

Qualification for NanoOptics – practice example by SCHOTT AG “Evaluation of qualification requirements”

presented by Grit Petzholdt-Gühne, HR Manager

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Indroduction

Grit Petzholdt-Gühne

1991 - 1995

1995 - 1999

Trainee; HR-Referent

Human Resources Manager

**Coca-Cola Erfrischungsgetränke AG
(Essen, Weimar, Berlin)**

1999 - 2003

Human Resources Manager

New Venture Gear

**DaimerCrysler AG
(Roitzsch)**

2004 -

Human Resources Manager

Jenaer Glas GmbH

**SCHOTT AG
(Jena)**

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Indroduction

SCHOTT in Jena:

SCHOTT Jenaer Glas GmbH:

- Float Glass
- Ceran

SCHOTT Displayglas Jena GmbH:

- Display Glass (TFT)

SCHOTT Lithotec AG Jena/Meiningen:

- Crystals (CaF₂) – 193, 157 nm
- Synthetic Fused Silica - 193 nm
- Mask Blanks
- Wafer

Headlines of the topic: “Germany – a competitive investment location for the future”

- Germany needs to become a development centre for new technologies.
- Germany is the champion in developing patents – the step from development to introduction into the market needs to be much faster.
- Every day requires higher qualification.
- The dynamic in qualification has to follow the speed of the general development.

What are our challenges?

Network within the globalized worldwide economy

→ increase of complexity and dynamics

Optimizing of the current status is not enough

→ periods of stability (and safety) gets shorter
and shorter



The future will be determined by management of
instability and unsafeness.

...explained in other words:

The change is not a linear and nearly calculable process anymore – it is much more abrupt and partly radical.

The consequence:

Jobs are changing, mostly imperceptible and creeping; but after some time they are so extremely different, that we are confronted with a completely new situation.

It is the most important management job now, to manage the change. (Malik)

The Nanotechnology as a key technology of the future is an example for this scenario.

What are the general requirements for the employees of the future ?

- high qualified employees (professional and social)
- mobile employees
- international capable employees
- motivated, satisfied employees with high commitment to the company
- entrepreneurial thinking and acting employees

...what is new here...?

Different is...

- ✓ nearly only very high qualifications are required in the future
- ✓ development goes forward with an extremely high speed
- ✓ the markets are determined by extremely variations
- ✓ international skills are required by all levels, down to the blue colour workers
- ✓ demographical development in Europe requires new ways of qualification-thinking

How do we response?

- ✓ innovative apprenticeship (FK Ultrapräzisionstechnik, FK Photonik/Lasertechnik; Fachberater nanooptische Applikationen)
- ✓ early diagnosis of qualification gaps by permanent monitoring
- ✓ promotion and demand of flexibility (job rotation, teamwork etc.)
- ✓ language training and international assignments
- ✓ lifelong learning; consideration of different learning behaviour corresponding to age

Summary:

Demographical problem

Future oriented apprenticeship
Hiring of apprentices

Recruiting and development of
High potentials

International recruiting of
specialists

Development of the potentials
to keep them

Development activities for the
Workforce to keep the efficiency
Until the end of working period

rising requirements/dynamics

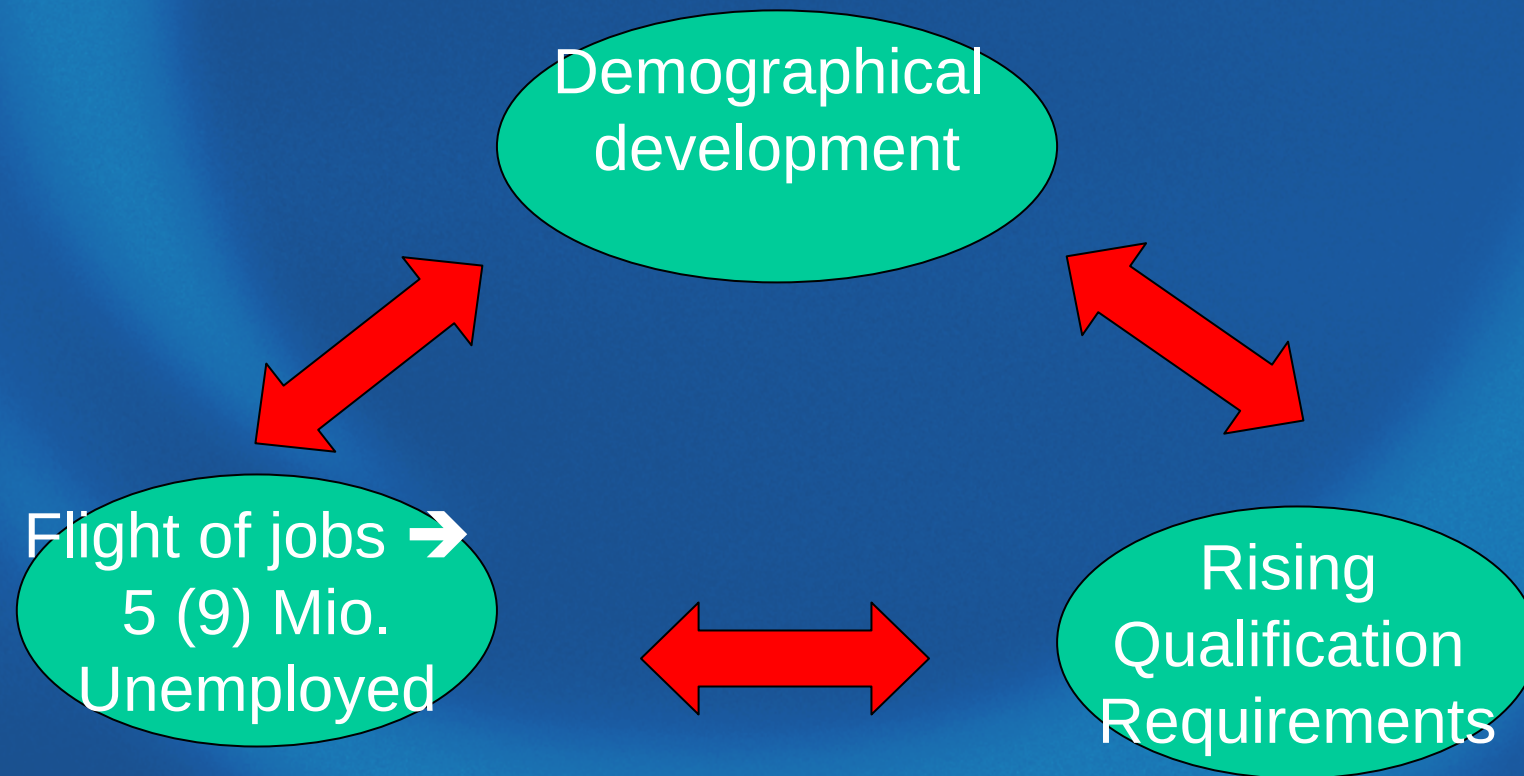
Lifelong learning – just a catchword?

Lifelong training has to become a matter of course for employees and companies:

- securing competitiveness
- securing of the permanent changing jobs
- securing lifelong performance and flexibility

Qualified employee have to be recognized as an asset of the company → the investment in qualification of employees increases the value of this asset.

Area of tension we currently operate:



What factors are hindering to react?:

Some examples:

Companies:

Cost pressure and saving activities, reduced headcounts minimize time for qualification...

Managers:

Requirement for short term success not for lasting effects, management weakness, disability for conflicts, lack of interest, fear to raise the successor ...

Employees:

Fears to demand qualification, fears to admit weaknesses or be measured by qualification result, lack of interest, indolence...

Here we need to provide a targeted support and control:

I want to introduce 2 instruments we developed and use in SCHOTT:

- a) To ensure the targeted training and to reduce qualification risks by permanent monitoring
- b) To promote one's own initiatives of the employees and to encourage employees to their development into the own hand

1. Qualifikation Matrix



1. Target

- Comparison of the existing competences/ qualifications of the employees with the job requirements
- Source file of requirement profiles and job descriptions



- Performance profile of the department → What is the right structure for the team ?
- Requirement profile of the employee → What are the required skills ?

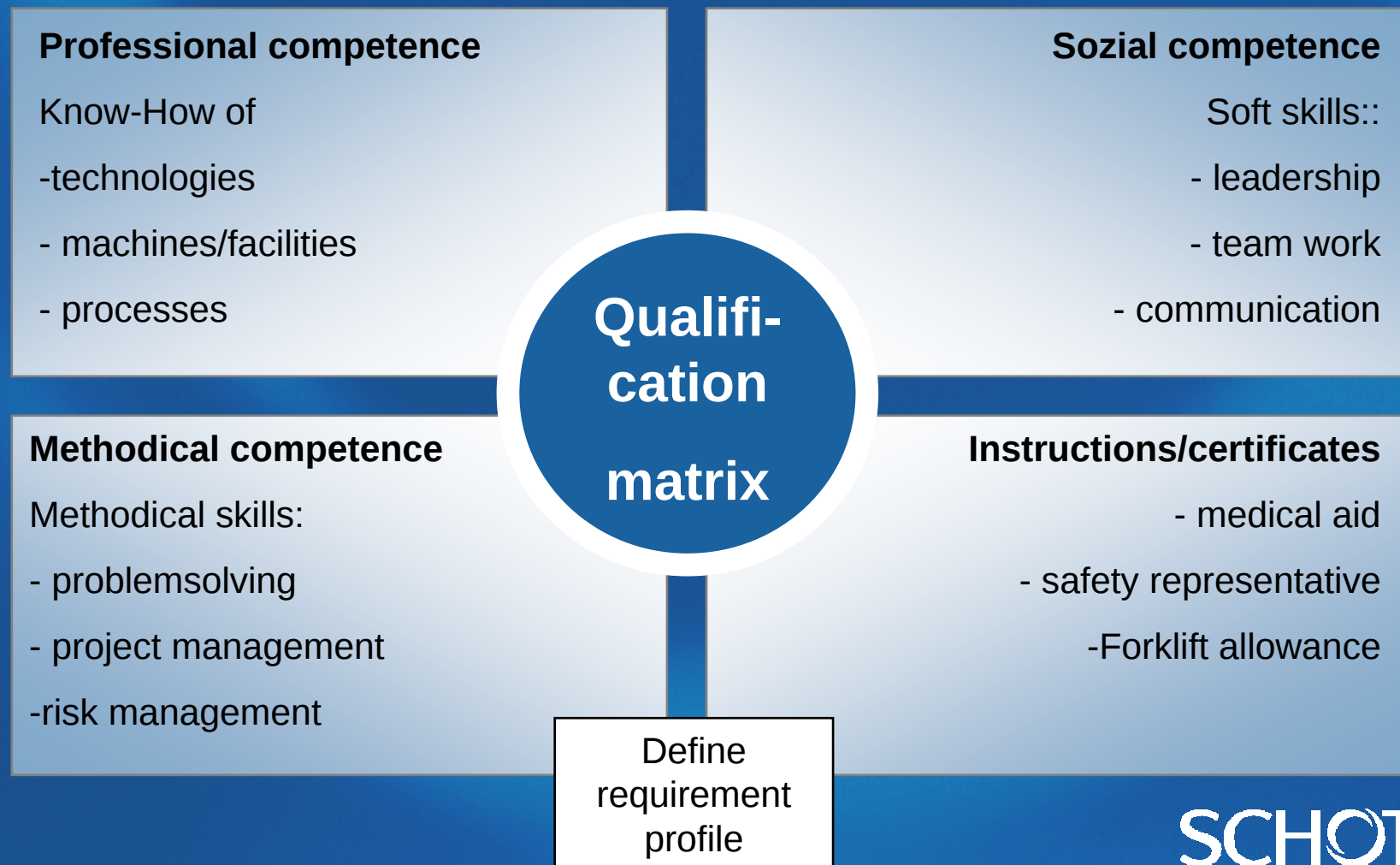
2. Short description

Definition

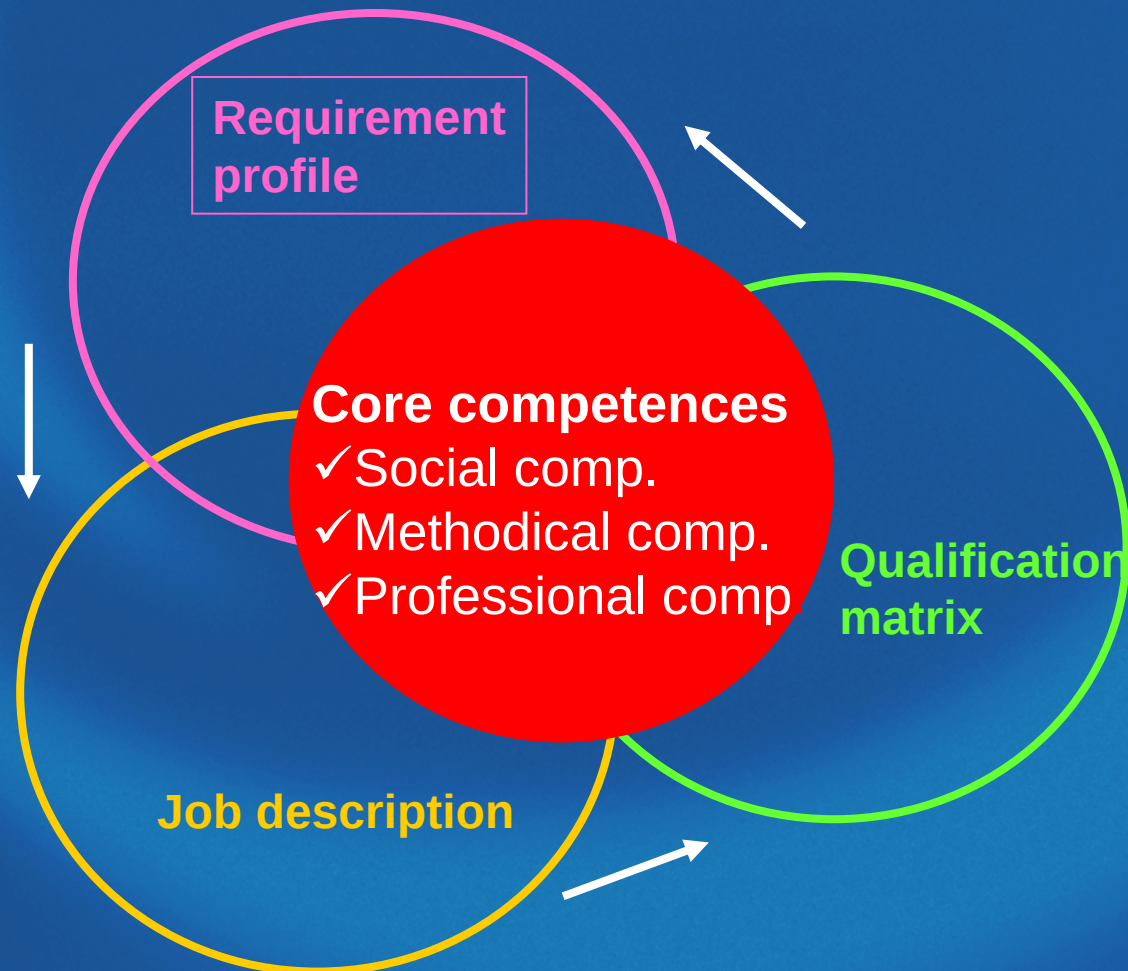
Qualification matrix is

- An instrument to plan, control, check and develop qualification of the single employee and of the department
- An instrument to manage the risk of qualification gaps and/or of succession and substitution gaps
- Documentation of the **Qualification profile** by actual and target of each employee in the department

3. Application area



Core competences:



Qualification matrix and the development process

general

individual

Job description



Requirement profile



Qualifikationsmatrix



Employee assesment



Career plan

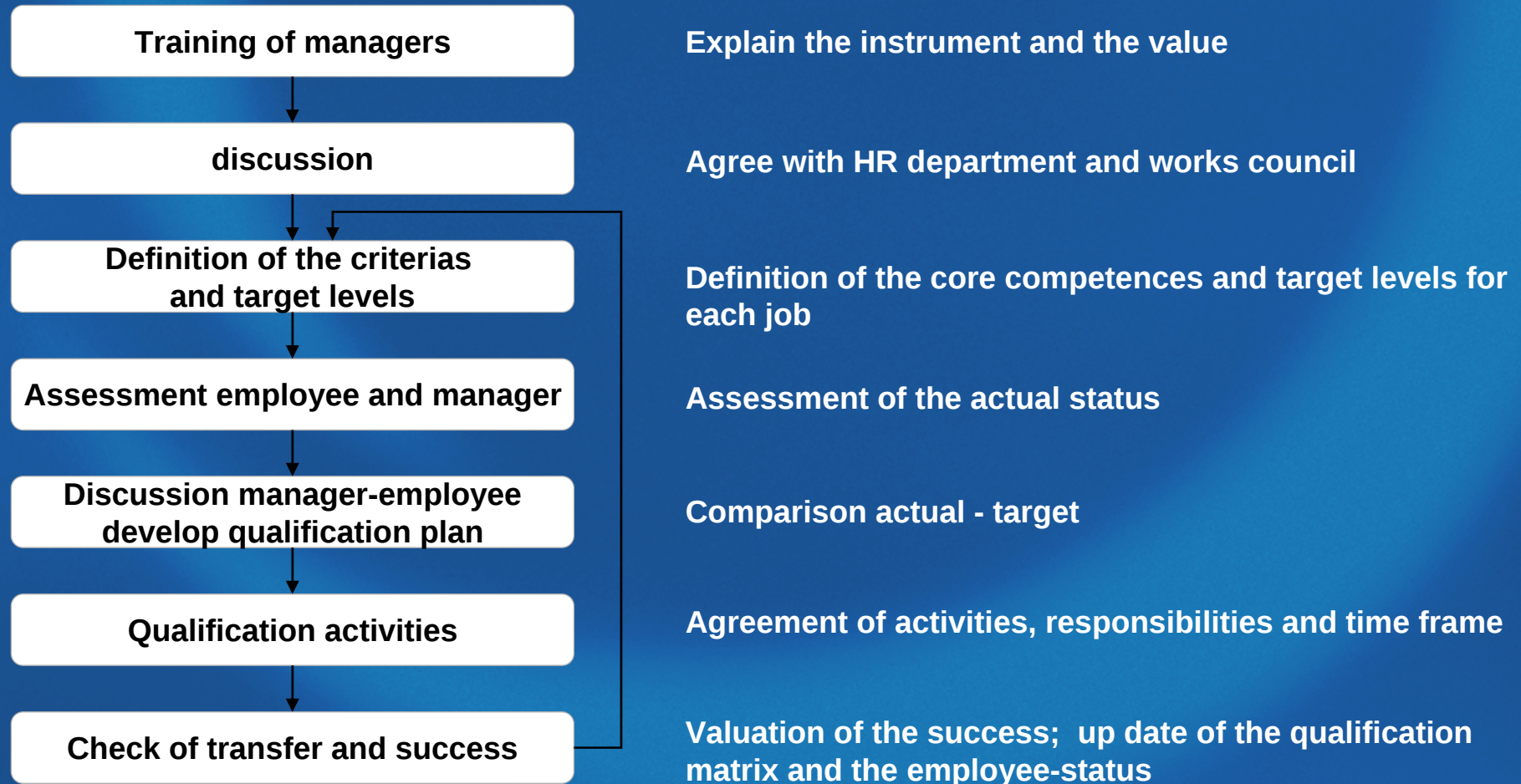
Qualification plan

Succession plan

staff development

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4. General course



5. Practice example:

Schulung der Führungskräfte

Abstimmung

**Definition of the criterias
and target levels**

Einschätzung durch MA und FK

Qualifizierungsbedarf ermitteln

Qualifizierungen

Erfolgskontrolle

Mitarbeiter/ Tätigkeit		Fritz Mustermann		Ing. Musterverarb.		Sabine Musterfrau		Total Differenz
		IST	SOLL	IST	SOLL	IST	SOLL	
Personal Competencies	Selbstmanagement/Selbstreflektion			3			3	-6
Business Competencies	Führungsfähigkeit/ Unternehmerische Fähigk.			1			3	-4
Interactive Competencies	Kommunikationsfähigkeit			3			1	-4
	Zusammenarbeit und Konfliktmanagement			3			2	-5
Intellectual Competencies	Analytisch- strategische Fähigkeiten			3			3	-6
Total Differenz			-13		-12			

5. Practice example:

Schulung der Führungskräfte

Abstimmung

Definition von Anforderungsprofilen

Assessment employee and manager

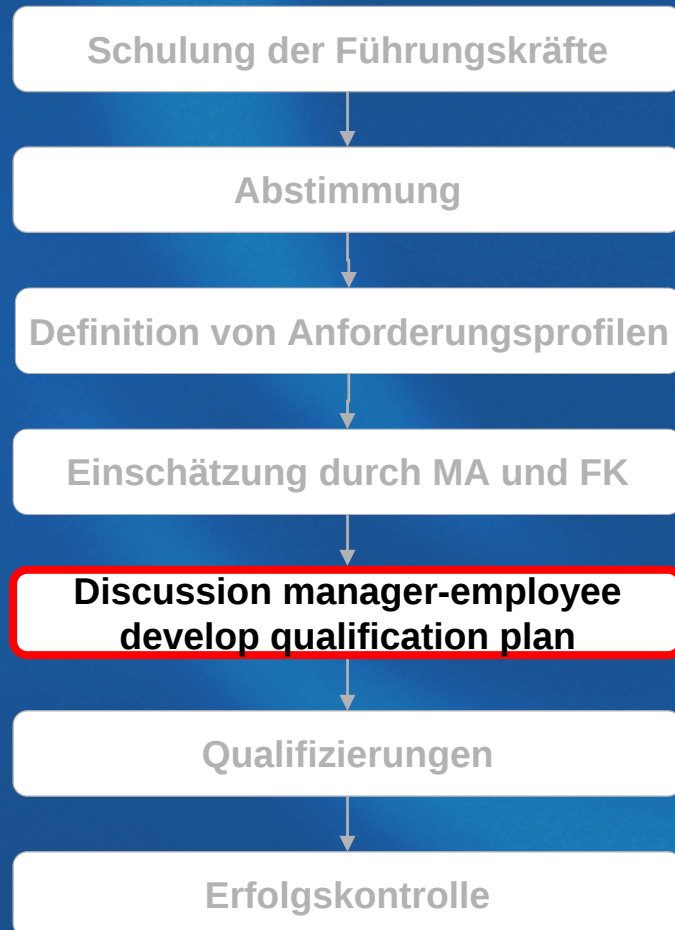
Qualifizierungsbedarf ermitteln

Qualifizierungen

Erfolgskontrolle

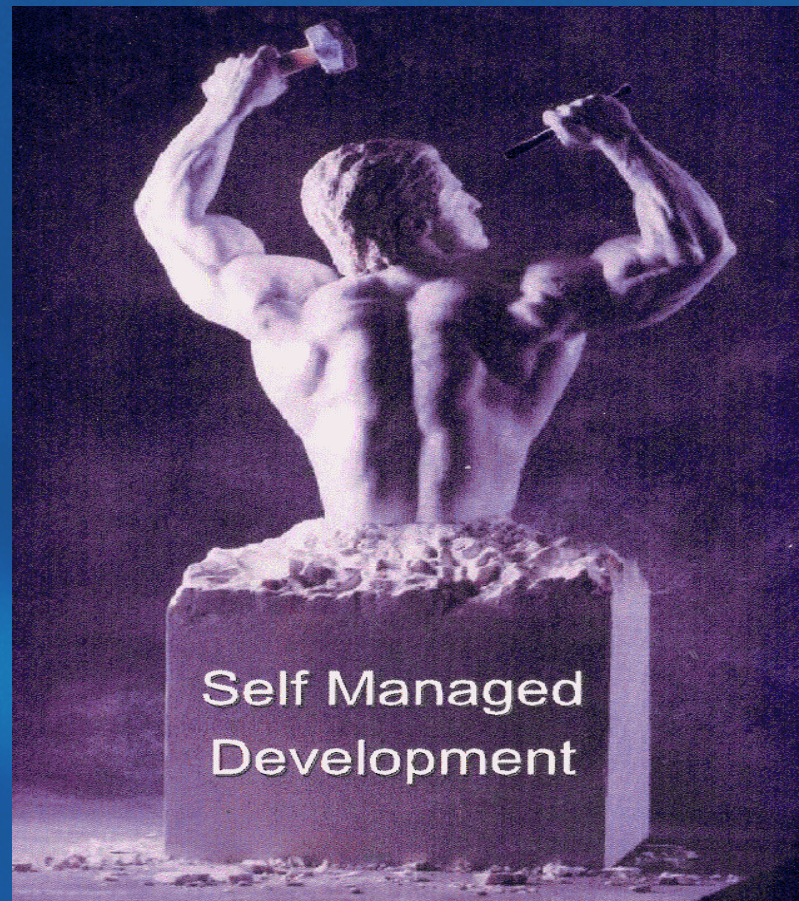
Mitarbeiter/ Tätigkeit		Fritz Mustermann Ing. .Musterverarb.		Sabine Musterfrau Ing. Mustererstellung		Total Differenz
		IST	SOLL	IST	SOLL	
Personal Competencies	Selbstmanagement/Selbstreflektion	2	3	2	3	-2
Business Competencies	Führungsfähigkeit/ Unternehmerische Fähigk.	2	1	2	3	0
Interactive Competencies	Kommunikationsfähigkeit	3	3	3	1	2
	Zusammenarbeit und Konfliktmanagement	3	3	3	2	1
Intellectual Competencies	Analytisch- strategische Fähigkeiten	3	3	3	3	0
Total Differenz		0		1		

5. Practice example:



Mitarbeiter/ Tätigkeit		Fritz Mustermann		Ing. .Musterverarb.		Sabine Musterfrau		Total Differenz
		IST	SOLL	IST	SOLL	IST	SOLL	
Personal Competencies	Selbstmanagement/Selbstreflektion	2	3	2	3	-2		
Business Competencies	Führungsfähigkeit/ Unternehmerische Fähigk.	2	1	2	3	0		
Interactive Competencies	Kommunikationsfähigkeit	3	3	3	1	2		
	Zusammenarbeit und Konfliktmanagement	3	3	3	2	1		
Intellectual Competencies	Analytisch- strategische Fähigkeiten	3	3	3	3	0		
Total Differenz		0		1				

Self Managed Development Program (SMD) by Schott



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SMD Process

Colleague/direkt
report

participant

manager

