

Fundamental

Research Corp.

Investment Analysis for Intelligent Investors

March 12, 2019

Shoal Games Ltd. (TSXV: SGW / OTCQB: SGLDF) – Completes Significant Acquisition

Sector/Industry: Mobile Games

www.shoalgames.com

Market Data (as of March 8, 2019)

Current Price	C\$0.55
Fair Value	C\$1.03
Rating*	BUY
Risk*	4
52 Week Range	C\$0.35 – C\$0.67
Shares O/S	131,124,989
Market Cap	C\$72.19 mm
Current Yield	N/A
P/E (forward)	N/A
P/B	N/A
YoY Return	-17.9%
YoY TSXV	-25.1%

*see back of report for rating and risk definitions

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



Highlights

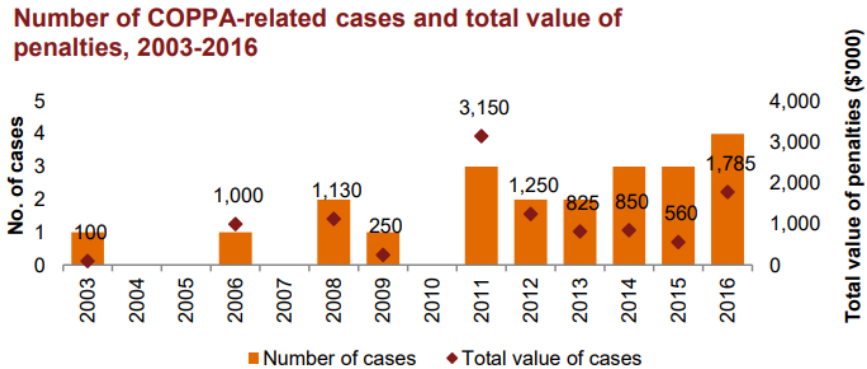
- On March 4, 2019, Shoal acquired an Israel based private company named Kidoz Ltd. (www.kidoz.net); an all-share deal valued at \$21 million. Kidoz's CEO will join Shoal as the Co-CEO. Kidoz will have the ability to nominate three members to Shoal's current board.
- Kidoz operates a **revenue generating business** (revenues / profitability undisclosed) focused on kid-safe platforms / solutions. It has a distribution platform consisting of over 1,500 kids' gaming / learning apps and videos that currently have over 50 million monthly users. Kidoz's child-mode app is pre-installed on laptops, smartphones, etc. including Lenovo, Acer, etc.
- Shoal or Kidoz have not disclosed Kidoz's revenues, earnings or capital structure. We suspect Kidoz's revenues to be in the \$8 million range.
- We believe Shoal's content (the Rooplay EdTech games platform), and Kidoz' global distribution network, have **significant synergies**. Through Kidoz, Rooplay gets instant access to millions of kids, thereby significantly lowering its user acquisition cost.
- We believe the acquisition will allow Shoal (which is currently focused on just the EdTech space) to capitalize on the rapidly growing kids' mobile gaming and digital advertising space.
- Shoal also **completed a \$2 million private placement**. Kidoz's shareholders now hold 40% of the total outstanding shares of Shoal.

Key Financial Data (FYE - Dec 31)

(US\$)	2015	2016	2017	2018E	2019E	2020E
Cash	570,086	60,190	478,397	598,325	3,200,843	4,500,696
Working Capital	454,447	13,896	345,184	589,016	3,367,674	4,774,209
Total Assets	1,129,526	129,093	557,853	716,676	24,700,188	26,340,078
LT Debt to Capital	0.0%	928.0%	125.9%	0.0%	0.0%	0.0%
Revenues	111,610	278,921	93,475	130,578	5,997,500	9,990,000
Net Income	(2,965,682)	(3,156,302)	(1,741,951)	(2,719,549)	920,325	1,423,203
EPS	-0.05	-0.05	-0.03	-0.02	0.01	0.01

Shoal to acquire Kidoz

On March 4, 2019, Shoal completed the acquisition of Kidoz Ltd. - a privately held Israeli company focused on kid-safe platforms / solutions for digital content distribution and monetization. The company, founded in 2009 by Gai Havkin and Eldad Ben Tora, started out with a platform that allows kids to operate smartphones / tablets in a protected environment that complied with the U.S. Child Online Privacy Protection Act (“COPPA”). As shown in the chart below, regulators have been increasing pressure on advertisers to be compliant. Several companies, including Disney (NYSE: DIS) and Viacom (Nasdaq: VIAB), have faced class-action lawsuits for non-compliance.

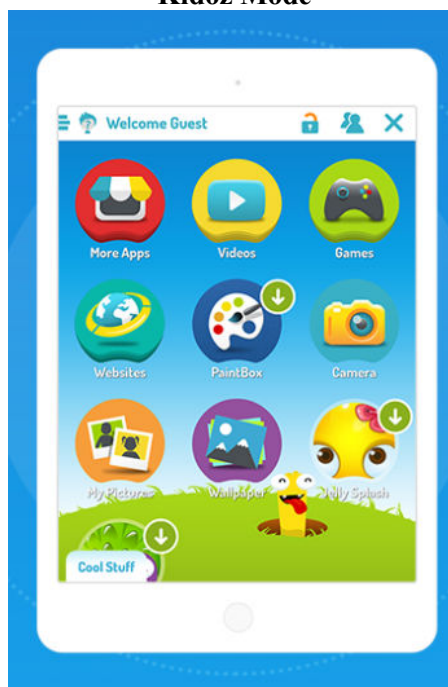


Source: Kids Digital Advertising Report (2017) by PwC

Kidoz has significantly grown (especially in the past few years), and currently, its platforms / solutions reach over 50 million kids per month globally, primarily through the following two avenues:

- **Kidoz mode** is a child-mode app that allows kids to use gaming / learning apps, and surf the internet safely with parental control and customized content libraries. It is pre-installed on laptops, smartphones, etc. as well as downloadable for free on Google Play Store (1+ million downloads / 4.1 rating from 17,000+ reviews). Kidoz mode is currently the official kid mode for over 40 Original Equipment Manufacturers (OEMs), including Lenovo (SEHK: 992), Acer (TSEC: 2353), TCL (SZSE:000100), Hisense (SHSE:600060), Deutsche Telekom (DB:DTE), etc. **Kidoz generates revenues through licensing fees paid by OEMs to include the Kidoz mode on their devices, and through advertisements delivered inside the Kidoz mode when the app is in use.**

Kidoz Mode



Source: Kidoz

- **Kidoz network** is a distribution platform consisting of over 1,500 kids' gaming / learning apps and videos, that are COPPA & GDPR compliant (GDPR is the European equivalent of the U.S.' COPPA). The network not only offers distribution, but also monetization opportunities to developers of kids' apps. **The network currently has 50 million monthly users, and hundreds of brands (a few listed below) advertise on the network.** As the network owner & operator, Kidoz generates revenues by selling advertising directly to brands and delivering the ads across the Kidoz publisher network with a portion of the ad revenue paid to partner publishers.

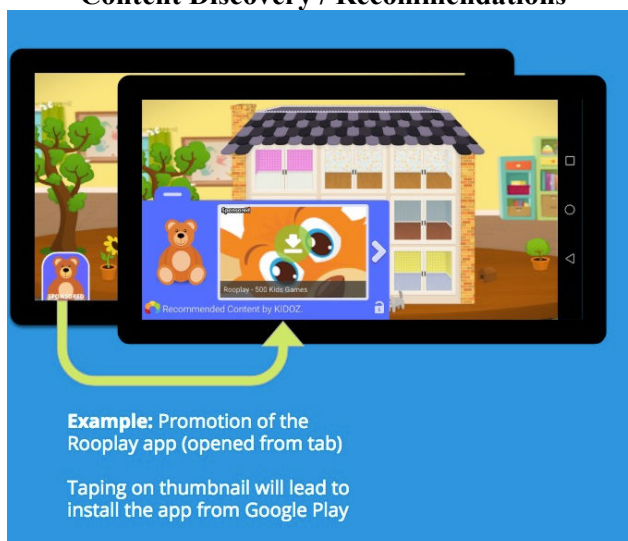
Few Brands Advertising on the Kidoz Network



Source: Kidoz

According to Kidoz, they are the **fastest-growing content discovery / recommendation platform for kids**, which basically involves driving traffic by placing links next to articles / news / videos. An example by Shoal's Rooplay is shown below. Shoal has been promoting Rooplay through the Kidoz network since July 2017. According to Kidoz, during a trial period, Rooplay generated 100,000+ installs from 170 countries, with a conversion rate (clicks to installs) of 3%. Kidoz states that Rooplay had a higher retention rate with their platform than Facebook (Nasdaq: FB) or Google Ads (Nasdaq: GOOGL).

Content Discovery / Recommendations



Source: Kidoz

We believe Shoal's content (the Rooplay EdTech games platform) and Kidoz' global distribution network have significant synergies. Through Kidoz, Rooplay gets instant access to millions of kids, thereby significantly lowering its user acquisition cost. Through Rooplay, Kidoz will have its own library of exclusive content. 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).



Source: Company

Rooplay is now available on Android, the web, iOS (pending approval), PCs and soon Smart TV's. This enables Shoal to **acquire users from all available channels**, whereas previously, they only had the potential for Android customers.

Market Potential

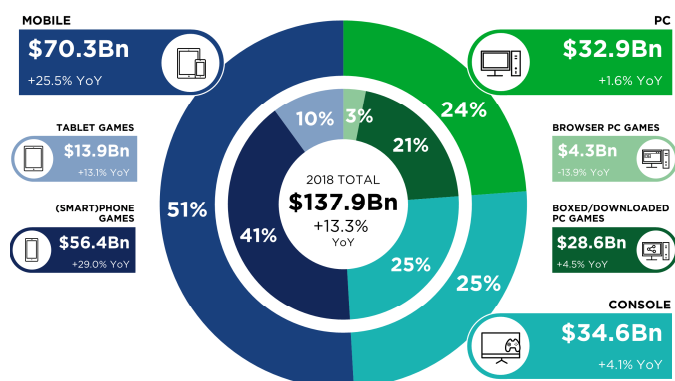
In addition to the upside potential from the above mentioned synergies, the combined entity is expected to **grow Kidoz's existing revenue stream organically**. Kidoz revenues / profitability remains undisclosed, although Shoal's press release indicated that Kidoz recently achieved positive adjusted EBITDA. Kidoz was successful in raising approximately \$4.5 million from private equity firms in the past few years.

Kidoz's acquisition, valued at \$21 million, will result in the issuance of 52.45 million Shoal shares at \$0.40 per share. Concurrently, Shoal completed a \$2 million private placement, at \$0.40 per share. It is estimated that Kidoz's shareholders will end up holding 40% of the total outstanding shares, subsequent to the transaction and the proposed private placement.

Kidoz's current management and employees will remain with the combined company. **Kidoz's CEO, Eldad Ben Tora, will join Shoal as the Co-CEO.** The acquisition has received approval from the TSX Venture Exchange. Kidoz will have the ability to nominate three members to Shoal's current board. It is expected that the new board will have three members from Shoal, three from Kidoz, and one independent.

In 2018, the mobile games market is expected to have generated \$70.3 billion in revenues, reflecting 51% of the global games market.

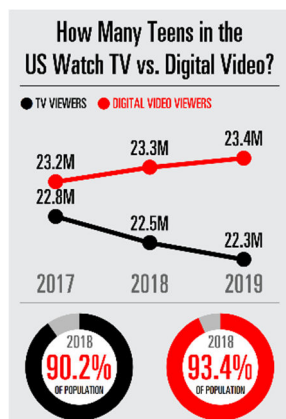
2018 Global Games Market



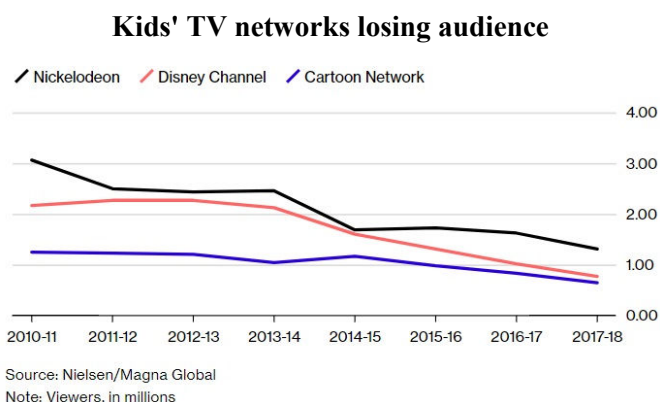
Source: Newzoo

According to SuperData Research, kids' games account for approximately 8% of the global mobile gaming market.

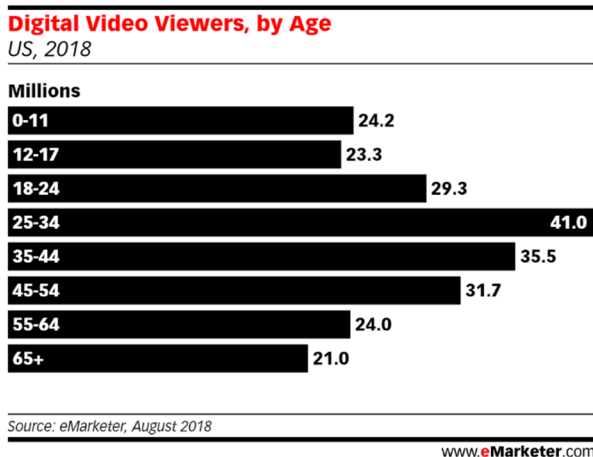
According to a survey conducted by the British online newspaper, the Independent, 25% of children under the age of six has a smartphone, and 80% of parents do not restrict the amount of time children spend on phones. As with adults, children are moving to digital videos (see charts below).



Source: eMarketer



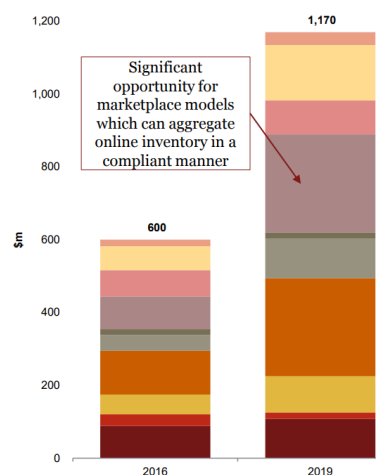
The chart below indicates that the category of kids between 0 and 11 years, watching digital videos, accounts for a significant portion of the overall market.



PwC expects the digital advertising market for kids to grow to \$1.2 billion by 2019, which is almost a 100% increase from the \$600 million in 2016. Digital advertising is expected to represent 28% of all modes of advertising to children.

Financials

Kids digital advertising market by channel, 2016-2019



Source: PwC Analysis, PwC Interviews

We believe the acquisition will allow Shoal (which is currently focused on just the EdTech space), to capitalize on the rapidly growing kids' mobile gaming and digital advertising space.

As the company was heavily focused on Rooplay's development in 2018 (with little spending on marketing), the app has yet to report any meaningful revenues. 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. 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, net losses were \$2.22 million (EPS: -\$0.02) in 2018, versus \$1.29 million (EPS: -\$0.02) in 2017.

Revenue / EBITDA / Net Losses



Source: Company Data

Clean Balance Sheet

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

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.

Valuation

Shoal or Kidoz have not disclosed Kidoz's revenues, earnings or capital structure. Assuming no significant cash or debt on Kidoz's balance sheet, and based on the average Enterprise Value to Revenue multiple of 2.6x for the Online Gaming Industry (Source: S&P Capital IQ), we suspect Kidoz's revenues to be in the \$8 million range. We also noticed that Owler (community based platform) indicated revenues of \$9.6 million (see image below). However, we are not in a position to speculate on the accuracy of this estimate.

KIDQZ
KIDQZ's Competitors, Revenue, Number of Employees, Funding and Acquisitions

Overview
Competitors
Financials
News
Blog
Press Releases
Videos
Contact
Summary
FAQ

KIDQZ's website >
KIDQZ is an online platform that offers kids' gaming content distribution and advertisement monetization solutions for brands.

KIDQZ's headquarters is located in Netanya, Center District. KIDQZ's parent company has been Shoal Games Ltd. since Dec 2018. KIDQZ's latest funding round was a Unattributed for \$3.5M on Dec 2015. KIDQZ's top competitor is Epic!, led by Suren Markosian, who is their Co-Founder & CEO. KIDQZ has 89 followers on Owler. [Read less](#)

Estimated Annual Revenue
\$9.6M
Agree?

Estimated Employees
58
Agree?

Co-Founder & CEO
Eldad Ben Tora

CEO Approval Rating
79/100
[Weigh In](#)

OVERVIEW
Founded: 2008
Headquarters: Netanya, Center District
Status: Private, Subsidiary of Shoal Games Ltd.
Industry Sector: Systems Software, Application Software
SIC Code: 7373 NAICS listing > 7372 NAICS listing >
Links: [in](#) [f](#) [t](#)

Update this Profile Followers on Owler: 89

For conservatism, we are modelling 2019 revenues of \$5 million for Kidoz, growing to over \$10 million by 2025. Note that these are extremely conservative numbers if Kidoz's actual revenues are closer to the number indicated by Owler.

Projections

STATEMENTS OF OPERATIONS							
(in US\$)- YE Dec 31st	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Revenues	5,997,500	9,990,000	14,454,545	21,631,091	35,046,001	51,478,204	72,101,527
Cost of Sales	2,299,250	3,597,000	5,056,364	7,281,327	11,385,000	16,401,781	22,684,610
Gross Profit	3,698,250	6,393,000	9,398,182	14,349,764	23,661,001	35,076,423	49,416,917
Expenses							
Selling & Marketing	500,000	1,000,000	1,500,000	3,000,000	4,500,001	6,000,002	7,500,003
Development	1,081,496	1,189,646	1,308,610	1,439,471	1,583,419	1,741,760	1,915,936
Stock Based Compensation							
Compensation & Consultation	784,419	941,303	1,129,563	1,355,476	1,626,571	1,951,885	2,342,262
G & A	403,677	1,805,516	2,612,403	3,909,437	6,333,945	9,303,775	13,031,076
EBITDA	928,658	1,456,536	2,847,605	4,645,379	9,617,065	16,079,000	24,627,639
Amortization	8,333	33,333	43,333	47,333	48,933	49,573	49,829
EBIT	920,325	1,423,203	2,804,272	4,598,046	9,568,132	16,029,427	24,577,810
Interest & Bank Charges							
Exchange rate and Unusual items							
EBT	920,325	1,423,203	2,804,272	4,598,046	9,568,132	16,029,427	24,577,810
Unusual gain or loss							
Income Taxes				1,379,414	2,870,440	4,808,828	7,373,343
Net Earnings for the period	920,325	1,423,203	2,804,272	3,218,632	6,697,692	11,220,599	17,204,467
EPS	0.01	0.01	0.02	0.02	0.05	0.08	0.12
Shares	134,291,656	134,291,656	134,291,656	134,291,656	134,291,656	136,813,912	139,789,726
			65.0%	66.3%	67.5%	68.1%	68.5%
Kidoz	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Revenues	5,000,000	6,000,000	7,200,000	7,920,000	8,712,000	9,583,200	10,541,520
Rooplay	2019E	2020E	2021E	2022E	2023E	2024E	2025E
User Acquisition Cost	\$12.0	\$12.0	\$11.0	\$10.0	\$9.0	\$8.0	\$7.0
Marketing Dollars	\$500,000	\$1,000,000	\$1,500,000	\$3,000,000	\$4,500,000	\$6,000,000	\$7,500,000
Avg Subscribers	41,667	83,333	136,364	300,000	500,000	750,000	1,071,429
Subscription Rate (annual)	\$48	\$48	\$48	\$48	\$48	\$48	\$48
Revenues	\$997,500	\$3,990,000	\$7,254,545	\$13,711,091	\$26,334,000	\$41,895,000	\$61,560,000

Source: FRC

Although our fair value estimate of Shoal's equity increased from C\$96 to C\$135 million, our value per share estimate dropped from C\$1.30 to C\$1.03, due dilution from the acquisition. We are maintaining our BUY rating.

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.
- Kidoz's revenues, earnings and capital structure are yet to be disclosed.
- 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.

We are lowering our risk rating from 5 (Highly Speculative) to 4 (Speculative).

APPENDIX

STATEMENTS OF OPERATIONS			
(in US\$)- YE Dec 31st	2018E	2019E	2020E
Revenues	130,578	5,997,500	9,990,000
Cost of Sales		2,299,250	3,597,000
Gross Profit	130,578	3,698,250	6,393,000
Expenses			
Selling & Marketing	346,266	500,000	1,000,000
Development	983,178	1,081,496	1,189,646
Stock Based Compensation	592,050		
Compensation & Consulation	653,682	784,419	941,303
G & A	269,118	403,677	1,805,516
EBITDA	-2,713,717	928,658	1,456,536
Amortization	5,832	8,333	33,333
EBIT	-2,719,549	920,325	1,423,203
Interest & Bank Charges			
Exchange rate and Unusual items			
EBT	-2,719,549	920,325	1,423,203
Unusual gain or loss			
Income Taxes			
Net Earnings for the period	-2,719,549	920,325	1,423,203

BALANCE SHEET			
(in US\$)- YE Dec 31st	2018E	2019E	2020E
Assets			
Cash	598,325	3,200,843	4,500,696
Accounts receivable	13,058	369,825	639,300
Prepaid expenses	91,405	73,965	127,860
Current Assets	702,788	3,644,633	5,267,856
Property and equipment	13,888	55,555	72,222
Security Deposits / Others		21,000,000	21,000,000
Total Assets	716,676	24,700,188	26,340,078
Liabilities & Shareholders' Equity			
Accounts payables & accrued liabilities	113,772	276,959	493,646
Derivative			
Related parties			
Current Liabilities	113,772	276,959	493,646
Loans payable			
Shareholder's Equity			
Share Capital	26,603,262	49,503,262	49,503,262
Foreign Currency Translation	24,580	24,580	24,580
Deficit	-26,024,938	-25,104,613	-23,681,410
Total Liabilities & Shareholders' Equity	716,676	24,700,188	26,340,078

STATEMENTS OF CASH FLOWS			
(in US\$)- YE Dec 31st	2018E	2019E	2020E
Operating Activities			
Net earnings for the period	-2,719,549	920,325	1,423,203
Items not involving cash			
Depreciation	5,832	8,333	33,333
Bad Debt expense			
Settlement of debt			
Trophy Bingo Amortization			
Gain on sale of domain name/others			
Stock Based Compensation	592,050		
	-2,121,667	928,658	1,456,536
Accounts Receivable	1,964	-356,767	-269,475
Other Assets			
Prepaid Expenses	-36,691	17,440	-53,895
Accounts payable and accrued expenses	-420	163,187	216,687
Changes in working capital	-35,147	-176,140	-106,683
Cash from (used in) operations	-2,156,814	752,518	1,349,853
Financing activities			
Proceeds from secured borrowings, net			
Private Placement	2,280,142	1,900,000	
Options / Warrants	6,600		
Cash provided by financing activities	2,286,742	1,900,000.00	-
Investing activities			
Acquisition of Equipment	-10,000	-50,000	-50,000
Cash used in investing activities	-10,000	-50,000	-50,000
Increase (decrease) in cash	119,928	2,602,518	1,299,853
Cash beginning of period	478,397	598,325	3,200,843
Cash end of period	598,325	3,200,843	4,500,696

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. The analyst and Fundamental Research Corp. "FRC" does not own any shares of the subject company, does not make a market or offer shares for sale of the subject company, and does not have any investment banking business with the subject company. Fees were paid by SGW 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, SGW has agreed to a minimum coverage term including four reports. Coverage can not 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 (72%), HOLD (7%), 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.