

## Assessing Health Organizational Culture Based on the Competing Values Framework

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**Abstract:** This study aims to describe how the Competing Values Framework (CVF) can be used to assess the existing health organizations and the desired culture in the City of Belo Horizonte, Minas Gerais, Brazil. The CVF is one of the most influential and extensively used models in the area of organizational culture research. Compared with other models and scales, the CVF and its matched scale OCAI have better validity and are very convenient for practical operations. The results suggest that as for the now perspective there is a dominance of hierarchical culture with an internal focus and dominant control and as for the preferred perspective we observed a hierarchical culture with an internal focus having 50% of dominance for control and 50% for flexibility. It is possible to conclude that organizations should not target only one type of culture, since, there is the need to consider the compliance with the established rules for work efficiency and operation.

**Key words:** Competing values framework, organizational culture, health organizations, culture change, operation, hierarchical culture

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### INTRODUCTION

Brazil had a high economic growth during the period of 2000-2010, the wages increasing and with unemployments around 5% which is understood as a full employment rate and with the support of social programs, the indexes of extreme poverty were significantly reduced. During the period of 2010-2014, the growth rate decreased slowly in contrast with the inflationary pressure that in 2015, closed at 10.67%, above the target for that period (6.5%). In mid-2014, the country entered economic recession (Anonymous, 2015), reaching a sequence of negative results of the Gross Domestic Product (GDP), closing 2015 at -3.8%. During 2016, the GDP continued to fall which reflected a political and economic crisis.

The economic crisis is facing a demographic transition process, consequence of the drop of the mortality and birth rates which has caused a change in the Brazilian age structure: a decrease of the youth population

and a rapid increase in the adult population and in the long term, a significant increase in the elderly population (Anonymous, 2015).

The decrease in the mortality rate and the increase of life expectancy are related to the technological advances and the new possibilities of treatment in the medical area.

The companies of the medical area have as their objective to care for the people's health and consequently, function as a system or better still as a group within the society of which they belong. This group needs people (doctors, nurses and managers) and technological and financial material resources to enable the development of their internal processes which will result in products and services for their clients (Feuerwerker, 2007).

In the daily life of the health sector, the health care personnel of the technical area are prominent, due to the excess of demand and furthermore, the the health group's function cannot be restricted only to the execution of

health care procedures but it also needs to be involved with management actions over which they need to have autonomy, given the nature of their function and the urgency of the demands (Vendemiatti *et al.*, 2010). The management's professionalization of the health sector's organizations needs to happen, not only for the health care professionals but also for the management professionals which are part of the health organizations internal environment. The group of professional health managers and technicians need to establish a parallel line of interpersonal relationships, establishing that the management and health care functions must assume the role of mediators in the relationships, increasing the focus on the organizational culture (Vendemiatti *et al.*, 2010). Thus, in view of the context hitherto mentioned, the question of this research is: What is the predominant organizational culture in the organizations of the health area? Therefore, the objective of this study is to study the organizational culture of the private health clinics that operate in the state of Minas Gerais.

**Literature review:** Among the different elements to be observed in organizations, the cultural aspects have shown themselves to be the key point in the organizational debates. This situation occurs from the fact that the competitive advantage of the organizations are based on the comprehension, respect and use of the different existing cultures. The cultural concept emerged to represent habits, customs and qualities that are passed forward from generation to generation and efficiency which has a tendency to develop perfection in the business process. When speaking about culture, it is necessary to define what culture really is.

**Culture:** Culture is defined as a set of values and basic items that determines meanings and builds an identity for a company, acting as an element of communication and as the union of the individuals that are part of the institution.

Trompenars (1994) presents culture as a systemic process and the dimensions of values self-organize themselves in a dynamic form, generating new meanings. The author suggests that the basis of success would be to understand one's culture, its premises and expectations about how people should think and act.

Any change in an organization is only accomplished if the necessary changes of its culture are processed. It is necessary that the cultural beliefs and values of the organization are moved together with its processes and activities in search of a harmony with its external values, especially those that the clients of products and services and the suppliers of resources perceive more clearly as they are part of the environment in which the organization is located (Crozatti, 1998).

**Organizational culture:** Organizational culture is understood as a stable and compact social unit, consisted by individuals that share a vision of the world. This is due to the fact that they have lived and reached solutions, collectively, for the difficulties of internal integration and external adaptation and that are capable of hiring new employees and also in transmitting their way of thinking to them (Schein, 1990).

In order to understand a culture change, it is important to know that two items compose the different levels of an organizational culture: the artifacts and the cultural values (Schein, 1992). The artifacts include everything from the physical layout how to dress and the manner how people address to each other, the smell and the sensation of the place, ritual symbols and emotional intensity. The cultural values are considered to be the basic points of the organizational culture and mechanisms with which it is possible to work to obtain culture changes (Schein, 1993).

Ouchi (1979) describes three cultural values or mechanisms fundamentally different which can help the organizations to deal with management problems and become more competitive: market, bureaucratic and Clan and Quinn adds one other organizational culture value that is capable of making a company more competitive: adhocracy. Adhocracy does not have any relationship with power or authority, for the power passes from the individual to the team (Cameron and Quinn, 2005). Clan is the friendly and welcoming environment that has as its main values the commitment and communication and adhocracy is a dynamic and creative environment that has as its main values innovation and agility (Kaya *et al.*, 2014).

**Implications of each type of "culture":** Organizations have to be more competitive to survive the constant political, social and economic changes. Following this idea, it was possible to study the organizational culture values as the best way to prepare organizations for the necessity of changes, making them more competitive and helping them to reach their objectives. The organizational cultural values will be explained as.

**The hierarchical culture:** Weber proposed a classic attribute of bureaucracy, hierarchy as one of the forms to achieve business development. The principle of hierarchical position authority is found in all the bureaucratic organizations: in the state and in ecclesiastical organizations as also in large party organizations and private companies.

The hierarchical culture has a clear organizational structure with standardized rules and procedures, strict

control and defined responsibilities and prepared for the market. This concept can be traced back to the “bureaucracy” image in Weber which already worked with the modern organizational management connected with the market (Yu and Wu, 2009). When thinking about hierarchical culture what comes to mind is a more constant market where supply and demand are in balance.

Hierarchies have respect for position and power. They often have well-defined policies, processes and procedures. Hierarchical leaders are typically coordinators and organizers who keep a close eye on what is happening.

**The market culture:** An organization in a multi-product market or open market, affects and is affected by the company in a constant form. The term, open market, refers to a type of organization that functions as a market in itself (Cameron, 1985). The open market is understood as a social arrangement immersed in the environment, withdrawing from it and transmitting to it in a reciprocal interaction, norms and standards of behavior that constitute suitable ways of action in a competitive environment. The objective of the organization is to be profitable and efficient in the competitive market of which it is part (Ouchi, 1979, 1984).

The market organization also seeks control but does so by looking outward and in particular taking note of transaction costs. Note that the market organization is not one which is focused just on marketing but one where all transactions, internal and external are viewed in market terms. Transactions are exchanges of value. In an efficient market organization, value flows between people and stakeholders with minimal cost and delay. Market cultures are outward looking are particularly driven by results and are often very competitive. Leaders in market cultures are often hard-driving competitors who seek always to deliver the goods.

**The clan culture:** Clan is an organic association in which there is solidarity as a form of unity between the objectives and the necessities of each individual (Durkheim, 1997). Solidarity or social integration is the feeling of personal comfort in the social relationships (Barnard, 1968). The necessity of unity is basic for an informal organization and is essential for the formal organization to function (Barnard, 1968).

The basic assumptions of the clan culture are: the environment that can be better managed through team work and the employee’s qualification, facilitating their conscious participation, commitment and loyalty; clients should be seen as partners and it is the organization that should develop a more human working environment

(Cameron and Quinn, 2005). The clan culture is based on shared values and common goals in a collective atmosphere and of mutual help with emphasis on the employee’s qualification and involvement (Yu and Wu, 2009). This clan culture achieves a greater cohesion within each organization, making it stronger and better prepared for the environments that have had constant changes during the last decades.

**The adhocratic culture:** The organizational adhocratic cultures are common in a more turbulent environment (Mintzberg, 1973). An organization with a simple structure and with a more bureaucratic formation is something of the past and adhocracy is the organizational formation of tomorrow (Mintzberg, 1979). The adhocratic company (of the future) is based on knowledge, it is an organization composed essentially by specialists that direct and discipline their own performance according to the client’s feedback.

The adhocratic culture prizes autonomy and the organizational values that are related to self-promotion in other words, the employee’s well-being and their personal fulfillment (Domenico *et al.*, 2006). The adhocratic culture worries about the individuality of each member of the the organization, emphasizing the flow of information in a decentralized way, prioritizing projects as they arise and whenever the organizational tasks are accomplished, the company is recharged quickly when new tasks arise (Yu and Wu, 2009).

Where, market success goes to those with greatest speed and adaptability, the adhocracy will rapidly form teams to face new challenges. It will use prototyping and experimenting rather than long, big-bang projects and development. Leaders in an adhocracy are visionary, innovative entrepreneurs who take calculated risks to make significant gains.

**Competing values framework and organization culture assessment instrument:** The CVF has a measurement measurable tool, quantitative, the Organization Culture Assessment Instrument (OCAI) which is a form of culture classification (Lim, 1995) which allows a better understanding and interpretation of the organizational culture (Cameron and Quinn, 2005). Cameron and Quinn (2005) stated that the use of the OCAI of the collected quantitative data of several individuals in the organization, the exploitation of the related values and assumptions that were experienced by the organization can provide a realistic representation of its culture.

The instrument has as its intended purpose to diagnose the current culture of an organization as also the culture that its members consider ideal for the

organizational efficiency. There are studies being carried out in several sectors, using the CVF and the OCAI as means to analyze organizational culture and its effect over the organization's performance.

**Competing values framework and its quadrants:**

According to the CVF, there is a dominant culture (which manifests itself in the employee's points of view at all levels of the organization) but there is no better culture: all of the four cultures can operate in a determined organization and with relative stability over time (Morais and Graca, 2013). Companies have to be flexible and adaptable to changes but also have to be stable and controlled. Their needs are growth, acquisition of resources, besides being flexible and having team work.

Leone *et al.* (2014) presented the CVF, classifying the organizations according to a more explanatory typology: clan, market or rational, hierarchical and adhocratic or developmental. Thus, a four-quadrant model is created which reflects the indicators of organizational effectiveness that are associated with each of these cultures. In the long run, the concern is with stability and the harmonious and efficient performance of the organization (Leone *et al.*, 2014).

The lower left quadrant represents the hierarchical culture. This culture can be seen in global companies such as McDonald and Ford Motor Co. and leads the employee to a state of alienation and to the decrease of the sense of autonomy (Leone *et al.*, 2014). This culture is characterized as a very formal and structured working space in which the procedures rule what people do. In this is a type of organization, the leadership is effective because the organization has a mechanical working scheme where what is important are the orders and rules (Acar and Acar, 2014).

The lower right quadrant characterizes the market culture. The company is orientated to the external environment, for the transactions with suppliers, clients, unions, regulating organs and competitors. Global companies that have an effective relationship between the suppliers, clients and external stakeholders are examples of this type of organizational culture (Cameron and Quinn, 2005). The main objective is to lead the organization in the direction of productivity, results and profit, creating competitive advantage which can be reached by means of a better external positioning. The health sector organizations tend to be increasingly competitive which has forced the health services to evolve (Acar and Acar, 2014).

The clan culture which is in the upper left quadrant, represents flexibility, discernment and internal focus and is defined by its similarity with a type of family

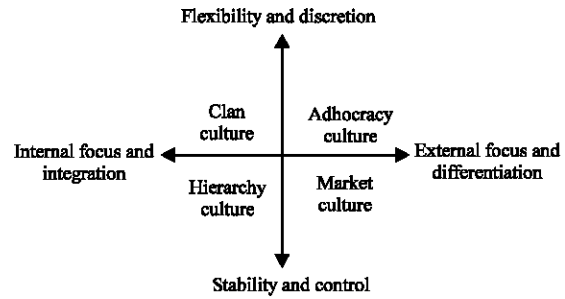


Fig. 1: The clan culture

organization. Successful Japanese organizations with teamwork and with an effective structure are typical examples of this culture (Cameron and Quinn, 2005) (Fig. 1). Instead of rules and their own hierarchy procedures, besides the focus on profit and on competition as in the market culture, this type of organization is based on teamwork, staff involving programs and commitment to their employees; remains cohesive by its tradition and reliability, creating bonds of commitment between people.

Finally, the right upper quadrant represents the adhocratic culture which configures flexibility, discernment and differentiation. Aspects such as innovation and pioneering initiatives are considered as the points that lead to success. Mintzberg (2003) refers to adhocracy as a type of organization that is the opposite of bureaucracy, characterized by been open to innovation with low levels of formalization, distancing it from the traditional established standards. The adhocratic culture is understood as a space of dynamic and creative work (Cameron and Freeman, 1991).

**MATERIALS AND METHODS**

This topic delineates the context that was studied, the type and method of research as also the techniques and data collection methods and the data analysis that were used to achieve the objective that was presented.

**Population and sample:** Ten health clinics were delimited as the object of this research: as the research population, a 103 employees of the private health institutions of the city of Belo Horizonte and two cities of the Central-Western region of the Minas Gerais State, Brasil which have as their main activity the provision of health services.

The sample that was raised is characterized as being non-probabilistic, that is, the sample was selected based on the facility of obtaining the collaboration of individuals to complete the questionnaire (Peixoto,

2012). Of the population (103 eligible individuals) a sample of 92 questionnaires answered by the members of the organizations was used. The sample consisted of professionals from the health area (doctors, nurses and physiotherapists, attendants, nursing assistants) managers (administrators and administrative assistants) were chosen by their accessibility in the ten private clinics.

**Method of data collections:** The method that was used for the data collection consisted in visiting the organizations to apply a structured questionnaire to the members of the institutions. The organizational culture was analyzed, using an applied questionnaire, identifying their types and the organization's efficiency based on the perception of their members.

This questionnaire was translated and adapted from Cameron and Quinn (2005), structured into two parts: the first with information covering aspects related to the respondents such as age, gender, length of employment, professional background and position held. The second with a set of adequate questions with the intention of identifying profiles that represent the different types of organizational culture in other words, the clan, the adhocratic, the market and the hierarchical cultures.

Each individual was asked to answer each question, using a 5 point Likert scale where: 1 means that it never occurs, 2; rarely occurs, 3; occasionally occurs, 4; frequently occurs, 5; always occurs.

This questionnaire has six items with the objective of identifying one of the different cultural dimensions: dominant characteristics, leadership and type of management, organizational congruence, strategic emphasis and criteria of success.

**Organizational culture identification:** The organizational culture has dimensions that were raised using a questionnaire with 24 questions. Each set of 6 questions are related to a type of organizational culture (Table 1).

The score was obtained in each group or cultural quadrant and subsequently, added and divided by six which is the quantity of questions of each group (Table 1) to identify each type of organizational culture in other words, each culture's variable. In the questionnaire, the 24 variables were elaborated with the intention of determining the characteristics of the dominant cultures (Cameron and Quinn, 2005).

The dominant cultural characteristic dimension was contemplated with four variables which were presented

**Table 1: Identification of the cultural profile**

Types of organizational culture	Questions
Clan culture	1, 5, 9, 13, 17 e 21
Adhocratic culture	2, 6, 10, 14, 18 e 22
Market culture	3, 7, 11, 15, 19 e 23
Hierarchical culture	4, 8, 12, 16, 20 e 24

using 4 questions. The first (A) identified the characteristics related to the first quadrant (A clan culture); the second form, related to the second quadrant (B adhocratic culture); the third (C market culture) and the fourth (D hierarchical culture). The dimension had to totalize 100 points distributed between the questions A-D, according to the respondent's perception about the characteristics of the cultures indicated in the quadrants A-D.

For each block, 4 distinct alternatives were presented, arranged in two columns in order to highlight the situations "Now" and "Ideal". In the column "Now", that represents the current situation in the organization as well as in column "Ideal", the desired situation, a weight was distributed for each of the alternatives so that the total sum of the block was 100.

This analysis was supported by the Competing Values Framework (CVF) Model. It is a model specially designed to represent the cultures in the organizations in the health area and their link with efficiency.

To measure the CVF, the Organizational Culture Assesment Instrument (OCAI) (Cameron and Quinn, 2005) was used. It is a useful and assertive instrument in the diagnosis of the essential predominant culture in an organization. It is a model that helps to identify the current company's culture and the one that is considered ideal to meet a future demand of the environment and able to give support to the organization in future challenges (Cameron and Quinn, 2005).

The organizational culture types that were considered in this research were: clan, adhocracy, market and hierarchical. These constructs were evaluated in the segment of health clinics. Problems of comprehension by part of the respondents, occurred in the measurement of the attribution, thus, the answers that were blank were excluded from the sample.

## RESULTS AND DISCUSSION

This study discusses the results that were found based on the answers of the questionnaires that were applied. First of all, the characterization of the sample is carried out using the demographic data. Following, the variables of the joint sample of the clinics are analyzed in order to know the dominant culture and its impact on the organizational efficiency in the respondent's

perception. Considering the 92 subjects of this study (100%), 72% of respondents were women. The strong presence of women can be considered a normal fact in the working force of the health area. Historically, this sector is a place which concentrates a responsible female working force that have the necessary knowledge to take care of the health of children, the sick and of the elderly people.

The percentage levels of the duration of employment in the respondent's organizations indicate that 62% have 01 up to 05 years; 18% have 06 up to 10 years and 20% more than 10 years. This finding shows that the vast majority of the employees have not been for a long time in the companies do not know the organization's rules, need training and constant observation due to the necessity of efficiency in the services that are provided to the community.

The levels of education percentual of the respondents reveal that in the sample 19% have high school education, 16% have technical education and 65% have higher education and tecnologist. The increase of the population demanded a growth in the offer of health services that, consequently, required a greater offer of udergraduate courses.

**The grouping of the dimintions:** This item presents the total of points received from the respondents which are related to the 6 dimintions of each type of organizational culture. In this manner, it is possible to obtain the perceptions of the individuals from the ten organizations that took part of this study (Fig. 2). Furthermore, it made it possible to evaluate the integration between the cultural dimintions in the institutions where the study was carried out.

The total points of the organizational cultural dimintions, at the presente moment, characterized a mixture of organizational cultures with the predominance of the hierachical, followed by the clan type. The respondents considered as an ideal situation a hierachibal organizational culture, followed by the clan type. Thus, the respondents considered that the current situation is coherent with what is intended for the organizational environments in question (Fig. 2).

The results also suggest that as for the "Now" perspective, there is a dominance of internal focus with stability and control dominance and as for the preferred perspective, we observed a dominance on internal focus but with 50% dominance for stability and control and 50% for flexibility and discretion.

The hierarchical organizational culture reflects the values and norms associated with bureaucracy, presupposing stability and acceptance by the employees, of the authority that comes from the formally established

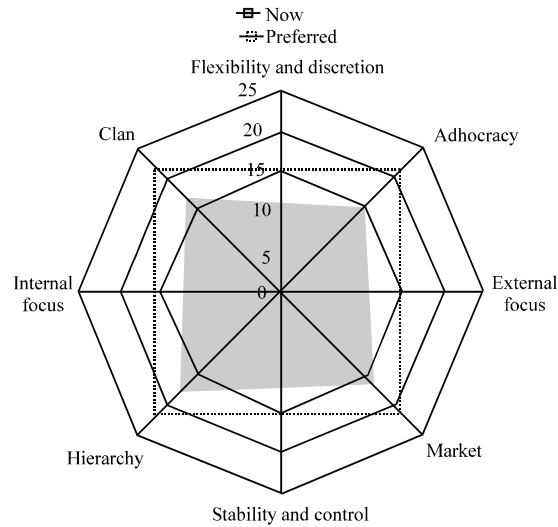


Fig. 2: The grouping of the dimintions

roles from rules and imposed regulations. Eren *et al.* (2003), Marshall *et al.* (2003), Scott *et al.* (2003), Ralston *et al.* (2006) and Cameron and Quinn (2005) developed this form in order to identify the effect of the culture over the organizational efficiency and found companies in the areas of health, education, manufacturing and state organizations, that confirmed these results.

It was observed that the organizations that were studied are complex, due to the diversity of the services, the variety of professionals with distint competences with several processes occuring simultaneously and the need for a more holistic approach of the organizational culture. Studies by Baker *et al.* (2003) and Marshall *et al.* (2003), that were conducted in Canada and in England, demonstrated that in the health area, the group "Clan" was dominant which is diferent from the results that were found in this research.

It was verified that the dominant organizational culture in the health care clinics of the region have a tendency towards hierarchy, followed by a tendency to the clan culture and in sequence, the market type and finally adhocratic. The more hierarchical culture is marked by formalization, well articulated procedures, concern for the proper functioning of its parts by the predictability and efficiency. This is an interesting result, due to the fact that this type of organization is recognized in the literature review (Cameron and Quinn, 2005; Helfrich *et al.*, 2007) as being effective in emphasizing stability and predictability of the environment and by its mechanistic processes.

The present study of the health companies that were researched are presented as a group that has a formalized and strutured working place where the procedures are well

defined and guide the organization's operations. This group realizes that the most important thing is to maintain the organization in good working order with stability, predictability and efficiency.

The OCAI demonstrated that there is not a significant difference in the predominance of a single type of organizational culture. The respondents showed that there is a balance where the four types of organizational culture coexist. The adhocratic culture is the less expressive in the health organizations that were studied. This result is understandable, taking into account that this culture configures itself as opposite to the hierarchical culture, based on essential values for a better process in the health area. On the other hand, the adhocratic culture is focused on risk and in the search for new and creative action which can be harmful in a health care environment.

The company's concern where the hierarchical culture predominates is with the efficient performance of the organization (Leone *et al.*, 2014). The activities of the companies that were studied, according to the respondent's perceptions are carried out based on a management focused on objectives on increasing efficiency on the services that are offered and on the processes, regulations and on the employee's adherence to the established standards.

Furthermore, it was interesting to observe that 72% of the questionnaire respondents were women with a short time of service in the institutions (62%). Organizational cultures are difficult to evaluate because of their shared beliefs, values, structures and the assumptions are not always clear (Schein, 1992). Thus, employees with a short period in the companies need more constant explanations and attention to the norms. This justifies the fact that the organizations and leaderships of the studied companies are more hierarchical as a way of having more control, more focus on the internal environment and, at the same time being somewhat flexible having a tendency towards the clan culture as a manner of being closer to the employees.

The analysis of the employee's perceptions with relation to the organizational culture's dimensions, presented some interesting results which instigate reflection. The results about the organizational culture in the studied organizations, demonstrated that, although, the hierarchical culture has the highest average among the other cultures it was not statistically different from the clan culture's average which comes soon after.

This result reinforces the literature in the sense that, besides the organizations of the health area being considered hierarchical (Vaghetti *et al.*, 2011), complex organizations with a formalized and structured working

environment in which each of the procedures and processes are well defined in order to confer stability, predictability, safety and efficiency and where the success is based on delivering a reliable health service in programming without unforeseen events and non-waste policies, the organizations of the health area also have clan culture characteristics, accepting the first and third hypotheses of this study. In other words, there is an expressive portion of employees that consider the health care environment as a friendly and pleasant working place, based on the interpersonal relationships and on personal development.

The adhocratic culture presented the lowest average between the organizational cultures in the respondent's opinions. This shows that creativity, the search for innovation and the involvement with risks do not show the reality of the health area.

## CONCLUSION

Starting from the question "what type of predominant organizational culture and what impact does it have on the health area organization's efficiency?", a quantitative research was developed using an instrument composed by three structured questionnaires to analyze the types of cultures that build an organizational culture and its impact on the efficiency of ten health clinics.

The companies of the sample are organized and structured organizations, based on the respect towards the procedures. In light of what the classical researchers address about organizational culture (Trompenaars, 1994), people take their values, experiences and training into the organization. In view of this thought, it is possible to notice that the hierarchical organizations are based on order values, routines and control.

The Competing Values Framework (CVF) by means of its Organization Culture Assessment Instrument (OCAI) showed that the researched organizations have a more formal and structured working environment with norms and rules which govern the employee's activities. It was possible to observe that the organizations that were studied have a type of culture that is more hierarchical.

The fact that most of the respondents have not been working for a long time in the companies can justify the necessity of a more hierarchical culture, assuming the dependency of the establishment of many rules, norms and determinations for its effective performance, attentive to processes and standards.

It is possible to conclude that the perceptions of the organizations members are important to maintain the company's balance. The organizations cannot direct

themselves to only one type of culture, for they need to be attentive to the compliance to the established rules for the efficiency in the work's operationalization.

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