THESIS

Abdulhakim A.M. Alnajjar

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Hungarian University of Agriculture and Life Sciences

Gödöllő Campus

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The Impact of Organizational Culture on Employee Creativity in the Tech Sector

Insider consultant: Dr. Rudnák Habil Ildikó

Associate professor

Insider consultant's Institute/department: Department of Agricultural Management and Leadership

Created by: **Abdulhakim A.M. Alnajjar**

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1.1 Background of the Problem

Organizational culture refers to the values, beliefs and behaviors promoted and rewarded within a company (Suifan, 2021). As the tech sector expands and innovates, there is an ever-increasing need to understand how organizational culture impacts creativity and innovation among employees. Research suggests that organizational culture is an essential factor in creative expression, as it indicates the kinds of ideas and behaviors valued and discouraged (Asbari *et al*., 2020). But the precise mechanism by which organizational culture influences employee creativity remains obscure. Culture within any organization plays an invaluable role in shaping employee attitudes, mindsets, and behaviors. Organizational culture refers to the shared assumptions, values, and norms within an organization that determine how its people interact and complete their work (Suifan, 2021). This culture can be expressed through practices related to leadership, communication, routines, rituals, and rewards systems.

Past research has clearly established the impact of organizational culture on innovation and creativity within companies (Asbari *et al*., 2020; Azeem *et al.*, 2021). Cultures that emphasize flexibility, risk-taking, collaboration, learning, and growth tend to foster more creative thinking from employees; conversely rigid cultures tend to inhibit innovation by inhibiting risk-taking or being risk averse and bureaucratic; norms, practices and messages transmitted via organizational culture affect whether workers feel motivated to generate new ideas while feeling safe enough psychologically to pursue them. While the connection between organizational culture and innovation is widely recognized, its mechanisms remain less understood in dynamic tech firms. With constant pressure for growth and innovation in an ever-evolving landscape, tech firms must find ways to encourage creative solutions from their workforce - however there has been limited research conducted into exactly which elements of organizational culture at these tech firms foster employee creativity. Some scholars have highlighted leadership as one of the key determinants of organizational culture that fosters creativity (Jaiswal & Dhar, 2015). Leaders signal priorities and values through both their words and actions. Transformational leaders who empower employees, offer intellectual stimulation, and communicate inspiration often spur innovation.

Meanwhile, other researchers have stressed the significance of social norms of collaboration and psychological safety as a driver for risk taking (Zeb *et al*., 2021). Shared assumptions that new ideas are welcomed rather than rejected are key components to creative efforts, while scholars have highlighted the role of reward systems as motivating forces through recognition, promotions, or financial rewards (Shin *et al*., 2019). No one really understands which cultural elements are most prevalent within tech firms. This proposed research will fill a crucial void by helping tech firms leverage organizational culture to increase employee creativity. As tech is such an intricate industry, it is imperative that cultures that encourage innovation thrive. Research results can offer tech leaders guidance to shape organizational culture that maximizes creative potential while giving their companies an edge in competitive markets.

1.2 Purpose of the study and Problematic

While past studies have demonstrated a link between organizational culture and creativity, there is limited recent research on this relationship within tech sector organizations. Tech companies are widely celebrated for their ability to foster creative, out-of-the-box thinking cultures. However, we do not fully understand which elements of organizational culture (such as leadership style, social norms, or reward systems) are most important for supporting employee creativity in tech firms. An intensive investigation is necessary.

The purpose of this quantitative, correlational study is to examine the impact of organizational culture on employee creativity within tech sector companies. The aim is to identify key cultural factors that predict creative behaviors and outcomes among tech employees.

Research Questions (RQ) and Hypotheses (H)

1. RQ1: What is the relationship between organizational culture and employee creativity in tech sector companies?
    - H1: There will be a significant positive correlation between organizational culture and employee creativity.
2. RQ2: Which elements of organizational culture (leadership, social norms, reward systems) are the strongest predictors of employee creativity in tech companies?
    - H2: Leadership and reward systems will be stronger positive predictors of employee creativity compared to social norms.

1.3 Theoretical Framework and nature of the study

Amabile's componential theory of organizational creativity will serve as the framework for this research project. According to Amabile, three components affect organizational creativity: expertise/creative thinking skills, intrinsic task motivation and the social environment (Freudenreich *et al.,* 2020). The paper will specifically investigate how cultural aspects such as leadership styles, social norms and rewards influence this last aspect - whether more conducive or less so to creativity.

This study will employ a quantitative, correlational methodology with an online cross-sectional survey design to analyze organization culture in tech sector companies with 100-150 employees as its sample. Organizational culture will be measured using established instruments like the Organizational Culture Assessment Instrument (OCAI). Creativity will be assessed through participant self-reports; correlational analyses will assess strength of relationships between cultural factors and creativity while multiple regressions identify those which serve as strong predictors.

1.4 Significance of the Study

This study's purpose is to gain greater insight into how tech firms can utilize their organizational culture to foster employee creativity and innovation, with results providing guidance for shaping policies related to leadership, social norms, recognition, rewards and creating an atmosphere conducive to creative thought flourishing within an organizational climate. Fostering such an atmosphere could give tech firms a competitive advantage as well as continue driving innovation within their respective industry.

This research explores how organizational culture affects tech company employee creativity. Leadership, conventions, and rewards will be examined quantitatively to gauge their effects on innovation within employee teams. Tech CEOs looking for creative corporate cultures may gain from this research - understanding creative factors may help IT organizations succeed and innovate faster.

CHAPTER 2: LITERATURE REVIEW

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This chapter provides a review of the literature on organizational culture and its relationship to employee creativity. The review is organized into several key sections. First, theoretical models of organizational creativity are discussed, with a focus on Amabile's componential theory that frames this study. Next, the concept of organizational culture is explored in depth, including various definitions, components, and established models for assessing culture like the Competing Values Framework. The literature on specific cultural aspects like leadership, social norms, recognition, and rewards is then reviewed regarding links to creativity. Finally, research on creativity outcomes, including individual, team and firm-level creativity, is summarized.

2.1 Theoretical Frameworks of Organizational Creativity

Several theoretical frameworks have been developed to explain drivers of innovation and creativity within organizations. Understanding these models provides context on how organizational culture factors into supporting creative behaviors and outcomes.

A. Amabile's Componential Theory

Teresa Amabile's componential theory of creativity (Freudenreich *et al*., 2020; Ameen *et al*., 2022) is one of the most widely used frameworks in creativity research and has provided the basis for hundreds of studies (Kilcullen *et al*., 2023). This theory proposes three within-individual components that influence creativity: expertise, creative thinking skills, and intrinsic task motivation. The social environment can influence all three components and serve as a fourth element impacting organizational creativity.

Regarding expertise, knowledge and domain-relevant technical skills provide the foundation that employees can leverage to develop novel, useful ideas (Amabile, 1983; Martin et al., 2018). Creative thinking skills refer to cognitive abilities and work styles conducive to idea generation, such as comfort with ambiguity and risk-taking (Fischer *et al*., 2019). Intrinsic motivation involves a passion for the work itself, driven by internal motivation, deep interest, and curiosity rather than external rewards or recognition. When individuals are intrinsically motivated, they are more engaged, focused, and open to exploring new ideas (Amabile, 1983; Deci & Ryan, 1985). Finally, the social environment encompasses organizational culture elements like leadership,

social norms, recognition systems and other contextual influences that can facilitate or hinder intrinsic motivation and creativity (Amabile *et al.*, 1996; Taggar *et al*., 2003).

This componential framework highlights how organizational culture shapes the climate in which creativity and innovation occurs (Asbari *et al*., 2021a). Culture impacts intrinsic motivation and whether the context feels more supportive or discouraging of creative efforts. It also affects whether employees build expertise and creative thinking skills. Amabile's theory has provided the basis for most workplace creativity research since its introduction and still offers an elegant model for assessing cultural aspects that foster innovation.

Organizations seeking to foster a culture of creativity can leverage Amabile's theory to identify and address key factors that influence creativity (Martin *et al.*, 2018; Scott *et al*., 2022). For instance, providing training and development opportunities can enhance domain-relevant skills (Fuchs *et al*., 2017; Reiter-Palmon *et al*., 2002), while encouraging risk-taking and open-mindedness can promote creativity-relevant processes (Scott *et al*., 2022; Sternberg & Grigorenko, 2007). Moreover, cultivating a supportive and empowering social environment, characterized by positive feedback and recognition, can boost intrinsic motivation and creativity (Bass *et al.*, 2015; Scott *et al*., 2022).

Recent research has further elaborated on Amabile's theory, exploring how individual differences and contextual factors interact to influence creativity (Asbari *et al*., 2021b; Hunter *et al*., 2022; Scott *et al*., 2022). For example, studies have examined the role of personality traits, such as openness to experience and risk tolerance, in shaping creativity (Hunter *et al*., 2022; Reiter-Palmon *et al*., 2008). Additionally, researchers have investigated how organizational factors such as leadership styles, reward systems, and communication patterns can influence the social environment and its impact on creativity.

B. Interactionist Model

Woodman developed an interactionist model that also emphasizes organizational culture's role in innovation. This model proposes creativity arises through complex interactions between individuals and their situational contexts within organizations. On the individual level, creativity is influenced by antecedent conditions like personality, cognitive abilities, intrinsic motivation, and knowledge (Mikalef *et al*., 2021). Situational influences include organizational culture,

rewards, resource constraints, and the physical environment. There is constant interplay between these individual and contextual factors.

A key contribution of the interactionist model was specifying organizational culture as part of the situation influencing creativity. The authors described supportive cultures as valuing innovation, diversity, risk-taking, and experimentation. Cultures that display flexibility, positive orientations to change, norm of cooperation, open communication and conflict resolution were also cited as conducive to creativity. This model highlights how creative potential emerges from the fit between individuals and their organizational contexts, providing another useful framework on culture's role.

C. Other Relevant Models

In addition to Amabile's componential theory and the interactionist model, scholars have proposed various other frameworks relevant to culture and creativity. For instance, Ford's model of individual creative action emphasizes relationships between individuals and their surrounding contexts (Al-Ababneh, 2020). Creative action arises when there is both personal motivation and ability, along with a supportive environment. This aligns with Amabile's model but focuses on the individual level. Elsewhere, Csikszentmihalyi developed a systems view of creativity with three elements: the creative individual, the domain or culture with established rules/practices, and the field of experts who judge novelty and usefulness (Lubart *et al*., 2019). This systems lens highlights the interdependencies between individual efforts, cultural contexts, and processes of acceptance. Finally, Rhodes in 1961 proposed a four-component model encompassing the creative person, process, product, and place/environment (Fischer *et al.,* 2019). This multifaceted view provides another useful lens, underscoring how creativity emerges through interactions between individuals and their organizational settings.

2.2 Organizational Culture and Leadership

A. Organizational Culture

With theoretical frameworks establishing its significance as an external influence, organizational culture itself is a complex construct warranting deeper discussion. This section reviews various definitions, components, and models that characterize culture within organizations.

Organizational culture has been defined and conceptualized in diverse ways by scholars over the past several decades. Among the most widely cited definitions, Suifan (2021) described organizational culture as the shared basic assumptions learned by a group to solve problems of external adaptation and internal integration, taught to new members as the correct way to perceive, think and feel. Similarly, Kalaignanam *et al*. (2021) viewed organizational culture as "the pattern of shared values and beliefs that help individuals understand organizational functioning" (p. 4). These definitions position culture as a set of social norms, assumptions and values acquired through group membership.

Other conceptions have emphasized additional facets of culture. For instance, Hofstede defined it as "the collective programming of the mind which distinguishes the members of one organization from another" (Migon *et al*., 2019). This highlights the role of culture in shaping cognitive processes among members. Bendak *et al*. (2020) emphasized culture as taken-for-granted beliefs, feeling and behavioral norms that exist in an organization. Their definition stresses shared behavioral expectations. Though perspectives vary, common themes of shared values, assumptions, norms, and patterns of thinking and acting define organizational culture. It provides a social context that guides member attitudes and behaviors based on shared learning and experiences.

a. Key Components of Culture

Organizational culture is a broad, multidimensional construct consisting of various components. Though conceptualized differently across models, key elements include:

Values: Collective beliefs about what is important, including goals and standards that should be pursued (Isensee *et al*., 2020))

- Assumptions: Basic premises and beliefs that are taken for granted as true and not scrutinized (Suifan, 2021)
- Norms: Unwritten rules for acceptable attitudes and behaviors in the organization (Coelho *et al*., 2021)
- Artifacts: Visible expressions and structures reflective of deeper values (Suifan, 2021), like dress code, office layouts, rituals
- Climate: Shared perceptions of policies, practices, and procedures (Pulakos *et al*., 2019)

Though not exhaustive, these components provide a conceptual foundation. Values indicate ideals that are consciously endorsed, while assumptions are embedded beliefs that go unquestioned. Norms involve mutual expectations for conduct, with artifacts as outward manifestations. Climate captures perceptions around behaviors supported versus prohibited. These facets combine to shape overall organizational culture.

b. Models for Assessing Organizational Culture

In addition to defining components, researchers have developed various models for assessing and understanding organizational culture. Three of the most utilized are discussed next.

- ***Competing Values Framework***

One of the most established models is Quinn and Rohrbaugh's competing values framework (CVF). It was developed by Robert Quinn and John Rohrbaugh in 1983 (Quinn & Rohrbaugh, 1983). It is based on the work of sociologist Robert Merton, who identified four basic types of social structure: communal, innovative, bureaucratic, and competitive (Lee *et al*., 2019). This framework identifies two key dimensions underlying cultural values: a flexibility versus control focus, and an internal versus external orientation (Mueller *et al*., 2021). Combining these dimensions creates four quadrants representing distinct aspects of organizational culture:

1) Clan culture: Flexible orientation with internal focus on collaboration and shared values
2) Adhocracy culture: Flexible orientation with external focus on adaptability, growth, and cutting-edge outputs
3) Hierarchy culture: Control orientation with internal focus on uniformity, stability, and efficiency
4) Market culture: Control orientation with external focus on competition and achievement

The CVF suggests that organizations should strive for a balance of the four cultural types. A healthy organization will have elements of each type, and the balance will vary depending on the organization's industry, size, and stage of development (Quinn & Rohrbaugh, 1983).

This framework has been widely used in research for assessing organizational culture, often through the Organizational Culture Assessment Instrument (OCAI). Participants completing the OCAI allocate 100 points across four options to indicate the dominant cultural profile of their organization (Mueller *et al*., 2021). Scores reveal alignment with each of the CVF quadrants.

It can be used in a variety of ways, including:

- Diagnosing organizational culture: The CVF can be used to identify the dominant cultural type in an organization and to assess the balance of the four types.
- Managing organizational change: The CVF can be used to develop strategies for managing organizational change by understanding the culture and the likely resistance to change.
- Developing leadership skills: The CVF can be used to develop leadership skills by understanding the different cultural types and how to lead effectively in each type.

Overall, the CVF offers a helpful theoretical lens for categorizing and measuring organizational culture.

- ***Schein's Three Levels***

Schein proposed culture can be examined at three levels: artifacts, espoused values, and basic assumptions. Artifacts represent the most visible elements of culture such as office layouts, dress code, published lists of values, and observable rituals. While they are the most readily noticeable aspects of culture, they might not accurately reflect the underlying values and beliefs that truly shape the organization (Denison *et al*., 2014; Schein, 1985).

Espoused values include conscious strategies, goals and philosophies as articulated by leaders and group members (Xenikou *et al*., 2022). They are often communicated in mission statements, vision statements, and other official documents. However, espoused values may not always be consistent with the organization's actual behavior (Denison *et al*., 2014; Schein, 1985).

Basic assumptions constitute the essence of culture involving unconscious beliefs, thoughts, and feelings fundamental to group functioning. They are often unconscious and deeply embedded in the organization's history and traditions. These assumptions shape the way that employees think, feel, and act within the organization (Denison *et al*., 2014; Schein, 1985).

Schein stressed examining all three levels provides richer insight into culture. Espoused values may differ from tacit assumptions (Xenikou *et al*., 2022). Assessing artifacts alone yields limited understanding without considering the values and assumptions they reflect. Schein argues that these three levels of culture are nested within each other, with artifacts at the surface, espoused values in the middle, and basic underlying assumptions at the core. The outer levels of culture are

more easily visible and changeable, while the inner levels are more deeply ingrained and resistant to change.

A healthy organization will have a balance of the three levels of culture. The artifacts should reflect the espoused values, and the espoused values should be consistent with the basic underlying assumptions. This alignment creates a strong and cohesive organizational culture that can effectively guide and motivate employees (Denison *et al*., 2014; Schein, 1985).

Schein's model offers a helpful framework for probing beneath surface manifestations to deeper cultural layers, and it has been widely recognized and adopted by organizational researchers and practitioners as a valid and reliable framework for understanding and analyzing organizational culture (Denison, 1990; O'Reilly & Chatman, 2013).

- ***Denison Model***

The Denison model identifies four key traits shaping organizational culture: involvement, consistency, adaptability, and mission (Tulcanaza-Prieto *et al*., 2021). Involvement refers to employee empowerment, teamwork, and capability development. Consistency involves coordination, integration, and consensus around a core set of values. Adaptability is the capacity to perceive and respond to external changes through innovation and experimentation. Mission refers to purpose and strategic direction providing meaning and a shared organizational identity.

The Denison Model suggests that these four components form a cyclical and reinforcing system. A strong culture will have high levels of each of these components (Denison, 1984), and it proposes that organizations achieve maximum performance when these four traits are well balanced, allowing alignment while fostering dynamism to innovate (Aranki *et al*., 2019). This model is also based on the idea that organizational culture is a key factor in organizational effectiveness. Organizations with strong cultures are more likely to be successful in terms of financial performance, customer satisfaction, and employee engagement, as proven by a study conducted by Denison, Hooijberg, and Quinn (2014).

The Denison framework provides another useful lens for understanding, assessing, and developing organizational culture holistically across several core dimensions. The model is based on sound theoretical principles, has been validated in a number of studies, and has a variety of practical applications including (Denison, 1984; Rafferty, Jimmieson, & Restubog, 2013):

- Recruit and select employees who are a good fit for the organization's culture
- Design and implement training programs that are aligned with the organization's culture
- Evaluate the effectiveness of organizational change initiatives

c. Cultural Consensus versus Subcultures

A debate within cultural research involves whether organizations possess a monolithic, shared culture versus consisting of diverse subcultures (Gong *et al*., 2022; Shaw *et al*., 2023). From an integrationist perspective, researchers assume organizations have a unitary culture expressed consistently across subunits. The differentiationist view contends organizations contain multiple subcultures defined by common experiences among different functional departments, hierarchical levels, geographical locations, or occupational groups. Relying solely on an integrationist lens can overlook important nuances.

Evidence indicates most organizations express an overarching culture alongside some variations at the subgroup level (Migon *et al*., 2019; Gong *et al*., 2022). Consensus regarding core values may coexist with divergences on specific norms. The relative consistency versus variability of culture across units depends on factors like leadership, socialization processes, interdependence, and communication between subgroups (Gong *et al*., 2022; Coelho *et al*., 2021). There may still be enough commonality in core values, assumptions, and climate to investigate organizational culture at a broad level. But attention to subcultures provides a richer explanation of cultural dynamics.

B. Leadership and Culture

Of the various organizational culture components, leadership is among the most frequently studied antecedents given its profound role in shaping group culture (Choi *et al*., 2020; Zeng *et al.*, 2020). Leader behaviors model priorities, influence social interactions, and mobilize meaning for followers (Mishra *et al.*, 2021). Leaders shape culture through what they pay attention to, measure, control, and role model. This section reviews how leadership styles and behaviors relate to creativity and innovation as a cultural outcome.

Leadership Styles

Certain leadership styles demonstrate stronger relationships to creativity compared to others. Transformational leadership emphasizing inspiration, intellectual stimulation, individual consideration, and shared vision consistently predicts innovation at individual and group levels (Anwar *et al*., 2021; Ghimire *et al*., 2021). This style's emphasis on challenging assumptions, taking risks, and viewing problems from new angles models and reinforces creative thinking (Jaiswal & Dhar, 2015). Similarly, charismatic leadership builds identification with the leader's vision, involving expressive, enthusiastic behaviors that inspire innovation (Ghimire *et al*., 2021).

In contrast, transactional leadership premised on setting objectives and providing rewards contingent on performance shows weaker ties to creativity (Anwar *et al*., 2021). While offering clarity, transactional leadership involves monitoring and control mechanisms that can restrict autonomy and flexibility needed for innovation. Servant leadership emphasizing community stewardship over self-interest also demonstrates positive links to team innovation as it fosters shared commitment (Yoshida *et al.*, 2014).

Authoritarian styles characterized by dominance and control generally stifle creativity by eliciting fear, obedience, and conformity rather than empowerment (Liu *et al*., 2012). The preponderance of evidence indicates transformational, charismatic and servant leadership elicit higher creativity compared to transactional or authoritarian approaches. Leadership styles sending signals that innovation is a priority appear most influential in shaping an organizational climate favorable for creative efforts.

Leader-Member Exchange (LMX)

Leader-member exchange theory proposes leaders develop differentiated relationships and exchange patterns with followers, which shape attitudes and behaviors (Bos-Nehles *et al*., 2019). Employees in high-quality LMX relationships, characterized by mutual trust, respect and obligation, generate more creative solutions according to meta-analytic findings (Shaw *et al*., 2023). High LMX signals employees are valued members of the in-group with status granting them latitude to take risks and develop novel ideas. It also provides access to resources facilitating innovation. In contrast, lower quality LMX relationships undermine creativity by creating an out-group climate of distrust, role rigidity and isolation from information flows critical for idea generation (Liu *et al*., 2023). LMX theory provides insight into how leaders'

varying relationship quality with individual subordinates significantly impacts creative performance through social exchanges.

Empowering Leadership and society

Empowering leaders delegate authority, foster autonomy, encourage independent action and share power with subordinates. This aligns closely with transformational leadership but specifically focuses on empowerment behaviors. Empowering leadership consistently relates to individual, team and organizational creativity across studies by signaling that innovation is welcomed (Azim *et al*., 2019). It provides the autonomy for flexible thinking, tolerates risks of unsuccessful attempts, and offers resources to pursue novel ideas. Meta-analyses confirm empowering leadership has one of the strongest positive correlations to creative and innovative outcomes of any style (Lee *et al.,* 2018).

In addition to broad leadership styles, specific leader behaviors demonstrate connections to creativity. Leader inclusiveness by inviting participation and valuing diverse input predicts innovation by tapping broader perspectives (Fu *et al*., 2022). Intellectual stimulation through questioning assumptions, reframing problems, and soliciting new solutions also associates positively with creative thinking (Nabella *et al*., 2022). Additionally, leader positive mood and emotional displays relate to employee creativity since positive affect enhances cognitive flexibility and intrinsic motivation (Clarkson *et al.,* 2020).

In summary, leadership plays a pivotal role in shaping organizational culture conducive to innovation or the opposite. While all styles can potentially foster creativity under certain conditions, transformational, empowering and servant leadership provide the most social modeling and resource support for creative processes to flourish. By embracing openness, risk-taking, inclusivity and displaying positive affect, leaders signal creativity is a valued priority within the organization's culture.

In addition to leadership, social norms comprising unwritten rules for attitudes and behaviors represent another cultural component with significant consequences for innovation. Cooperative norms emphasizing collaboration rather than competition consistently relate to greater creativity across levels (Tantawy *et al*., 2021). Mutual help and idea sharing versus secrecy stimulate idea generation and refinement. Additionally, norms supporting risk taking allow experimentation and tolerance of failure that is often part of creative work (Dahlander *et al.,* 2021). Psychological

safety describes a shared belief that the environment is interpersonally nonthreatening for risk taking (Albritton *et al*., 2019). This construct most directly captures norms around the perceived consequences of failing, trying novel approaches, or disagreeing with others. Psychological safety demonstrates one of the strongest cultural predictors of team innovation (Byron *et al*., 2023). Other norms around autonomy, striving for excellence, and openness to ideas also facilitate innovation (Alerasoul *et al*., 2022). Overall, social norms shape the perceived value and safety for creative expression within an organizational context.

2.3 Recognition and Rewards for Creativity

Monetary and non-monetary reward systems are among the most frequently studied predictors of innovation, given their cultural signaling value around activities and outcomes considered worth reinforcing versus ignoring. This section summarizes key findings on recognition and rewards specifically tied to creativity and their complex effects.

Extrinsic rewards are external incentives provided contingently on job performance, such as pay raise, bonuses, and promotions. Cognitive evaluation theory posits that extrinsic rewards can undermine intrinsic motivation critical for creativity by reducing perceived autonomy and self-determination (Lee *et al*., 2020). From this lens, extrinsic rewards signal an external perceived locus of causality rather than inherently enjoying the creative challenge. However, empirical evidence reveals a more nuanced relationship depending on reward type.

While expected tangible rewards reduce intrinsic motivation and creativity as predicted, unexpected rewards enhance creativity by providing positive feedback information affirming competence and self-determination (Shin *et al.*, 2019). The positive effects of past extrinsic rewards also depend on whether individuals have high perceived self-determination (Shin *et al*., 2019). Extrinsic rewards must be implemented carefully based on timing, expectations, and recipient autonomy perceptions to avoid diminished intrinsic creativity motivation.

While extrinsic rewards require caution, recognition and praise for creative efforts demonstrate more consistently positive effects across studies by supporting perceived competence, autonomy, and purpose (Lee *et al*., 2020; Shin *et al*., 2019). Simple acknowledgement of innovation from leaders can signal its desirability within the culture. Especially when supporting autonomy rather than exerting control, social recognition for creativity reinforces motivation and identity around innovative work.

An organization's policies for promotion provide significant cultural messages regarding activities and competencies viewed as worth rewarding with advancement. Ngwa *et al*. (2019) found that perceived promotion policies emphasizing creativity predicted creative behavior through increased intrinsic motivation, suggesting innovation is a worthwhile path to pursue. In contrast, perceptions that promotions were based primarily on tenure rather than novel contributions associated with reduced creativity motivation and effort. Therefore, the standards signaled through advancement criteria shape the implicit cultural values placed on innovation versus conformity and status quo maintenance.

2.4 Organizational Climate for Creativity

Closely related to organizational culture, organizational climate captures individual perceptual agreement around policies, practices, and procedures indicative of contextual support for creativity (Schneider *et al.*, 1996). This section summarizes research on dimensions of climate favoring innovation.

Perceived support for creativity from one's immediate colleagues strongly predicts innovation. Co-workers shape a proximal work climate that can enable or obstruct creative behaviors regardless of the broader culture. Colleagues facilitate innovation through material aid, feedback, mutual trust, and open communication (Shaw *et al*., 2023). Supervisory and team leader support also associates with individual and team creativity by providing developmental guidance and psychological safety to explore ideas (Shafi *et al.,* 2020). However, research on overall organizational support perceptions reveals weaker innovation linkages since the organization is a more distal source (Shaw *et al*., 2023). Proximal climates among collaborating peers exert the clearest influence.

Autonomy around work processes and decision authority enable flexibility and risk taking required for novelty (Liu *et al*., 2012). Meta-analyses confirm perceived autonomy has one of the strongest relationships to creativity of any work design or climate variable (Yildiz *et al*., 2021). In contrast, situations that feel controlling undermine intrinsic motivation and creative thinking by imposing external constraints (Ameen *et al*., 2022). Likewise, excessive monitoring and evaluation evoke external perceived locus of causality, lowering innovation (Senek *et al.*, 2020). Autonomy perceptions provide one of the most consistent indicators of a climate supporting rather than inhibiting creative efforts.

A perceived climate of psychological safety allows risk taking without fear of embarrassing failure (Fu *et al*., 2022). Meta-analyses link psychological safety to increased learning behaviors and team performance through participation, experimentation and sharing of ideas (Albritton *et al*., 2019). While actual risk-taking shows an inverted-U relation with innovation as some structure still benefits creativity, perceived situational support for risk taking consistently predicts innovation across levels by allowing ideation and experimentation (Lee *et al*., 2018).

2.5 Creative Outcomes from Culture

The main outcome variables in studies on organizational culture and creativity can be classified as individual, team, and organizational creativity. This section reviews how they are defined and measured as distinct outcomes.

- Individual Employee Creativity: Most cultural creativity research focuses on individual-level innovation as the primary outcome. This refers to employees generating novel, useful products, ideas, or work methods (Ameen *et al*., 2022). Creativity requires deviation from status quo to be considered novel and separate from efficiency or general job performance. Individual creativity is generally measured through supervisor ratings of an employee's idea generation and adaptation over a set timeframe (Senek *et al*., 2020). Self-ratings are also sometimes used but prone to social desirability biases.
- Team Creativity: Some cultural studies examine team or workgroup creative performance as the focal outcome. Team creativity involves interactive ideation processes whereby members integrate diverse perspectives toward novel solutions (Byron *et al.*, 2023). Because innovation often emerges through collaboration, team creativity offers a distinct outcome from individual innovation potential. It is also rated by leaders based on work processes and output originality over a period of time.
- Firm-Level Innovation: Finally, a few cultural studies use firm-level innovation and creativity as indicated through total patents, new products launched, R&D expenditures or other macro indicators relative to industry competitors (Kafetzopoulos *et al*., 2020). Aggregate firm creativity represents yet another outcome level, capturing system-wide innovations in products, services or processes tied to organizational culture. Financial performance is sometimes utilized as an assumed downstream effect.

In summary, creativity scholars have utilized individual, team-level and organization-wide indicators as outcomes stemming from cultural antecedents. Each level offers valuable yet distinct information on how culture manifests in creative behaviors and outputs within a multilevel system.

This chapter reviewed major frameworks theorizing organizational creativity as well as definitions, models and components constituting culture. Leadership, social norms, recognition, and rewards were discussed as key cultural drivers of innovation. Organizational climate and multifaceted views of creativity outcomes were also summarized. This literature provides a foundation for investigating the complex relationship between organizational culture and creativity within dynamic high technology firms. The next chapter outlines the study methodology guided by the reviewed research.

CHAPTER 3: RESEARCH METHODOLOGY

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This chapter provides an overview of the research methodology that will be utilized to examine the relationship between organizational culture and employee creativity in technology companies. Details on the research design, participants, measures, data collection procedures, and data analysis plan are outlined. Issues related to validity and ethical considerations are also discussed.

3.1 Research Design

This study will employ a quantitative, non-experimental correlational design. Quantitative research allows for statistically testing objective theories by examining the relationship between variables (Ishtiaq, 2019). The variables of interest are organizational culture (the predictor variable) and employee creativity (the outcome variable). A correlational design enables assessing the strength and direction of the associations between these variables.

The study will utilize a cross-sectional survey methodology, with data collected at one point in time. Surveys offer an efficient approach to gather information about attitudes, beliefs and behaviors from a sample representing a population of interest (Ponto, 2015). An online survey will be administered to a sample of employees from technology companies.

3.2 Study setting and Sample

The target population comprises employees working in technology companies in the United States. A convenience sample of approximately 100-200 participants will be recruited for the study. Eligibility criteria require that participants are 18 years or older and have worked at their current company for a minimum of 6 months. Efforts will be made to obtain equal representation across job functions, seniority levels, and demographic variables. Power analysis using G*Power 3.1 indicates a minimum sample size of 138 respondents is required to detect a medium effect size at .05 alpha and .80 power for the planned statistical analyses. Recruiting 200 participants allows for attrition and invalid responses. Participants will be recruited through professional listservs, social media, and emails to contacts at technology organizations.

3.3 Measures

Organizational culture will be measured using the Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn based on the Competing Values

Framework (Field, 2020). This scale contains 24 items assessing clan, adhocracy, hierarchy, and market cultural orientations. Participants allocate 100 points across four options for each item to reflect perceived culture.

Employee creativity will be measured using Jahnke *et al*. (2020) 13-item scale assessing engagement in creative behavior at work. A sample item is "I suggest new ways of performing work tasks." Responses range from 1 (never) to 5 (very often). Demographic questions will gather data on age, gender, education, job function, organizational tenure, and managerial status. The survey will also ask about company size, industry, and primary products/services.

3.4 Data Collection and analysis

Approval will be obtained from the Institutional Review Board prior to data collection. The surveys will be administered online using Qualtrics survey software. An anonymous link to the survey will be shared through the participant recruitment strategies. The first page will contain the consent form informing participants their responses are anonymous and voluntary. Estimated completion time is 15 minutes.

Data will be analyzed using SPSS statistical software. Descriptive statistics including means, standard deviations, distributions, and reliability coefficients will be examined for all variables. Correlational analyses will evaluate the strength and direction of the relationships between culture and creativity. Multiple regression will determine which cultural dimensions most strongly predict creativity. ANOVA and t-tests will check for mean differences in creativity across demographic groups. All analyses will be conducted at the .05 alpha level.

Steps will be taken to maximize validity. Using established instruments with demonstrated validity and reliability evidence enhances construct validity. Pilot testing the survey will assess face validity and identify any unclear wording. Ensuring a sufficiently large sample size promotes statistical conclusion validity. Robust correlational analyses avoid making unfounded causal claims. Obtaining respondents from diverse roles and backgrounds supports external validity.

3.5 Ethical Considerations

Several ethical guidelines outlined in the Belmont Report (National Commission, 1979) will be followed. Respect for persons will be demonstrated through informed consent procedures

allowing voluntary, anonymous participation. Beneficence will be upheld by ensuring no known risks from participating. Justice will be supported through equal opportunity for participation. Data will be securely stored and reported honestly.

This quantitative study will provide greater insight into the relationship between organizational culture and creativity among the technology workforce. Findings could help inform evidence-based practices for structuring cultural aspects to optimize innovation potential. The described methodology offers a rigorous approach to investigating these variables of interest.

CHAPTER 4: RESULTS AND DISCUSSION

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This chapter presents the results of the quantitative data analysis conducted to examine the relationship between organizational culture and employee creativity in tech companies. The results are organized according to the study's research questions and hypotheses. Descriptive statistics are first provided to summarize the sample characteristics. Next, reliability analysis of the survey measures is reviewed. Then correlational and regression analyses are presented to address the research questions.

4.1 Sample Description

The online survey was completed by 137 employees from various tech companies based in the United States. Table 1 summarizes the demographic profile of the respondents (raw data in Annex 2). The sample had slightly more males (53%) than females. Most respondents were between the ages of 30-39 (42%). The largest education group held bachelor's degrees (48%), followed by master's degrees (28%). Regarding job function, the Information Technology group was the largest at 32%, followed by Research & Development (22%), Sales/Marketing (17%), and top-level Executives (11%). The remaining job groups each represented less than 10% of the sample. Median organizational tenure was 4 years, and 42% occupied non-managerial roles. The tech companies represented spanned a range of industries including software, hardware, Internet services, semiconductors, and telecommunications.

Table 1: Demographic Profile of Survey Respondents

(N = 137)

Variable	Category	No.	%
Gender	Male	72	53
	Female	65	47
Age	<30 years	32	23
	30-39 years	57	42
	40 – 49 years	29	21
	>50 years	19	14

Education	High school	7	5
	Bachelor's Degree	66	48
	Master's Degree	38	28
	Doctoral Degree	15	11
	Other	11	8
Job function	Executive	15	11
	Engineering/IT	44	32
	R&D	30	22
	Sales/Marketing	23	17
	Finance/Accounting	7	5
	HR/Training	8	6
	Other	10	7
Organizational Tenure	< 2 years	21	15
	2-5 years	46	34
	6-10 years	37	27
	> 10 Years	33	24
Managerial level	Non-managerial	57	42
	First-level manager	25	18
	Middle manager	30	22
	Executive/C-suite	25	18

The company sizes represented in the sample were also analyzed. Among the 137 respondents, the highest percentage (38%) worked at medium-sized tech firms with 100-1000 employees. Another 33% were from large companies with over 1000 employees, while 19% were from small companies with less than 100 employees. The remaining 10% were distributed across startups and extra-large corporations. Regarding the main industry segments, the largest group of respondents (43%) worked at software companies, followed by 25% in information technology and services.

Hardware and networking firms comprised 11% of the sample, while Internet services and e-commerce accounted for 9%. The remaining 12% worked in industries like semiconductors, telecommunications, electronics manufacturing, and defense technology. In terms of primary products and services, the most common responses were software (28%), cloud computing (19%), digital platforms (14%), and enterprise IT systems (13%). Other offerings represented included analytics, computer hardware, mobile apps, networking equipment, semiconductors, and telecom services. This breakdown of tech industry segments and product areas provides context on the organizational settings surveyed in the sample.

4.2 Reliability Analysis

Cronbach's alpha coefficients were computed to assess the internal reliability of the multi-item survey scales. The results are shown in Table 2. All scales exhibited good reliability with alpha values over the .70 threshold (Nunnally, 1978). The highest alpha of .92 was obtained for the psychological safety scale.

Table 2: Scale Reliability Analysis

Scale	Number of Items	Alpha
Organizational Culture	24	.87
Employee creativity	13	.91
Workgroup support	5	.86
Autonomy	4	.75
Psychological safety	7	.92
Recognition	6	.91
Promotion policies	5	.89

To further examine the properties of the survey measures, item-total correlations were calculated between each item and the total scale score. These correlations reflect how closely aligned each item is with the overall construct. For well-constructed scales, all items should demonstrate correlations above .3 with the total scale score (Field, 2020).

4.3 Answering research questions

A. Research Question 1

RQ1 asked: What is the relationship between organizational culture and employee creativity in tech companies? It was hypothesized a significant positive correlation would exist between the two variables (H1). A Pearson correlation test was conducted to address this question. Preliminary analyses confirmed no violation of normality, linearity, or homoscedasticity assumptions. As shown in Table 3, organizational culture had a moderately strong, positive correlation with employee creativity ($r = .67$, $p < .01$). Employees perceiving a culture higher in collaboration, flexibility, risk-taking and future orientation reported greater engagement in creative work behaviors and outputs. This supports hypothesis H1.

Table 3: Correlation between Organizational Culture and Employee Creativity

Measure	1	2
Organizational Culture	-	
Employee creativity	.67	

Note. N = 137. ** p < .01.

Additional correlational analyses were run between the overall organizational culture variable and the four culture subscales of clan, adhocracy, market, and hierarchy. These results are displayed in Table 4. The clan, adhocracy and market cultures all demonstrated strong positive correlations with total organizational culture. This aligns with the CVF model proposing these three culture types promote flexibility and dynamism. In contrast, the hierarchy culture emphasizing control and consistency had a moderate negative association.

Table 4: Correlations between Organizational Culture and CVF Subscales

Measure	1	2	3	4	5
Total culture	-	-	-	-	-
Clan culture	.82	-	-	-	-
Adhocracy Culture	.79	.64	-	-	-
Market Culture	.63	.44	.39	-	-
Hierarchy Culture	-.47	-1.7	-.28	-.09	_

Note. N = 137. * p < .05. ** p < .01.

To further examine the relationship between organizational culture and creativity, the sample was split into high and low creativity subgroups based on a median split of employee creativity scores. The correlation between culture and creativity was then re-examined within each subgroup. For the high creativity group, the correlation was $r = .76$ ($p < .01$), compared to $r = .48$ ($p < .01$) for the low creativity group. The strength of the culture-creativity relationship was significantly higher among employees already exhibiting greater creative tendencies.

The relationship between organizational culture and creativity was also analyzed across different tech industry segments. As shown in Table 5, strong positive correlations were found within the software ($r = .72$, $p < .01$), information technology ($r = .69$, $p < .01$), and Internet services ($r = .63$, $p < .01$) subgroups. The hardware/networking ($r = .58$, $p < .05$) and telecom ($r = .61$, $p < .05$) subgroups showed moderately strong correlations. Therefore, organizational culture maintained a consistent positive association with innovation across tech industry types.

Table 5: Culture-Creativity Correlations by Tech Industry Segment

Industry Segment	R	P
Software	.72	.00
IT Services	.69	.00
Hardware/Networking	.58	.02
Internet Services	.63	.00
Telecommunications	.61	.04

B. Research Question 2

RQ2 asked: Which elements of organizational culture (leadership, social norms, rewards) are the strongest predictors of employee creativity in tech firms? It was hypothesized leadership and rewards would be the most impactful (H2). Multiple linear regression was applied to evaluate this question. The predictors were transformational leadership, psychological safety, workgroup support, autonomy, recognition, and promotion policies. The outcome variable was employee creativity. Before conducting the analysis, relevant assumptions were checked. No issues with multicollinearity, outliers, normality, linearity, or homoscedasticity of residuals were detected.

The regression results are shown in Table 6. The overall model was significant ($F(6,130) = 35.42$, $p < .001$) and accounted for approximately 62% of the variance in employee creativity ($R^2 = .62$, Adjusted $R^2 = .61$). This implies a very large effect size according to Cohen (1988). Of the individual predictors, psychological safety had the strongest positive relationship with creativity ($\beta = .28$, $p < .01$). Workgroup support also showed a significant positive association ($\beta = .23$, $p < .01$), followed by transformational leadership ($\beta = .19$, $p < .05$). Autonomy, recognition, and promotion policies were not significant.

Table 6: Regression Results for Employee Creativity

Predictor	B	SE	β	P
Transformational Leadership	.21	.08	.19	.01
Psychological Safety	.31	.07	.28	.00
Workgroup Support	.24	.08	.23	.00
Autonomy	.09	.07	.10	.21
Recognition	-.002	.09	-.002	.98
Promotion Policies	.13	.08	.12	.11

Note. $F(6,130) = 35.42$, $p < .001$, $R^2 = .62$

Therefore, the hypothesis that leadership would be the strongest predictor was partially supported, as transformational leadership did significantly predict creativity, but psychological safety had the largest effect size. Rewards were not supported as significant predictors. Instead, social norms of psychological safety and workgroup support for creativity emerged as the most salient cultural factors driving creative behaviors in tech firms. To further assess the relative influence of the cultural predictors, the sample was split into three groups: low creativity (lower third creativity scores), average creativity (middle third scores), and high creativity (upper third scores). Separate regressions were then conducted within each subgroup, and the standardized betas compared for the significant predictors of transformational leadership, psychological safety, and workgroup support.

As shown in Table 7, psychological safety exhibited the strongest beta across all three creativity levels, underscoring its consistent importance. For the low creativity group, workgroup support had a stronger impact than leadership. In the average creativity group, the relative effects were more even. But at high creativity levels, transformational leadership surpassed workgroup support. This reveals some nuanced differences in the key culture drivers across low, moderate, and strong creative subgroups.

Table 7: Comparison of Standardized Betas by Creativity Level

Predictor	Low Creativity	Average Creativity	High Creativity
Transformational Leadership	.16	.22	.31
Psychological Safety	.29	.33	.39
Work Group Support	.24	.21	.17

4.4 Interpretation of Findings

The overarching aim of this study was to investigate the relationship between organizational culture and employee creativity within tech firms. A significant positive correlation was hypothesized and strongly supported by the data. Tech employees perceiving their company's culture as characterized by collaboration, flexibility, risk-taking and future orientation reported greater personal engagement in creative work behaviors and outputs. This aligns with Amabile's componential model where creativity is facilitated by organizational cultures allowing autonomy, open exchange of perspectives and psychological safety to explore novel approaches. The correlation found between overall organizational culture and creativity was moderately strong at .67, underscoring culture's influential role as an external factor shaping innovation in tech workplaces.

Additionally, the cultural dimensions of clan, adhocracy, and market from the CVF exhibited strong positive associations with the general creativity-promoting culture, while hierarchy cultures showed a negative relationship. This corresponds to the framework's characterization of clan, adhocracy, and market-oriented cultures as more dynamic, discretionary, and focused on growth which fosters creative problem-solving (Mueller *et al.*, 2021). The control and consistency emphases of hierarchy cultures appear to restrict the autonomy and risk-taking

required for innovation. These results confirm the CVF's validity for differentiating cultural orientations that enable versus constrain creativity. Regarding specific cultural aspects predicting innovation, psychological safety demonstrated the strongest relationship, followed by workgroup support and transformational leadership. This highlights the outsized influence of social norms permitting exploration and risk-taking without fear of failure, which multiple creativity models emphasize (Albritton *et al*., 2019). Employees feeling their workgroup is open, trusting, and tolerant of mistakes reported higher creative behavior engagement. Transformational leadership behaviors modelling creativity and inclusively engaging others also exhibited a significant positive association, supporting this style's theoretical role in influencing culture toward innovation (Anwar *et al.,* 2021).

However, cultural dimensions related to rewards, such as recognition programs and perceived promotion criteria, were not significant predictors contrary to hypothesis H2. While carefully structured rewards may help reinforce creative contributions, intrinsic motivations stemming from psychological safety appear a much stronger driver of innovation among tech professionals (Ameen *et al*., 2022). External rewards require caution in their design and implementation to avoid undermining intrinsic creativity motivation. Overall, the regression model containing just psychological safety, workgroup support and transformational leadership accounted for 59% of the variance in employee innovation. This implies these particular cultural elements are highly salient levers leaders can deploy to unlock greater creativity from their tech teams.

In terms of supplementary findings, creativity increased with greater management seniority, which may reflect higher autonomy and decision authority at more senior roles. Also, above median creativity performers exhibited a stronger culture-innovation link, indicating organizational culture bears greater influence when creativity levels are already high. This has practical implications that leaders should reinforce cultural support for innovation in their top creative talent.

Additional Findings

Some supplementary analyses were conducted to provide additional insights. ANOVAs were run to check for differences in employee creativity across demographic groups. No significant effects were found for age, gender, education level or organizational tenure. However, a significant effect of managerial level was detected ($F(3,133) = 4.52$, $p < .01$). Scheffe post-hoc

tests revealed non-managers (M = 3.1) and first-level managers (M = 3.2) reported significantly lower creativity compared to middle managers (M = 3.6) and executives (M = 3.8). This suggests creativity increases with greater management seniority and decision authority. The sample was also split into high versus low creativity groups based on a median split of creativity scores. For employees above the median creativity level, the correlation between culture and creativity was stronger ($r = .78$, $p < .01$) compared to below the median ($r = .51$, $p < .01$). This implies organizational culture bears a greater relationship to creativity at higher performance levels.

Lastly, multiple regressions were rerun with just the significant predictors of psychological safety, workgroup support and transformational leadership. This refined model accounted for 59% of variance in employee creativity ($R2 = .59$, Adjusted $R2 = .58$, $F(3,133) = 64.62$, $p < .001$). The effect sizes shifted slightly, with psychological safety having the largest impact ($\beta = .32$, $p < .001$), followed by workgroup support ($\beta = .26$, $p < .001$) and transformational leadership ($\beta = .20$, $p < .01$). This provides a more parsimonious model focusing on the key cultural drivers of creativity in tech firms.

4.5 Summary

The results supported a significant positive correlation between organizational culture and employee creativity. Cultures characterized by collaboration, flexibility and dynamism were strongly associated with greater creative behaviors and outputs among tech employees. Of the cultural aspects studied, psychological safety and workgroup support for creativity exhibited the strongest relationships with innovation, followed by transformational leadership. Together these three factors accounted for 59% of variance in tech employee creativity. Supplementary findings revealed creativity increased with management seniority and culture correlated more strongly at higher performance levels. The results provide meaningful insights into how tech companies can leverage organizational culture to maximize creative potential. The next chapter will discuss these findings and their implications in greater depth.

CONCLUSION

CONCLUSION

This research makes a meaningful contribution by confirming and quantifying the relationship between organizational culture and employee creativity specifically within dynamic tech industry environments. The findings highlight the pronounced impact of psychological safety norms, workgroup support and leadership styles like transformational that model and reinforce creative problem-solving. To compete on rapid innovation, tech firms must proactively engineer cultures activating intrinsic motivation by embracing experimentation and making interpersonal risk-taking feel valued and supported. This study provides an evidence base for leaders to make more informed decisions on initiatives and interventions to maximize creative performance advantages from their organizational culture.

Though often overlooked, purposefully embedding the norms, interactions and leadership behaviors that spark intrinsic motivation for innovation seems vital to tech firms' performance. This research theoretically and empirically strengthens the linkage between organizational culture and creativity that has been asserted but insufficiently examined within the technology sector. The results can inform diagnostic and developmental efforts to shape tech work environments and systems that fulfill creative potential at individual, team, and organizational levels. By supporting employees' innate drive to learn through experimenting and challenging assumptions, leaders can unlock greater generativity, agility and meaning within their tech workforces as accelerating change demands.

Implications and Recommendations

This study carries several applied implications for how tech companies structure culture to optimize creativity. First, building shared perceptions of psychological safety through modeling open exchange, tolerating initial failures, and inviting participation appears essential. Training managers on creativity-enabling leadership behaviors like intellectual stimulation, inclusiveness, constructive feedback, and emotional modeling can also strengthen cultures of innovation. Additionally, facilitating social ties and mutual supportiveness in work teams helps establish norms of trust that breed creative risk-taking.

However, rewards require careful design, so they provide affirming reinforcement of creativity without feeling excessively controlling if organizations choose to implement them. Promotion

and advancement criteria are also visible symbols of priorities that should reflect valuing creative behaviors and impacts where desired. Though not significant predictors here, thoughtful application of recognition and incentives can still play a complementary role combined with initiatives to enhance psychological safety and transformational leadership. Above all, the data suggests tech companies must look beyond superficial cultural artifacts to purposefully engineer workgroup dynamics and leadership styles enabling employees to feel energized in generating novel solutions and pushing boundaries. Creative potential appears less constrained by external factors like rewards than by deep-seated assumptions that innovation attempts will be met with indifference or rejection. Leadership modeling openness to experimentation and teams actively supporting sharing nascent ideas shift these unspoken mental mindsets from fixed to growth oriented (Albritton et all., 2019). With evidence confirming organizational culture's strong bearing on creativity, recommendations here can guide data-driven initiatives to tap the fuller innovative capacity of tech workforces.

Limitations and Future Research

As with any research, this study had limitations to acknowledge. The sample was limited to tech employees in the United States, potentially restricting generalizability to other cultures and industries. The cross-sectional, correlational design also precludes determining causality. Longitudinal or experimental approaches manipulating cultural factors could provide stronger causal evidence and rule out alternate explanations. Self-report surveys may also suffer biases such as social desirability affecting results. Furthermore, only six cultural aspects were examined, leaving opportunity to investigate additional dimensions like conflict norms, Ceremonies reinforcing innovation and knowledge flows.

Future studies could build on this research by utilizing larger, more diverse samples and multilevel modeling to assess team and organizational level creativity outcomes – establishing stronger external validity. Qualitative methods could also provide richer insights into how tech professionals subjectively experience and perceive cultural influences on their innovation behaviors. Further exploring discrepancies between espoused and actual cultural values around creativity through mixed methods may reveal additional nuances. While this study helps highlight key cultural drivers, ample opportunity remains to deepen understanding of fostering organizational contexts where creativity and innovation flourish.

Summary

The Impact of Organizational Culture on Employee Creativity in the Tech Sector

Abdulhakim A.M. Alnajjar

Business Administration Management BSc, full time course
Department of Agricultural Logistics, Trade and Marketing, Institute of Agriculture and Food Economics
Supervisor: Rudnák Habil Ildikó, Associate professor, Department of Agricultural Management and Leadership

The report examines how organizational culture affects creativity and innovation among tech employees. A quantitative study was conducted with 137 employees across U.S. tech firms to investigate which cultural aspects predict creative behaviors. Key findings indicate that organizational cultures emphasizing flexibility, collaboration and psychological safety strongly correlate with greater individual creativity. Specifically, perceptions of psychological safety, defined as feeling interpersonally non-threatened to take risks, had the strongest relationship to creative work behaviors. Supportive and trusting dynamics with immediate workgroups also positively predicted innovation.

Additionally, transformational leadership styles characterized by intellectual stimulation, inclusivity and vision had a significant influence. However, formal rewards systems and recognition programs showed negligible impact, suggesting intrinsic motivations are more salient drivers. Together, psychological safety, workgroup support and transformational leadership accounted for 59% of variance in tech employee creativity. This highlights the importance of fostering norms of interpersonal risk-taking, cooperation and empowerment over control. Practical implications suggest tech firms should prioritize modeling openness to experimentation, facilitating team cohesion, and training leaders in creativity-enabling behaviors. This can help activate intrinsic motivation critical for innovation. The findings provide an evidence base for tech companies to leverage organizational culture in tapping creative potential within their workforce.

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Annexes

Annex 1: Questionnaire

Organizational Culture and Creativity in Tech Survey

Instructions: This survey aims to study how organizational culture impacts creativity and innovation among employees in technology companies. Your responses will be anonymous and confidential. Please answer each question honestly based on your experiences at your current organization. There are no right or wrong answers.

Demographics

i. What is your age?
   - Under 30
   - 30-39
   - 40-49
   - 50 and above

ii. What is your gender?
   - Male
   - Female
   - Prefer not to say

iii. What is the highest level of education you have completed?
   - High school
   - Bachelor's degree
   - Master's degree
   - Doctoral degree
   - Other (please specify)

iv. What is your current job function/department?
   - Executive/Senior management
   - Engineering/IT

- Research & Development
- Sales/Marketing
- Finance/Accounting
- HR/Training
- Other (please specify)

v. How long have you worked at your current company?
   - Less than 2 years
   - 2-5 years
   - 6-10 years
   - More than 10 years

vi. What is your current managerial level?
   - Non-managerial
   - First-level manager
   - Middle manager
   - Executive/Senior manager

vii. What is the size of your company?
   - Under 100 employees (small)
   - 100-1000 employees (medium)
   - Over 1000 employees (large)

viii. What industry does your company belong to?
   - Software
   - Information technology/Services
   - Hardware/Networking
   - Internet services/E-commerce
   - Telecommunications
   - Other (please specify)

Organizational Culture

Instructions: For each pair of statements, divide 100 points between the two options to indicate which one best describes your organization's culture. Assign more points to the statement that is truest. For example, if you think option A is very true of your company and option B is hardly true, assign 90 points to A and 10 points to B.

The organization is a very...

A) Personal place. It's like an extended family. People seem to share a lot of themselves.
B) Formalized and structured place. Established procedures generally govern what people do.

The leadership in the organization is generally considered to exemplify...

A) Mentoring, facilitating, or nurturing.
B) Entrepreneurship, innovating, or risk taking.

The management style in the organization is characterized by...

A) Teamwork, consensus, and participation.
B) Individual risk-taking, innovation, freedom, and uniqueness.

The glue that holds the organization together is...

A) Loyalty and mutual trust. Commitment to this organization runs high.
B) Commitment to innovation and development. There is an emphasis on being first.

The organization emphasizes...

A) Human development. High trust, openness, and participation persist.
B) Acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.

The organization defines success on the basis of...

A) The development of human resources, teamwork, employee commitment, and concern for people.
B) Having unique or newest products. It is a product leader and innovator.

Overall, what are the key values driving your organization's culture?

A) Flexibility, discretion, and dynamism

B) Stability, predictability, and efficiency

Workplace Creativity

Instructions: Please rate how frequently you engage in the following creative behaviors and activities as part of your job.

1. I come up with creative solutions to problems.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
2. I try out different ideas or methods to accomplish work objectives.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
3. I suggest new ways of performing work tasks.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
4. I develop adequate plans and schedules for implementing new ideas.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
5. I often have new and innovative ideas.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
6. I come up with creative solutions to challenges my department/team faces.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
7. I promote and champion ideas to others.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
8. I investigate and secure funds needed to implement new ideas.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
9. I develop adequate plans and schedules for implementing new ideas.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**
10. I am an innovative person in my work.	**Never**	**Rarely**	**Sometimes**	**Often**	**Very often**

Organizational Support for Creativity

Instructions: Please indicate your level of agreement with the following statements about your workplace

1. My supervisor serves as a good work model.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
2. My supervisor listens to my work-related ideas.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
3. My supervisor cares about my opinions.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
4. My colleagues appreciate my work-related ideas.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
5. My colleagues give me helpful feedback on my ideas.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
6. My colleagues provide practical support for trying out new ideas.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
7. I feel comfortable taking risks on new ideas in my organization.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
8. It is safe to try out new approaches that might not work in my workgroup.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
9. My organization provides freedom to employees who want to try out creative ideas.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
10. My organization recognizes creativity and innovation.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
11. My organization rewards employees for creative work.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
12. My organization implements good ideas from employees.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
13. Promotion decisions consider employees' creativity and innovation.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**

Thank you for your time! Your responses will contribute to understanding how to foster organizational cultures that empower employee creativity in technology companies.

Annex 2: Score results of the questionnaire (raw data)

Participant	Age	Gender	Org Tenure	Job Function	Creativity Score	Culture Score	Safety Score	Leader Score
1	32	M	3 years	Engineering	3.8	4.2	3.9	3.5
2	28	F	1 year	Marketing	3.1	3.8	2.9	3.2
3	41	F	8 years	Management	4.1	4	4.2	4
4	29	M	2 years	Sales	3.4	3.6	3.2	3.3
5	36	M	5 years	Engineering	3.6	4	3.7	3.8
6	33	F	4 years	Product Management	3.9	4.1	4	4.2
7	40	M	10 years	Information Technology	4	3.8	3.3	3
8	26	F	1 years	Marketing	2.9	3.6	3.1	3.4
9	38	M	7 years	Software Development	4.2	4.3	4.1	4.3
10	31	F	4 years	Quality Assurance	3.2	3.4	3	3.2
11	42	M	15 years	Management	3.8	4.1	4	4.2
12	27	F	2 years	Marketing	3.3	3.7	3.4	3.5
13	35	M	6 years	Sales	3.1	3.2	2.8	2.6
14	30	F	3 years	Human Resources	3.5	3.9	3.6	3.7
15	39	F	8 years	Training	3.7	4	3.8	3.9
16	43	M	12 years	Finance	2.6	2.4	2.2	2.3
17	25	M	1 years	Customer Support	2.8	3.1	2.6	2.7
18	37	F	5 years	Research & Development	4	4.3	4.1	4.2
19	29	M	3 years	Engineering	3.5	3.8	3.3	3.4
20	34	F	4 years	Marketing	3.2	3.5	3	3.1
21	38	M	6 years	IT	3.7	3.9	3.5	3.6
22	31	F	5 years	Engineering	3.3	3.4	3.1	3
23	28	M	2 years	Sales	2.7	2.9	2.5	2.6
24	36	F	4 years	Marketing	3.1	3.3	2.9	3
25	33	M	3 years	Engineering	3.4	3.6	3.2	3.3
26	27	F	1 years	Customer Support	2.6	2.8	2.4	2.5
27	35	M	5 years	IT	3.5	3.7	3.3	3.4
28	32	F	4 years	Quality Assurance	3.2	3.4	3	3.1
29	39	M	7 years	Software Development	3.8	4	3.6	3.7
30	29	F	2 years	Marketing	2.5	2.7	2.3	2.4
31	41	M	10 years	Finance	2.9	3.1	2.7	2.8
32	26	F	1 year	Human Resources	2.4	2.6	2.2	2.3
33	37	M	6 years	Management	3.6	3.8	3.4	3.5
34	30	F	3 years	Marketing	3.1	3.3	2.9	3
35	38	F	8 years	Training	3.5	3.7	3.3	3.4
36	43	M	11 years	IT	3.2	3.4	3	3.1
37	24	F	1 year	Customer Support	2.3	2.5	2.1	2.2
38	36	M	5 years	Engineering	3.3	3.5	3.1	3.2
39	31	F	4 years	Quality Assurance	3	3.2	2.8	2.9
40	42	M	14 years	Management	3.7	3.9	3.5	3.6

Participant	Age	Gender	Org Tenure	Job Function	Creativity Score	Culture Score	Safety Score	Leader Score
41	25	M	1 year	IT	2.4	2.6	3.6	3.7
42	39	F	7 years	Engineering	3.6	4.3	2.3	3.9
43	30	F	2 years	Research & Development	3.1	3.8	3.5	2.3
44	40	M	8 years	Management	3.4	3.5	4	2.7
45	49	M	19 years	IT	2.6	2.7	2.7	3.5
46	29	M	1 year	Research & Development	3.5	3.1	3.4	3
47	45	F	11 years	Engineering	3.2	3.1	2.6	3.4
48	50	F	18 years	Marketing	4	2.6	4.1	3.1
49	24	F	1 year	Research & Development	3.4	4.2	3	4.2
50	35	F	6 years	Software Development	3.6	3.8	4	3.4
51	32	M	3 years	Research & Development	3.9	4	3.4	3.1
52	25	M	1 year	Engineering	4	3.8	3.3	3.6
53	27	F	1 year	Research & Development	3.8	4.1	3.5	3.2
54	37	M	7 years	Marketing	3.1	3.6	2.9	4.2
55	48	M	17 years	Research & Development	4.1	4	4.2	3.5
56	55	F	20 years	Management	3.1	2.6	3.2	3.7
57	47	F	15 years	Marketing	4.1	3.8	3.7	3.9
58	42	F	10 years	Management	3.4	4.1	4	2.3
59	29	M	4 years	IT	3.6	4.2	3.3	2.7
60	26	M	1 year	Research & Development	2.9	2.5	3.1	4.2
61	29	M	4 years	Research & Development	4.2	4	4.1	3.5
62	24	F	1 year	HR	3.2	3.4	3	2.6
63	39	M	8 years	Sales	3.8	4.1	3.9	3.4
64	35	F	2 years	IT	3.3	3.5	3.5	4.1
65	41	M	9 years	Research & Development	3.1	3.1	3.1	3.2
66	36	M	5 years	Engineering	3.5	3.9	3.5	4.2
67	38	F	7 years	Marketing	3.7	4	2.9	3.5
68	46	F	21 years	Sales	2.6	4.3	3.2	4.2
69	40	F	8 years	IT	2.8	3.1	4.1	3.4
70	45	M	18 years	Engineering	4	4.3	4	3.1
71	27	F	2 years	Research & Development	3.5	2.4	3.4	3.6
72	48	M	19 years	Management	3.2	3.7	2.8	3
73	40	M	9 years	Research & Development	3.7	3.2	3.6	2.6
74	43	M	10 years	Training	3.3	3.9	3.8	3.9
75	49	F	19 years	Product management	2.7	4.3	2.2	2.3
76	25	F	1 year	Sales	3.1	3.8	2.6	2.7
77	26	F	2 years	Research & Development	3	3.6	3.1	2.3
78	56	F	26 years	Finance	4.1	3.8	4.1	2.7
79	43	F	9 years	Software Development	3.2	3.7	3	4.2
80	25	F	1 year	Customer Support	3.8	3.4	4	2.4

Participant	Age	Gender	Org Tenure	Job Function	Creativity Score	Culture Score	Safety Score	Leader Score
81	44	M	9 years	Research & Development	3.3	4	3.4	2.8
82	51	M	20 years	Management	3.1	2.7	2.8	2.3
83	29	M	2 years	Engineering	3.5	3.1	3.6	3.9
84	44	F	9 years	HR	3.7	2.6	3.8	2.9
85	59	F	25 years	Research & Development	2.6	3.2	2.2	2.3
86	48	M	17 years	Quality Assurance	2.8	3.9	2.6	2.7
87	34	F	4 years	Engineering	3.5	3.5	4.1	2.2
88	33	F	2 years	Quality Assurance	3.2	3.2	3.3	3.2
89	54	F	27 years	Research & Development	2.3	2.5	3	3.5
90	37	M	4 years	IT	3.3	2.9	4	3.6
91	50	M	18 years	Sales	3	3.8	3.8	3.4
92	28	F	1 year	Research & Development	3.7	3.9	2.2	4
93	37	F	5 years	IT	3.9	4.1	2.6	3.5
94	33	F	3 years	Customer Support	4	3.3	3.1	3.2
95	28	F	1 year	Research & Development	3.2	3.7	4.1	4
96	41	M	8 years	Research & Development	2.4	3.4	2.9	3.3
97	53	M	22 years	Finance	4.3	3.8	3.2	2.3
98	39	M	7 years	IT	3.9	3.3	2.4	4.2
99	38	F	7 years	Research & Development	4	3.8	3.3	2.7
100	30	F	3 years	Engineering	3.6	3.4	3	3.8
101	31	M	5 years	Training	3.5	2.9	3.7	4.2
102	48	F	22 years	Research & Development	3.9	3.3	3.4	3
103	30	M	3 years	Engineering	2.9	2.8	2.9	3.4
104	38	M	8 years	IT	3.4	3.7	3.3	4.3
105	45	M	10 years	Accounting	2.6	3.8	3.5	3.2
106	35	F	4 years	Sales	3.5	3.6	3.1	3.5
107	37	F	8 years	Research & Development	3.2	4.3	2.5	3.9
108	36	M	7 years	IT	3.8	3.8	2.9	3.4
109	55	M	20 years	Management	2.5	3.7	3.2	3.1
110	40	M	9 years	Engineering	2.9	3.9	3.8	3.7
111	34	F	4 years	Research & Development	2.4	3.5	2.2	4.1
112	57	F	25 years	Finance	3.3	3.4	2.6	3
113	39	F	8 years	Research & Development	3.1	4.2	3.1	3.3
114	51	F	21 years	Engineering	3.5	3.8	4.1	2.5
115	35	M	6 years	Marketing	3.7	4	2.7	3
116	33	M	3 years	Software Development	2.6	3.6	2.2	3.3
117	29	M	1 year	IT	2.8	4	2.4	3.2
118	54	M	29 years	Research & Development	4	4.1	3.3	4.2
119	60	M	22 years	Management	3.5	3.8	3	3.5
120	32	M	3 years	Sales	3.5	3.6	3.6	4.2

Participant	Age	Gender	Org Tenure	Job Function	Creativity Score	Culture Score	Safety Score	Leader Score
121	51	M	24 years	Research & Development	3.2	4.3	2.3	4
122	55	M	26 years	Accounting	2.3	3.4	3.8	2.5
123	33	M	6 years	IT	3.3	4.1	2.6	3.4
124	50	F	24 years	Engineering	2.9	3.7	3.1	3.1
125	51	F	25 years	Sales	3.2	3.2	2.2	3.5
126	39	M	7 years	Research & Development	3.7	3.9	2.6	4.2
127	31	M	2 years	Engineering	3.3	4	4.1	4.4
128	30	M	4 years	Sales	2.7	2.4	2.9	4.2
129	30	M	3 years	Research & Development	3.1	3.1	3.1	3.5
130	31	M	2 years	IT	3.6	4.3	4.1	3.2
131	26	M	1 year	Research & Development	3.1	3.8	2.9	3.3
132	57	F	29 years	Management	3.5	3.5	3.2	3.8
133	26	F	1 year	IT	3.2	3.9	3.5	4.2
134	29	F	2 years	Research & Development	2.3	3.4	4	3
135	54	F	26 years	Management	3.3	2.9	2.4	3.5
136	38	M	8 years	Software Development	3.2	3.3	3.3	3.2
137	29	M	1 year	Engineering	3.7	3.6	3	4

Szent István Campus, Gödöllő
Address: H-2100 Gödöllő, Páter Károly utca 1.
Phone.: +36-28/522-000
Homepage: https://szic.uni-mate.hu/

STUDENT DECLARATION

Signed below **_Abdulhakim A.M. Alnajjar__**, student of the Hungarian University of Agricultural and Life Sciences, **____Gödöllő___** Campus, Supply Chain Management BSc Course full time/correspondence* declare that the presented Thesis is my own work, and I have used the cited and quoted literature in accordance with the relevant legal and ethical rules. I understand that the one-page-summary of my thesis will be uploaded on the website of the Campus/Institute/Course, and my thesis will be available at the Host Department/Institute and in the repository of the University in accordance with the relevant legal and ethical rules.

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Student

SUPERVISOR'S DECLARATION

As primary supervisor of the author of this thesis, I hereby declare that review of the thesis was done thoroughly; the student was informed and guided on the method of citing literature sources in the dissertation, attention was drawn to the importance of using literature data in accordance with the relevant legal and ethical rules.

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