

SmartUp Academy

Foundations Course

Lecture 4

Business Models



The SmartUp Founding Team



SmartUp
Academy



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SmartUp

THE SMART WAY TO BUILD A STARTUP

SmartUp Academy

A program to teach the **profession** of building successful companies (...work in progress)

- The Foundations Course
 - The three pillars for a successful company:
 - Profitable
 - Fast growing
 - Modest investment
- Workshops – Specific Subjects
- **4-5 years Residency Program**



The Language of Business

Moving from Science to Business

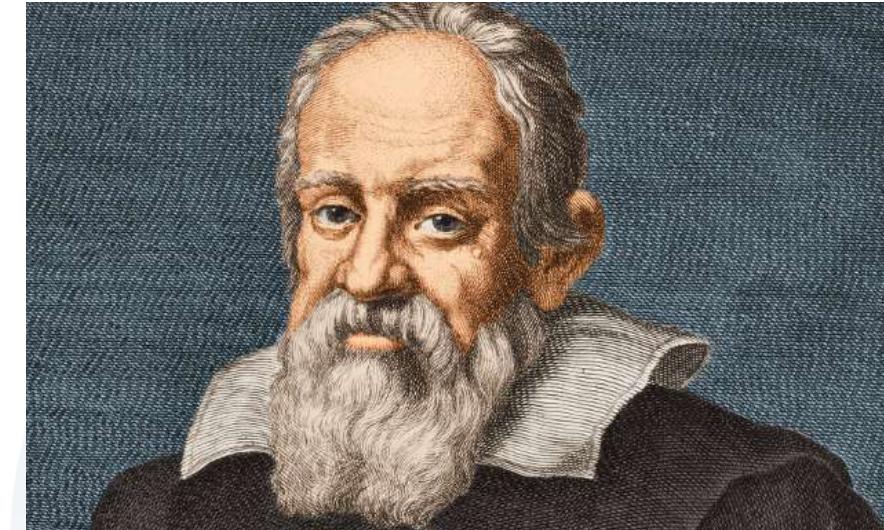
“Mathematics is the language in which God has written the universe !” Galileo Galilei 1564 – 1642

Galileo was the first to write an equation in physics, and paved the way to Newton

What is the language of business?

Money !! Models to evaluate options

Every decision has to be expressed in monetary terms



SmartUp Academy – Successful Companies

The three **pillars** for a successful company:

1. Profitable
2. Fast growing
3. Modest investment

But why Profitable, Fast Growing and with a Modest Investment?



Why Profitability?

What is the difference between a company that

- generates a profit of a million dollars a year,
- and a company that loses a million dollars a year?



Why Profitability?

- A company that loses a million dollars a year
 - Lives on borrowed time until it runs out of money and dies
- A company that generates a million dollars a year
 - Lives the Infinite Game, thrives and grows
- A company that generates a million dollars a year:
 - Has figured out a successful business model
 - Has time and resources to pursue their worthy purpose
 - Has independence to do whatever they need to do
 - Has a much higher probability for a very successful EXIT, if and when interested



The 3 Pillars of a SmartUp Successful Company

- **Why Fast Growing?**

- Ability to pay the investment back, and show a return on investment
- Compounded growth in the value of the company
- ...and a company that doesn't grow is just not interesting

- **Why Modest Investment?**

- More financing sources available
- Founders keep much bigger ownership
- Easier to raise money because a seed financing might be all you need
- Innovative financing structures



The SmartUp Business Model

- The SmartUp Business Model is a spreadsheet that models how your business evolves over time, based on your assumptions
- Each column represents a period of time, usually a month, or a quarter, and sometimes, a year
- Each raw is an item, like “number of units sold”, “revenues”, “Engineering salaries”, etc.
- The SmartUp business model is a powerful tool for analyzing and evaluating business options like: pricing, payment terms, hiring and many more
- The same model, if done properly, is then used for tracking company operations and performance



The SmartUp Business Model

The SmartUp Business Model

- In every business model there are two sections that evolve over time
 - Income, or sales, or revenues
 - Expenses
- Subtracting the Expenses from Income yields Profits (or Loss)
Profits (Loss) = Income – Expenses
- Income is usually modeled and tracked by the different sources of income:
 - Products – a line per product, or family of products
 - Services, consulting,
 - Other, depending on the company



The SmartUp Business Model

- Expenses are usually divided into three categories
 1. Sales expenses, direct expenses per sale
 - Cost of producing and delivering the product (think shoes, bread, cars)
 - Cost of selling the product
 - CAC – Customer Acquisition Cost
 - Sales cost – salespeople salaries, commissions, distribution (stores, resellers...)
 2. Stable expenses – expenses that are not related to each sale, usually include salaries of Management, Engineering, Marketing, etc., and then overhead of operations like rent, legal, cloud computing, etc.
 3. One-time big expenses, like building a lab, or building a manufacturing facility or a warehouse
- The SmartUp Business Model is an operational cashflow model, NOT the accounting Profit & Loss (P&L) standard report



The SmartUp Business Model

- Every model is based on assumptions, like time to market, pricing, Customer Acquisition Cost, sales growth rate, and many more
- The assumptions have to be stated clearly, and used **EXPLICITLY** in the model, as parameters
- The purpose of the model is to test different values of these parameters to see the impact they have on the business



Tanagora Business Model Exercise

- Tanagora Inc. wants to build software to optimize production of tagamachies
- They assume it will take them a year to develop the software, with three engineers, one of them is the Founder CTO
- They assume they will be able to hire the first engineer in month 2, and the third engineer in month 3
- Let's compute the cost, and investment, needed to develop the Tanagora software



Tanagora Product Development Cost Business Model

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Tanagora Inc. Business Model - Product Development															
2																
3	Founder fully loaded cost per month			\$8,000												
4	Engineer fully loaded cost per month			\$10,000												
5	Salesperson fully loaded cost per month			\$10,000												
6	Customer success fully loaded cost per month			\$7,000												
7	Admin fully loaded cost per month			\$6,000												
8																
9	Salaries represent	70%	of total cost													
10																
11	Founders	2														
12	Engineers	2														
13	Admin	0														
14	Year 1															
15		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
16																
17	Founders	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	Engineers	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2
19	Salespeople	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
20	Customer Success	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Admin	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
22																
23	Fully loaded salaries	\$16,000	\$26,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$42,000	\$42,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000	\$52,000
24	Overhead	\$4,800	\$7,800	\$10,800	\$10,800	\$10,800	\$10,800	\$10,800	\$12,600	\$12,600	\$15,600	\$15,600	\$15,600	\$15,600	\$15,600	\$15,600
25																
26	Total Expenses	\$20,800	\$33,800	\$46,800	\$46,800	\$46,800	\$46,800	\$46,800	\$54,600	\$54,600	\$67,600	\$67,600	\$67,600	\$67,600	\$67,600	\$67,600
27																
28	Investment needed	\$20,800	\$54,600	\$101,400	\$148,200	\$195,000	\$241,800	\$288,600	\$343,200	\$397,800	\$465,400	\$533,000	\$600,600	\$668,200	\$735,800	\$803,400
29																
30																

Development Cost of \$600,000

Tanagora Business Model Exercise

- Sales Model - Since Tanagora's product is new and complex, they decide to sell the software using a direct sales force and assume it will take 3 months to train a salesperson
- Pricing - They believe they can sell a SaaS license for \$1,000 a month
- Sales Forecast - They believe they can grow sales from 1 new customer in the first month of sales (year 2) to 8-10 new customers a month by the end of year 2, and continue to grow the number of new customers by 1 every month
- They assume no customer attrition (no churn)



Tanagora Business Model Exercise

- Sales Forecast – Customer Acquisition Cost (CAC). Since they decided to go with a direct sales process, they did not include marketing expenses or CAC
- To simplify the model, salespeople's compensation was calculated at flat \$10,000/month, \$120,000 annually
- A salesperson at full quota is expected to bring in 5 new customers a month, or \$60,000 annually, thus direct cost of salespeople is $16.6\% = \$10,000 / \$60,000$



Sales Plan for Second and Third Years

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	Salesperson fully loaded cost per month			\$10,000																					
2	Customer success fully loaded cost per month			\$7,000																					
3	Admin fully loaded cost per month			\$6,000																					
4																									
5	Salaries represent			70% of total cost																					
6																									
7	Add 1 salesperson to generate	5																							
8	Add 1 salesperson to support	50																							
9	Add 1 customer success person to sup	80																							
10																									
11	Product Monthly License			\$1,000																					
12																									
13																									
14																									
15																									
16	Number of new customers	1	1	2	2	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
17	Total number of customers	1	2	4	6	9	12	16	21	27	34	42	51	61	72	84	97	111	126	142	159	177	196	216	237
18	Sales in thousands	\$1	\$2	\$4	\$6	\$9	\$12	\$16	\$21	\$27	\$34	\$42	\$51	\$61	\$72	\$84	\$97	\$111	\$126	\$142	\$159	\$177	\$196	\$216	\$237
19																									
20	Number of salespeople for new accounts	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	
21	Number of salespeople for existing customers	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	3	3	3	4	4	4	4	
22	Number of customer success people	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	
23																									
24	Cost of Sales in thousands	\$14	\$14	\$14	\$14	\$29	\$29	\$29	\$29	\$43	\$43	\$53	\$53	\$76	\$76	\$86	\$86	\$110	\$119	\$119	\$129	\$129			
25																									
26	Gross Margin, or Sales Contribution	\$13	\$12	\$10	\$8	\$20	\$17	\$13	\$8	\$2	\$9	\$1	\$2	\$8	\$19	\$8	\$21	\$25	\$40	\$56	\$49	\$58	\$77	\$87	\$108
27																									



Tanagora Business Model Exercise

A combined P&L view of Tanagora's Business Model – Year 1

Tanagora Business Model Exercise

A combined P&L view of Tanagora's Business Model – Year 2

Tanagora Business Model Exercise

Investment Needed - \$1,831,700
Turn Profitable on month – 34

A combined P&L view of Tanagora's Business Model – Year 3

Tanagora Business Model Exercise

A combined P&L view of Tanagora's Business Model – Year 4

Tanagora Business Model Exercise

Paid Investment back on Month - 52

A combined P&L view of Tanagora's Business Model – Year 5

The SmartUp Business Model

The SmartUp Business Model calculates three parameters

1. How long does it take the company to turn to profitability
2. How much money is needed before the company turns profitable
3. How long does it take to pay the investment back

In the Tanagora exercise the answers were:

1. Took 34 months to turn to Profitability
2. Required investment of \$1,831,700
3. Took 52 months to pay the investment back



The SmartUp Business Model - Successful Companies

The three **pillars** for a successful company, and how they are measured:

- 1. Profitable** - How long does it take the company to turn to profitability (in months)
- 2. Modest investment** - How much money is needed before the company turns profitable
- 3. Fast growing** - How long does it take to pay the investment back (in months)



The SmartUp Business Model

- The purpose of the business model is to test many assumptions and variables by calculating and comparing the three outcomes:
 - Time to Profitability
 - Investment needed
 - Time to pay the investment back
- With a monthly subscription, customers can cancel the subscription any time
- The Tanagora model assumed no churn
- What would happen if we add a reasonable attrition rate of 2% a month



Tanagora Business Model with Churn

Number of customers	Monthly Churn -->			
	1.50%	2.00%	2.50%	3.00%
100	2	2	3	3
200	3	4	5	6
300	5	6	8	9
400	6	8	10	12
500	8	10	13	15
600	9	12	15	18
700	11	14	18	21
800	12	16	20	24
900	14	18	23	27
1000	15	20	25	30



Tanagora Business Model with 2% Monthly Churn

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
Founder fully loaded cost per month			\$8,000		Add 1 salesperson to generate				5							
Engineer fully loaded cost per month			\$10,000													
Salesperson fully loaded cost per month			\$10,000		Add 1 salesperson to support				50							
Customer success fully loaded cost per month			\$7,000		Add 1 customer success person to support				80							
Admin fully loaded cost per month			\$6,000													
Salaries represent				70% of total cost												
License Fee				\$1,000 Per month												
Attrition				2.0% Monthly												
			Year 1	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year 2
Number of new customers			0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total number of customers			0	0	0	0	0	0	0	0	0	0	0	0	0	1
Less attrition (churn)																0
Revenues			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Number of salespeople for new accounts			0	0	0	0	0	0	0	0	0	0	1	1	1	1
Number of salespeople for existing customers			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of customer success people			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Founders			2	2	2	2	2	2	2	2	2	2	2	2	2	2
Engineers			0	1	2	2	2	2	2	2	2	2	2	2	2	2
Admin			0	0	0	0	0	0	0	1	1	1	1	1	1	1
Expenses			\$22,900	\$37,100	\$51,400	\$51,400	\$51,400	\$51,400	\$51,400	\$60,000	\$60,000	\$74,300	\$74,300	\$74,300	\$74,300	\$74,300
Profit and (Loss)			(\$22,900)	(\$37,100)	(\$51,400)	(\$51,400)	(\$51,400)	(\$51,400)	(\$51,400)	(\$60,000)	(\$60,000)	(\$74,300)	(\$74,300)	(\$74,300)	(\$73,300)	(\$72,300)
Aggregate Profit and (Loss) - Investment			(\$22,900)	(\$60,000)	(\$111,400)	(\$162,800)	(\$214,200)	(\$265,600)	(\$317,000)	(\$377,000)	(\$437,000)	(\$511,300)	(\$585,600)	(\$659,900)	(\$733,200)	(\$805,500)

Tanagora Business Model with 2% Monthly Churn

Tanagora Business Model with 2% Monthly Churn

Tanagora Business Model with 2% Monthly Churn

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
1																	
2	Founder fully loaded cost per month			\$8,000		Add 1 salesperson to generate				5	new customers a month.						
3	Engineer fully loaded cost per month			\$10,000							Add a salesperson 3 months before needed						
4	Salesperson fully loaded cost per month			\$10,000		Add 1 salesperson to support				50	existing customers						
5	Customer success fully loaded cost per month			\$7,000		Add 1 customer success person to support				80	customers						
6	Admin fully loaded cost per month			\$6,000													
7	Salaries represent				70% of total cost												
8	License Fee				\$1,000 Per month												
9	Attrition				20% Monthly												
10				Year 5	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year 6
11																	
12																	
13	Number of new customers			34	35	36	37	38	39	40	41	42	43	44	45	46	
14	Total number of customers			487	512	538	564	591	618	646	674	703	732	761	791	821	
15	Less attrition (churn)			5	5	5	6	6	6	7	7	8	8	9	9	10	
16																	
17	Revenues			\$487,000	\$512,000	\$538,000	\$564,000	\$591,000	\$618,000	\$646,000	\$674,000	\$703,000	\$732,000	\$761,000	\$791,000	\$821,000	\$851,000
18																	
19	Number of salespeople for new accounts			8	8	8	9	9	9	9	9	10	10	10	10	10	
20	Number of salespeople for existing customers			11	11	12	12	13	14	14	15	15	16	17	17	18	
21	Number of customer success people			6	6	6	7	7	7	8	8	8	9	9	9	10	
22	Founders			2	2	2	2	2	2	2	2	2	2	2	2	2	
23	Engineers			2	2	2	2	2	2	2	2	2	2	2	2	2	
24	Admin			1	1	1	1	1	1	1	1	1	1	1	1	1	
25																	
26	Expenses			\$391,400	\$391,400	\$405,700	\$430,000	\$444,300	\$458,600	\$468,600	\$482,900	\$497,100	\$521,400	\$535,700	\$535,700	\$560,000	\$580,000
27																	
28	Profit and (Loss)			\$95,600	\$120,600	\$132,300	\$134,000	\$146,700	\$159,400	\$177,400	\$191,100	\$205,900	\$210,600	\$225,300	\$255,300	\$261,000	\$271,000
29																	
30	Aggregate Profit and (Loss) - Investment			(\$1,568,400)	(\$1,447,800)	(\$1,315,500)	(\$1,181,500)	(\$1,034,800)	(\$875,400)	(\$698,000)	(\$506,900)	(\$301,000)	(\$90,400)	\$134,900	\$390,200	\$651,200	\$901,200
31																	

**Paid Investment back
on Month – 55**

(\$134,900)

The SmartUp Business Model

The SmartUp Business Model calculates three parameters

1. How long does it take the company to turn to profitability
2. How much money is needed before the company turns profitable
3. How long does it take to pay the investment back

In the Tanagora model with realistic 2% monthly churn:

1. Time to Profitability – 38 months
2. Investment required – \$2,127,000
3. Time to pay investment back – 55 months



The SmartUp Business Model

- Is there a difference between customers paying:
 - \$1,000 every month,
 - Or \$12,000 every year



Tanagora Business Model with \$12,000 Annual

Investment Needed - \$1,100,000

Turn Profitable on month – 23

Tanagora Business Model with \$12,000 Annual

Paid Investment back on month 34

The SmartUp Business Model

The SmartUp Business Model calculates three parameters

1. How long does it take the company to turn to profitability
2. How much money is needed before the company turns profitable
3. How long does it take to pay the investment back

Tanagora model with \$12,000 annual instead of \$1,000 monthly

1. Time to Profitability – 23 months, instead of 34 months
2. Investment required – \$1.1m instead of \$1.83m
3. Time to pay investment back – 34 months instead of 52 months



Tanagora Business Model with \$12,000 Annual and 20% Churn

Investment Needed - \$1,100,000
Turn Profitable on month – 23

Tanagora Business Model with \$12,000 Annual and 20% Churn

Paid Investment back on month 36

SmartUp Business Model – Analysis

Analysis of different assumptions

Scenarios	\$1,000 a Month, No Churn	\$1,000 a Month, Churn 2% monthly	\$12,000 a Year, No Churn	\$12,000 a Year, Churn 20% annually
Time to Profitability	34 months	38 months	23 months	23 months
Investment Required	\$1,830,000	\$2,100,000	\$1,100,000	\$1,100,000
Time to Pay Investment Back	52 months	55 months	34 months	36 months



The SmartUp Business Model - Successful Companies

The three **pillars** for a successful company, and how they are measured:

- 1. Profitable** - How long does it take the company to turn to profitability (in months)
- 2. Modest investment** - How much money is needed before the company turns profitable
- 3. Fast growing** - How long does it take to pay the investment back (in months)



SmartUp Academy Methodology

A program to teach the **profession** of building successful companies

- The 3 pillars of a successful company
 1. Profitable
 2. Modest Investment
 3. Fast Growing
- First Step - **Branding**
- Second Step - **Business Model**

Branding First – Last Week Homework

- Define who your prospects are – be as specific as you can
- Define the problem(s) you try to solve
NOT the solution, the problem
- Are your prospects aware of the problem? Do they define it as a problem that needs to be solved?
- When they have the problem what do they do?
- What else can be of interest to your prospects, that is not related to the problem, but will still get their attention?

Introducing- KIMOS

Kimos

- Kimos - The Bottle That Boils Water In 3 Minutes
- <https://www.youtube.com/watch?v=KqvZ9jlozS0>

A SELF-HEATING THERMOS
THAT REPLACES YOUR HOT WATER KETTLE
ANYPLACE ANYTIME





SmartUp

THE SMART WAY TO BUILD A STARTUP



The Iridize Story

Eyal Lewinsohn

Global VP, Product Strategy & Development

The Iridize Story

Agenda



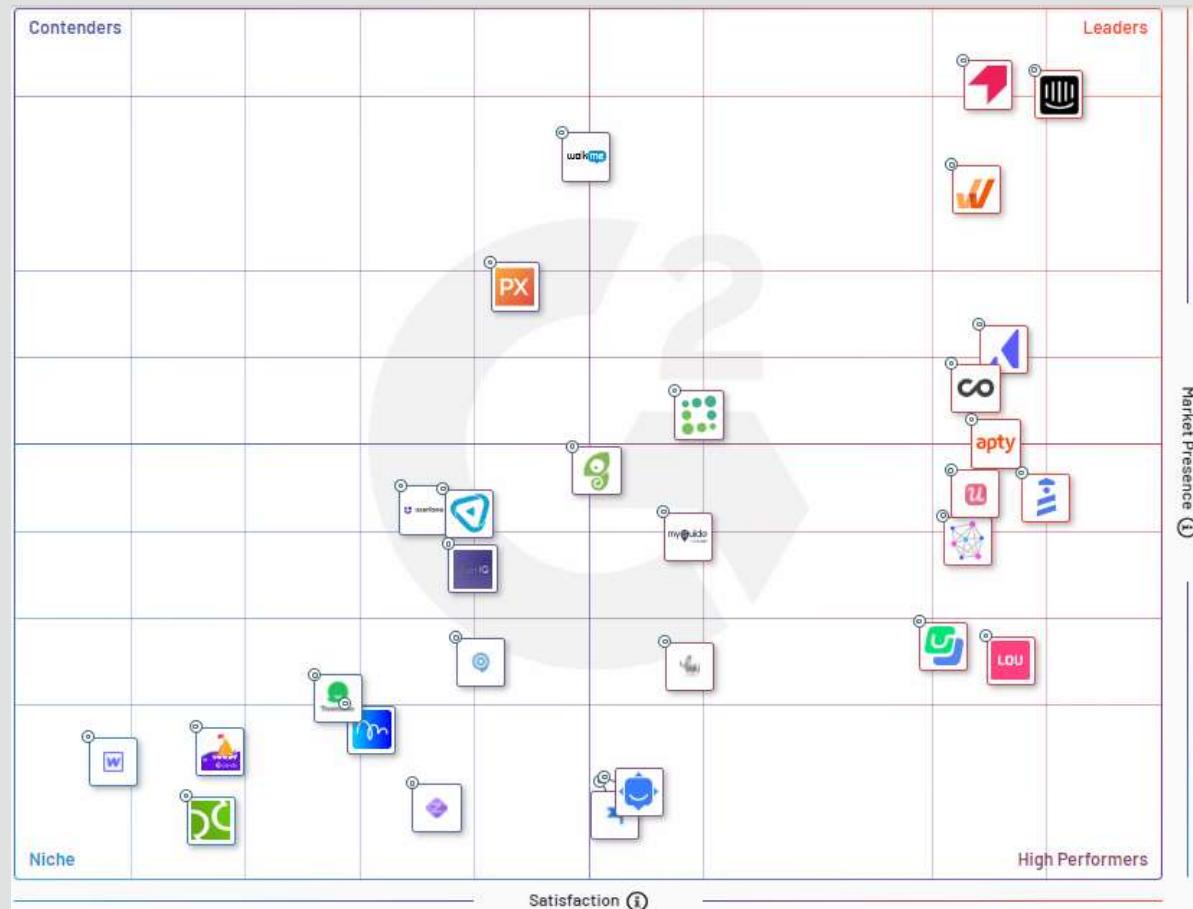
The Iridize Story

Idea



The Iridize Story

Competition

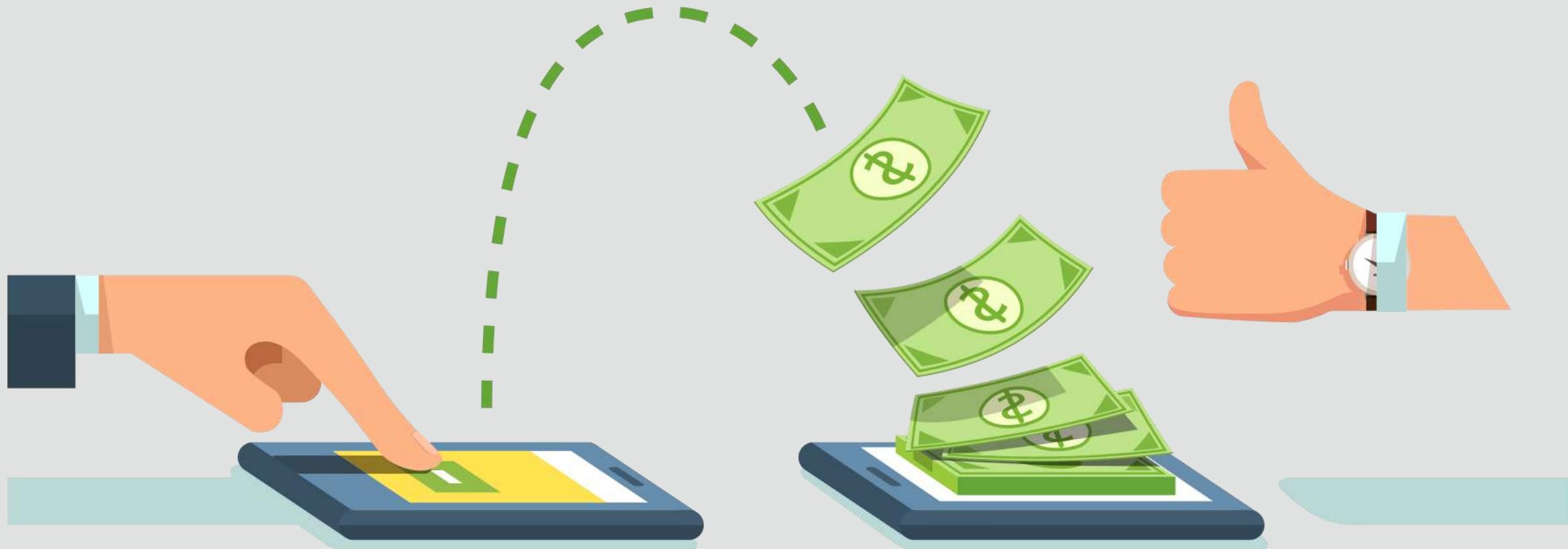


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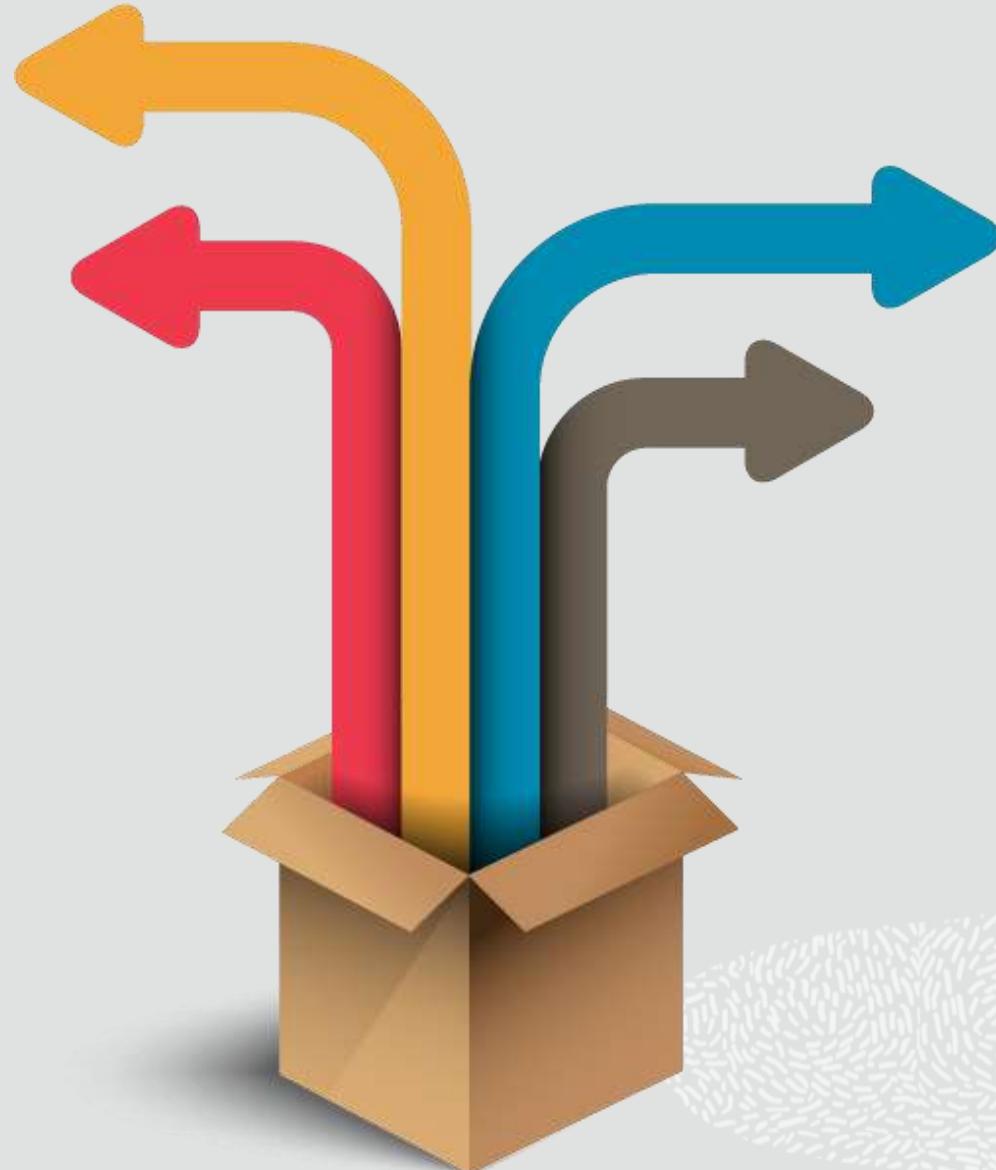
The Iridize Story

Funding



The Iridize Story

Pivot



The Iridize Story

Divorce



The Iridize Story

Product Market Fit

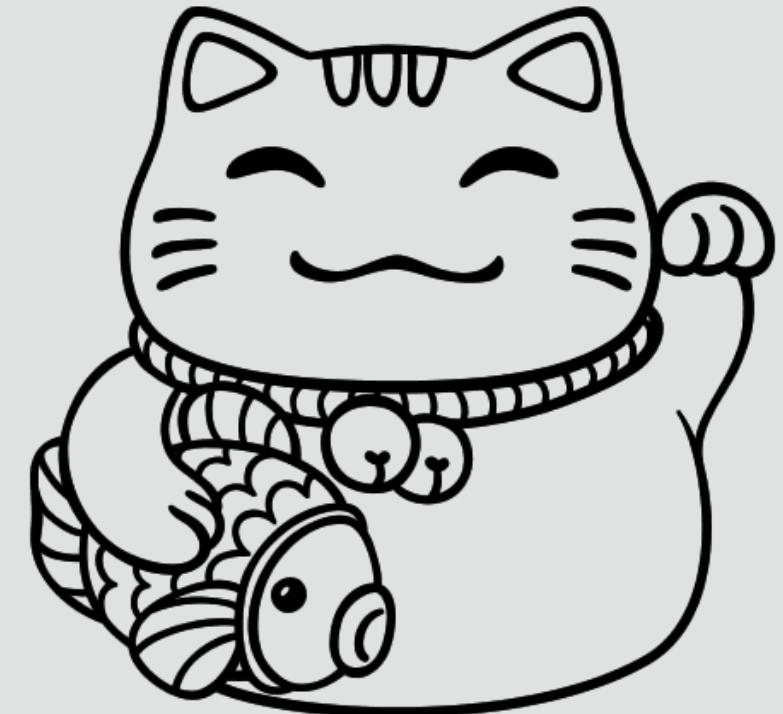


ORACLE



The Iridize Story

Luck



The Iridize Story

Integration

33M ARR
85M TCV

+50%
ARR Growth

300
Customers

4M
Users



- *OGL \$1M to 85M in 3 Years*
- *Renewal Rate 80%*



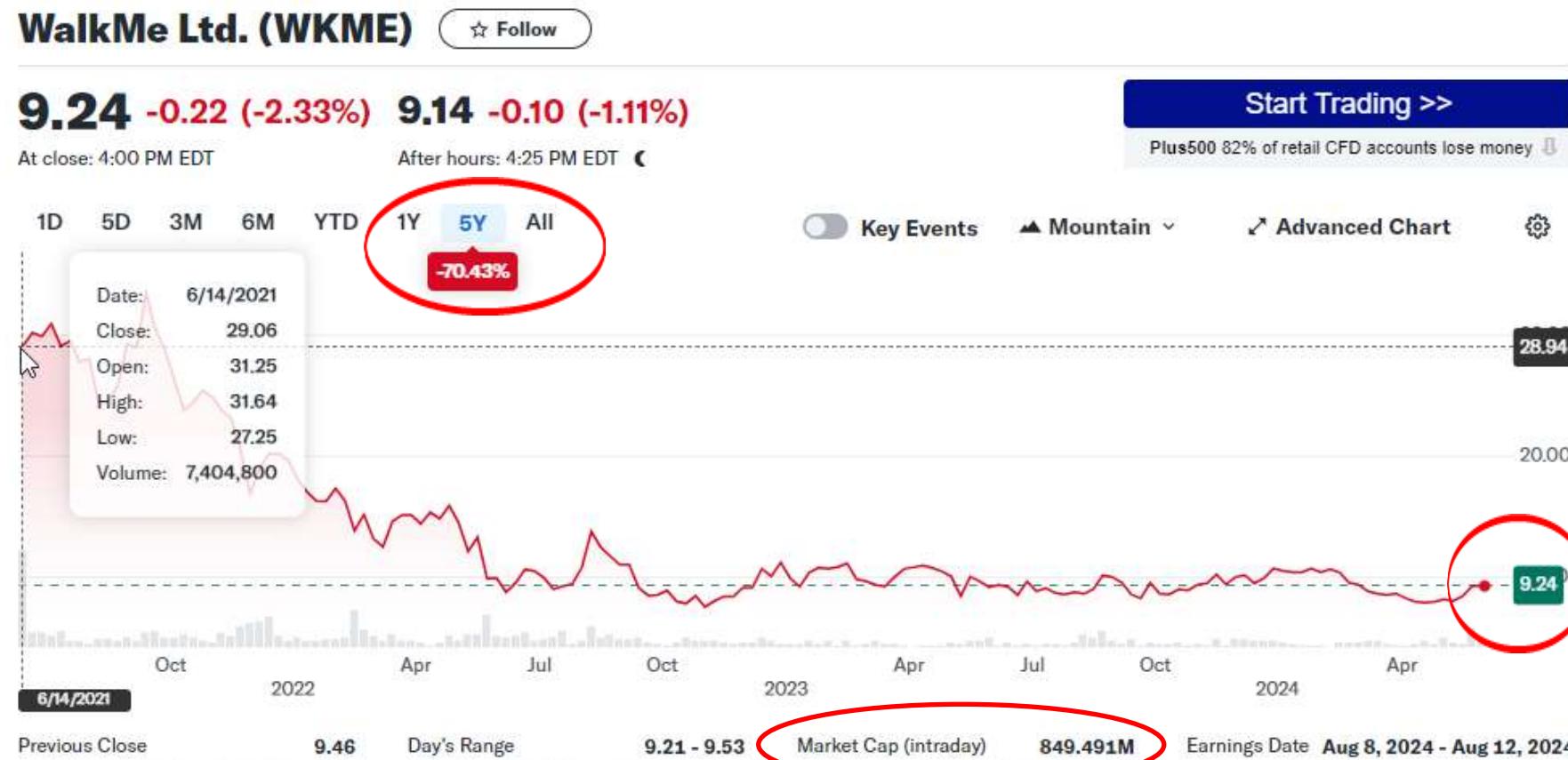
Q&A



WalkMe Financial Story



- <https://en.wikipedia.org/wiki/WalkMe>
- WalkMe has raised **US\$307.5** million in nine rounds of funding. The company was valued at US\$2 billion after its Series G round in December 2019.
- The company's initial public offering (IPO) took place on June 16, 2021, raised additional **\$286m** for a total of **\$593m**, at a valuation of **US\$2.56 billion**



The WalkMe Founders Story



- WalkMe Inc. was founded in 2011 by Dan Adika, Rafael Sweary, Eyal Cohen and Yuval Shalom Ozanna
- Until recently Dan Adika was able to sell (restricted?) shares at a total value of about \$2m

144: Securities Sold During T

Name and Address of Seller	Date of Sale	Amount of Securities Sold	Gross Proceeds
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/13/2023	25000	233107.50
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/12/2023	25000	247972.50
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/11/2023	25000	245875.00
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/08/2023	20000	188856.00
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/07/2023	20000	189968.00
DAN ADIKA 1 Walter Moses St Tele Aviv L3 6789903	09/06/2023	15000	143803.50

Name of Beneficial Owner Principal Shareholders:	Ordinary shares beneficially owned before and after this offering		Percentage of ordinary shares beneficially owned	
	Before this offering	After this offering	Before this offering	After this offering
Entities Affiliated with Insight Partners(1)	23,447,372	31.9	28.4	
Entities Affiliated with Greenspring Associates(2)	10,366,855	14.1	12.5	
Scale Venture Partners IV, LP(3)	9,429,021	12.9	11.4	
Entities Affiliated with Mangrove Capital Partners(4)	6,278,354	8.6	7.6	
Entities Affiliated with Gemini Israel Ventures(5)	7,730,048	10.5	9.4	
Executive Officers and Directors:				
Dan Adika(6)	2,210,226	2.9	2.6	
Rafael Sweary(7)	2,029,916	2.7	2.4	
Andrew Casey(8)	183,597	*	*	
Haleli Barath(9)	51,944	*	*	
Michele Bettencourt(10)	1,944	*	*	
Menashe Ezra(5)	7,730,048	10.5	9.4	
Ron Gutler(11)	7,335	*	*	
Jeff Horning(1)	23,447,372	31.9	28.4	
Rory O'Driscoll(3)	9,429,021	12.9	11.4	
Michael Risman(12)	3,404,955	4.6	4.1	
Roy Saar(13)	6,444,594	8.8	7.8	
All directors and executive officers as a group (11 individuals)	54,940,952	74.7	66.4	

