



UNISTELLAR

Democratizing Astronomy

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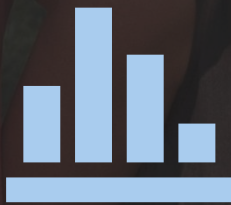
Category



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Unistellar is an electronics and software company that makes the first IOT consumer telescope...



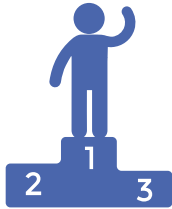
...and generates sky-related data

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In a Nutshell



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First mover

Recognizable name
and brand



\$2.8M sales

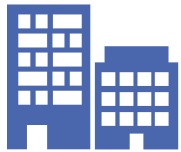
via crowdfunding (more
than Oculus Rift)



SETI
INSTITUTE

Partnership

with SETI Institute
(Silicon Valley)



Headquarters

in France and offices in
San Francisco



International

50% sales in North
America, 40% in Europe,
10% Rest of the World



World Class Team

in data science, embedded
software, industrial engineering,
online marketing

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Market and Target Customer

Addressable market

Our target customer:
**the amateur of meaningful
outdoor activity**

\$889B

US Outdoor Recreation Revenue 2017
Total available market *

Current astronomy market: potential and limitations

Among these, Astronomy is a massively
popular topic:
100s of Millions of Virtual Sky Apps**



SkyMap >50M downloads,
StarChart >30M downloads

But Consumer-Friendly products are
seldom to fulfill that specific interest.

* Source: Outdoor recreation report 2017

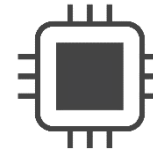
** Source: App Store and Play Store

Market Trend: Democratization of Niche Hobbies

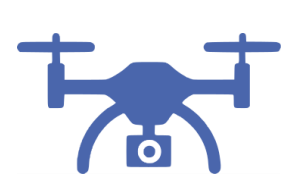
The Amateur Astronomy market is about to experience a technological revolution towards digital telescopes:



**New specific sensors
available at lower costs**



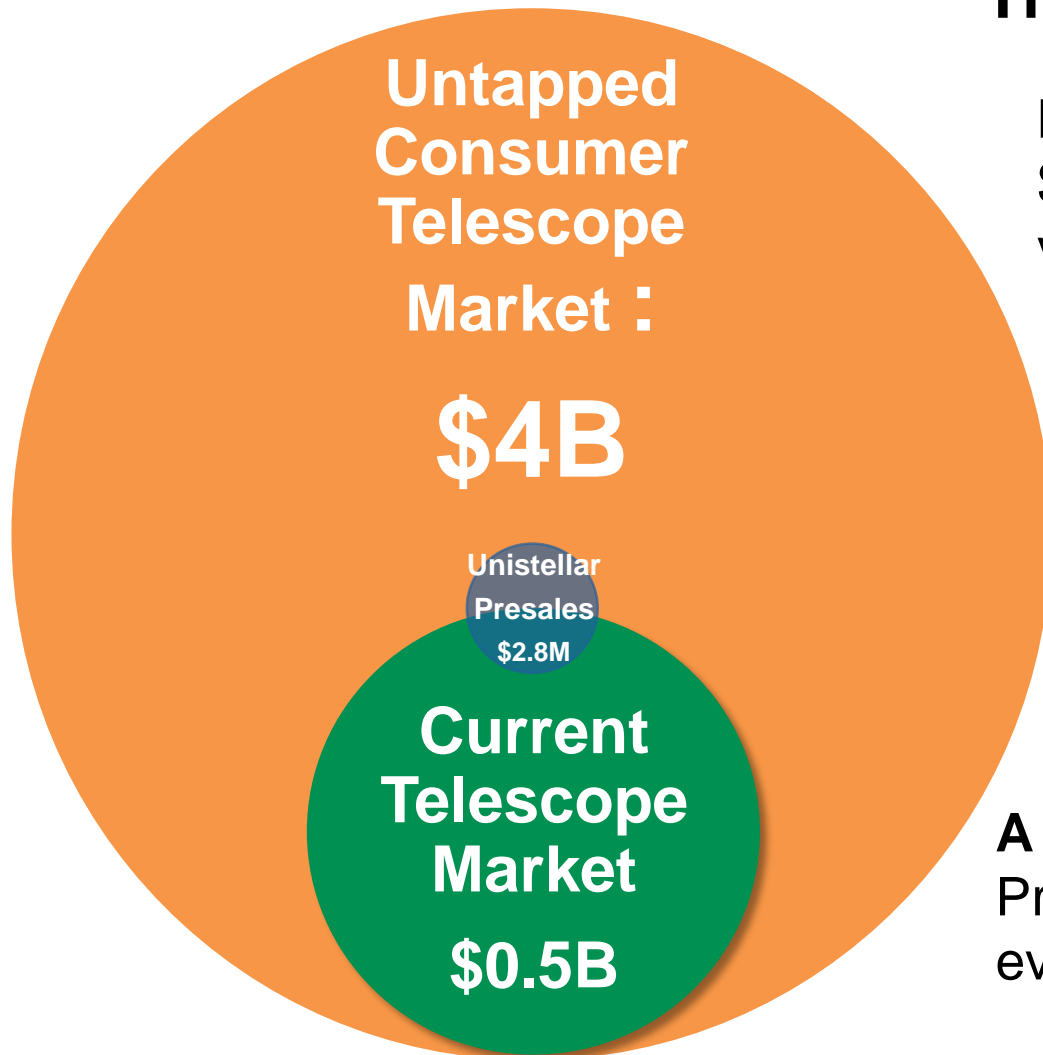
**More calculation power
in embedded systems**



Unistellar is capitalizing on a technological trend that is similar to that of Consumer Drones and is transforming Astronomy in a Mass-Market, like DJI & Parrot (Consumer Drones) did with Aeromodelling and Aerial Photography



Market Opportunity



The Revolution is coming for Astronomy:

Massive popular appeal for sky observation

\$0.5B current telescope market despite extremely poor visual and overall experience

Urban market untapped

4/5th of developed countries' population is urban, and cannot use standard telescopes

Software and electronics revolution at its start

Release of new key electronic components, emergence of AI in embedded software

A Digital Telescope entails a faster renewal rate.

Product renewal rate is multiplied by 5, from 25 (slow evolving Optics) to 5 years (fast evolving Electronics).

Customer Expectations



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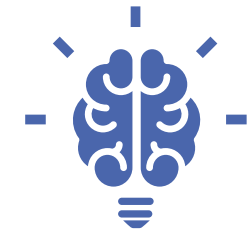
Visual wonder
Beautiful and colorful
celestial bodies



Ease of use
Turnkey experience



Use it Everywhere
Especially From Home



Engaging Experience
Participating,
learning & sharing

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Current Customer Experience



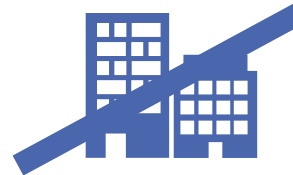
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Lack of visual power
Faint “grayish” objects



Overall complexity
Hard and time-consuming
to use



Unreachable From Cities
Light Pollution



Not connected
Less Engaging / Not
Participative.



The Game Changer, the eVscope



*1st Digital
Telescope*



Light amplification

Proprietary hardware and software provides unique performance



Fully automated

Patented technology for automated alignment



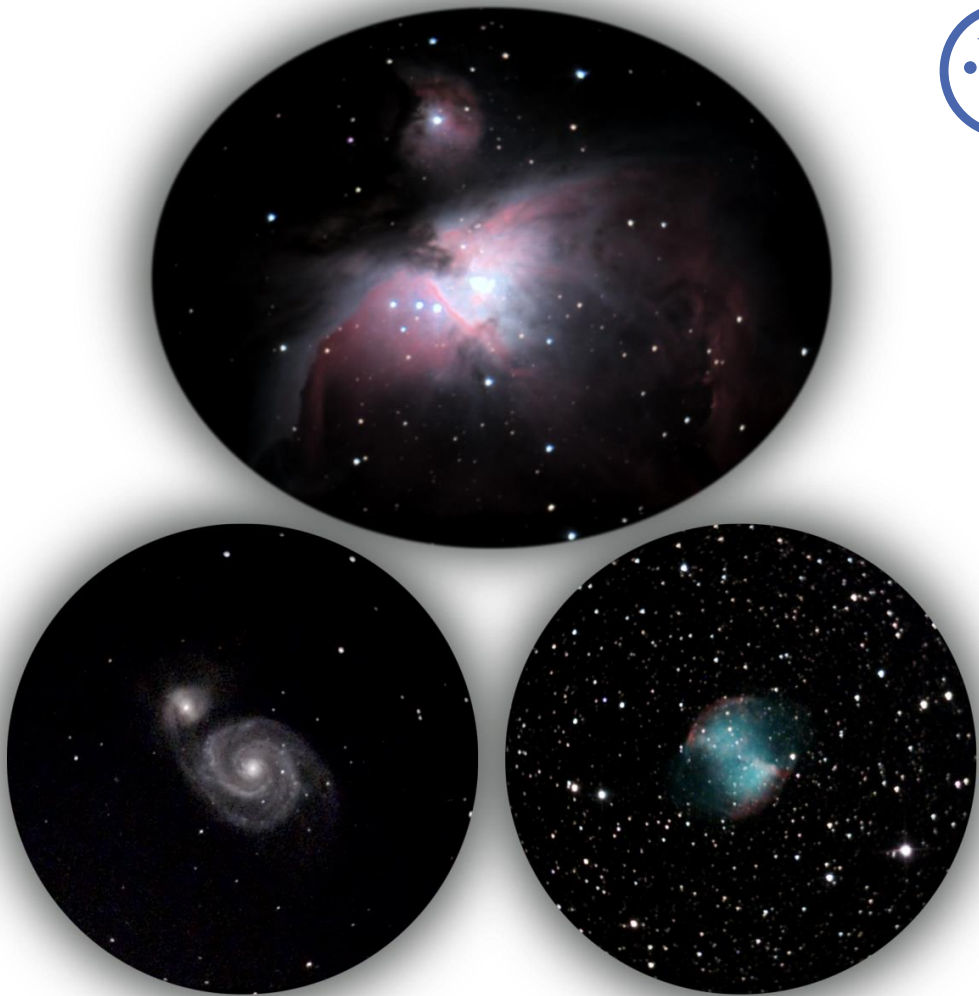
Fully connected

Connected telescope, app control.

Patent 2016
PCT Extension 2017



100x More Powerful



Actual views through the eVscope



Unique visual experience

Finally, you see hundreds of colorful galaxies and nebulae



Plug&Play

No more complex procedures, simply enjoy the nightsky



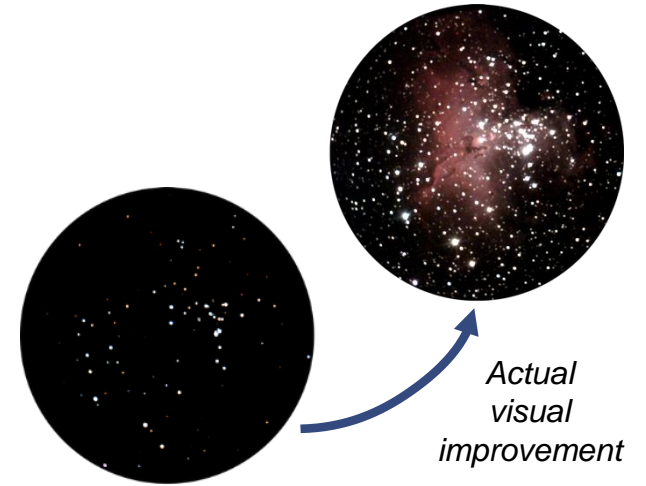
Rural and Urban alike

An open window to the sky, even from light-polluted big cities



Community and Science

Share your observations, participate to observation campaigns



The eVscope is the first true mass-consumer telescope

User Testimonials, Online and in the Press



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“

After 40 years of astronomy I'm bored of 30-60min of [...] fixing cables, cameras, software and focusing and a shit load of work getting my data [...] Sometimes I just want to observe without the extra work.
So I backed it.

Petri T. Backer #167

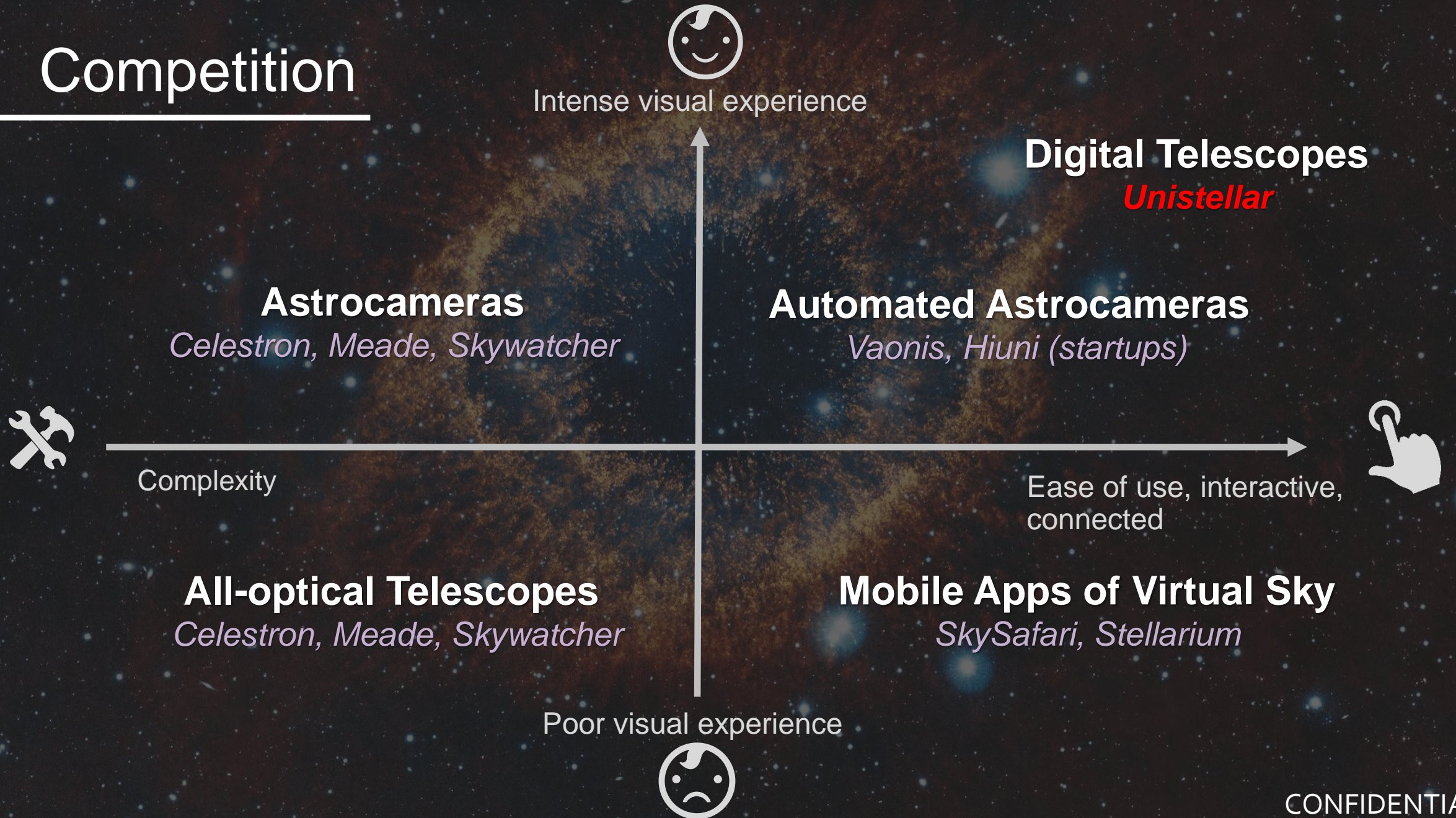
“

A peek though its eyepiece reveals the eVscope's power

Lee Billings in Scientific American, October 2017

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Competition



Go to Market Strategy



KICKSTARTER

Presales to Innovators

>\$2.8M preorders, 2k units
First to market and recognizable brand



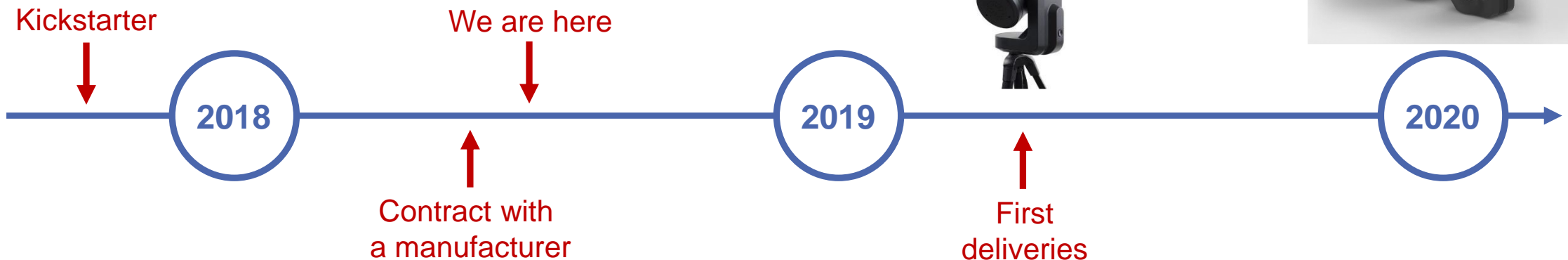
Sales online and at premium retailers to early adopters

10k-20k units/year
Confirm leadership on digital telescopes



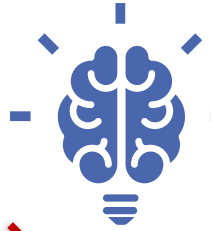
New <\$1000 mid-range eVscope, Sales online and at big retailers

100k units/year
Even more consumer friendly



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Expansion and future strategy: the community



What: Having the largest worldwide base of active users is a key barrier to entry



How: by creating an even richer visual experience through simultaneous observations and real-time data sharing (Waze-like community-driven online-service)



Organize/participate to common observations

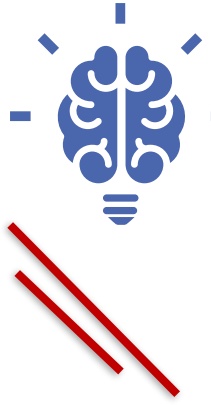
Our technology improves everyone's image quality by merging data



Active eVscope community

- ✓ Share your observation
- ✓ Initiate a new observation campaign
- ✓ Find eVscopes around you
- ✓ Improve your planetarium
- ✓ Post on social media (buzz)
- ✓ Participate to cutting-edge Science (Supernovae, NEA...)

Expansion and future strategy: data application

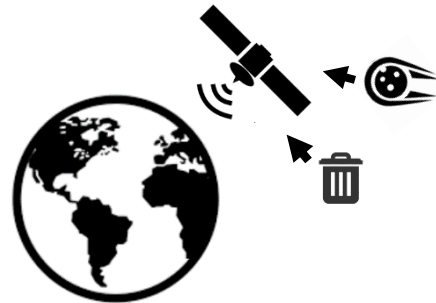


What: We want to create and exploit unique night-sky related Data

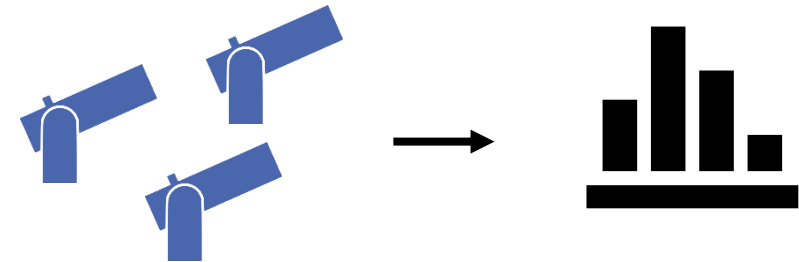


How: by collecting the sky images passively generated by eVscope users and extracting useful data (Worldwide & 24/7)

Example: space debris surveillance for satellite manufacturers



1- Problem: Satellites experience increasing risks of collision with space debris
2000 operating satellites, >30 000 large debris



2- Unistellar's solution: a worldwide network of eVscope for sky surveillance
Our network detects an unknown object,
Sends a request to a big telescope for confirmation,
Measures precisely the debris trajectory and sends an alert

Unistellar today, 12 employees



Laurent Marfisi, CEO
Arts et Métiers Alumni
5-year experience in Industrial & Technical Project Management



Arnaud Malvache, President & CTO
PhD, Polytechnique Alumni
10-year experience in Research in Optics & Image Processing

R&D team: 6 developers
1 Head of Communication



Antonin Borot, VP Engineering
PhD, Polytechnique Alumni
10-year experience in Exp. Optics.
Co-founder of SourceLAB



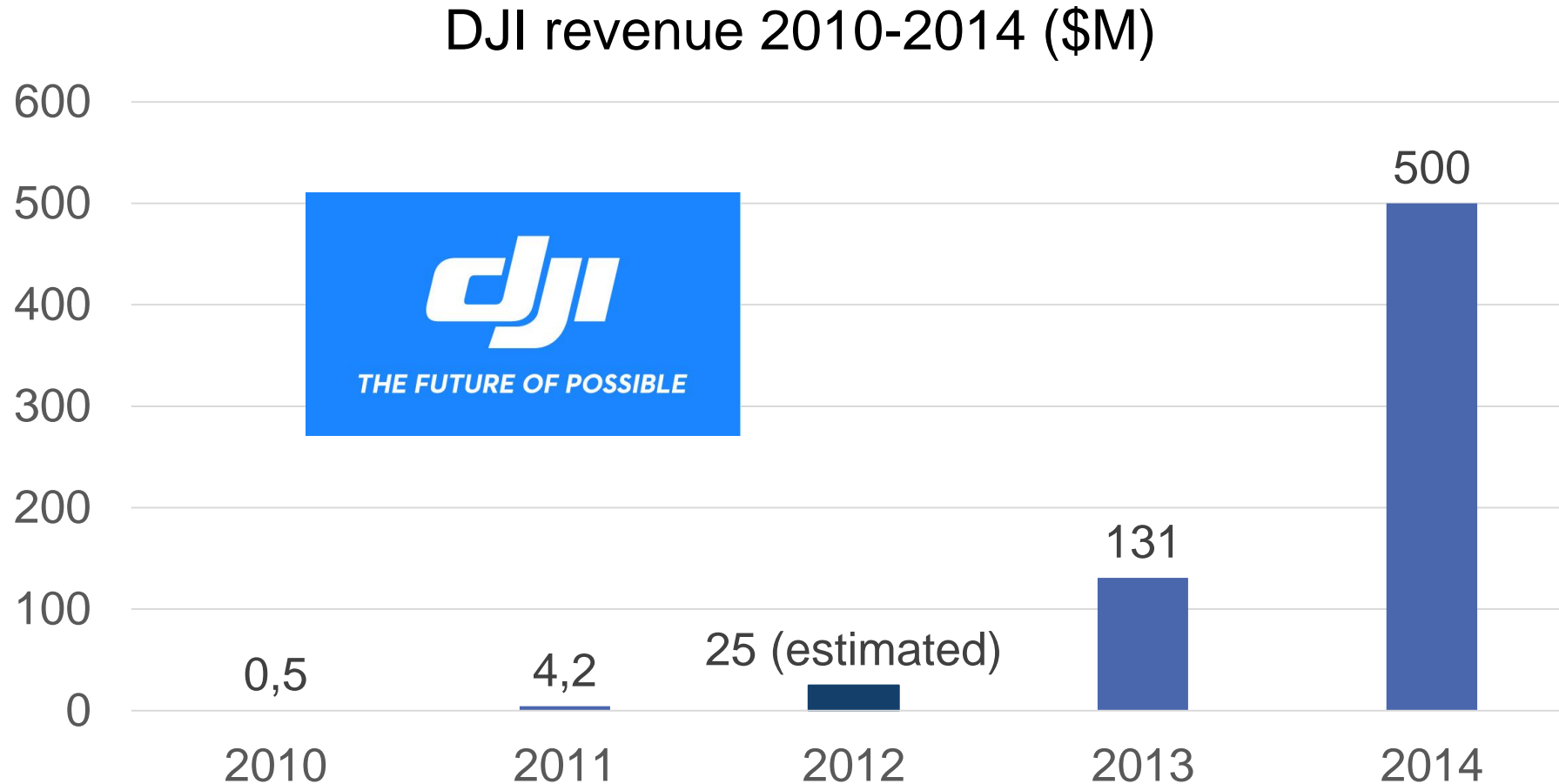
Franck Marchis, CSO
PhD, 20-year experience. Senior Astronomer at SETI Institute



Mina Veltcheva, VP Manufacturing
PhD
8-year experience in Manufacturing Management

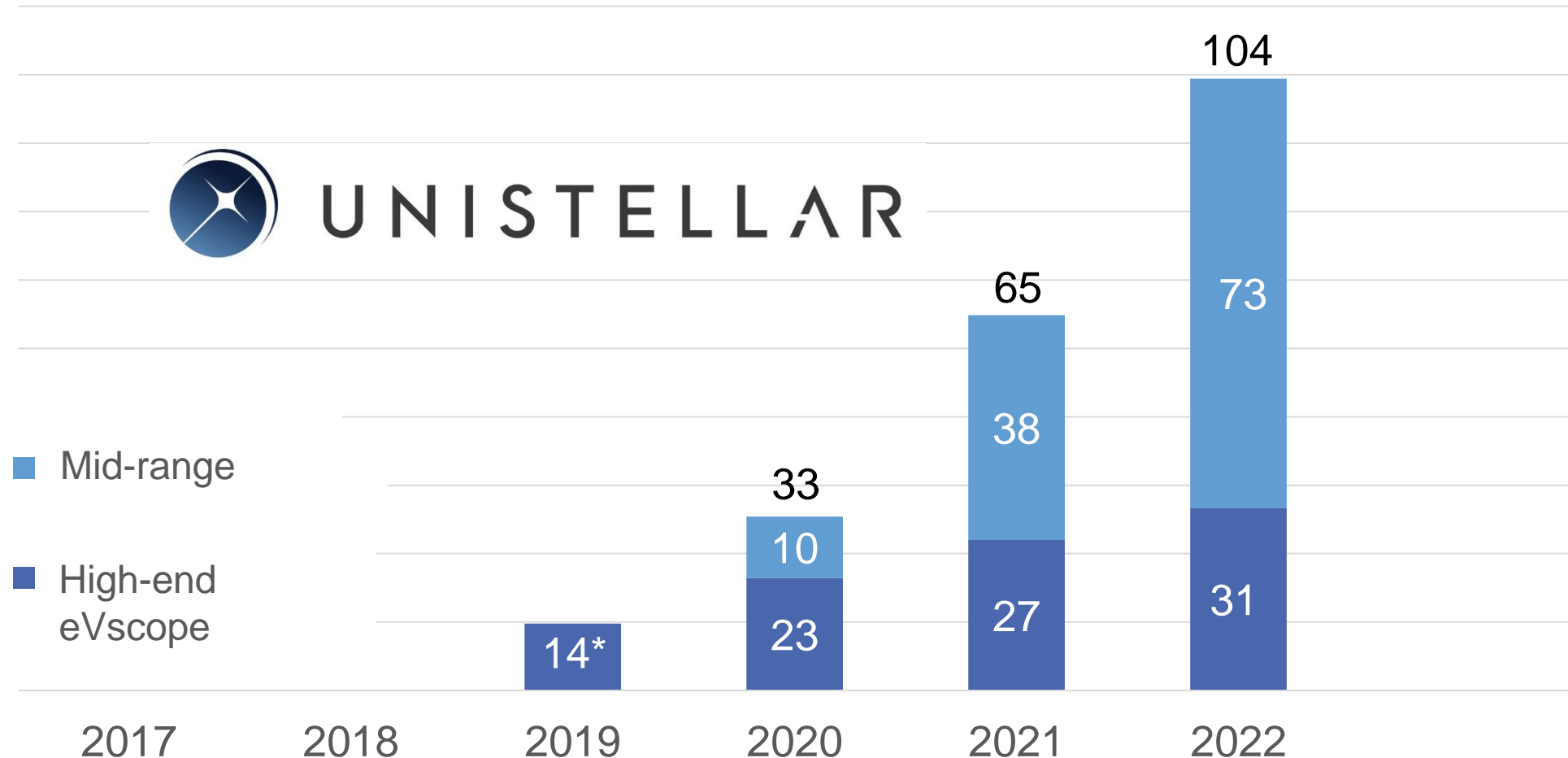
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Example of Successful Democratization of a Niche Hobby



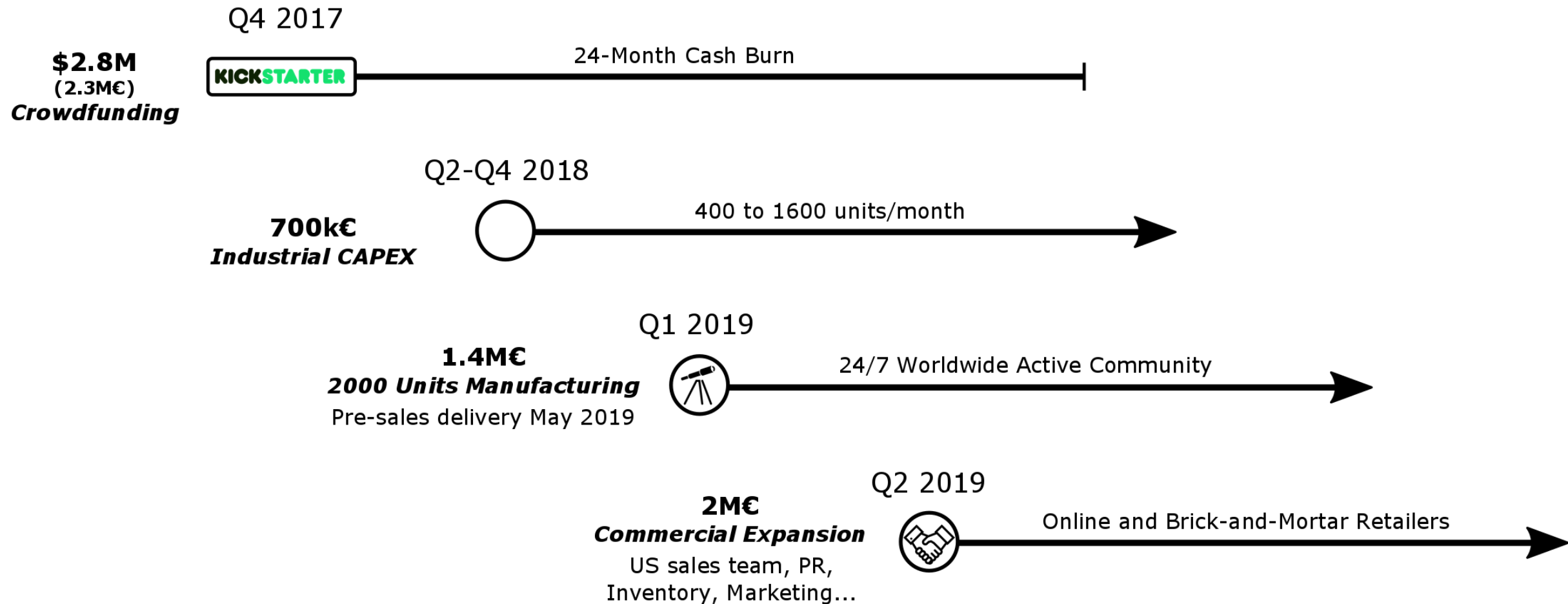
2017 Revenue: \$2.5B

Unistellar Revenue 2017-2022 (M€)



*Kickstarter sales are accounted for in 2019

Funding Timeline



Funding need phase 1

November 2018

1.4M€

Our need

2000

Units delivered

50

Units/day
Production Capacity

+0.9M€ matching government subsidies

Funding need phase 2

April 2019

1.8M€

Our need

10k

Units sold in 2019

16M€

Revenue in 2019

Ready for Christmas 2019

P&L* (€)

	2017	2018	2019	2020	2021	2022
Sales						
High End eVscope	1 862 319,82	1 080 000,00	13 670 655,81	22 585 384,32	27 165 292,30	31 398 820,68
Medium Range eVscope				10 495 230,56	38 369 037,95	72 861 215,30
Total Sales	1 862 319,82	1 080 000,00	13 670 655,81	33 080 614,88	65 534 330,25	104 260 035,98
Cost of Goods Sold						
High End eVscope	934 400,00	467 200,00	5 644 281,08	9 170 378,38	11 064 432,43	12 690 162,16
Medium Range eVscope				5 252 464,43	18 658 957,84	34 420 518,05
Total COGS	934 400,00	467 200,00	5 644 281,08	14 422 842,81	29 723 390,27	47 110 680,22
Gross Profit (Loss)	927 919,82	612 800,00	8 026 374,73	18 657 772,07	35 810 939,98	57 149 355,76
Gross Margin	50%	57%	59%	56%	55%	55%
Expenses						
Sales & Marketing						
Salaries	20 000,00	179 000,00	912 900,00	5 192 790,00	10 724 069,00	15 491 016,51
Advertising	92 000,00	60 000,00	1 230 359,02	2 662 255,34	5 898 089,72	9 383 403,24
Fairs, PR, Ambassadors, Content...	37 000,00	67 500,00	210 000,00	760 000,00	620 000,00	980 000,00
Travel Expenses	18 000,00	85 000,00	235 500,00	862 050,00	1 648 255,00	2 413 080,50
Secured Payment Processing	55 869,59	32 400,00	410 119,67	677 561,53	814 958,77	941 964,62
Crowdfunding fees & costs	149 179,99	54 000,00	-	-	-	-
R&D						
Salaries & Payroll taxes	40 000,00	364 800,00	496 128,00	1 108 627,20	2 591 192,64	3 923 372,41
Patent expenses	-	25 000,00	100 000,00	200 000,00	400 000,00	400 000,00
NASA partnership	-	-	30 000,00	100 000,00	200 000,00	200 000,00
Factory costs						
CAPEX (Tooling & Design Studies)	-	500 00,00	710 000,00	470 000,00	900 000,00	1 600 000,00
General & Admin						
Other Structural Costs (office supplies...)		54 200,00	132 040,00	461 142,40	940 406,63	1 398 451,66
Offices rental	-	34 750,00	98 416,67	372 500,00	765 000,00	1 105 000,00
Legal and Professional Fees	-	30 000,00	60 000,00	120 000,00	240 000,00	480 000,00
Warranty & Free After Sales						
salaries	-	-	93 080,00	407 332,40	1 003 092,37	1 408 668,82
supplies	-	-	76 740,23	210 005,77	441 462,33	768 340,70
Total G&A salaries	23 000,00	261 045,00	751 959,75	1 637 398,18	2 920 108,63	3 979 401,43
Loan repayment	-	6 333,33	12 666,67	12 666,67	45 333,33	78 000,00
TOTAL EXPENSES	269 586,00	1 667 628,33	5 062 172,05	14 174 117,03	28 333 917,29	42 200 066,45
INCOME BEFORE TAXES	658 333,82	(1 054 828,33)	2 964 202,68	4 483 655,05	7 477 022,69	14 949 289,32

*For the sake of clarity, crowdfunding prepaid backlog from Kickstarter (\$2,2M) and Indiegogo (\$0.6M done + \$0.6M of future sales) are modeled as normal sales (2017 & 2018)