



# ISO 9001:2015

Subject: Quality Management System

Clause 7 - Support

31.03.2017



УНИВЕРЗИТЕТ У БЕОГРАДУ  
ФАКУЛТЕТ ОРГАНИЗАЦИОНИХ НАУКА

HOMEWORK?



# Contents

ISO 9001:2015

## ISO 9001:2015 CLAUSES



### CLAUSE 4

Context of the organization



### CLAUSE 5

Leadership



### CLAUSE 6

Planning



### CLAUSE 8

Operation



### CLAUSE 9

Performance evaluation



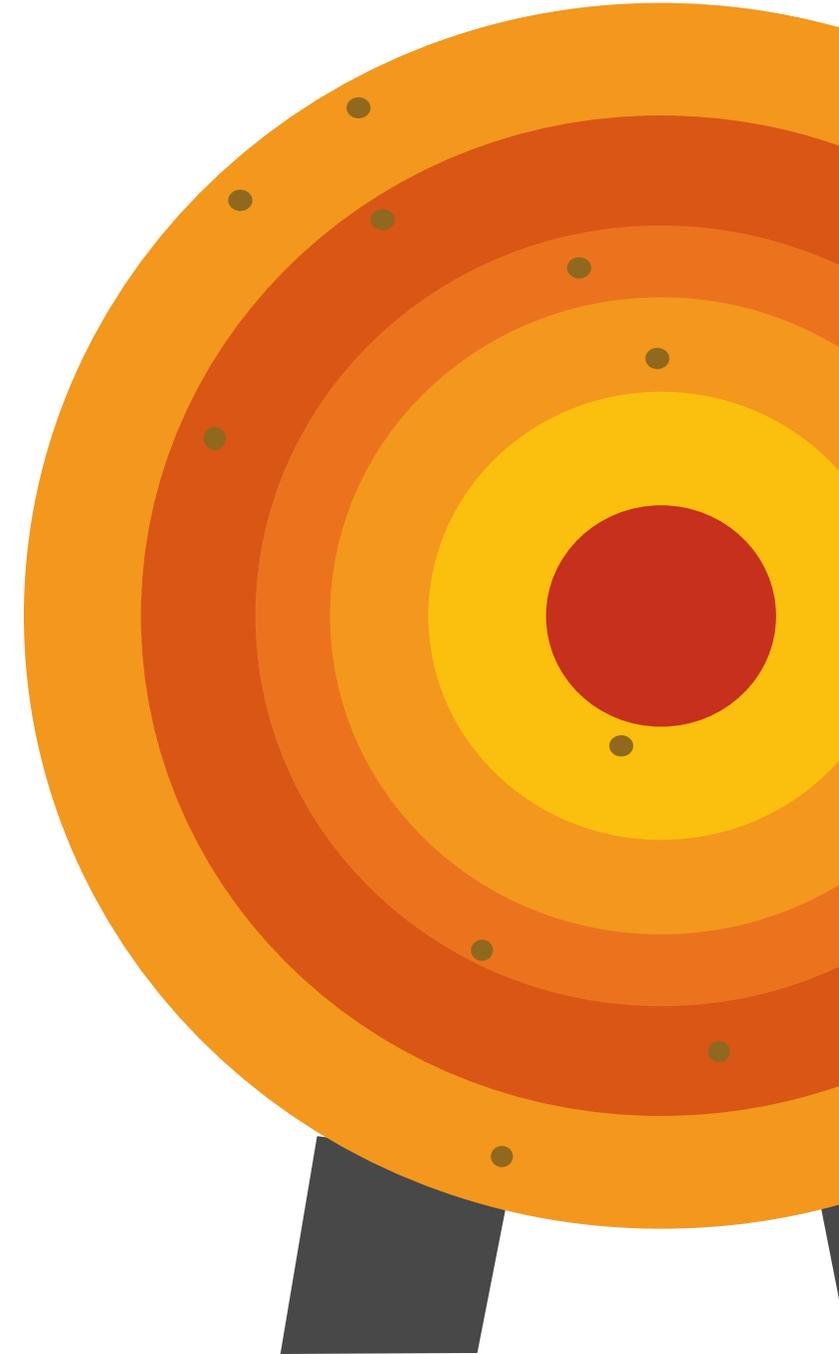
### CLAUSE 10

Improvement



### CLAUSE 7

Support



# CLAUSE 7 - Support

## Requirements

1

**AN EFFECTIVE QUALITY  
MANAGEMENT SYSTEM  
CANNOT BE MAINTAINED  
OR IMPROVED WITHOUT  
ADEQUATE RESOURCES.**

# CLAUSE 7 - Support

## Requirements



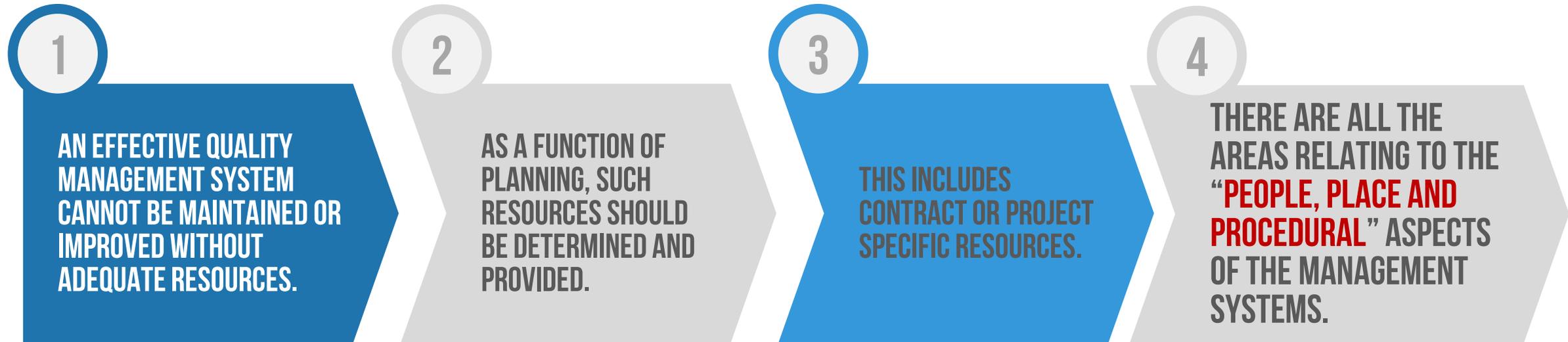
# CLAUSE 7 - Support

## Requirements



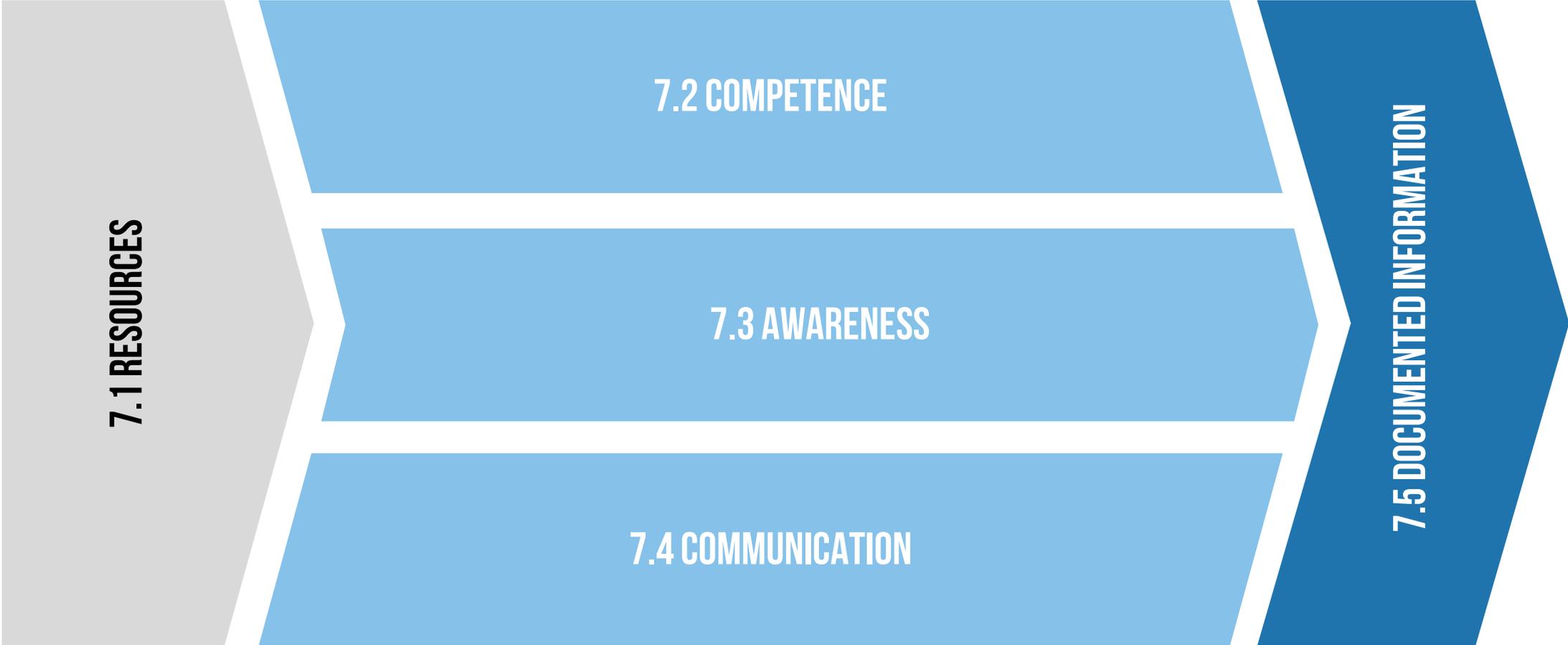
# CLAUSE 7 - Support

## Requirements



# CLAUSE 7 - Support

Requirements



# 7.1 Resources



The main intention behind this general requirement is that the people working within the quality management system are **competent** to fulfil their duties supported by equipment and infrastructure that is fit for purpose.

# 7.1 Resources



There must be adequate provision of **infrastructure** such as buildings, equipment, IT systems, transport, etc.

# 7.1 Resources

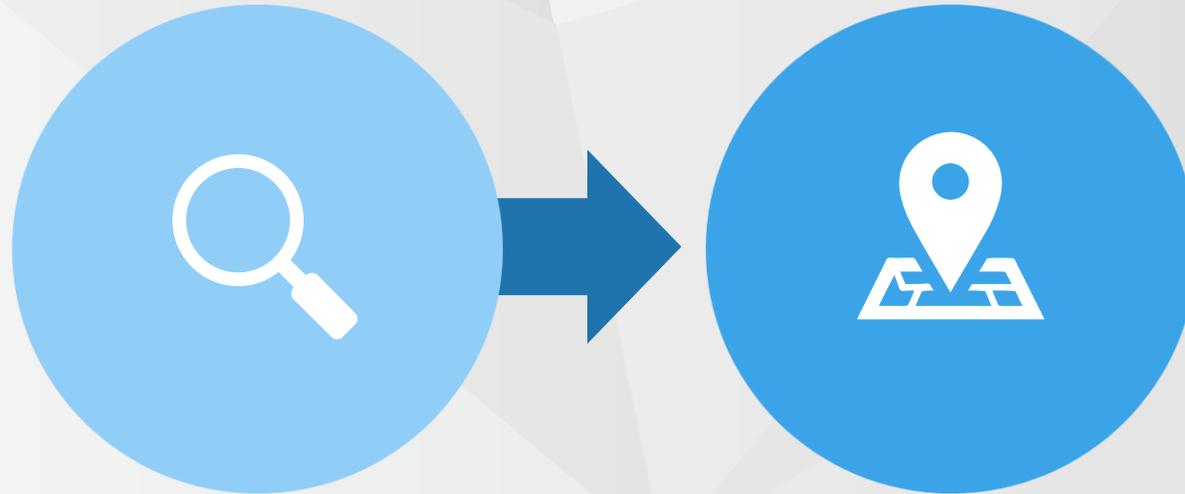


Determining what is needed and what **maintenance program** should be developed to ensure its continuing capability is part of planning.

# Resources

The **work environment** of an organization has many human and physical factors that can influence quality, effectiveness and efficiency.

These **factors** need to be identified and managed and can include: protective equipment, ergonomics, heat, noise, light, hygiene, humidity, vibration, temperature etc.



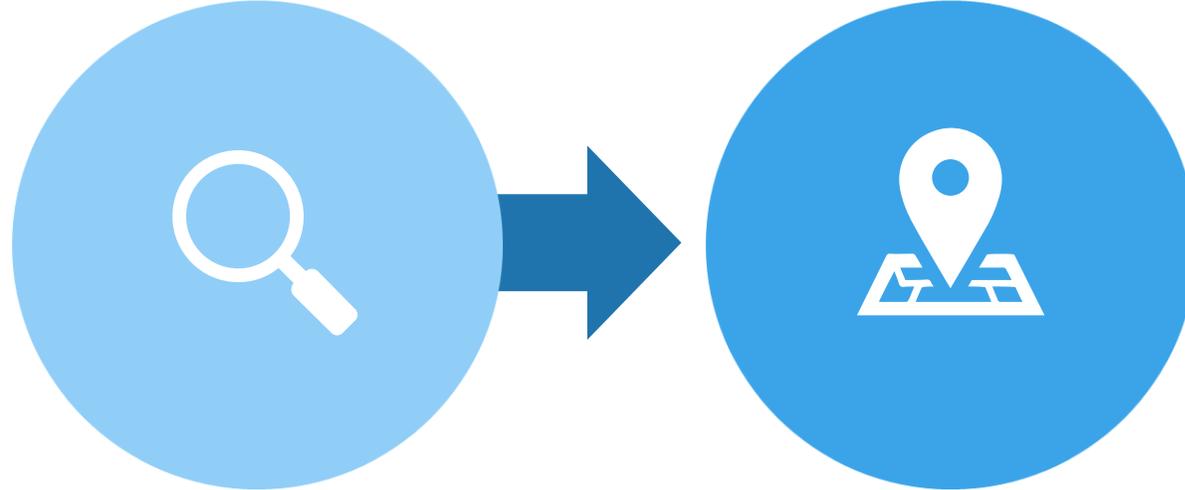
Work environment **criteria** are often found in procedures, contracts, specifications and codes of practice.

**Evidence of compliance** should be available via retained documented information.

# Resources

The organization must determine what **monitoring and measuring** has to be undertaken and provide evidence that it was undertaken using correct and reliable equipment.

Regular **calibration and maintenance** (and retained documented information) is one way to provide confidence that results are **reliable**.



**Critical measuring equipment** must be available and in a known state of accuracy to provide assurance and evidence that products meet their relevant requirements.

This also includes **software**.

# Competence



In order to determine competence, **competence criteria** need to be established for each function affecting quality. This can then be used to assess existing competence and determine future needs.



Retained **documented information** is required to be able to demonstrate competence. Recruitment and induction programs, training plans, skills tests and staff appraisals often provide **evidence of competence** and their assessment.



Where criteria are not met, some action is required to fill the gap. **Training** or **reassignment** may even be necessary.

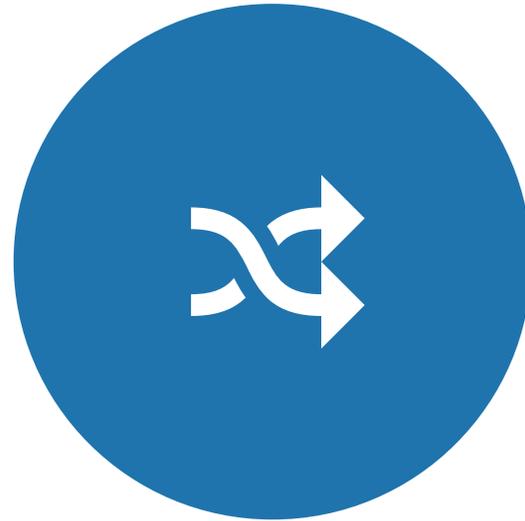


Competency requirements are often included in recruitment notices and **job descriptions**.

# Awareness



Personnel need to be made aware of the relevance of their activities and how they **contribute to achievement** of the **quality objectives** and the effectiveness of the **management system** and resulting **organizational performance**.



**Induction programs** and **staff reviews** are often used for this purpose.

# Communication



ISO 9001:2015 brings a clear emphasis on the importance of both **internal** and **external communications**.



The clause emphasizes the need to plan and implement a process for communications along the familiar 'who, what, when, how' principles.



**Effective communication** is essential for a management system. Top management need to ensure that **mechanisms** are in place to facilitate this.

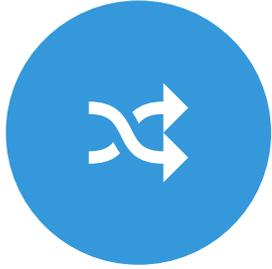


It should be recognized that communication is **two-way** and will not only need to cover what is **required**, but also what was **achieved**.



**Mechanisms for communication** could include: meetings, notice boards, in-house publications, awareness raising seminars, toolbox talks, intranet, email, etc.

# Documented information



The term “**documented information**” now replaces the previously used terms “documented procedure” and “records”.



Standard does specify on a number of occasions the need to maintain or retain documented information, in order to give structure, clarity and evidence of the system being **maintained and effective**.



Documented information can be **in any format** as long as it provide appropriate evidence to **demonstrate compliance**, and such documented information does not mean there has to be a procedure for everything.



Organizations still need to look at where documented information (e.g. processes, procedures, data, records) is **critical for the management systems** and its effective operation.



# SKILLS MANAGEMENT

# CHANGING VALUES – CHANGING WORK STYLES



- 1945



- 1962



- 1980



1981+

## TRADITIONALIST

- ✓ reliable
- ✓ loyal
- ✓ hard worker
- ✓ constant
- ✓ accepts leadership
- ✓ respects supervisors

## BOOMER

- ✓ assertive
- ✓ performance-oriented
- ✓ motivated
- ✓ ambitious
- ✓ team-focused
- ✓ client-centric
- ✓ service-driven

## GENERATION X

- ✓ self-assured
- ✓ independent
- ✓ technophile
- ✓ flexible

## GENERATION Y

- ✓ purpose-seeking
- ✓ optimistic
- ✓ realistic
- ✓ competitive person
- ✓ stubborn
- ✓ multitasking

# CHANGING VALUES – CHANGING WORK STYLES



- 1945

## TRADITIONALIST

- avoid
- system conformant
- little willingness to change



- 1962

## BOOMER

- tetchy towards criticism
- impartial
- egocentric
- focused more on processes than results



- 1980

## GENERATION X

- impatient
- skeptic
- lazy
- low level of assertiveness
- cynical



1981+

## GENERATION Y

- needs guidance
- requires (company) structures
- lacks <<personal drive
- disloyal

# THE ADKAR MODEL



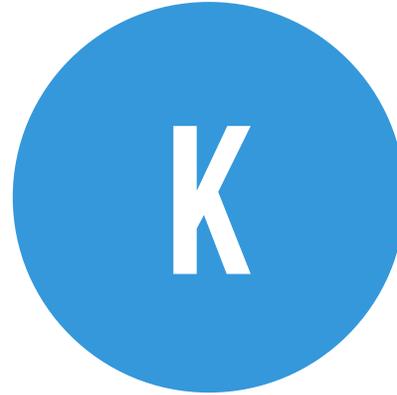
## **AWARENESS**

of the need for change



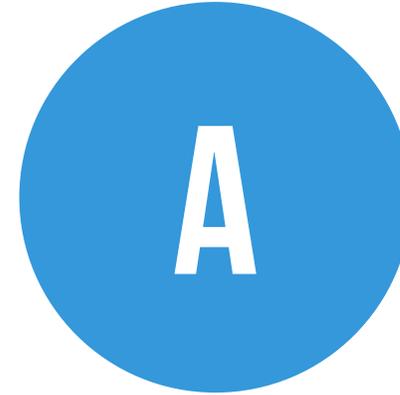
## **DESIRE**

to support and  
participate in the change



## **KNOWLEDGE**

of how to change



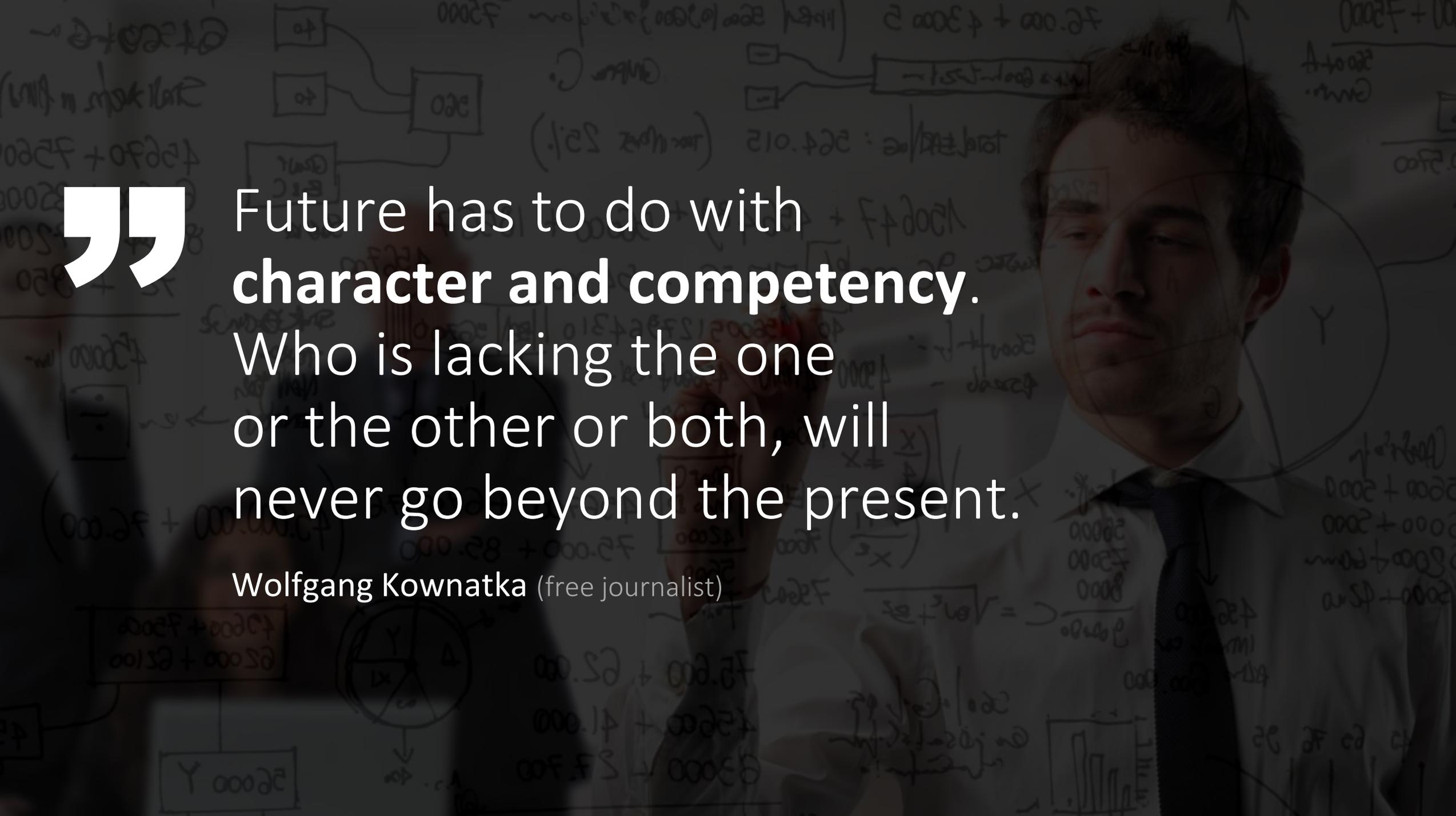
## **ABILITY**

to implement required  
skills & behaviour



## **REINFORCEMENT**

to sustain the change

A man in a white shirt and tie is pointing at a whiteboard. The whiteboard is covered in various mathematical formulas, diagrams, and handwritten notes. The background is dark, and the text is white. The man is looking towards the camera with a slight smile.

“

Future has to do with  
**character and competency.**  
Who is lacking the one  
or the other or both, will  
never go beyond the present.

Wolfgang Kownatka (free journalist)

# SKILLS MANAGEMENT

## Personal Competence



- Emotional awareness
- Accurate self-assessment
- Self-confidence



- Achievement drive
- Commitment
- Initiative
- Optimism



- Understanding others
- Developing others
- Service orientation
- Leveraging diversity
- Political awareness



- Influence
- Conflict management
- Communication
- Leadership
- Team capability



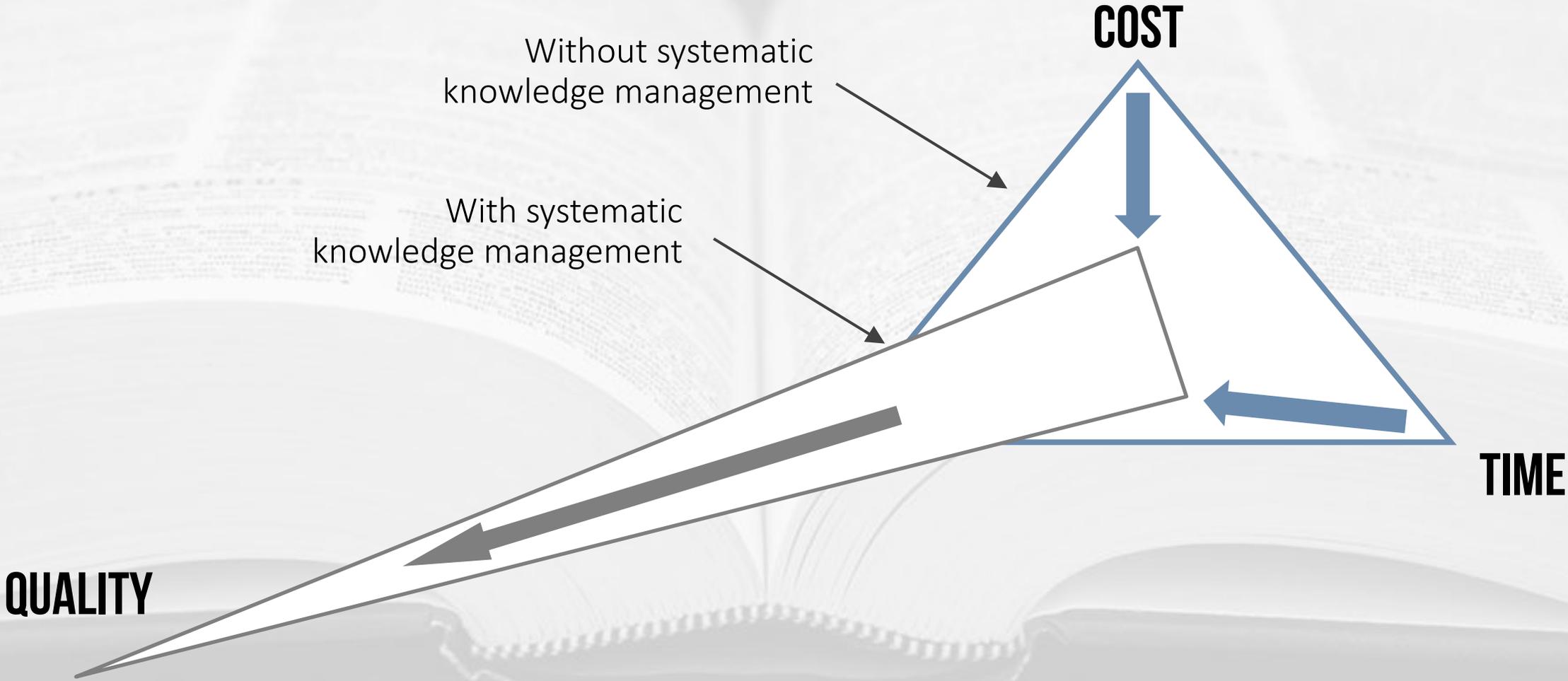
- Trustworthiness
- Conscientiousness
- Adaptability
- Innovation

A detailed close-up photograph of a mechanical watch movement. The image shows several interlocking gears of various sizes, some with gold-colored teeth and others with silver or steel teeth. There are also several small, round, red-tinted jewels or bearings scattered across the scene. The background is a dark, textured metal plate with some faint markings. The overall lighting is dramatic, highlighting the intricate details and textures of the mechanical parts.

# KNOWLEDGE MANAGEMENT

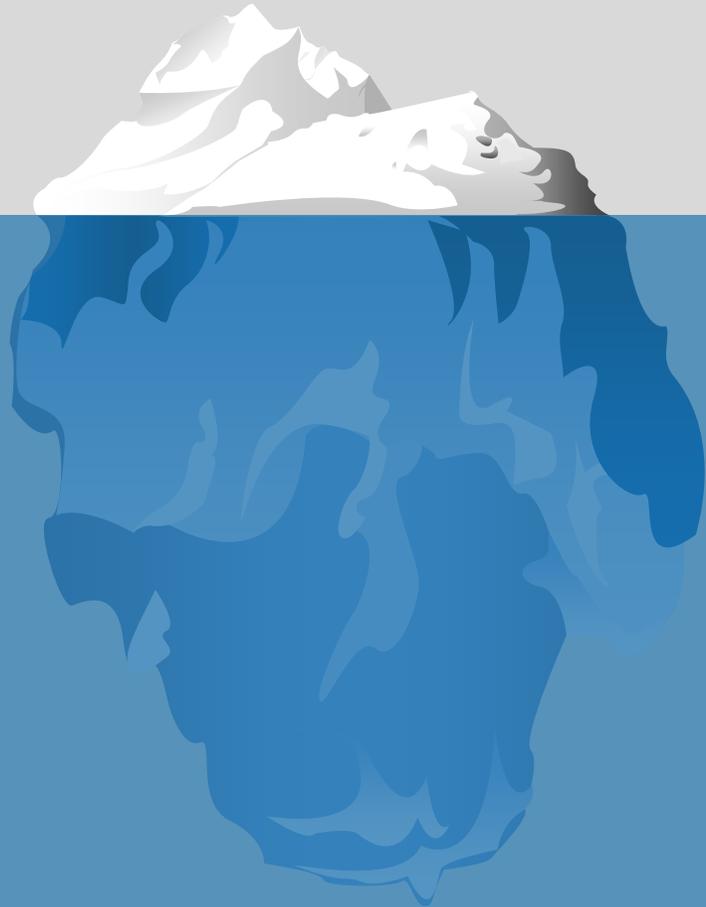
# KNOWLEDGE MANAGEMENT

Systematic Success



# KNOWLEDGE TYPES

Explicit and Implicit



**WORK INSTRUCTIONS,  
DOCUMENTED PROCESSES,  
REPORTS, DRAWINGS...**

**Explicit knowledge** is documented knowledge that is easy for others to grasp.

**EMPLOYEE  
EXPERIENCE,  
ROUTINES, AND SKILLS.**

**Implicit knowledge** exists in the employees' minds and is therefore difficult for others to grasp.

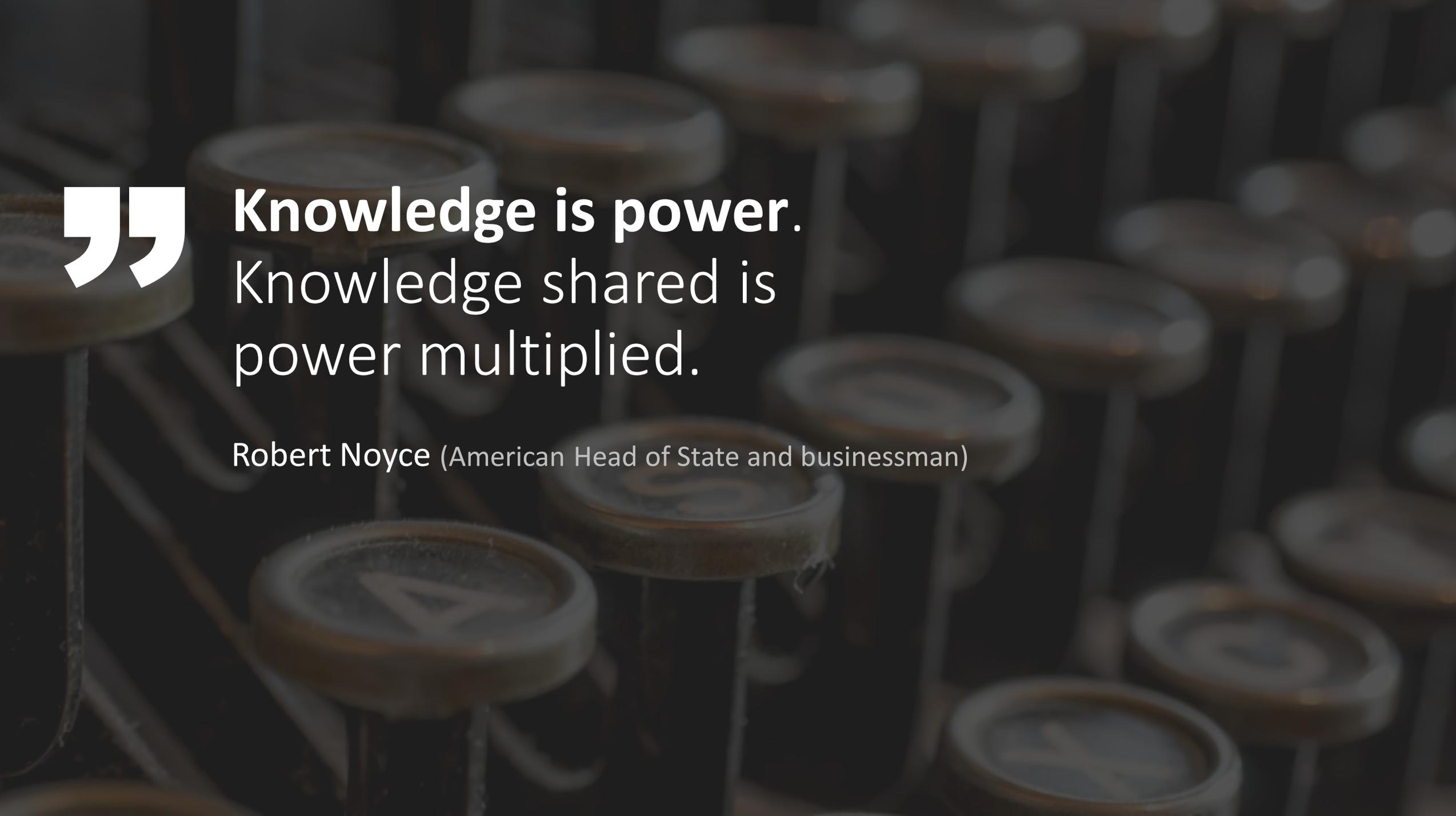
# KNOWLEDGE TYPES

Companies and Employees



Knowledge Types





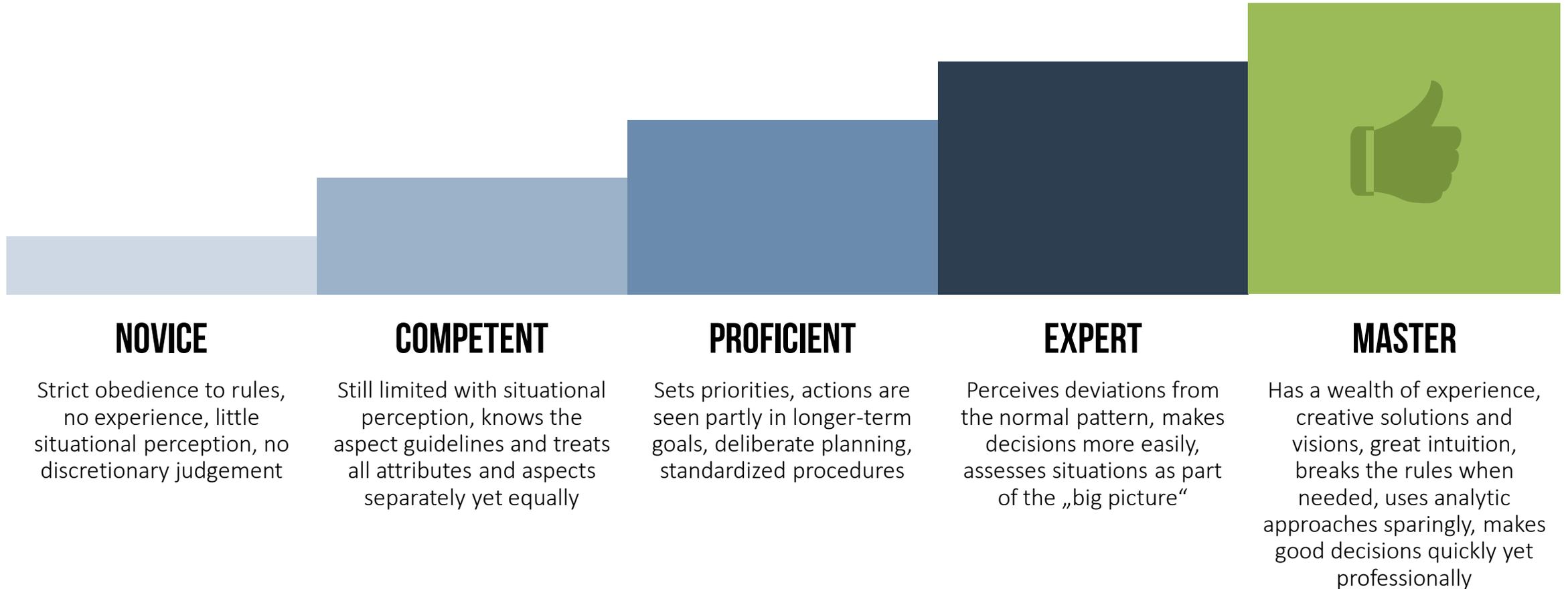
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**Knowledge is power.**  
Knowledge shared is  
power multiplied.

Robert Noyce (American Head of State and businessman)

# KNOWLEDGE DEVELOPMENT

Dreyfus Model for Skill Acquisition



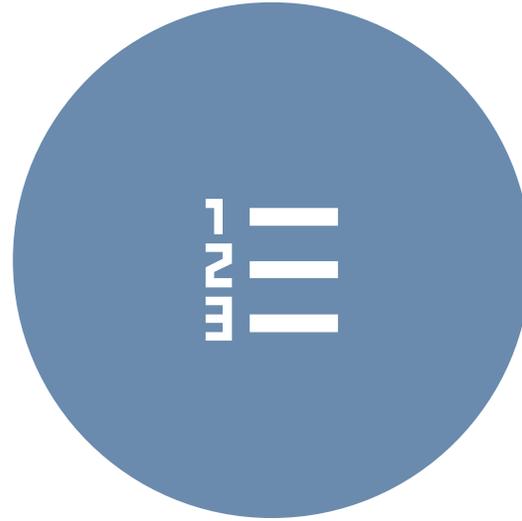
# CREATIVE TECHNIQUES

Knowledge Transfer and Expansion with Creativity



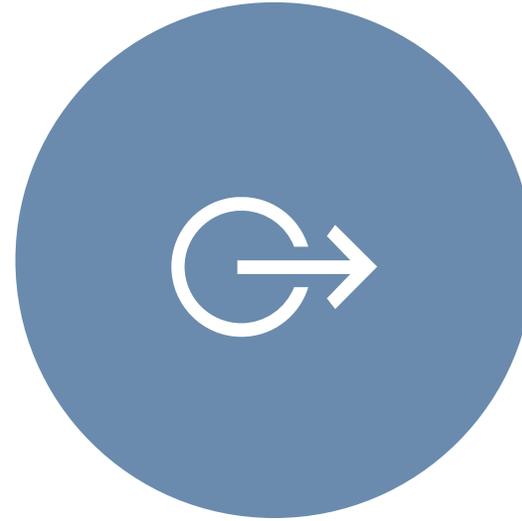
## BRAINSTORMING

Collection of ideas through spontaneous talk. The ideas are collected and can be reviewed later.



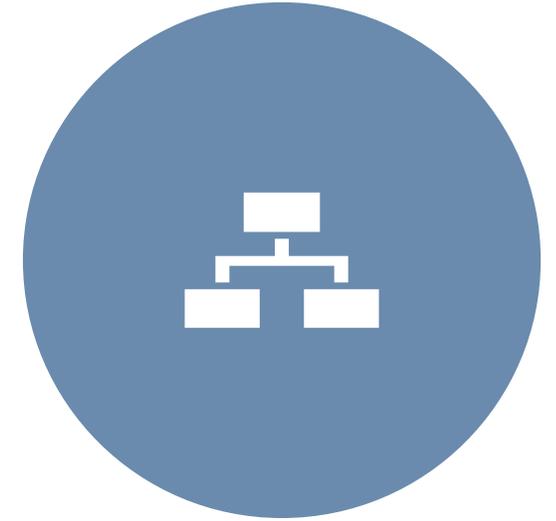
## OSBORN CHECKLIST

Exaggerated questions are used to find new approaches. An example is „interchanging cause and effect“.



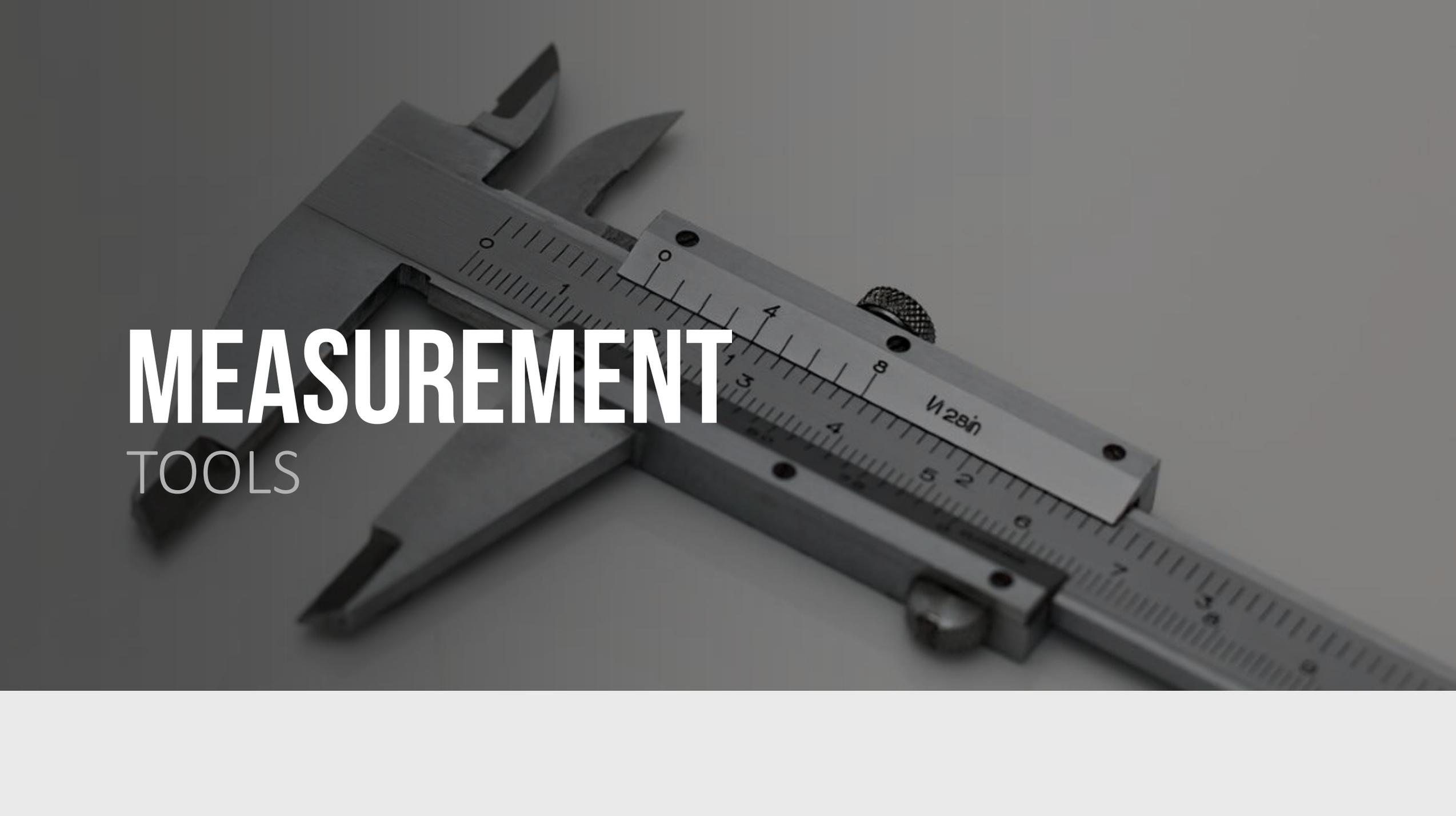
## 635 METHOD

Six employees each write three ideas. After five minutes, the ideas get passed to the right and is developed further.



## MINDMAP

Ideas and priorities of one subject are represented by a branched structure.

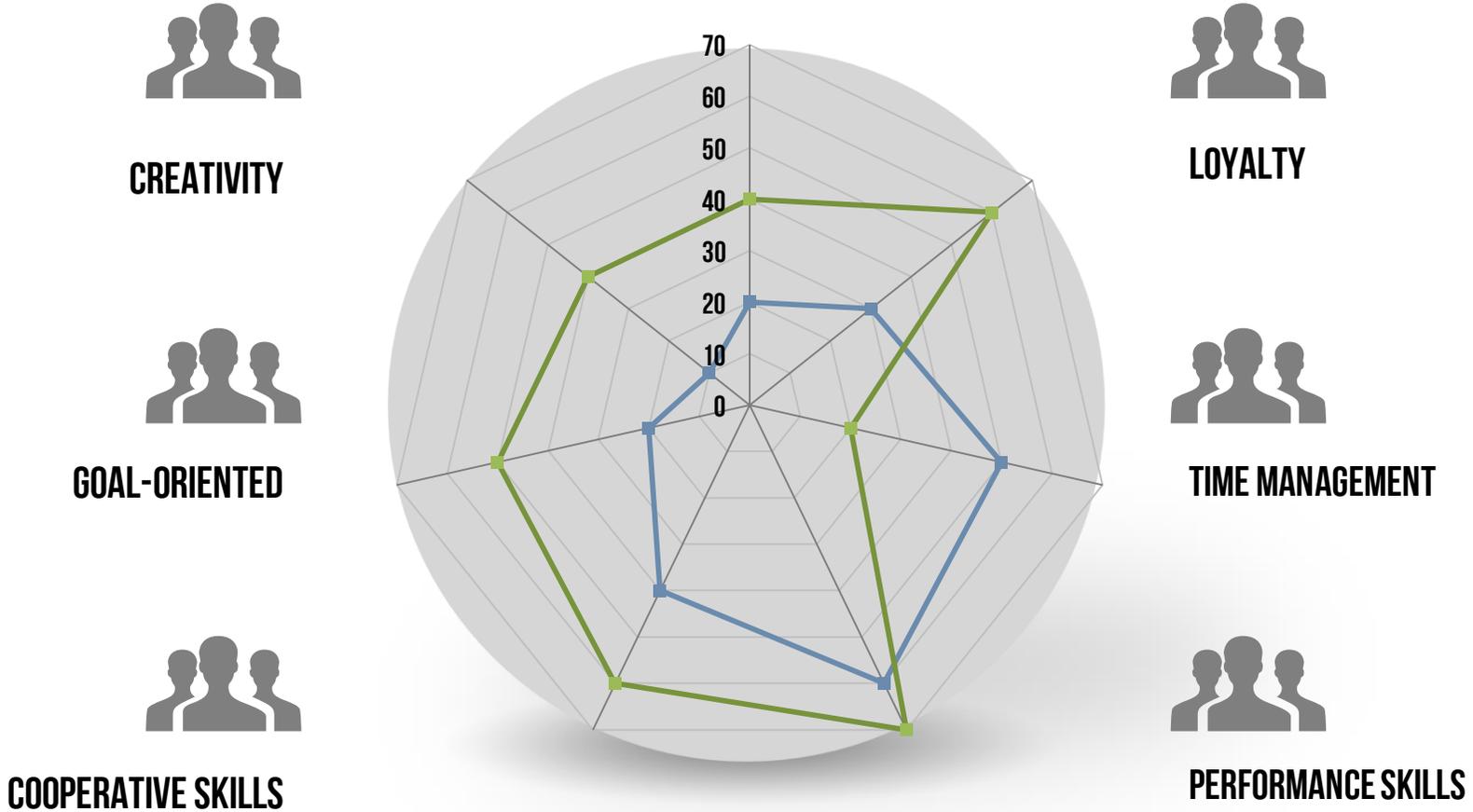


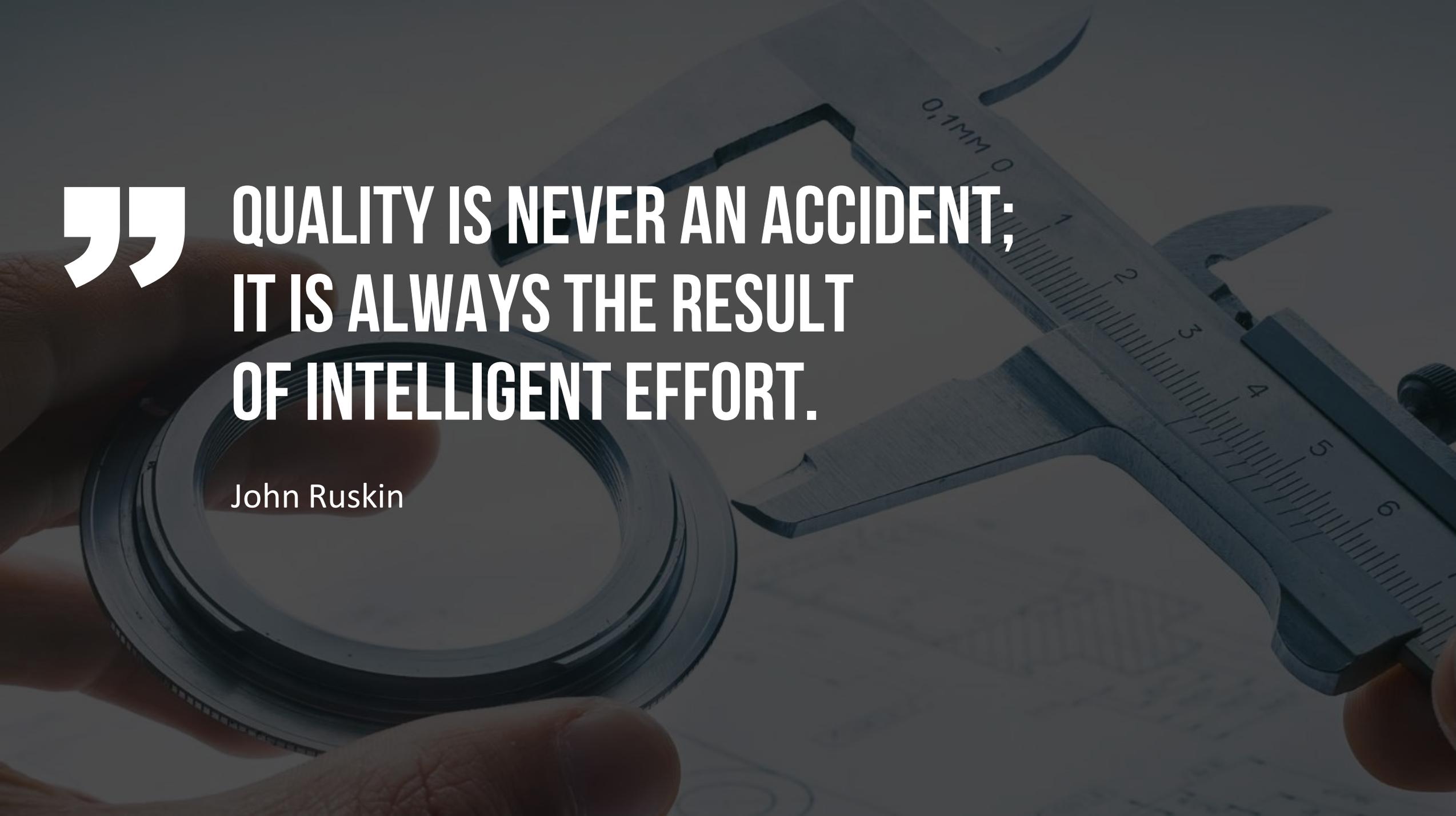
# MEASUREMENT

TOOLS

# SKILLS MEASUREMENT

Example of a Skills Network





”

**QUALITY IS NEVER AN ACCIDENT;  
IT IS ALWAYS THE RESULT  
OF INTELLIGENT EFFORT.**

John Ruskin