



imec **xpand**

SMART INVESTMENTS IN HEALTH

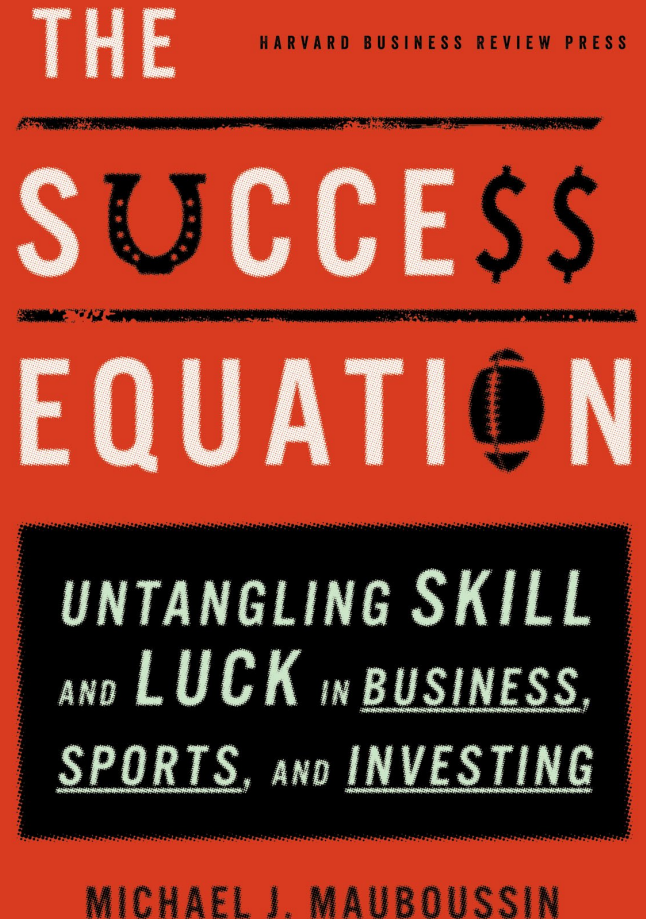
TOM VANHOUTTE, PARTNER IMEC.XPAND

SEMICON EUROPA 2019

WHAT DEFINES A “SMART” INVESTMENT?

“PEOPLE HAVE A DIFFICULT TIME UNTANGLING SKILL AND LUCK BECAUSE OF OUR BASIC DESIRE TO FIND CAUSE AND EFFECT IN EVERY SITUATION, WHETHER OR NOT THAT VIEW REPRESENTS REALITY”

Michael J Mauboussin
Author
The Success Equation





PURE
LUCK

PURE
SKILL

Source: The Success Equation

■ THE MARKET CONSISTS OF A LARGE GROUP OF EQUALLY SKILLED INVESTORS

■ EVERYONE CAN BUY EVERY STOCK AT ANY POINT IN TIME

■ THE PRICE IS SET BY THE MARKET AND REFLECTS ALL AVAILABLE INFORMATION AT THAT TIME

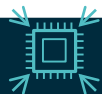
■ THE BUYER HAS NO FUNDAMENTAL IMPACT ON THE STOCKS

HOW CAN VENTURE CAPITAL EVOLVE ON THE LUCK – SKILL SCALE?



BE SMARTER

Venture capital investors do not all have the same skills. Skills in domains that are not core to the investment focus could be particularly valuable to identify top deals.



BE THE FIRST

Because of the asymmetrical information in the early stage segment it is possible to make excess returns by being first. That obviously requires a good grip on the technology, financing and team risk.



NEGOTIATE A GOOD DEAL

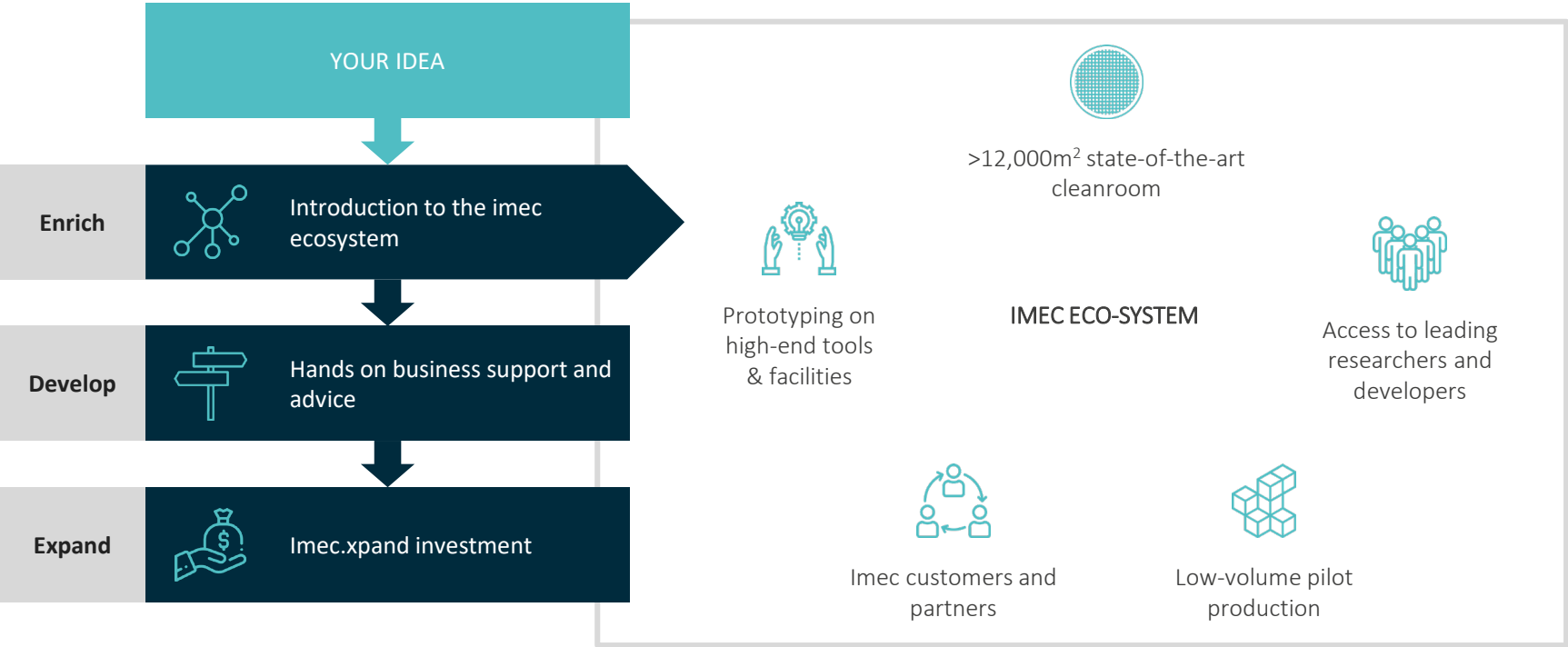
The value at the time of a first investment is not set by the market. The terms and conditions are the result of a negotiation between parties. Good deals can lead to great returns.



ADD VALUE

A VC can add value in areas where the team is lacking skills. It is especially valuable if the VC adds complementary value in domains where the team has little or no expertise.

OUR APPROACH



YESSE

y e s s e t e c h n o l o g i e s

Yesse is developing a platform technology that merges human odorant receptors with cutting-edge nanotechnology. This enables Yesse to **decode every scent** and to create the first of its kind digital odor database.

SPOTLIGHTS

- Ongoing collaboration agreements with several of the big fragrance houses.
- Broad platform technology with extended use in various areas like medical diagnosis (Parkinson biomarkers under validation) and TNT detection.

IMEC ADDED VALUE

Essential imec knowledge is being deployed for the integration of the odor receptors on the chip.

KEY FACTS



Smart industries, smart health



New York, NY, USA
Leuven, Belgium



Imec.xpand, Alexandria Venture Investments,
New York Ventures



3.2 mUSD total investment in seed round



<https://yesse.tech/>





Onera is developing the **first fully disposable, wearable sleep diagnosis device** with the same quality as the current state-of-the-art standard. Onera's goal is to make sleep diagnostics broadly accessible anywhere, anytime.

SPOTLIGHTS

- Clinically validated, measures all 11 parameters that are required for diagnosis of sleep disorders like sleep apnea to polysomnography
- Allows for qualitative as well as quantitative follow-up of sleep medication and dose response

IMEC ADDED VALUE

Exclusive license to unique imec technology. Leveraging 10+ years of R&D, which has been validated in clinical studies during product development.

KEY FACTS



Smart health



Palo Alto, CA, USA
Eindhoven, The Netherlands



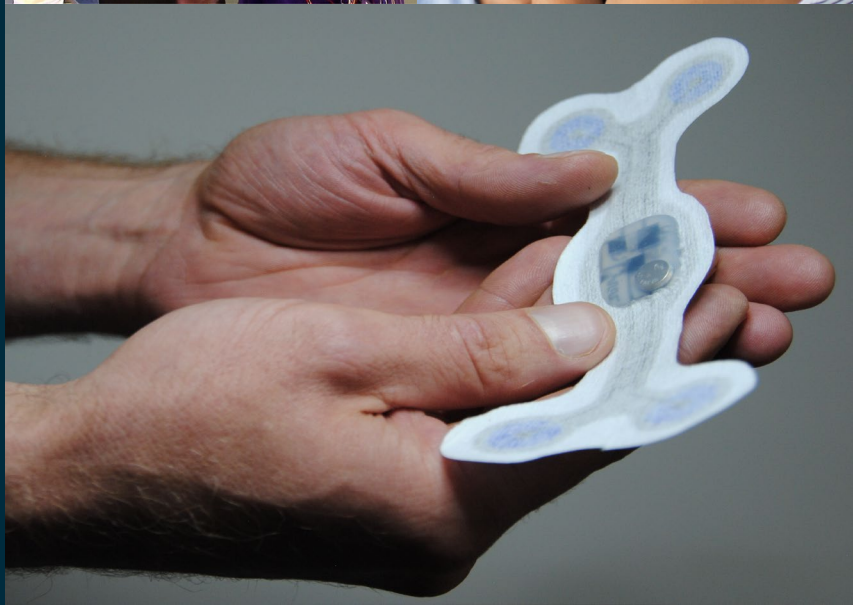
Imec.xpand, Jazz Pharma, BOM



9 mEUR total investment in series A round



<https://www.onerahealth.com/>





Imec spin-off Spectricity is developing the world's tiniest spectral sensor based on hyperspectral imaging technology. The technology has broad applications in health (wearables), food, agriculture and industrial sector.

SPOTLIGHTS

- High-volume production supporting low-cost, low power and miniaturized (few mm²).
- Technology has proven its use in imagers in various applications implemented by customers of imec.

IMEC ADDED VALUE

Spectral technology has been developed over the course of several years at imec and key engineers from imec have joined the team.

KEY FACTS



Smart industries, smart health



Mechelen, Belgium



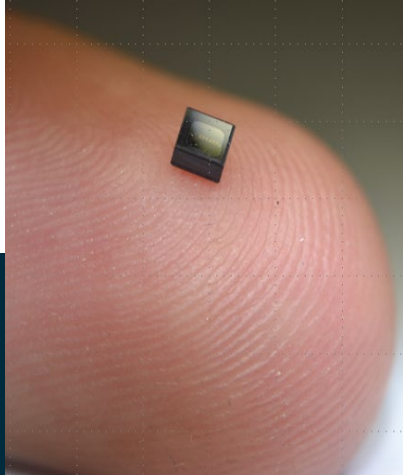
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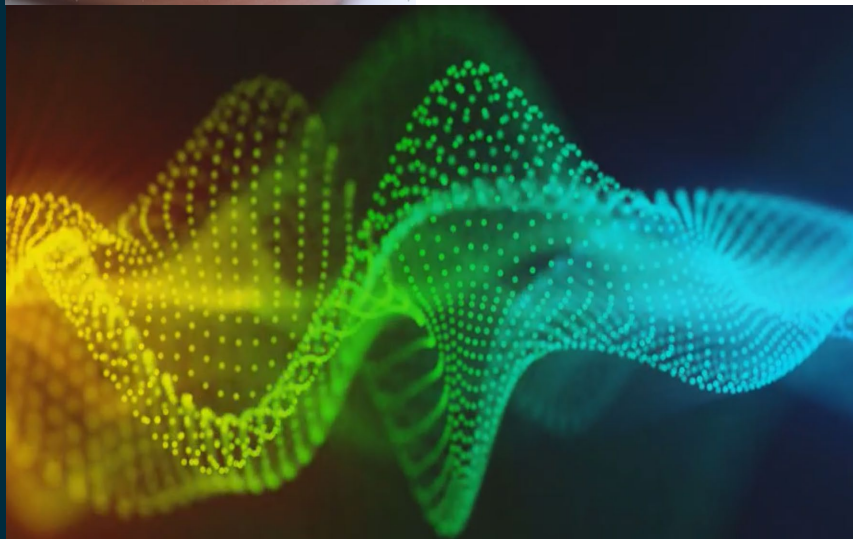
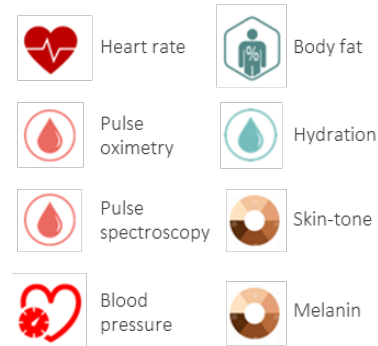
3.7 mEUR total investment in seed round

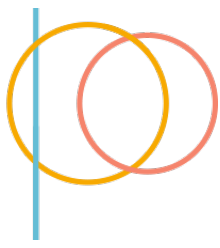


<https://spectricity.com/>



HEALTH MARKERS





Imec spin-off Pulsify Medical will develop a non-obtrusive **ultrasound patch system** for continuous monitoring of stroke volume & cardiac output in the ICU (post-operative) and home setting (HF patients).

SPOTLIGHTS

- Collaboration with both **imec** and the Medical Image Center of University of Leuven.
- Clear evolution at ICU/CCU towards non-invasive real time monitoring.
- Monitoring 'fluid status' and 'fluid responsiveness' = holy grail at ICU.

IMEC ADDED VALUE

Imec IP-protected technology and knowhow of large area, flexible ultrasound transducer technology, transducers, thin film transistors and system architecture.

KEY FACTS



Smart health



Imec.xpand, KU Leuven and University Hospital Leuven



Heverlee, Belgium



2.6 mEUR total investment in 1st closing Series A



▪ **mec** **xpand**