

April 15, 2019

Ashok Kumar, PhD, CFA | ak@think-equity.com | 646-968-9363

Duos Technologies Group, Inc. (DUOT US - \$0.72 - Buy)

DUOT: Weaning Away From Project Based Income | Initiating at Buy | PT \$2

Key Points

Financial Results. Total revenues for 4Q18 increased to \$2.56 million, from \$641k in the same quarterly period last year. Full year 2018 revenues increased to \$12.0 million, from \$3.9 million in 2017. The increase in total revenue was driven by an increase in project revenue and maintenance and technical support, which was offset by a decrease in IT asset management services revenues.

Net loss for 4Q18 totaled \$836k, an improvement from a net loss of \$1.41 million in 4Q17. Net loss for full year 2018 totaled \$1.6 million or \$(0.08) per dilute share, an improvement from net loss of \$5.2 million or \$(1.43) per diluted share in 2017.

The improvement in net income was primarily attributable to increased revenue, improved gross margins and a lower rate of operating expense growth.

Strategic Relationship. On May 15, 2018, Duos announced that it was awarded a multi-million dollar contract from Canadian National Railway (CN). The order was for four rail inspection portals and includes the deployment of the Company's first thermal undercarriage inspection system.

We value the original contract in excess of \$6 million. In addition there is likely a service contract, which is typically up to 40% of the contract value or \$2.5 million recognized over 5 years.

Duos received a follow on contract for an additional 3 systems, valued at \$4.5 million. These systems are expected to be delivered in the April 2019 time frame.

Our checks indicate that Duos could receive an order for additional 10 systems from CN, to begin delivery by end of 2019. In sum, this would translate to a total of 17 systems and order value in excess of \$15 million.

Focus on AI. Duos announced the launch of truevue360, an AI and machine learning platform, to enable customers to pursue a wide variety of opportunities in the AI space.

The company anticipates truevue360 to be operational by the end of Q219, with the long-term operational goal for truevue360 to contribute to the recurring revenue base.

Summary

For the fiscal year ending December 31, 2019, Duos expects total revenue to be between \$14.0 million and \$15.0 million, or a 16% to 25% increase over 2018. The company's guidance is based on contracts in backlog that are scheduled to be executed before 4Q19.

Initially this is a project based business. Duos is starting to build out in two or three key industries. Revenues can be lumpy early on because of how the Company accounts for revenue. Quarter-on-quarter or year-on-year financial changes are not as meaningful near term. We believe investor focus should be on long term trends.

Rating, Price and Target

Symbol	DUOT
Rating	Buy
Price	\$0.72
Price Target	\$2.00

Market Data

Market Cap (M)	\$17.80
Shares Outstanding (M)	24.70
Average Daily Volume (000s)	160.00
Float (M)	10.00
Total Debt (M)	\$0
Net Cash/Debt (\$M)	\$1.50
Dividend	NM

FYE Dec	2017A	2018A	2019E
EPS	(1.43)	(0.08)	0.02
Previous	(1.43)	(0.06)	0.02
Revenue (M) (\$)	3.9	12.0	16.5
Previous	3.9	12.3	16.5

Quarterly EPS	Q1	Q2	Q3	Q4
2017A	(1.21)	(0.70)	(0.07)	(0.16)
2018A	(0.04)	(0.03)	0.02	(0.04)
2019E	(0.03)	(0.02)	0.01	0.05

Quarterly Revenue (M)	Q1	Q2	Q3	Q4
2017A	1.0	1.2	1.0	0.6
2018A	1.1	3.2	5.1	2.6
2019E	2.5	3.0	4.5	6.5

Company Description

Duos Technologies Group, Inc., through its subsidiary, Duos Technologies, Inc. designs and deploys artificial intelligence driven intelligent technologies systems in the United States. Its technology platforms include Praesidium, an integrated suite of analytics applications, which process and analyze data streams from virtually conventional or specialized sensors, and/or data points; and Centraco, a user interface that includes a physical security information management system. The company offers intelligent technology solutions for critical infrastructure. Duos Technologies Group, Inc. is headquartered in Jacksonville, Florida. Duos Technologies Group Inc. is a subsidiary of Environmental Capital Holdings, Inc.

Weaning Away From Project Based Income

Duos Technologies Group, Inc. (Duos) provides intelligent security analytical technology solutions. The company has developed a broad range of proprietary technologies which are typically deployed as turnkey systems.

These tools include machine learning and video analytics that are delivered through a combination of image capture technology solutions. The backend processing and middleware is branded as Praesidium, and the customer-facing software platform is branded as Centraco.

Duos' primary focus is on mission-critical security, inspection and operations in target markets. These include rail transportation, retail distribution, critical infrastructure security, and law enforcement sectors.

A competitive differentiator is that Duos solutions do not require a change in customer's business practices. Duos' core platform is adaptable to different verticals, without major modifications to the core code. The long run market strategy is to mitigate individual market cyclicalities.

Duos announced the launch of truevue360, an AI and machine learning platform, to enable customers to pursue a wide variety of opportunities in the AI space.

The company anticipates truevue360 to be operational by the end of Q219, with the long-term operational goal for truevue360 to contribute to the recurring revenue base.

Takeaways

Financial Results. Total revenues for 4Q18 increased to \$2.56 million, from \$641k in the same quarterly period last year. The increase in total revenue was driven by progress to completion of key projects awarded earlier in 2018.

Full year 2018 revenues increased to \$12.0 million, from \$3.9 million in 2017. The increase in total revenue was driven by an increase in project revenue and maintenance and technical support, which was offset by a decrease in IT asset management services revenues.

Net loss for 4Q18 totaled \$836k, an improvement from a net loss of \$1.41 million in 4Q17.

Net loss for full year 2018 totaled \$1.6 million or \$(0.08) per dilute share, an improvement from net loss of \$5.2 million or \$(1.43) per diluted share in 2017.

The improvement in net income was primarily attributable to increased revenue, improved gross margins and a lower rate of operating expense growth.

Financial Outlook. For the fiscal year ending December 31, 2019, Duos expects total revenue to be between \$14.0 million and \$15.0 million, or a 16% to 25% increase over 2018. The company's guidance is based on contracts in backlog that are scheduled to be executed before 4Q19.

Revenues should be evaluated over a slightly longer period based on how Duos books its revenues. Constraint on Duos revenue growth is capitalization and identifying and hiring top talent.

Global provider of intelligent technologies. Duos has experience in designing, developing, and implementing intelligent technologies for rail, utilities, oil and gas, chemical industries, commercial and retail distribution and government sectors. The Company's products and solutions are field tested and ready to scale. The primary target market is North America and current customers are Fortune 100 and 500 companies. Given the suitability and adaptability of technologies to other verticals, Duos plans to expand its presence to other high growth verticals and globally.

Rich IP Portfolio. Flexible Technology Architecture. The Company's technology is built on two platforms.

First is centraco®, a customer facing interface. It not only works with inputs from the Company's technology but also embraces third party technology.

The real engine is an analytics process backend called praesidium®. This is the engine that takes the inputs, be it video or other sensors, does analysis and presents it to the operator or management to take operational or business decisions.

Target Markets and Customers. Duos' focus is the rail market, which is the Company's sweet spot.

Duos primarily serves Fortune 100 and Fortune 500 companies. Duos has a small number of large customers which include CN, CSX, BNSF and Ferromex.

Duos is also targeting the distribution vertical with retail partners like Kohl's. A related market is the video analytics segment. This opportunity grows out of the Company's involvement with security.

In sum, the near term verticals Duos can monetize are rail, distribution and correctional facilities. But rail remains bulk of the business and will likely represent bulk of the growth going forward.

Expanding share of wallet in rail vertical. Duos technology has undergone extensive vetting with transportation research and testing organization, TTCI (subsidiary of Association of American Railroads). TTCI is the technology arm of AAR and is funded by Class-1 railroads.

The opportunity here is unlike the traditional software business where companies can come in and see if their technology works.

Duos solutions work. It is a question of developing and fitting it into the business processes of Class-1 rail road and expanding out from there.

But it is a resources intensive business. The type of people needed are not inexpensive. Constraint on Duos revenue growth is capitalization and identifying and hiring top talent.

Focus on AI. Duos announced the launch of truevue360, an AI and machine learning platform, to enable customers to pursue a wide variety of opportunities in the AI space.

The company anticipates truevue360 to be operational by the end of Q219, with the long-term operational goal for truevue360 to contribute to the recurring revenue base.

Strong, seasoned management team. Gianni Arcaini, Chairman, has a thirty-five year executive career spanning multiple industries. Arcaini is the inventor and co-inventor of all technologies offered by Duos. David Ponevac, CTO, has over 14 years of software engineering experience. Adrian Goldfarb, CFO, is a thirty-five year industry veteran with more than 20 years in the IT industry.

Business Model. Duos gross margins are 50% plus across all the businesses. At current burn rate, break-even is estimated at around \$14-\$15 million in revenues annually. This is on an operating basis.

Expenditure is skewed toward two key areas - R&D Engineering and Business Development. The Company can then grow the business but also deliver new solutions into those industries and also be able to support them.

As revenues approach \$15-plus million, which we estimate for 2019, then Duos can become less sensitive to timing of a single project.

We expect Duos to migrate to a subscription model for two reasons. One that it is more accessible for the customer to pay the subscription amount than commit to a capex. Second, it takes any revenue volatility and shows linear growth.

Valuation

Our 12-month price target is \$2 based on 4x forecast 2018 revenue of \$16.5 million. This valuation multiple is comparable to the peer group of emerging growth companies.

We expect the business model to come into focus in 2019.

Initially this is a project based business. Duos is starting to build out in two or three key industries. Revenues can be lumpy early on because of how the Company accounts for revenue. Quarter-on-quarter or year-on-year financial changes are not as meaningful near term. We believe investor focus should be on long term trends.

Notable Operational Milestones

Expanding Existing Relationship. On May 15, 2018, DUOT announced that it was awarded a multi-million dollar contract from Canadian National Railway (CN). The order was for four rail inspection portals and includes the deployment of the Company's first thermal undercarriage inspection system.

Strategic Engagement. We estimate the acquisition price for each rail inspection portal is \$1.5 million, which values the original contract in excess of \$6 million (including various sub components). In addition there is likely a service contract, which is typically up to 40% of the contract value or \$2.5 million recognized over 5 years.

Duos received a follow on contract for an additional 3 systems, valued at \$4.5 million. These systems are expected to be delivered in the April 2019 time frame.

Our checks indicate that Duos could receive an order for additional 10 systems from CN, to begin delivery by end of 2019. In sum, this would translate to a total of 17 systems and order value in excess of \$15 million.

Expanding Ecosystem. Duos has submitted a bid with Alstom for Amtrak project, total project value estimated at \$6 million. We anticipate prototype deliveries by year end 2019, and revenues in 2020.

AI Platform. Launched truevue360™, which will focus on driving additional revenues and margin to Duos by developing, implementing and marketing artificial intelligence and deep learning solutions for a broad range of industries

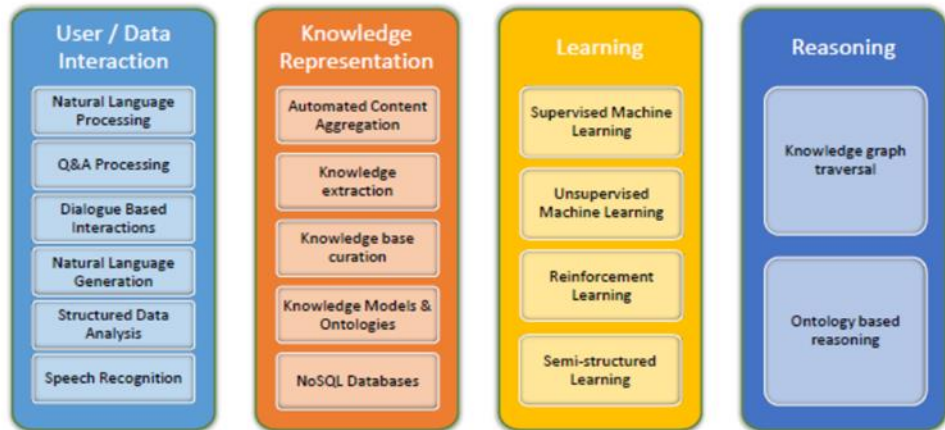
Adjacent Vertical. Awarded contract in the aggregate of \$1.0 million from a regional bank with a national footprint for the installation of Duos' praesidium® and centraco® systems, which will provide comprehensive security solutions for 19 of the bank's sites in 14 locations across the United States.

Worldwide Cognitive/Artificial Intelligence Software Platforms

Market Research firms, IDC and Gartner, predict that the worldwide cognitive/artificial intelligence (AI) software platforms market will grow from \$2.0 billion in 2017 to \$9.5 billion in 2022 at a compound annual growth rate (CAGR) of 37%. Growth in this market continues to be driven by increases in AI software platforms, including conversational AI platforms being used to develop applications ranging from chatbots and conversational interfaces to predictive and prescriptive applications that offer advice and recommendations.

Figure 1. Cognitive/AI Software Platform

A set of technologies that use NLP, machine learning, knowledge graphs and other technologies to answer questions, discover insights and provide recommendations. These systems hypothesize and formulate possible answers based on available evidence, can be trained through the ingestion of vast amounts of content, and automatically adapt and learn from their mistakes and failures.



Sources: IDC, Forrester and ThinkEquity Estimates

The AI software platforms market continues to grow at rapid pace and involves billion-dollar software firms as well as a wealth of start-ups around the globe. DUOT is acting now to gain the benefits derived from AI, deep learning, and machine learning.

Technology Suppliers

Cognitive/AI software platform vendors, like DUOT, need to make their tools and platforms easy to develop, easy to use, and easy to scale. We are already seeing vendors addressing these needs by offering suites of tools and APIs such as Amazon's SageMaker and Microsoft Azure Machine Learning Studio that help enterprise developers to create AI-enabled applications more easily than ever before. These tools are providing the capabilities for enterprises to create applications that do product recommendation, pricing optimization, predictive maintenance, financial advice, and a whole host of other use cases.

In addition, we're seeing vendors providing low-code/no-code AI tools for jobs like image recognition and classification, speech recognition, machine transcription, machine learning-based text analytics, and a host

of other functions. These tools can be simply plugged into an application to provide the capabilities of an AI-enabled function without the need for extensive training or development.

Vendors also need to accommodate the low-cost or no-cost open source deep learning and machine learning toolkits and cloud services that are proliferating in the market today. Many organizations are using these tools such as Google's TensorFlow, Caffe, and R to develop their own cognitive/AI applications. However, these toolsets need additional capabilities and technologies that aren't currently offered by open source, which is why the cognitive/AI platforms that offer a range of additional technologies have emerged. Vendors need to include flexibility for developers to add open source models into an extensible framework. We believe that vendors like DUOT that can successfully mix and match open source with proprietary technologies and offer them at a reasonable cost will be the winners in this market in the long run.

Figure 2. Marketplace: Cognitive/AI Systems



Sources: Company Reports, IDC and ThinkEquity estimates

Market Forecast

IDC and Gartner predict the market for cognitive/AI software will grow to \$9.5 billion by 2022, at a compound annual growth rate of 37%.

Figure 3. Worldwide Cognitive/AI Software Platforms, Revenue by Region, 2017-2022 (\$ mil)

	2017	2018	2019	2020	2021	2022	2017 Share (%)	2017-2022 CAGR (%)	2022 Share (%)
Region									
Americas	1,667	2,284	3,081	4,120	5,546	7,438	84	35	79
Asia/Pacific	90	123	169	229	294	361	5	32	4
EMEA	228	323	474	714	1,085	1,667	12	49	18
Total	1,985	2,730	3,724	5,064	6,925	9,466	100	37	100

Sources: IDC and ThinkEquity estimates

Table shows that the Americas will continue to gain overall share. The second fastest-growing region is EMEA, where rapidly growing commercial activity is generating strong demand for cognitively enabled applications.

Recent Financial Results

Revenues

Total revenues for 4Q18 increased to \$2.56 million, from \$641k in the same quarterly period last year. The increase in total revenue was driven by progress to completion of key projects awarded earlier in 2018.

Full year 2018 revenues increased to \$12.0 million, from \$3.9 million in 2017. The increase in total revenue was driven by an increase in project revenue and maintenance and technical support, which was offset by a decrease in IT asset management services revenues. The increase in project revenue is a

result of Duos' introduction of intelligent analytics and machine learning, and transition from traditional legacy security-centric offerings.

Figure 4. Duos Technologies Group, Inc. — Statement of Operations

	For the Years Ended	
	December 31,	
	2018	2017
<i>(in thousands, except per share data)</i>		
Statement of Operations:		
Revenue	\$12,049	\$3,885
Cost of revenue	6,844	2,295
Gross profit	5,204	1,590
Operating expenses	6,774	5,034
Income (Loss) from operations	(1,570)	(3,444)
Other income (expense)	(11)	(1,709)
Net income (loss)	(1,581)	(5,153)
Series A preferred stock dividends	-	(18)
Net income (loss) applicable to common stock	\$1,581	(\$5,170)

Sources: Company Reports and ThinkEquity estimates.

Gross Profit

Gross profit for 4Q18 increased to \$1.14 million, from \$221k in 4Q17.

For full year 2018, gross profit increased to \$5.2 million, from \$1.6 million in 2017. The increase in gross profit was due to the effect of both higher revenues and lower cost of sales on completed projects.

Operating Expenses

Operating expenses for 4Q18 increased to \$1.98 million from \$1.24 million in 4Q17.

For full year 2018, operating expenses increased to \$6.8 million from \$5.0 million in 2017.

The increase in operating expenses was from additional staffing to support anticipated business for 2019.

Net Income (Loss)

Net loss for 4Q18 totaled \$836k, an improvement from a net loss of \$1.41 million in 4Q17.

Net loss for full year 2018 totaled \$1.6 million or \$(0.08) per dilute share, an improvement from net loss of \$5.2 million or \$(1.43) per diluted share in 2017.

The improvement in net income was primarily attributable to increased revenue, improved gross margins and a lower rate of operating expense growth.

Figure 5. Duos Technologies Group, Inc. – Balance Sheet Summary

(\$, 000)	December 31, 2018	December 31, 2017
Cash	\$1,209	\$1,942
Total assets	\$4,490	\$2,866
Total liabilities	\$4,661	\$2,244
Total stockholders' equity (deficit)	(\$171)	\$622

Sources: Company Reports and ThinkEquity Estimates

Liquidity and Capital Resources

As of December 31, 2018, DUO had a negative working capital of \$469k. Cash on hand was \$1.2 million. The company incurred a net loss of \$1.58 million for the twelve months ended December 31, 2018.

Net cash used in investing activities for the twelve months ended December 31, 2018 and 2017 were \$345k and \$3.6 million. Duos continues to increase investments in software development and lab equipment.

Figure 6. Duos Technologies Group, Inc. – Cash Flow Summary

(,000)	For the Years Ended December 31,	
	2018	2017
Net cash used in operating activities	(\$345)	(\$3,562)
Net cash used in investing activities	(286)	(42)
Net cash (used in) provided by financing activities	(102)	5,371
Cash, end of period	1,209	1,942

Sources: Company Reports and ThinkEquity Estimates

Financial Outlook

For the fiscal year ending December 31, 2019, Duos expects total revenue to be between \$14.0 million and \$15.0 million, or a 16% to 25% increase over 2018. The company's guidance is based on contracts in backlog that are scheduled to be executed before 4Q19.

Summary

Global provider of intelligent technologies. Duos has experience in designing, developing, and implementing intelligent technologies for rail, utilities, oil and gas, chemical industries, commercial and retail distribution and government sectors. The Company's products and solutions are field tested and ready to scale. The primary target market is North America and current customers are Fortune 100 and 500 companies. Given the suitability and adaptability of technologies to other verticals, Duos plans to expand presence to other high growth verticals and globally.

AI Platform. Duos announced the launch of truevue360, an AI and machine learning platform, to enable customers to pursue a wide variety of opportunities in the AI space.

The company anticipates truevue360 to be operational by the end of Q219, with the long-term operational goal for truevue360 to contribute to the recurring revenue base.

Not a single industry trick. Duos' underlying technology is industry agnostic. The Company is picking the highest growth opportunities. The Company is currently heavily rail focused. As they get capitalized the Company has plans to expand into other markets.

Duos is focusing on couple of areas. Retail is under tremendous pressure right now. Cost saving and automation of the ingress and egress in the distribution centers is a key application. Duos has an ongoing project with the retailer Kohl's. This includes that automation of their distribution center. This \$3 million project opens up opportunities for Duos with other retail partners.

Duos is also developing applications for oil theft prevention. In sum, Duos is has an industry agnostic base of technology which they can apply to multiple industries.

Business Model.

The Company's gross margins are 50% plus across all the businesses. At current burn rate, operational break even is estimated at annual revenue of \$14-\$15.

Duos is transitioning to a subscription model for two reasons: It is a more attractive value proposition for the customer to only pay the subscription amount than lay out the capex. It also removes any revenue bumps and shows the growth in a much more stable manner.

As revenues approach \$12 - \$14 million, which we estimate for 2019, then Duos can become less sensitive to timing of a single project.

Artificial Intelligence Software Platforms

Market Research firms, IDC and Gartner, predict that the worldwide cognitive/artificial intelligence (AI) software platforms market will grow from \$2.0 billion in 2017 to \$9.5 billion in 2022 at a compound annual growth rate (CAGR) of 37%. Vendors like Duos that can successfully mix and match open source with proprietary technologies and offer them at a reasonable cost will be the winners in this market in the long run.

Risks

Ability to continue as a going concern. As of December 31, 2018, DUO had a negative working capital of \$469k. Cash on hand was \$1.2 million. The company incurred a net loss of \$1.58 million for the twelve months ended December 31, 2018.

The accumulated deficit as of December 31, 2018 was \$30.3 million.

The technology management platforms are complex and highly integrated. The technology platforms developed and designed by Duos to accommodate integrated applications that include organically developed technology and third-party technology, thereby substantially increasing their functionality. Due to the complexity and the condensed development cycles under which the Company operates, they may experience errors in software, corruption or loss of data, or unexpected performance issues from time to time. Any major integration or interoperability issues or launch delays could have a material adverse effect on revenues and operating income.

Products and services may fail to keep pace with changing technology and evolving industry standards. The market in which Duos operates is characterized by rapid technological developments, evolving industry standards, frequent new product introductions and changes in customer requirements.

Both traditional and new competitors are investing heavily in these market areas and competing for customers. As next-generation video analytics technology continues to evolve, Duos must keep pace in order to maintain or expand market position.

Revenues are dependent on economic conditions and the willingness of enterprises to invest in technology. Enterprises continue to be cautious about sustained economic growth and have tried to maintain or improve profitability through cost control and constrained spending. Duos' core technologies are designed to address cost reduction but other factors may cause delaying or rejecting capital projects. There is a growing market trend toward more customers exploring operating expense models as opposed to capital expense models for procuring technology.

The market trend toward operating expense models is expected to continue as customers seek ways of reducing their overhead and other costs. These may result in continued pressure on ability to increase revenue and may create competitive pricing pressures and price erosion.

Faces significant competition and many of the competitors are larger and have greater financial resources. Duos product offerings compete and will compete with other similar products from competitors. These competitive products could be marketed by well-established, successful companies that possess greater financial, marketing, distributional and other resources.

History of losses and growth plans expect to incur negative operating cash flows in the future. Accumulated deficit was approximately \$28 million as of December 31, 2017 and approximately \$29.4 million as of September 30, 2018. Operating losses may continue as DUOT continues to expend resources to further develop and enhance technology offering,

Dependence on a limited number of customers. As of December 31, 2017, four customers accounted for 83% of accounts receivables. Additionally, three largest customers accounted for approximately 60% of total revenues for the year ended December 31, 2017. The concentration of credit risk makes DUOT vulnerable economically.

Inability to protect Intellectual Property. Duos relies on a combination of trade secrets, patents, copyrights, trademarks, confidentiality agreements, and other contractual provisions to protect intellectual property, but these measures may provide only limited protection.

The Company cannot be certain that their technologies and products do not and will not infringe on issued patents or other proprietary rights of others.

Competitors may develop technologies that are similar or superior to Duos technologies, duplicate technologies, or design around patents, and may have or obtain patents or other proprietary rights that would prevent, limit, or interfere with Duos ability to make, use, or sell their products.

For additional risk considerations, please refer to the company's SEC filings.

Figure 7. Duos Technologies Group Inc. - Income Statement, 2016-2019E

	Mar-16	Jun-16	Sep-16	Dec-16	2016	Mar-17	Jun-17	Sep-17	Dec-17	2017	Mar-18	Jun-18	Sep-18	Dec-18	2018	Mar-19	Jun-19	Sep-19	Dec-19	2019E	
(\$ in thousands, except per share data)	1Q16	2Q16	3Q16	4Q16		1Q17	2Q17	3Q17	4Q17		1Q18	2Q18	3Q18	4Q18		1Q19E	2Q19E	3Q19E	4Q19E		
Revenues:																					
Project	\$229	\$883	\$594	\$1,494	\$3,200	\$360	\$591	\$561	\$371	\$1,884	845	2,941	4,731	2,237	\$10,754	\$1,950	\$2,450	\$3,950	\$5,950	\$14,300	
Maintenance and technical support	608	603	619	401	2,231	315	311	288	\$213	1,128	257	252	371	289	1,170	358	358	358	358	358	1,430
IT asset management services	167	161	154	191	674	360	260	197	\$56	873	46	47	-	32	124	193	193	193	193	193	770
Total Revenues	\$1,004	\$1,647	\$1,367	\$2,086	\$6,105	\$1,036	\$1,163	\$1,046	\$641	\$3,885	1,148	3,240	5,102	2,559	\$12,049	\$2,500	\$3,000	\$4,500	\$6,500	\$16,500	
Cost of revenues													0.57								
Project	141	378	303	759	1,581	346	376	458	307	1,488	548	1,847	2,685	1,294	6,374	1,050	1,300	2,100	3,100	7,550	
Maintenance and technical support	268	196	263	59	786	147	88	131	93	459	103	108	89	109	409	143	143	143	143	143	572
IT asset management services	78	98	79	111	366	138	122	69	19	348	20	28	-	13	61	88	88	88	88	88	350
Total Cost of Revenues	486	672	645	929	2,732	631	586	658	419	2,295	671	1,983	2,774	1,416	6,844	1,281	1,531	2,331	3,331	8,472	
Gross Profit	518	975	722	1,157	\$3,372	404	577	387	221	\$1,590	477	1,257	2,328	1,142	\$5,204	\$1,220	\$1,470	\$2,170	\$3,170	8,028	
	52%	59%	53%	55%	55%	39%	50%	37%	35%	41%	42%	39%	46%	45%	43%	49%	49%	48%	49%	49%	
Operating Expenses:																					
Selling and marketing expenses	86	85	62	45	278	69	50	27	33	179	41	74	73	100	289	100	100	100	100	400	
Salaries, wages and contract labor	886	939	759	787	3,370	736	840	784	739	3,099	766	1,315	1,072	1,147	4,300	1,175	1,175	1,175	1,175	4,700	
Research and development	55	74	72	70	272	88	72	66	85	311	135	143	123	88	489	125	125	125	125	500	
Professional fees	77	92	60	77	306	120	85	87	101	394	64	60	64	57	245	100	100	100	100	400	
General and administrative expenses	180	239	199	272	890	248	310	210	283	1,052	210	295	360	586	1,451	400	400	400	400	1,600	
Impairment loss on intangible assets & goodwill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Operating Expenses	1,285	1,428	1,152	1,252	5,116	1,260	1,358	1,175	1,241	5,034	1,216	1,888	1,692	1,978	6,774	1,900	1,900	1,900	1,900	7,600	
Profit (loss) from Operations	(767)	(453)	(430)	(94)	(1,744)	(856)	(781)	(788)	(1,020)	(3,444)	(740)	(631)	636	(836)	(1,570)	(681)	(431)	270	1,270	428	
Salaries -percentage	88%	57%	55%	38%	55%	71%	72%	75%	115%	80%	67%	41%	21%	45%	36%	47%	39%	26%	18%		
R&D percentage	6%	4%	5%	3%	4%	8%	6%	6%	13%	8%	12%	4%	2%	3%	4%	5%	4%	3%	2%		
Other Income (Expense):																					
Interest Income (Expense)	(72)	(144)	(162)	(183)	(561)	(921)	(833)	(1,526)	(1,239)	(4,519)	(6)	(4)	(5)	(2)	(17)	(5)	(5)	(5)	(5)	(20)	
Other Income (Expense) - Non Cash	1	(66)	0	(191)	(256)	(518)	295	2,189	844	2,810	2	1	1	2	6	1	1	1	1	4	
Total Other Income (Expense)	(71)	(210)	(161)	(375)	(817)	(1,439)	(538)	663	(395)	(1,709)	(4)	(4)	(4)	0	(11)	(4)	(4)	(4)	(4)	(16)	
Net Income (Loss) before Taxes	(838)	(663)	(591)	(469)	(2,561)	(2,295)	(1,318)	(125)	(1,415)	(5,153)	(743)	(634)	633	(836)	(1,581)	(685)	(435)	266	1,266	\$412	
Income Tax Provision	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Series A preferred stock dividends	-	-	-	(6)	(6)	(6)	(6)	(6)	(0)	(18)	-	-	-	-	-	-	-	-	-	-	
Net income (loss) applicable to common stock	(838)	(663)	(591)	(475)	(2,567)	(2,301)	(1,324)	(131)	(1,415)	(5,171)	(743)	(634)	633	(836)	(1,581)	(685)	(435)	266	1,266	412	
Net income (loss) per common share	(\$0.45)	(\$0.35)	(\$0.31)	(\$0.25)	(\$1.36)	(\$1.21)	(\$0.70)	(\$0.07)	(\$0.16)	(\$1.43)	(\$0.04)	(\$0.03)	\$0.02	(\$0.04)	(\$0.08)	(\$0.03)	(\$0.02)	\$0.01	\$0.05	\$0.02	
Weighted average shares outstanding	1,883,598	1,883,598	1,883,598	1,883,598	1,883,598	1,894,171	1,894,923	1,899,716	8,736,794	3,606,401	20,709,478	20,707,153	26,412,450	21,000,000	20,796,132	24,000,000	24,800,000	25,000,000	25,000,000	24,700,000	

Sources: Company Reports and ThinkEquity Estimates

Figure 8. Duos Technologies Group, Inc.—Valuation Comparables, Prices as of 4/12/19

(In millions, except per share data)

Ticker	Company Name	Stock Price 4/12/2019	% of 52-Week		Shares Out.	Market Cap	Enterprise Value	Revenue		EBITDA		EPS	
			High	Low				LTM	CY+1	LTM	CY+1	LTM	CY+1
NasdaqGS:DMRC	Digimarc Corporation	31.12	89.4%	221.8%	11.7	364.4	320.8	21.2	22.9	(31.5)	(23.9)	(2.86)	(2.89)
AMEX:INS	Intelligent Systems Corporation	35.33	93.0%	712.3%	8.9	312.7	293.4	20.1	NA	6.8	NA	0.70	NA
NasdaqCM:SPCB	SuperCom Ltd.	1.46	54.9%	119.7%	15.0	21.8	28.9	27.7	25.9	(0.1)	4.0	(0.32)	0.23
NasdaqCM:MITK	Mitek Systems, Inc.	11.86	90.7%	187.7%	38.7	459.3	440.2	69.1	88.9	5.0	20.2	(0.25)	0.44
NasdaqGM:AWRE	Aware, Inc.	3.40	74.3%	113.3%	21.6	73.3	21.7	16.1	NA	0.8	NA	0.06	NA
NasdaqCM:BKYI	BIO-key International, Inc.	1.32	36.3%	176.0%	14.0	18.5	18.1	4.0	11.0	(6.8)	NA	(0.73)	(0.13)
AIM:SPSC	Spectra Systems Corporation	1.70	100.0%	173.3%	45.8	78.1	65.1	12.5	12.2	4.9	4.3	0.08	0.08
NasdaqCM:APDN	Applied DNA Sciences, Inc.	0.65	35.3%	216.7%	36.8	24.0	23.0	4.1	11.4	(11.1)	(3.5)	(0.39)	(0.20)
Max		35.33	100.0%	712.3%	45.8	459.3	440.2	69.1	88.9	6.8	20.2	0.70	0.44
Median		2.55	81.8%	181.8%	18.3	75.7	47.0	18.1	17.5	0.3	4.0	(0.29)	(0.02)
Min		0.65	35.3%	113.3%	8.9	18.5	18.1	4.0	11.0	(31.5)	(23.9)	(2.86)	(2.89)
Mean		10.86	71.7%	240.1%	24.1	169.0	151.4	21.9	28.7	(4.0)	0.2	(0.47)	(0.41)
DUOT	Duos Technologies Group, Inc.	0.72	90.0%	288.0%	24.7	17.8	19.1	10.1	12.3	(1.69)	NA	(0.13)	(0.06)

Ticker	Company Name	LT Growth Rate (%)	Est. 1 Year Growth (%)		TEV/Revenue			TEV/EBITDA			P/E		
			Revenue	EBITDA	LTM	CY+1	CY+2	LTM	CY+1	CY+2	LTM	CY+1	CY+2
NasdaqGS:DMRC	Digimarc Corporation	20.0	8.0	NA	15.14x	14.01x	11.59x	NM	NM	NM	NM	NM	NM
AMEX:INS	Intelligent Systems Corporation	NA	NA	NA	14.60x	NA	NA	43.4x	NA	NA	50.5x	NA	NA
NasdaqCM:SPCB	SuperCom Ltd.	NA	(22.1)	2009.6	1.04x	1.11x	1.01x	NM	7.3x	5.4x	NM	6.3x	4.9x
NasdaqCM:MITK	Mitek Systems, Inc.	15.0	33.0	43.5	6.37x	4.95x	NA	88.4x	21.8x	NA	NM	27.2x	NA
NasdaqGM:AWRE	Aware, Inc.	NA	NA	NA	1.34x	NA	NA	26.3x	NA	NA	59.4x	NA	NA
NasdaqCM:BKYI	BIO-key International, Inc.	NA	171.2	NA	4.49x	1.65x	1.08x	NM	NA	NA	NM	NM	13.2x
AIM:SPSC	Spectra Systems Corporation	NA	(2.4)	(14.8)	5.07x	5.34x	5.01x	12.9x	15.1x	14.2x	20.7x	20.6x	18.8x
NasdaqCM:APDN	Applied DNA Sciences, Inc.	NA	180.1	NA	5.55x	2.02x	NA	NM	NM	NA	NM	NM	NA
Max		20.0	180.1	2009.6	15.14x	14.01x	11.59x	88.4x	21.8x	14.2x	59.4x	27.2x	18.8x
Median		17.5	20.5	43.5	5.31x	3.49x	3.04x	34.9x	15.1x	9.8x	50.5x	20.6x	13.2x
Min		15.0	(22.1)	(14.8)	1.04x	1.11x	1.01x	12.9x	7.3x	5.4x	20.7x	6.3x	4.9x
Mean		17.5	61.3	679.4	6.70x	4.85x	4.67x	42.8x	14.7x	9.8x	43.5x	18.1x	12.3x
DUOT	Duos Technologies Group, Inc.	NA	216.1	NA	1.89x	1.56x	1.16x	NM	NA	NA	NM	NM	36.0x

Ticker	Company Name	5-Year Historical CAGR (%)			LTM Margins (%)			Ratios			Returns (%)		
		Revenue	EBITDA	EPS	Gross	EBIT	EBITDA	DSO	DPO	DIO	ROA	ROE	ROIC
NasdaqGS:DMRC	Digimarc Corporation	(9.5)	NM	NM	54.19	(158.19)	(148.42)	88.6	56.5	NA	(27.9)	(46.8)	(30.2)
AMEX:INS	Intelligent Systems Corporation	4.3	42.8	42.3	57.59	30.56	33.61	44.8	12.7	NA	15.0	27.5	16.9
NasdaqCM:SPCB	SuperCom Ltd.	24.8	NM	NM	44.99	(17.05)	(0.48)	202.8	113.1	131.3	(5.2)	(13.4)	(7.3)
NasdaqCM:MITK	Mitek Systems, Inc.	34.1	NM	NM	85.61	(1.52)	7.21	48.8	137.0	NA	(0.6)	(11.0)	(0.8)
NasdaqGM:AWRE	Aware, Inc.	(3.6)	(30.3)	(18.6)	92.31	2.36	5.11	103.0	43.0	NA	0.4	2.0	0.4
NasdaqCM:BKYI	BIO-key International, Inc.	15.3	NM	NM	(2.96)	(169.83)	(167.35)	208.3	42.4	85.3	(30.9)	(56.7)	(35.5)
AIM:SPSC	Spectra Systems Corporation	1.5	NM	NM	71.77	31.13	39.17	35.9	28.2	363.4	8.7	16.1	9.7
NasdaqCM:APDN	Applied DNA Sciences, Inc.	12.3	NM	NM	75.15	(281.83)	(269.15)	122.1	300.2	95.7	(92.6)	(263.8)	(132.0)
Max		34.1	42.8	42.3	92.31	31.13	39.17	208.3	300.2	363.4	15.0	27.5	16.9
Median		8.3	6.3	11.9	64.68	(9.28)	2.31	95.8	49.7	113.5	(2.9)	(12.2)	(4.0)
Min		(9.5)	(30.3)	(18.6)	(2.96)	(281.83)	(269.15)	35.9	12.7	85.3	(92.6)	(263.8)	(132.0)
Mean		9.9	6.3	11.9	59.83	(70.55)	(62.54)	106.8	91.6	168.9	(16.6)	(43.3)	(22.3)
DUOT	Duos Technologies Group, Inc.	NA	NA	NA	42.28	(17.31)	(16.64)	48.0	76.9	NA	(43.9)	NM	NM

Sources: Thomson Reuters, Google Finance and ThinkEquity Estimates

Important Disclosures

Analyst Certification

The analyst, Ashok Kumar, responsible for the preparation of this research report attests to the following: (1) that the views and opinions rendered in this research report reflect his or her personal views about the subject companies or issuers; and (2) that no part of the research analyst’s compensation was, is, or will be directly related to the specific recommendations or views in this research report.

Financial Interests

The analyst, Ashok Kumar, has no financial interest in the debt or equity securities of the subject company of this report. Further, no member of his household has any financial interest in the securities of the subject company. Neither the analyst, nor any member of his household, is an officer, director, or advisory board member of the issuer(s) or has another significant affiliation with the issuer(s) that is the subject of this research report. The analyst has not received compensation from the subject company. At the time of this research report, the analyst does not know, or have reason to know, of any other material conflict of interest.

Duos Technologies Group, Inc. Rating History as of 04/12/2019
powered by: BlueMatrix



ThinkEquity, a Division of Fordham Financial Management, Inc.

ThinkEquity is a division of Fordham Financial Management, Inc. (Fordham), a member of FINRA and SIPC. Fordham or an affiliate does not have a client relationship with and has not received compensation from this subject company Duos Technologies Group, Inc. in the last 12 months. Fordham expects to receive or intends to seek investment banking business from the subject company in the next three months. Fordham does not make a market in the securities of the subject company of this report at the time of publication. Fordham does not hold a beneficial ownership of more than 1% or more of any class of common equity securities of the subject company.

This report is for information purposes only. Under no circumstances is it to be used or considered as an offer to sell, or a solicitation of an offer to buy any security. While the information contained in this report has been obtained from sources believed to be reliable, we have not independently verified the information and we do not represent or guarantee that the report is accurate or complete and it should not be relied upon as such. Any references or citations to, or excerpts from, third-party information or data sources (including, but not limited to, Bloomberg and Capital IQ) do not and are not intended to provide financial or investment advice and are not to be relied upon by anyone as providing financial or investment advice. Based on public information available to us, prices and opinions expressed in this report reflect judgments as of the date hereof and are subject to change without notice. The securities covered by or mentioned in this report involve substantial risk and should generally be purchased only by investors able to accept such risk. This research report and the securities mentioned herein, some of which may not be registered under the Securities Act of 1933, are intended only for Qualified Institutional Buyers (QIBs), as defined under Rule 144A. Any opinions expressed assume that this type of investment is suitable for the investor.

Ratings Definitions

Think Equity rating definitions are expressed as the total return relative to the expected performance of S&P 500 over a 12-month period.

BUY (B) - Total return expected to exceed S&P 500 by at least 10%

HOLD (H) - Total return expected to be in-line with S&P 500

SELL (S) - Total return expected to underperform S&P 500 by at least 10%

Current Ratings Distribution

This Equity Ratings Distribution reflects the percentage distribution for rated equity securities for the twelve month period March 30, 2018 through March 31, 2019. Within the twelve month period ended March 25, 2019, ThinkEquity, LLC (TE) has provided investment banking services to 17% of companies with equity rated a Buy, 0% of companies with equity rated a Hold and 0% of companies with equity rated a Sell. As of March 25, 2019, ThinkEquity, LLC had six stocks under coverage: Buy 6 (100%), Hold 0 (0%), Sell 0 (0%).