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

First: eliminate excel

Second: eliminate controller
The expert group
Digital Transformation

2020: The discussion in the controller community is now more dominated by opportunities.

We’re aware of the challenges
But we also see the chances
Direction:
to master customer experience and operational excellence

... for companies & controllers!
Deep dive “Direction”:
What digital masters have or do compared to digital dinosaurs?

<table>
<thead>
<tr>
<th>As companies</th>
<th>As controlling function</th>
<th>As controller</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOP 5:</strong></td>
<td><strong>TOP 3:</strong></td>
<td><strong>TOP 3:</strong></td>
</tr>
<tr>
<td>1. Digital offerings with additional value for customers</td>
<td>1. Fast decentralised decision making through empowerment</td>
<td>1. Manage information architecture (incl evaluation of data relevance, insurance of data quality &amp; detail level)</td>
</tr>
<tr>
<td>2. Shorter implementation of customer relevant innovations</td>
<td>2. Live and integrated planning, simulation, analytics</td>
<td>2. Support development and implementation of new offerings</td>
</tr>
<tr>
<td>3. Ability for data based decision making</td>
<td>3. Risk adjusted real-time planning &amp; reporting</td>
<td>3. Conduct and support involvement and empowerment (frame work for local efficiency &amp; effectivity including respective risk management and co-responsibility)</td>
</tr>
<tr>
<td>4. Agility &amp; cost advantages (i.e. reduced value chain)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Constant cash inflows</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Digital Transformation

ICV – working group Digital Transformation | Reinoud van der Vliet | www.kuka.com
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 peer-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?**

<table>
<thead>
<tr>
<th>Definition of scope</th>
<th>Vision, identify potential</th>
<th>Definition of goals</th>
<th>Brainstorming, collect ideas</th>
<th>Evaluation</th>
<th>Priorization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition digital transformation, digitalization objects and definition relevant new technologies</td>
<td>Develop a vision, identify the gaps. First categorization</td>
<td>Setting of targets, definition of methods</td>
<td>Customer experience vs. operational excellence, technology scouting etc.</td>
<td>Match to targets, calculate target contribution</td>
<td>Prioritization of ideas, initiating projects</td>
</tr>
</tbody>
</table>
How to structure and prioritize digital transformation initiatives?

Who?
- Experts
- Not C-level management

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

What?
- Target contribution
- Legal requirements
- Customer-/ Market requirements
- Synergy effects
- Cost-value ratio
- Strategic aspects
For companies: The maturity model for the controlling function

Two models for two different purposes:

- 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

- 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
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?

<table>
<thead>
<tr>
<th>Action field</th>
<th>Topic</th>
<th>Maturity level 1: Digital beginner</th>
<th>Maturity level 2: Digital score-keeper</th>
<th>Maturity level 3: Digital enabler</th>
<th>Maturity level 4: Digital innovator</th>
<th>Maturity level 5: Digital leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes</td>
<td>Efficiency</td>
<td>Processes are not documented and manually handled</td>
<td>Processes are documented, but manually handled</td>
<td>Processes are documented. Some digital add-ons exist to automate the processing</td>
<td>Processes are captured in IT-tools. A process transformation takes place using automated workflows and tools</td>
<td>Using robotic process automation, self-services and workflow management, processes are obsolete</td>
</tr>
</tbody>
</table>

Digital Transformation
For companies: The maturity model for the controlling function

Find the starting point, define targets and plan realization

<table>
<thead>
<tr>
<th>Topic 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Topic 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>…</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic 23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not necessary to be “digital master“ for each topic

For some topics the goal might already be achieved...

…or even overachieved

Priorization

1. ✓
2. ✓
3. ✓
4. ✓
5. ✓
For companies: The maturity model for the controlling function

The benchmarking model: step 1

- 3 Scenarios to identify with (or in between)
- 5 aggregated Dimensions
- Quick online responding

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Below Par</th>
<th>Par</th>
<th>Pro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategie</td>
<td>• Keine Dig.-Strategie vorhanden</td>
<td>• Strategie vorhanden</td>
<td>• Strategie wird gelebt</td>
</tr>
<tr>
<td></td>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
</tr>
<tr>
<td>Daten &amp; Technologie</td>
<td>• Daten inkonsistent</td>
<td>• SSoT vorhanden</td>
<td>• Datenmanagement top</td>
</tr>
<tr>
<td></td>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
</tr>
<tr>
<td>Kompetenzen &amp; Kultur</td>
<td>• Keine Digitale Kultur</td>
<td>• Digitale Kompetenz gefördert</td>
<td>• Digitale Kultur allgegen-wärtig</td>
</tr>
<tr>
<td></td>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
</tr>
<tr>
<td>Methoden &amp; Prozesse</td>
<td>• Manuelle Prozesse</td>
<td>• Erkenntnisse in Echtzeit</td>
<td>• Predictive Analytics Standardtool</td>
</tr>
<tr>
<td></td>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
</tr>
<tr>
<td>Integration</td>
<td>• Kein Business Partnering</td>
<td>• Viel Self-Service-Controlling</td>
<td>• Controlling maximal integriert</td>
</tr>
<tr>
<td></td>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
</tr>
</tbody>
</table>

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

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

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

The planning results do not meet the quality as expected

**Forecast 1**
- August/September

**Forecast 2**
- February/March

**Forecast 3**
- May/June

**Budget**
- August/September

**Divisions**

**Countries**
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 branch 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
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!
For Controlling - **How to find the best reporting tool?**

How does the organisation define (Self-Service) BI?

---

**Push-principle**
- Distribution of standardized reports
- No personalized functionalities available 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
For Controlling - **How to find the best reporting tool?**

Which deployment model: central, decentral or a mix?

**Centralized deployment**
- Strong governance
- Easy to manage
- Clear responsibilities
- Distance to demanding departments
- Slow processes

**Decentralized deployment**
- Direct communication within the demanding departments
- Lean processes
- Weak governance
- Complex to manage, self-organisation

**Mixed deployment**
- 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 best reporting tool?**

Don’t listen to the supplier!

- Demo applications
- Datamodelling
- Easy to use datasource
- Plug & play
For Controlling - **How to find the best reporting tool?**

**Evaluation: seeing is believing!**

1. Understanding of BI and suppliers
2. Common vision established
3. Understanding of Self-Service BI in place
4. Deployment model defined
5. Understanding 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 prototype 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?

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

**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
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
Controlling is a management function

**TOP 3:**

1. Fast decentralised decision making through 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
  - Lead with consequences
  - Changemangement
  - Drive digitalisation regardless
  - Collaboration skills (from broadcasting to listening)
  - Programming
  - Know how in tools in methods
  - Visualization skills
  - Statistics
  - …
For a controller: Curriculum of the digital transformed controller
How to define goals and starting point?

Know-how in tools & methods
- Internal knowledge Inventory
- Knowledge extension
- Technical skill extension
- Ownership & Collaboration

Collaboration skills (from broadcasting to listening)
- Structure to support collaboration
- Clarification of responsibilities to support collaboration
- Strengthen personal interaction to support collaboration
- Collaboration as a precondition for digitalisation

Change (management)
- Develop change culture
- Experience digital work
- Create awareness & sense of urgency
- Lead with consequences
- Drive digitalisation regardless

Business partner
Data scientist
Digital transformation
For companies, controlling and controllers

New opportunities

New tools

New roles

Embrace the challenges...

…and seize the chances
Outlook

Coming up next

Mittelstandstagung in Braunschweig

Wann & Wo

Termin: Donnerstag, 06.02.2020, ab 14 Uhr
Ort: Haus der Wissenschaft
Raum Veolia, 5. OG
Pockelestraße 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.
Outlook

Coming up next

45. Congress der Controller

Sehr geehrte Damen und Herren,

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


„For a better performance“ passt da perfekt als Motto für den 45. Congress der Controller in München. Reflektieren wir gemeinsam unsere Erlebnisse und die Möglichkeiten der Digitalisierung? Was unsere 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
Verantwortungsträger

Deutsche Bahn AG
Mitarbeit des ICV-Verbandes
Sprecher des Controller Congresses
Good luck and lots of success with your digital transformation!

fk-digital-transformation@icv-controlling.com