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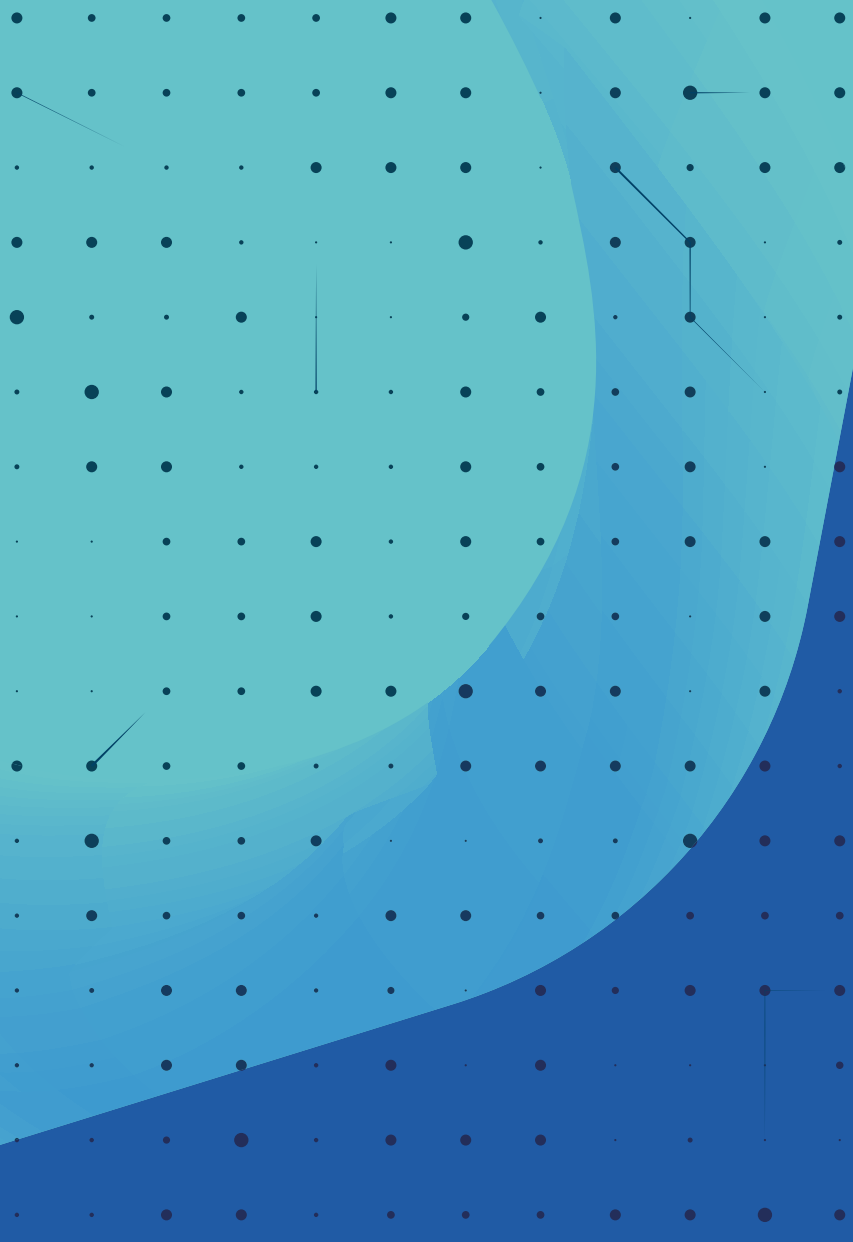
Introduction
to Management
Cybernetics

The cybernetic consulting approach



The Consumer Goods FORUM

End-to-End Value Chain

Dr. Boysen Management + Consulting

Learning Objectives
Session XII

In this section...

- You will learn that a cybernetic consulting process only succeeds when the pre-conditions for a cybernetic working-mode are created in the organization.
- You will learn how a cybernetic consulting process is executed and what the expectations should be.

Index XII

A consultant should deliver input and ensure the organization develops cybernetic behaviour by itself.

a. The Nature of Cybernetic Consulting

“Cybernetic consulting” is ambiguous – and it must be ambiguous:

Task		
The consultant should initiate and establish cybernetic behaviour in the organization.		The consulting process should be designed cybernetically, enabling the organization to start self-regulating processes.
Consultant’s Responsibility		
The consultant is measured by the results the organization achieves.		The consultant should aim to get the organization to develop cybernetic capabilities.
Customer Expectation		
The consultant should transmit and implement methods to the organization.		The consultant should coach and support customers.

To be successful, a consultant should ensure the customer and the organization’s management support cybernetic behaviour.

b. Pre-Conditions for Successful Cybernetic Consulting

- The consultant should ensure the customer wants to achieve cybernetic behaviour within the organization, as the consultant clearly understands the advantages compared to classic behaviour.
- The consultant should also ensure management is both ready and capable of ‘systems thinking’ (see learning session IV). The customer should be prepared to carry out changes at management level.

The consultant should initiate the process to organizational self-regulation with industry background and methodological input.

c. Self-Conception of Cybernetic Consulting

I do not support the often-cited systemic approach where consultants should not supply any solution-related input, but only trigger the customer‘s ability to bring up questions and solutions with the help of question techniques and active listening.

I am convinced a consultant must also supply industry competence to the projects to equip the organization with professional grounding that allows for cybernetic initiatives.

Management is an important aspect to be analysed when cybernetic projects are carried out.

d. Proceeding in the Project

- A good cybernetics consultant will act on the **quality of the interactions at the interfaces** between the organization and its environment. (cf. Part VI).

- The consutant will stimulate the **adaptability** and viability of the organization.

  Many organizations control the daily business based on basic conditions, but they do not perceive environmental changes (observation skills, self-reflection) and they are unable to react adequately (readiness and capability to change). A good consultant will foster the comprehension of recursive-circular behaviour.

A good consultant will foster the comprehension of recursive-circular behavior.

- The consultant will **show managers they are not only observers, but parts of the system.** Management should become an element to be analysed and questioned (Second Order Cybernetics, according to Heinz von Foerster). Clients‘ systems can only do what is within their possibilities. Projects are destined to end if management does not cooperate.

A good consultant becomes effective in an “enzymatic” way to ensure there is a sustainable benefit from their support.

The competence of a consultant can be recognised in the way support is delivered. A pragmatic, problem-oriented approach has proven to be of value, rather than lecturing methods.

Despite all operative support, the consultant should not get involved in the daily business, but rather become effective without becoming “a part of their product” – like an enzyme. Therefore, I call this proceeding “enzymatic management”. Only this way can the consultant achieve stability that is independent of their personal presence – becoming sustainable.

Critical to success is that agreed measures are implemented in a disciplined way. The consultant often cannot avoid calling for a binding commitment until the involved parties notice the benefit of the measures.

To push the readiness to change, the intrinsic factors of those involved should be triggered.

An important pre-condition for the readiness to change is for those involved to understand what is the benefit expected from the measures. Start harvesting “low-hanging fruits” and issues with large levers simultaneously.

The readiness to change is a function of...

The expected benefit	=	Dissatisfaction with the present situation	x	Attractiveness of the objective	x	Viability
		• displeasure • loss of motivation • problem awareness		• does it make sense? • advantages		• realistic?

> ! Effort for the involved parties

- financial
- time
- labour
- loss of free space

In cybernetically-led organizations decisions are prepared, weighed up, taken, accepted and supported on a working basis.

f. Cybernetic Decision-Making

1. **Initialization**
   - Problem awareness
   - Problem definition and segregation

   e.g. Definition of investment need
2. **Decision Preparation**
   - Identification and involvement of all relevant parties
   - Information processing and aggregation

   e.g. Investment alternatives
3. **Weighing up Decision**
   - Elaboration of arguments and positions
   - Discourse and weighing up of all perspectives and alternatives

   e.g. Investment calculation
4. **Resolution**
   - Decision-making
   - Commitment to the decision

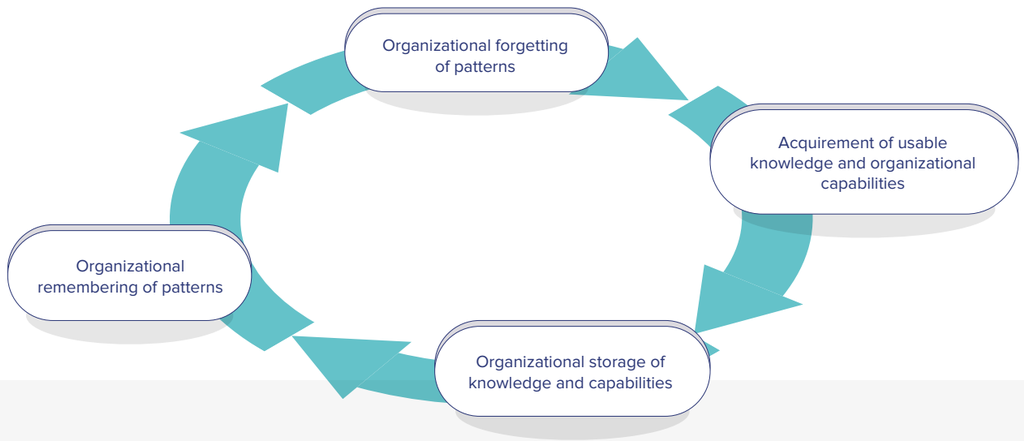
   e.g. Investment sign-off

Pre-conditions for employees to decide:

Willingness to make decisions (by a single person)
Capability to make decisions (by a single person)
Possibility to make decisions (to be granted by management)

Cybernetic management is about changing from the administration of a given business to managing current adaptability, agility and innovation.

e. Organizational Learning Process



Pre-conditions for organizational learning:

- Tolerance, especially fault tolerance
- Open co-existence of different views and opinions
- Constructive discourse
- Knowledge management
- Organizational self-reflection (Audits)

A cybernetics project is sustainable when it is ensured that once the project ends, adaptability is achieved.

g. Sustainability of a Change Project

"De-freezing"

- Generate a discrepancy feeling (problem/ target situation)
- Achieve responsibility
- Smash useless routines and dissolve useless structures
- Overcome loss perception by good communication about the change

"Moving"

- Make use of the momentum being liberated by dissolving well-rehearsed mechanisms
- Encourage individual initiative: People should feel involved
- Develop and prioritize approaches to solutions together
- Formal decision-making about future processes and structures

"Re-freezing"

- Documentation and implementation of the decided option
- Verify the effectiveness: are fine-tuning or corrections necessary?
- Simultaneously increase the capability to change and to adapt to enable the organization to find new solutions if new difficulties appear

Introduced measures have to be further monitored and accompanied in the stabilization phase.

"After organizational changes, a reaction in the direction of former patterns is probable, if the pressure of the change declines."

(Becker, Horst; Langosch, Ingo: Produktivität und Menschlichkeit – Organizationsentwicklung und ihre Anwendung in der Praxis, de Gruyter Verlag, Oldenburg, 2002, p. 57)

Cybernetics has evidently not arrived everywhere in practice – perhaps because of lack of skills or customer acceptance – or it is called something else for marketing and communication purposes (complementary consulting).

h. Consultants with Cybernetic Background and Approach

Where can you find consultants who help the change to cybernetic work?

Although cybernetics offers effective levers for noticeable improvements, there are only a few consultants who promote themselves as applying cybernetics methods. What is the reason?

Hypothesis 1

Despite the available theory, cybernetics has not yet arrived in broad consulting practice because it is not understood and/or "it is burning in the daily business" of customers who do not find the patience "to get on the bike, instead of continuing to push it".

Hypothesis 2

Cybernetics has already become a usual toolset that is no longer placed in the foreground – similar to "e-business", which has become just another facet of normal business.

Hypothesis 3

Cybernetics "does not sell". What sells are result improvements, new customers, personnel reduction etc. Commercially oriented consultants are aware of this and sell these topics. Some consultants apply the principles of cybernetics to achieve results, but they do not call it "cybernetics", at best they call it "complementary consulting".

References on the side of the client and the consultant are indicators for the project success to be expected.

i. References

The purchase or sale of a consulting project cannot be compared with the purchase or sale of an industrial investment asset.

The latter can be completely specified ex ante. Generally, comparable investment assets are already installed in other companies where customers can scrutinize the benefit.

Consulting projects take shape while they are being implemented. The result cannot be fully described before a project starts. Cybernetics consulting projects in particular have to be carried out with the on-going development in mind in order to meet the requirements in terms of adaptability and to reach the aim of "injecting" organizations with the ability to develop.

Pre-conditions for organizational learning:

- Tolerance, especially fault tolerance
- Open co-existence of different views and opinions
- Constructive discourse
- Knowledge management
- Organizational self-reflection (Audits)

Questions for Reflection

1. **How do you ensure your project is cybernetic, that it can further develop and that it 'survives' without external intervention?**

2. **How do you ensure management continuously questions its actions and that it considers itself a part of the system – and possibly a part of the system's problem?**

3. **Do you feel well when decisions are taken at the lower levels of your organization?**

4. **How do you ensure projects in your organization not only deliver immediate results, but that these are sustainable?**

5. **Can you provide examples of projects that delivered better capability to change?**

6. **What measures do you consider to foster capability of organizational learning?**

Summary of Section

- A cybernetics consultant should **both deliver input and ensure the organization is able to develop cybernetic behaviour on its own.**
- To be successful, a consultant should **ensure the customer and the organization's management want and support cybernetic behaviour.**
- The consultant should **initiate the process to organizational self-regulation** with industry background and methodological input.
- **Management is an important item to be analyzed** when cybernetic projects are carried out.
- A good consultant **becomes effective in an "enzymatic"** way to ensure a sustainable benefit of their support.
- To push the readiness to change, **intrinsic factors of everyone involved should be triggered.**
- In cybernetically-led organizations, **decisions are prepared, weighed up, taken, accepted and supported on a working basis.**
- Cybernetic management is about **changing from the administration of a given business to managing current adaptability, agility and innovation**.
- A cybernetics project is sustainable **when after a project ends, adaptability is achieved.**
- Introduced measures have to be **further monitored and accompanied in the stabilization phase**.
- **Cybernetics has evidently not reached everywhere in consulting practice** – perhaps because of a lack of skills or customer acceptance – or it is called something else for marketing and communication purposes.
- **References from client and consultant** are indicators of the expectations for the success of the project.
- There are **only a few consultants who understand** the principles of cybernetics and apply them successfully in their consulting practice.

Relevant Sources for Further Reading

- **Argyris, Chris; Schön, Donald A.:** Die lernende Organization – Grundlagen, Methode, Praxis, Klett-Cotta Verlag, Stuttgart 2006, 978-3-608-91890-8.
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Summary

Introduction
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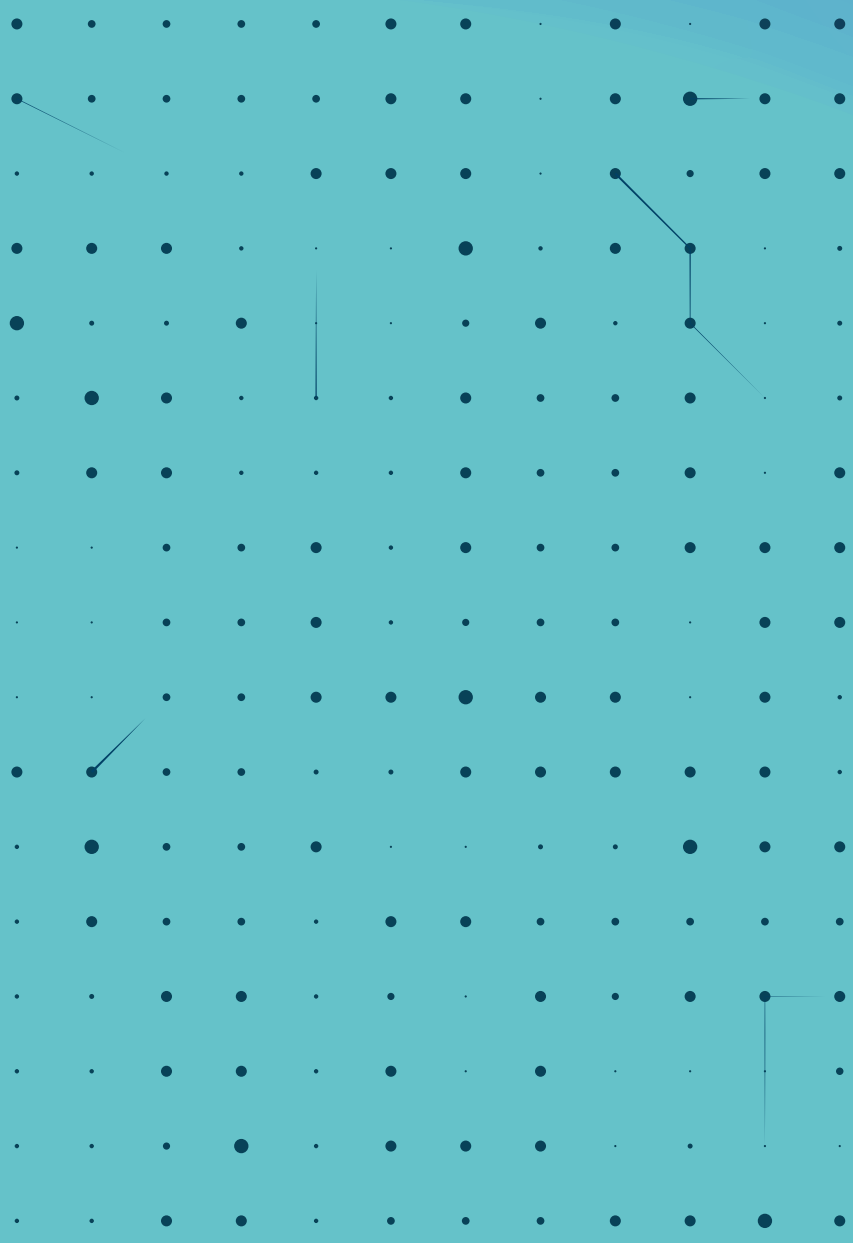

The Consumer Goods FORUM

End-to-End Value Chain

Dr. Boysen Management + Consulting

Organizations are systems, and systems seek for survival. Survival in dynamic-complex environments requires adaptation.

- The objective of any organization is to survive, and thus, they are **constantly in search for a sustainable financial result**.
- Management cybernetics offers methods to **achieve organizational stability in dynamic-complex environments**.
- It is important to realize we are a part of **our world and we cannot 'outsmart'** it without suffering the consequences.
- Organizations led by a cybernetics approach **develop sustainability against disturbance and disruption.** They always find new dynamic stabilities.
- Organization's should be provided with **the necessary tools to become self-regulated**.
- The task for management is to initiate self-regulation and maintain it by ensuring **enough information and energy are added**.
- To **improve the resiliance** of your organization, **build a cybernetic management set-up and identify** and operate the effective flow parameters.

Management attitudes are crucial for survival in complex-dynamic environments. Organize an open strategic and operative discourse.

- The sustainability of organizations strongly depends on **management's awareness for reciprocal effects and their leadership attitude**. Therefore, always start with the management readiness for a cybernetic approach. **Specially focusing on management's capability** and willingness to understand the system.
- Stop believing you can solve problems because you are in a management position. **Try to understand and use your system**.
- In dynamic-complex environments, **the complexity of your organization is the basis for survival**. Increase the degree of possibilities for action (variance).
- Use the competence of your staff in **cybernetic discourses** to reach well-aligned and sharpened solutions.
- In a world characterized by uncertainty, **your 'Inner Form'** becomes increasingly relevant for orientation and good decision-making.

Seek for a market-oriented strategy and ensure it is executed.
Stay alert and attentive to environmental changes.

- **A demand-oriented strategy** is always the first step to embed your organization in markets. Focus on solutions for customers.
- Feed your business with descriptions of ‘future spaces’ with highly probable and consistent parameter values by means of a **corporate foresight dialogue**.
- Use cross-border relationships to **increase the intellectual capital by sharing it.**
- Include the **‘blue oceans’ approach** in your considerations, equipping your organization with **an ‘osmotic skin’** and **a continuous open discourse**.
- Ensure **weak signals** are perceived by your organization, **opportunities are capitalized** and risk is actively managed rather than being avoided.
- **Establish a strategy-driven innovation process,** involving the whole organization.
- **Be attentive to changes in strategic partnerships.** Careful observation and game theory help operate rationally in a dynamic system.
- By means of **a strategic and an operational risk self-assessment**, all risk becomes evident and effective management will be possible.

Establish a ‘System Thinking’, aligning processes at interfaces and with staff.

- **‘System Thinking’** sensitizes our minds to the relevance of interrelations and interactions, and improves our effectiveness in complex-dynamic systems.
- Computer-supported **system dynamics have successfully been applied** to meaningful complex topics and have led to significant insights.
- **Processes bear tremendous unreleased potential** for financial results and stabilization.
- Performance can considerably be improved by **well-aligned dynamic-complex interactions** between the operational functions and the business processes.
- Picture and design processes in the stress-field of **expectations and possibilities at the interfaces**.
- Avoid ‘waste’ by carrying out a **thorough alignment at interface-level**, designing processes starting from customer expectations.
- Install **all five core functions of living systems in the processes.**
- Cybernetics-oriented processes allow for organizational **‘right-sizing’**, but should be done carefully, **creating value without losing flexibility**.

Accept complexity, understand it and cope with it.

- Overall complexity cannot be reduced, but there are effective means to cope with it.
- While the level of complexity should be accepted, **the distribution of internal and external complexity** can be distributed throughout the organization.
- **Understand and design complexity** in your organization using a practice-proven procedure model.
- **The more conscious people are regarding the limits of their knowledge**, the better the capability to find sustainable solutions.
- Self-regulation requires an initial **drive from top-management**.
- Complex tasks in complex environments require managers with **special skills**. VUCA sets new, additional requirements towards the leadership. Information, findings and cognition become more volatile.
  - In uncertain environments, try to think about probabilities and protect different possible outcomes by completing simultaneous initiatives.
  - With increasing dynamic complexity self-regulating teams should be created.
  - Consider ambiguity as a key to the solution.

Under VUCA conditions, attentively observe, think probabilities and proceed iteratively. Manage the systems cost.

- Under VUCA conditions, you should **attentively observe, think probabilities and iteratively proceed**.
- Rather than only managing a particular business, you take up the challenge to **drive the organizational change towards adaptability, agility and innovation**.
- **The IT applications should best support the aligned processes and reflect the process quality.**
- **The IT applications should be flexible to adapt to changing processes.**
- **Ideally, the IT applications are fully integrated.**
- IT should **dynamically provide the most relevant management** information.
- Under VUCA conditions, **special controlling and methods** instruments are useful to lead companies. **The system cost should be managed**.
  - First, internal blunder and resulting rework, tolerance exceedance and commercial loss caused by a lack of cybernetic quality should be gathered.
  - Then, well-dosed preventative measurements should be defined and implemented to reduce the cost of failure and to optimize the total system cost. This bundle usually consists of process optimization, training and leadership.

Extract of the Summary

1. Organizations are systems, and **systems seek for survival.** Survival in dynamic-complex environments **requires adaptation. Adaption depends on feedback.**

2. Management attitude is crucial for survival in complex-dynamic environments. Organize an open strategic and operative discourse.

3. Seek for a market-oriented strategy and ensure it is executed. Embed your organization in the market. Stay alert and attentive to environmental changes.

4. Establish ‘System Thinking’, align your processes, specially at interface-level. System Dynamics method can help identify and understand patterns in system behaviour.

5. **Accept complexity, understand it and cope with it.**

6. Under VUCA conditions, attentively observe, think probabilities and proceed iteratively. Manage the systems cost.

7. In a world characterized by uncertainty, your ‘inner form’ becomes increasingly relevant for decision-making.

About

The Consumer Goods Forum

The Consumer Goods Forum (“CGF”) is a global, parity-based industry network that is driven by its members to encourage the global adoption of practices and standards that serves the consumer goods industry worldwide. It brings together the CEOs and senior management of some 400 retailers, manufacturers, service providers, and other stakeholders across 70 countries, and it reflects the diversity of the industry in geography, size, product category and format. Its member companies have combined sales of EUR 3.5 trillion and directly employ nearly 10 million people, with a further 90 million related jobs estimated along the value chain. It is governed by its Board of Directors, which comprises more than 50 manufacturer and retailer CEOs.

For more information, please visit:
www.theconsumergoodsforum.com

About

Dr. Boysen Management + Consulting

Dr. Boysen Management + Consulting, led by Dr. Werner Boysen, is a first-class management consultancy specializing in the performance improvement of medium-sized industrial companies.

Dr. Werner Boysen is an industrial engineer and holds a PHD in economics. With his broad industry expertise and his practice-proven skills, Dr. Boysen helps his clients to improve their operational professionality.

For more information on his latest book, **“45 Perspectives on Cybernetics”**, please contact: **bestellung@dr-boysen-management.de** (available in german)

Dr. Werner Boysen

Cybernetics Learning Series Author

Ruediger Hagedorn,

End-to-End Value Chain Director The Consumer Goods Forum