

An aerial photograph of Rotterdam, Netherlands, showing the city's skyline and harbor. The image captures the city's unique architecture, including the Erasmus Bridge and the Euromast, and the surrounding waterways. The sky is overcast, and the city is densely packed with buildings and infrastructure.

Innoveren: zo zijn onze manieren

Dirk Deichmann & Gabriël van der Kruijk

Some insights from our research and practical experience on:

**Failure (rejection)
Success (adoption)**

Idea failure vs success

Do you continue after an earlier failure or success?



Idea failure vs success

Do you learn more from a failure or success?



Data from an idea management program

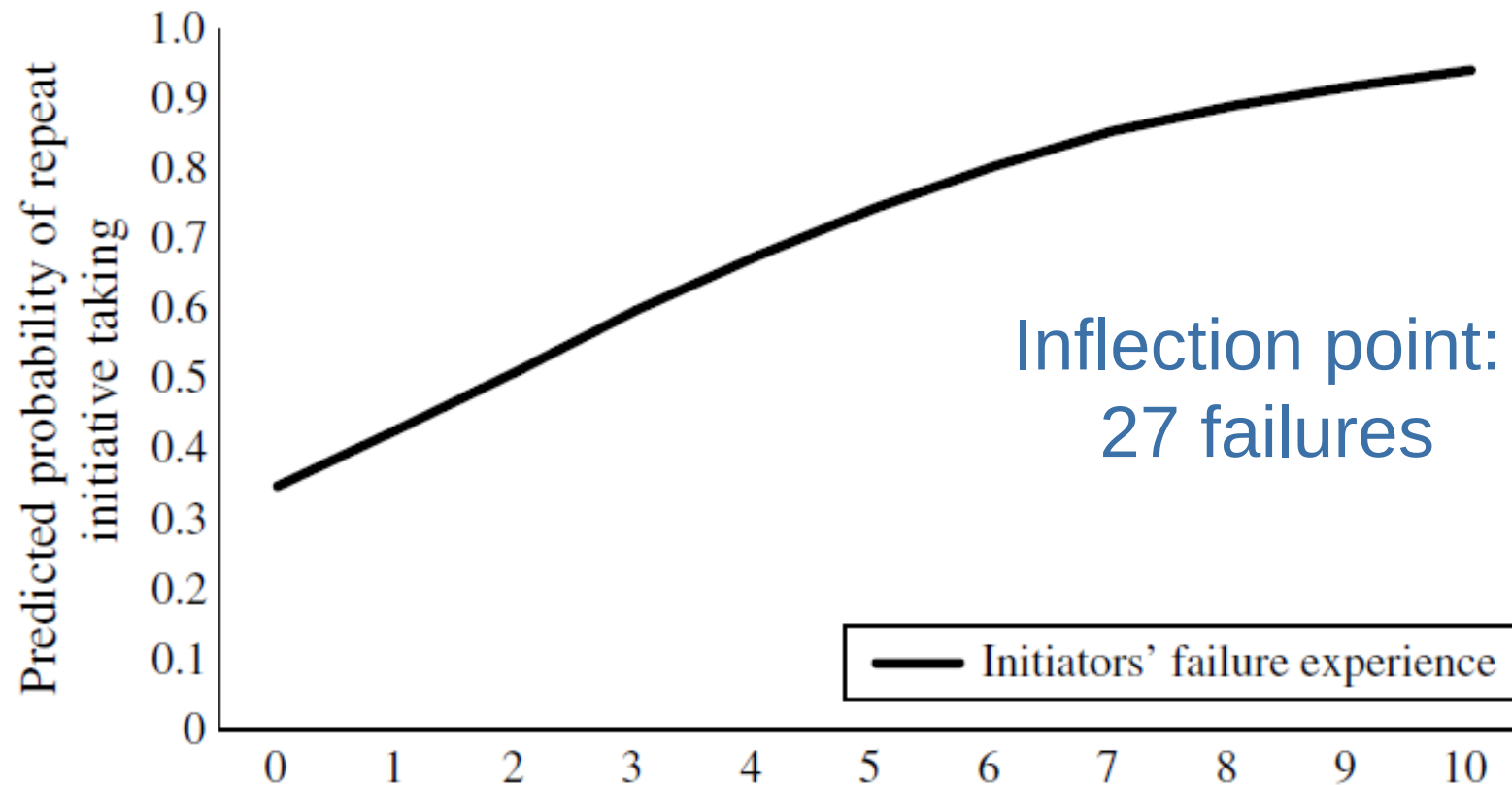
Studying a 12-year archival record of 2,352 ideas



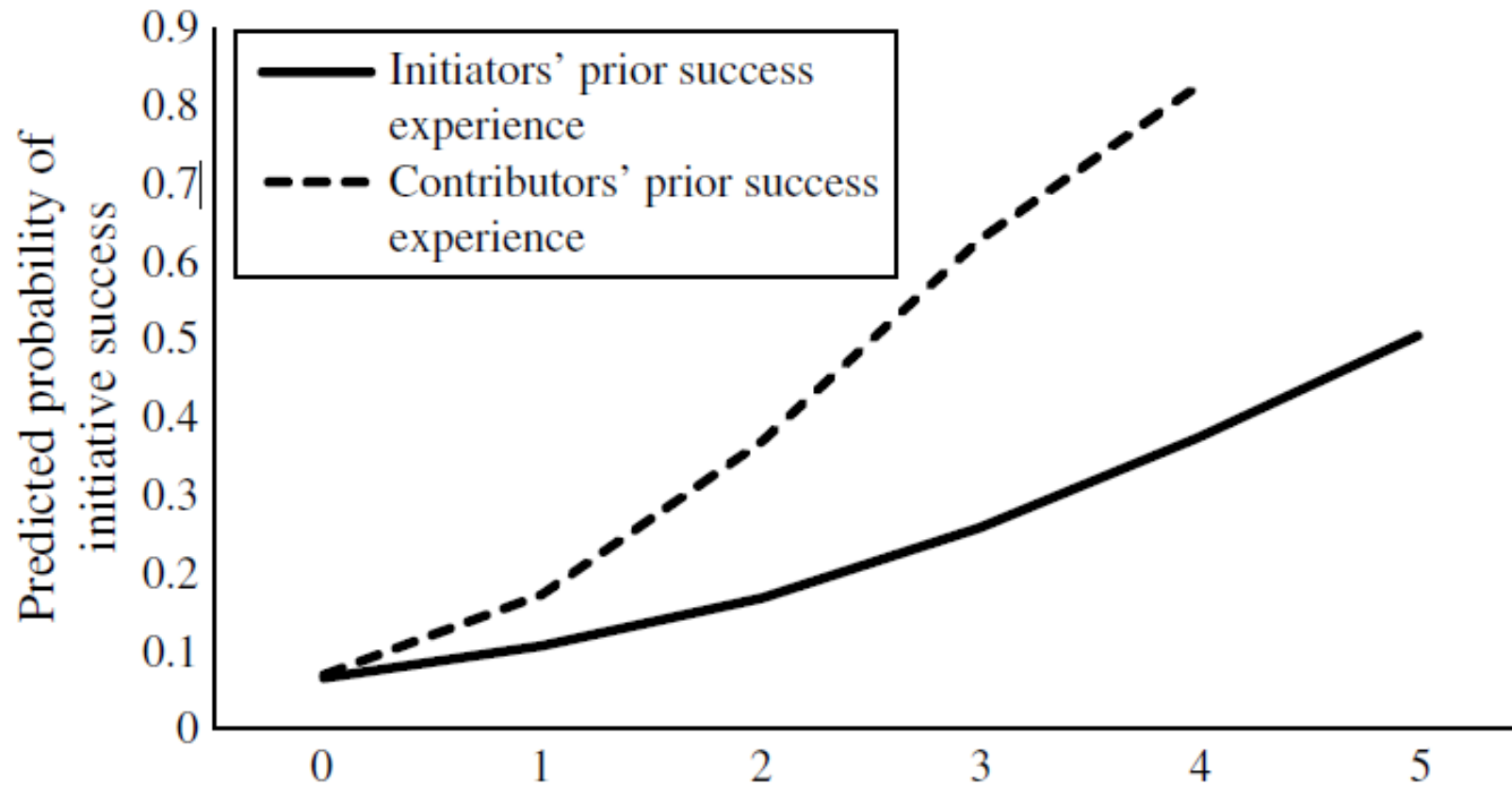
How many people do you think generated only one idea?

48%

Failure can motivate to come back with more...



...but success breeds success



Take aways

- Follow a structured process such as design thinking
- Importance of a “safe” environment where failures have no negative repercussions
- Work in a team and build a community, not a contest
- Try to enjoy the process, not (only) the outcome

Koppert's visie op Digitaal

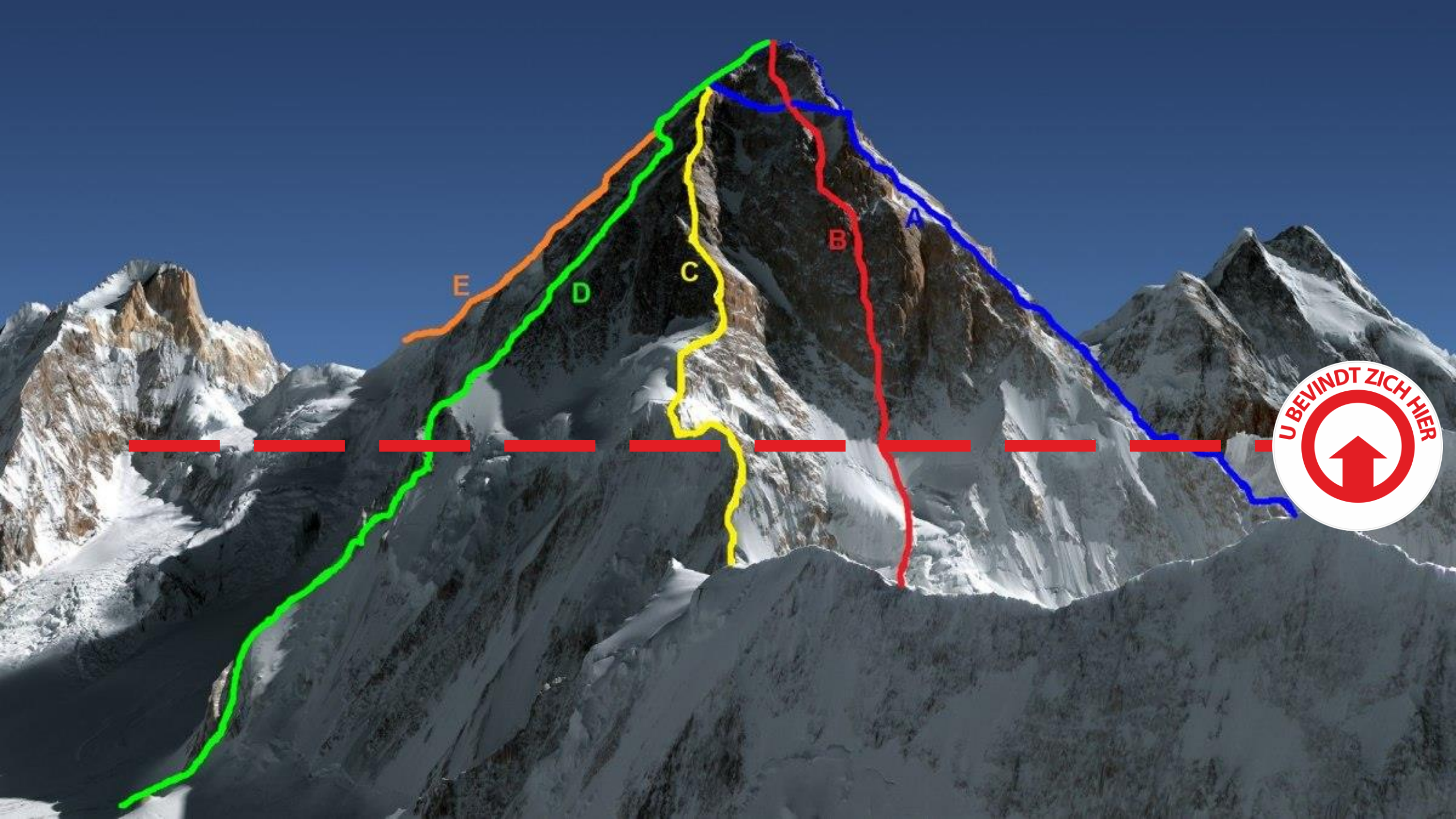


Koppert

**“Our products are alive; our
supporting products
contribute to our core.”**

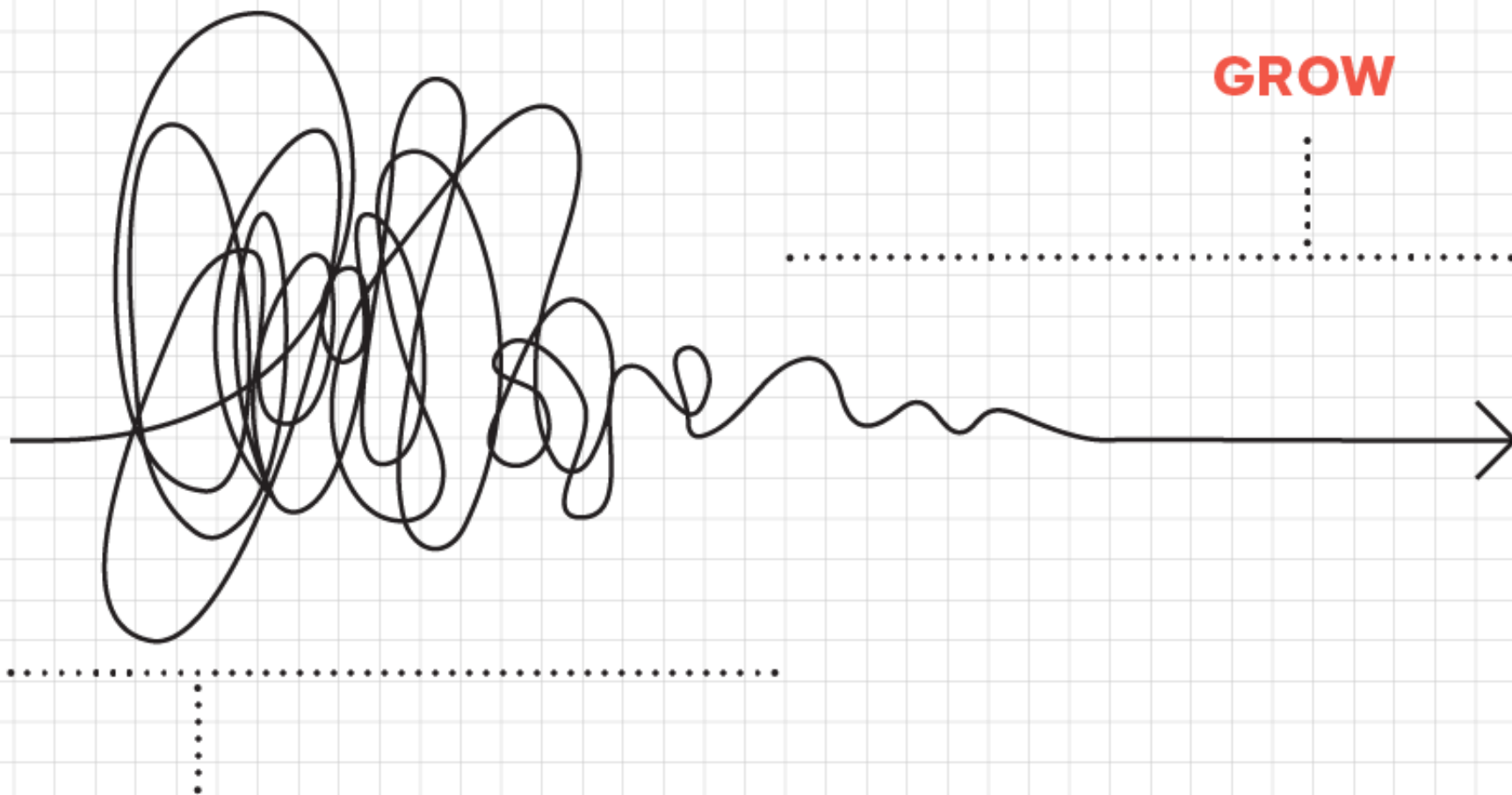
Ambitie





Explore

High uncertainty

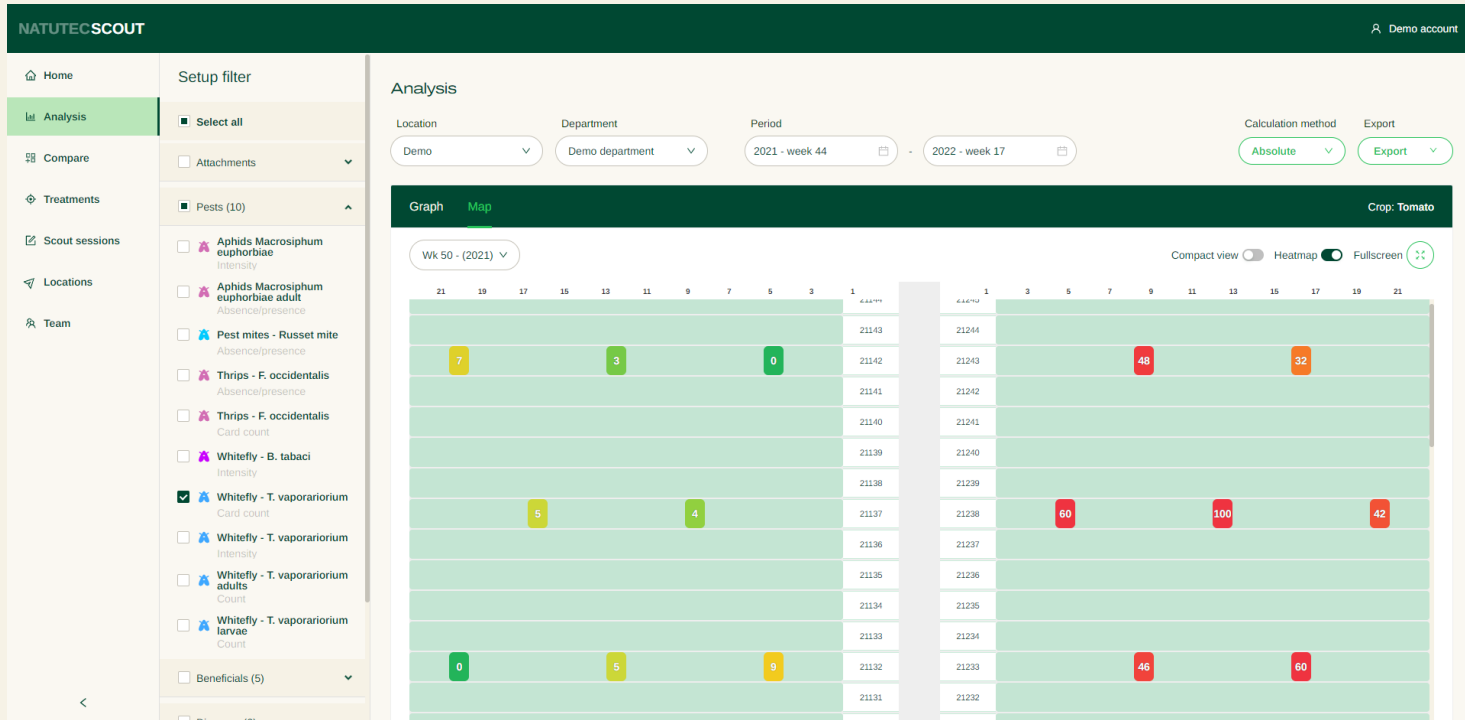


GROW

Exploit

Low uncertainty

SEARCH



Plan

Startpunt

Bezoekrapport



Bedrijf:
Adres:
Plaats:
Contactpersoon:
Telefoon:
E-mail:
Klantnummer: -
Gewas: Aardbei
Oppervlakte: 2,4 ha

Bezoekdatum:
Consultant:
Telefoon:
E-mail:

1. Afdeling 1

1,2 ha. 12.480 meter teeltgoot in deze afdeling.

Spint
Zeer enkele stip met verse spint gevonden.
Volgveld introductie van Spidex nog niet nodig.
Deze week zetten we 6 potten Spidend (Feltiella) in.
Bij twijfel de komende 2 weken; met de introductie van Thripex (N. cucumeris los) Spidex mee mengen en inzetten.

Luis
Niet gezien. Wekelijks 1 Aphiscout per 1.000 m² inzetten.

Trips
Rustig. Geen te zien in de bloemen.
Op het moment van volle bloei eenmalig Thripex (N. cucumeris los) 250 per meter goot inzetten.

Witte vlieg
Rustig.

Meeldauw/Botrytis
Deze week een bespuiting met Flint (12,5 gram per 100 liter water) uitvoeren.
Na 7 dagen (vrijdag erna) terugkomen met een bespuiting Serenade (8 ltr/ha). Deze eerste periode komt er veel blad bij, het is belangrijk dan de preventieve bedekking met een fungicide te behouden.
Zwavelverdamers om de nacht 4 uur per nacht aanhouden.

Bestuiving
Bij toenemende bloei inzet opschalen. Streef naar 10 tot 12 kasten per hectare bij volle bloei (afhankelijk van de hoeveelheid bloemen die gelijktijdig openstaan).

Duponchella/varenrouwmug



Digitalisering

Digitaal verwerkbaar maken



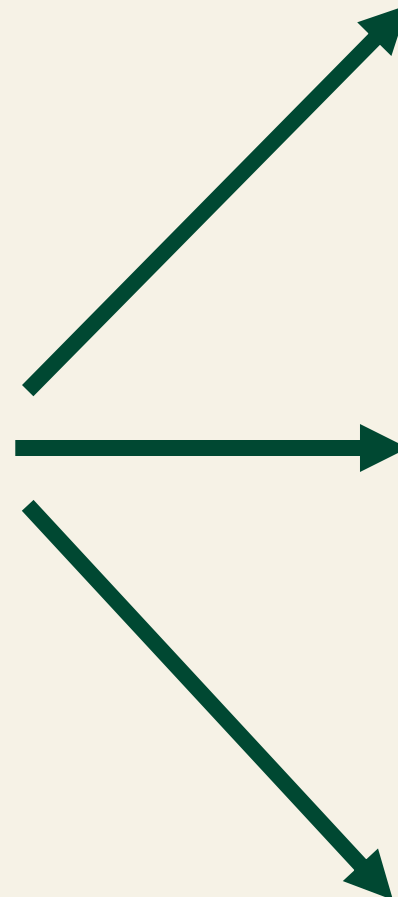
Plaag	Druk	Advies
Spint	1/5	6x Spidend
Luis	0/5	1 Aphiscout per 1.000m ³
Trips	2/5	1x Thripex per 250m goot
Witte vlieg	1/5	Geen inzet

Digitalisatie

Slimmer doen

Digitaal

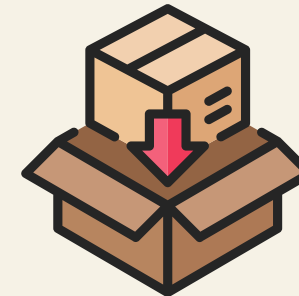
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Dashboard



Webshop bestelling



Trendanalyse



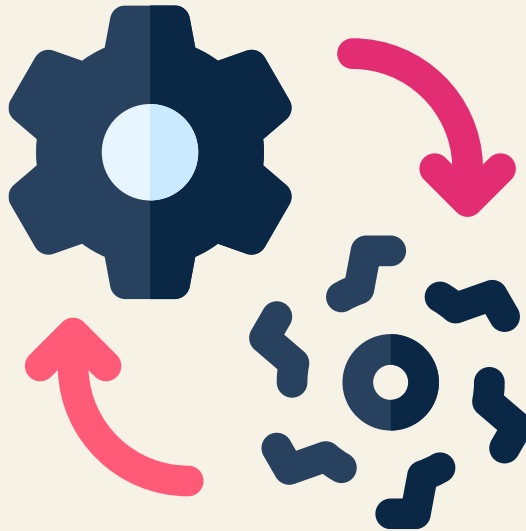
Digitale Transformatie

Anders doen

Voorspellen



Simuleren (Digital Twin)



En?



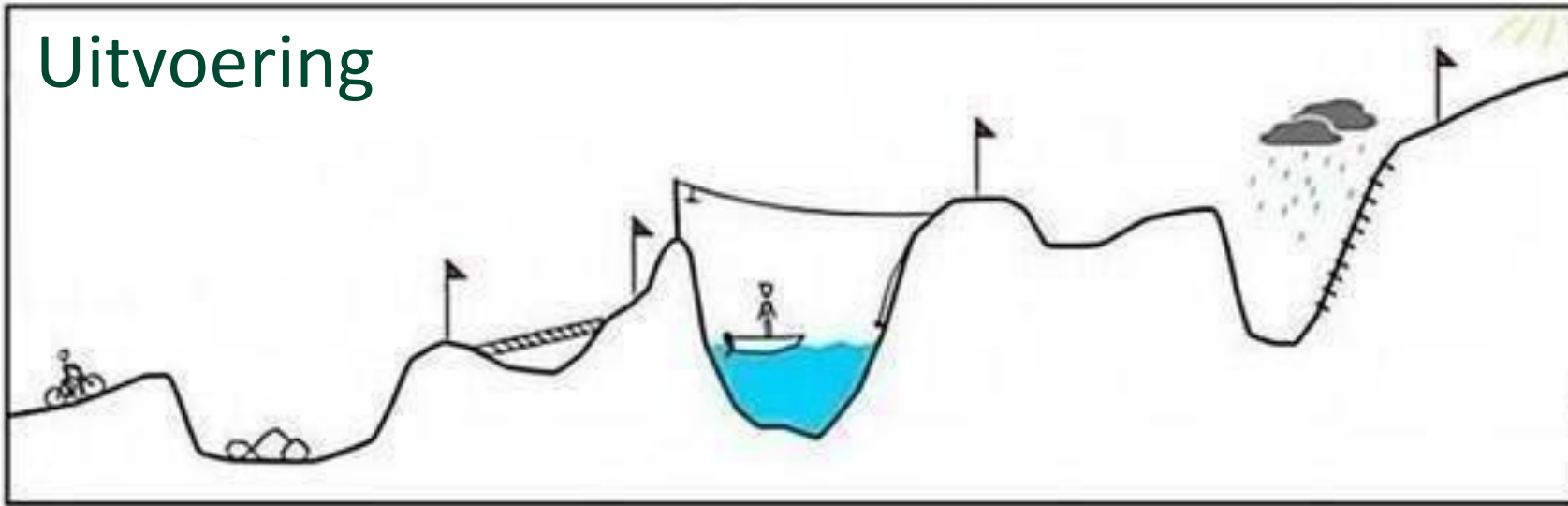
Plan & hoop



Plaag	Druk	Advies
Spint	1/5	6x Spidend
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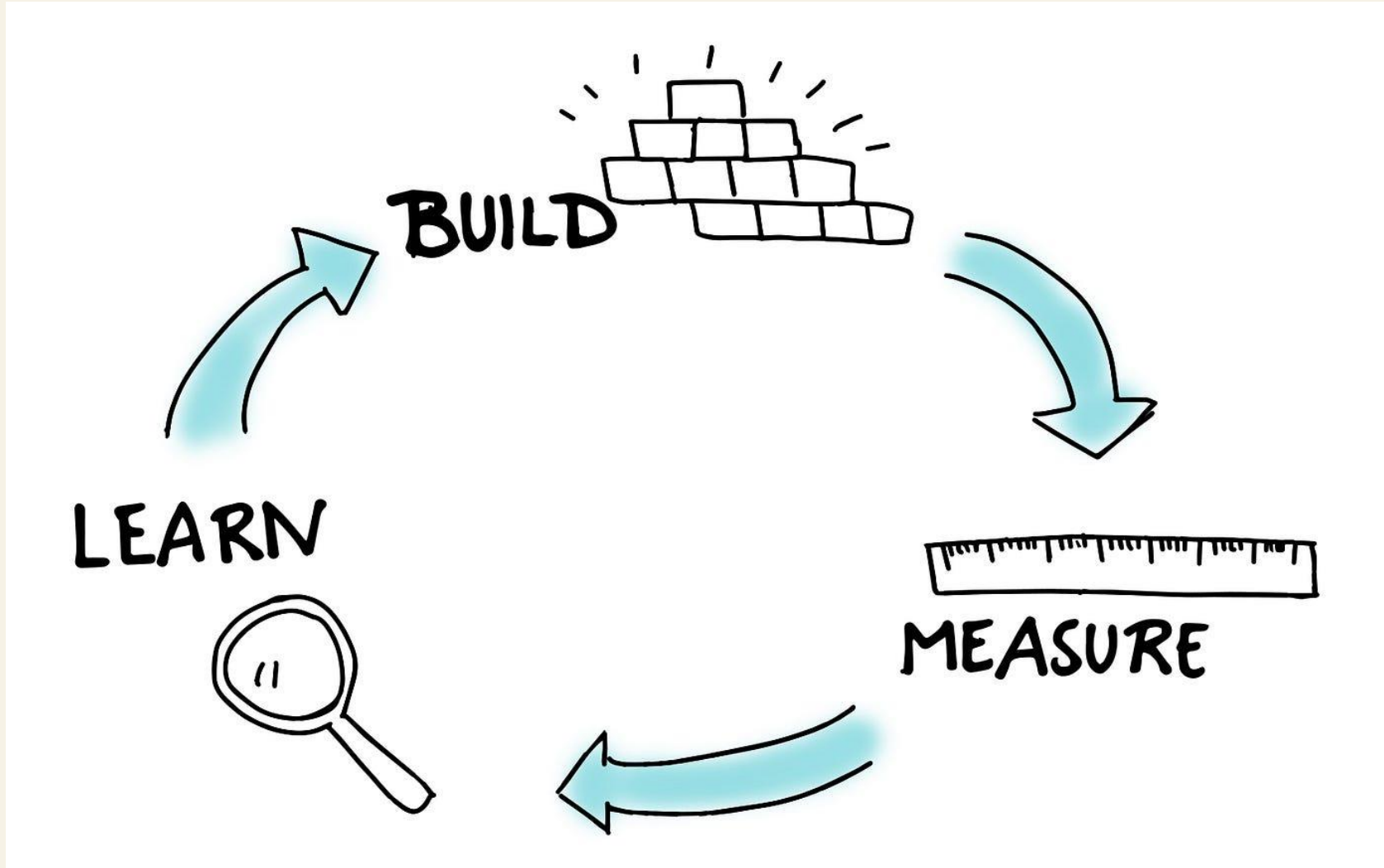


Uitvoering



Reis

Build, Measure & Learn



Ons experiment

Kort - binair



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Tomaten



Action points

- Deploy Spidex in rows 12-18
- If Whitefly gets above 25/card on fresh cards, increase Swirskii to 10/m²
- Orders for the next 4 weeks have been placed according to year planning



Under control

Medium - Stoplicht



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Pests

Greenhouse whitefly



Critical

Whitefly pressure has decreased to 8/sticky card average after sprays last week. Advice now is to keep releasing macrolophus to maintain a healthy population to make sure to keep the WF under control.

Advice
Go to 8/m² for Mirical instead of the regular 5/m².

15	16	17	18	19	20	21	22	23	24	Week
8	10	10	11	13	17	23	56	89	8	Count

Trips



Action required

Whitefly pressure has decreased to 8/sticky card average after sprays last week. Advice now is to keep releasing macrolophus to maintain a healthy population to make sure to keep the WF under control.

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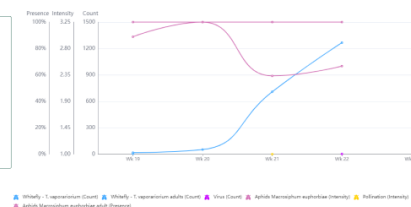


Action points

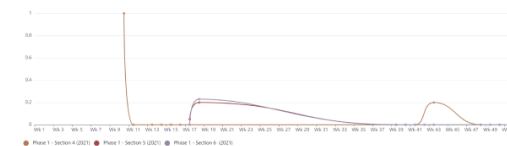
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Greenhouse whitefly





Resultaat

Kort - binair



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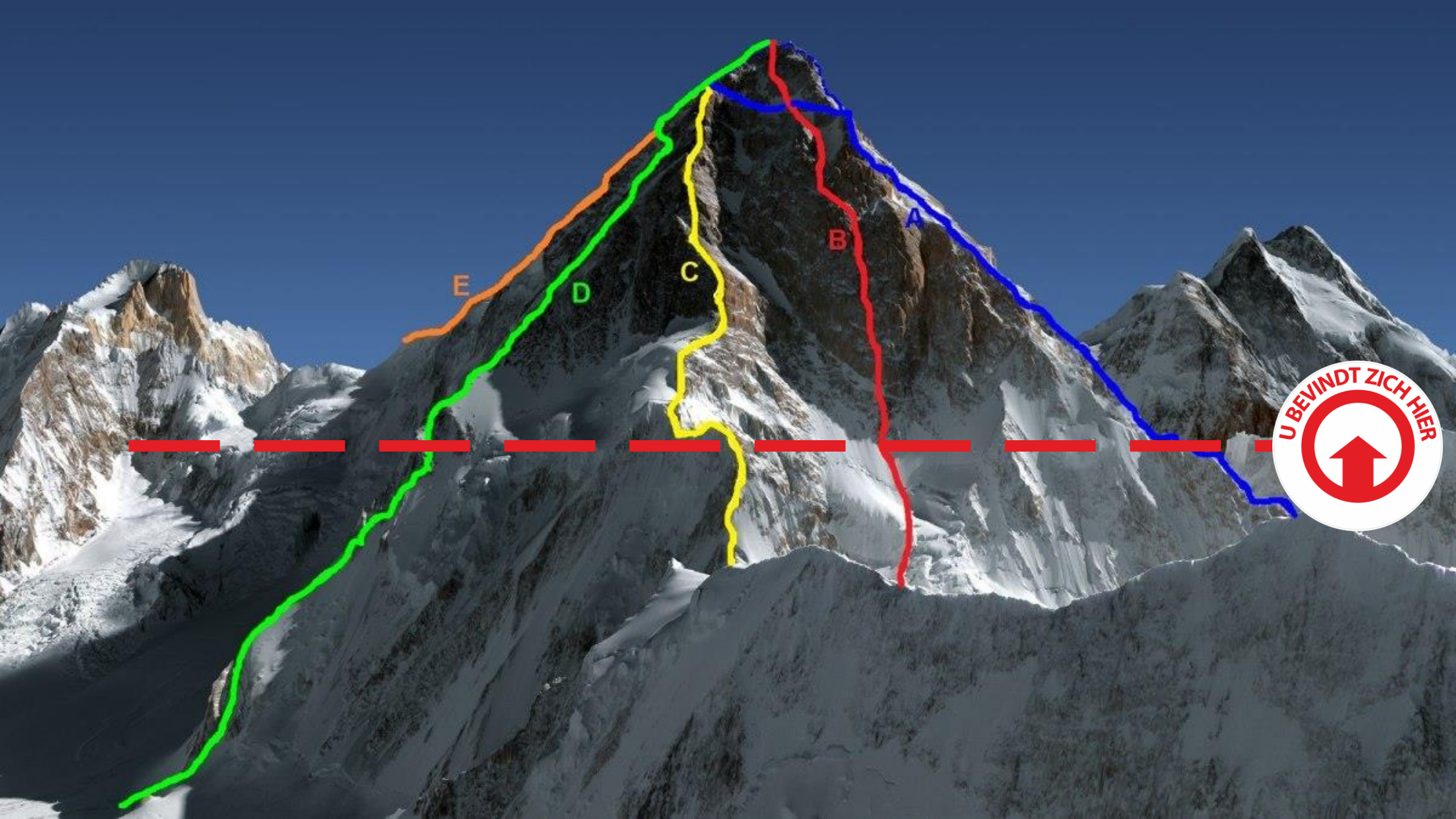
Volgende experiment

'Eerste indruk, het compacte formaat werkt top! Laat ze maar komen!'

'Dit rapportformaat ziet er goed uit. Al met al heel duidelijk wat er aan de hand is en wat er moet gebeuren.'



Conclusie: Geen Word-documenten genereren!



Horticulture innovation at Erasmus University

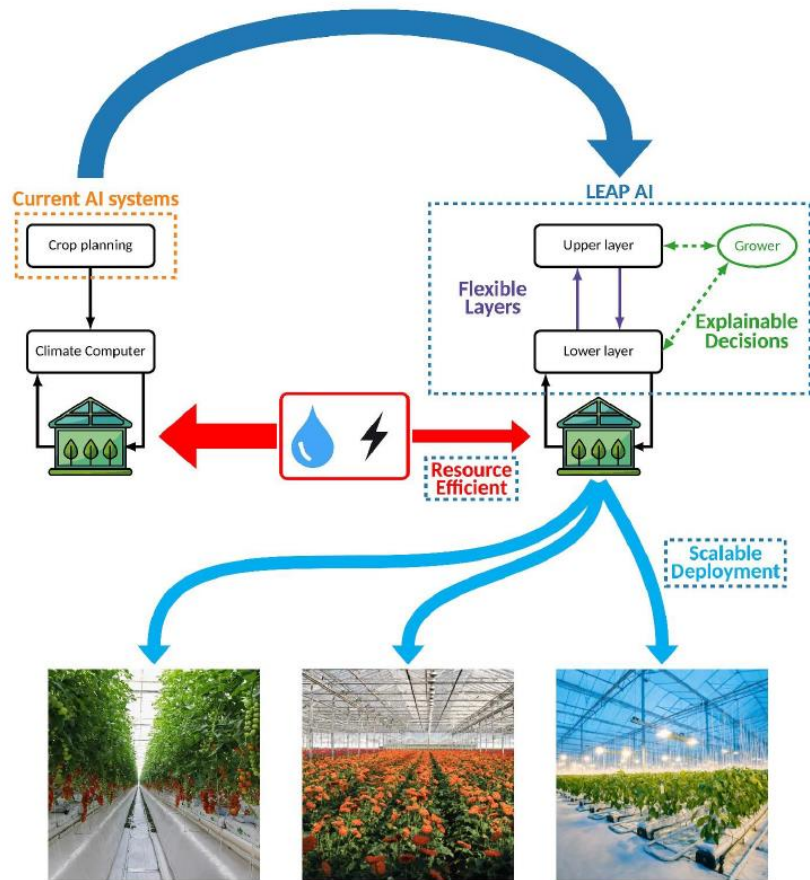


Opportunities for innovation

- Promising innovations not only come from within organizations: **new ideas can be found everywhere**
- Solo efforts often turn out ineffective: **solutions need to be co-created in a broader ecosystem**



Research



NWO grant
proposal
LEAP-AI

Master theses

E.g., Femke Melkert:
Cultivating creativity in
Dutch greenhouse
horticulture

PT-PhD supervision

E.g., Saritha Saraswathy
from Nutreco on the topic of
innovation contests and
idea selection

Teaching

Master elective

Foresight and Future Thinking in the Horticulture Sector



Executive
education
Weerbaarheid
van de
tuinbouwsector

Koppert

Teaching cases

E.g.: Design
thinking digital
solutions for
biological pest
control at
Koppert

Engagement

ERiM

MyERIM

Erasmus Horticulture and Food Centre

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Erasmus Horticulture and Food Centre

Thank you

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Accredited by

