

Co-creating a digital
process industry
**DIGITAL TRANSFORMATION
IN THE PROCESS INDUSTRY”
– PERSPECTIVE OF A
CHEMICAL PLAYER**

Public

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Digital4Clariant
Herøya Industry Park Conference
30.11.2017

what is precious to you?

Agenda

- Clariant at a glance
- Digital transformation is reality
- Challenges and opportunities: Cooperation and co-creation as emerging pattern

Digital transformation in the process industry – perspective of a chemical player

- **Clariant at a glance**

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Clariant at a glance

A GLOBALLY LEADING COMPANY IN SPECIALTY CHEMICALS



5847

Sales 2016 (CHF m)
from continuing operations

263

Net result 2016 (CHF m)
from continuing operations

4

Business Areas

887

EBITDA 2016 (CHF m)
before exceptionals

15.2%

EBITDA margin 2016
before exceptionals

140 in **53**

companies countries

17442

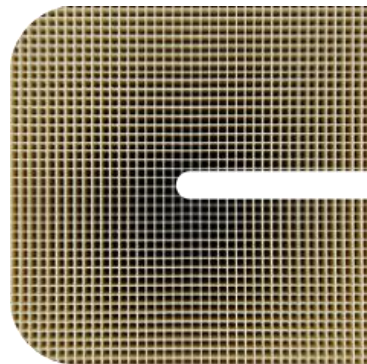
Employees 2016

Four Business Areas – the right portfolio for future growth



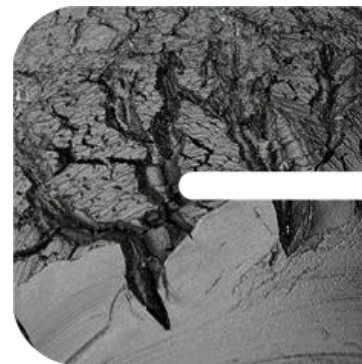
**Care
Chemicals**

SALES (CHF m)	1 465
EBITDA (CHF m)	276
EBITDA margin	18.8 %



Catalysis

SALES (CHF m)	673
EBITDA (CHF m)	160
EBITDA margin	23.8 %



**Natural
Resources**

SALES (CHF m)	1 184
EBITDA (CHF m)	200
EBITDA margin	16.9 %



**Plastics
& Coatings**

SALES (CHF m)	2 525
EBITDA (CHF m)	368
EBITDA margin	14.6 %

Topics today

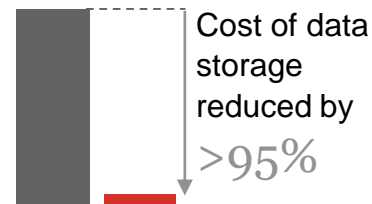
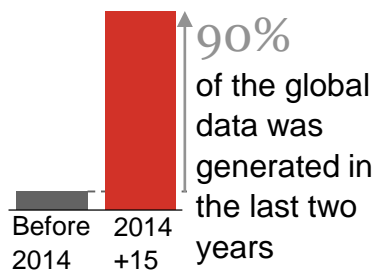
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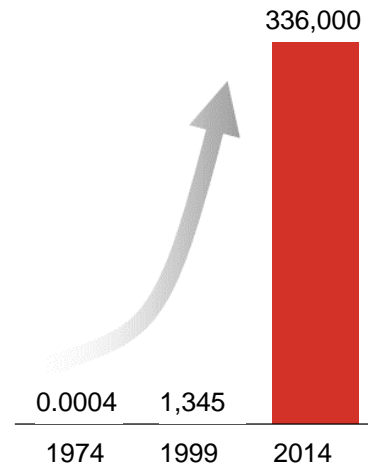
Keeping pace with the four digital dimensions fueling innovation and change is crucial to Clariant's growth

Data availability & costs



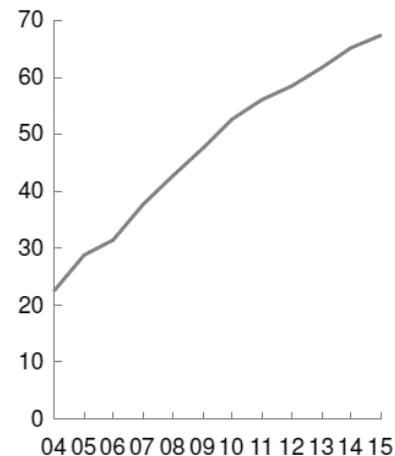
Computing capacity

PC capacity in BIPS (billions of instructions per second)



Readiness of society

Share of Internet users



+ Connectivity & speed



5-10X
faster rate for technology adjustment in Internet of Things (after the market maturity) than e. g. for mainframe technology (30 years!)

Clariant has established six work-streams to lever the potential of digitalization into the organization

1

New digital business model development

Grow via business models with digital offering

2

Digital@Operations

Next level Clariant Production System and performance with (in)direct growth impact

3

Big Data and Advanced Analytics

Data science as growth and operational efficiency lever

4

Cyber security

5

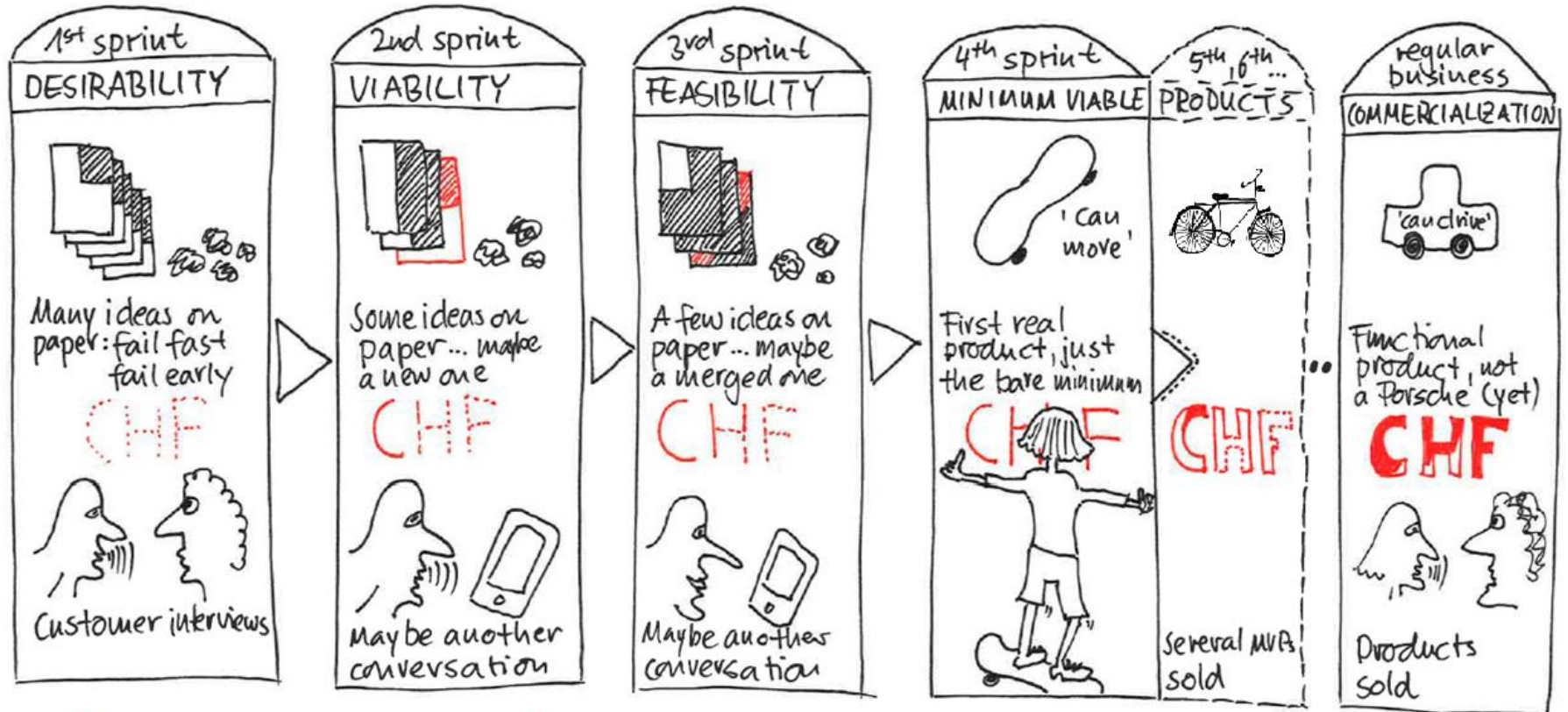
Legal and Tax

6

Digital4Clariant program

We imbibe “the valley spirit” to embrace digitally driven entrepreneurship

WORKING IN SPRINTS – PERFECTIONISM IS THE ENEMY



12 km from Muttenz

Old pump factory

Agile Sprints



Team set-up within four weeks

Off-site 3-5 days a week

Immersion boards decide



Old warehouse
Muttenz harbour

Berlin
Digital Ventures



Planegg

....



Interdisciplinary
Students involved
Consultants
Freelancers
Business angels



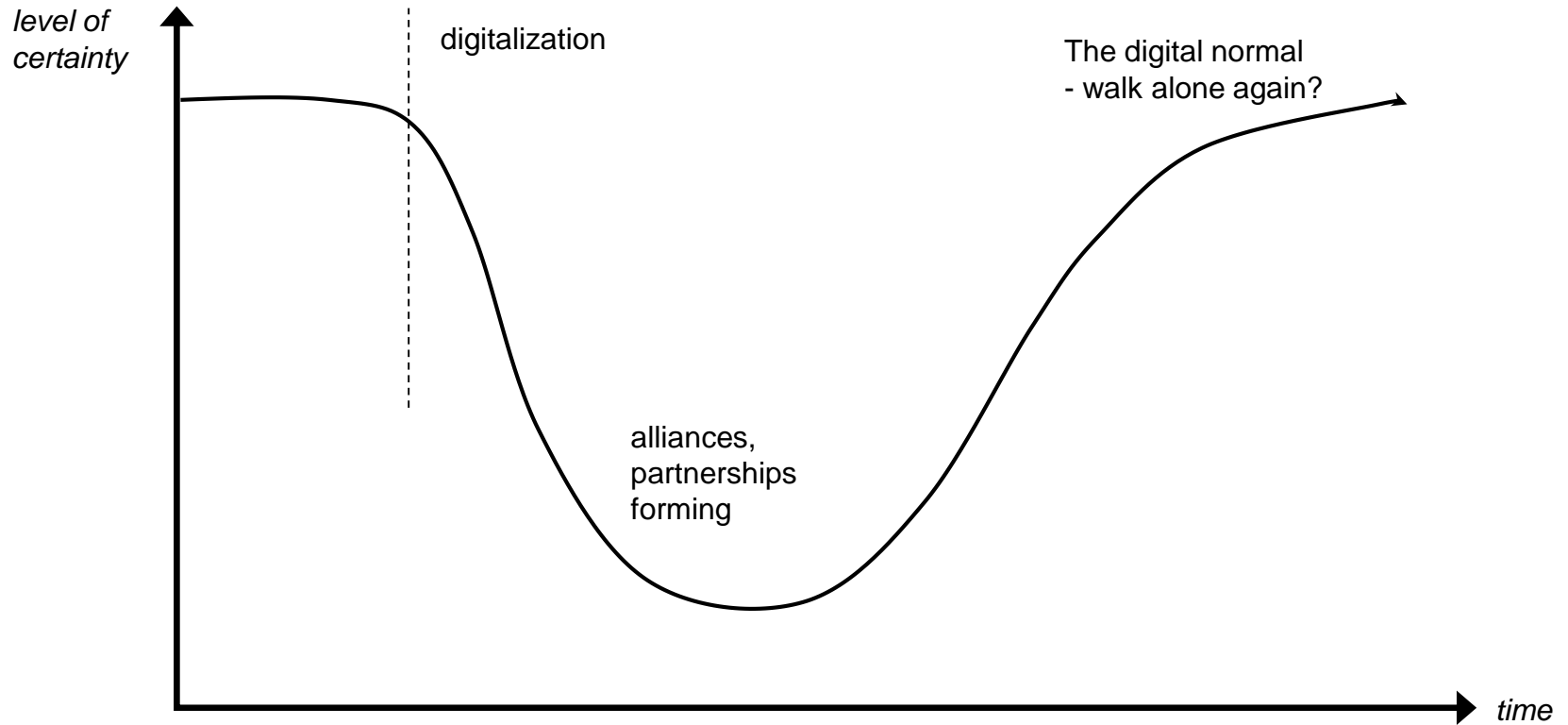
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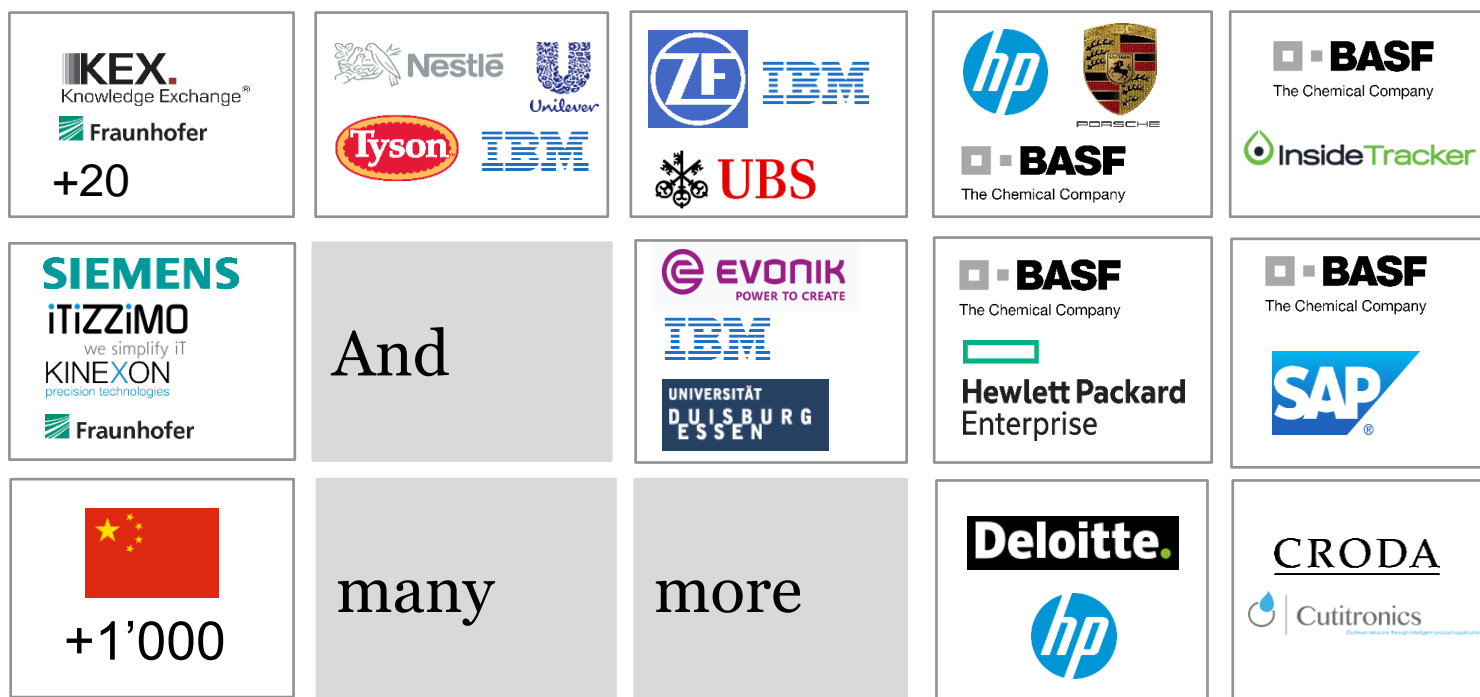
“Our general strategic advise for business executives includes building strong alliances and partnerships (and, if necessary, even with competitors)”

Is it?

Just as a reaction to uncertainty?

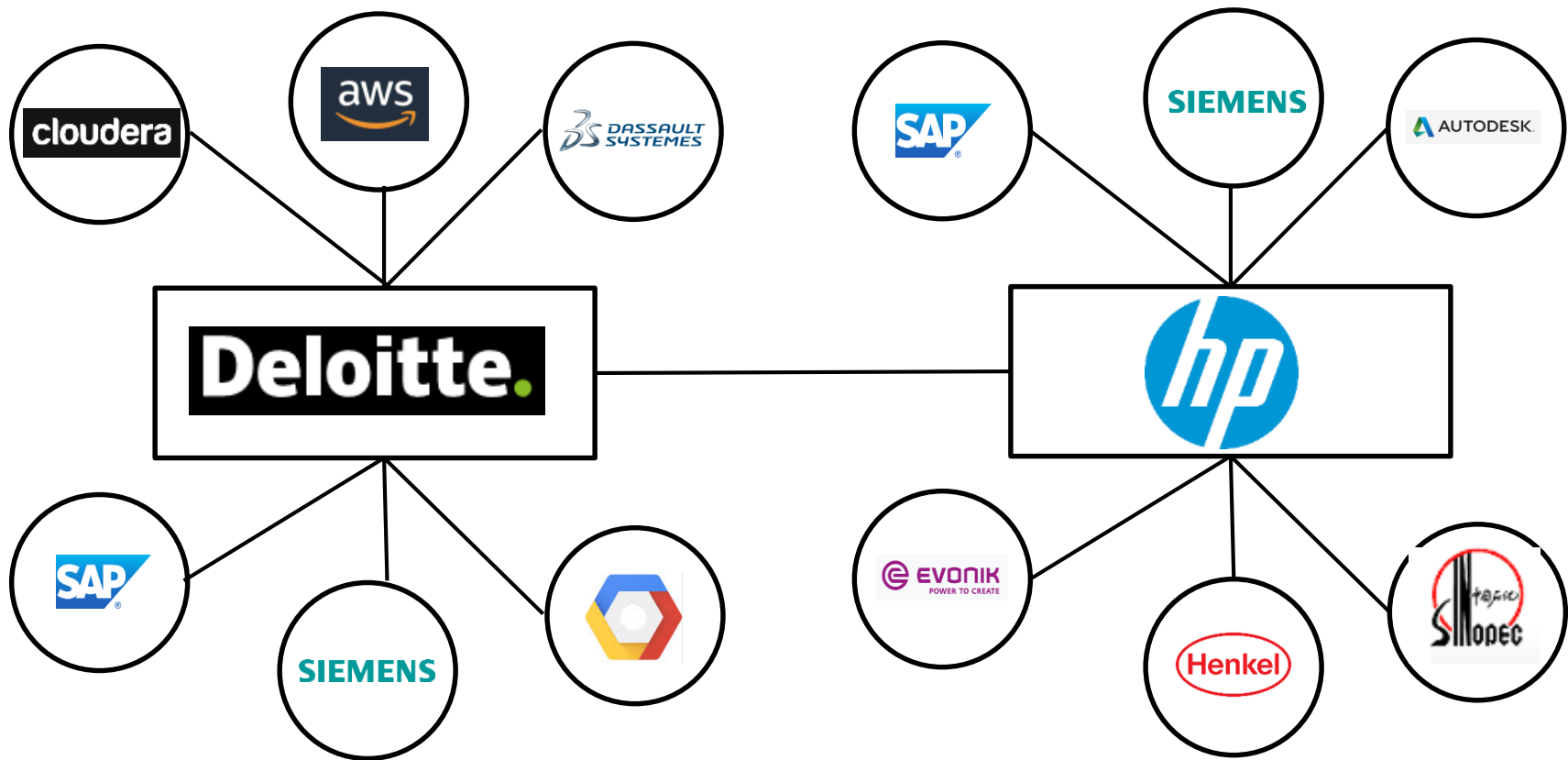


Many alliances and partnerships formed in last 12 months – and it is not a reaction to “uncertainty” only



And companies even widen the span of cooperation

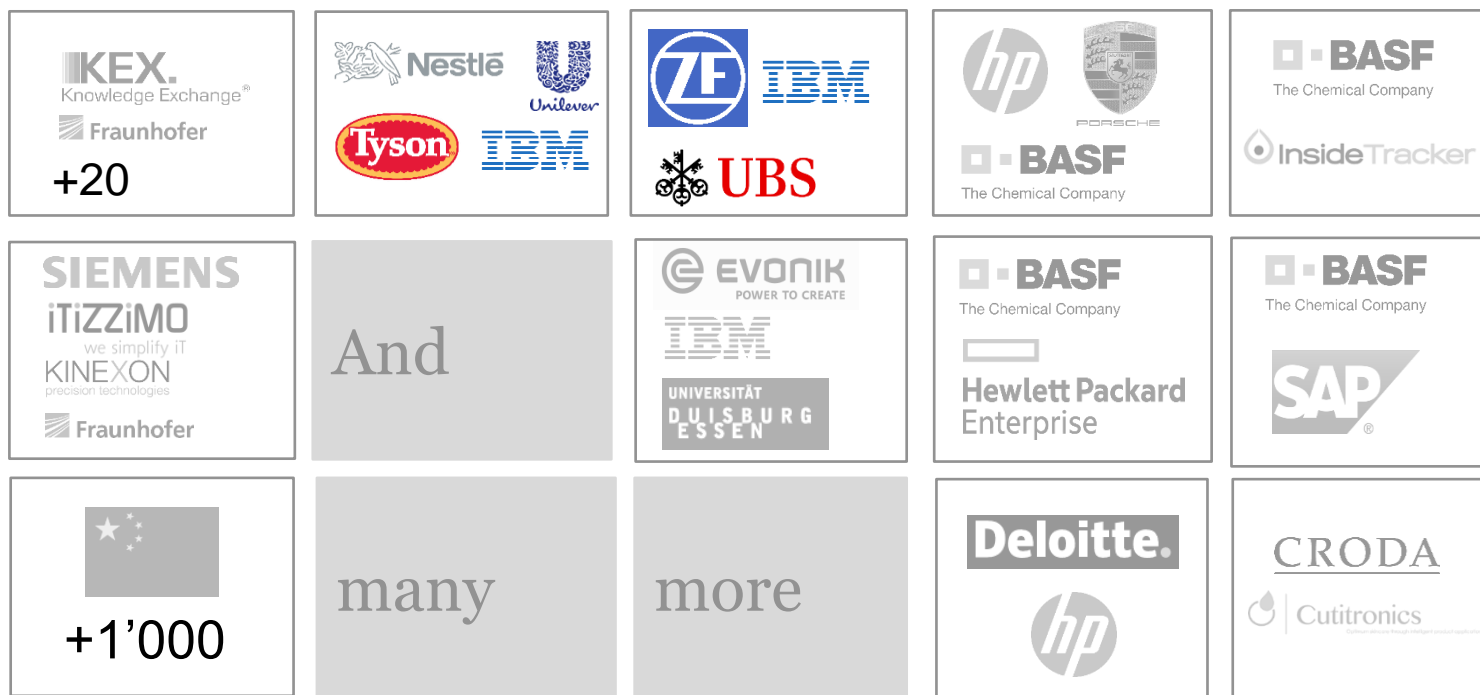
“HP and Deloitte announce alliance to accelerate digital transformation of US\$ 12 trillion global manufacturing industry”



Digital collaborators' ecosystem

Manufacturing ecosystem

It is very likely that there will be a competition of alliances
each orchestrating overlapping ecosystems



Cooperation is the new (difficult) normal

And now let's not forget some of the most important players

	And			
	many	more		

Food for thought: Chinese robotics industry alliance

Chinese president Xi Jinping initiated a “Made in China 2025” program.

In June 2017, more than 1’000 firms and a new robotics association, CRIA (Chinese Robotics Industry Alliance) have begun to jointly realize the advantages of robotics.

Goal of partnership: Five-year robot plan focuses on automating key sectors of the economy including car manufacturing, electronics, home appliances, logistics, and food production.

How are you going to cooperate?

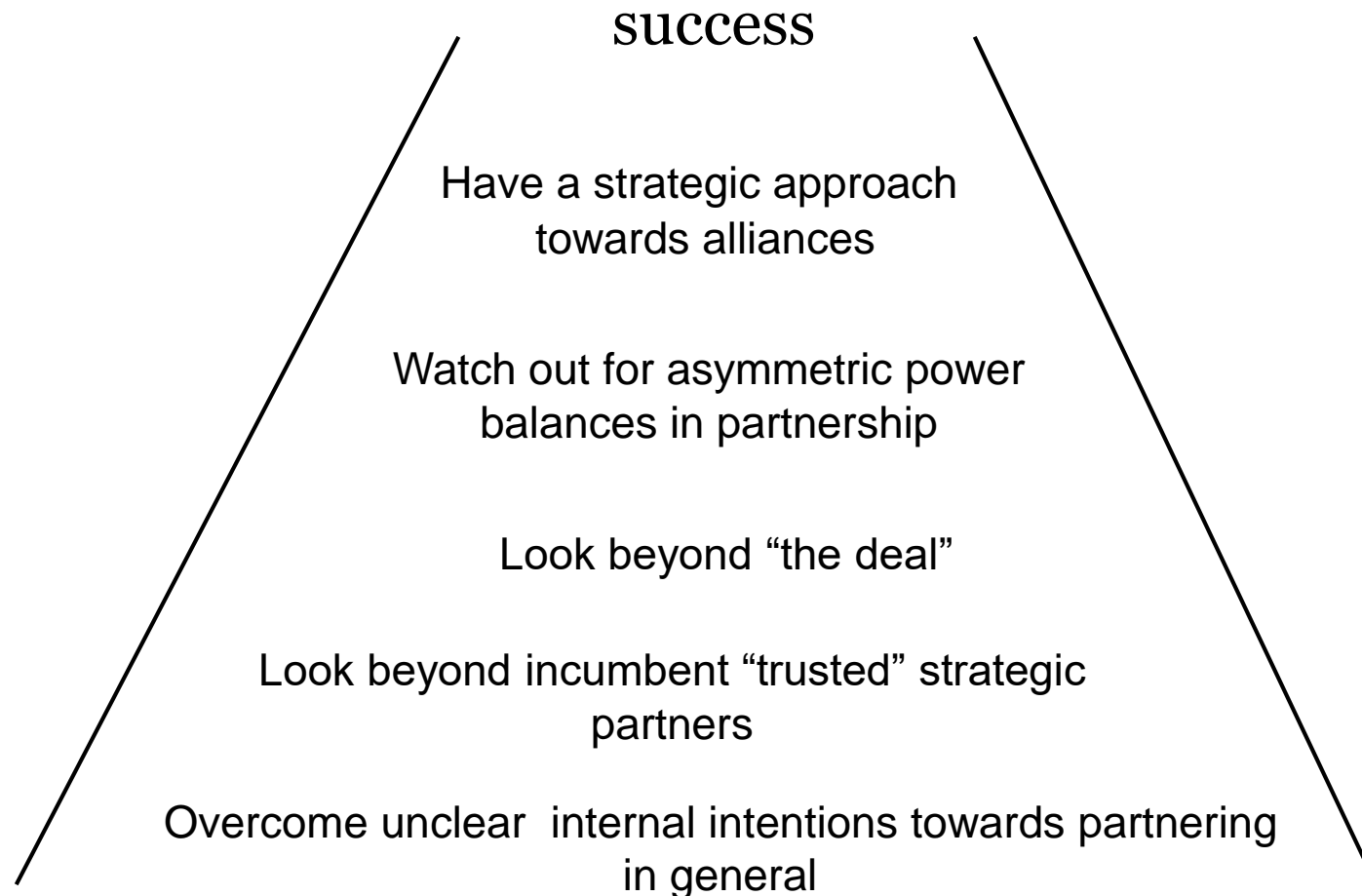
Back-up

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Road to success



Questions?