

## The Influence of Cultural Factors in the Business Environment on the Formation and Maturity of Entrepreneurial Ecosystems

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### ABSTRACT

This study explores how cultural factors within the business environment affect the formation and maturity of entrepreneurial ecosystems. Employing a qualitative, exploratory approach, the data were analyzed using thematic analysis. The research population consisted of managers and entrepreneurs of knowledge-based businesses in Isfahan. Using snowball sampling, semi-structured interviews were conducted with nine experts, achieving theoretical saturation.

The analysis identified several key themes that shape the development and maturation of entrepreneurial ecosystems: a culture of innovation and risk-taking, collective values and beliefs, leadership style and structure, continuous learning and skill development, and market- and customer-oriented perspectives. The findings indicate that promoting innovative thinking and risk-taking, fostering trust and collaborative work, implementing transformational leadership, emphasizing ongoing skill development, and focusing on customer needs create a strong foundation for sustainable ecosystem growth and development.

These insights offer valuable guidance for policymakers and ecosystem managers in designing supportive strategies and development programs.

**Key words:** Entrepreneurial ecosystem, business culture, innovation ecosystem, entrepreneurship

### INTRODUCTION

Entrepreneurial activities are widely recognized as crucial drivers of economic growth and sustainable development. Beyond generating employment, entrepreneurship promotes innovation, productivity, and the creation of new market value, with far-reaching economic, social, and cultural impacts (Esfandiyar et al., 2025). These activities serve as catalysts for economic development, a role amplified by the rapid advancement of technology and the rise of technology-based entrepreneurship (Acs et al., 2014). Entrepreneurship is not limited to technology; it also encompasses social, sustainable, strategic, and knowledge-based initiatives. Even large multinational companies consider entrepreneurship a key source of innovation and competitiveness, adopting corporate entrepreneurship strategies to enhance their market position (Lui Jaksic et al., 2018).

Although entrepreneurial ventures are often initiated by individuals, their success largely depends on institutional and environmental factors, commonly conceptualized as the entrepreneurial ecosystem (Aparicio et al., 2016). An entrepreneurial ecosystem is a dynamic and complex network of actors, resources, and

interactions within a specific geographic or thematic context. These components interact synergistically to support the creation, development, and maturation of innovative ventures (He et al., 2024). The ecosystem typically includes entrepreneurs, investors, universities, research and development centers, government agencies, large corporations, support organizations, advisory networks, regulatory frameworks, entrepreneurial culture, and financial and human resources (Neto et al., 2024). By facilitating startup creation, fostering innovation, and promoting economic growth and employment, these ecosystems enhance resource accessibility, create new opportunities, and improve the efficiency of entrepreneurial processes (Fomenko et al., 2024; Singh et al., 2025).

Entrepreneurial ecosystems are multidimensional and shaped by numerous factors, with business culture being particularly influential. Business culture encompasses values, attitudes, norms, and behaviors that guide economic and entrepreneurial activities. It directly affects the formation and maturation of ecosystems by influencing risk tolerance, innovation propensity, opportunity recognition, and entrepreneurs' interaction capabilities (Donaldson, 2021). The ecosystem itself functions as a continuous network of actors, organizations, and institutions that collectively enable entrepreneurs to identify and exploit opportunities. Research indicates that national culture, due to its unique traits, plays a decisive role in shaping entrepreneurial behaviors (Dubina & Ramos, 2016). Cultural dimensions such as power distance, individualism, uncertainty avoidance, and long-term orientation can either facilitate or constrain entrepreneurship. Hofstede's cultural dimensions model has been widely adopted as a robust analytical framework to systematically examine these cultural differences and their impact on economic and entrepreneurial behavior (Canestrino et al., 2023).

Given the significant role of culture in entrepreneurial ecosystems, this study aims to investigate the influence of cultural factors within the business environment on the formation and maturation of these ecosystems. A better understanding of these cultural influences can guide policymakers, decision-makers, and entrepreneurs in designing effective strategies to support and develop entrepreneurship.

## **Theoretical Foundations**

### **Entrepreneurial Ecosystem**

Entrepreneurial activities originate from an individual's initiative, motivation, aspirations, skills, and capacity. However, no one operates in isolation—especially in entrepreneurial projects, which demand dedication, hard work, significant resources, and patience to succeed. In such ventures, the collaborative effort of all participants in the ecosystem plays a vital role in achieving success (Magni et al., 2024). Often, support activities within the ecosystem are critical for project outcomes. A well-organized and cohesive community within the entrepreneurial ecosystem significantly contributes to entrepreneurial success.

An entrepreneurial ecosystem is a complex system of interconnected actors, factors, and relationships within a defined geographic or thematic context (Lui Jaksic et al., 2018). Its primary purpose is to support and foster entrepreneurial activities. Eisenberg (2011) identifies the components of entrepreneurship as policy, taxation, culture, support structures, human capital, and market conditions. While some factors—such as markets and human resources—directly influence entrepreneurial activities, others facilitate and enhance project development. Within this ecosystem, culture acts as a supportive factor through norms, values, and organized activities that foster an entrepreneurial spirit. Culture also shapes risk-taking, innovative thinking, creativity, and experimentation.

### **Cultural Dimensions**

Culture is recognized as a crucial element of the entrepreneurial ecosystem (Eisenberg, 2011). It affects the

willingness to take risks, identify and exploit opportunities, innovate, and adopt collective approaches (Dubina et al., 2016). Culture can either encourage or hinder specific entrepreneurial behaviors. Geert Hofstede defines national culture as a “collective programming of the mind” that distinguishes one group from another. Culture is learned, not inherited; it emerges from social environments rather than genetics (Hofstede et al., 2010). In other words, culture reflects shared characteristics within a group and differentiates them from other groups. These shared traits are transmitted across generations, particularly from parents to children.

Hofstede’s analysis identifies systematic differences across national cultures along four primary dimensions: power distance, individualism, uncertainty avoidance, and masculinity. A fifth dimension, long-term orientation, measures a society’s focus on traditions and historical continuity. Low scores indicate adherence to social norms and traditions (short-term orientation), while high scores reflect adaptability, change, and practical problem-solving (long-term orientation). From an entrepreneurial perspective, a long-term orientation is generally associated with higher entrepreneurial performance.

### **Research Methodology**

This study is qualitative, applied, and follows an exploratory approach. Data were collected through semi-structured interviews and analyzed using thematic analysis. The research population consisted of managers and entrepreneurs of knowledge-based businesses in Isfahan. Snowball sampling was employed, continuing until theoretical saturation was reached. The researcher conducted interviews with nine experts, achieving theoretical saturation. Additionally, data collection involved library research. The interview data were systematically analyzed using thematic analysis to identify patterns and themes.

### **Research Findings**

#### **Step 1: Familiarization**

The first step is to become familiar with the data. Before analyzing individual elements, it is essential to have an overall understanding of all collected information. In this study, this step included transcribing audio recordings, reading the texts, taking initial notes, and reviewing the data to gain familiarity.

#### **Step 2: Coding**

In this step, the data are coded. Coding involves highlighting sections of text—usually phrases or sentences—and assigning brief labels or “codes” to describe their content.

#### **Step 3: Identifying Themes**

Next, the generated codes are reviewed to identify patterns and develop themes. Themes are broader than individual codes and often combine several codes under a single overarching topic. For example, multiple related codes can be grouped into one main theme. This step relies heavily on the coder’s experience, skill, and judgment. Ambiguous or irrelevant codes may be discarded.

#### **Step 4: Reviewing Themes**

At this stage, themes are checked to ensure they accurately represent the data. The researcher revisits the dataset and compares it with the proposed themes. Duplicate or overlapping codes and themes are removed or merged. In this study, a total of 212 codes and concepts were extracted; 130 were duplicates or similar, leaving 50 unique primary codes.

#### **Step 5: Defining and Naming Themes**

After finalizing the list of themes, each theme is defined and named. This involves clearly formulating the meaning of each theme and explaining how it contributes to understanding the data. Each theme is given a concise, descriptive, and comprehensible name.

**Table 1 – Classification of Themes**

Main Themes	Sub-Themes	Concepts / Initial Codes
Innovation Culture and Risk-Taking	Attitude Toward Innovation	<p>Individuals are inclined to experiment with new approaches.</p> <p>Creativity is encouraged in the workplace.</p> <p>Embracing innovative ideas is considered a key value.</p> <p>There is a belief in learning from failures.</p> <p>Continuously updating knowledge and information is highly valued.</p>
	Risk-Taking and Ambiguity Tolerance	<p>Decision-making involves a willingness to take risks.</p> <p>Managing uncertainty is considered an essential skill.</p> <p>Training is provided to cope with failures.</p> <p>Social support exists for entrepreneurs who take risks.</p> <p>There is a tendency to invest in high-risk projects.</p>
Collective Values and Beliefs in the Business Environment	Trust and Collaboration Among Ecosystem Members	<p>Networking is recognized as a key factor for success.</p> <p>Mutual trust exists among partners.</p> <p>Sharing of resources and information among members is common.</p> <p>Collaboration between companies and organizations is active.</p> <p>Members have a strong sense of belonging to the ecosystem.</p>
	Supportive Cultural Influence of Family and Society	<p>Families provide strong moral and emotional support to their members.</p> <p>Society holds a positive and supportive attitude toward entrepreneurship.</p> <p>A culture of assisting colleagues and even competitors is encouraged.</p> <p>Group or collective success is highly valued.</p> <p>Managers face specific social</p>

		expectations.
Leadership Style and Structure in Knowledge-Based Businesses	Transformational and Supportive Leadership	<p>Managers encourage employee participation in decision-making.</p> <p>An open environment for sharing ideas is fostered.</p> <p>Employee personal and professional development receives special attention.</p> <p>Managers are recognized as role models for innovation.</p> <p>Experimentation and trial-and-error are supported by leadership.</p>
	Leadership Style Based on Trust and Motivation	<p>Teams are granted sufficient autonomy.</p> <p>Employees' intrinsic motivation is emphasized.</p> <p>A strong sense of responsibility is cultivated within teams.</p> <p>Close communication between managers and staff is maintained.</p> <p>Concerns and challenges are addressed through effective leadership.</p>
Continuous Learning and Education in the Ecosystem	Learning Culture and Skill Development	<p>Regular internal training programs are conducted.</p> <p>Research and study within the organization are encouraged.</p> <p>Receiving feedback and adapting behavior is a common practice.</p> <p>Learning from the experiences of others is valued.</p> <p>A collaborative learning environment among members is fostered.</p>
	Role of Educational and Supportive Institutions	<p>Collaboration exists with universities and research centers.</p> <p>Accelerators and incubators play a significant role.</p> <p>Access to specialized educational resources is provided.</p> <p>Governmental and private support is available in the field of education.</p> <p>Advisory networks have been established to assist businesses.</p>

Market and Customer Orientation in the Entrepreneurial Ecosystem	Customer-Centric Culture and Responsiveness to Needs	<p>Customer feedback is carefully considered.</p> <p>Rapid adaptation to market changes is essential.</p> <p>Products are developed to meet market needs.</p> <p>Customer satisfaction is prioritized in decision-making.</p> <p>Long-term relationships with customers are maintained.</p>
	Attitude Toward Competition and the Global Market	<p>There is readiness to compete at the international level.</p> <p>Innovation is pursued to achieve market differentiation.</p> <p>Global trends are closely monitored.</p> <p>A positive attitude toward international collaboration exists.</p> <p>Opportunities and threats in the global market are well recognized.</p>

The results indicate that innovation culture and risk-taking, collective values and beliefs, leadership style and structure, continuous learning and training, and perspectives on the market and customers are among the key themes influencing the formation and maturation of entrepreneurial ecosystems.

## Conclusion

This study investigated the cultural factors affecting the formation and maturation of entrepreneurial ecosystems among managers and entrepreneurs of knowledge-based businesses in Isfahan, using a thematic analysis approach. The findings indicate that innovation culture and risk-taking, collective values and beliefs, leadership style and structure, continuous learning, and market- and customer-oriented perspectives are the primary themes influencing the development and maturity of entrepreneurial ecosystems.

The first main theme, encompassing innovation culture and risk-taking, revealed that a positive attitude toward innovation and readiness to accept risk are key facilitators in the formation of entrepreneurial ecosystems. Managers and entrepreneurs in this domain foster creativity, continuous innovation, and tolerance for ambiguity and risk, thereby creating a dynamic environment that supports the growth of startups and knowledge-based enterprises. This openness to experimentation accelerates organizational innovation processes and advances ecosystem maturity.

The second theme, collective values and beliefs in the business environment, highlighted that trust and collaboration among ecosystem members play a central role in strengthening social and economic ties. Supportive family and community cultures act as psychological and social backing for entrepreneurs, enhancing motivation and resilience. These shared values elevate interactions in the ecosystem from purely

commercial exchanges to broader social collaboration, facilitating cross-sector cooperation.

The third theme, leadership style and structure in knowledge-based businesses, emphasized the importance of transformational and supportive leadership in motivating and developing employees. Leadership based on trust and empowerment fosters responsibility and active participation within teams, directly contributing to ecosystem maturity and creating an open and dynamic environment conducive to innovation and sustained collaboration.

The fourth theme, continuous learning and skill development, showed that a culture of ongoing learning is vital for maintaining competitiveness and ensuring the ecosystem's growth. Supportive and educational institutions provide essential infrastructure for specialized training and knowledge transfer. Continuous learning enables ecosystem members to adapt quickly to market changes and emerging technologies, promoting sustainable ecosystem maturity.

The fifth theme, market- and customer-oriented perspectives, demonstrated that a strong customer-centric culture enhances client satisfaction and loyalty, serving as a key driver for the development of knowledge-based businesses. A proactive approach to global competition and market trends allows the ecosystem to address international challenges and seize worldwide opportunities, which is critical for ecosystem sustainability and maturation.

Based on these findings, it is recommended that policymakers and managers of entrepreneurial ecosystems, particularly in knowledge-based business sectors, focus on fostering an innovation culture and risk acceptance. Educational and support programs should be designed to strengthen these values across organizations and entrepreneurial networks. Collective values such as trust and collaboration should be reinforced through supportive social structures and expanded networking. Transformational and trust-based leadership should be promoted and cultivated at all organizational levels to increase motivation and active participation. Moreover, continuous investment in specialized education, training, and collaboration with educational and research institutions is essential to equip ecosystem members to respond effectively to rapid technological and market changes. Finally, emphasizing customer orientation and market-focused strategies is critical for sustainable business development and for facilitating entry into global markets, ensuring the growth and long-term maturity of the entrepreneurial ecosystem.

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