challenge placed on VGE and its video game developers at Digital Creations, who were now in the unenviable position whereby developing anything less than the best-selling game in history could be considered a failure. To Brown, this seemed immeasurably unreasonable.

Keeping these concerns to himself for the moment, Brown did say: "Our business is intensely competitive and 'hit' driven. If we do not deliver 'hit' products and services, or if consumers prefer our competitors' products or services over ours, our operating results could suffer.

"Competition in our industry is intense, and we expect new competitors to continue to emerge throughout the world. Our competitors range from large established companies, like Calling Card, to emerging start-ups. In our industry, though, many new products and services are regularly introduced, only a relatively small number of hit titles account for a significant portion of total revenue for the industry. We have significantly reduced the number of games that we develop, publish, and distribute. In fiscal year 2010, we published 54 primary titles, and in fiscal year 2011, we published 36. In fiscal year 2012, we expect to release approximately 22 primary titles. Publishing fewer titles means that we can concentrate more of our development spending on each title, and driving hit titles often requires large marketing budgets and media spending.

The underperformance of any single title, like *TrueWar,* can have a large adverse impact on our financial results. Also, hit products or services offered by our competitors may take a larger share of consumer spending than we anticipate, which could cause revenue generated from our products and services to fall below expectations.

"So, yes, I agree that we are currently in a good market position. But given our strategy to reduce the number of titles we publish, we need to be absolutely sure we pick the right ones," Brown finished. VGE had a number of large-scale game development projects in the works, but one of the largest projects is the production of *TrueWar III*.

RISK IN THE VIDEO GAME INDUSTRY

Brown is familiar with the riskiness of the video game industry and the performance of VGE's competitors. But the level of success experienced by Calling Card is not typical for the industry. Video game development costs are high and growing higher. Development costs for the average game for Microsoft's Xbox 360 or Sony's PS3 range from $15 million to $30 million.[2] And most games simply are not profitable. It is estimated that only 4% of games are produced, and only 20% of games that make it to retailers actually realize a profit.[3]

Because such a high percentage of games are unprofitable, many publishers like VGE are hesitant to publish new games (also known as new IPs, or Intellectual Properties). Instead publishers often put greater confidence in established, highly successful game franchises. For many genres, typically one, two, or a series of titles are dominant. Because many gaming consumers buy only the top game in a genre, any competing games are likely to have poor sales in comparison.[4] Therefore, publishers are reluctant to release a game into a genre that is dominated by a different publisher, unless the new game is unique enough to separate itself from competitors.

Because video games are so expensive to develop, the development of each represents a high level of risk to VGE. For example, DangerZone—a video game development company that was acquired by VGE's competitor SG in 2008 for $682 million—had some of the largest game budgets in the industry. Examples include:

- *Magic Swords.* DangerZone spent an estimated $130 million developing it. The sequel, *Magic Swords 2,* was not expected to cost as much, but it still had a large development budget.
- *The Empire of Sand (TES).* Many in the video game industry believed this game would be one of the most expensive games in the history of the industry. An SG insider estimated that SG and DangerZone had already incurred more than $300 million on the project. These costs included a large licensing fee, voiceacting (*TES* was the first game of its kind to use full voiceacting instead of only text for onscreen conversations), and a large development team.

The costs of video game development are effectively fixed (and sunk) from the perspective of a video game publisher. All expenses associated with the development of the game and prerelease advertising represent the bulk of all costs associated with a game's release and are incurred prior to any revenues being received from game sales. For example, SG struggled to recover those substantial investments. As a result, SG experienced net losses of $1.1 billion in 2009 and $677 million in 2010. While its financial performance during the subsequent year improved, SG still was not profitable.

STRUCTURE OF THE VIDEO GAME INDUSTRY

The video game industry is composed of three sets of firms: the publishers (e.g., VGE), the developers (e.g., Digital Creations), and the platform holders (e.g., Microsoft (Xbox 360) and Sony (PS3)).[5] The publishers typically provide the funding/budget, promotion, marketing, distribution, and support, whether the game development studio is external (to the publisher) or internal (like Digital Creations for VGE). The developers are the idea makers and the workers responsible for game conception, prototype, design, technology, and development and implementation. A technology platform is required to play video games, so the platform holders are the console companies that control nearly every aspect of games on their platforms. For instance, the publisher and developer could require permission from the platform holder to begin developing a game, and the platform holder would submit a finished game to a certification process before it could be sold. Alternatively, personal computers (PCs) are an open platform with a low barrier for entry to developers but higher competition for customers.

A publisher in the video game industry purchases the rights to publish a new game that has been created by a developer, much like how a book publisher purchases the rights from an author to publish the book. This is the same relationship between VGE and Digital Creations: The developer (Digital Creations) creates the video game, while the publisher (VGE) markets the game and arranges for its manufacture, distribution, and sale.

The relationship between publishers and developers, however, could feel strained. There is a clear cultural difference between publishers, which are stereotypically business men or accountants who do not necessarily care about games the way developers do, and the developers, which are people who enjoy playing video games and have creative and technical expertise.[6] At least one video game developer thought that publishers were largely at fault for a worrying increase of Western game development studios that went bankrupt.[7] The argument was that "ignorant" publishers could make "ruinous" requests of developers, which would cause a game to tank, but then were in a position to blame the game's failure on the developer, which was often contractually bound to say nothing. So the publisher could continue unscathed, ready to do the same to the next development studio, while the affected development studio often went out of business.

Most typically, the publisher would share revenue with the developer: The developer assumes the production costs while the publisher assumes the marketing and distribution costs.[8] The publisher typically pays the developer royalties for a game based on a percentage of the game's net sales revenue after deductions, such as taxes, shipping, insurance, and returns—a calculation often described as "net receipts"[9] or "adjusted gross receipts."[10] But developer royalties could sometimes cover marketing costs if it is written in the contract, but such contracts are considered "exploitative" because contractual deductions include expenses that are not under the control of the developer (like marketing, advertising, and promotion expenses). Such contracts leave the publisher in control of determining the amount of "adjusted gross receipts," and ultimately give the publisher control of determining how much royalty income to pay the developer.

The royalty paid to independent video game developers could vary anywhere from 10% to 70% of the amount paid to the publisher. Yet royalties are often paid to the developer only after the publisher has first recouped any advances paid to the developer.[11] Additionally, contracts between publisher and developer could include step ups in rates based on hitting certain sales goals or milestones.[12]

Publishers take on a lot of risk when they choose to fund a project, but many developers feel that they also take a disproportionate cut of the revenue.[13] If a developer could afford to do so, it should stay independent to control its own development and schedule of the game. Alternatively, if the developer receives no advance funds against the royalty from the publisher, all development risk resides with the developer, which funds the entire development process. Therefore, some developers think that a publisher contract *is* worth it (in order to receive publisher advance funding), despite the obvious drawbacks (most notably, a loss of control of the publication process).[14] If possible, it is advisable for developers to have a lawyer and accountant on hand when negotiating and reviewing a contract with a publisher.[15] Because Digital Creations is wholly owned by VGE, some of these tensions are diminished.

VGE'S PUBLISHING PROCESS

VGE follows a standard process for publishing a new video game. In most cases, VGE receives a loan request from a subsidiary developer for a new game development project. The developer makes a presentation outlining the game details, including the concept, story, game play, and genre, as well as an estimate of costs, including staffing, technology needs, and length of development.[16]

VGE then performs its own market research and cost analysis to determine the potential profitability of the new game. In market research, VGE determines the potential success of the game based on an analysis of its target audience, the saturation of the game's genre, and the estimated marketing expenses that would be incurred. The market analysis gives a rough estimate on potential sales revenue that a new game might generate. VGE looks at the potential sales of the game and the loan amount then uses its judgment to decide whether or not to approve the development loan.

If the loan request is approved, VGE typically assigns a producer or team of producers to the project.[17] The producer is responsible for making sure that development stays on schedule and on budget. Any additional changes to the schedule or budget must be approved by the producer.[18] Significant changes must be approved by VGE management; management informs producers prior to development what constitutes a "significant change."

Once a development loan is approved, the developer begins the actual work of creating the new game. Because console manufacturers (such as Microsoft and Sony) set certain requirements for games to be released on their consoles, VGE works with the developer to ensure these requirements are met during production. In cases where the game is being developed by an outside company, VGE typically advances the development costs to the developer in the form of milestone payments—paid at various predetermined stages in the game's development.[19]

The producer is in close contact with VGE's marketing team to develop a marketing plan for the game.[20] Marketing is an essential part of the video game development process. The trend in the video game market is to spend as much on marketing a new game as actually developing it.[21] Marketing a video game includes magazine ads, television spots, trade shows, internet forums, and/or a game demo.[22] Some games are making use of "adver-gaming," when advertisements are put into the games themselves. In-game advertisements are becoming increasingly feasible and popular because so many games are played online. The Internet connectivity required for online gaming allows new advertisements to be placed in older games. Constant communication between the producer and the marketing function is essential.

After the game has gone through rigorous testing and the marketing plan has been set in motion, the distributor is sent a master copy, the game manual, and box art that has been created by the marketing team in collaboration with the developer.[23] In most cases, the distributor is the console manufacturer (such as Microsoft and Sony). The distributor copies and packages the game and ships it to retailers. The cost of producing and distributing these copies is borne by the publisher.

VIDEO GAME COST BREAKDOWN

Console games for Xbox 360 and PS3, for example, typically sell for $60 to consumers. The cost breakdown, detailed next, shows where the $60 paid by the consumer goes (see Exhibit 1). It does not portray how transactions are recorded.[24]

Exhibit 1: Video Game Cost Breakdown Summary

Purpose	Amount	Paid By	Paid To
Retailer (Profit)	$15	Consumer	Retailer
Returns/PP/MDF	7	Publisher	Retailer
Distribution/COGS	4	Publisher	Media Manufacturer
Platform Royalty Fee	7	Publisher	Platform Holder
Publisher	27	Publisher	Internal
Total Cost to Consumer	$60		

Notes on terminology:

Retailers include stores such as GameStop, Walmart, and Amazon.

Returns are money paid to retailers for product returns.

PP is "price-protection" or money paid back through the chain if/when the publisher reduces the price of the video game.

MDF is "marketing and development funds" or money paid to retailers for promotions such as TV ads, local flyers, and in-store marketing displays.

Distribution costs are for shipping and warehousing.

COGS (Cost of Goods Sold) is the cost of manufacturing the physical DVD, the instruction manual, and the case.

The *Platform Royalty Fee* is paid to Microsoft or Sony, as applicable.

The *Publisher* pays royalties to the developer out of the remaining amount.

Games for PCs typically sell for $50. PC sales differ from console sales because the majority of PC game sales involve no physical product. Instead customers purchase and download games via websites, such as SteamPowered.com. In this case, publishers receive $35 for the sale of every PC game, while the website owner receives $15 (in this case, the website is the retailer).

Video games could have digital sales, often described as Downloadable Content (DLC). DLC also could refer to additional game content sold after the original game release. The publishers receive 70% of the revenues from digital sales, and the download source (e.g., Microsoft (Xbox 360), Sony (PS3), or Steam (PC)) keeps the remaining 30%. Thus, for DLC priced at $20 to the customer, the publisher receives $14.

CONSOLE RELEASES

Digital Creations created and released several games under VGE's ownership. The seventh-generation consoles (at the time, commonly referred to as "next gen") were kicked off by the release of Microsoft's Xbox 360 in 2005 and Sony's PlayStation 3 (PS3) in 2006. This was the first console generation really capable of running *TrueWar* games, and Digital Creations took advantage of the opportunity to release the games summarized in Exhibit 2. (See Exhibits 3-8 for breakdown and statistics of VGE's other console games.)

Exhibit 2: Console Video Game Releases

***True War: Alpha Company* (2008)**

Later became available for digital download for $20

Loan:	$25 million
Marketing:	$30 million

***True War: WWII* (2009)**

Only sold via digital download for $15

Loan:	$6 million
Marketing:	$4 million

***True War: Bravo Company* (2009)**

Sales:	3.2 million copies PC 3.8 million copies Xbox 360 3 million copies PS3 290,700 copies sold via digital download for $20
Loan:	$60 million
Marketing:	$45 million

***True War: Bravo Company: Jungle* (2010)**

Only sold via digital download for $15

Sales:	1.1 million copies
Loan:	$10 million
Marketing:	$5 million

Exhibit 3: VGE Income Statement: *TrueWar: Alpha Company*

Revenue:		
Xbox 360 sales ($27 per unit sold × 1.4 million)	$37,800,000	
PS3 sales ($27 per unit sold × 1.01 million)	27,270,000	
Digital download ($14 per download × 107,900)	1,510,600	
Total Revenue		**$66,580,600**
Expenses:		
Digital Creations royalties		
Xbox		
First million units sold (1 million × $27 × 25%)	$(6,750,000)	
Remainder units sold (400,000 × $27 × 26%)	(2,808,000)	
Total	**$(9,558,000)**	
PS3		
First million units sold (1 million × $27 × 25%)	$(6,750,000)	
Remainder units sold (10,000 × $27 × 26%)	(70,200)	
Total	**$(6,820,200)**	
Games on Demand (107,900 × $14 × 50%)	$(755,300)	
Total Digital Creations Royalties		$(17,133,500)
Marketing		$(30,000,000)
Total Expenses		**$(47,133,500)**
Income		**$19,447,100**

Exhibit 4: Digital Creations' Return on Game Development

TrueWar: Alpha Company	
Digital Creations royalty income	$17,133,500
VGE loan	(25,000,000)
Excess/Unpaid portion of loan (Digital Creations)	$(7,866,500)
VGE's Return on Loan Investment	
TrueWar: Alpha Company	
Net income	$19,447,100
Excess/Unpaid portion of loan	(7,866,500)
Total return on project (VGE & Digital Creations)	$11,580,600

Exhibit 5: VGE Income Statement: *TrueWar: WWII*

Revenue:		
Digital downloads ($10.50 per unit × 1.5 million)	$15,750,000	
Total Revenue		**$15,750,000**
Expenses:		
Digital Creations royalties (1.5 million × $10.50 × 50%)	$(7,875,000)	
Total		$(7,875,000)
Marketing		$(4,000,000)
Total Expenses		**$(11,875,000)**
Income		**$3,875,000**

Exhibit 6: Digital Creations' Return on Game Development

TrueWar WWII	
Digital Creations royalty income	$7,875,000
VGE loan	(6,000,000)
Excess/Unpaid portion of loan (Digital Creations)	$1,875,000
VGE's Return on Loan Investment	
TrueWar WWII	
Net income	$3,875,000
Excess/Unpaid portion of loan	1,875,000
Total return on project (VGE & Digital Creations)	**$5,750,000**

Exhibit 7: VGE Income Statement: *TrueWar: Bravo Company*

Revenue:		
Xbox 360 sales ($27 per unit sold × 3.8 million)	$102,600,000	
PS3 sales ($27 per unit sold × 3 million)	81,000,000	
PC sales ($35 per unit sold × 3.2 million)	112,000,000	
Digital download ($14 per download × 290,700)	4,069,800	
Jungle ($10.50 per unit sold × 1.1 million)	11,550,000	
Total Revenue		**$311,219,800**
Expenses:		
Digital Creations royalties		
Xbox		
First million units sold (1 million × $27 × 27.5%)	$(7,425,000)	
Second million units sold (1 million × $27 × 28.5%)	(7,695,000)	
Third million units sold (1 million × $27 × 29.5%)	(7,965,000)	
Remainder units sold (800,000 × $27 × 30.5%)	(6,588,000)	
Total	**$(29,673,000)**	
PS3		
First million units sold (1 million × $27 × 27.5%)	$(7,425,000)	
Second million units sold (1 million × $27 × 28.5%)	(7,695,000)	
Remainder units sold (1 million × $27 × 29.5%)	(7,965,000)	
Total	**$(23,085,000)**	
PC		
First million units sold (1 million × $35 × 27.5%)	$(9,625,000)	
Second million units sold (1 million × $35 × 28.5%)	(9,975,000)	
Third million units sold (1 million × $35 × 29.5%)	(10,325,000)	
Remainder units sold (200,000 × $35 × 30.5%)	(2,135,000)	
Total	**$(32,060,000)**	
Digital download (290,700 × $14 × 50%)	$(2,034,900)	
Jungle units sold (1.1 million × $10.50 × 50%)	$(5,775,000)	
Total Digital Creations Royalties		**$(92,627,900)**
Marketing (Bravo Company)		$(45,000,000)
Marketing (Bravo Company: Jungle)		$(5,000,000)
Total Expenses		**$(142,627,900)**
Income		**$168,591,900**

Exhibit 8: Digital Creations' Return on Game Development

TrueWar: Bravo Company	
Digital Creations royalty income	$92,627,900
VGE loan	(70,000,000)
Excess/Unpaid portion of loan (Digital Creations)	$(22,627,900)
VGE's Return on Loan Investment	
TrueWar: Bravo Company	
Net income	$168,591,900
Excess/Unpaid portion of loan	22,627,900
Total return on project (VGE & Digital Creations)	$191,219,800

ROYALTY AGREEMENT BETWEEN VGE AND DIGITAL CREATIONS

The contract between VGE and Digital Creations does not include marketing expenditures when determining "net receipts." Instead, VGE is responsible for paying for promotion expenses out of its portion of the revenues, while Digital Creations is responsible for all development costs.

At VGE, the royalties typically first go toward paying back the development loan. Only after the development loan is repaid does the developer (in this case, Digital Creations) actually receive royalty revenue. It is unlikely that a developer would receive any additional development loans if it had trouble repaying development loans in the past. Alternatively, developers with a history of creating profitable games could warrant minimum guaranteed royalty payments. In these cases, a publisher and a developer agree on a minimum guaranteed royalty payment prior to the release of the game. The minimum guaranteed royalty payment is essentially recorded as a prepaid asset by the publisher.

The royalty percentage to be paid by VGE to Digital Creations is determined at the beginning of the agreement. The royalty share is effectively an expense that reduces VGE's profit. Additionally, VGE increases Digital Creations' royalty percentage every time game sales meet an "additional royalty threshold." There is a threshold for each SKU,[25] meaning that there is an independent threshold for each released version of the game (for example, Xbox 360, PS3, and PC). Each time the threshold for a specific SKU is met, Digital Creations receives a prescribed royalty percentage increase. For example, when *TrueWar: Alpha Company* reached 1,000,001 units sold, that one unit (and the next 999,999 units) received a royalty of 26%—1% higher than the first one million units sold. The 2,000,001 unit sold had a royalty of 27%. Royalty percentages and thresholds are specific to each individual game and are detailed in Exhibit 9. The royalty revenue is first applied toward paying off the development loan made to Digital Creations. Only after the loan is repaid is royalty revenue paid to Digital Creations.

Exhibit 9: VGE and Digital Creations Royalty and Loan Agreements

	Loan Amount	Royalty %	Royalty Threshold	Increase %
TrueWar: Alpha Company	$25 million	25%	1 million	1%
TrueWar: WWII	$6 million	50%	N/A	N/A
TrueWar: Bravo Company 2	$60 million	27.5%	1 million	1%
TrueWar: Bravo Company: Jungle	$10 million	50%	N/A	N/A
True War III	$100 million	29%	1 million	1%

Because *TrueWar WWII* and *TrueWar: Bravo Company: Jungle* were only distributed digitally, VGE was able to earn a larger portion of each sale. *TrueWar WWII* and *TrueWar: Bravo Company: Jungle* also had unique royalty agreements: Digital Creations earned 50% of VGE's revenue from those games (the royalty percentage) but received no additional royalty share for meeting a new threshold. Both games sold for $15, and VGE received 70% of each download ($10.50).

A year or more after their release, both *TrueWar: Alpha Company* and *TrueWar: Bravo Company* were also released digitally on consoles via services provided by the console manufacturers. Both games sold for $20, and VGE received 70% of each download ($14). Once again, Digital Creations earned 50% of VGE's revenue from game sales (the royalty percentage) but received no additional royalty share for meeting a new threshold.

DIGITAL CREATIONS' NEWEST PROJECT: *TrueWar III*

Digital Creations' newest project is *TrueWar III*. This is a large-scale project for Digital Creations. It has been nearly five years since Digital Creations released *TrueWar II*, and the expectations from the development team and PC gamers are extraordinarily high. Digital Creations received a $100 million loan from VGE for the development of *TrueWar III*. *TrueWar III* is intended as the true successor to *TrueWar II* and will be available on both PC and console.

VGE plans to spend at least $100 million on a marketing campaign for *TrueWar III*. Therefore, along with the $100 million loan to Digital Creations, VGE anticipates spending a total of $200 million on the development and advertising of *TrueWar III*. The unit sales for all of Digital Creations' recent projects, including forecasts of *True War III*'s most realistic case, worst case, and best case sales, are found in Exhibit 10.

Exhibit 10: *TrueWar* Unit Sales Information

TrueWar: Alpha Company	Worldwide Total
Xbox 360	1,400,000
PS3	1,010,000
Digital download	107,900
TrueWar WWII	
Total Sales (digital download only)	1,500,000
TrueWar: Bravo Company	
Xbox 360	3,800,000
PS3	3,000,000
PC	3,200,000
Games on Demand (digital download)	290,700
Jungle DLC (digital download, all platforms)	1,100,000
TrueWar III:	
Most Realistic Case: 11 million units sold	
Xbox 360	4,180,000
PS3	3,300,000
PC	3,520,000
TrueWar III:	
Worst Case: 7 million units sold	
Xbox 360	2,660,000
PS3	2,100,000
PC	2,240,000
TrueWar III:	
Best Case: 15 million units sold	
Xbox 360	5,700,000
PS3	4,500,000
PC	4,800,000

A GROWING CONCERN

At VGE's Executive Meeting, CFO Jerry Brown feels a growing concern: "We have a lot of capital tied up in game development. The industry trends toward larger and larger game budgets. This is likely because of the fact that publishers like us are stricter on which games will be developed and published. We [at VGE] are publishing fewer titles and therefore investing more heavily in each individual release.

"As you know, we have already approved Digital Creations' $100 million loan for its new game, *TrueWar III*. Although I am a fan of the series, *TrueWar* has substantial competition, particularly since the series is directly competing against the best-selling video game franchise in history: *Active Duty*. The last video game published by Digital Creations, *TrueWar: Bravo Company*, was not even in the top 5 games in the genre, based on total unit sales. The *Active Duty* series is on top in that genre, and they have been able to release a game every year.

"Why should we continue funding and marketing Digital Creations' projects in a market dominated by *Active Duty*? Would we be better off focusing our development and marketing efforts in other genres and/or markets? We have already committed $100 million to the development of *TrueWar III*, not including our marketing costs, and for a new video game release we have historically spent an amount equal to development costs. Given the relatively poor showing of Digital Creations' last product, we can cut our losses, minimize marketing expenses for *TrueWar III*, and focus our attention on our other products. I continue to wonder if the Digital Creations acquisition was really a worthwhile investment. More importantly and relevant to the current discussion, however, should we continue to support Digital Creations' development efforts?" Brown finished.

CEO Jonathan Sebastian thought for a moment before speaking. "We must be sure that our focus meets the needs of the changing, growing market. We are building the strength of our most important IPs, and for VGE, this means about a dozen very substantial IPs. Each of these will be transformed into year-round businesses with major packaged goods launches, social launches, downloadable content, and microtransactions. Our most important IPs include *TrueWar*. Digital Creations and its *TrueWar* franchise are very important to us.

"Sales forecasts for *TrueWar III* demonstrate it is a viable title in the genre. Independent companies have projected sales figures of eight million and 11 million copies. I think *TrueWar III* will sell more than either of these projections. *TrueWar: Bravo Company* sold more than nine million units, so we must only sell an additional two million units to reach the higher forecast," Sebastian said.

Despite Sebastian's obvious enthusiasm, Brown remained skeptical but said nothing more. Given that VGE was reducing the number of titles it was releasing, using one of those titles to directly attack the most successful video game in history seemed unwise and perhaps was an invitation for financial failure for *TrueWar III*.

DECISIONS ABOUT DIGITAL CREATIONS

When Brown returned to his office, he convened a meeting of some of his staff, determined to explore more thoroughly his concerns about Digital Creations. Brown had joined VGE just a few months ago after holding CFO positions at technology and clothing companies, so he had not participated in any earlier decisions regarding Digital Creations. First he wanted to reinvestigate the decision to fund *TrueWar III* to see if he agreed with the decision. Second, despite the fact that VGE anticipated spending $100 million on marketing for *TrueWar III*, the bulk of those funds have not yet been spent. Therefore, he wanted to determine how much he thought would be appropriate for VGE to spend on marketing for *TrueWar III*. Third, he wanted to learn more about the relationship between VGE and Digital Creations, including (but not limited to) the contract and the structure of the royalty fees. He was not sure what he would learn but knew that the royalty fee structure, for example, was critical to the profitability of both VGE and Digital Creations, particularly because Digital Creations was a foreign subsidiary. Finally, Brown wanted to reinvestigate the purchase of Digital Creations to determine its value to VGE—had the purchase been a good investment from the perspective of VGE?

Brown decided that he wanted fresh eyes to perform the analysis, someone who had not been involved with the purchase of Digital Creations and had not previously been involved with analysis of Digital Creations' financial performance. So he looked right at you, recent graduate and the newest member of the finance team at VGE, and gave you a special project.

FACT AND FICTION

This case is based on real companies, utilizing public information about the companies and their competing products. For example, many statements made by the CEO and CFO were obtained either from text in the company's 10-K or from quotes made by the CEO in conversations with investors and analysts. Gaps in the public information were estimated (and are, therefore, fictionalized). All names in the case were changed for anonymity.

CASE REQUIREMENTS

1. Should VGE have approved the development loan for *TrueWar III?*
   To answer this question, prepare "what-if" analysis of the most realistic case, worst case, and best case scenarios (see Exhibit 10). Begin by preparing "what-if" analysis of the **most realistic case** scenario:
   a. Calculate total revenue for Xbox 360, PS3, and PC sales of 11 million units.
   b. Calculate Digital Creations' total royalties for each separate console. Be sure to incorporate the royalty increase threshold.
   c. Calculate nonroyalty costs (for example, marketing costs).
   d. Using the information from 1a-1c, create an income statement.
   e. Determine how much (if any) Digital Creations owes VGE on its development loan for *TrueWar III* (this is a simple comparison of Digital Creations' royalty income to the amount of the loan from VGE to Digital Creations). Was Digital Creations able to repay its loan from VGE?
   f. Calculate VGE's return on loan investment for TrueWar III. This is the sum (or net) of the project's net income/loss (calculated in 1d) and the excess/unpaid portion of the loan (calculated in 1e).
   g. Under these assumptions, should VGE have approved the loan for TrueWar III?
   h. Repeat steps 1a-1g to prepare what-if analyses for the **best case** and **worst case** scenarios with estimated sales of 15 million and 7 million units, respectively (see Exhibit 10). Also calculate Digital Creations' return on game development and VGE's return on loan investment for these scenarios.
2. How much should VGE spend on marketing for *TrueWar III*? Are any of the scenarios unprofitable? If so, does this influence your recommendation?
3. How does the transfer price (i.e., royalty payments) influence an evaluation of the performance (i.e., profitability) of Digital Creations? What could (or should) VGE do with Digital Creations if *TrueWar III* proves unprofitable? What other issues should Jerry Brown consider with regard to the structure of the royalty payments from VGE to Digital Creations?
4. Is the investment in Digital Creations worth what VGE paid to purchase it? Is the cycle of releases really working for Digital Creations? Hint: Can you estimate the return on investment (ROI, calculated as a percentage) for each of the three games individually? Collectively (i.e., can you estimate the ROI for VGE's purchase of Digital Creations)?
5. Now that you have completed the analysis requested by Brown, what will you say when you present it to him? Do you think Brown's concerns about Digital Creations and *TrueWar III* are well-founded—that is, should he be concerned?

ENDNOTES

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[20]Bob Bates, *Game Design*, Cengage Learning PTR, Boston, Mass., September 2004, p. 242.

[21]Kris Graft, August 2010.

[22]Bates, 2004, p. 241.

[23]Bethke, 2003, p. 295.

[24]Dietrich, December 2009.

[25]SKU (Stock Keeping Unit) – a number or code used to identify each unique product or item for sale in a store or other business.