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CENTROALGORITMI

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AN INTEGRATED VISION OF QUALITY MEASUREMENTS

1. BACKGROUND

- Quality can be considered as a multiscale concept as it is important as a strategic in a more and more globalized world and the quality concept can be defined according to different points of view, dimensions, and characteristics, which leads to the need of a better understanding of quality measurements.

2. RESEARCH QUESTIONS

- **Aim (general)**
  - To develop a multidimensional model to assess and define quality through different dimensions in a holistic view to better understand the quality integration and its deployment in an organization.
- **Aim (specific)**
  - To characterize quality in micro, meso and macro levels;
  - To understand the relationship between the different levels.
- **Research questions**
  - Can quality be measured in different dimensions?
  - How to measure quality in different dimensions?
  - What are the features of quality in each dimension?

3. RESEARCH METHODOLOGY

- Qualitative research with inductive approach
- Observations (no control over the phenomenon)
- Theory development
- Literature review and case studies

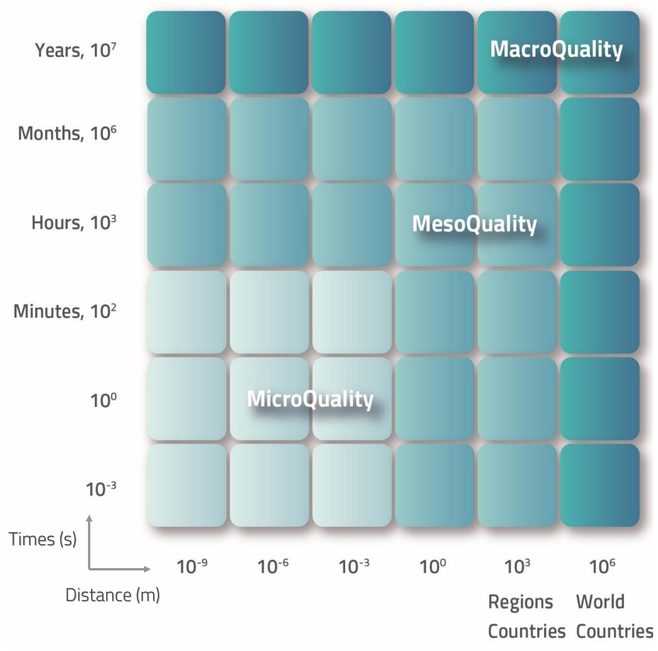

Figure 1: Multiscale overview quality (Saraiva et al., 2020).

4. FINDINGS

- Macro, meso and micro are terms often used in different contexts, situations, and fields of application and knowledge.
- Macro: systemic level (policies, regulations, policymakers and governments, the collective, long-term decisions).
- Meso: intermediate level (regional context, community, specific group decisions, services).
- Micro: individual level (individual issues, needs, perceptions, factors).

Table 1: Comparison of micro, meso and macro levels in different contexts.

	Organization	Country	World
MACRO	Top management	Government	Country
MESO	Middle management	Region	Organization
MICRO	Shop floor / individual	Individual	Quality professional

5. CONCLUSIONS

- Different measurement levels can be identified in organizations as well as different levels of aggregation of quality indicators in the different measurement levels (dynamics of quality decisions in different management levels).
- Quality scales as a relationship between time and distance.
- The development of a measurement system of quality is quite challenging to better understand this multidimensionality of quality and exploring deeper this concept.

6. REFERENCES AND ACKNOWLEDGMENTS

- Saraiva, P., Sampaio, P., Cubo, C., & Reis, M. (2020). Macroquality measurement: world state of quality and European quality scoreboard approaches and results. *Total Quality Management & Business Excellence*, 31(9-10), 1060-1076. doi: 10.1080/14783363.2018.1461012.
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