Digital Transformation
Webinar 23.01.2020

The expert group
Digital Transformation

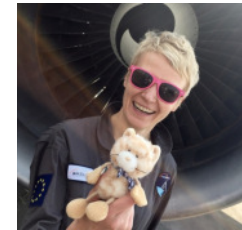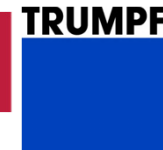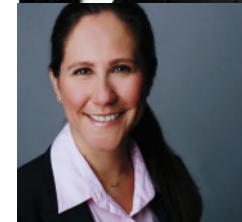Founded 2016   Lead: Jurate Keblyte

Actual   Lead: Reinoud van der Vliet
                                                         Delegate: Nadia Vasquez-Novoa

The expert group
How do we work?

➢ 3-4 Meetings/year

➢ Intensively working together during the meetings

➢ Mainly pause in between due to the workload of all group members

The expert group
How do we work?

➢ Communication and documentation via Slack

➢ Open for all menbers, easy to use, always available

➢ Protocol of each session by podcast, live recorded at the end of each meeting

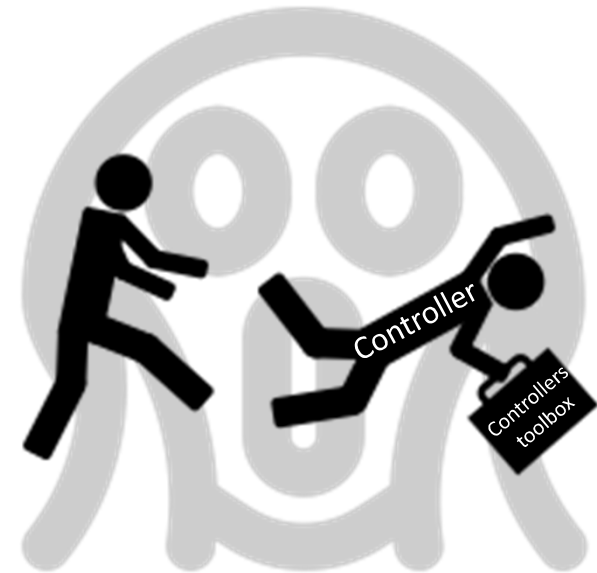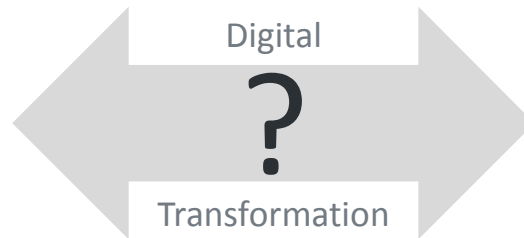➢ Direct available after the meeting, no additional work afterwards

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The expert group
Digital Transformation

2016: The discussion in the controller community was (partly) characterized by fear

Digital

?

Transformation

Controller

Controllers toolbox

First: eliminate excel

Second: eliminate controller
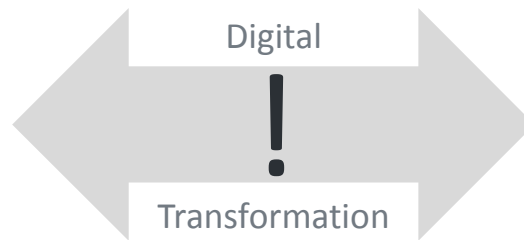
The expert group
Digital Transformation

2020: The discussion in the controller community is now more dominated by oportunities
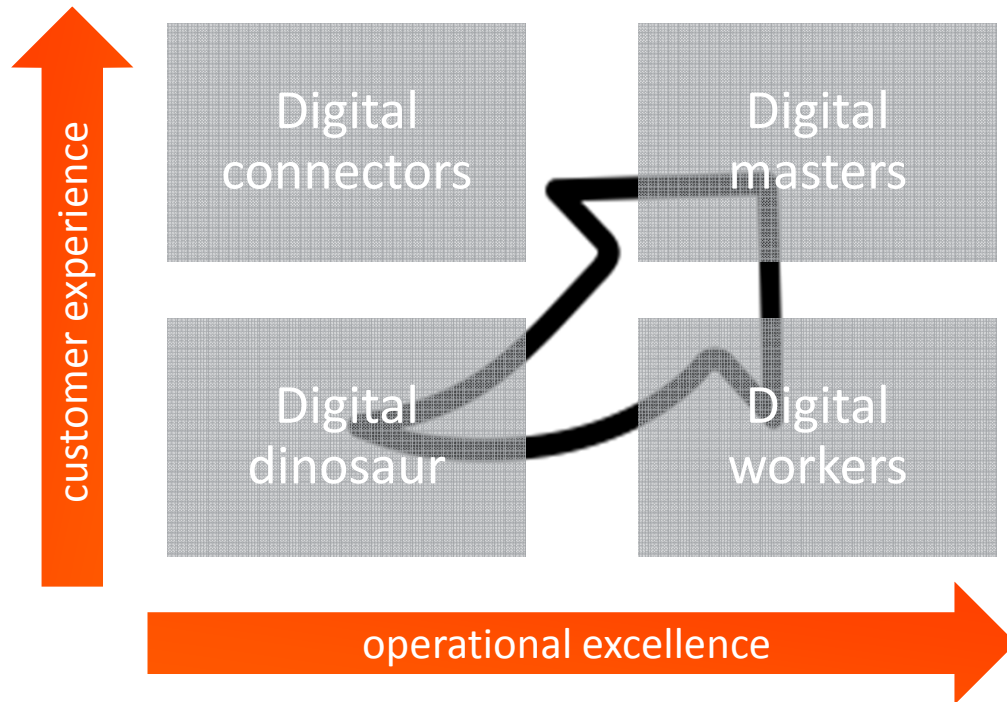
Digital
!
Transformation

We're aware of the challenges

But we also see the chances

Direction:

to master customer experience and operational excellence

… for companies & controllers!

customer experience

| Digital connectors | Digital masters |
| Digital dinosaur | Digital workers |

operational excellence

Digital Transformation

Digitaler Reifegrad der Unternehmen in der Schweiz

Digitales Kundenerlebnis

3% Digitale Konnektoren

7% Digitale Master

87% Digitale Dinosaurier

3% Digitale Arbeiter

Digitale operationale Exzellenz

www.hwzdigital.ch

#DigitalCH17

Deep dive "Direction":
What digital masters have or do compared to digital dinosaurs?

Digital Transformation

As companies

TOP 5:

1. Digital offerings with additional value for customers

2. Shorter implementation of customer relevant innovations

3. Ability for data based decision making

4. Agility & cost advantages (i.e. reduced value chain)

5. Constant cash inflows

As controlling function

TOP 3:

1. Fast decentralised decision making trough empowerment

2. Live and integrated planning, simulation, analytics

3. Risk adjusted real-time planning & reporting

As controller

TOP 3:

1. Manage information architecture (incl evaluation of data relevance, insurance of data quality & detail level)

2. Support development and implementation of new offerings

3. Conduct and support involvement and empowerment (frame work for local efficiency & effectivity including respective risk management and co-responsibility)

The expert group
How do we work?

After the theoretical beginning, practical sessions @companies

➢ Presentation of a question, an idea or a problem by
the hosting organisation

➢ Brainstorming, discussion and exchange of experience
to find an answer

➢ Proposal or solution for the presented topic

Digital transformation
For **companies** based upon practical examples

➢ How to identify the biggest potential of digital transformation?

➢ How to structure and prioritize digital transformation initiatives?

➢ How to find the starting point and how to define targets?

➢ Benchmark – how to compare with a pear-group?

For companies
How to identify the biggest potential of digital transformation?

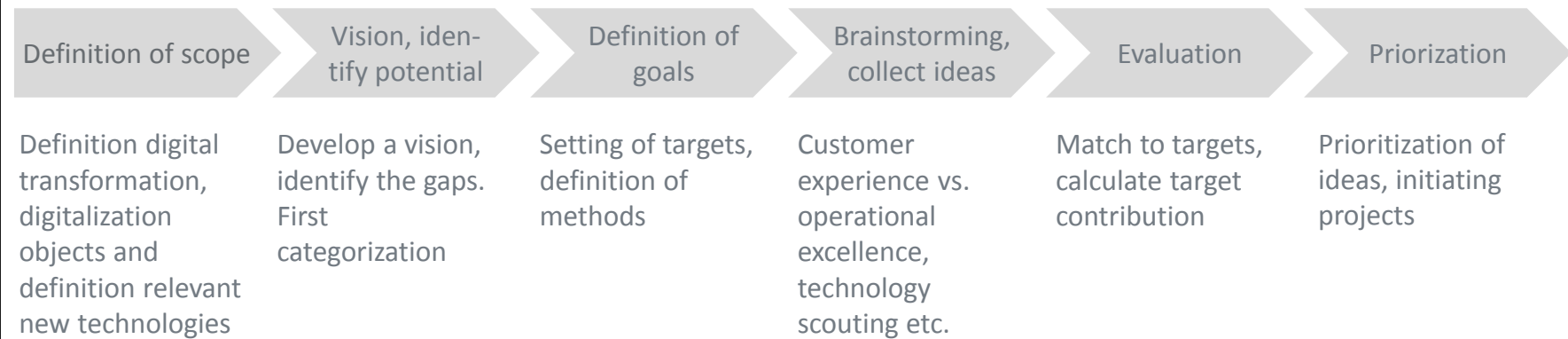
Analyse interfaces

Analyse end-to-end processes

For companies
How to structure and prioritize digital transformation initiatives?

- Too many initiatives and ideas
- Risk of double work
- Difficult to coordinate
- Too little resources

For companies
How to structure and prioritize digital transformation initiatives?

Definition of scope	Vision, identify potential	Definition of goals	Brainstorming, collect ideas	Evaluation	Priorization
Definition digital transformation, digitalization objects and definition relevant new technologies	Develop a vision, identify the gaps. First categorization	Setting of targets, definition of methods	Customer experience vs. operational excellence, technology scouting etc.	Match to targets, calculate target contribution	Prioritization of ideas, initiating projects

For companies
How to structure and prioritize digital transformation initiatives?

Who?	How?	What?

Who?
- Experts
- Not C-level management

How?
- Characteristics, stars
- Scrum Poker
- Scoring
- For customer experience: customer survey etc.

What?
- Target contribution
- Legal requirements
- Customer-/ Marketrequirements
- Synergy effects
- Cost-value ratio
- Strategic aspects

For companies: The maturity model for the controlling function
Two models for two different purposes:

- Target gap oriented internal model

- Detailed assessment of aspects related to the Digital Transformation in controlling

- Detailed scenarios, 5 maturity levels

- Application in workshops

- Consulting background

- Benchmarking oriented 2-step model

  - Aggregated scenarios

  - Objectives hierarchy for Digital Transformation

- Application as quick online self assessment and benchmarking tool

- Academic background, deep-rooted in decision theory and operations research
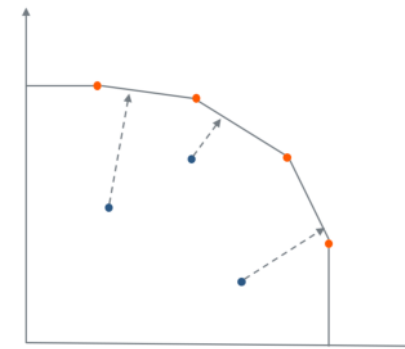
For companies: The maturity model for the controlling function

How to find the starting point and how to define targets?

➤ 6 Fields of action identified

➤ 3-5 Action objects defined to each field of action, 23 in total

Approach

1. Define the company-individual goal per object

2. Identify the gaps and calculate the ROI for each object

3. Prioritize the objects and plan realization

4. Transform & digitalize!

For companies: The maturity model for the controlling function
How to find the starting point and how to define targets?

Action field	Topic	Discription	Maturity level 1 Digital beginner	Maturity level 2 Digital score-keeper	Maturity level 3 Digital enabler	Maturity level 4 Digital innovator	Maturity level 5 Digital leader
Processes	Efficiency	Are processes technical supported by IT? Are processes documented and available in tools?	Processes are not documented and manually handled	Processes are documented, but manually handled	Processes are documented. Some digital add-ons exist to automate the processing	Processes are captured in IT-tools. A process transformation takes place using automated workflows and tools	Using robotive process automation, self-services and workflow management, processes are obsolete

Digital Transformation

For companies: The maturity model for the controlling function
Find the starting point, define targets and plan realization
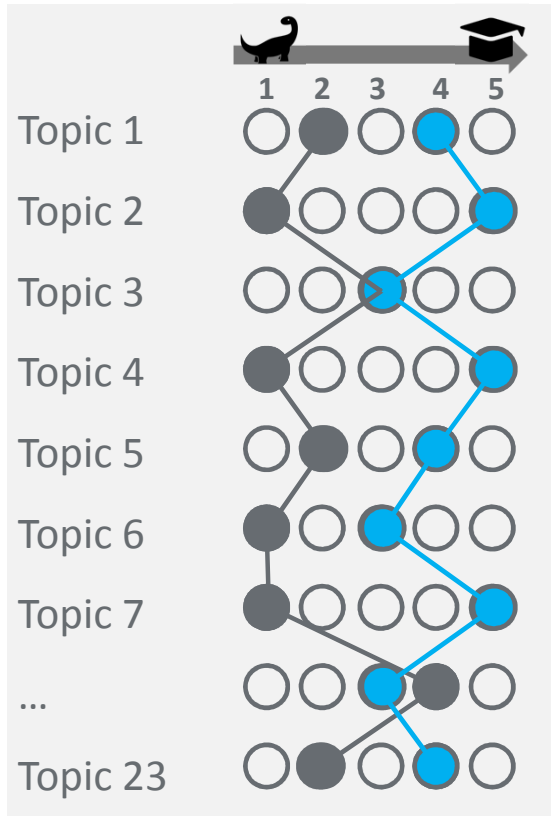
Not necessary to be „digital master" for each topic

For some topics the goal

might allready be achieved…

…or even overachieved
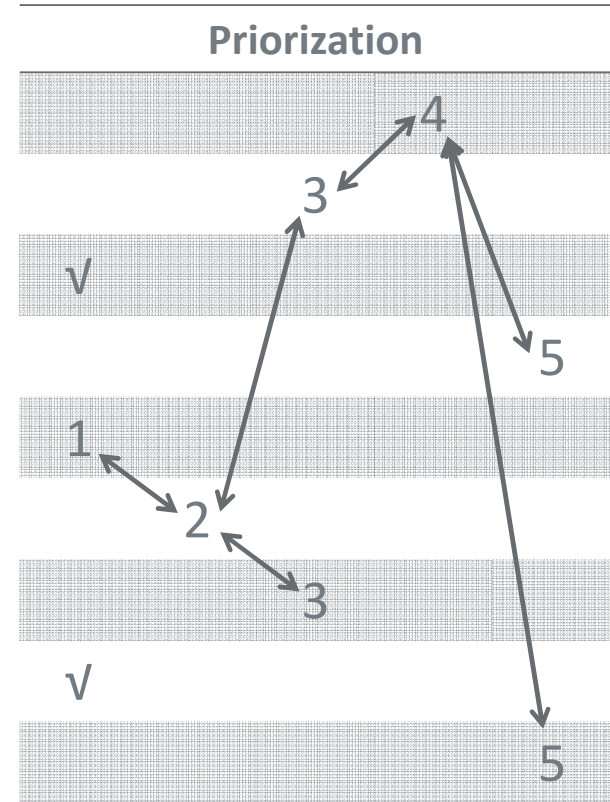
Priorization

For companies: The maturity model for the controlling function
The benchmarking model: step 1

➢ 3 Scenarios to identify with (or in between)   (example)

➢ 5 aggregated Dimensions

➢ Quick online responding

(example)

1. Dimensionen der Digitalen Transformation: Strategie
Wie lassen sich Aspekte der Strategie im Zusammenhang mit der Digitalen Transformation am besten beschreiben?

Bitte wählen Sie das zutreffendste Szenario oder einen Zwischenwert aus.
Strategie

- Keine Digitalisierungsstrategie vorhanden.
- Digitalisierung hat kaum Priorität beim Management

- Eine Digitalisierungsstrategie existiert und ist den Mitarbeitern bekannt.
- Das Management priorisiert Themen im Zusammenhang mit Digitalisierung.

- Die Umsetzung der Digitalisierungsstrategie wird aktiv gelebt.
- Die Digitalisierungsstrategie wird kontinuierlich dem sich verändernden Geschäftsumfeld angepasst.

○ ◉ ○ ○ ○ ○ ○

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Dimension	Below Par	Par	Pro
Strategie	• Keine Dig.-Strategie vorhanden • …	• Strategie vorhanden • …	• Strategie wird gelebt • …
Daten & Technologie	• Daten inkonsistent • …	• SSoT vorhanden • …	• Datenmanagment top • …
Kompetenzen & Kultur	• Keine Digitale Kultur • …	• Digitale Kompetenz gefördert • …	• Digitale Kultur allgegen-wärtig • …
Methoden & Prozesse	• Manuelle Prozesse • …	• Erkenntnisse in Echtzeit • …	• Predicitive Analytics Standardtool • …
Integration	• Kein Business Partnering • …	• Viel Self-Service-Controlling • …	• Controlling maximal integriert • …

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For companies: The maturity model for the controlling function
The benchmarking model: step 2

➢ Objectives hierarchy related to digitalization in controlling was developed and validated in DiTra workshops

➢ Answers are given in relation to a "perfect" scenario

➢ The idea of an objectives hierarchy stems from decision theory and captures the effectiveness of digital transformation activities

➢ Online tool allows quick self assessment and gathers data for benchmarking

First full publication of model during ICV Congress in April!

For companies: The maturity model for the controlling function
The benchmarking model: results

➢ Answers from steps 1 and 2 will be used for benchmarking a controlling organization's transformation activities

➢ Respondents will get a detailed report about their efforts in relation to industry peers and otherwise comparable organizations

➢ Different transformation strategies will be taken into account

➢ The benchmarking models are state of the art scientific models and will account for differences in size, strategy, etc.

➢ Results will be published in scientific and trade journals

Participate and find out how your organization is coping with the challenges of the digital transformation!
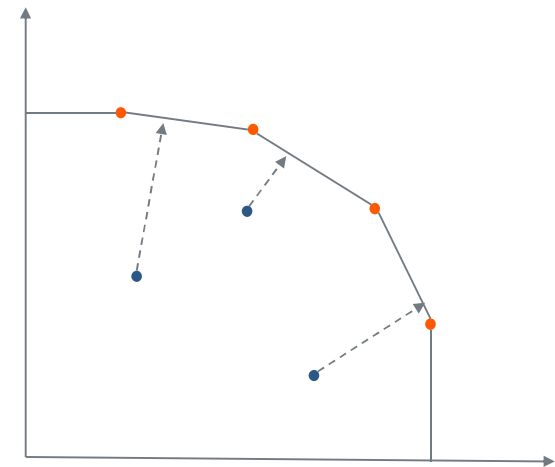
For companies: The maturity models for the controlling function
Contact

➤ Contact for the internal maturity model:

➤ Christian Lohr christian.lohr@bwi.de

➤ Contact for the benchmarking maturity model:

➤ Philipp Klüver p.kluever@tu-braunschweig.de
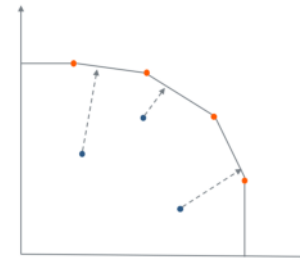
Digital transformation
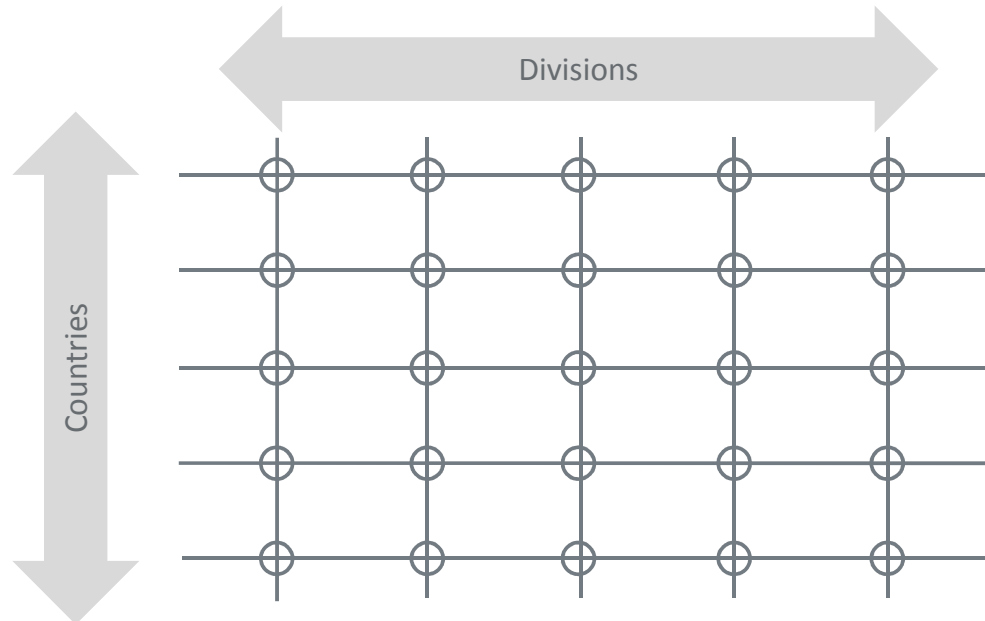## For the **controlling function** based upon practical examples

➢ Would predictive and prescriptive analytics help to improve the quality of the planning and reduce the efforts?

➢ How to find the best reporting tool?

For Controlling
Would **predictive and prescriptive analytics** help to improve the quality of the planning and reduce the efforts?

Budget	Forecast 1	Forecast 2	Forecast 3
August/September	February/March	May/June	August/September

Planning process in 4 cycles, FC 3 and budget next year timely aligned

Divisions

Countries

Planning within the Sales-Matrix is causing a lot of consultation and discussion

The planning results do not meet the quality as expected

For Controlling

Would predictive and prescriptive analytics help to improve the quality of the planning and reduce the efforts?

Analysis:

➢ Planned Units: ca 30.000/year in at 7 product groups, 5 regions and 6 markets

➢ Historical data available back to 2010

➢ Market data available from branche organization

➢ Complex communication structures within the planning sales matrix causes the workload

Discussion:

➢ Database unsufficient / data volume too small for statistic methods (no "big" data)

➢ Required granularity high → also not suitable for statistics

➢ Prescriptive and predictive analytics cannot be used due to unsufficient data

Proposed solution:

➢ Reduce workload and improve communication by organising a planning conference

analoge solution

For Controlling How to find the best reporting tool?
What tools are available?

For Controlling - How to find the best reporting tool?
What does Business Intelligence mean and what tool fits?

Don't create lists with criteria, "must" and "nice to have"

Tell each other the user experience you want to reach and paint the vision you have

Get help!
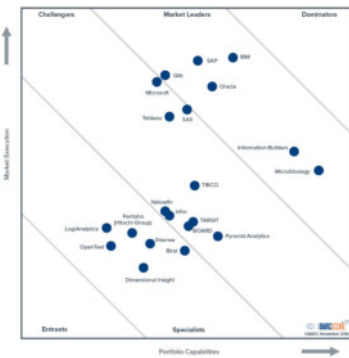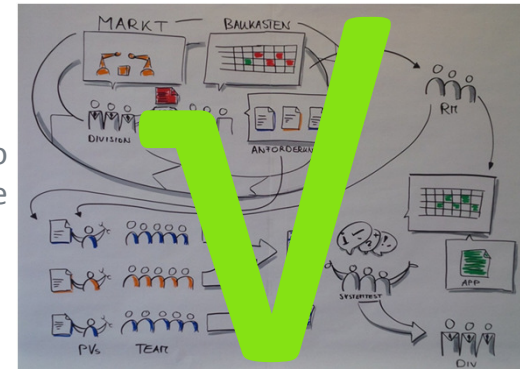
Analysts

User groups

References

For Controlling - How to find the best reporting tool?
How does the organisation define (Self-Service) BI?

Board members

Management

Specialists

Push-principle
- Distribution of standardized reports
- No personalized functionalities avaialble in the reports
- Strong centralized understanding/governance of relevant content and KPIs

Pull-principle
- Standardized reports are available in a portal, web-application etc.
- Filtering, drill-down and drill-through functionality available for the enduser
- Centralized datamodelling and rights-management

Endusers create own dashboards and reports
- Allows enduser to connect to internal and external datasources
- Allows enduser to build individual datamodels
- Allows enduser to create own reports
- Allows enduser to share reports

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For Controlling - How to find the best reporting tool?
Which deployment model: central, decentral or a mix?

Centralized deployment

Decentralized deployment
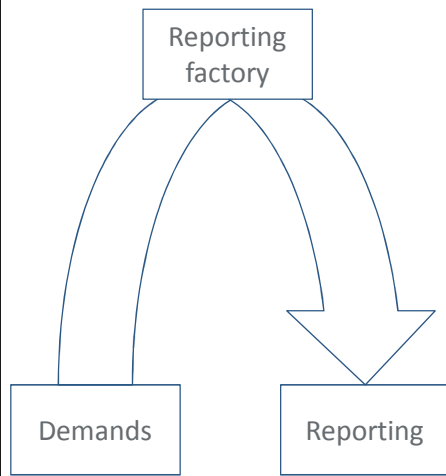
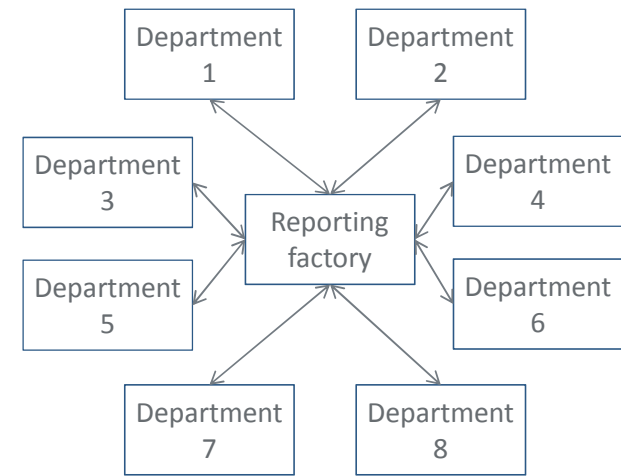**Mixed deployment**

- ✓ Strong governance
- ✓ Easy to manage
- ✓ Clear responsibilities
- ⚡ Distance to demanding departments
- ⚡ Slow processes
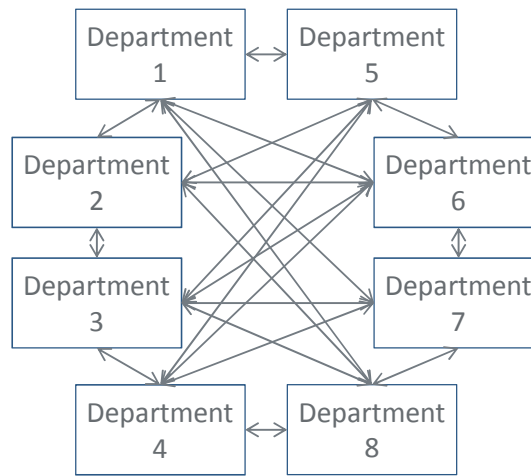
- ✓ Direct communication within the demanding departments
- ✓ Lean processes
- ⚡ Weak governance
- ⚡ Complex to manage, self-organisation

- ✓ Governance by reporting factory
- ✓ Lean processes
- ✓ Direct communication within the departments
- ≈ Unclear responsibilities
- ≈ Management maybe complex

For Controlling - How to find the best reporting tool?
Listen to the supplier!

- Hardware resources
- Hardware configuration
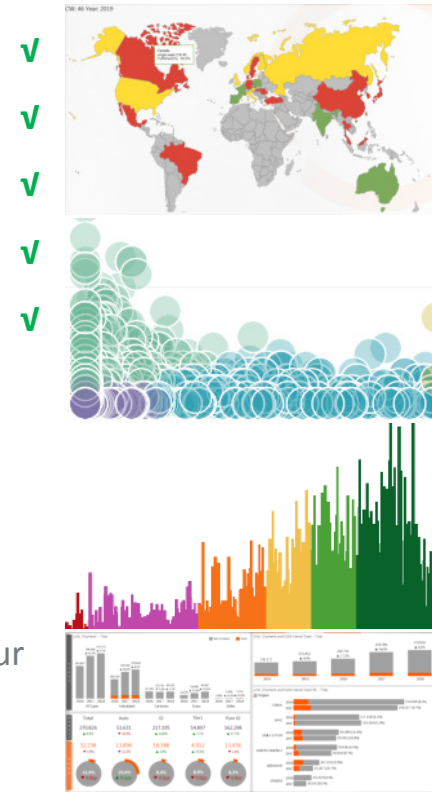- IT infrastructure
- Rights management

For Controlling - How to find the [ ]rting tool?
Don't listen to [ ] supplier!

- Demo applications
- Datamodelling
- Easy to use datasources
- Plug & play

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For Controlling - How to find the best reporting tool?
## Evaluation: seeing is beleiving!

1. Understanding of BI and suppliers   √

2. Common vision established   √

3. Understanding of Self-Service BI in place   √

4. Deployment modell defined   √

5. Undestanding of infrastructure and budget available   √

6. Two or three suppliers fitting the best to the above defined requirements

- Define a first application

- Have the pitching suppliers to build a prototyp of this application based upon your own data and infrastructure

- Invest the costs of 3-5 days per supplier to do so

For Controlling - How to find the best reporting tool?
## Implementation: what strategy to follow?
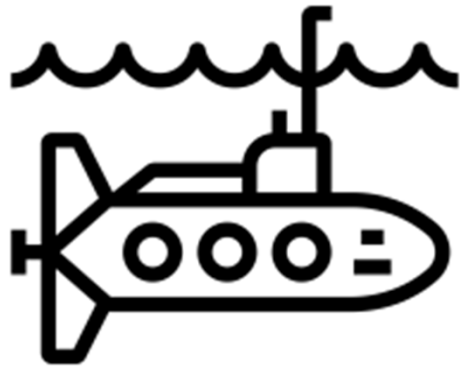
Submarine
- No official policy, a single department is taking the lead
- Quick implementation and benefits
- Scalability and infrastructure may be at risk
- Risk of an inefficient IT-landscape

Oil-patch
- Official policy without a centralized strategy
- Quick implementation and benefits
- Scalability and infrastructure to be implemented on the flight
- Efficient IT-landscape
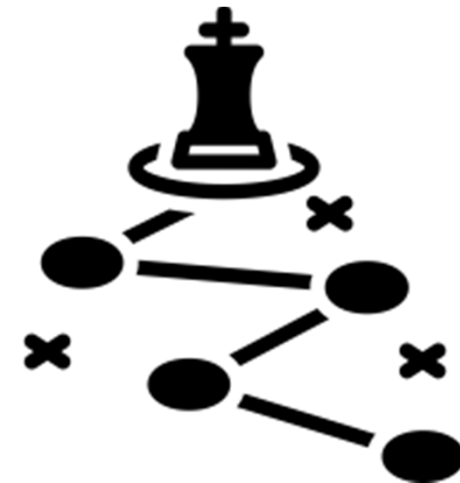
Enterprise architecture
- Enterprise policy and strategy established
- Slow implementation, late benefits
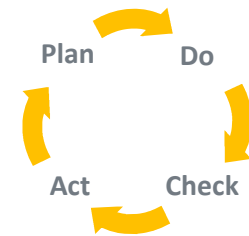- Scalability and infrastructure well planned
- Efficient IT-Landscape

For Controlling - How to find the best reporting tool?
Deployment in daily business: how to reach the optimum?

Supplier by yearly order volume

EEE
HHH
FFF
III
BBB
CCC
AAA
JJJ
GGG
DDD
Other

- ⚡ Data quality is poor
- ⚡ Data sources do not match
- ⚡ Data are not available
- ⚡ Tooling know-how is insufficient
- ⚡ Outcome does not meet the expectations

Supplier by yearly order volume (in T€)

HHH
FFF
III
BBB
CCC
AAA
JJJ
GGG
DDD
EEE
Other

- ✓ Start small
- ✓ Start with a few (one?) data sources
- ✓ Improve data quality
- ✓ Implement masterdata management
- ✓ Define data architecture
- ✓ Include external data sources
- ✓ Build up tooling know-how
- ✓ Learn from the unexpected
- ✓ Use the opportunity to improve

Plan **Do**

Act **Check**

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Digital transformation
For the **controller** based upon practical examples

➢ What roles are available for digital transformed controllers?

➢ What competences does the digital transformed controller need?

Deep dive "Direction":
As Controller

TOP 3:

1. Manage information architecture (incl evaluation of data relevance, insurance of data quality & detail level)

2. Support development and implementation of new offerings

3. Conduct and support involvement and empowerment (frame work for local efficiency & effectivity including respective risk management and co-responsibility)
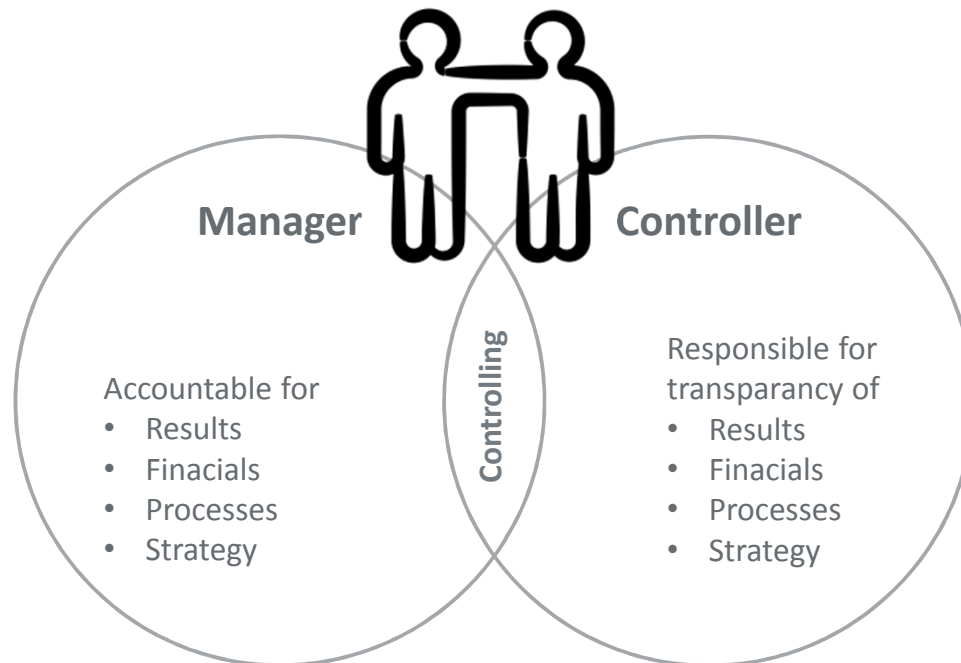
Roles:

1. Data scientist

2. Business partner

3. Business partner

For controller

Controlling is a management function

Manager

Accountable for
- Results
- Finacials
- Processes
- Strategy

Controlling

Controller

Responsible for transparancy of
- Results
- Finacials
- Processes
- Strategy

TOP 3:

1. Fast decentralised decision making trough empowerment

2. Live and integrated planning, simulation, analytics
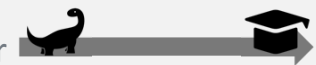
3. Risk adjusted real-time planning & reporting

For controller: the controller competence model
Where is the digital transformed controller?

Competences of the digital transformed controller

	1	2	3	4	5
Lead with consequences	○	○	○	○	●
Changemanagement	○	○	○	○	●
Drive digitalisation regardless	○	○	○	○	●
Collaboration skills (from broadcasting to listening)	○	○	○	○	●
Programming	○	○	○	○	●
Know how in tools in methods	○	○	○	○	●
Visualization skills	○	○	○	○	●
Statistics	○	○	○	○	●
....	○	○	○	○	●

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For a controller: Curriculum of the digital transformed controller
## How to define goals and starting point?

| Know-how in tools & methods	Collaboration skills (from broadcasting to listening)	Change (management)
• Internal knowledge Inventory • Knowledge extension • Technical skill extension • Ownership & Collaboration	• Structure to support collaboration • Clarification of responsibilities to support collaboration • Strengthen personal interaction to support collaboration • Collaboration as a precondition for digitalisation	• Develop change culture • Experience digital work • Create awerness & sence of urgency • Lead with consequences • Drive digitalisation regardless
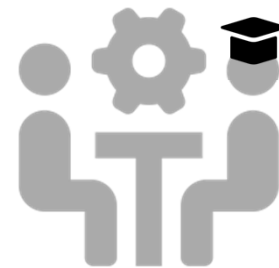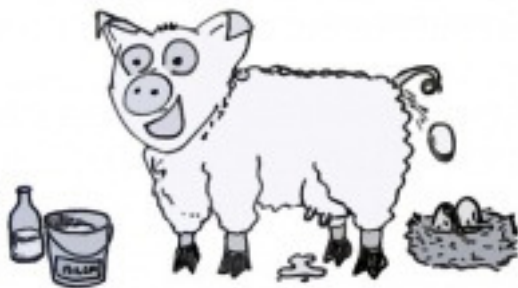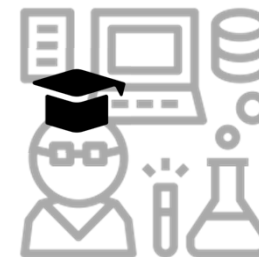
Business partner   Data scientist

Digital transformation
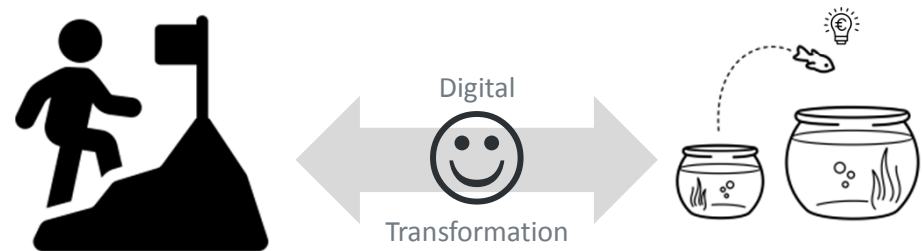## For companies, controlling and controllers

New oportunities

New tools

New roles

Embrace the challenges…

…and seize the chances

Digital

Transformation

Outlook
Coming up next

Mittelstandstagung in Braunschweig

mittelstandstagung-bs.de

Wann & Wo

Termin: Donnerstag, 06.02.2020,
ab 14 Uhr

Ort: Haus der Wissenschaft
Raum *Veolia*, 5. OG
Pockelsstraße 11
38106 Braunschweig

Preis: Normalpreis 280 €
Weitere Person 150 €

Anmeldung & Informationen

Melden Sie sich bis zum 30.01.2020 unter

www.mittelstandstagung-bs.de

an und freuen Sie sich auf eine spannende
Tagung! Mehrere TeilnehmerInnen aus dem
selben Unternehmen heißen wir deutlich
vergünstigt zur Mittelstandstagung willkommen.

Controlling aktuell
Mittelstandstagung
Do., 06.02.2020

**Digitale
Transformation
im Controlling**

Outlook
Coming up next

45. Congress der Controller

ICV
International Association of Controllers

DIGITALISIERUNG
TRANSFORMATION
CHANCEN

icv

For a better performance

45. Congress der Controller
27./28. April 2020 in München

Impulse. Netzwerken. Know-how.

Sehr geehrte Damen und Herren,

Standardisierung, Automatisierung und Künstliche Intelligenz bestimmen die Geschäftswelt und halten auch Einzug in die Arbeitswelt der Controller. Im Kontext sich rasant wandelnder Märkte und der vielfältigen Möglichkeiten von Digitalisierung verändern sich Rollen, Erwartungen und Kompetenzprofile.

Klar ist: Die digitale Transformation eröffnet großartige Chancen – und Controller sind längst Teil von ihr. Mit Kundenorientierung, Geschäftsverständnis, Methodenwissen und modernen Tools stellen sie steuerungsrelevante Informationen zur Verfügung, zeitnah und auf allen Ebenen. Die Controller von morgen sind gefragt als Lotsen in unruhigen Gewässern, Partner im Geschäft und Manager von Veränderung.

„For a better performance" passt da perfekt als Motto für den 45. Congress der Controller in München. Reflektieren wir gemeinsam unsere Erfahrungen und die Möglichkeiten der Digitalisierung! Wo sehen wir Best Practices, welche Herausforderungen stellen sich und auf welche Fragen können wir aktuell vielleicht auch noch keine Antworten geben?

Ich freue mich auf spannende und lehrreiche Impulse, inspirierende Diskussionen und natürlich auf den persönlichen Austausch beim 45. Congress der Controller.

Herzlichst

Dr. Richard Lutz
Vorstandsvorsitzender, Deutsche Bahn AG
Mitglied des ICV-Kuratoriums
Schirmherr des Controller Congresses

Digital Transformation

Good luck and lots of success with your digital transformation!

fk-digital-transformation@icv-controlling.com