

# Fundamental

## Research Corp.

*Investment Analysis for Intelligent Investors*

November 28, 2018

### Shoal Games Ltd. (TSXV: SGW / OTCQB: SGLDF) – 600,000+ Downloads / Pursuing an \$8 Million Financing

**Sector/Industry: Mobile Games**

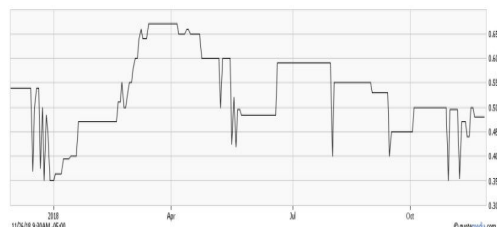
**www.shoalgames.com**

#### Market Data (as of November 28, 2018)

Current Price	C\$0.48
Fair Value	C\$1.30
Rating*	BUY
Risk*	5 (Highly Spec)
52 Week Range	C\$0.30 – C\$0.67
Shares O/S	73,674,703
Market Cap	C\$35.36 mm
Current Yield	N/A
P/E (forward)	N/A
P/B	N/A
YoY Return	29.7%
YoY TSXV	-25.6%

\*see back of report for rating and risk definitions

\*All the figures are in US\$ unless otherwise specified.



#### Highlights

- Since our previous update report in March 2018, Rooplay's downloads are up 140% to 600,000. The platform currently has over 40 proprietary games, over 300 games in total, and seven international brands under license.
- Rooplay's ramp up has been slower than expected. Until recently, the platform was only available on Android mobile devices. A web-enabled version of Rooplay was recently launched, making Rooplay available on the web and all web-enabled mobile devices. However, there have been significantly delays to get it up on iOS and smart TVs as planned.
- In August 2018, the company announced the development of a new game development tool – Shoal.JS - to enable content creators / game developers to easily add their games onto Rooplay, allowing for additional content at relatively low cost.
- The company recently announced a private placement of up to US\$8 million at US\$0.40 per share. Details of the use of funds were not provided, although the press release stated that the funds will be used for “business expansion and operational objectives”, and “to increase the company's distribution reach”.

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

(US\$)	2015	2016	2017	2018E	2019E
Cash	570,086	60,190	478,397	598,325	470,229
Working Capital	454,447	13,896	345,184	589,016	319,229
Total Assets	1,129,526	129,093	557,853	716,676	661,743
LT Debt to Capital	0.0%	928.0%	125.9%	0.0%	0.0%
Revenues	111,610	278,921	93,475	130,578	2,094,750
Net Income	(2,965,682)	(3,156,302)	(1,741,951)	(2,719,549)	(1,268,120)
EPS	-0.05	-0.05	-0.03	-0.04	-0.02

## Key Developments

Since our previous update report in March 2018, the company has been focused on improving Rooplay's usability / personalization / engagement, as well as expanding the content / game library. Key advancements / developments are listed below:

- The number of **downloads is up 140%** from 250,000 to 600,000.
- Rooplay currently has more than 40 exclusive games (Rooplay Originals), and over 300 games in total. The company has **seven international brands under license** (see image below). Shoal continues to execute its strategy to gain mass adoption by licensing popular intellectual property rights for use in their apps. Games associated with popular brands / characters are likely to instantly appeal and capture attention, allowing Shoal to attract a much larger user-base at significantly low acquisition costs.

### Licensing Partners



*Source: Company*

- Rooplay is currently only available on Android mobile devices. Management had previously estimated Rooplay to be launched on other platforms and devices (including Apple / NASDAQ: AAPL, Mobile Phones, Tablets, Smart TVs and Computers) in the first half of this year. Although a web-enabled version of Rooplay was recently launched, there have been significant delays getting it up on the other platforms. As a result, Rooplay's ramp up has been significantly slower than our previous expectations. Management stated that Rooplay iOS and Rooplay (smart) TV versions are currently in advanced stages of development, and should be launched before year end.
- In August 2018, the company announced the development of a new game development tool (Shoal.JS) to enable content creators to easily add their games onto Rooplay. We believe this is likely to encourage more content providers / game developers to partner with Rooplay.

## Collaboration with The Wonderfilm

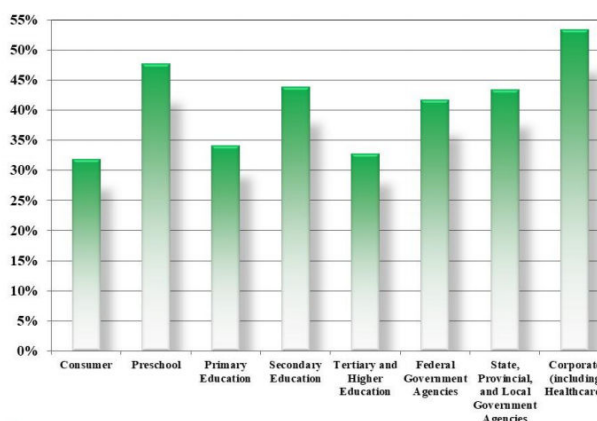
In September 2018, Shoal announced a collaboration agreement with The Wonderfilm Media Corporation (TSXV: WNDR / Market capitalization - \$18 million). The entities will work together on the development and distribution of content on Video on demand (VOD) platforms. **WNDR is run by Kirk Shaw, who has produced over 230 films, and is considered a leading independent film financier and producer in Canada.** We believe possible synergies between the firms include potential distribution of Shoal's content via WNDR's growing distribution network and vice-versa.

## Market Update

The following few points highlight the continued highly positive outlook on the global EdTech (Educational Technology) space:

- Market Research Firm Metaari estimates that the global game based learning products and services market will grow by **37% p.a. to over US\$17 billion by 2023.**
- According to a recent report on Research and Markets, revenues of the global educational technology market reached US\$17.7 billion in 2017. Revenues are expected to grow at a CAGR of **18.3% to US\$40.9 billion by 2022.**
- According to Metaari, education game companies received over **US\$1.7 billion in funding** in 2016 and 2017.
- Shoal's primary target market, the preschool segment, is expected to have the **second-highest growth rate** from 2018 to 2023 in game-based learning.

**Game based learning market growth (2018 – 2023)**



Source: Metaari

- The Chinese government is expected to **invest \$30 billion in EdTech** by 2020.

In June 2018, the company announced a new board member, with extensive experience in gaming. A brief biography of the new member, as provided by the company, follows:

*Claes Kalborg brings 20 years of brand licensing and development experience from leading game companies such as Rovio (the makers of Angry Birds) and King.com (the makers of Candy Crush). Claes brings a wealth of international experience gained from a 20+ year*

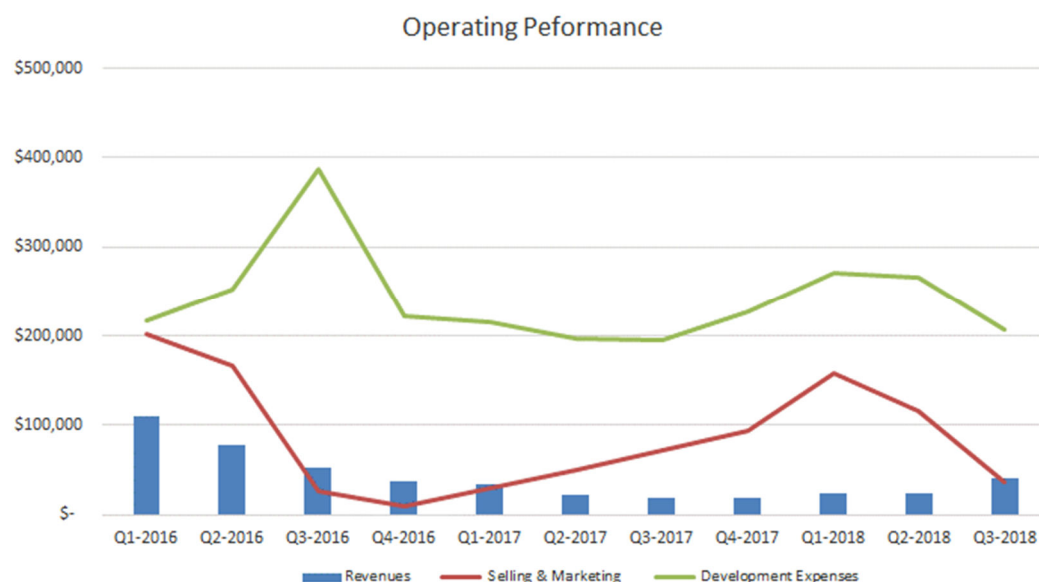
## Board Additions

## Financials

*career developing licensing programs for some of the largest gaming companies in the world. Claes shaped the licensing program at Finland's Rovio turning Angry Birds into a global merchandising business. Next, as Head of Global Licensing, Claes took King.com's blockbuster mobile games (over 500 million monthly active users) into the physical world with a range of products and experiences.*

In Q3-2018, Shoal generated \$41k in revenues (up from \$19k in Q3-2017). In the nine month period, Shoal generated \$90k in revenues versus \$75k in the same time period in the previous year. Segmented revenues were not disclosed.

Although Shoal started ramping up marketing expenses in Q2-2017 (with the launch of Rooplay), the company significantly slashed expenses in the past two quarters due to delays in launching Rooplay on additional platforms.



*Source: Company Data*

In Q3-2018, Shoal reported EBITDA of -\$0.40 million versus -\$0.47 million in Q3-2017. The net loss was \$0.40 million (EPS: -\$0.01) in Q3-2018, versus \$0.43 million (EPS: -\$0.01) in Q3-2017. In the nine month period, the net loss was \$2.22 million (EPS: -\$0.02) in 2018, versus \$1.29 million (EPS: -\$0.02) in 2017.

### Revenue / EBITDA / Net Losses



Source: Company Data

Free cash flows were -\$1.76 million in 2018 (9M), versus -\$1.22 million in 2017 (9M).

Summary of Cash Flows	2017 (9M)	2018 (9M)
Cash Flows from Operations	(1,212,089)	(1,752,786)
Cash Flows from Investing	(3,640)	(8,720)
Cash Flows from Financing	1,973,624	2,284,819
Net Change	757,895	523,313
Free Cash Flows	(1,215,729)	(1,761,506)

Source: Company Data

### Balance sheet and cash flows

Shoal cleaned up its balance sheet in Q2-2018; outstanding promissory notes were extinguished in exchange for funds from the exercise of warrants. At the end of Q3-2018, the company had \$1 million in cash, with no debt. Working capital and the current ratio were \$1.03 million, and 11.6x, respectively.

Liquidity Analysis	2016	2017	Q3-2018
Cash	\$60,190	\$478,397	\$1,001,710
Working Capital	\$13,896	\$345,184	\$1,032,394
Current Ratio	1.14	2.70	11.64
Debt / Capital	942.3%	136.9%	0.0%
LT Debt / Capital	928.0%	125.9%	0.0%

Source: Company Data



## Valuation

**Stock options and warrants:** Shoal has 3.61 million options (weighted average exercise price of C\$0.45) and 0.13 million warrants (weighted average exercise price of C\$0.52) outstanding. Currently, 2.34 million options are in the money, implying the company can raise up to C\$0.98 million if exercised.

We have pushed out our revenue forecasts to account for the delays in the development of Rooplay, without making any significant changes to our long-term forecasts. Our revised revenue and earnings forecasts are shown below.

### Revenue Projections

Rooplay	2019E	2020E	2021E	2022E
User Acquisition Cost	\$11.4	\$8.6	\$8.6	\$8.6
Marketing Dollars	\$1,000,000	\$2,000,000	\$4,000,000	\$6,000,000
Avg Subscribers	87,500	233,333	466,667	700,000
Subscription Rate (annual)	\$48	\$48	\$48	\$48
<b>Revenues</b>	<b>\$2,094,750</b>	<b>\$9,775,500</b>	<b>\$22,344,000</b>	<b>\$39,102,000</b>

### STATEMENTS OF OPERATIONS

(in US\$)- YE Dec 31st	2017	2018E	2019E	2020E	2021E	2022E
Revenues	93,475	130,578	2,094,750	9,775,500	22,344,000	39,102,000
Cost of Sales	-	-	628,425	2,932,650	6,703,200	11,730,600
<b>Gross Profit</b>	<b>93,475</b>	<b>130,578</b>	<b>1,466,325</b>	<b>6,842,850</b>	<b>15,640,800</b>	<b>27,371,400</b>
<b>Expenses</b>						
Selling & Marketing	244,810	346,266	1,000,000	2,000,000	4,000,000	6,000,000
Development	833,202	983,178	1,081,496	1,189,646	1,308,610	1,439,471
Stock Based Compensation	43,212	592,050	-	-	-	-
Compensation & Consultation	466,916	653,682	784,419	941,303	1,129,563	1,355,476
Bad Debt Expense	-	-	-	-	-	-
G & A	256,303	269,118	403,677	605,516	908,274	1,362,411
<b>EBITDA</b>	<b>-1,750,968</b>	<b>-2,713,717</b>	<b>-1,803,267</b>	<b>2,106,386</b>	<b>8,294,353</b>	<b>17,214,042</b>
Amortization	4,068	5,832	5,333	5,133	5,053	5,021
<b>EBIT</b>	<b>-1,755,036</b>	<b>-2,719,549</b>	<b>-1,808,600</b>	<b>2,101,253</b>	<b>8,289,299</b>	<b>17,209,021</b>
Interest & Bank Charges	-84,114	-	-	-	-	-
Exchange rate and Unusual items	-12,274	-	-	-	-	-
<b>EBT</b>	<b>-1,851,424</b>	<b>-2,719,549</b>	<b>-1,808,600</b>	<b>2,101,253</b>	<b>8,289,299</b>	<b>17,209,021</b>
Unusual gain or loss	78,712	-	-	-	-	-
Income Taxes	-30,761	-	-542,580	630,376	2,486,790	5,162,706
<b>Net Earnings for the period</b>	<b>-1,741,951</b>	<b>-2,719,549</b>	<b>-1,266,020</b>	<b>1,470,877</b>	<b>5,802,510</b>	<b>12,046,315</b>

Source: FRC

We are lowering our fair value estimate to C\$1.30 per share, from our previous estimate of C\$1.48 per share.

DCF Valuation		Q4-2018E	2019E	2020E	2021E	2022E	Terminal
Funds Flow from Operations (US\$)		(488,206)	(1,259,787)	1,477,270	5,808,967	12,052,797	
Change in Working Capital (US\$)		84,178	141,691	(498,496)	(794,756)	(1,126,581)	
Cash from Operations (US\$)		(404,028)	(1,118,096)	978,774	5,014,211	10,926,217	
CAPEX (US\$)		(1,280)	(10,000)	(10,000)	(10,000)	(10,000)	
Free Cash Flow (US\$)		(405,308)	(1,128,096)	968,774	5,004,211	10,916,217	
Present Value (US\$)		(405,308)	(980,953)	732,532	3,290,350	6,241,382	77,195,741
Discount Rate	15%						
Terminal Growth	3%						
Present Value (C\$)	\$94,681,119						
Cash - Debt (C\$)	\$1,302,223						
Fair Value (C\$)	\$95,983,342						
Shares O/S*	73,966,578						
Value per Share (C\$)	\$1.30						

\* long-term C\$/US\$ - 1.1

Source: FRC

## Risks

The following risks, though not exhaustive, may cause our estimates to differ from actual results:

- The company's primary app, Rooplay, is in early stages.
- Attracting players and keeping them engaged is critical and requires continuous development and innovation.
- The social games sector is highly competitive.
- The company may have to pursue equity financings, which may dilute existing shareholders.
- The social games sector is currently not subject to any material regulations. Any unfavorable changes in regulations in the future may impact the company's business.
- Management and insiders own over 70% - 80% of the outstanding shares. Therefore, the liquidity and the average daily trading volume of SGW's shares are low at this time.

**We maintain our risk rating of 5 (Highly Speculative).**

## APPENDIX

<b>STATEMENTS OF OPERATIONS</b>			
<b>(in US\$)- YE Dec 31st</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>
Revenues	93,475	130,578	2,094,750
Cost of Sales	-		628,425
<b>Gross Profit</b>	<b>93,475</b>	<b>130,578</b>	<b>1,466,325</b>
<b>Expenses</b>			
Selling & Marketing	244,810	346,266	1,000,000
Development	833,202	983,178	1,081,496
Stock Based Compensation	43,212	592,050	
Compensation & Consulation	466,916	653,682	784,419
G & A	256,303	269,118	403,677
<b>EBITDA</b>	<b>-1,750,968</b>	<b>-2,713,717</b>	<b>-1,803,267</b>
Amortization	4,068	5,832	8,333
<b>EBIT</b>	<b>-1,755,036</b>	<b>-2,719,549</b>	<b>-1,811,600</b>
Interest & Bank Charges	-84,114		
Exchange rate and Unusual items	-12,274		
<b>EBT</b>	<b>-1,851,424</b>	<b>-2,719,549</b>	<b>-1,811,600</b>
Unusual gain or loss	78,712		
Income Taxes	-30,761		-543,480
<b>Net Earnings for the period</b>	<b>-1,741,951</b>	<b>-2,719,549</b>	<b>-1,268,120</b>



<b>BALANCE SHEET</b>				
<b>(in US\$)- YE Dec 31st</b>				
	<b>2016</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>
<b>Assets</b>				
Cash	60,190	478,397	598,325	470,229
Accounts receivable	17,194	15,022	13,058	146,633
Prepaid expenses	33,494	54,714	91,405	29,327
<b>Current Assets</b>	<b>110,878</b>	<b>548,133</b>	<b>702,788</b>	<b>646,188</b>
Property and equipment	10,148	9,720	13,888	15,555
Security Deposits	8,067			
<b>Total Assets</b>	<b>129,093</b>	<b>557,853</b>	<b>716,676</b>	<b>661,743</b>
<b>Liabilities &amp; Shareholders' Equity</b>				
Accounts payables & accrued liabilities	91,626	114,192	113,772	326,959
Derivative		44,572		
Related parties	5,356	44,185		
<b>Current Liabilities</b>	<b>96,982</b>	<b>202,949</b>	<b>113,772</b>	<b>326,959</b>
Loans payable	347,698	502,313		
<b>Shareholder's Equity</b>				
Share Capital	21,223,271	23,133,400	26,603,262	27,603,262
Foreign Currency Translation	24,580	24,580	24,580	24,580
Deficit	-21,563,438	-23,305,389	-26,024,938	-27,293,058
<b>Total Liabilities &amp; Shareholders' Equity</b>	<b>129,093</b>	<b>557,853</b>	<b>716,676</b>	<b>661,743</b>

<b>STATEMENTS OF CASH FLOWS</b>			
<b>(in US\$)- YE Dec 31st</b>	<b>2017</b>	<b>2018E</b>	<b>2019E</b>
<b>Operating Activities</b>			
Net earnings for the period	-1,741,951	-2,719,549	-1,268,120
<b>Items not involving cash</b>			
Depreciation	4,068	5,832	8,333
Bad Debt expense			
Settlement of debt			
Trophy Bingo Amortization			
Gain on sale of domain name/others	48,632		
Stock Based Compensation		592,050	
	<b>-1,689,251</b>	<b>-2,121,667</b>	<b>-1,259,787</b>
Accounts Receivable	2,172	1,964	-133,575
Other Assets	8,067		
Prepaid Expenses	-21,220	-36,691	62,078
Accounts payable and accrued expenses	61,395	-420	213,187
<b>Changes in working capital</b>	<b>50,414</b>	<b>-35,147</b>	<b>141,691</b>
<b>Cash from (used in) operations</b>	<b>-1,638,837</b>	<b>-2,156,814</b>	<b>-1,118,096</b>
<b>Financing activities</b>			
Proceeds from secured borrowings, net	188,135		
Private Placement	1,872,549	2,280,142	1,000,000
Options / Warrants		6,600	
<b>Cash provided by financing activities</b>	<b>2,060,684</b>	<b>2,286,742</b>	<b>1,000,000.00</b>
<b>Investing activities</b>			
Acquisition of Equipment	-3,640	-10,000	-10,000
<b>Cash used in investing activities</b>	<b>-3,640</b>	<b>-10,000</b>	<b>-10,000</b>
<b>Increase (decrease) in cash</b>	<b>418,207</b>	<b>119,928</b>	<b>-128,096</b>
Cash beginning of period	60,190	478,397	598,325
<b>Cash end of period</b>	<b>478,397</b>	<b>598,325</b>	<b>470,229</b>

#### 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.

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