

# BUSINESS REVIEW



# ROLE OF EXPERT IN VALIDATION OF INFORMATION COLLECTION INSTRUMENTS FOR BUSINESS PURPOSES

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#### **ARTICLE INFO**

## **Article history:**

Received 22 May 2023

**Accepted** 15 August 2023

#### **Keywords:**

Expert; Validation;

Information Collection.



# **ABSTRACT**

**Purpose:** This article purpose is exposing role of expert in validation of information collection instruments for business purposes.

**Theoretical framework:** The work is based on the multidisciplinary, interdisciplinary, transdisciplinary and pluridisciplinary vision, as relevant aspects in the expert's profile.

**Design/Methodology/Approach:** The coherence, relevance, independence and impact of each of the items that make up the instrument are established as validation criteria, as well as the possible judgments to be issued, specifically, acceptance, modification or rejection, and prepares a validation sheet to facilitate the formalization of the opinion.

**Findings:** The role of the expert in the validation of information gathering instruments for business purposes is of strategic importance, since the confidence in the inferences made depends on the quality of the data obtained.

**Research, practical & social implications:** It is vitally important to verify that the expert candidate meets the profile and thus be convinced that the judgments issued contribute to the proper definition of the instrument.

**Originality/Value:** The expert's profile is proposed to achieve an information collection instrument in accordance with the formulated objectives and a validation sheet is proposed.

Doi: https://doi.org/10.26668/businessreview/2023.v8i8.3122

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# PAPEL DO PERITO NA VALIDAÇÃO DOS INSTRUMENTOS DE RECOLHA DE INFORMAÇÕES PARA FINS COMERCIAIS

#### **RESUMO**

**Objetivo:** O objetivo deste artigo é expor o papel de especialista na validação de instrumentos de coleta de informações para fins comerciais.

**Quadro teórico:** O trabalho baseia-se na visão multidisciplinar, interdisciplinar, transdisciplinar e pluridisciplinar, como aspectos relevantes no perfil do perito.

Concepção/Metodologia/Abordagem: A coerência, a relevância, a independência e o impacto de cada um dos elementos que compõem o instrumento são estabelecidos como critérios de validação, bem como os eventuais acórdãos a emitir, especificamente, a aceitação, a alteração ou a rejeição, e prepara uma ficha de validação para facilitar a formalização do parecer.

**Constatações:** O papel do perito na validação dos instrumentos de recolha de informações para fins comerciais é de importância estratégica, uma vez que a confiança nas conclusões depende da qualidade dos dados obtidos.

**Investigação, implicações práticas e sociais:** É de importância vital verificar se o perito candidato cumpre o perfil e, assim, estar convencido de que os acórdãos emitidos contribuem para a definição adequada do instrumento.

**Originalidade/Valor:** Propõe-se o perfil do perito para obter um instrumento de recolha de informações em conformidade com os objetivos formulados e propõe-se uma ficha de validação.

Palavras-chave: Especialista, Validação, Coleta de Informações.

# PAPEL DEL EXPERTO EN LA VALIDACIÓN DE INSTRUMENTOS DE RECOPILACIÓN DE INFORMACIÓN CON FINES COMERCIALES

#### **RESUMEN**

**Finalidad:** Este artículo expone el papel de los expertos en la validación de instrumentos de recolección de información con fines comerciales.

**Marco teórico:** El trabajo se basa en la visión multidisciplinaria, interdisciplinaria, transdisciplinaria y pluridisciplinaria, como aspectos relevantes en el perfil del experto.

**Diseño/Metodología/Enfoque:** Se establecen como criterios de validación la coherencia, pertinencia, independencia e impacto de cada uno de los ítems que conforman el instrumento, así como las posibles sentencias a emitir, específicamente, aceptación, modificación o rechazo, y se prepara una hoja de validación para facilitar la formalización del dictamen.

**Hallazgos:** El papel del experto en la validación de instrumentos de recolección de información con fines comerciales es de importancia estratégica, ya que la confianza en las inferencias realizadas depende de la calidad de los datos obtenidos.

**Investigación, implicaciones prácticas y sociales:** Es de vital importancia verificar que el candidato experto cumple con el perfil y así estar convencido de que las sentencias emitidas contribuyen a la adecuada definición del instrumento.

**Originalidad/Valor:** Se propone el perfil del experto para lograr un instrumento de recolección de información de acuerdo con los objetivos formulados y se propone una hoja de validación.

Palabras clave: Experto, Validación, Recopilación de Información.

#### INTRODUCTION

Validation process of information collection instruments called expert judgment, requires the professional who will exercise role of expert, review instrument in depth, which indicates he must assess the coherence, relevance, independence and impact of each of the items or proposals, and then issue a judgment or opinion about them, which will have as alternatives acceptance, modification or rejection of the item. Expert judgment as an evaluation strategy

presents a series of advantages, among which are the possibility of obtaining extensive and detailed information on study object and quality of responses by judges (Cabero & Llorente, 2013).

In this context, Ortega-Toro et al (2019) point out that the quality of the data obtained from the application of instruments depends on the design, validation and reliability. Expert judgment as a technique requires the review of the instrument by specialists in the scientific area under study and with at least 10 years of research experience, suggesting the use of the Delphi methodology, considering the criteria, understanding and relevance. Anguera et al (2018) express that the validation of an information collection instrument requires a structured system that allows researchers to analyze various forms and sources of information objectively. An instrument must guarantee the application of the segmentation criteria, data quality controls, coding and preparation for quantitative analysis.

In this sense, Castellano et al (2017) propose the application of entropy analysis to determine the degree of unpredictability of the collective behavior of the elements that make up an instrument. Likewise, Chacón-Moscoso et al (2028) expose the advantages of designing and using non-standardized instruments, which allow obtaining information related to the phenomenon under study and Fabra et al (2018) integrate the theory of achievement goals and the theory of self-determination in the development of an instrument based on observational methodology to assess the multidimensional motivational climate.

It is worth mentioning that Hong et al (2019) propose to improve the mixed methods assessment tool (MMAT) and developed a procedure to critically analyze different study designs, with the aim of strengthening the estimation of content validity by identifying methodological criteria, which are relevant to obtain the quality of qualitative, survey and mixed methods studies.

In this order of ideas, we will have that in the items the coherence will be expressed in terms of wording, relevance is referred to link with objectives, independence reflected in non-conditioning and impact is translated into the ability to obtain information that allows to respond to objectives.

Given the importance of the expert's judgment and its impact on the quality of the information to be obtained, the main purpose of this research is to contextualize the role of the expert in the validation of the data collection instruments.

#### **CONCEPTUAL FRAMEWORK**

According to Yasser & Khwanda (2022), information systems have a direct impact on knowledge management and the technological requirements of information systems have a greater impact than organizational requirements. In this regard, Snoeijer et al. (2021) point out that information management represents an effective strategy in the evaluation process of the Coordination for the Improvement of Higher Education Personnel (CAPES) to the Graduate Program in Automation and Systems Engineering (PPGEAS), since the permanence of accreditation is linked to the way in which the information related to the evaluation indicators is managed, which allow the development of strategic planning.

Regarding research on information systems, Araujo & Scafuto (2021) identify three fields; specifically, knowledge transfer; knowledge transfer as a positive factor for the organization; knowledge transfer and strategic innovation. In this sense, Baa & Chattoraj (2022) conducted a descriptive study with the purpose of investigating the role played by the public sector in the process of creating financial resources for economic growth and employment opportunities, using the survey technique as a strategic ally for the collection of information, which made it possible to demonstrate the various ways in which the public sector plays a role in the process of creating financial resources for economic growth and employment opportunities. The survey technique was a strategic ally for the collection of information, which made it possible to show the various ways in which the public sector can contribute to economic development, with the provision of health and education services by the public sector representing the highest percentage of the Human Development Index.

#### **METHODOLOGY**

The methodological structure of this research is based on the profile, the multi-, inter-, trans- and pluridisciplinary vision, the role expressed in terms of possible judgments according to the criteria, coherence, relevance, independence and impact of the items, judgments that must be expressed in a validation sheet. The details of these aspects are presented below:

# **Expert Profile**

The expert must meet following conditions, must be a professional in area or related to sphere of knowledge where research is registered, know disciplines such as logic and epistemology in field of methodology to generate scientific knowledge and be willing to contribute to investigative process through issuance of objective judgments. Because validation

procedure based on expert judgment is widely used in research, it is convenient to internalize it constitutes "an informed opinion of people with experience in subject, who are recognized by others as qualified experts in it, and who can give information, evidence, judgments and evaluations" (Escobar-Pérez & Cuervo-Martínez, 2008).

# **Expert's Vision**

Action of expert is based on vision he has about coexistence or not of different disciplines in context of the research, and in this regard Henao Villa et al (2017) point out that disciplinary function as an agent of atomization of knowledge it is inscribed mainly in objective world and its technical interest mainly feeds the world of system from an "objective" view of the world.

# Multidisciplinary

It accepts coexistence of several disciplines acting independently, but recognizes need for these to contribute efforts to achieve a common objective, taking as a premise that models, methods and techniques of each discipline maintain their essence and structure. In accordance with this approach, it is stated that "in multidisciplinary research, a variety of disciplines collaborate in a research program without integration of concepts, epistemologies or methodologies. The degree of integration between disciplines is restricted to research results" (Flinterman, Teclemariam-Mesbah & Broerse, 2001).

# Interdisciplinary

It considers a set of disciplines intervene in investigation, which are combined with each other in order to achieve a common objective, denying any possibility of acting independently. In tune with this conception, it is stated "interdisciplinary research is a collaboration of several disciplines, but in this case, concepts, methodologies, or epistemologies are explicitly exchanged and integrated, resulting in mutual enrichment" (Flinterman, Teclemariam-Mesbah & Broerse, 2001).

# Transdisciplinary

He professes integration criterion is a priority in complex research process and considers need to transcend epistemologically well beyond threshold of disciplines, to achieve evidence of findings and novelties allow strengthening of the scientific endeavor. In these terms, it is known that "transdisciplinarity is a specific form of interdisciplinarity in which the limits between and the beyond disciplines are transcended and knowledge and perspectives are integrated from different scientific disciplines, as well as from non-scientific sources" (Flinterman, Teclemariam-Mesbah, & Broerse, 2001).

#### Pluridisciplinary

It is based on fact complementarity of disciplines strengthens investigative process and respects notion the scopes are linked to each discipline in particular. The difference between multidisciplinary and multidisciplinary is based on classification established by Jantsch (1975) and which was presented at the Seminar of the Organization for Economic Cooperation and Development (OECD, 1979).

#### **EXPERT ROLE**

An expert must be clear that validity of an instrument is defined as "the degree to which a measuring instrument measures what it really intends to measure or serves the purpose for which it has been built" (Martín Arribas, 2004). Hence, expert, understanding relevance of their role and aware the validation will be accompanied by an immediate process of reliability estimation, must be rigorous in review of instrument in each of its parts and then pass judgment and formulate the recommendations as the case may be. It is appropriate to clarify that reliability, which is the other quality requirement of any measuring instrument, is defined as the degree to which the instrument measures accurately and rules out the error (Garrote & Rojas, 2015). That is why it is recommended to take as a basis for making your judgment, the following criteria:

## Coherence

It is necessary to guarantee each of items make up instrument have an adequate wording, that is, they clearly convey spirit of what is being investigated, that they do not lead to a particular answer and they do not present ambiguities. In this regard, López Quiroz (2011) indicates this criterion refers to action of evaluative analysis based on degree of logical integration of the different components.

#### Relevance

This refers to necessary link that must exist between the items and the objectives pursued in the research, which indicates it must be ensured each of items contributes to obtaining information. Regarding this criterion, López Quiroz (2011) states it is oriented to explicit capacity of item to respond to real information needs.

# Independence

The instrument must be prepared considering the items should not be conditional on each other, that is, there must be possibility the subject selected to answer the instrument can express their opinion in the order that they consider it. In a practical way, we can say response to an item should not depend on the response to another item. With regard to this criterion, Aune and Deseo (2019) affirm assumption of local independence refers to the fact for one level of trait responses to different items are statistically independent; that is, probability of giving a certain answer to an item is not modified if the answer of same person to another item is known.

# **Impact**

It is oriented towards ability of the item to extract information required to comply with objectives, hence it is vital observe degree of association between the item and objectives, which can be appreciated from matrix of operationalization of variables, combining indicators and dimensions within the framework of conceptual and operational definition of the variables. Every item must contribute substantially to providing answers to the objectives formulated in the research and if not, it does not make sense for it to form an integral part of the instrument.

This scenario suggests it is the responsibility of researcher to consult experts in evaluated area to analyze content and context, in order to determine the existence of a possible interaction between content of the item and some specific characteristic of the group that can explain the possible contamination of the measurement process (Elosúa, López & Tarres, 2000).

# **Possible Judgments**

Once each item has been thoroughly reviewed, expert will proceed to issue his corresponding judgment, for which he will have three alternatives, firstly, acceptance, which means that he fully agrees, secondly, modification, which indicates is accepted, but some adjustment is required and, thirdly, rejection, which expresses a decontextualization. In this

sense, the task of expert becomes a fundamental task to eliminate irrelevant aspects, incorporate those are essential and / or modify those require it (Garrote and Rojas, 2015).

#### **Validation Sheet**

Based on the aforementioned aspects, a validation sheet has been prepared, in which the expert will issue the respective judgment (Table 1).

Table 1. Validation sheet

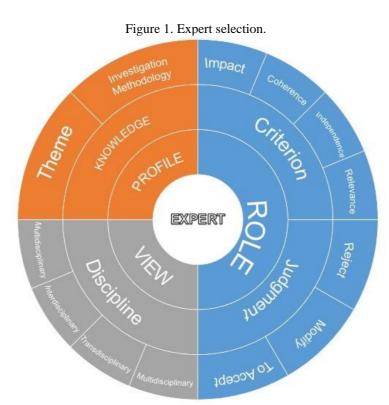
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		Criteria															Judgment						
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#### RESULTS AND DISCUSSION

Validation of an instrument for collecting information through expert judgment, "consists, basically, of requesting a series of people to demand a judgment about an object, an instrument, a teaching material, or their opinion regarding a specific aspect" (Cabero & Llorente, 2013). This is a faithful indication that, although it is true the size and selection procedure of sample are important to guarantee representativeness, it is also true the instrument will allow the collection of quality information. In this context, researcher must be careful in

selecting expert, since generation of scientific knowledge, findings and novelty of research will be subject to the structure of the instrument and its ability to extract information. To this end, there must be evidence the expert complies with profile and responsibly assumes his role, thus becoming a strategic ally in the process.



Source: Own elaboration

Regarding number of experts to be selected, it should be noted that Cabero & Llorente (2013) state selection of number of experts depends on aspects such as ease of access to them or possibility of knowing enough experts on subject matter of investigation and the selection of one or other depends both on the object to be evaluated and on objectives pursued by evaluator and the ease of access to the experts. In this vein, Escobar-Pérez & Cuervo-Martínez (2008) point out that the number of judges that should be used in a trial depends on level of expertise and the diversity of knowledge.

In any case, it is convenient to select an odd number of experts greater than or equal to three, who have a solid knowledge of topic addressed and also have proven experience in research methodology, as well as a clear disciplinary vision that allows them to apply the criteria. objectively and issue the corresponding judgment, this will guarantee that they fulfill a role according to what was envisaged (Figure 1).

#### **CONCLUSION**

Role of expert is of vital importance in an investigation, hence its selection is central and strategic, which is why it is an urgent need to verify candidate for expert meets profile and has clearly defined their philosophical vision of investigation, and thus have conviction that judgments issued contribute to definition of an instrument in accordance with requirements formulated through the objectives.

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