

Qualimetrics Intervention-Research

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Introduction

At first, it is necessary to define qualimetrics intervention-research. It is a specific Intervention-research methodology aimed at triggering a common representation system shared by all the actors of an organization through the use of qualitative, quantitative and financial data. On the face of it, qualimetrics intervention-research shares the same sociological and anthropological roots summed up in the concept of “participative observation”, a method which consists in carrying out observations by participating in productive activities. Like in action-research, in qualimetrics intervention-research, researchers are at the same time partners as regards companies observation and co-producers of knowledge with company actors. Intervention-researchers, when applying a qualimetrics methodology adopt a decidedly transformative approach of the research object, as the objective is to change the structures and behaviors observed in the company or the organization by experimenting both on and with the actors so as to better understand the phenomena observed “through and for action”. Like in action-research, the objective of qualimetrics intervention-research is to create a community of inquiry. However, qualimetrics is not only focused on the creation of such communities of inquiry regarding social phenomena, but on a more comprehensive analysis of the organizations that takes into account both social and economic performance. Indeed, most action-research and intervention-research methodologies find their common origins in sociology, and not in the field of accounting or economics. Conversely, the qualimetrics methodology as a measure of performance is seen as more efficient than classical quantitative measurement as it seeks to reconcile the three opposed logics systems- qualitative, quantitative and financial- by re-contextualizing them so as to circumvent a silo type of approach and to get a clear picture of their interaction.

Qualimetrics methodology assumes that accounting only gives a partial representation of a company’s overall economic performance. Traditional accounting is the realm of number crunchers. The rigidity of numbers (which besides can be tempered with or selectively manipulated as evidenced in the ethno-statistics approach), can lead to distorted images of organizational performance. On the other hand, what is often referred to as the magic of words can also be misleading. To reconcile these opposite approaches to the bottom line, the qualimetrics modelization permits bringing meaning to both words and numbers. Qualimetrics is thus defined as an intervention into the way in which numbers are produced, analyzed, displayed and interpreted.

Epistemological underpinnings

The qualimetrics intervention-research approach mobilizes the three following concepts or principles :

-First, the *Cognitive Interactivity Principle* which is an interactive process of knowledge production between company actors and intervener-researchers through successive feed-back loops with the steadfast goal of increasing the value of significant information processed by scientific work. i.e, several interviews and meetings are organized to help actors be more accurate with regard to the dysfunctions to be addressed. It partly draws on a constructionist epistemology as it considers that the complex object is difficult to grasp in its entirety. It therefore differentiates from positivist research which seeks a so-called neutrality: action-researchers and qualimetrics researchers alike are interacting with actors. Cognitive interactivity leads to two types of results:

-As for company actors, it modifies their viewpoint on the operation and performance of the enterprise as well as their behavior in the work-place, they are led little by little to modify their representation of the research object.

-As for intervener-researchers, it brings out new facts which allow to strengthen existing hypotheses or to express new ones thanks to the additional qualitative, quantitative and financial data provided by the qualimetrics approach.

Second, the *Contradictory Intersubjectivity Principle* is a technique for creating consensus based on the subjective perceptions of different actors in order to create more objective grounds for working together through numerous interactions between the actors. It thus consists in confronting the points of view of all the actors, the objective being to identify specificities and convergences and to reconcile different or conflicting logics within the enterprise. It avoids the limitation of a purely conceptual model of action: lack of rigor in inquiry method and in applying validity procedures. Multiplying different images or perspectives on company operations improves the quality and the significance of the information captured. Hence the necessity to collect information from a diversified and multiple pool of informants since confronting subjective representations results in the production of a new collective representation and sense-making. They are indispensable in the context of change entailed by the qualimetrics methodology.

Third, the *Generic Contingency Principle* designates the “epistemological principle that, while recognizing the operational specificities of organizations, postulates the existence of invariants that constitute generic rules, embodying core knowledge that possesses a certain degree of stability, universality, and reproducibility. Knowledge produced by intervention-researches tends to be specific hence contingent by nature, but the contribution of the qualimetrics method is to help bringing to light fairly permanent features and invariants

thanks to the scientific program stemming from the exploitation of a database in which are collected the results obtained through intervention-researches carried out by a research-center named Iseor, in hundreds of companies and organizations throughout the world, and constituting a highly reliable statistical series. This is why the qualimetrics methodology is construed as “a generic knowledge construction instrument”.

Those epistemological tenets have enabled to build up step by step a generic knowledge creation now explicitly referred to as “Socio-Economic Approach to Management”. Indeed, the qualimetrics intervention-research methodology unveils the infra-micro relationships between the economic and social performance factors, as opposed to only focusing on either economic or social performance.

The implementation of the qualimetrics method has resulted in the design of participative management tools, as opposed to widespread centralized and authoritative management tools. Those tools are aimed at promoting development and facilitating decision-making.

-Internal and external action plan consists in three to five year master-plan listing and prioritizing the strategic initiatives to be taken for ensuring the development breakthroughs. This strategic action plan involves each and every actor throughout the organization and is consequently participatory in essence, as opposed to traditional strategic planning. In accordance with the qualimetrics approach, one major objective is to enhance awareness of the hidden costs resulting from dysfunctions and the conversion of hidden costs into value added with a view to avoiding loss of energy and removing obstacles to the firms' strategic development internally and externally.

-Priority action plans are implemented half-yearly and meant to identify the high added value development actions as against the low value added ones to help attaining the strategic objectives and preventing dysfunctions as advocated by the qualimetrics approach. This participative tool is meant at involving all team members in order to reconcile participation and coordination. This phenomenon goes by the name of *decentralized synchronization*.

-The competency grids are synoptic tools displaying the competencies of each and every company actors. This grid is designed through communication, coordination and conciliation so as to come up with a shared vision of the existing skills and the integrated training needs required for job enrichment and career prospects development as well as multi-skilling. They play a pivotal role in qualimetrics research intervention when it comes to drawing up an integrated bottom line. It helps analyzing ratios featuring on balance sheets or accounting for dysfunction costs resulting from lack of skills or wrong job specifications. The grid actually deals with intangible assets of a company or an organization partly or totally left aside in accounting documents and thus contributes to obtain the proper qualitative, quantitative and financial evaluation specific to the qualimetrics approach.

-Socio-economic log-books: as opposed to traditional accounting and management control documents. This set of indicators broadens the scope of economic and social performance measurement by embracing not only short term performance, but also creation of potential, i.e. long term performance. It contributes to changing organizational road-maps by better balancing short and long term qualitative, quantitative and financial results elicited by the qualimetrics approach. It thus enables organizations to better achieve sustainable development.

The qualimetrics methodology enables measuring the impacts of dysfunctions (qualitatively, quantitatively and financially) translated into hidden cost (or loss of value added). It helps identifying and quantifying hidden costs which are rarely or never mentioned in a company's traditional accounting information system. Capitalizing on the results of 34 years of international researches in 35 countries around the world made it possible to describe different categories of dysfunctions within companies and organizations classified under five headings: working conditions, work organization, communication-coordination-cooperation, time management, integrated training, and strategic implementation.

The intervention-researchers when implementing the qualimetrics approach proceed to a monetary assessment of the hidden dysfunctional costs by evaluating costs linked to five major indicators : absenteeism, occupational injuries, staff turnover, non quality, and direct productivity gaps. They are, at this point, in a position to bring to light and evaluate the chief components of the financial consequences of dysfunctions: excess salary, excess-time, overconsumption, non production, non creation of potential and risk.

At the end of the qualimetrics intervention process, improvements are evaluated financially by measuring the transformation of hidden costs into value added. Indeed, the objective of the qualimetrics intervention is to operate the conversion of hidden costs stemming from dysfunctions into value added creation. The gains in value added actually identified are compared to the cost of the research-actions, which permits establishing the actual economic balance as well as assessing the profitability of change actions implemented by the enterprise. Those economic balances are determined by taking into account the investments and the subsequent improvement performance in terms of increased value added.

Conclusion

The contribution of the qualimetrics methodology to action-research processes is on the one hand to break the silo between social and economic objectives. On the other hand, this method demonstrates that action-research projects are not only important for social reasons or to enhance reflexivity and organizational learning, but also because they can result in sustainable economic development: the qualitative, quantitative and financial evaluation of the metamorphosis of dysfunctions and hidden costs into added value creation and performance improvement are observed both in terms of immediate results and creation of potential

The qualimetrics intervention research is aimed at enhancing the quality of scientific participative observation in the field of organizational change. Indeed, such a scientific object is difficult to grasp because of it is intangible, complex and ever changing. It requires eliciting implicit variables, which can't be achieved only through research methods that

enable in-depth and up-close observation of the research object. Such a scientific observation methodology needs analyzing the organizational change phenomena from different points of views so as to better analyze the multi-faceted scientific object. Such a challenge can be overcome only by involving a research team consisting not only of the intervener-researchers, but also of organizational actors who are in a way “scientists in the raw”. E.g, the Iseor laboratory took the initiative of organizing yearly conferences where intervener-researchers along with company actors present the outcomes of the research processes, as opposed to as opposed to a more traditional “ivory tower” practice.

Another difference with other forms of action-research practices is the concept of generic contingency (see above) which can be illustrated by the implementation of co-built management tools, as opposed to more informal ways of organizational learning processes.

Further readings

Boje, D., & Rosile, G.A. (2003). Comparison of socioeconomic and other transorganizational development methods. *Journal of Organizational Change Management*,

Coghlan D. (2004). Action-Research in the Academy : why and Whither ? Reflections on the Changing Nature of Research. *Irish Journal of Management*. Vol 25, Issue 2:1-10.

Eikeland, O. (2001). *Action research as the hidden curriculum of the western tradition*, In P. Reason & H. Bradbury (eds.), *Handbook of action research* (pp. 145-157). London: Sage Publications.

Gephart, R.P., & Smith, R.S. (2009). An invitation to ethnostatistics. *Recherches en Sciences de Gestion- Management Sciences - Ciencias de Gestión*, 70, 85-102.

Savall H. (1974-2010). *Work and People. An Economic Evaluation of Job-Enrichement*. (preface by H.I. Ansoff and J. Delors). Charlotte, NC: Information Age Publishing.(fist published in French in 1974. Dunod)

Savall H, Zardet V. (2004-2011). *The Qualimetrics Approach. Observing the Complex Object*. Charlotte. NC: *Information Age Publishing*.

Savall H., Buono A. (ed.), (2007). *Socio-Economic Intervention in Organizations*. Charlotte. NC. Information Age publishing.