**GLUU** CENTER FOR GLOBAL FINANCIAL STUDIES October 13, 2019 Sunday. Page 1 Symbol: GLUU Glu Mobile Inc. **Investment Thesis** Analyst Alexandros Giannakitsidis UNIQUE LONG-TERM GROWTH PROSPECTS AND CONSUMER INTEREST Buy below \$5.10 Sell above \$7.03 I am initiating coverage of GLU Mobile Inc. with a BUY limit order at \$5.10 and a \$6.37 price target. I think that GLU Mobile has a unique business model that benefits from the increase in the use of cellular phones and benefits from the increase in casual mobile 99% Probability of Price Increase gaming and the growth of the gaming industry in general. All of their games are on platforms like Google Playstore and Apple App \$5.47 Last Price store. Currently the stock is undervalued in my opinion due to lower guidance based on news of new game releases being pushed back Intrinsic Value \$5.62 a quarter. While being a company that is still growing at an high rate with a growing industry provides a unique chance to invest into Target Dividends \$0.00 a stock that has a chance for high returns. GLUU is valued based on two specific metrics, which is average daily users and average daily bookings. One measures the amount of people who constantly play their games and the other metric measures the average Target Price \$6.37 amount spent by players in-game. Average bookings per daily user has seen a steady increase of 5-10% quarter over quarter. GLUU has several patents for certain games, which have an average life of 5 years. I believe that GLUU will create value to stockholders Share Price Performance once they release Deerhunter and Disney games slated for 2020, GLUU aslo accounts for 15% of ad revenue, I believe the GLUU is one of the few competitors in this space that offers a high growth potential due to their partnerships and patents for certain 12 games as well as a general increase in the population of mobile gamers due to increased phone sales and industry growth. 10 For the long: 15 (subjected in 15) 1. New game releases as well as continued consumer interest in current growth and catalog titles: GLUU has fallen drastically over the last 12 months, not due to any poor performance in their financials or industry risks, but due to ٤ the fact that they had to push back their game releases of DeerHunter and Disney Sorcerer's Stone. With the news that these games had fallen behind in production management called for a lower guidance that stockholders were not pleased with. My belief is that once these titles will be released the stock will bounce back from these inconsistencies in price as the company has seen growth inrevenue of 30-40% for the last three years with having 4 quarters of positive earnings results. The sustainability of the catalog titles like Diner Dash and Kim Kardashian Hollywood will provide a stable base for growth along with their growth titles that have higher returns. My believe is that the stock will correct by about 50-100bps ounce games have been released into the market. Growth in Iphone and Google playstore users during seasons like Christmas could see a growth in daily users: With the growth in cellular users and the tendency for people to buy new phones during holiday seasons provides the chance at the moment to buy GLUU before a good revenue session for the company as users start to fill their phone with apps and games. Completion of a new headquarters providing less costs of producing games: Communication Services Volume GI.UU GLUU has recently completed a new headquarters in San Fransisco. This will be beneficial as they are now able to pool most resources into one centralized locations as well as lowering their lease requirements. Overall the company will benefit from the Glu Mobile Inc. develops, publishes, and markets a portfolio of free-to-play mobile games for the lower cost of production and maximizing their profits. 4) Maintaing sustained partnerships and deals with large companies like WWE and DISNEY GLUU produces many games for large brand names like MLB, WWE, and DISNEY. This provides value to the company itself and has a direct affect on their bottom line. Maintaing these relationships and releasing new content will help the stock increase in price Communication Services when titles like these are released by 50bps annually. Industry Entertainment For the short Last Guidance December 11, 2018 1. Fail to timely develop and publish new high quality games and failing to continually enhance current games: Next earnings date November 6, 2019 The current product cycle for GLUU has the company releasing a certain amount of high profile games a year, but if they were to fail behind schedule like now for example the stock price may see a downward turn. As well as not providing new content to existing games like previously with another title could cost the company dearly. de Masi, Niccolo, Executive Chairman 2. Reliance on a very small portion of total players for nearly all of their revenue: Earl, Nick, President, CEO & Director GLUU markets free to playgames with in-app purchases meaning that most of their revenue comes from in-game purchases by Ludwig, Eric, Executive VP, COO & CFO players. Most people don't buy virtual goods meaning that if there is a downturn in the economy or lower consumer spending a GLUU would suffer greatly Leichtner, Scott, VP. General Counsel & Corporate Secretary Akhavan Christopher Chief Revenue Officer Key Catalysts for price change Lee, Gordon, VP of Accounting & Principal Accounting Officer · Average Daily users and average bookings per daily average users · Growth in cell-phone use · Creating value in their growth games as well as maintaining their catalog titles and maintain key partnerships SciPlay Corporation Carbonite, Inc. A10 Networks, Inc. Monotype Imaging Holdings Inc. Shutterstock, Inc. My \$6.37 price target is derived from Discounted Unlevered Free Cash Flow estimates. Zynga Inc Blucora, Inc. MobileTron Inc Quotient Technology Inc Shares outstanding (mil) 145 88 Market Capitalization (mil) \$797.99 Last Price per share Weighted Diluted shares outstanding (mil) \$5.47 151 27 52 week high \$11.75 Options and Warrants (Shares equivalent) 15 01 % shares held by institutions 52-week low \$4.11 67% 58.97% 51% 12.31% Volatility % shares held by investments Managers Daily volume (mil) 174 % shares held by hedge funds 12.81% 6 79% % shares held by VC/PE firms 0.038% Short interest Davs to cover short interest 3.11 % shares held by insiders 1.73% -4.69% Beta 1.23 Poison Pill and Type NONE Quarterly Earning Surprises (Actual/Median Estimates) Profitability GLUU (LTM) **GLUU** Historical Peers' Median (LTM) Last 5 quarters Return on Capital 12 5% 6/30/2018 \$360,772 (-1.3%) Adjusted EBITDA Margin 10.0% 32 41% 9/30/2018 62 55% \$397.14 (3.8%) 5.1% 12/31/2018 Return on Equity \$382.56 (-0.5%) Adjusted Net margin 2 9% 3/31/2019 \$383.54 (6.9%) Invested Funds GLUU (LTM) **GLUU** Historical Peers' Median (LTM) 6/30/2019 \$382.16 (-5.5%) 0.0% Cash/Capital 53.4% History Last 10 years NWC/Capital 25.6% 0.0% Mean Surprise 1.28% Operating Assets/Capital 93.2% 0.0% 99th percentile "surprise" range -22% to 25% 0.0% Goodwill/Capital 62 4% **EBITDA** Last 5 quarters Capital Structure GLUU (LTM) **GLUU** Historical Peers' Median (LTM) 6/30/2018 \$-5.652 (-117.1%) 9/30/2018 Total Debt/(Market Cap.+ Other Claims on Capital) \$20 172 (-50 3%) 12/31/2018 Minority Interest/(Market Cap.+ Other Claims on Capital) \$212 (-95%) Preferred Equity/(Market Cap.+ Other Claims on Capital) 3/31/2019 \$9.568 (-68.5%) CGFS Credit Rating С СС 6/30/2019 \$16.128 (-47.3%) History: Credit Rating Mode d to ccc+ b- to b Last 10 years Probability of Default Model bbb bb to bb-106.27% Likely Current Cost of Debt 0.00% 5 27% 99th percentile "surprise" range -510% to 723% Likely Current Cost of Equity (Cost of Debt + MRP) 674% 12 01% Likely Current WACC 12 00% 12.0%

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Glu Mobile Inc.	Symbol: GLUU		Cost of Capital Estimates			
Analyst	Alexandros Giannakitsidis			CGFS Credit Rating	Credit Rating Model	Probability of Default ModelModel
Buy below	\$5.10		Implied Cost of Borrowing (GLUU)	6.5%	7.7%	4.9%
Sell above	\$7.03		Implied Cost of Borrowing (Peers)	5.8%	6.1%	5.7%
Probability of Price Increase	99%			Base Year	Explicit Period (15 years)	Continuing Period
Last Price	\$5.47		Cost of New Debt Estimate	7.70%	7.70%	•
Intrinsic Value	\$5.62		Country Risk Premium Estimate	6.74%	6.74%	_
Target Dividends	\$0.00		Cost of Equity Estimate	14.44%	14.44%	_
Target Price	\$6.37		WACC Estimate	14.07%	14.07%	
Forecast Assumptions	Ψ0.07		WACC ESTINIBLE	14,07 %	14,07 //	0 17,0776
Fiscal Year	Revenue Growth	EBITDA Margin	CAPEX/Revenue	DPR/CAPEX	Other	
Base Year (Actual)	21.74%	7.1%	0.9%	0.87	SBC/Revenue	5.64%
	10.00%	8.0%	1.1%	0.85	SBC/ Revenue	
year 1		10.0%			Lauran danna	Constant/same as LTM
year 2	25.00%		1.0%	0.86	Lease term	5
year 3	30.00%	15.0%	1.0%	0.79	Rent Expense/Revenue	1.58%
year 4	25.00%	12.0%	0.9%	0.80		Tappers off to historical average
year 5	-5.00%	14.0%	0.9%	0.80	R&D life	1
year 6	20.00%	12.0%	0.8%	0.85	R&D Expense/Revenue	21.91%
year 7	30.00%	10.0%	0.7%	0.85		Constant/same as LTM
year 8	25.00%	10.0%	0.7%	0.88	LIFO Reserve	Tappers off to zero
year 9	25.00%	10.0%	0.7%	0.90	Non-operating pension costs	Tappers off to zero
year 10	-8.00%	8.0%	0.7%	0.90	Net financing pensions costs	Tappers off to zero
year 11	20.00%	8.0%	0.6%	0.92	Overfunded pension plans	Tappers off to zero
year 12	20.00%	7.0%	0.6%	0.94	Capitalized interests	Constant/same as LTM
year 13	20.00%	7.0%	0.5%	0.95	Dividends/Revenue	0.00%
year 14	20.00%	6.0%	0.5%	0.97	Tax Rate	26.10%
year 15	18.00%	6.0%	0.5%	0.99		
Continuing Period	2,52%	6.0%	1%	1,00		
Simulation Assumptions						
Random Variables	Distribution Assumption	MAX	Likelly	MIN		
Deviations in annual Revenue GrowthExpl. Per.	Triangular	10.00%	0%	-5.00% [	Sensitivity: Price Varian	nce Attribution Analysis
Deviations in annual Revenue GrowthCont. Per.	Normal	1,52%	0%	-1.52%		Revenue growth
Deviations from EBITDA Margin base annual estimates	Triangular	9.00%	0%	-4.00%		EBITDA Margin
Deviations from CAPEX/Revenue base annual estimates	Triangular	1.91%	0%	0,38%		65.03% CAPEX/Rev
Deviations from Kd base annual estimates	Triangular	5,80%	0%		.83%	Discount Rate
Deviations from CRP base annual estimates	Triangular	1,36%	0%	-2.38%		
Deviations from TEV/Revenue base estimate	-	1.76	0%	-1.63		TEV/Rev
Deviations from TEV/Revenue base estimate  Deviations from TEV/Revenue base estimate	Triangular		0%	0.02%		TEV/EBITDA
	Triangular	49.89		-7.94 0.00%		P/BV
Change in P/BV (TTM)	Triangular	16.65	0%	-1.88		P/E
Change in P/E (FW)	Triangular	60.00	0%	-10,00		
Recovery Rate	Triangular	10.00%	0%	-10%		Asset Recovery Rate
Valuation						
DCF Valuation				Intrinsio	: Value DistributionProba	bility (Upside)=99%
	Base	Explicit Period (Average)	•			
Revenues	\$386.35	\$1,735.21	\$4,613.19			
EBITDA Margin	10%	10%	6%			
UFCF	\$50.12	\$123.73	\$268.89			
WACC	14.07%	14.07%	14.07%			
ROIC	12.54%	29.44%	19.71%			
					وألا وأوالتي التو	
Relative Valuation						
	Median Justified Multiple	Basis	Implied Equity Value			
EV/Rev (FW)	1.6x	\$456.71	\$797.49	N 1- 0 4 0	4 0 0 0 0 0 0	N 0 N 0 N 0 4 0
EV/EBITDA (FW)	10.1x	\$39.59	\$448.37	** ** ** ** ** ** ** ** ** ** ** ** **	\$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5 \$0.5	۵, <sup>۳</sup> ۵ <sub>۲,</sub> <sup>۳</sup> ۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴۵, ۴
P/BV (TTM)	3.4x	\$280.47	\$939.74	' K' K' K' K ^	K" K" * X" X * X *	x x øð, øð, øð, øð,
P/E (FW)	18.3x	\$28.86	\$526.70			
•						
Asset Based Valuation			Valuation Summary	Intrinsic Value	Target Price	Model Weight
Recovery Rate	60%		DCF Valuation	\$ 8.37	-	<u>-</u>
•	\$1,096.88		EV/Rev (FW)	\$ 4.80		
Capital				·		
	\$123.06		EV/EBITDA (FW)	\$ 270	) 5	23/6
Capital Intangibles Claims	\$123.06 \$56.98		EV/EBITDA (FW) P/BV (TTM)	\$ 2,70 \$ 5,65		
Intangibles Claims	\$56.98		P/BV (TTM)	\$ 5.65	5 \$ 6.45	0%
Intangibles	·		P/BV (TTM) P/E (FW)	\$ 5.65 \$ 3.17	5 \$ 6.45 7 \$ 3.61	0% 0%
Intangibles Claims	\$56.98		P/BV (TTM)	\$ 5.65	5 \$ 6.45 7 \$ 3.61 7 \$ 3.62	0% 0% 0%