

# Fundamental

## Research Corp.

Investment Analysis for Intelligent Investors

February 23, 2018

### YDreams Global Interactive Technologies Inc. (TSXV: YD) – Virtual Reality Company with Aggressive Growth Strategy – Initiating Coverage

Sector/Industry: Technology

www.ydreamsglobal.com

#### Market Data (as of February 23, 2018)

Current Price	\$0.22
Fair Value	\$0.40
Rating*	BUY
Risk*	4
52 Week Range	\$0.13 - \$0.40
Shares O/S	78,911,644
Market Cap	\$17.36 M
Current Yield	N/A
P/E (forward)	N/A
P/B	N/A
YoY Return	-42.11%
YoY TSXV	-1.66%

\*see back of report for rating and risk definitions



#### Investment Highlights

- Ydreams Global Interactive Technologies Inc. (“Ydreams”, “company”) provides exhibition / marketing services via Virtual Reality / Augmented Reality (“VR/ AR”) technology.
- The company recently opened its first Arkave location in Brazil. Arkave is the company’s VR gaming arena franchise, a new concept for VR gaming that allows players to play cooperative games at a centralized physical location. Arkave intends to be the first VR arena in the world that allows cooperative play between Arkave locations around the world.
- The VR/ AR market is projected to reach a value of \$108 billion by 2021, reflecting a CAGR of 94%.
- We are initiating coverage with a BUY rating and a fair value estimate of \$0.40 per share.

#### Risks

- Our valuation is dependent on the company’s VR arena business venture, which has only recently opened its first location.
- The VR industry is an early stage industry.
- The company’s legacy business is experiencing low growth and has been loss-making in recent years.
- Exchange rate risk.
- Liquidity risk.

#### Key Financial Data (FYE - Dec 31)

(C\$)	2016	2017E
Revenue	\$ 5,234,746	\$ 1,758,181
Net Income	\$ -3,915,226	\$ -3,763,692
Working Capital	\$ 656,791	\$ 3,020,226
Debt	\$ 221,481	\$ 1,507,752
Total Assets	\$ 2,037,483	\$ 4,586,237
Shareholders' Equity	\$ 177,029	\$ 1,627,801

*Overview*

**Overview**

Ydreams Global Interactive Technologies Inc. (“Ydreams”) is a technology company that provides a diverse range of exhibition and marketing services in the VR/ AR space. The company was incorporated in 2007, and went public in 2016, via a RTO of Apple Capital. CEO, Daniel Japiassu, is a long-time member of the company, having joined in February of 2006. The company’s main line of business is to provide client companies with VR and AR solutions. Ydream’s specialty is incorporating VR / AR technology with physical venues / stores of client companies to provide interactive concept spaces. VR technologies help Ydreams’ clientele rebrand their strategy and provide their customers with an immersive digital experience, which the company believes increases customer loyalty and retention due to the deeper emotional response elicited by multi-sensory VR/ AR.

The company’s clientele includes some of the most high-profile publicly-listed companies currently trading, such as Adidas (ETR: ADS), Coca Cola (NYSE: KO), Unilever (NYSE: UN), and Nike (NYSE: NKE). Ydreams has developed more than 1,000 projects and provided over 5,000 technology solutions during the company’s lifetime, with work spanning over 30 countries. The company’s largest accounts over the past 5 years are shown below:

**KEY ACCOUNTS**

**Last 5 Years – Canadian Dollars**

#1 Bradesco Bank	8,818,000
#2 City of Rio	4,727,000
#3 CISCO	1,530,000
#4 Coca-Cola	1,364,000
#5 Cancer Hospital	806,000
#6 AB InBev	712,000
#7 Gafisa – Real State	572,000
#8 Sonae Sierra	483,000
#9 Ipiranga Gas Station	358,000
#10 Petrobras Oil	342,000

*Source: Company*

*Company Structure*

The company’s main business is rooted in Brazil, where many of the company’s key accounts are originated. However, the company is planning on expanding its legacy business to China and Dubai, which we cover in a below section. Furthermore, the company expects a major growth catalyst in their new Arkave VR arena franchise venture, which we also cover in a below section. The company’s operations are broken up into three distinct divisions that utilize VR / AR technology in different ways:

*Historical VR/  
AR Projects*

- Ydreams Experiences: brand experience division. This section of the company handles the interactive, digital marketing aspect of operations. Notable projects include a brand activation campaign with Coca Cola during the 2014 FIFA World Cup. The division has historically generated 35% of the company’s revenue, according to managements estimates.
- Ydreams Futures: concept space division. Ydreams Futures utilizes VR/ AR and transformative design to develop concept spaces and exhibits for clients. The division has historically generated 65% of the company’s revenue, according to management estimates.
- Ydreams Ventures: product development division. A new addition to the company’s operations, the division has developed two proprietary projects which serve as potential revenue streams for the company: the SKUP line of retail VR/ AR products and the Arkave VR franchise project. **Moving forward, management expect the Venture’s division to drive growth.**

Some of the company’s most notable VR/ AR projects are detailed below, outlining the historical operations of the company prior to recent developments. Note that revenues from each project/ other financial details have not been disclosed.

**The Cisco Urban Innovation Project:**

In 2016, the company entered into an agreement with Cisco (NASDAQ: CSCO) for a project based around Cisco’s Porto Maravilha (Wonder Harbour) Urban Innovation Project. The project, which Cisco developed in relation to the 2016 Olympic Games held in Rio de Janeiro, was an urban engagement program rooted in smart technologies designed to help residents feel more connected to the city. Utilizing an “Internet of Things” platform, Cisco contracted Ydreams to develop VR/ AR solutions. The project featured the following highlights:

- “Hear the city” App: Utilizing Cisco’s Urban Innovation Platform, Ydreams developed an app that generated music based on real-time data on urban mobility, weather and social media engagement. The vibration and rhythm of the music varies with changes in data. According to the company, at least 2,000 people used the app to interact with the sounds of the city.
- Interactive totems: four interactive totem poles with information on transportation, nearby restaurants, current time and weather. Users could also use the totems to take pictures and post them on social media. According to the company, 40,000 people took pictures and uploaded them using the totems.
- “Take Care” App: an app based on social sustainability projects, the app invites Rio de Janeiro’s residents, visitors and tourists to engage in social initiatives.
- “Happy-O-Meter” App: the app assigned a real-time happiness rating based on social media messages sent in certain Porto Maravilha hot spots, and tracked smiles in images taken at the company’s interactive totems. According to the company, the app generated 200,000 images.
- Olympic Cisco House: an interactive concept space where visitors could put on VR head-sets and interact with surroundings.

**The Coca Cola 2014 FIFA World Cup Project:**

Coca Cola approached Ydreams to develop VR and AR marketing solutions to improve their advertising campaign centered around the 2014 FIFA World Cup. Coca Cola’s campaign during the period was centered around the FIFA Fan Fest, a sponsored arena featuring various activities designed to improve customer engagement, with the arenas featured in 12 host cities. The value-add of Ydream’s VR solution was highlighted in the project’s impact:

- An estimated 126,000 visitors, solely to the Ydreams concept space.
- 96,000 shared pictures.
- 75,000 emails.

**The Natura Ekos Project:**

In 2016, Natura Cosméticos S.A. (BVMF: NATU3), a Brazilian manufacturer and marketer of cosmetic products, engaged Ydreams to develop a concept space to provide brand activation ahead of their Ekos product launch. The project manifested as a stand located within São Paulo’s Ibirapuera Park, with interactive experiences divided into three stages. Incorporating multiple VR and AR technologies, including 18 VR glasses, 360-degree VR, 360-degree immersive projection, and social media, the project generated 1.3 million shares on Facebook, as well as 12,846 shared pictures. More significantly, the stand received at least 1,600 visitors, demonstrating Ydream’s ability to draw traction via their innovative concept spaces. According to Ydreams, the Natura Ekos project was the largest organic engagement campaign on Natura’s Facebook page.

**A Visitor taking a Picture at the Company’s Ekos Exhibit**



*Source: Company*

**The Senna Emotion Project:**

The Senna Emotion project, completed in 2015, was a Ydreams Future project undertaken for the Instituto Ayrton Senna. The institute is a Brazilian NGO founded by F1 race car driver Ayrton Senna’s family, focused on human development opportunities for young Brazilians. In order to showcase Ayrton Senna’s life and achievements, Ydreams established

a concept space within the exhibit that featured:

- Images of a Life: a digital, interactive book that recounted Senna’s life via imagery.
- Victory Table: an interactive table with details about Senna’s achievements on the racetrack, with images and videos accessible by touch.
- S is for Senna: visitors use VR head-sets to experience a lap around the Interlagos Circuit, narrated by Senna himself.

The project had significant impact, drawing 400,000 visitors over 11 different cities in Brazil to the Senna exhibit. Ydreams recorded that up to 110,000 visitors attended the Senna Emotion exhibit in Manaus.

**A Senna Emotion Project Visitor using a VR Headset**



*Source: Company*

Moving forward, the company has announced a number of attractive projects with leading global brands (financial obligations/ benefits undisclosed):

- On February 23, 2018, Ydreams announced that Brazilian fashion brand Schutz, which designs and sells women’s shoes, was reopening their flagship Manhattan, New York store, with two products from Ydreams’ product line. We believe this pertains to the company’s SKUP line of products. This is the third Schutz store which has utilized Ydream’s products and services, and a positive sign for Ydreams given that Schutz maintains 80 retail locations worldwide.
- On January 22, 2018, Ydreams announced that they had signed on for a project with the Emoji® company, the official owner of the emoji brand of text message icons. The proposed project calls for Ydreams to set up interactive playgrounds that incorporate AR technology in six shopping malls (locations undisclosed). The playground will be themed after the emoji brand of icons, and will charge a nominal fee to grant users access.
- On January 12, 2018, Ydreams announced that they had signed on for a project spanning nine shopping malls (location undisclosed). The company has received a sponsorship of \$515,000 from an undisclosed party for the project. The envisioned project is an interactive exhibition designed to mimic the studios and rooms of famous youtube celebrities, with a focus on gaming and reviews. Visitors will be charged a nominal fee in order to visit the exhibition.



- On October 5, 2017, the company was engaged by Qualcomm Inc. (NASDAQ: QCOM) to design a project for Futurecom 2017. Futurecom is Latin America’s largest telecommunications fair, taking place in São Paulo. This is the third time Qualcomm has assigned Ydreams this project, indicating satisfaction with the company services.
- On September 19, 2017, the company was commissioned by Octagon, a leading sports marketing agency, to develop a project for the National Basketball Association (“NBA”). The first assignment of the project is to develop a series of attractions incorporating AR technology.

In addition to concept spaces and digital brand experience campaigns, which fall under Ydreams Futures and Ydreams Experiences, the company is exploring different VR/ AR applications that could generate significant revenues. These projects are developed under Ydreams Ventures, the company’s “dreams accelerator” unit. Descriptions of the division’s current offerings are given below.

As mentioned at the beginning of this report, Ydreams expects to generate growth via their new Ventures division. **The company sees their Arkave VR gaming platform as a major growth catalyst moving forward.**

**Arkave**

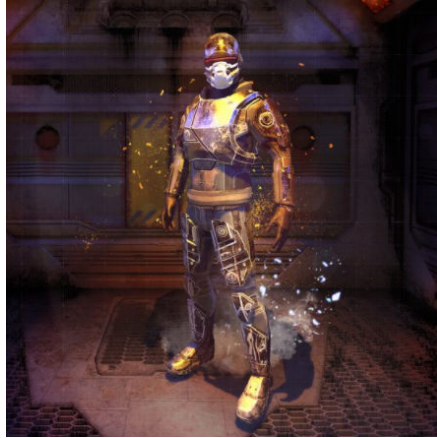
Arkave is a patented, proprietary VR gaming network that Ydreams has developed, representing a move into the VR arcade space. As well as the platform itself, the company has developed the games featured on the platform. The concept of Arkave represents a step up from existing VR arcades, as Ydreams seeks to develop Arkave into a global franchise that connects the company’s VR arcade locations in different parts of the world. Management believe their platform may be the world’s first multiplayer PvP (player vs. player) integrated arena. The platform features:

- Total movement: games are played in areas spanning up to 300 square-feet. VR arcades offer players greater freedom to allow for free-roaming and greater immersion to enhance the VR experience. This differs from current VR head-mounted devices that often incorporate cables that restrict the degree to which players can move.
- Total body recognition: a combination of trackers and software allow players to view their entire bodies and provide an extra degree of interaction.
- Local and Network Multiplayer: at current, Arkave arenas can handle up to 3 players playing in the same room. This allows for players to further enhance their VR experience by adding elements of cooperation.

At current, management intends to use a franchise revenue model with the Arkave VR project. **This involves the generation of revenues via three streams: a franchise fee for the Arkave trademark, reimbursement for training and advisory services, and a royalty on sales of the franchisee.** The company would also provide the franchisee with support services during the life of the contract. We believe that this will allow Arkave to achieve high growth rates early in the franchise’s lifetime, as outsourcing will allow

Ydreams to benefit from franchisee sales whilst avoiding major capital expenditures and shifting risk. However, we believe the company will also invest in their own Arkave stores, as they have for their inaugural Arkave location (mentioned below).

#### A Visual from one of the Company's Proprietary Arkave Games



*Source: Company*

Arkave's first location is planned to be 3,230 square-foot area, with eight VR arenas. The company estimates that the facility can host up to 14 players at a time. **Furthermore, according to a September 2017 press release, management intend to charge \$1 per minute per customer. Whilst management has provided no revenue guidance for the Arkave franchise, for valuation purposes, we estimate that an Arkave location can generate up to \$2.45 million, and that the company will collect a royalty on the revenues of franchisee locations equal to 5%.** Our assumptions are detailed in the revenue forecast section of this report.

Ydreams opened its first location in Parque Dom Pedro, on December 22, 2017; a shopping mall in Campinas, Brazil. Parque Dom Pedro is one of Latin America's largest shopping malls and has averaged 1.7 million visits per month, according to Market Watch. The contract was signed with Sonae Sierra Group (ENXTLIS: SON), an international retail holdings company that operates over 40 malls across Europe and South America. Should Ydream's first Arkave location prove a success, this relationship may be a strategic benefit for Ydreams in introducing future Arkave units.

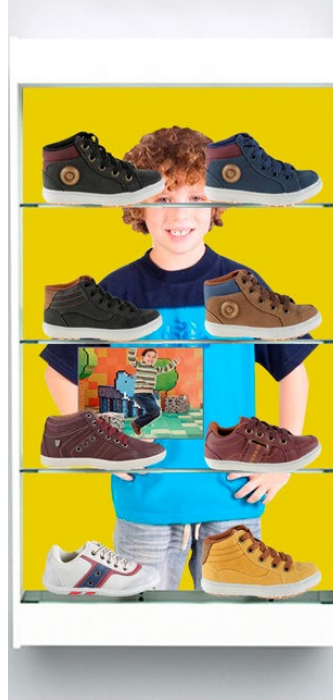
#### **SKUP**

Another product of the Ydreams Ventures division, the SKUP product line leverages VR to provide retail customers an interactive experience. SKUP caters to retail stores, offering a suite of VR/ AR products that are designed to attract customer attention, and personalize and optimize their shopping experience. According to management, these units are estimated to generate revenues of \$10,000 to \$30,000 per unit. The SKUP product line features several different products, including the following (descriptions and product images taken from the company website):

- Aero Display: wall display that reacts to consumer interaction with a product. When

the client touches/picks up the product, a window with information shows a company video, price, available colors and/or complimentary products. Content can be presented in multimedia form (images, texts, or videos). This wall display supports sound.

**Visualization of the Company’s Aero Display Product**



*Source: Company*

- **Tangible:** Shelf and platform display with interactive screen built-in where it is possible to display products and offer a touch digital interactive catalog. Contents can be presented in multimedia form (image, texts, or video). Contents can be presented in multimedia form (image, texts, or video).

**Visualization of the Company’s Tangible Product**



*Source: Company*



- **Magicbook:** Digital product catalog with barcode reader. The client shows the product's barcode (for example: on a piece of clothing) at the place indicated on the display, updating the digital pages to the specific content. Furthermore, the consumer can turn the pages by moving their hands through the air above the display. The content can be presented in multimedia form (image, texts, or video). This display supports sound.
- **RFID Mirrors:** RFID tags are added to selected products, and when consumers pick up a product and approach the interactive mirror, they are surprised by a video about the manufacturing of the product, a runaway show, the product's price, color options and a complete look with that piece. The content can be presented in multimedia form (image, texts, or video). This display supports sound.

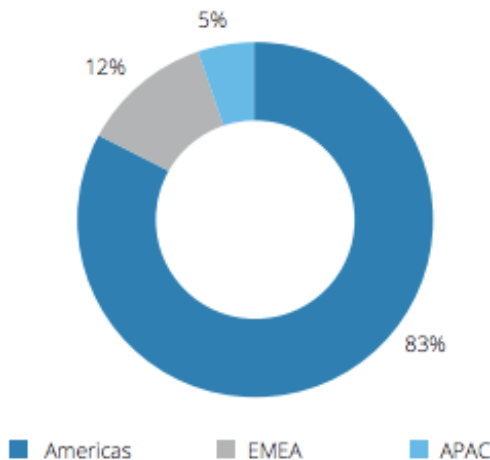
As the rise of E-Commerce continues to disrupt the retail industry, incumbents are seeing the average sales-per-square-foot (a common performance metric used in retail) extending its decline. CoStar Research, a commercial real estate research company, reported that the average sales-per-square-foot had dropped to \$325 in recent years, down from approximately \$375 in the early 2000s. The SKUP line of products can potentially add value to “brick and mortar” retailers by incorporating new technologies within physical spaces, improving customer loyalty and retention via improved shopping experience. **We consider SKUP a growth catalyst, but management have advised that SKUP requires more investment and will likely launch fully in the second half of 2018.**

#### **VR and AR development in the Middle East and China**

To stimulate growth and improve profitability of their legacy business, the company is currently considering entering new markets. Having submitted several proposals for review, Ydreams is hoping to extend its current operational model (VR/ AR concept spaces, digital brand experience campaigns and transformative design) to retail and museum locations in China and Dubai. The company has a proven track record in this project category, as shown by its Senna Emotion project, and is currently negotiating two interactive exhibition projects with Chinese companies. The company is also exploring a potential project with a company in Dubai that produces multi-million-dollar waterfalls, for which Ydreams is currently assessing new possible VR interactive solutions. However, the company does not currently possess the resources to aggressively expand into these regions, and is therefore, in the process of identifying local strategic partners. In May 2017, the company entered into a cooperation agreement with SEED group, a company that forms strategic partnerships with foreign companies seeking business opportunities in the Middle East. Though the agreement was signed to facilitate an introduction of Ydreams into the MENA region, there were no financing arrangements included in the agreement.

Despite the considerable development of the VR and AR markets that has come with the commercialization of virtual reality head-mounted devices, market share is currently concentrated in North America. The below chart from Deloitte provides a regional breakdown of revenues from the VR space:

VR revenue share per geography (2015)

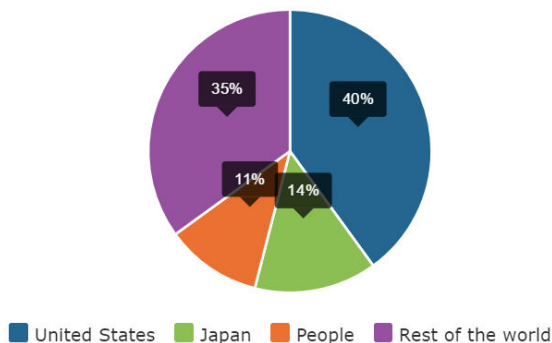


Source: Deloitte, Statista, Marketsandmarkets.com

However, industry experts expect that moving forward, Asia will take the lead in driving growth of the industry. International Data Corporation (“IDC”), a Chinese technology research firm, estimates that shipments of virtual reality head-mounted devices in China will rise to 15.5 million units in 2020. This is up from an estimated 0.61 million units in 2016, reflecting a CAGR of 124.5%. Furthermore, in the first quarter of 2017, technology market research firm Canalys reported that China accounted for 14% of the global VR head-mounted device market (note that People in the below graph denotes China, or “the People’s Republic of China”).



VR headsets, Worldwide, share of units (%) by country, Q1 2017

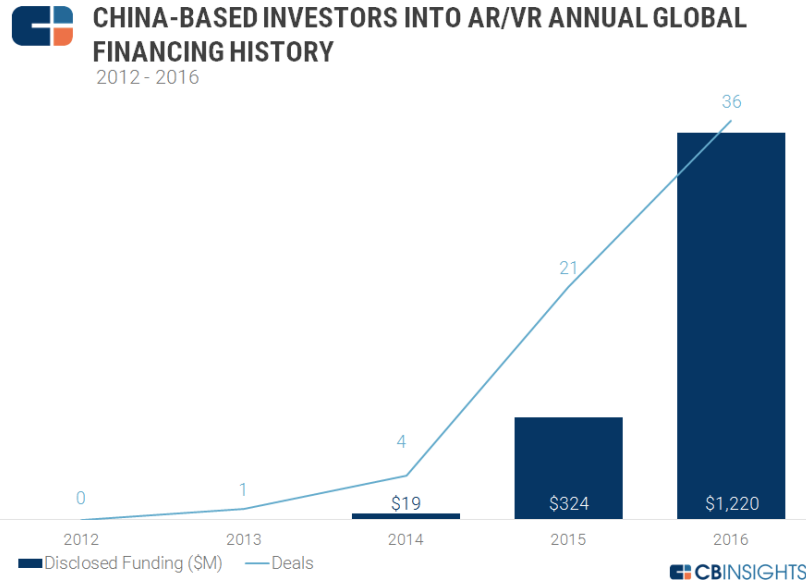


© Canalys 2017

Source: Canalys

This trend is supported by big-ticket investments being made by prominent Chinese companies including Alibaba (NYSE: BABA), Baidu (NASDAQ: BIDU) and Tencent

(HKG: 0700).



Deloitte estimated that in 2016, the major drivers of the VR/ AR market in the Middle East would continue to be the video gaming sector, falling in line with global trends. According to IDC, shipments of head-mounted devices in the first quarter of 2017 amounted to 160,000 units, reflecting 7% of global shipments. However, there is a growing regional interest in the applications of VR and AR technologies in alternative spaces. For example, Egyptian startup BSocial, created “Experience Mecca”, an app that allows users to experience the Muslim holy site in a VR setting. The app was released on the Oculus app store in April 2016, and has since generated over 165,000 downloads. Continuing interest in VR’s applications outside of video gaming are likely to drive growth in the sector moving forward, as current demand is due to consumer interest in video gaming head-mounted devices. IDC estimated a 2016 Middle East and Africa VR/ AR market of \$181.59 million in 2016, with expectations of a 2020 market to the tune of \$6 billion, reflecting a CAGR of close to 140%. Deloitte expects the following to be major drivers of the Middle East’s VR/ AR industry:

- **A shift in corporate focus to innovation in order to drive growth:** given that current VR/ AR market demand is largely consumer driven in the region, companies will need to address this demand by developing content and products which cater to developing preferences in the Middle East.
- **Lower oil prices and pressure to diversify:** Middle Eastern economies are likely to seek avenues by which to diversify from natural resources such as oil, due to volatility in oil prices and the income shocks that result. One avenue of interest are innovative technologies such as VR and AR.
- **Lower acquisition costs and greater accessibility to VR and AR technologies and expertise.**
- **Increase in population and shift in demographics:** according to Youth Policy Labs, over 28% of the Middle East’s population is aged between 15 and 29, and this

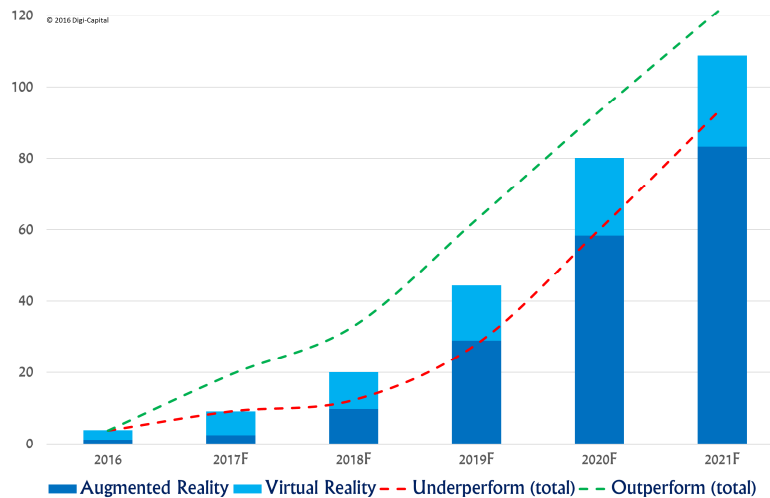
*Industry Overview*

age group is a major consumer of VR and AR products and services.

**With the accelerating development of the VR/ AR market in both the Middle East and China, we believe that Ydreams’ move to these geographies represents a material growth opportunity.**

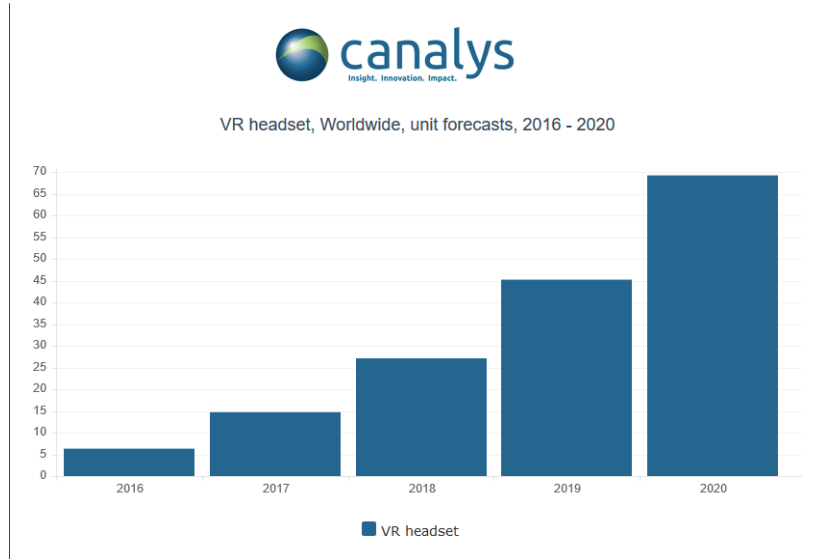
The VR/ AR market is currently a nascent market exhibiting explosive growth, as new technological developments are introduced into the space and consumer demand increases for VR head sets and AR products. According to Digi-Capital, a capital markets advisory and management consulting firm in the VR/ AR space, the industry could grow to \$108 billion by 2021, with low-end and high-end estimates ranging from \$94 billion to \$121 billion, respectively. Given that Digi-Capital estimates the VR/ AR market at \$3.9 billion at the end of 2016, that represents a CAGR of 94.3%.

**Digi-Capital™ VR/AR revenue (\$B)**



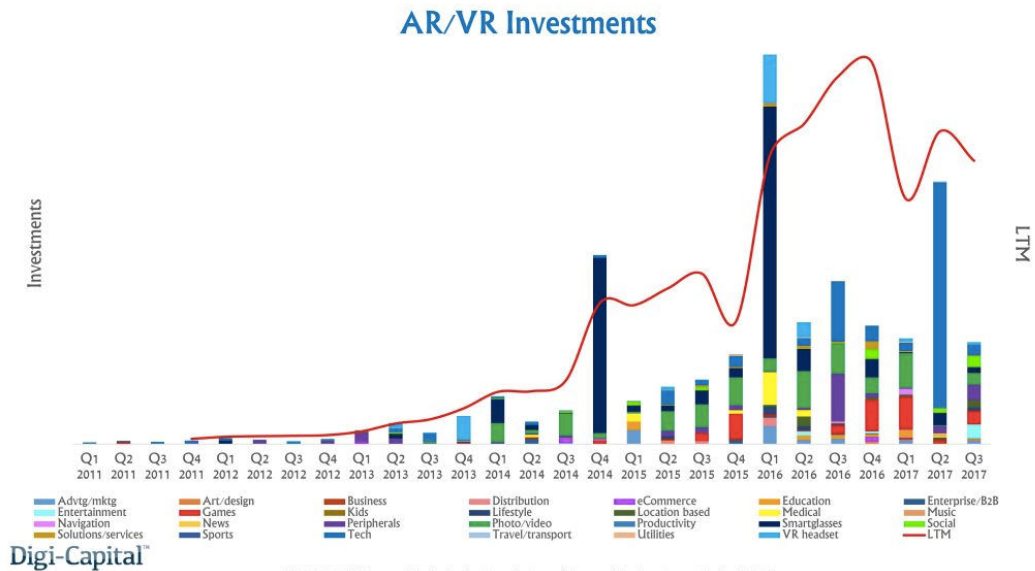
Source: Digi-Capital

At current, the most visible product in the VR/ AR markets are the Virtual Reality head-mounted devices, such as the Oculus Rift by Oculus VR, and PlayStation VR head-set by Sony (NYSE: SNE). According to Canalys, the market for VR head-mounted devices stood at approximately 6.3 million units in 2016, which they project will reach close to 70 million units in 2020.



Source: Canalys

Investors are quickly catching on to the potential of the VR/ AR industry, and many Tech Giants are jumping on the opportunity to penetrate the market. Facebook Inc. (NASDAQ: FB) made headlines in 2014 when the company paid \$2 billion in cash and stock to acquire Oculus VR, the company responsible for developing the Oculus Rift headset. In the third quarter of 2017, Digi-Capital reported that LTM investment in the VR/ AR industry across various sectors amounted to \$1.8 billion:



Source: Digi-Capital

The info graphic below outlines other active investors in the VR/ AR space, as well as their portfolio companies:





**Management Overview**

The company’s board of directors has 5 members, 3 of which are independent. We believe that a company’s board of directors should include independent or unrelated directors who are free of any relationships or business that could materially interfere with the director’s ability to act in the best interest of the company. **Directors own 46.3% of the outstanding shares, which we believe reflects conviction of the company’s insiders.**

Management	Shares	% of Total
Daniel Japiassu, CEO & Director	5,250,000	8.67%
Karina Israel, COO & Director	5,250,000	8.67%
Miguel Remédios, Director	17,550,000	28.97%
Spencer Smyl, Director	17,000	0.03%
James Nelson, Director	0	0.00%
	<b>28,067,000</b>	<b>46.3%</b>

*Source: Public Disclosures*

Brief biographies of the senior management and board members, as provided by the company, follow:

**Daniel Japiassu – CEO & Director**

An entrepreneur at heart, Daniel has over 20 years experience in project management and business planning. At the age of the 21 he opened his first company. Has experience living in Spain and at the United States Working with great brands and always on the lookout for new approaches, he found in YDreams the perfect match. Daniel has won several web awards and was shortlisted for a Cannes Cyber Lion.

**Karina Israel – COO & Director**

With over 20 years experience, which includes production direction for agencies like Ogilvy Interactive in São Paulo, and later in Portugal, at YDreams, as a precursor in producing real-time location-based games for mobile devices, Karina spearheaded YDreams' move into the professional advertising sector. She majored in Communication at Rio de Janeiro’s Federal University, has a Masters in Technology, Science and Society from Salamanca University and postgraduate studies in Business Administration from the New Lisbon University and Cultural Studies in São Paulo university (USP).

**Eli Dusenbury – CFO**

Eli Dusenbury currently works as a CFO and accounting consultant in Vancouver for both US and Canadian companies as well as assurance services with a public practice firm. Most recently Eli worked as an audit manager at Anton & Chai, LLP a US public practice firm specializing in SEC filers. Eli attended the University of Capilano, where he graduated with honors in 2009 with a Bachelor’s Degree in Business. Prior to Anton & Chai, LLP, Eli was a senior accountant at Smythe Ratcliffe LLP. He began articling at Smythe Ratcliffe LLP in 2009 and successfully passed the Uniform Final Evaluation (UFE) in 2011 obtaining his CA designation shortly thereafter. Eli has 8 years of public accounting experience providing assurance services to both public and private sector clients reporting in Canada and the US over a broad range of industries including but not limited to: technology, research & development, agriculture, engineering, mining & exploration, manufacturing and processing

and financing.

**James Nelson – Director**

Mr. James Nelson has over 12 years of public markets experience focused in finance, investor relations and corporate development serving as a director and a consultant to several public and private companies and has worked in a variety of industries including: energy, mining, oil & gas, and technology.

**Miguel Remedio – Director**

Miguel Remédio has a background education in Environmental Engineering and a Master in Mathematical Modelling from the Oregon Graduate Institute of Science and Technology. In 2000 he cofounded YGroup in Portugal and was responsible for finances and the international expansion of the company, creating offices in Spain and Brazil. He has extensive international experience in sales and project development of interactive solutions for brands and institutions. Besides being Director of YDreams Global, Miguel is member of the board of Ynvisible SA and other European technology companies.

**Spencer Smyl - Director**

Spencer Smyl graduated from the University of British Columbia (UBC) in Political Science and Economics. Since then Spencer has been actively involved in both the private and public sectors, working for the Senate of Canada, business development in the health and wellness industry, and in venture capital. His business networks in government, health and wellness, and venture capital provide a strategic reach in the resource, technology, and professional sport marketplaces. Spencer currently sits on the board of several publicly listed Canadian companies on the TSX.V, where he focuses on improving upon their mechanics that make for successful growth.

**Financials**

As of September 30, 2017, the company had revenues of \$0.54 million for the 3 months ended, and \$1.32 million for the 9 months ended. This is significantly lower than the \$1.57 million and \$3.99 million reported at the end of Q3-2016 (for the 3 months ended and 9 months ended, respectively). According to management, this is due to outsized revenues in 2016, from lucrative marketing opportunities associated with the Olympic games that were held in Rio da Janiero, followed by declining economic conditions in Brazil during 2017. The company, now cognizant of their exposure to a single market, are pursuing cross-border opportunities in Dubai and China. The company believes that whilst this implies lower short-term revenues as sales adjust, in the long-term, net sales revenues should grow to reflect the increase in scale and move to more lucrative markets. We believe that this is a reasonable expectation due to the degree of growth exhibited in the VR/ AR market. Note that as the company went public in 2016, the financial statements for 2014 were recorded in Brazilian Reals- we have adjusted at an average 2014 exchange rate of 0.474 C\$/ BRL. All other years are recorded at C\$.

STATEMENTS OF OPERATIONS							
(in CS) - YE Dec 31st	2014	2015	2016	2016(3M)	2017(3M)	2016(9M)	2017(9M)
Revenues	5,997,161	4,103,358	5,234,746	1,574,670	537,624	3,989,396	1,318,636
COGS	2,930,927	2,344,906	2,424,448	1,077,008	318,223	1,982,057	1,137,196
<b>Gross Profit</b>	<b>3,066,234</b>	<b>1,758,452</b>	<b>2,810,298</b>	<b>497,662</b>	<b>219,401</b>	<b>2,007,339</b>	<b>181,440</b>
<b>EXPENSES</b>							
SG&A Expense	1,670,929	1,258,913	2,847,065	1,313,636	571,783	2,037,126	2,126,015
Share-Based Payments			351,002	139,037	52,870	139,037	720,309
Other Expenses	133,841	33,617	24,759	4,546	9,628	14,776	17,783
<b>EBITDA</b>	<b>1,261,464</b>	<b>465,922</b>	<b>(412,528)</b>	<b>(959,557)</b>	<b>(414,880)</b>	<b>(183,600)</b>	<b>(2,682,667)</b>
Depreciation		96,169	95,436	24,910	24,836	69,490	77,644
<b>EBIT</b>	<b>1,261,464</b>	<b>369,753</b>	<b>(507,964)</b>	<b>(984,467)</b>	<b>(439,716)</b>	<b>(253,090)</b>	<b>(2,760,311)</b>
Financing Costs	220,928	626,562	254,579	195,899	41,390	407,462	72,958
<b>EBT</b>	<b>1,040,536</b>	<b>(256,809)</b>	<b>(762,543)</b>	<b>(1,180,366)</b>	<b>(481,106)</b>	<b>(660,552)</b>	<b>(2,833,269)</b>
Non-Recurring Expenses		452,241	2,925,657	1,792,782		1,792,782	-10,500
Taxes	335,625		79,877	-131,341		60,074	
<b>Net Profit (Loss)</b>	<b>704,911</b>	<b>(709,050)</b>	<b>(3,768,077)</b>	<b>(2,841,807)</b>	<b>(481,106)</b>	<b>(2,513,408)</b>	<b>(2,822,769)</b>
FOREX Translation		111,348	-147,149	-15,802	-2,702	-152,033	12,338
<b>Net comprehensive Profit (Loss)</b>	<b>704,911</b>	<b>(597,702)</b>	<b>(3,915,226)</b>	<b>(2,857,609)</b>	<b>(483,808)</b>	<b>(2,665,441)</b>	<b>(2,810,431)</b>
<b>Margins</b>							
Gross	51%	43%	54%	32%	41%	50%	14%
EBITDA	21%	11%	-8%	-61%	-77%	-5%	-203%
EBIT	21%	9%	-10%	-63%	-82%	-6%	-209%
Net	12%	-17%	-72%	-180%	-89%	-63%	-214%
<b>Expenses</b>							
SG&A	27.86%	30.68%	54.39%	83.42%	106.35%	51.06%	161.23%

Source: FRC, Financial Statements

Margins have also reduced significantly between Q3-2016 and Q3-2017. Apart from the impact of reduced sales, Ydreams also reported a lower gross margin for the nine months ended. According to the company, the relative cost of services rendered rose in 2017 due to mandatory increases in payroll as required by Brazilian labor unions, and funding requirements to complete a large project. Operating profit margins have also decreased, as operating expenses rose due to the company's move into the China and Dubai markets. The move caused a significant increase in consulting fees and travel/ promotion costs. Share-based compensation and management fees also increased over the comparable period in 2016, reflecting Ydream's transition from a private to public company, and the larger number of directors incurring these fees.

The following table provides a summary of Ydream's current balance sheet:

<b>BALANCE SHEET</b>				
<b>(in C\$) - YE Dec 31st</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017(Q3)</b>
<b>ASSETS</b>				
<b>CURRENT</b>				
Cash and Cash Equiv.	70,363	6,067	837,044	392,239
Recoverable Taxes	453,967	315,801	457,476	501,998
Marketable Securities			24,000	
A/R	462,757	395,168	431,118	309,694
Prepaid			27,812	
<b>Total Current Assets</b>	<b>987,087</b>	<b>717,036</b>	<b>1,777,450</b>	<b>1,203,931</b>
Related Parties	434,360			
PPE	405,138	322,009	260,033	325,536
Other Receivables	1,662	9,916		
<b>Total Assets</b>	<b>1,828,247</b>	<b>1,048,961</b>	<b>2,037,483</b>	<b>1,529,467</b>
<b>LIABILITIES</b>				
<b>CURRENT</b>				
Loan Payable	227,294	316,398	136,549	423,746
Salaries and Social Charges Payable	162,540	501,111	344,560	396,112
A/P	101,642	79,585	223,982	113,717
Taxes Payable	891,595	683,090	375,592	172,046
Provisions for Income and Social Taxes	12,546	17,248		
Unearned Revenues	315,318	38,390	30,000	30,753
Other Payables	53,265	52,104	9,976	9,164
<b>Total Current Liabilities</b>	<b>1,764,200</b>	<b>1,687,926</b>	<b>1,120,659</b>	<b>1,145,538</b>
Loans Payable	254,768	31,698	84,932	119,190
Salaries and Social Charges Payable			198,630	174,458
Taxes Payable			456,233	527,623
<b>Total Liabilities</b>	<b>2,018,968</b>	<b>1,719,624</b>	<b>1,860,454</b>	<b>1,966,809</b>
<b>SHAREHOLDERS EQUITY</b>				
Share Capital	101,178	169,429	3,884,471	5,505,253
Share-Based Payment Reserve			1,047,876	1,722,455
Deficit	-291,898	-1,086,542	-4,854,619	-7,677,388
Accumulated Other Comprehensive Income		246,450	99,301	12,338
<b>Total shareholders' equity (deficiency)</b>	<b>(190,721)</b>	<b>(670,663)</b>	<b>177,029</b>	<b>(437,342)</b>
<b>Total Liabilities and Shareholders Equity</b>	<b>1,828,247</b>	<b>1,048,961</b>	<b>2,037,483</b>	<b>1,529,467</b>

Source: Financial Statements

At the end of Q3-2017, the company had a cash position of \$0.39 million and working capital of \$0.06 million, as well as assets totaling \$1.53 million, and a debt position of \$0.54 million. Note that the company's liquidity has improved over time. Interest coverage has deteriorated significantly in recent years.

<b>(in C\$) - YE Dec 31st</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017(Q3)</b>
<b>Liquidity &amp; Capital Structure</b>				
Cash	70,363	6,067	837,044	392,239
Working Capital	(777,113)	(970,890)	656,791	58,393
Current Ratio	0.56	0.42	1.59	1.05
LT Debt	254,768	31,698	84,932	119,190
Total Debt	482,062	348,096	221,481	542,936
LT Debt / Capital	0.87	-0.10	0.21	1.13
Total Debt / Capital	165%	-108%	56%	514%
EBIT Interest Coverage	5.71	0.59	-2.00	N/A
Total Invested Capital	220,978	(328,634)	(438,534)	(286,645)

Source: FRC, Financial Statements



Below is a summary of the firm's cash flows:

Summary of Cash Flows				
(\$, mm)	2015	2016	2016 (9M)	2017 (9M)
Operating	-\$0.01	-\$0.06	\$0.01	-\$0.21
Investing	-\$0.00	-\$0.01	-\$0.01	-\$0.01
Financing	-\$0.01	\$0.16	\$0.09	\$0.19
Effects of Exchange Rate	\$0.01	-\$0.01	-\$0.02	-\$0.01
<b>Net</b>	<b>-\$0.01</b>	<b>\$0.08</b>	<b>\$0.08</b>	<b>-\$0.04</b>
<b>Free Cash Flows to Firm (FCF)</b>	<b>-\$0.01</b>	<b>-\$0.06</b>	<b>\$0.00</b>	<b>-\$0.22</b>

Source: FRC, Financial Statements

**Financing:** On February 22, 2018, the company announced that it had raised gross proceeds of \$2.75 million via a non-brokered, two tranche private placement. The first tranche consisted of 4.38 million units at \$0.15 per share, including a warrant with a strike price at \$0.25, expiring February 9, 2023. The second tranche consisted of 13.96 million units at \$0.15 per share, including a warrant with a strike price at \$0.25, expiring February 21, 2023. Total common shares issued amount to 18.33 million, raising the company's outstanding shares to 78.91 million.

**Stock options and warrants:** the company has 5.9 million stock options (weighted average exercise price of C\$0.37), and 58.56 million warrants (weighted average exercise price of C\$0.32) outstanding. 2.11 million options, and none of the warrants, are currently in the money. The company has the potential to raise up to C\$0.3 million if all the 'in-the-money' options and warrants are exercised.

*Valuation*

**Valuation**

The below tables outline our revenue forecasts through to 2025:

	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Existing Operation's Revenues	\$ 1,810,927	\$ 1,865,255	\$ 1,921,212	\$ 1,978,849	\$ 2,038,214	\$ 2,099,360	\$ 2,162,341	\$ 2,227,212
COGS	\$ 905,463	\$ 932,627	\$ 960,606	\$ 989,424	\$ 1,019,107	\$ 1,049,680	\$ 1,081,171	\$ 1,113,606
Number of Own-Stores	2	4	8	16	24	36	45	56
Per-Own-Store Revenue	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800	\$ 2,452,800
Average Occupancy Rate	50%	50%	50%	50%	50%	50%	50%	50%
Own-Store Arkave Revenues	2,452,800	4,905,600	9,811,200	19,622,400	29,433,600	44,150,400	55,188,000	68,678,400
COGS	1,226,400	2,452,800	4,905,600	9,811,200	14,716,800	22,075,200	27,594,000	34,339,200
Number of Franchisee-Stores	10	20	40	80	120	180	225	281
Royalty Revenue per Franchisee	122,640	122,640	122,640	122,640	122,640	122,640	122,640	122,640
Franchisee Revenue	1,226,400	2,452,800	4,905,600	9,811,200	14,716,800	22,075,200	27,594,000	34,461,840
<b>Consolidated Revenue</b>	<b>\$ 3,650,527</b>	<b>\$ 9,223,655</b>	<b>\$ 16,638,012</b>	<b>\$ 31,412,449</b>	<b>\$ 46,188,614</b>	<b>\$ 68,324,960</b>	<b>\$ 84,944,341</b>	<b>\$ 105,367,452</b>
<b>Consolidated COGS</b>	<b>\$ 1,518,663</b>	<b>\$ 3,385,427</b>	<b>\$ 5,866,206</b>	<b>\$ 10,800,624</b>	<b>\$ 15,735,907</b>	<b>\$ 23,124,880</b>	<b>\$ 28,675,171</b>	<b>\$ 35,452,806</b>

Source: FRC

STATEMENTS OF OPERATIONS									
(in CS) - YE Dec 31st	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Revenues	1,758,181	3,650,527	9,223,655	16,638,012	31,412,449	46,188,614	68,324,960	84,944,341	105,367,452
COGS	1,516,261	1,518,663	3,385,427	5,866,206	10,800,624	15,735,907	23,124,880	28,675,171	35,452,806
<b>Gross Profit</b>	<b>241,920</b>	<b>2,131,863</b>	<b>5,838,227</b>	<b>10,771,806</b>	<b>20,611,824</b>	<b>30,452,707</b>	<b>45,200,080</b>	<b>56,269,171</b>	<b>69,914,646</b>
<b>EXPENSES</b>									
SG&A Expense	2,834,687	2,976,421	3,128,664	5,643,614	10,655,103	15,667,178	23,175,827	28,813,121	35,740,640
Share-Based Payments	960,412	480,206	461,183	831,901	1,570,622	2,309,431	3,416,248	4,247,217	5,268,373
Other Expenses	23,711								
<b>EBITDA</b>	<b>(3,576,889)</b>	<b>(1,324,764)</b>	<b>2,248,381</b>	<b>4,296,292</b>	<b>8,386,099</b>	<b>12,476,098</b>	<b>18,608,006</b>	<b>23,208,833</b>	<b>28,905,634</b>
Depreciation	103,525	17,369	61,500	103,925	184,779	342,195	492,406	715,838	868,904
<b>EBIT</b>	<b>(3,680,415)</b>	<b>(1,342,132)</b>	<b>2,186,881</b>	<b>4,192,367</b>	<b>8,201,320</b>	<b>12,133,904</b>	<b>18,115,600</b>	<b>22,492,995</b>	<b>28,036,730</b>
Financing Costs	97,277	293,301	293,301	293,301	293,301	293,301	293,301	293,301	293,301
<b>EBT</b>	<b>(3,777,692)</b>	<b>(1,635,433)</b>	<b>1,893,580</b>	<b>3,899,066</b>	<b>7,908,020</b>	<b>11,840,603</b>	<b>17,822,299</b>	<b>22,199,694</b>	<b>27,743,429</b>

Source: FRC

## Revenue Assumptions

- Revenue is based on three streams: existing operational revenues from the Experiences and Futures division, revenue from future Arkave stores owned by Ydreams, and future Arkave franchisee revenues.
- The mature part of the company’s operations, the Experiences and Futures divisions, have not yielded consistent growth over time. We applied a long-term growth rate of 3%. For conservatism, we assumed that the attempted expansion of the company’s legacy operations to China and Dubai will not impact growth of these divisions’ revenues meaningfully.
- For the company’s growth catalyst Arkave, we base our revenue forecasts on the number of own-stores the company will possess and the number of franchisees they will have in the future.
- According to a September press release, the company plans to charge customers \$1 per minute. This is similar to pricing for VR arenas currently operating in the market. Assuming 8 hours of operation per day, and operation every day of the year, own-store revenue per Arkave location is \$2.45 million per annum. We estimate an occupancy/ utilization rate of these locations of 50% to maintain conservatism.
- For franchisees, management have not provided guidance regarding the structure of royalty fees. Instead, we use a common royalty of 5% of (full capacity) gross revenues, which we recognize as franchisee revenue.
- Management hopes to set up at least 100 stores within 24 months, as per a press release on December 22, 2017. To remain conservative, we forecast the company will have 12 stores by the end of 2018. Management have advised that most stores will be franchisee locations- we forecast that 2 of the first 12 Arkave locations will be the company’s own locations, whilst the remaining 10 will be franchisee locations.
- We forecast growth in stores in line with the market. In the above industry overview, it is cited from a reputable third-party source that the expected CAGR of the VR industry is 94.3% through to 2021. As a result, we believe it is reasonable to forecast the number of stores (both franchisee and own-stores) doubling until 2021. We then halve the rate of growth to 50% till 2023, and then again to 25% through to 2025, reflecting a move from an earlier growth phase to maturity.

## Cost Assumptions

- Operating costs guided by the 5-year average SG&A margin in the computer gaming sector. This puts operating costs at 33.92% of total revenues in each year.
- Long-term gross margin of 50%. We believe this is reasonable given the company’s historical performance and industry averages. This gross margin applies to the baseline revenue activities- due to no COGS from the franchisee line of revenue, consolidated gross margin is higher than 50%.
- CAPEX expenditures (as advised by management) are \$300,000-\$400,000 per own-store.
- Long-term corporate tax rate of 26%.

## Discounted Cash Flow Valuation

Our DCF Valuation on Ydream’s shares is \$0.38 per share.

DCF Model	2017-Q4	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	Terminal
EBIT(1-tax)	\$ -680,877	\$ -993,178	\$ 1,618,292	\$ 3,102,351	\$ 6,068,977	\$ 8,979,089	\$ 13,405,544	\$ 16,644,816	\$ 20,747,180	
Depreciation	25,881	17,369	61,500	103,925	184,779	342,195	492,406	715,838	868,904	
Investment in WC	-75,751	-56,186	-496,964	-662,536	-1,324,800	-1,324,809	-1,987,074	-1,490,391	-1,853,415	
CFO	\$ -730,746	\$ -1,031,995	\$ 1,182,828	\$ 2,543,741	\$ 4,928,956	\$ 7,996,475	\$ 11,910,876	\$ 15,870,263	\$ 19,762,669	
CAPEX	-47,716	-900,000	-910,000	-1,721,000	-3,333,100	-3,346,410	-4,961,051	-3,777,156	-4,594,872	
FCF	\$ -778,462	\$ -1,931,995	\$ 272,828	\$ 822,741	\$ 1,595,856	\$ 4,650,065	\$ 6,949,825	\$ 12,093,107	\$ 15,167,797	\$ 15,622,831
PV	\$ -778,462	\$ -1,631,243	\$ 191,529	\$ 480,220	\$ 774,467	\$ 1,876,291	\$ 2,331,563	\$ 3,373,210	\$ 3,517,711	\$ 20,976,420
Discount Rate	20%									
Terminal Growth Rate	3%									
Total PV	\$ 31,111,705									
Cash - Debt	\$ 2,699,303									
Equity Value	\$ 33,811,008									
Shares O/S (dil)	81,013,159									
<b>Fair Value</b>	<b>\$ 0.38</b>									

Source: FRC

For our discount rate, we utilized a WACC of 20%. This is based on a weighted average of a lower WACC appropriate to the company’s legacy business, as well as higher rate to reflect the required return on risky ventures. We believe that the Arkave opportunity, though lucrative, is risky, and have incorporated a 35% target return within our calculation. We used a weighting of 60-40 in favour of the legacy WACC to arrive at our discount rate.

### Venture Capital/ Private Equity Target Returns

Stage of development	Typical target rates of return
Start up	50-70%
First stage	40-60%
Second stage	35-50%
Bridge / IPO	25-35%

Source: Aswath Damodaran (New York University), QED Research

<b>WACC</b>	
WACC (Legacy)	10%
Venture Rate of Return	35%
<b>WACC</b>	<b>20%</b>

Source: FRC

*Risks*

**Based on our review of the company’s business model, the quality of the management team and their execution plan, and our valuation models, we are initiating coverage on Ydreams with a BUY rating, with a fair value estimate of \$0.40 per share.** We believe this valuation reflects the potential upside of the Arkave opportunity, whilst reflecting the potential risks and lower growth rate of the company’s legacy business. Investors should monitor the news flow of the company to keep up with the development of the Arkave franchise.

We believe the company is exposed to the following risks (list is non-exhaustive):

- The company’s valuation is dependent on the success of their Arkave franchise, which has yet to generate significant revenues.
- The company operates in an industry that is in its early stages. Therefore, it is difficult to determine long-term industry growth rates
- The company lacks a track record of profitability.
- Liquidity risk.
- Solvency risk.
- Volatility in revenue and earnings.
- Exchange rate risk.
- Access to capital and share dilution.

**We are initiating coverage with a risk rating of 4 (Speculative).**

**Fundamental Research Corp. Equity Rating Scale:**

**Buy** – Annual expected rate of return exceeds 12% or the expected return is commensurate with risk

**Hold** – Annual expected rate of return is between 5% and 12%

**Sell** – Annual expected rate of return is below 5% or the expected return is not commensurate with risk

**Suspended or Rating N/A**— Coverage and ratings suspended until more information can be obtained from the company regarding recent events.

**Fundamental Research Corp. Risk Rating Scale:**

**1 (Low Risk)** - The company operates in an industry where it has a strong position (for example a monopoly, high market share etc.) or operates in a regulated industry. The future outlook is stable or positive for the industry. The company generates positive free cash flow and has a history of profitability. The capital structure is conservative with little or no debt.

**2 (Below Average Risk)** - The company operates in an industry where the fundamentals and outlook are positive. The industry and company are relatively less sensitive to systematic risk than companies with a Risk Rating of 3. The company has a history of profitability and has demonstrated its ability to generate positive free cash flows (though current free cash flow may be negative due to capital investment). The company’s capital structure is conservative with little to modest use of debt.

**3 (Average Risk)** - The company operates in an industry that has average sensitivity to systematic risk. The industry may be cyclical. Profits and cash flow are sensitive to economic factors although the company has demonstrated its ability to generate positive earnings and cash flow. Debt use is in line with industry averages, and coverage ratios are sufficient.

**4 (Speculative)** - The company has little or no history of generating earnings or cash flow. Debt use is higher. These companies may be in start-up mode or in a turnaround situation. These companies should be considered speculative.

**5 (Highly Speculative)** - The company has no history of generating earnings or cash flow. They may operate in a new industry with new, and unproven products. Products may be at the development stage, testing, or seeking regulatory approval. These companies may run into liquidity issues, and may rely on external funding. These stocks are considered highly speculative.

**Disclaimers and Disclosure**

The opinions expressed in this report are the true opinions of the analyst about this company and industry. Any “forward looking statements” are our best estimates and opinions based upon information that is publicly available and that we believe to be correct, but we have not independently verified with respect to truth or correctness. There is no guarantee that our forecasts will materialize. Actual results will likely vary. FRC and the Analyst do not own shares of the subject company. Fees were paid by YD to FRC. The purpose of the fee is to subsidize the high costs of research and monitoring. FRC takes steps to ensure independence including setting fees in advance and utilizing analysts who must abide by CFA Institute Code of Ethics and Standards of Professional Conduct. Additionally, analysts may not trade in any security under coverage. Our full editorial control of all research, timing of release of the reports, and release of liability for negative reports are protected contractually. To further ensure independence, YD has agreed to a minimum coverage term including an initial report and three updates. Coverage cannot be unilaterally terminated. Distribution procedure: our reports are distributed first to our web-based subscribers on the date shown on this report then made available to delayed access users through various other channels for a limited time.

The distribution of FRC’s ratings are as follows: BUY (73%), HOLD (6%), SELL / SUSPEND (21%).

To subscribe for real-time access to research, visit <http://www.researchfrc.com/subscribe.php> for subscription options.

This report contains "forward looking" statements. Forward-looking statements regarding the Company and/or stock’s performance inherently involve risks and uncertainties that could cause actual results to differ from such forward-looking statements. Factors that would cause or contribute to such differences include, but are not limited to, continued acceptance of the Company's products/services in the marketplace; acceptance in the marketplace of the Company's new product lines/services; competitive factors; new product/service introductions by others; technological changes; dependence on suppliers; systematic market risks and other risks discussed in the Company's periodic report filings, including interim reports, annual reports, and annual information forms filed with the various securities regulators. By making these forward looking statements, Fundamental Research Corp. and the analyst/author of this report undertakes no obligation to update these statements for revisions or changes after the date of this report. A report initiating coverage will most often be updated quarterly while a report issuing a rating may have no further or less frequent updates because the subject company is likely to be in earlier stages where nothing material may occur quarter to quarter.

Fundamental Research Corp DOES NOT MAKE ANY WARRANTIES, EXPRESSED OR IMPLIED, AS TO RESULTS TO BE OBTAINED FROM USING THIS INFORMATION AND MAKES NO EXPRESS OR IMPLIED WARRANTIES OR FITNESS FOR A PARTICULAR USE. ANYONE USING THIS REPORT ASSUMES FULL RESPONSIBILITY FOR WHATEVER RESULTS THEY OBTAIN FROM WHATEVER USE THE INFORMATION WAS PUT TO. ALWAYS TALK TO YOUR FINANCIAL ADVISOR BEFORE YOU INVEST. WHETHER A STOCK SHOULD BE INCLUDED IN A PORTFOLIO DEPENDS ON ONE’S RISK TOLERANCE, OBJECTIVES, SITUATION, RETURN ON OTHER ASSETS, ETC. ONLY YOUR INVESTMENT ADVISOR WHO KNOWS YOUR UNIQUE CIRCUMSTANCES CAN MAKE A PROPER RECOMMENDATION AS TO THE MERIT OF ANY PARTICULAR SECURITY FOR INCLUSION IN YOUR PORTFOLIO. This REPORT is solely for informative purposes and is not a solicitation or an offer to buy or sell any security. It is not intended as being a complete description of the company, industry, securities or developments referred to in the material. Any forecasts contained in this report were independently prepared unless otherwise stated, and HAVE NOT BEEN endorsed by the Management of the company which is the subject of this report. Additional information is available upon request. THIS REPORT IS COPYRIGHT. YOU MAY NOT REDISTRIBUTE THIS REPORT WITHOUT OUR PERMISSION. Please give proper credit, including citing Fundamental Research Corp and/or the analyst, when quoting information from this report.

The information contained in this report is intended to be viewed only in jurisdictions where it may be legally viewed and is not intended for use by any person or entity in any jurisdiction where such use would be contrary to local regulations or which would require any registration requirement within such jurisdiction.