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LEUPHANA UNIVERSITY OF LÜNEBURG

Steinbeis Innovation Center Logistics and Sustainability

"DEALING WITH CONTRADICTIONS" LEARNING MODULE

NOTES FOR TRAINERS/TEACHERS

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NOTES FOR TRAINERS/TEACHERS

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LEARNING MODULE CONTEXT

The following learning tasks relating to “Dealing with contradictions” form an interdisciplinary topic that addresses several occupational profile positions in the general training plan for vocational education and training in the occupation of freight forwarding and logistics services clerk against the background of sustainability.

The learning tasks look at the existence of contradictions in daily life and in the world of work and consider possible ways of dealing with these contradictions. Trainees learn the difference between efficiency and sustainability. They also occupy themselves with action options in dilemma situations and reflect upon the significance of contradictions for their daily decision-making processes during the normal work routine.

This learning module comprises three learning tasks and focuses on individual contradictions between sustainability and company routines. Trainees in particularly study and apply the learning and knowledge acquisition method of “systemic visualisation". In the basic learning task, the trainees concentrate on the identification and interpretation of characteristics. In the link-up learning task, they reflect upon their working environment with regard to these contradictions and present an everyday contradiction that they choose themselves. In the expansion learning task, the trainees then work together with the guidance of a trainer to carry out a “systemic visualisation” with a view to deriving possible action options to deal with contradictions.

CONTENTS OF THE LEARNING MODULE

One of the meanings of efficiency is cost-effectiveness. Using as little as possible of a necessary resource is considered efficient. One might be tempted to take the view that increases in efficiency in everyday working life at the company will lead to sustainable business practices. Surely less waste or lower use of energy also means placing less of a burden on the environment and thus results in longer availability of finite resources. Or does it?

Not necessarily!

An example will be presented to uncover the misunderstanding that underpins this assumption. German aviation has more than tripled since 1990. Technical innovations, better use of space and various other measures have enabled average use of kerosene per person to be reduced by 42 per cent since this time – a good development at first glance. However, a closer look reveals that traffic volume has risen sharply over the same period. Despite strong increases in efficiency, the consequence is that more and more kerosene is being used in absolute terms. In fact, the figure has gone up by 85 per cent since 1990.

This is why scientists also refer to the "efficiency trap". Although increased efficiency permits a relative degree of environmental relief to be generated, the challenge of absolute production growth remains in place. Efficient action may be expedient from an economic perspective, but it is questionable from an ecological point of view. The conclusion we may draw is that the drive towards efficiency and the orientation towards sustainability are two independent rationalities to which companies need to accord equal attention in order to do business in a future-proof way. Successful company management over the long term would therefore derive as many economic returns as possible from the available resources whilst retaining the resource base. This would be a fair way of working in intergenerational and intragenerational terms. Future-oriented business administration and commercial actions should therefore face up to the challenges posed by both short-term efficiency rationality and longer-term sustainability rationality and link up these two perspectives. The following figure illustrates this relationship. The efficiency perspective can be described by the terms "functionality", "economic efficiency", and "legal conformity". The sustainability perspective is denoted by the terms "ecological efficiency", "material preservation", and "responsibility".

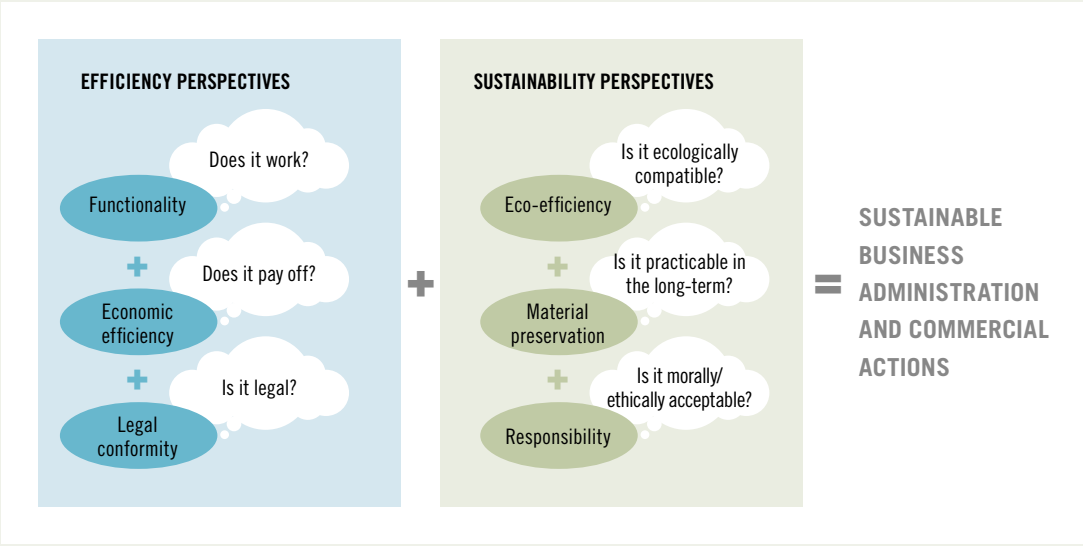


Figure 1: Efficiency and sustainability perspectives in business administration and commercial actions (representation by Müller-Christ, 2014)

Within the scope of business administration and commercial actions, contradictions occur between efficiency rationality ("functionality", "economic efficiency", and "legal conformity") and the rationality of sustainability ("ecological efficiency", "material preservation", and "responsibility"). Future-proof business administration and commercial actions are thus characterised by their ability to deal with these contradictions.

However, the question that now arises is what dealing with contradictions means for everyday working life. It is possible within this context to speak of so-called "trade-offs", "conflicting objectives", or "compromises". The fundamental focus is on understanding the possible contradiction between an ideal and working routine and on making a justified action decision. This frequently puts decision-makers in difficult dilemmas. Decisions on business administration and commercial actions often involve choosing between scarce resources such as money, time, and staff.

Which possible options arise when seeking to utilise a resource that is absolutely scarce and finite, such as time? We will use a general example to explore this question on the basis of the approach set out by Georg Müller-Christ in 2007. The quandary people face between commitment to their career and to family life is ubiquitous. No one can maximise time in both areas at the same time without having to accept losses. This means that personal coping processes are inevitable. There are essentially the following four ways of dealing with this dilemma:

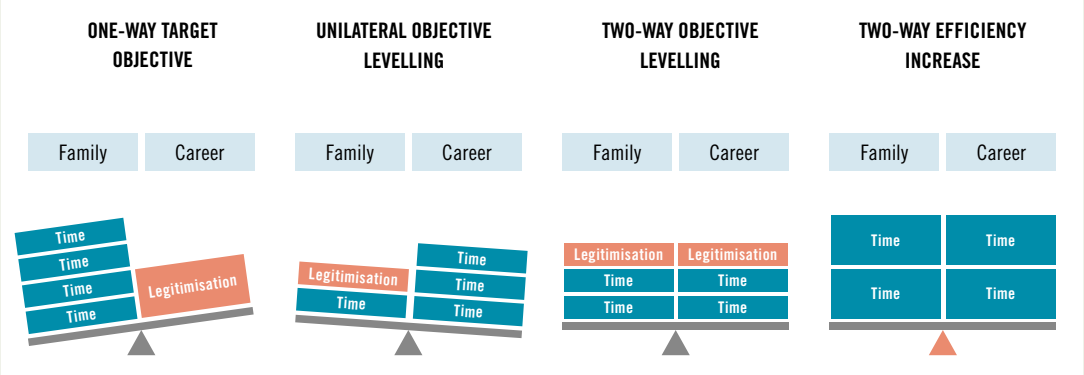


Figure 2: Possible ways of dealing with trade-offs, based on Georg Müller-Christ, 2007

One sub-goal might involve giving up the commitment to career maximisation. This would simply remove the trade-off rather than overcoming it. It would, however, give rise to the mental challenge of having to legitimise surrender of the partial objective. Secondly, a person could reduce their objective – for example with regard to the family – to a medium target attainment level. This would limit the degree of individual legitimisation needed (unilateral objective levelling). The third possibility is to pursue two-way objective levelling. This would, however, need an enormous mental effort from decision-makers and would also require them to demand dual legitimisations for themselves and for the two groups of objectives. The fourth approach could involve an attempt to increase personal efficiency. More streamlined self-organisation and better management of the available time could enable a more intensive use of this resource. Nevertheless, there would also be a risk of mental and physical stresses and strains that a person may not be able to withstand in the long term. This example demonstrates that a universally ideal solution cannot exist. The toleration and negotiation of trade-offs inevitably leads to difficult decision-making. In some cases, the difficulties are considerable. The following three coping strategies suggest themselves as ways for dealing with contradictions in everyday business administration and commercial activities:

1. **Time separation**
2. **Spatial separation**
3. **Spherical separation**

Time separation

One way of dealing with the contradiction between efficiency and sustainability is to create a time separation between these two rationalities. The principle of sustainability could, for example, remain the focus of commercial activity until such time as financial challenges require rational action on the basis of efficiency. Sustainable and efficient actions thus alternate and might be able to compensate for each other.

Spatial separation

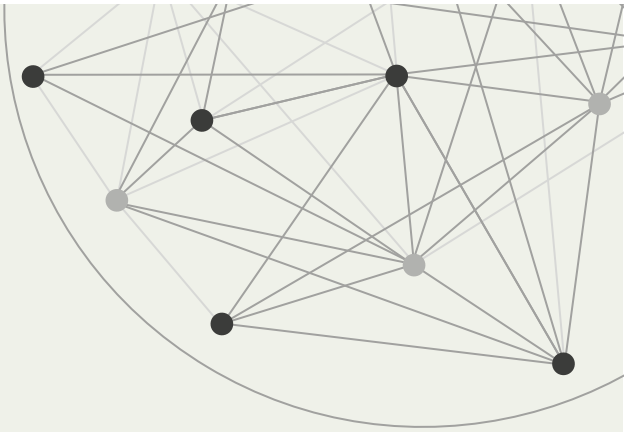
Using spatial separation as a way of dealing with contradictions involves physical division of the contradiction within the company via the deployment of organisational means. One department could, for example, concentrate on the realisation of sustainability-oriented aims whilst another department could keep a close eye on efficiency orientation. However, equal importance would need to be attached to the rationalities of sustainability and efficiency within the scope of the pursuit of a dual target of this nature.

Spherical separation

Spherical separation describes dealing with contradictions by according simultaneous consideration to the efficiency and sustainability strategy in different spheres of company action. Because objectives based on efficiency and sustainability rationality need to be taken into account at the same time, possible contradictions in parallel spheres would need to be borne in mind on an ongoing basis.

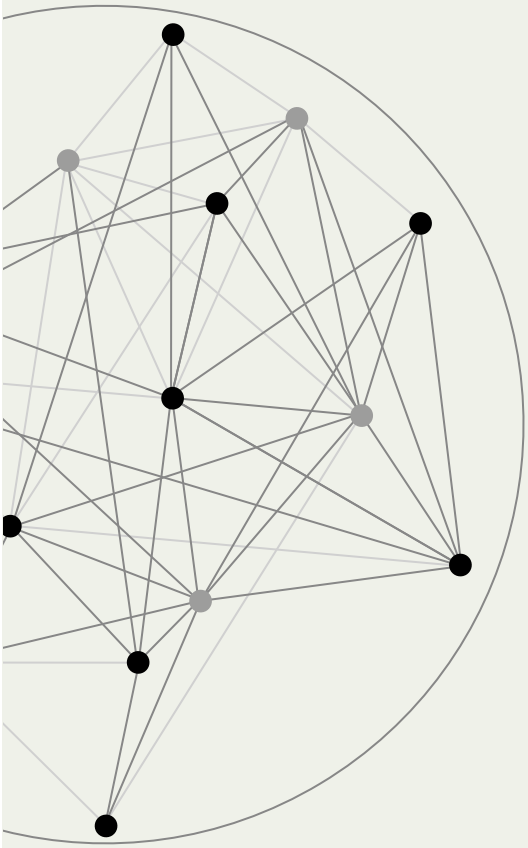
SUMMARY OF THE LEARNING MODULE

Classification under training regulation:	Interdisciplinary topic
Topic:	Dealing with contradictions
Type of learning task:	Basic learning task, link-up learning task, expansion learning task
Learning venues:	Workplace, company or classroom, inter-company learning venue
Learning arrangements:	Individual and group work
Target competencies:	- The trainees outline the "systemic visualisation" method. - The trainees describe and interpret the network of relationships in the transport and logistics sector with the assistance of a diagram. - The trainees explain the contradiction between efficiency and sustainability. - The trainees reflect upon their everyday working routine against the background of the contradiction between efficiency and sustainability.
Brief description and module context:	In the basic learning task, the trainees describe and interpret a picture of the network of relationships in the transport and logistics sector that has been designed as a "systemic visualisation" by experts in the branch. This provides them with an insight into the "systemic visualisation" method. Within the scope of the link-up learning task, the trainees look at the contradiction between efficiency and sustainability and identify contradictions in their professional environment. The trainees then jointly opt for one of the contradictions. In the subsequent expansion learning task, they use the "systemic visualisation" method to create their own presentation. Against this background, the trainees reflect jointly on their findings and draw conclusions for their everyday work routine. This module serves as an interdisciplinary module that facilitates various link-up points with other learning modules. It promotes an understanding of alternative actions between efficiency and sustainability in everyday working life. Within this context, it addresses how to deal with contradictions.
Contents and tasks:	- Introduction to the learning and knowledge acquisition method of "systemic visualisation" - Interpretative consideration of a network of relationships in the transport and logistics sector - Structured consideration of the contradiction between efficiency and sustainability - Identification of and reflection on contradictions between efficiency and sustainability orientation in everyday working life - Development of possible options for sustainable routine business administration and commercial actions
Materials required:	- Flip chart paper and flip chart marker - Metaplan board - Presentation cards



LEARNING PHASES	SEQUENCE OF ACTIVITIES FOR LEARNERS	EXPLANATION OF LEARNING METHODS AND TECHNIQUES	NOTES ON RESOURCES
	THE INTRODUCTORY PHASE IS WELL-SUITED TO BE WORKED ON INDIVIDUALLY		
INTRODUCTORY PHASE	Before the trainees look at contradictions in the transport and logistics sector, they familiarise themselves with the "systemic visualisation" method with the assistance of texts and images. Within this context, the trainees use key questions to interpret the image of a "systemic visualisation" of a network of relationships in the transport and logistics sector as viewed from their personal perspective. Finally, they formulate a conclusion in the form of a hypothesis. They have the option of discussing this with a colleague.	The trainees read a brief information text (see *Material 1**) and interpret a picture (see *Material 2**). The trainees are provided with key questions to help them with the interpretation of the picture (see *Note 1**). They are also given tips on how to formulate a hypothesis (see *Note 2**).	
	THE ANALYSIS PHASE IS WELL-SUITED TO BE WORKED ON IN GROUPS		
ANALYSIS PHASE	Once the trainees have interpreted a picture of an external visualisation, they use an information text to find out about the contradiction between efficiency and sustainability. They then reflect upon their personal everyday working lives and identify similar contradictions. Trainees present the contradictions identified to the group and check these for commonalities and differences. Finally, everyone agrees together on a contradiction they wish to work with further.	The trainees read an information text on the topic of "Sustainability and efficiency as contradictory decision rationalities" (see *Material 3**). They are provided with key questions and tips for their joint discussion and selection of the contradictions identified (see *Notes 3 and 4**).	In order to record their results, the trainees require flip chart paper and flip chart markers.
IMPLEMENTATION AND REFLECTION PHASE	Working under the guidance of the trainer, the trainees carry out a "systemic visualisation" on the basis of the contradiction chosen. They then use the visualisation they have performed as a basis for reflecting on possible action options against the background of the two perspectives of efficiency and sustainability. Finally, they transfer the findings they have made to their personal everyday working life. Alternatively, the trainees can follow the analysis phase with a discussion of the action options of the stakeholders involved without conducting their own "systemic visualisation".	The trainer is provided with method cards that give detailed instructions on how to carry out a "systemic visualisation" (see *Material 4***).	A spacious company room or classroom equipped with flip chart paper, flip chart markers, a metaplan board, and presentation cards is required for the "systemic visualisation".

** see Notes for Trainees/Students*
*** see presentation cards for the "systemic visualisation" method*



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