

# The organizational culture of scale-ups and performance

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## Abstract

**Purpose** – Scale-ups have a crucial role in our society and economy, are known for their fast growth and high performance and undergo significant organizational change. Research on the organizational elements that ensure scale-ups sustaining high performance is limited. This empirical study aims to investigate the organizational culture in scale-ups using the Competing Values Framework, including the clan, adhocracy, the market, hierarchy cultures and its relation to performance.

**Design/methodology/approach** – Quantitative and qualitative data were collected in five scale-ups. Surveys provided data of 116 employees on organizational culture, assessed using the Organizational Culture Assessment Instrument (OCAI) and perceived performance. The aggregate outcomes and performance measures were analyzed using correlation analysis. Interviews were held with ten top managers and mirrored against the quantitative data.

**Findings** – The results show that top managers and employees have different perspectives on the culture scale-ups are supposed to have. Top managers perceive market culture as more and hierarchy culture as less present in their organizations than employees. The clan and adhocracy culture are positively correlated to performance and are preferred by employees. Market and hierarchy culture types are negatively correlated to performance and are least preferred by employees.

**Research limitations/implications** – It enables scale-up leaders to specifically intervene when cultural elements are experienced by employees that will not drive performance and fit the high performance and fast-growing scale-up environment.

**Originality/value** – This study is the first that showed that organizational-wide surveys, combined with in-depth interviews, are suitable for top managers of scale-ups to diagnose the organizational culture and the effect on the organization's performance.

**Keywords** Organizational culture, Organizational performance, Organizational change, Scale-ups, Competing Values Framework (CVF), Organizational Culture Assessment Instrument (OCAI)

**Paper type** Research paper

## Introduction

In recent years, the number of high-growth firms – often referred to as scale-ups – has increased (Jansen and Luxemburg 2019). Due to their fast growth, scale-ups are companies that undergo rapid organizational change. A broadly accepted definition of a scale-up is defined as follows:

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A scale-up is a company that experiences accelerated growth and wealth creation over time, with an average annualized growth greater than 20% a year in employees or turnover over three years and with ten or more full-time employees (FTE) at the beginning of the observation period. (Organisation for Economic Co-operation and Development (OECD, 2007)).

It is of great importance to study scale-ups since these organizations have proved to play a vital role in society. Scale-ups are gaining popularity for various reasons: they are good job creators, entrepreneurial by diffusing new products and technological innovations, and are crucial for competition and the economy (Martínez-Fierro *et al.*, 2019; Deschryvere, 2008; Henrekson and Johansson, 2010).

Henrekson *et al.* (2010) did a metaanalysis of empirical studies on scale-ups and concluded that these companies are excellent job generators (Henrekson and Johansson, 2010). In the Netherlands, there were 2.800 scale-ups with a minimum of ten full-time equivalents at the end of 2018, accounting for 5.6% of all businesses. Between 2015 and 2018, these scale-ups created 219.456 full-time equivalent jobs (Jansen and Luxemburg, 2019).

Scale-ups are also significant in innovation and competitiveness (Bleda *et al.*, 2013). The productivity of a scale-up is relatively high because these companies are very efficient with their production resources. This indicates that the available input yields a large amount of output. As a result, scale-ups' inventive nature and entrepreneurship have a considerable and sustained impact on overall economic growth (Erken *et al.*, 2018).

It has been demonstrated that the increasing number of scale-ups in the corporate environment has a positive impact on the industry's growth (Bos and Stam, 2014). Because scale-ups are innovative, they strive to constantly enhance their product to be the best in the market, resulting in a significant increase in competitiveness (Krošláková *et al.*, 2015). Scale-ups can thus be viewed as businesses that contribute to job creation and economic growth (Martínez-Fierro *et al.*, 2019; Deschryvere, 2008; Henrekson and Johansson, 2010).

However, only a tiny proportion of scale-ups can maintain their high performance and growth for a more extended time (Daunfeldt and Halvarsson, 2015; Hölzl, 2009; Gabrielsson *et al.*, 2014). The Dutch scale-up dashboard, which offers insight into the most recent developments in fast-growing companies in the Netherlands, presents that growth stagnates in about half of the scale-up after 5–8 years (Jansen and Luxemburg 2019). Since the terminology of scale-ups is relatively young and the number of studies on scale-ups is limited, research on understanding the high performance and growing of scale-ups is of high interest.

As theoretical research demonstrates a strong relationship between organizational culture and performance (Hartnell *et al.*, 2019; Kim and Chang, 2019), understanding the specific relationship between the scale-up organizational culture and their performance is of great value. Hence, the performance of scale-ups is found to accelerate within this particular growth stage, and it will deepen our understanding of specific cultural elements that drive performance.

Moreover, for managers of organizations, it is of high interest to assess their organization's culture since this is a factor that could influence the organization's performance (Hartnell *et al.*, 2011, 2019; Chatman and O'Reilly, 2016; Kim and Chang, 2019). The increased interest in organizational culture is apparent from many popular management articles and scholarly journals which have emphasized and researched the impact of organizational culture on organizational performance. The interest in the role of organizational culture on the performance of large corporate firms is apparent from the popularity of the best-selling book '*Corporate Culture and Performance*' by Kotter and Heskett (Kotter and Heskett, 2011). Additionally, the Dutch Corporate Governance Code emphasized the importance of the topic by including a section on organizational culture for stock market-listed companies (Corporate Governance Code (CGC), 2016). Despite the large number of academic publications, there is no consensus on what organizational culture

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entails, and a large number of definitions exist. Defining organizational culture seems complicated, and definitions emphasize only a particular focus or level of organizational culture. A highly recognized definition, from which many definitions are derived, defines culture as

(1) a pattern of basic assumptions, (2) invented, discovered, or developed by a given group, (3) as it learns to cope with its problems of external adaptation and internal integration, (4) that has worked well enough to be considered valid and, therefore (5) is to be taught to new members as the (6) correct way to perceive, think, and feel in relation to those problems (Schein, 1990).

Since there is no consensus on the definition, it is not easy to assess the organizational culture, and therefore, a framework can be used. A highly valid and reliable framework that can identify an organizational culture profile is the Competing Values Framework (CVF) of Cameron and Quinn. This framework allows studying culture by assessing the presence of four culture types based on two dimensions (Cameron and Quinn, 2011). The first dimension differentiates characteristics that emphasize flexibility and discretion from those which emphasize stability and control. The second dimension differentiates the organizational characteristics between those that emphasize an internal focus and integration from those with an external focus and differentiation (Rohrbaugh *et al.*, 1983; Cameron and Quinn, 2011).

The CVF's four culture types are clan, adhocracy, market and hierarchy. These four types will be elaborated by their assumptions, beliefs, values and behaviors based on the CVF of Cameron and Quinn.

*The clan culture type* is an organizational culture that combines internal focus and integration with flexibility and discretion. The assumption on which a clan culture is built is that human affiliation results in a strong positive bond with the organization, which could feel like an extended family. The core belief of the clan culture is that people behave appropriately when they have trust in, loyalty to and membership in the organization. The pursued values are attachment, affiliation, collaboration, trust and support. They result in behaviors such as teamwork, participation, employee involvement and open communication (Cameron and Quinn, 2011).

*The adhocracy culture type* is an organizational culture that combines flexibility and discretion with external focus and differentiation. The assumptions of an adhocracy culture include that change promotes the creation and the gathering of new resources. The belief that fits the adhocracy culture is that people behave appropriately when they have a creative mindset to be innovative and therefore be able to take risks. Accordingly, the values of the adhocracy type include growth, stimulation, variety, autonomy and attention to detail (Kimberly and Quinn, 1984). Behaviors that arise as a consequence are risk-taking, creativity and adaptability.

*The market culture type* is an organizational culture that combines stability and control with external focus and differentiation. The assumptions of a market culture are based on the focus on achievements that promote aggressiveness and competitiveness (Cameron and Quinn, 2011). The core belief in a market culture is to set goals and to achieve goals by clear communication. People are motivated by rewards to meet the expectation of the stakeholders. The values fitting this culture include gathering information from customers and competitors, goal setting, planning, task focus, competitiveness and aggressiveness.

*The hierarchy culture type* is an organizational culture that combines internal focus and integration with stability and control. The assumption on which a hierarchy culture is based is that stability, predictability and control result in efficiency. People behave appropriately when they have clear roles and when rules and regulations formally define procedures. The values which are pursued in a hierarchical culture are precise communication, routinization, formalization and consistency, which result in the behavior of conformity and predictability (Kimberly and Quinn, 1984).

The interest in organizational culture resulted in a large number of measurement instruments based on the different cultural frameworks, of which only a small portion seems to be valid (Jung *et al.*, 2009). According to Jung *et al.* (2009) and Cameron and Quinn (1999), the Organizational Culture Assessment Instruments (OCAI) is a valid and reliable method that allows investigating the organizational culture profile, based on the CVF, on a large scale and has been used in many types of businesses (Jung *et al.*, 2009; Cameron and Quinn, 1999). In research, metaanalysis and systematic reviews have been performed on the four organizational culture types of the CVF in association with measures such as firm performance, effectiveness and innovation (Büschgens *et al.*, 2013; Hartnell *et al.*, 2011, 2019), making it of interest to use the OCAI instrument in this study.

Moreover, to assess a complete picture of organizational culture, complimentary use of both a qualitative and a quantitative approach is recommended (Yauch and Steudel, 2003). By only studying organizational culture by using a survey, not all layers of organizational culture, including artifacts, norms and values, and underlying assumptions, can be assessed according to the model of Schein (2010). Namely, implicit beliefs and unconscious assumptions cannot be assessed only by a survey but should be assessed by focus group discussions, interviews or observations (Schein, 2010). Therefore, additionally to a quantitative approach, it is important to set up interviews to assess the deeper layers of the organizational culture (Jung *et al.*, 2009).

Prior research showed the four organizational culture types of the CVF of Cameron and Quinn are related to the performance of organizations (Chatman and O'Reilly, 2016; Hartnell *et al.*, 2011, 2019; Büschgens *et al.*, 2013; Eisend *et al.*, 2016). Büschgens *et al.* showed a positive relationship between innovation, and Eisend *et al.* showed a positive association between new product performance and the clan, market and adhocracy culture types (Eisend *et al.*, 2016; Büschgens *et al.*, 2013). However, prior research has mainly studied corporates and large institutions, such as hospitals, to study organizational culture and its relationship to performance, not scale-ups (Jacobs *et al.*, 2013).

For both research and practice, it is therefore of high interest to examine the organizational culture of scale-ups and, in specific, its relation to performance. This research paper aims to fill the existing literature gap by the following research question (RQ1):

*RQ1.* What is the relationship between the organizational culture and performance in scale-ups?

## Methods

This study aimed to collect data on the organizational culture of scale-ups and the effect on their performance. The research design used to find empirical results of the organizational culture and performance of scale-ups was by doing a multiple-case study (Gustafsson, 2017). The approach used to collect data was a mixed method that included both qualitative and quantitative methodologies. Qualitative data were collected by interviews with top managers in order to get in-depth data on the managerial organizational culture. Organizational-wide surveys were held in order to collect quantitative data on all layers of the organizational culture as well as the perceived performance.

### *Participants*

The criteria for selecting the scale-ups were based on the characteristics of a scale-up, as mentioned in the definition of a scale-up in the introduction (OECD, 2007). Overall 15 Dutch scale-ups that met the required characteristics were accepted for this present study and asked to participate. These scale-ups were discovered through the personal network or the Internet. Each scale-up was asked to join this study by participating in two interviews with top

managers and a companywide questionnaire with at least 30% response rate. Of these 15 scale-ups, five committed to participate and formed the sample of this study.

At the time of data collection, these five scale-ups ranged in age from six to seven years. The number of employees varied between 25 and 135 persons.

The sampling frame for the qualitative data collection consisted of the top management team. Each scale-up could decide for their own whom the management team wanted to participate. The final collected data consisted of ten semistructured interviews with two top managers of each scale-up, including Chief Executing Officers, Chief Operating Officers, Chief Technology Officers, Chief Product Officers and Human Resource Managers. Two persons per scale-up were interviewed to increase the validity and reliability and reduce bias (Babbie, 2013).

The sampling frame for the quantitative data collection was the entire population of the scale-ups. The survey was spread organization-wide by the contact person, and in case the 30% response rate was not met yet, reminders were sent. Personnel could decide for themselves if they wanted to participate in the survey.

All five scale-ups obtained a survey response rate of at least 30% of all personnel, resulting in a total sample of 116 surveys in this study. Most respondents were employees (72%) of the scale-ups. The remaining respondents included executives (3%), middle managers (7%), team managers (16%) and interns (2%). A large percentage of the respondents were male (66%). The majority of the respondents were aged 25–34 y. (66%), with a bachelor's (45%) or master's degree (45%) as the highest education level degree. Respondents' departments varied largely; however, one-third worked in IT. The five-participating scale-ups are not named in this study for privacy reasons and are coded as Company 1–5.

#### *Data collection*

*Qualitative design.* In order to get better insight into the organizational culture of scale-ups, semistructured interviews were held. The format of a semistructured interview was chosen due to its flexibility to go in depth on a certain topic with follow-up questions (Babbie, 2013). This method also gave the opportunity to guide the interviewee to a more relevant area of the research (Babbie, 2013). The interview content was in line with the RQs on a deeper understanding of the current and preferred organizational culture of the interviewees. The content of the questions was based on the six key themes of the OCAI questionnaire, including the dominant organizational culture, leadership style, management of employees, organizational glue, strategic emphasis and criteria for success (Cameron and Quinn, 2011). The interviews took approximately 45 min, and were held via video calling recorded, and transcribed.

*Quantitative design.* The goal of the survey was to collect data on the current and the preferred organizational culture and perceived performance from the organizational-wide population. The survey consisted of three parts. The first part consisted of six multiple-choice and two open questions about the participant's demographics and scale-up, including questions on age, gender, education, the company name, the start year of working at the company, department and job level. Furthermore, it consisted of six ipsative questions, including an *a* and *b* section on current and preferred organizational culture which were derived from the OCAI questionnaire. The OCAI consisted of six key themes, which are mentioned in the previous section. These were questioned current and preferred for the preferred and current situation, with multiple-choice questions (A, B, C and D) on the four organizational culture types. This made a total of 48 subquestions that had to be filled in an ipsative manner (Cameron and Quinn, 1999).

The third part consisted of ten multiple-choice questions to measure the perceived performance of the scale-up respondents, including employee satisfaction, employee

commitment, product quality, innovation, market share, efficiency, financial performance, productivity, timeliness and smooth functioning (Hartnell *et al.*, 2011). The questions were measured on a five-point Likert scale.

The aim was to survey 30% of the employees of each scale-up. Every employee of the organization has had the chance to participate in this study by the probability sampling method. This way, the results are representative of the whole organizational population. The survey took approximately 15 min to be filled in, which could be done anonymously, and 201 of 408 employees responded. Since not all surveys were fully completed, 116 were included in the analysis.

#### *Data analysis*

*Interviews.* All ten interviews were transcribed. Thematic analysis was conducted. This involved coding the data before identifying and reviewing the six key themes on the four organizational culture types. Each theme is examined to gain an understanding of the interviewees' perception of the current and preferred organizational culture. The data of the interviews are coded by open and axial coding. The mentioned characteristics of the organizational culture types were noted in the codebook. A data structure was created by selecting the main key characteristics of the culture types of the CVF. The corresponding codes of the interviewees were coded using the data structure.

A calculation per interviewee was made to discover the current organizational culture profile by calculating the numbers of codes per organizational culture type of all six themes of the current organizational culture type's characteristic. To create one company organizational culture profile, the average of the profiles of the two interviewees of the top managers was taken. This resulted in five organizational culture profiles of the participating scale-ups. To create an organizational culture profile of overall scale-ups, the average of these five profiles was taken. Additionally, the codes which were most quoted by all interviewees represent the most present characteristics of the scale-ups organizational culture. A scale is conducted, which is used to classify the characteristics. If a large number of interviewees (more than five) mentioned the particular characteristic, then the characteristic was extremely highly present in scale-ups organizational culture. If four interviewees mentioned the characteristic, then it was highly present in scale-ups organizational culture. If three interviewees mentioned the characteristic, then the characteristic can be considered moderately present. The characteristics which were only mentioned once or twice are not considered a characteristic that applies to the overall organizational culture of scale-ups. The characteristics of the data structure which are not mentioned are considered absent.

*Surveys.* The analysis of the survey data consists of an organizational culture analysis, a performance reliability test and a correlation test between the organizational culture and the performance. First, the mean and standard deviation of the four current and preferred organizational culture types are calculated by taking the average of the 116 respondents. Second, to measure the overall performance of the scale-ups, a new overall performance variable was made by taking the average of the ten performance measures, including employee satisfaction, employee commitment, product quality, innovation, market share, efficiency, financial performance, productivity, timeliness and smooth functioning. All ten performance measures were tested using Cronbach's Alpha on their reliability. Cronbach's Alpha measured the internal consistency and was used to test whether or not a measure contributes to an underlying scale. Ideally, the Cronbach's Alpha should be between 0.8 and 0.9; above 0.7 is acceptable (Allen and Bennett, 2012).

Pearson's correlation analysis investigated the association between the independent variables (clan, adhocracy, market and hierarchy culture types) and the dependent variables (overall performance and independent ten performance measures). The Pearson's correlation shows how the two variables vary together. A positive correlation means that as one variable

increases, the other variable also increases. A negative correlation is when one variable increases as the other decreases. Correlations vary between  $-1.00$  and  $+1.00$ . A correlation of  $0$  means there is no relationship between the two variables. To judge the strength of the correlation the following effect size is used (Cohen, 1988):  $r < 0.29$  is a small effect,  $0.30 < r < 0.49$  is a medium effect and  $r > 0.50$  is a large effect. These indicate both the direction (positive or negative) and the strength of the relationship between the four organizational culture types and the ten performance measures and overall performance.

**Results**

*Not one dominant culture type*

The results of this study show there is not one dominant organizational culture type within scale-ups. The survey showed the clan and adhocracy as most present organizational culture types and even more preferred, and the market and hierarchy organizational culture types as the least present and even less preferred by employees.

Table 1 describes the organization culture profile based on the survey outcomes in scale-ups and on the four organizational culture types (clan, adhocracy, market and hierarchy). The table shows the current and preferred organizational culture profile’s mean percentages and standard deviations in scale-ups. It also shows the difference between the current and preferred cultures. The current profile of scale-ups consists of the clan culture as the most dominant type, followed by the adhocracy, the market and the least dominant current type is the hierarchy culture.

The clan culture is also the most preferred organizational culture type. The clan culture type is even higher preferred than currently is observed. Similar is the adhocracy culture type, the second-highest organization type present in scale-ups in this sample but is also preferred to be even more present. The market culture type is the third present type; however, this culture type is preferred to be much less than it is currently present. Also, the hierarchy culture type, which is the least present in the current culture, is also desired to be less in the preferred organizational culture profile of scale-ups.

	Clan	Adhocracy	Market	Hierarchy
Current, mean % (SD)	31.71 (12.94)	26.47 (9.88)	22.01 (11.62)	19.78 (13.59)
Preferred, mean % (SD)	35.48 (10.35)	29.07 (7.79)	16.51 (6.82)	18.94 (7.62)
Difference, mean % (SD)	3.77 (9.85)	2.60 (8.98)	-5.53 (10.42)	-0.84 (14.95)

**Note(s):**  $N = 116$ , SD = Standard deviation

**Table 1.** The OCAI scores of the total population per culture type



**Figure 1.** The organizational culture profile of scale-ups based on the CVF

Additional to [Table 1](#), [Figure 1](#) shows the organizational culture profile of scale-ups. Here, it is visualized the organizational culture is more preferred toward the flexibility and discretion axis, which are in line with the clan and adhocracy culture types.

*Prominent organizational culture characteristics.* In the interviews with the top managers, the underlying characteristics of scale-ups organizational culture are elaborated to study the deeper layers of the organizational culture, which is in line with the theory of Schein. According to top managers, the adhocracy, the market and clan cultures are the most present in the organizational culture of scale-ups and will be further elaborated per the organizational culture type.

First, the characteristics of the clan culture which are shown in a scale-up, include the great concern for people, affiliation, open communication and overall openness. Second, the most present characteristics of the adhocracy culture types include a focus on growth, innovation, new and unique products, attention to detail and a nonhierarchical, risk-taking, and dynamic culture. Third, the market culture type characteristics included the focus on winning, gathering customers' information, getting the job done, achievement orientation, goal setting and accomplishment, competence, result orientation and task focus. The characteristics of the hierarchy culture type were not highly present in the organizational culture of scale-ups.

*Subcultures.* In the interviews with the top managers, the emergence of subcultures within scale-ups was mentioned, showing there is not one organizational culture type within a scale-up. There are several reasons for the arising of subcultures. First, interviewees mentioned that after a certain number of employees, which is about 40–50 employees, it becomes difficult to maintain one main culture. Departments will grow, group formation starts and consequently, subcultures will arise. Owing to the growth of the number of employees, often scale-ups have to expand their offices to a larger place, where it is no longer common to see all your coworkers every day. Second, the subcultures also arise by the fact that many internationals are working at scale-ups and have different ethnic and cultural backgrounds. This results in different behavioral norms and values. For example, more internationals work in the IT department than in the business departments in many scale-ups. This results in different cultures among the departments. Third, scale-ups expand to locations in different cities or countries due to the growth. In these various locations, subcultures automatically arise.

#### *The discrepancy between top managers and employees*

There is a difference in perspective of the current organizational culture of top managers and employees. According to top managers, the market culture type is more, and the hierarchy culture type is less present in the current organizational culture profile than in the survey's organizational culture profile, which employees mainly fill in. The survey showed the clan and adhocracy types are most present and the market and hierarchy types are least present in the current organizational culture profile.

*Strategic focus clash.* In the interviews with the top managers, a strategic clash was notable. A strategic clash is a contradictory focus on the pursued strategy between top management and employees. It was observed that the strategy of the top managers, focusing on an advantage-seeking strategy, was contradictory to the strategy of the employees, focusing on an opportunity-seeking strategy. According to several top managers, their strategic emphasis was on finding new markets, selling the products in new markets and finding new customers, which aligns with the market culture type. However, according to the employees, they desire to emphasize improving the product by using creativity and knowledge of the employee, which is in line with the clan and adhocracy culture types. This contradiction is reflected within the steering mechanism of the top manager, which is not in line with the employee's preference.



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### *Organizational culture in relation to performance*

*Reliability analysis.* Before analyzing the performance, it was important to analyze the reliability of the scales of the ten performance measures (employee satisfaction, employee commitment, product quality, innovation, market share, efficiency, financial performance, productivity, timeliness and smooth functioning). To measure the reliability, Cronbach's Alpha was used to determine the internal consistency of the performance measures. To create an overall performance measure, it was necessary to determine whether each variable was reliable to add. The results confirm the relatively high internal consistency of each classification item, which ranges from 0.795 to 0.826. The Cronbach's Alpha should ideally be between 0.8 and 0.9; however, a Cronbach's Alpha above 0.7 is acceptable (Allen and Bennett, 2012). These measures indicate high reliability, which shows the internal integrity of the survey questions. All performance measures are included in the overall performance measure.

*Correlation analysis.* Table 2 shows, in scale-ups, the clan and the adhocracy culture variables have a moderate and positive correlation impact on the overall performance, with a value of 0.43 and 0.3, and with the highest significance level ( $p$ -value < 0.01). The market and hierarchy variables have a moderate and negative impact on the overall performance of  $-0.36$  and  $-0.32$ , and with the highest significance level ( $p$ -value < 0.01).

Additionally, Table 2 shows the clan culture has a medium-strong and positive correlation impact on the employee satisfaction (0.35), employee commitment (0.35), financial performance (0.31) and smooth functioning (0.35), with the highest significance level ( $p$ -value < 0.01). The adhocracy culture has a medium-strong and positive correlation impact on the employee commitment (0.39) and innovativeness (0.33), with the highest significance level ( $p$ -value < 0.01). The market culture has a medium-strong and negative correlation impact on the employee satisfaction ( $-0.43$ ), employee commitment ( $-0.31$ ) and smooth functioning ( $-0.34$ ), with the highest significance level ( $p$ -value < 0.01). The hierarchy culture has a medium-strong and negative correlation impact on the employee commitment ( $-0.35$ ), innovativeness ( $-0.31$ ), market share ( $-0.33$ ) and financial performance ( $-0.3$ ), with the highest significance level ( $p$ -value < 0.01). The remaining performance measures showed a weak correlation between the organizational culture types and the performance measures.

## **Discussion**

This study adopted a research approach of performing qualitative and quantitative research at five scale-ups to understand the relationship between the organizational culture based on the four culture types of the CVF (clan, adhocracy, market and hierarchy) and performance in scale-ups. The RQ arose from the literature gap concerning the missing knowledge on the relationship between the organizational culture and performance in scale-ups.

### *Not one dominant culture type due to subcultures*

First, the results of this study show a scale-ups organizational culture is not to be comprised within one organizational culture type of the CVF. The fact that the organizational culture of scale-ups does not consist of a dominant organizational culture can be explained by the emergence of subcultures within an organization. This study suggests subcultures emerge when the organization is growing, and the number of teams, departments and locations is increasing, which could affect the present organizational culture within the teams. Furthermore, the departments are increasing within the organization, all of which have their expertise and competencies, resulting in group formation. With growth, different teams with different managers and different (personal) management styles guide individual

**Table 2.**  
Descriptive statistics  
and correlation among  
variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	31.71	12.94															
2	26.47	9.88	-0.03														
3	22.04	11.62	-0.65**	-0.05													
4	19.78	13.59	-0.37**	-0.66**	-0.20*												
5	3.64	0.56	0.43**	0.30**	-0.36**	-0.32**											
6	4.00	0.77	0.35**	0.22*	-0.43**	-0.12	0.64**										
7	4.10	0.80	0.35**	0.39**	-0.31**	-0.35**	0.65**	0.50**									
8	3.79	0.81	0.20*	0.22*	-0.09	-0.27**	0.64**	0.28**	0.33**								
9	3.99	0.74	0.20*	0.33**	-0.13	-0.31**	0.49**	0.15	0.33**	0.22*							
10	3.20	1.15	0.28**	0.18	-0.08	-0.33**	0.63**	0.39**	0.37**	0.46**	0.22*						
11	3.48	0.87	0.20*	-0.12	-0.21**	0.08	0.48**	0.26**	0.22*	0.24**	0.13	0.06					
12	3.34	0.95	0.29**	0.14	-0.27**	-0.15	0.66**	0.29**	0.32**	0.33**	0.35**	0.24**	0.30**				
13	3.81	0.74	0.17	0.13	-0.24**	-0.05	0.61**	0.29**	0.33**	0.28**	0.34**	0.27**	0.25**	0.41**			
14	3.25	0.99	0.31**	0.25**	-0.21*	-0.30**	0.75**	0.47**	0.35**	0.48**	0.37**	0.55**	0.12	0.42**	0.38**		
15	3.46	0.99	0.35**	0.20*	-0.34**	-0.19*	0.70**	0.45**	0.44**	0.39**	0.14	0.20*	0.50**	0.45**	0.40**	0.43**	

**Note(s):** N = 116; \*Correlation is significant at the 0.05 level (two tailed); \*\*Correlation is significant at the 0.01 level (two tailed)

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behavior. Thus, the presence of subcultures that appear within scale-ups is not surprising and depends on contextual factors that are not changed easily.

Assessing different culture types and subcultures is valuable for organizations and subsequently to understand underlying perspectives and values espoused. Interventions should be based on detailed assessments of current and desired cultures within different subgroups of an organization and not on the false assumption that an organization has one unitary culture. Especially for scale-ups, it could be expected that personal values will mostly lie within characteristics of the clan culture and the adhocracy culture since these are most preferred by the employees. The characteristics which should be focused on belonging to the clan culture are teamwork, participation, employee involvement and open communication, and those belonging to the adhocracy culture are risk-taking, creativity and adaptability (Cameron and Quinn, 2011).

Moreover, to explore the underlying characteristics of a culture, it is suggested to combine a quantitative approach, such as a survey including the OCAI framework, in combination with a qualitative approach, like interviews. The quantitative approach assesses the overall presence and preferred culture and the presence of subcultures. Subsequently, to determine the underlying characteristics and values of the people within the organization, a qualitative approach is needed across all organization levels. This is in line with the theory of Schein that believes in studying organizational culture; it is essential to investigate all layers of the organization to get a complete understanding of the artifacts, norms and values and the underlying assumptions (Schein, 2010). Additionally, this study agrees with the study of Yauch and Steudel, to assess organizational culture by complementary use of both quantitative and qualitative approaches (Yauch and Steudel, 2003).

#### *The discrepancy between top managers and employees*

Second, this study shows a discrepancy between the perspective on the organizational culture between top managers and employees. According to employees, the current organizational types that were most present (clan and adhocracy) were also the most preferred. The organizational types that were least present (the market and hierarchy) were also less preferred. According to the top managers, the hierarchy culture type was much less present and the market was much more present in the current organizational culture profile compared to the employees.

The managerial bias can explain this since the interviews were only held with top managers, who could naturally have a different perspective on the organization than employees due to their position. One of the top managers interviewed, who had only recently started working at the current scale-up, remarked that the leadership style was rather top-down, but the staff preferred a bottom-up approach. This suggests that the hierarchy culture is more prevalent than top managers claim but that the gap is due to managerial prejudice.

Moreover, in scale-ups top managers are tactically and strategically focused on the market, whereas employees in scale-ups are primarily focused on the organization's product and innovation. It results in a discrepancy between top managers who perceive the market culture to be dominant, whereas employees perceive clan and adhocracy types as most present and preferred. Generally, employees start working in scale-ups due to their dynamics, flexibility and nonhierarchical attitude, which the interviewees often mention. The increased focus of top managers on an advantage-seeking strategy (the market culture type), results in a loss of attention on the opportunity-seeking strategy (clan and adhocracy culture type), which is preferred by the employees. The strategic clash was recognized by several top managers in the interviews and fits in the phase of a scale-up. Certainly, the opportunity-seeking strategy ensured scale-up success within the start-up phase. Namely, scale-ups are successful due to their innovativeness which is necessary to maintain their growth (Coad and Rao, 2008). Also, competition in the technology sectors, in which many scale-ups fares,

showed that successful innovators arise rapidly with a winning innovative product or service and increase their market share even more (Coad and Rao, 2008). Therefore, it is important for scale-ups, which are in this transition by organizational growth, that top management should not lose attention on its opportunity-seeking strategy in order to realize its long-term goals.

#### *Organizational culture in relation to performance*

Third, the relationship between the four culture types and the performance of the scale-ups showed the two most preferred organizational culture types (clan and adhocracy) are positively correlated, and the organizational culture types which are less present and preferred to decrease (the market and hierarchy) are negatively correlated, with the overall performance of scale-ups.

In this study, the clan and adhocracy culture types were most preferred by employees and showed to be beneficial for the performance of the scale-ups. On the other hand, this study showed that top managers have a high focus on the market culture while the employees do not prefer this culture type, and it shows a negative correlation with the performance of scale-ups. Prior studies showed the independent performance variables or overall performance of organizations, not in particular scale-ups, is increased by the clan, adhocracy and market culture (Büschgens *et al.*, 2013; Hartnell *et al.*, 2011, 2019; Kim and Chang, 2019). The discrepancy between the market culture type and performance between this study and the previous studies can be explained by the fact that these studies investigated other organizational types than scale-ups. Also, these studies mentioned their outcomes should be interpreted with caution since their study samples were not very high.

Furthermore, since the data on this study's organizational culture and performance is obtained within one survey, the results could be influenced by common method variance. The negative relationship between the market culture type and the scale-up performance can be explained by the fact that the employees do not prefer the market culture. Within the same survey, the respondents were asked to fill in their perception of the organizational culture and how they perceived the performance of the scale-up.

Based on these results, performance will increase when organizations emulate the preferred cultural characteristics and underlying values. In this study, interventions based on the underlying cultural characteristics and values of the two organizational culture types (clan and adhocracy) are expected to steer performance positively.

#### *Managerial implications*

Assessing scale-up's organizational culture and performance is not only crucial regarding developing academic research in this area and thus primarily used by academics. It is also essential to strengthen scale-up organizations in their day-to-day growing business and, therefore, deployed by top management themselves. This study is the first study showing that organizational-wide surveys, using the OCAI questionnaire, in combination with in-depth interviews, are a suitable method for top managers to diagnose the organizational culture of their scale-up. It helps top managers to obtain information on the different subcultures, preferred characteristics and underlying values within their organization. In practice, it is advised to assess the organizational culture of their scale-up organization periodically. By assessing the organizational culture regularly, such as once a year, the top management can detect a potential shift in culture and take action if the ambitions regarding organizational culture differ from the present organizational culture. By starting with a quantitative survey, an extensive perspective on the organizational culture can be obtained, and differences within the organization can be detected. Following that, in-depth sessions should focus on actual practices, what happens between people and how employees and top managers experience working in a scale-up at various stages of development and growth

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(Graamans *et al.*, 2021). In this regard, top managers should be aware that cultural interventions are not one-time actions. Organizational culture should be continuously monitored and adjusted to align with its ambitions.

The importance hereof is stressed by the results of the current study as significant differences between top managers and employees regarding the perceived culture of the start-up organization were exposed. In this regard, employees also often seem to experience a different culture than they prefer. Employees perceiving a different culture from what they like should be a critical sign for top management. As a leader of a scale-up company with existential (growth) ambitions, it is of absolute importance to be aware of and understand these perceived differences as it could risk a nonproductive gap between top management and employees. Moreover, it could lead to the departure of key employees as they do not feel enough fit (anymore) between the organization and their values.

Furthermore, the outcomes of this study stress that a hierarchical culture negatively relates to performance in this particular environment. The focus of top management in a scale-up environment should therefore focus on minimizing hierarchical culture characteristics in their organization. On the contrary, the focus of top management in the scale-up environment should be on stimulating and creating clan and adhocracy culture characteristics. It is about building an organization where employees feel part of an extended family where creativity and flexibility are core values. Although the top management of scale-ups primarily seems to focus on new market opportunities, a key element of success lies in building an organizational culture in which all employees feel part of the journey of growth. Especially the accelerating transition to hybrid working within organizations, and thus the lack of physical connectivity, makes it essential that employees keep recognizing and feel connected to the organizational culture.

After all, employees are the supporting force of the organization's sustainable development. The organizational culture in scale-up organizations should function as "glue", strengthening the connection between employees, teams and management to continuously shift toward success. It determines the way the potential of scale-up organizations will flourish and thus requires continuous attention, both in practice and research.

### *Limitations*

This study shows several limitations. First, the generalizability of the results on the organizational culture of scale-ups is limited since this study only researched five scale-ups. To enhance the generalizability, data on the organizational culture of more scale-ups should be obtained. Second, although two people per scale-up were interviewed in this study, to avoid a one-man bias (Babbie, 2013), more interviews should be held to get a more detailed and concrete perspective on the true behavior, feelings and practices of the people of the entire organization. Third, the 30% response rate survey research should be representative of the total scale-up population; however, surveys are almost always self-selected, which could result in the most committed employees filling in the survey, and the least do not (Starr, 2012). Fourth, organizational culture is a highly complex phenomenon that is difficult to measure. However, by a complementary approach of both quantitative and qualitative methods, the reliability of the outcomes on organizational culture is increased.

Lastly, the data collection has taken place in the early beginning of the Covid-19 outbreak, April 2020. Therefore, the data might be a time constraint as many organizations faced a difficult time shortly after. Future research should include adequate variables considering crisis times like Covid-19 and specifically examine ensuing cultural changes resulting from the significantly increased digital and remote working environments.

*Future research*

This research will make several recommendations for future studies. First, the performance measures of this study were all subjective, allowing us to make conclusions on the perceived performance. For future research, it would be interesting to use objective performance measures, such as financial numbers. Second, future research should investigate more scale-ups, interviewees and survey respondents to compare the results with the outcomes of this study and increase the generalizability. Third, it would be interesting to investigate the top manager's role and its strategic focus and leadership style in relation to the organizational culture and performance. This research suggested there was a clash in the strategy of the top manager by focusing too much on the market and too little on product innovation. Trust could be a factor that should be investigated to increase the performance of scale-ups, especially on innovation.

**Conclusion**

The scale-up organizational culture does not consist of one dominant organizational culture type. It has been shown subcultures emerge in scale-ups that could deviate from the main organizational culture pursued by the management team. The organizational culture in scale-ups is a combination of the most present characteristics of the four culture types. It is essential to focus on the underlying characteristics since these are concrete indicators for top scale-up managers to steer their organizational culture. Therefore, to investigate the underlying characteristics, it is recommended to assess the organizational culture using a complementary quantitative and qualitative research approach. The qualitative approach showed to be necessary to understand these underlying characteristics of the organizational culture and the presence of subcultures.

The clan and adhocracy culture types are most beneficial for top managers of scale-ups to focus on since these were positively correlated to scale-ups' performance and were most preferred by the employees. The market and hierarchy culture types were negatively correlated to performance. They were also least preferred by employees, and it is thus recommended for top managers of scale-ups not to focus on the characteristics of these two culture types.

Top managers and employees showed different perspectives on the organizational culture of scale-ups. Most importantly, top managers pursued a high market-focused culture, which has been shown in this study to be disadvantageous for the performance of the scale-up. By focusing on the clan characteristics and the adhocracy culture types, a top manager could increase its scale-ups performance.

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