



# Sports and Technology

## Innovation in practise

### Case Nano4Sports

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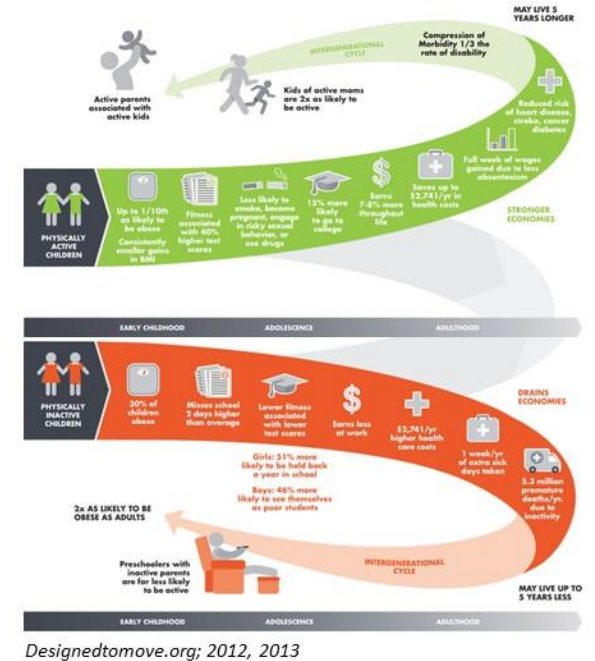
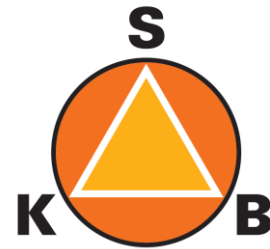
Creating value through  
Smart Connections

[www.sportsandtechnology.com](http://www.sportsandtechnology.com)

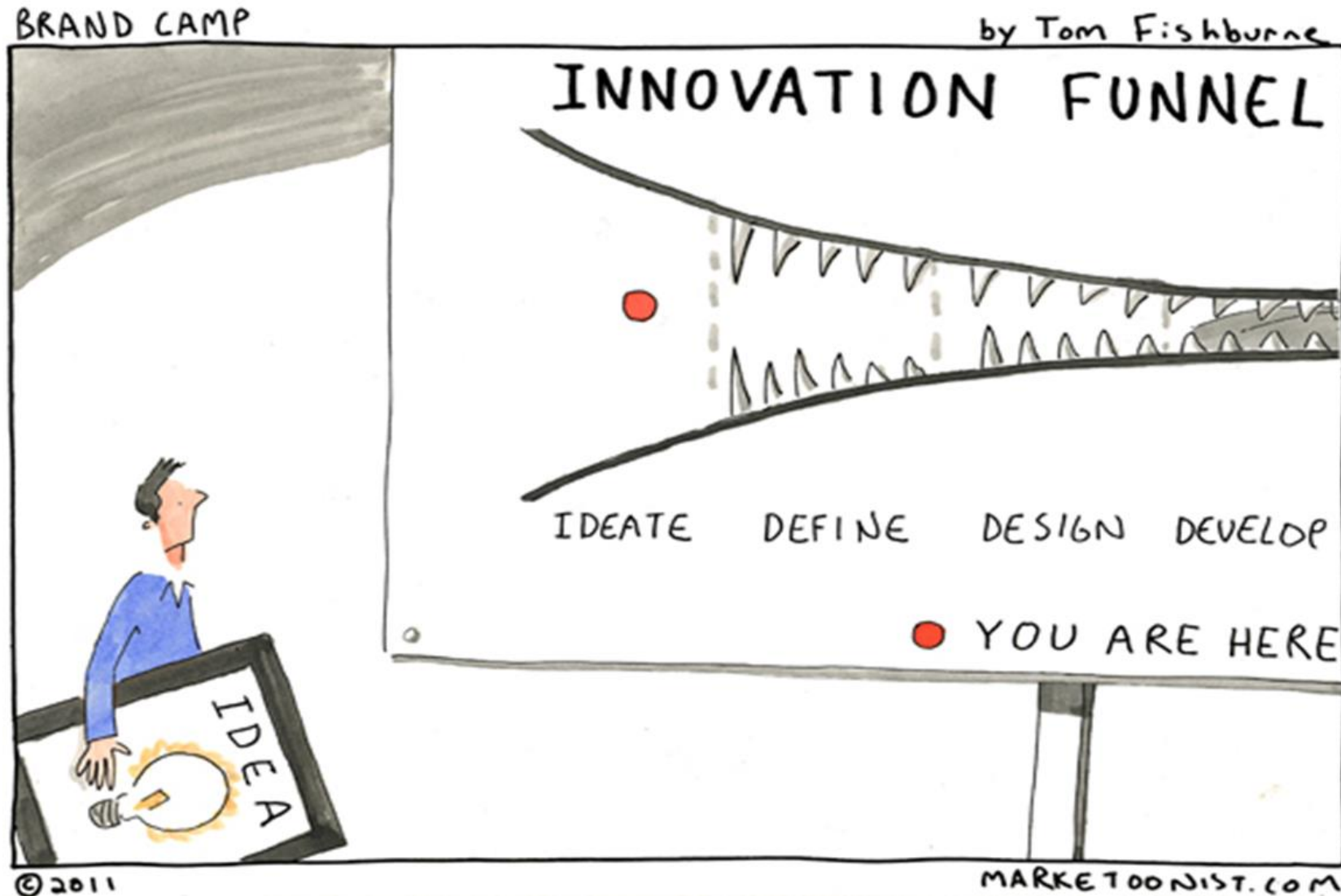
# Innovation & the challenge of vitality

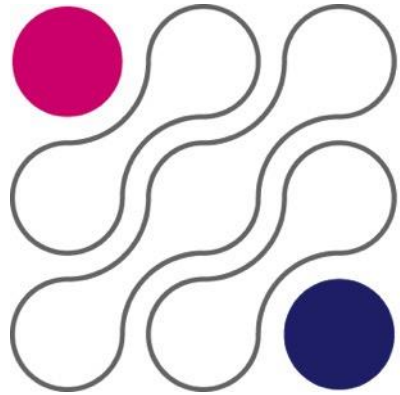
Through:

- Q-helix cluster collaboration
  - Sports
  - Business
  - Knowledge
  - Government
- Open innovation
- Support in the innovation funnel



# The innovation funnel

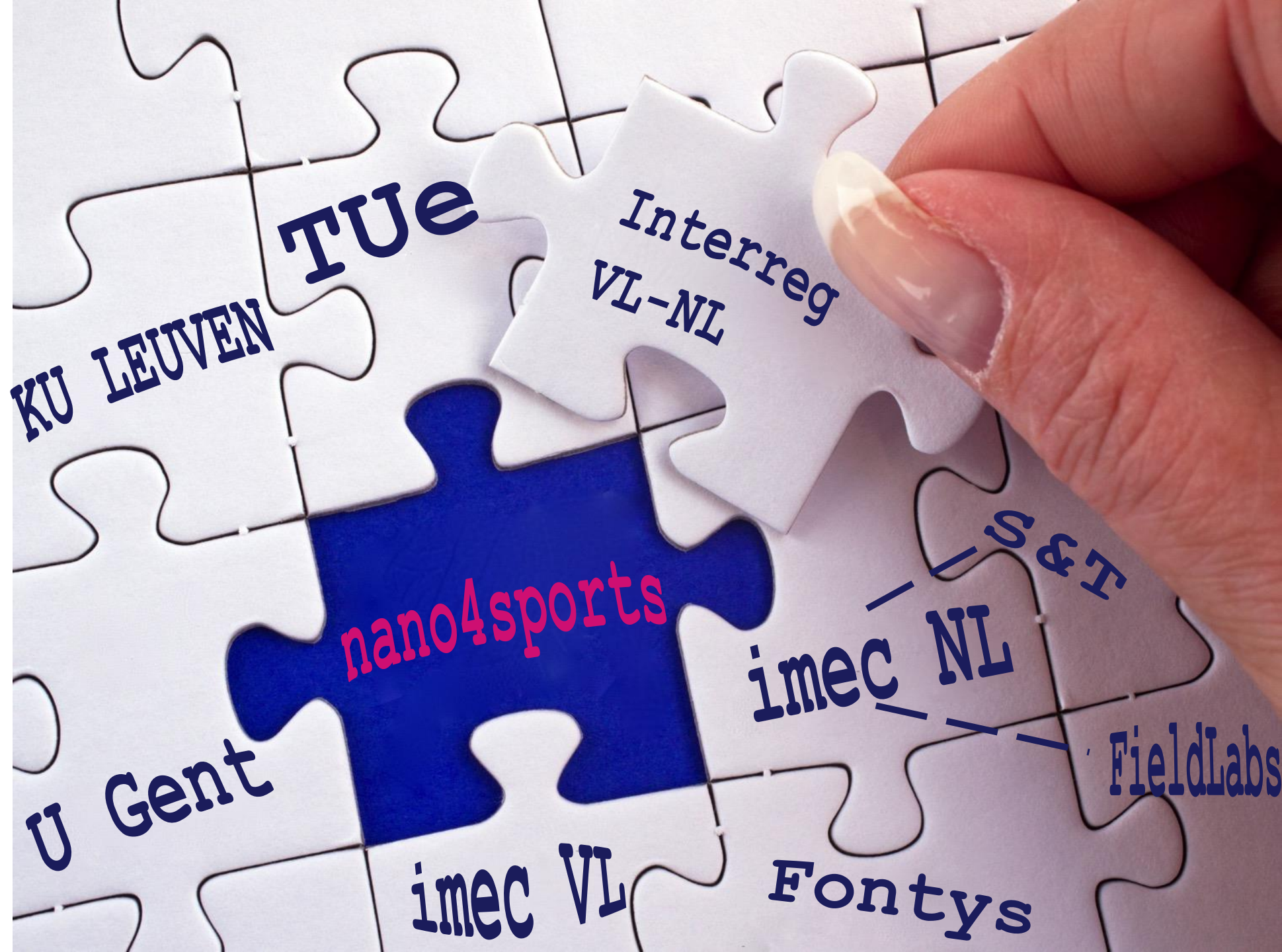




nano4SPORTS

TECHNOLOGY FOR AN ACTIVE LIFESTYLE





KU LEUVEN

TUE

Interreg  
VL-NL

nano4sports

imec NL

S&T

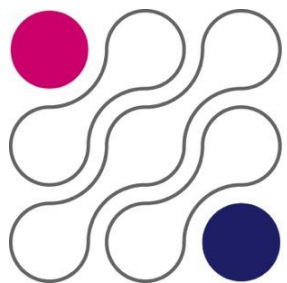
FieldLabs

U Gent

imec VL

Fontys





# nano4SPORTS

TECHNOLOGY FOR AN ACTIVE LIFESTYLE



# Interreg



EUROPESE UNIE

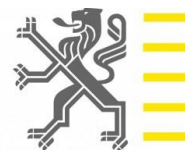
## Vlaanderen-Nederland

Europees Fonds voor Regionale Ontwikkeling



Ministerie van Economische Zaken

Met steun van de  
Vlaamse overheid



met de steun van  
**VLAAMS-  
BRABANT**

**Provincie Noord-Brabant**



# GOALS

Develop sensors, data processing, analytics and feedback solutions for sports to:

- Improve performance
- Reduce/prevent injuries
- Motive people to have a more active life
- Increase participation in sports



SENSORS



DATA  
PROCESSING  
AND  
ANALYTICS

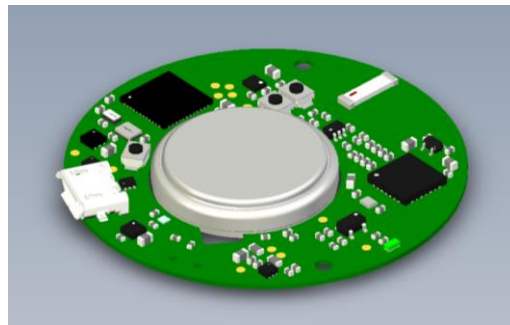


FEEDBACK  
AND  
VISUALISATION



# LOW-POWER SENSOR SYSTEM

BUILDING ON MEDICAL EXPERIENCE OF IMEC





# Nano4Sports: 4 use cases



Cycling

FL



Running

NL/FL



Adapted  
running

NL



24/7 Monitoring

NL

# FROM RESEARCH TO REALISTIC APPLICATIONS

Research labs



Controlled conditions

Field labs



Semi-controlled conditions

Field



Realistic conditions

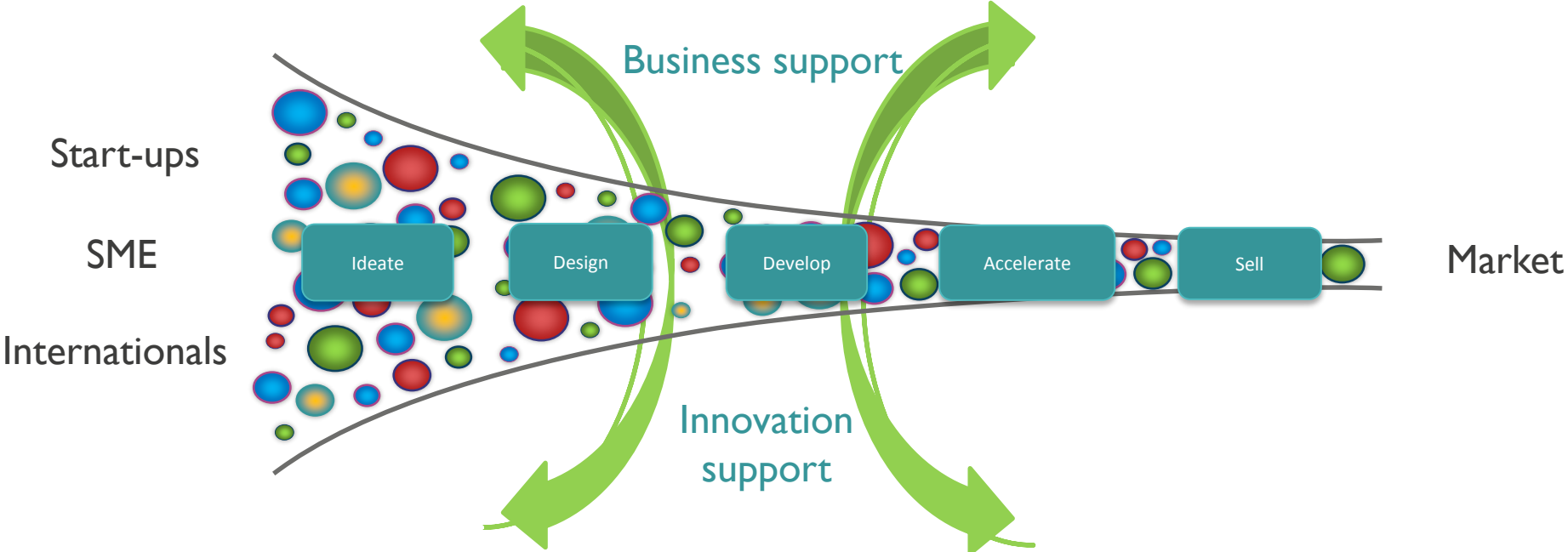


Sports clubs  
Marathon

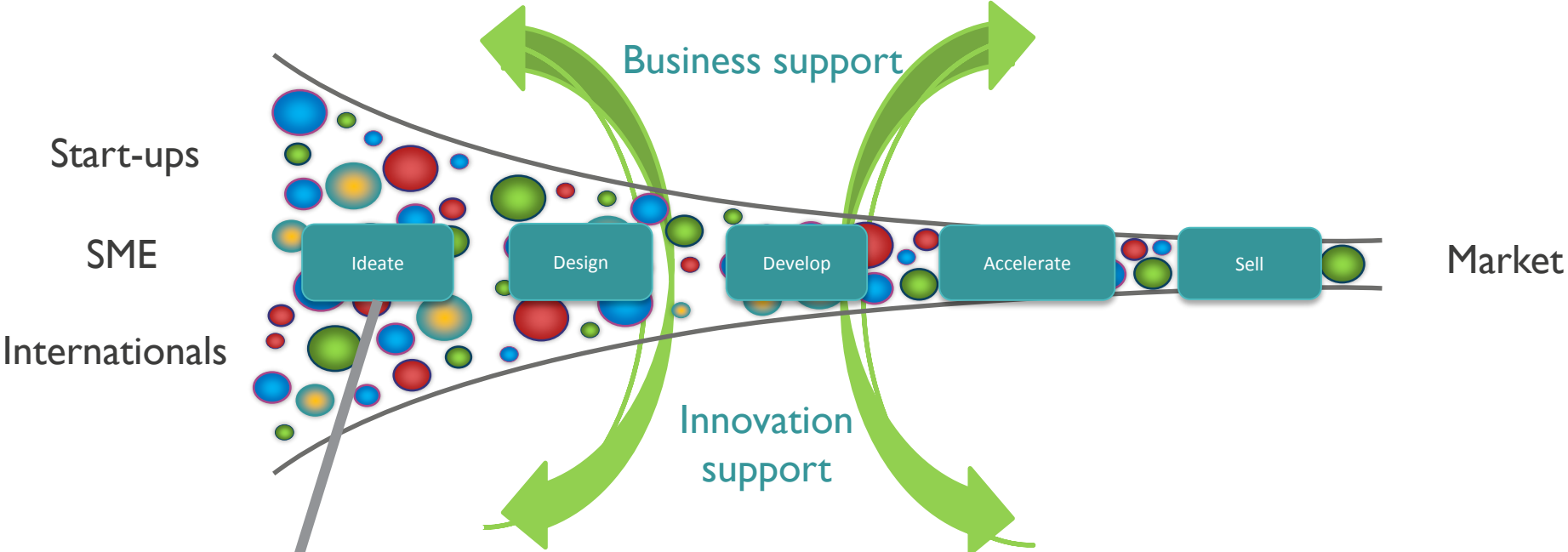
nano4SPORTS



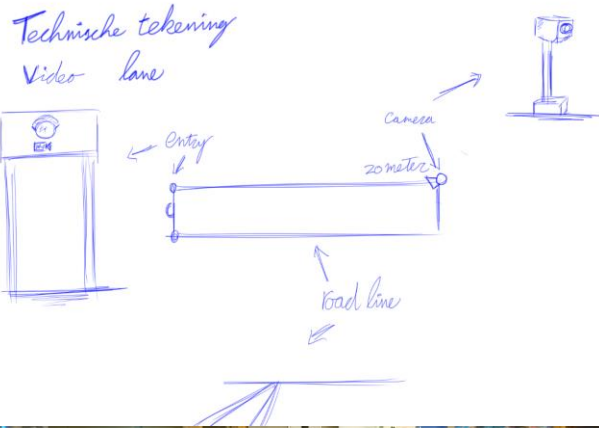
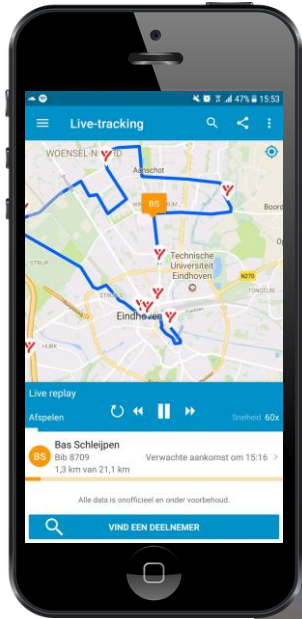
# nano4SPORTS & the innovation funnel



# nano4SPORTS & the innovation funnel

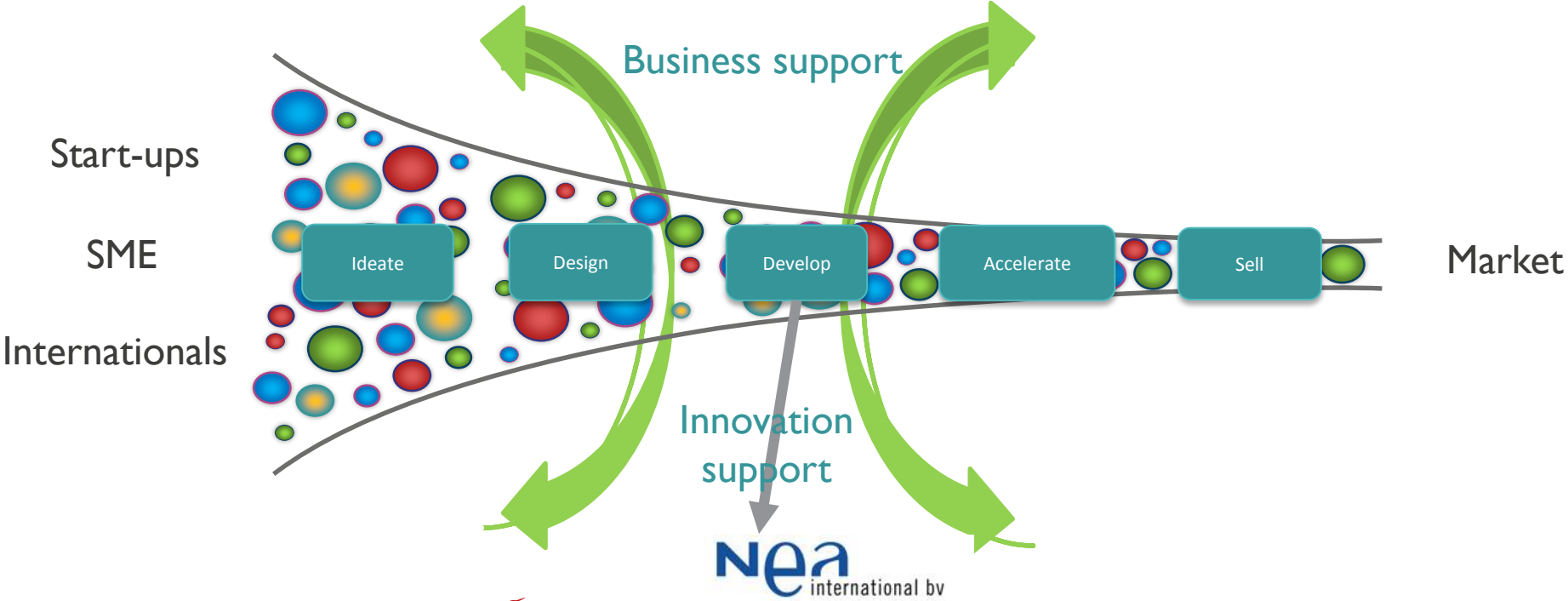


# nano4SPORTS & the innovation funnel





# nano4SPORTS & the innovation funnel

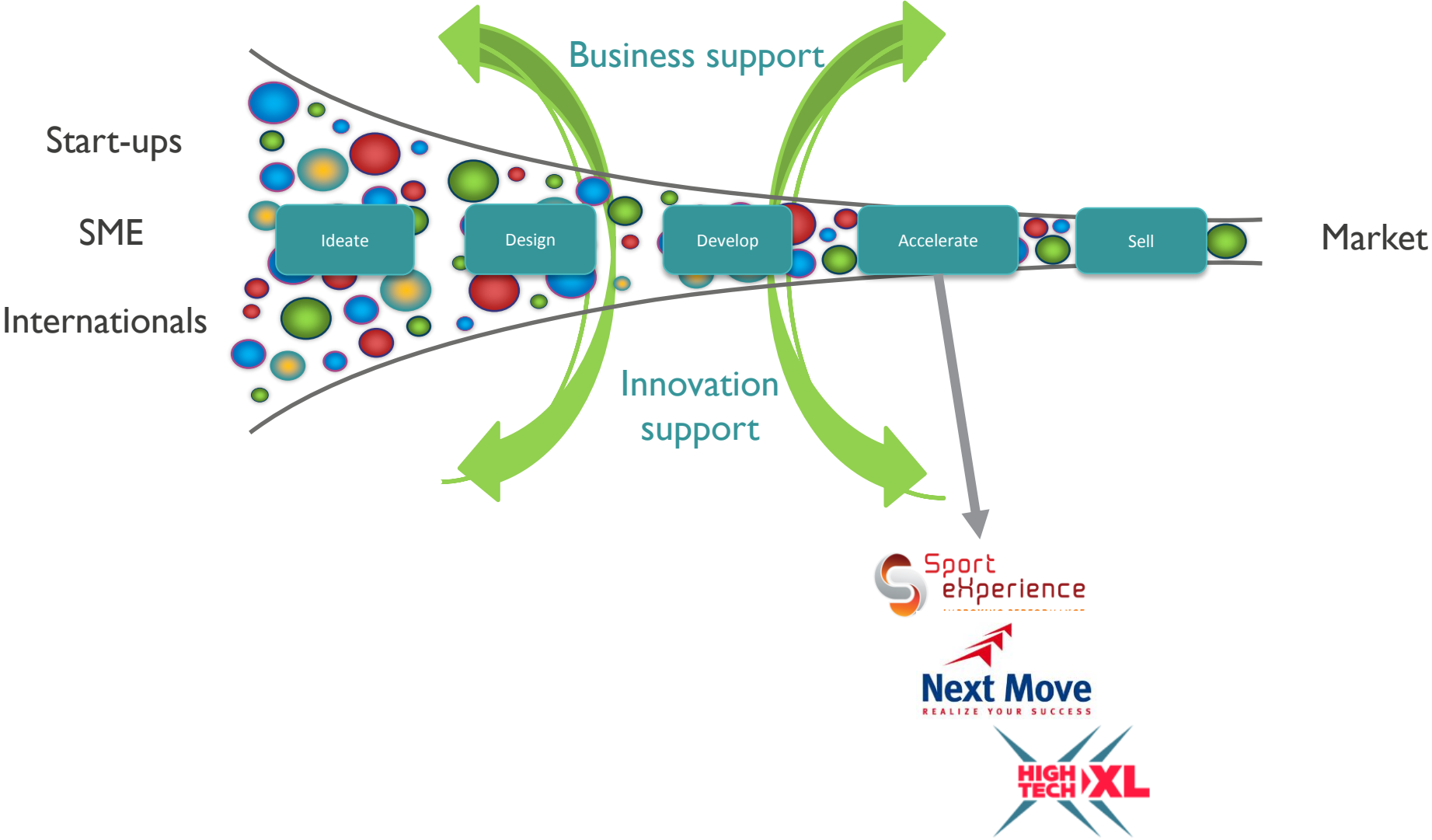


2M Engineering

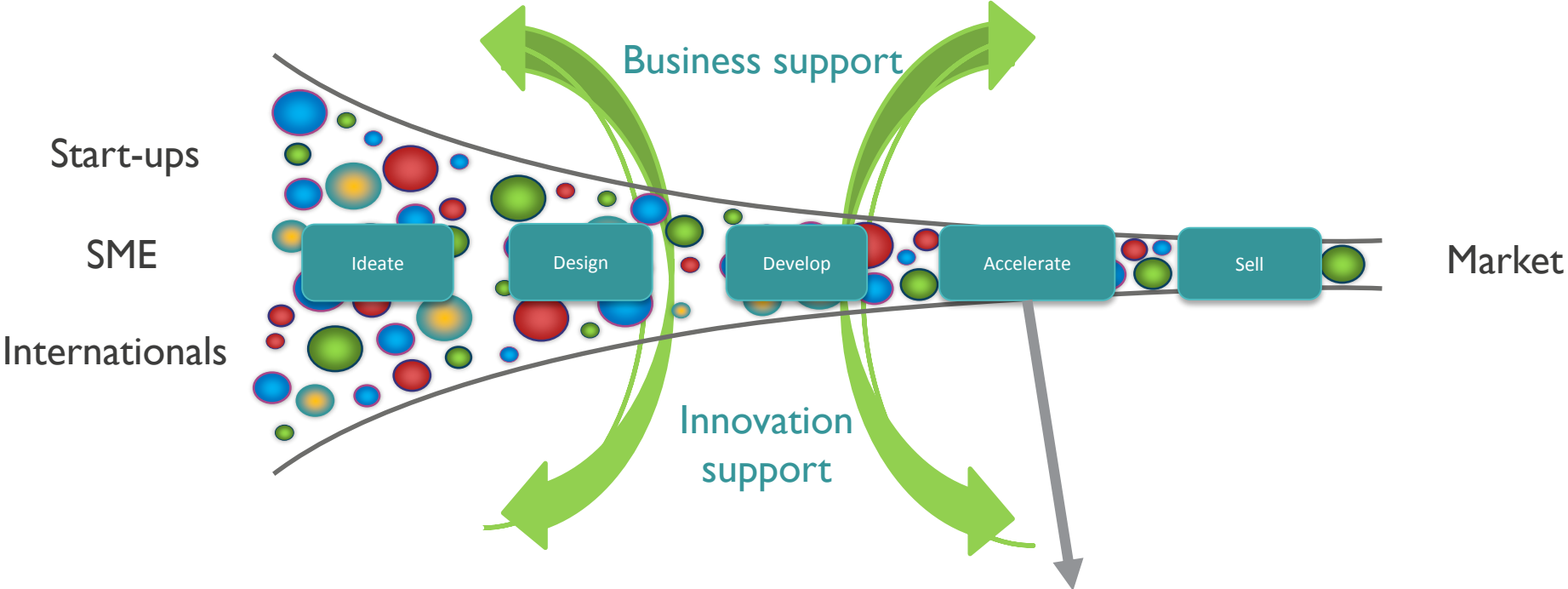
**Nano4Sports**  
**SME innovation**  
**projects**



# nano4SPORTS & the innovation funnel

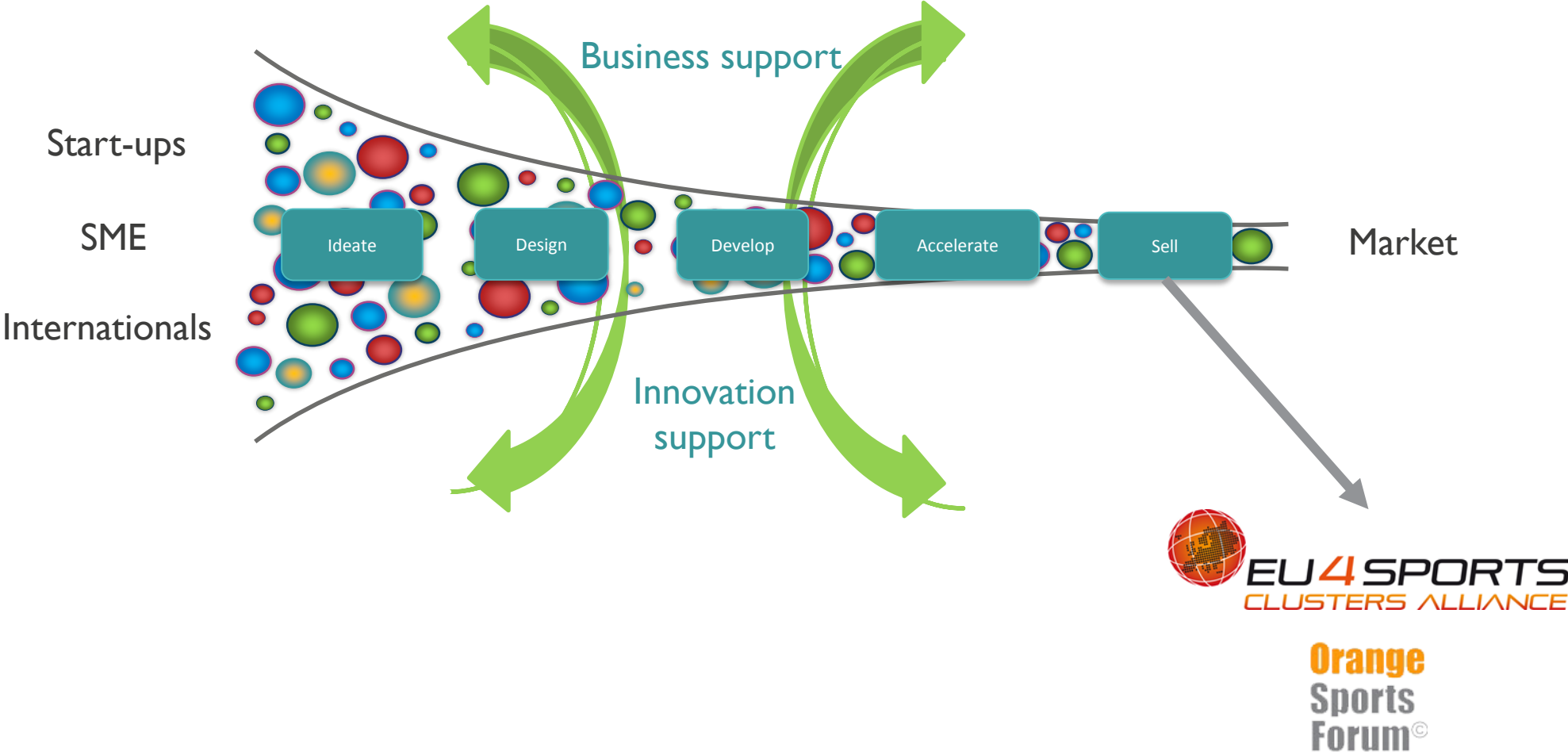


# nano4SPORTS & the innovation funnel

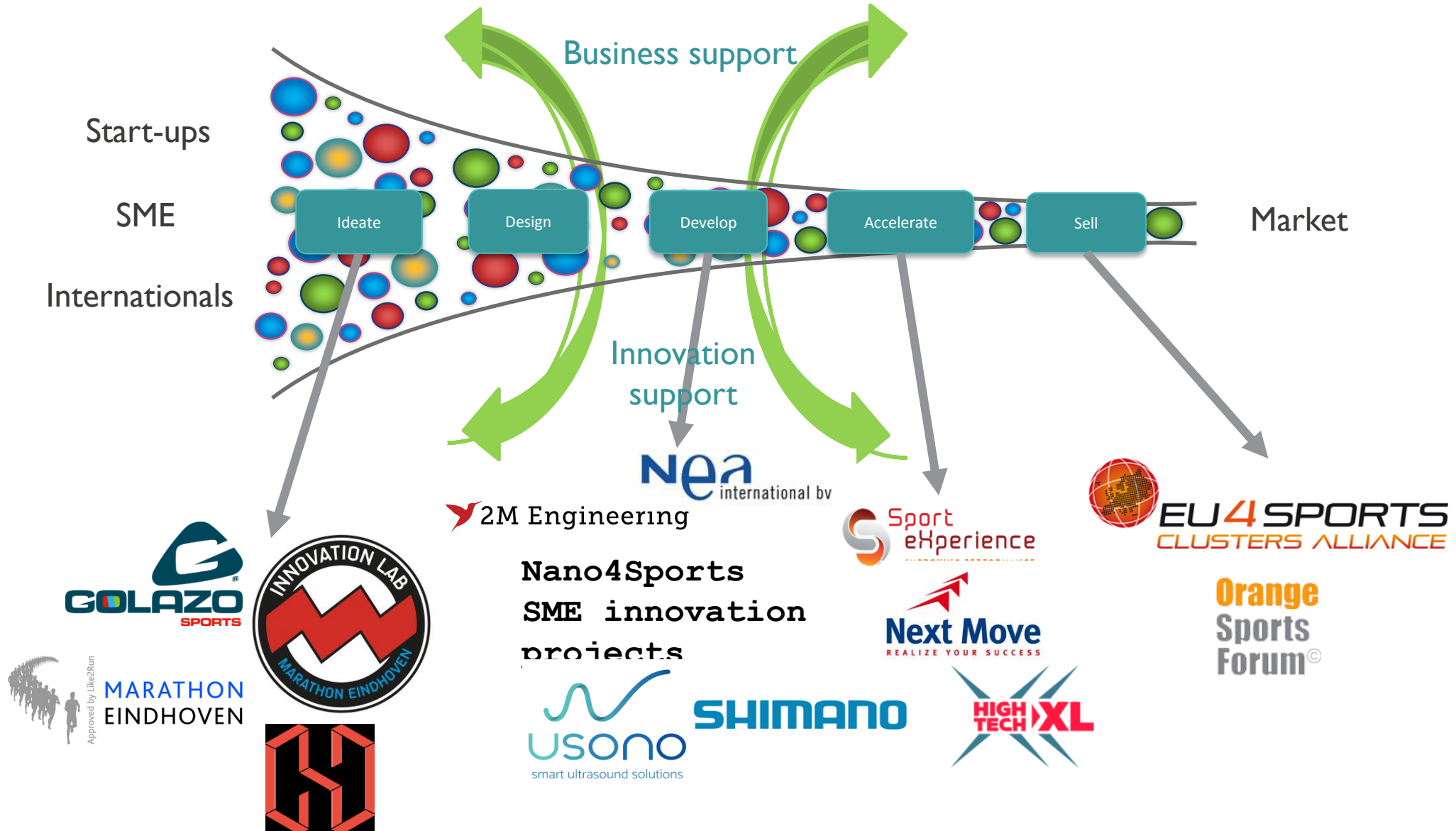




# nano4SPORTS & the innovation funnel



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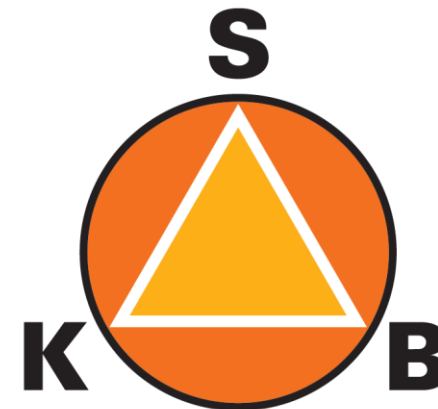


# Sports innovation in practise:

- Create end-user value & business
- Regional strengths:
  - Living labs
  - Knowledge infrastructure
  - Design & Technology
- The Brainport eco-system for business support

Collaboration in the Q-helix:

- **S**port
- **K**nowledge
- **B**usiness
- **G**overnment







The most innovative marathon  
of the world.....?!





sports and  
technology

# Sports and Technology

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# Thank You