

# Bend the Trend: Swissmem's Policies and Activities to foster Innovation

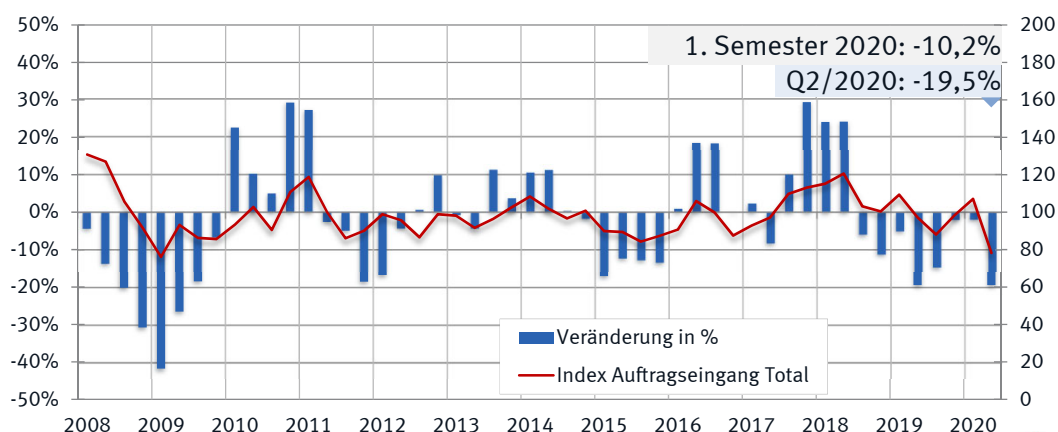
The Swiss association of mechanical and electrical engineering industries

Dr. Stefan Brupbacher, Director



## Industry is Suffering: Orderbook -34% (2018/20)

Swissmem-Quartalsstatistik (Q1 2001=100)



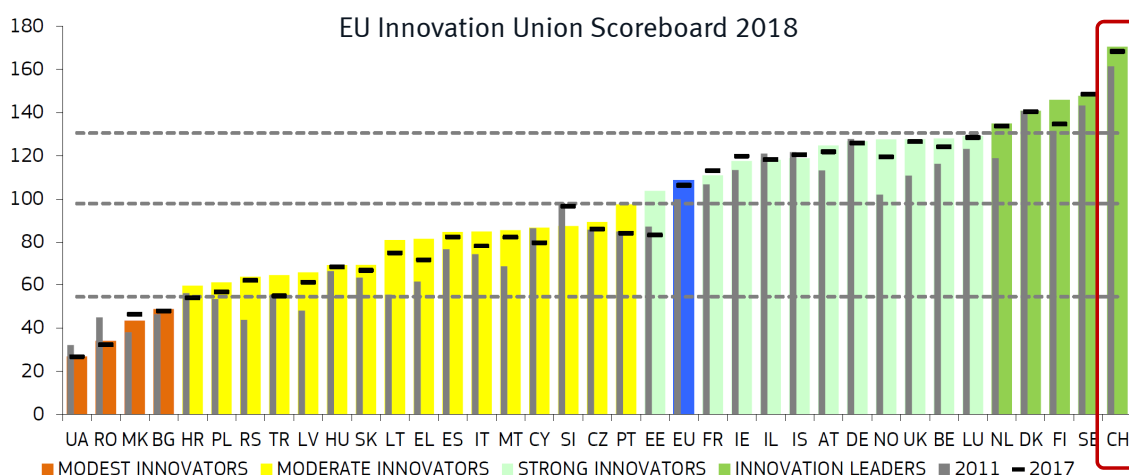
## Manufacturing Industry in a Perfect Storm

- Cyclical downturn of (automotive) industry
  - Decoupling: Trade- and Tech-War US vs. China
  - Eurocrisis since 2009, devaluation of USD since 2020
  - Digitalisation
  - COVID-19
  - **29.11.: Initiatives threatening export industry**
- ⇒ Innovation key for survival and success

3 | Photonics CTO Day



## Excellent Swiss Position – at the Surface at least

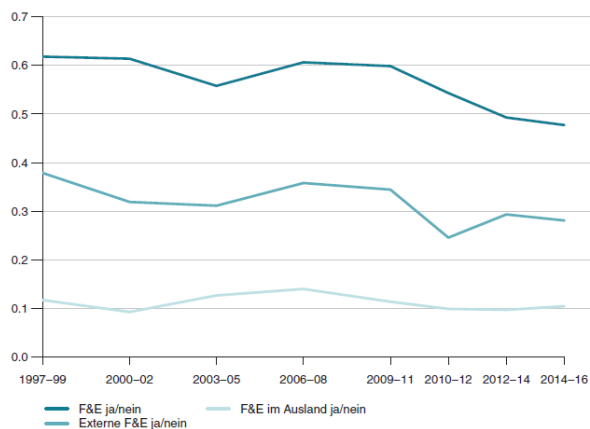


4 | Photonics CTO Day



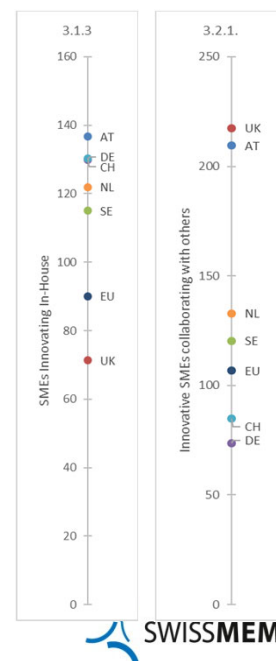
## MEM-Reality more problematic!

Companies in the high-tech industry doing R&D (KOF 2018)



5 | Photonics CTO Day

SME Indicators (EIS 2019)



SWISSMEM

## R&D Realities of SME

- Financial limits: R&D resources often below critical mass
- Manpower limits: Limited competences for adaption of new technologies
- Cultural limits: e.g. MEM-culture & IT-culture & innovation culture
- Organisational limits: new business models, new markets, new innovation methods

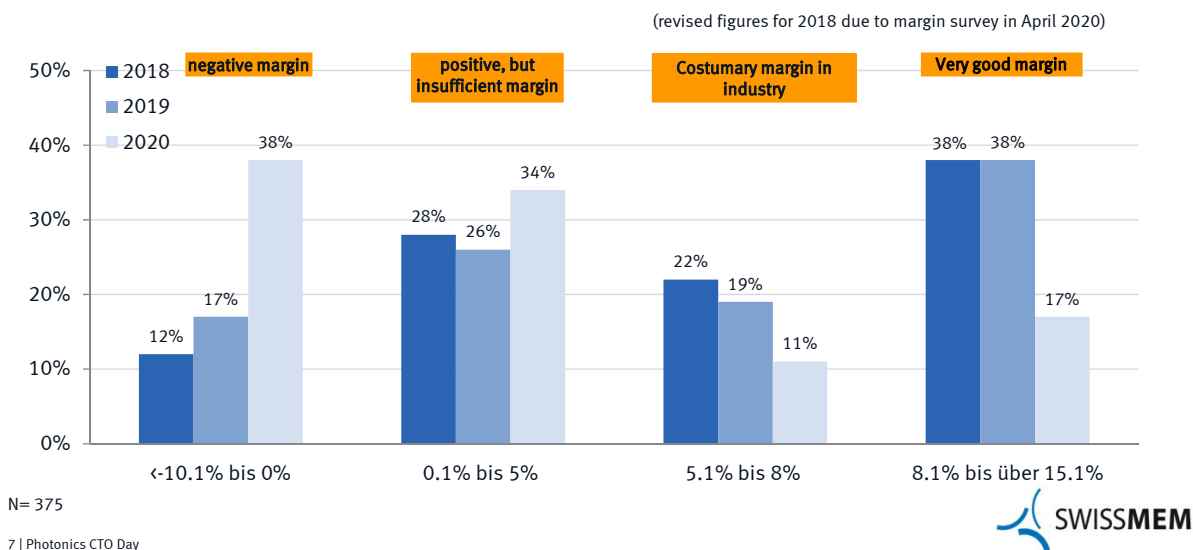
### Consequences:

=> R&D activities at SME at risk

6 | Photonics CTO Day

SWISSMEM

## Limited Availability of Resources



## R&D in Swiss Industry: How to Bend the Trend?

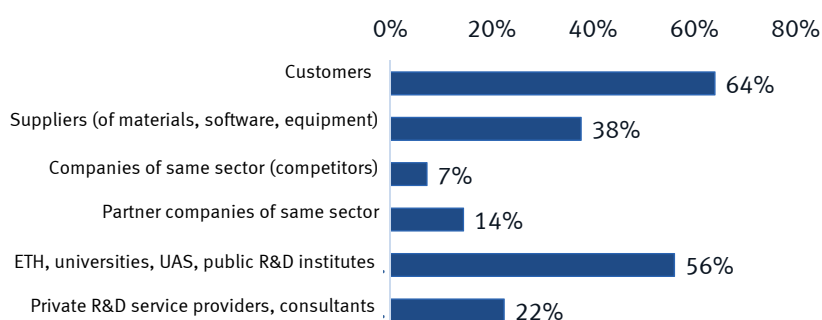
Strong financial support for innovation in other countries –  
Swiss system in question?

- Private contributions remain key – and shield from politics
  - But: call for more flexibility for Innosuisse tools, better funding of Innosuisse, inspire etc. but no «subsidisation»
  - And: emphasis on collaborative R&D among companies and universities, within CH and abroad
- ⇒ New culture of innovation required = Swissmem Innovation 2.0
- ⇒ Swissmem innovation campaign 2021

## Success Depends on Cooperation

- Increasingly complex technologies
  - Interdisciplinarity
  - Critical size of R&D Dept.
- } Need for outside R&D

Most valuable collaboration partners (Swissmem, 2017)



9 | Photonics CTO Day



## Swissmem Activities to Stimulate Innovation

- Support of Innosuisse NTN Innovation Booster (Photonics, Additive Manufacturing, Data Booster, ...)
- Budget increase for Innosuisse (130 Mio) and technology competence centres (28 Mio) in 2021 – 2024
- Innovation Coaches for members to enable Innosuisse projects
- Swissmem Specialist Groups form networks and platforms

10 | Photonics CTO Day

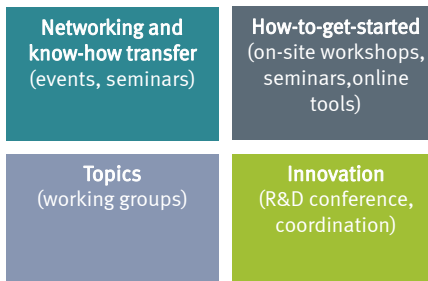


# National Initiative for Industrie 4.0

## Industrie 2025

- inform
- sensibilise
- connect
- facilitate

www.industrie2025.ch  
@Industrie2025

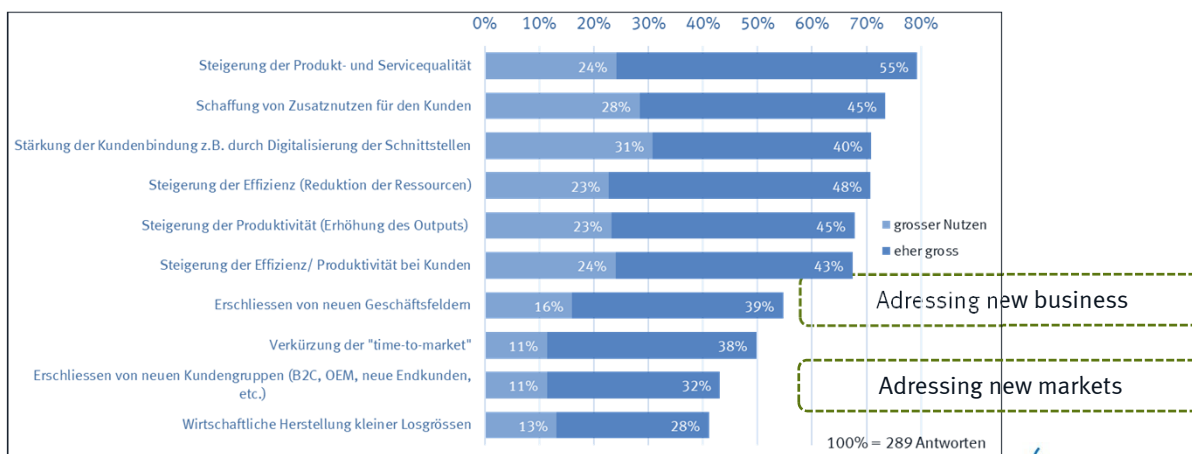


WK13



# Potentials in New Business Models and Markets

Survey on Industrie 4.0 (2020) / Potentials for own company?



Addressing new business

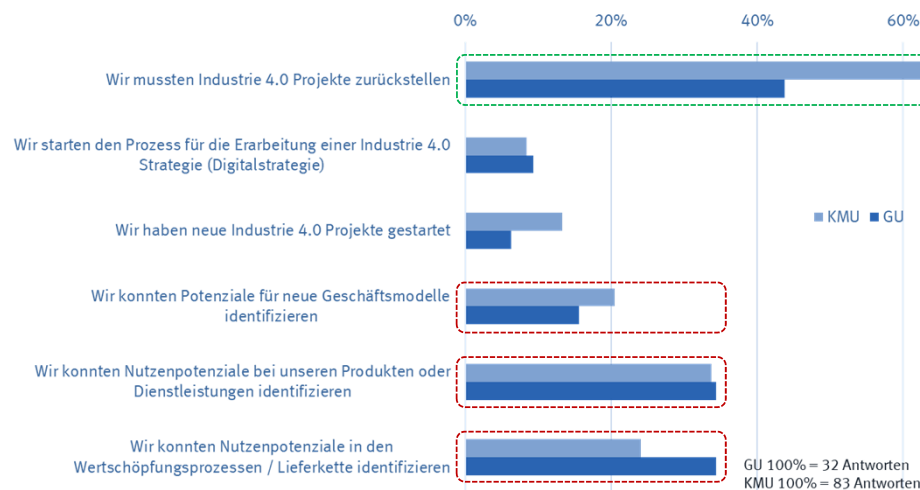
Addressing new markets



**WK13** konkrete Ergebnisse?  
gibt es Best-practice Beispiele als Success-proof ??  
Werner Kruesi; 12.10.2020

## Covid-19 as «Chance» for Industrie 4.0

Did the Covid-19 pandemic have an influence on your planning and activities regarding Industrie 4.0?



More than 60% of SME and more than 40% large E are putting I.4.0 on hold due to pandemic

SME and large E identified new value propositions during the pandemic



13 | Photonics CTO Day

## Mindset & Culture are essential

- From technology leadership to customer value
- Technology: formerly driver, in the future enabler
- Challenge 1: who is doing what – internally, externally
- Challenge 2: core role of CTOs in managing the paradigm shift
- Visionary leadership required on all levels with strong backing by top management
- The transition needs new mindset and leads to a new corporate culture
- New corporate culture key for higher standing of industry in society
- Industry is key for future of Switzerland



14 | Photonics CTO Day



find your future

Une initiative de Swissmem

Navigation Home Actualités Thèmes Formations & Emplois

tec industry  
Engineering our Future

Le CO2 se transforme en pierre

En savoir plus