1. Introduction

Creative, innovative, genius – these words describe the highest levels of human performance. When we are engaged in the art of being creative, we are performing at the peak of our abilities. Creative works give us insight and enrich our lives. According to the Business Roundtable (2005) and the Council on Competitiveness (2005), creativity is also central to economic success. In line with this view, the European Union named 2009 the European Year of Creativity and Innovation, arguing that “Europe’s future depends on the imagination and creativity of its people.” Asian countries such as Singapore and China also introduced major initiatives designed to support creativity (Lau et al., 2004). These countries have transformed their markets from industrial economies to knowledge economies, thanks in large part to such initiatives.

The importance of creativity to firm growth and, in turn, a country’s economic success is expected to continue increasing in the coming years, due to several broad trends. First, globalization is resulting in increased competition, even in industries that have historically been protected from significant challenges. Second, sophisticated information and communication technologies are resulting in shorter product development cycles. Third, job functions that do not require creativity are being automated or moved to low-wage countries.

Given its importance to economic outcomes, it is natural to ask what factors drive creativity. A first wave of modern creativity research in the 1950s and 1960s attempted to address this question by focusing on the personality traits of exceptionally creative individuals. In the 1970s and 1980s, a second wave of research based in cognitive psychology shifted attention to the role of internal mental processes such as memory and logical reasoning while people are engaged in creative behavior. In the 1980s and 1990s, a third wave of research emerged in which the cognitive approach was complemented by a sociocultural approach that focused on the effect of one’s social and cultural contexts on creativity. This latter thread of research was highly interdisciplinary, with sociologists, anthropologists, historians, neuroscientists, and computer scientists, among others, working together to improve our understanding of what drives creativity. After decades of research, scholars are closer than ever to identifying the
various determinants of creativity. And yet we still do not have a complete picture of the factors underlying creativity.

TOWARD AN EXPLANATION OF CREATIVITY

To explain creativity, an important first step is to establish what the term “creativity” refers to. Creativity has been alternatively used to describe: (1) the personality traits of an individual that facilitate the generation of new ideas; (2) the process of generating new ideas; (3) the outcomes of the creative process; and (4) environments that are conducive to the generation of new ideas (Rhodes, 1961; Im, 1999). Given these different perspectives on what creativity describes, it is perhaps not surprising that definitions of creativity vary.

Broadly speaking, however, the various definitions of creativity can be classified as having an individualist or a sociocultural perspective, in line with the two major approaches found in prior creativity research. The individualist approach studies a single person’s creative thought or behavior. This is the approach associated with both personality psychology, which focuses on the personality traits of creative people such as persistence, curiosity, energy, intellectual honesty, self-motivation, cognitive ability, and risk orientation (Amabile, 1988), and cognitive psychology, which focuses on how creative people think, perceive, learn, and remember.

The central idea of the individualist approach, namely, that creativity is driven by a specific set of personality traits, is illustrated in Figure 1.1.

The individualist approach to studying creativity is intuitive. When we think about creativity, we often think about the person who conceived of an innovation or who made a masterpiece. For example, when we view the works of Leonardo da Vinci we tend to think of the creative mind and genius behind them (Shlain, 2014).

![Figure 1.1 The individualist approach](image.png)
Of course, because creativity is not limited to geniuses but rather can be experienced by anyone, studies that belong to the individualist approach offer important insights into practices that one can adopt, or work environments that one can design to enhance their creativity. Robert and Michele Root-Bernstein's (2001) book entitled *Sparks of Genius*, for instance, identifies various practices that are common among some of the most creative individuals in the world. Csikszentmihalyi (1990) further identifies factors that contribute to the so-called flow state, during which one’s creativity is at its peak.

Because the individualist approach focuses on individuals, individualist definitions of creativity correspond to processes associated with a single person. For Martins and Terblanche (2003), creativity is an individual’s capacity to generate new and valuable ideas for products, services, processes, and procedures. For Sternberg (1999), creativity is an individual’s ability to produce work that is both novel (as in original) and appropriate (as in useful).

Creativity is not the domain simply of individuals, however – groups also display creativity. Examples include music or theater performances, which are collaborative efforts. To understand the creative processes of social, cultural, and organizational systems, one has to go beyond the individualist approach. Indeed, in a review of the first-wave personality tests measuring originality at the individual level, Amabile (1988) concludes that the traits and processes associated with creativity cannot be evaluated without reference to their social context. Similarly, in considering why Florence experienced such a dramatic and sustained burst of creativity during the Renaissance, Csikszentmihalyi (1990, 1996) concludes that the answer cannot come down to individuals’ personality traits or genetic luck alone, but rather historical, social, and economic factors also played an important role.

Studies at the individual level can be summarized under six headings: traits, goal orientation, values, thinking styles, knowledge and abilities, and psychological states. Raja and Johns (2010) examine traits such as conscientiousness, openness to experience, agreeableness, extraversion, and neuroticism, and how those traits interacted with job scope to affect creativity. Other studies have focused on one or two personality dimensions and sought to identify contextual variables that were particularly relevant to them (for example, Baer, 2010; Baer and Oldham, 2006; George and Zhou, 2001; Madjar, 2008).

Individuals may also have different goal orientations (self-development beliefs that serve as motivational mechanisms that influence how employees interpret and act in achievement situations: Elliot and Church, 1997). Hirst et al. (2009), for example, found that learning orientation had a positive effect on creativity.

Values are guiding principles of individuals’ lives: they provide directions
for action, and they serve as standards for judging and justifying action. Hence, employees’ values may be relevant for idea generation and implementation. Shin and Zhou (2003) found that employees high on conservation values reacted more strongly and positively to the influence of transformational leadership by exhibiting greater creativity.

Individuals who have a high need for cognition enjoy thinking and cognitive activities. Miron-Spektor et al. (2011) showed that having members with creative and conformist cognitive styles benefited a team’s radical innovation, suggesting that some cognitive styles may facilitate idea generation whereas others may inhibit, and still others may facilitate idea implementation.

Knowledge is a key component for creativity, according to Amabile (1996). Howell and Boies (2004) found that strategic and relational knowledge was positively related to idea promotion. Baer (2012) showed that creativity and implementation had the strongest negative relation when employees’ networking ability and perceived implementation instrumentality were low.

More progress has been made in understanding how psychological factors affect creativity rather than idea implementation. Several studies focus on the effects of mood states or job dissatisfaction on creativity (Amabile et al., 2005; Binnewies and Wörnlein, 2011; Fong, 2006; George and Zhou, 2002, 2007; Zhou and George, 2001). Fong found that neither positive nor negative emotion had any main effects on creativity; instead, emotional ambivalence (the simultaneous experiences of positive and negative emotions) facilitated creativity.

Building on these ideas, the sociocultural approach considers both the creative individual and the context in which the individual is a member. Sawyer (2014) describes such an approach as a systems model, as it contains: (1) the people who create new ideas or products; (2) the intermediaries who determine which creative ideas or products are worth sharing; and (3) the creative ideas or products that have been approved by the intermediaries. Taking this perspective, Sawyer (2012: 8) defines creativity as “the generation of a product that is judged to be novel and also to be appropriate, useful, or valuable by a suitably knowledgeable social group.”

The central idea of the sociocultural approach, namely that creativity is driven not only by an individual’s personality traits but also by the social and cultural contexts in which the individual is located, is illustrated in Figure 1.2.

In short, research belonging to the sociocultural approach focuses less on that part of creativity that can be attributed to the mental processes that occur inside people’s minds and more on that part that can be attributed to factors outside of people’s minds, in particular, the social groups or networks that people belong to, the structures of these social groups or networks, the
demand for creative ideas or products, and the markets in which the creators and consumers of creative ideas and products interact. Naturally, this approach is often the one pursued by sociologists, who consider creativity relative to a social system. However, in recent years many psychologists interested in the study of creative individuals have started adopting a sociocultural view of creativity. The two approaches are thus starting to converge toward a commonly shared perspective of creativity that takes into account both the individual and the context in which that individual operates.

In this book we are interested in the role of creativity at the organization level for firm success. Accordingly, we build on the convergence in our understanding of creativity by taking as given the fact that a firm’s creativity depends not only on the contributions of the people working at the firm but also on the influences that affect the setting in which they operate.

**CREATIVITY AT THE ORGANIZATION LEVEL**

The above discussion leads to the question: are there certain characteristics at the organization level that stimulate creativity? In a review of studies that examine different settings, Amabile (1988) concludes that a number of environmental factors promote creativity. For instance, operational autonomy, challenging goals, recognition for good performance, and a sense of urgency increase creativity among employees. Managers who are
enthusiastic about new ideas, are good role models, and have good communication skills are also associated with increased creativity. And, at the firm level, sufficient people, financial capital, and time for employees to develop new ideas are important for creativity. Amabile classifies these various organizational characteristics into three main categories: motivation to innovate, resources to support innovation, and management practices that facilitate the creative process. In subsequent research, Amabile et al. (1996) refine the classification of organizational characteristics that support creativity, introducing the following categories: encouragement of creativity (for example, managerial encouragement, support from colleagues); operational autonomy; resource availability; and pressure (such as challenging goals, a sense of urgency).

More recent studies have focused on different aspects of organizational creativity. While each stream of this literature provides important insights into the practices and social environments that support the creative process at the firm level, each provides insights into only part of the bigger picture. Taken together, however, the bigger picture emerges.

Much of the research that has examined management-related factors in facilitation creativity and innovation in organizations has addressed the role of different human resource practices. Results suggest that organizations that provide training and employee involvement practices, use performance-based pay systems, enable flexible working hours, emphasize job variety and autonomy, and are characterized by human resource flexibility, witness higher levels of innovation (Martínez-Sánchez et al., 2009, 2011; Shipton et al., 2006).

Previous research has linked creativity and innovation with top managers’ demographic characteristics such as management or chief executive officer (CEO) tenure (S.Wu et al., 2005) and with the structure and strategy of the organization. Decentralized (Cohendet and Simon, 2007; Jung et al. 2008), more complex structures (Damanpour and Schneider, 2006) and low levels of formalization (Jung et al. 2008; Hatum, 2007) facilitate both creativity and innovation.

Climate supportive of innovation is conducive of organizational-level innovation (Patterson et al. 2005). Baer and Frese (2003) explored innovation as an antecedent of performance at the organizational level. They have found that the relationship between process innovativeness and firm performance was enhanced by high levels of climate for personal initiative and creativity.

Table 1.1 summarizes the main streams of research in organizational creativity.

As can be seen from Table 1.1, one stream of the literature on organizational creativity attempts to distinguish between creativity and innovation.
Introduction

Based on case studies of innovative companies, Kanter (1983) concludes that organizational innovation is supported by strategies and policies that promote rational risk taking, collaborative management, open communication, constructive feedback, recognition for creative work, and access to resources for problem solving. One may notice that Kanter’s (1983) list is similar to those of Amabile (1988) and Amabile et al. (1996), who focus instead on organizational creativity. Similarly, many of the indicators used to compile rankings of the most innovative firms worldwide – for example, the indicators on culture, management, and governance employed in the annual rankings published by Boston Consulting Group (BCG)\(^1\) – can also be used to assess organizational creativity. This raises the question of whether the two concepts are the same.

We argue that while the characteristics that determine organizational creativity are similar to those that determine organizational innovation, the two concepts are distinct. Specifically, following Amabile et al. (1996), we argue that creativity refers to the generation of new and useful ideas, while innovation refers to the process through which new and useful ideas

<table>
<thead>
<tr>
<th>Research area</th>
<th>Main emphasis</th>
<th>Papers</th>
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<tbody>
<tr>
<td>Creativity at the organization level</td>
<td>Quantifying an organization’s creative output and identifying the qualities, factors, or practices that increase organizational creativity.</td>
<td>Amabile (1988); The Creative Climate Questionnaire (CCQ) in Ekvall (1996); KEYS in Amabile et al. (1996); Team Climate Inventory (TCI) in Anderson and West (1998); European Innovation Scoreboard (EIS) in Hollanders (2009).</td>
</tr>
<tr>
<td>Creativity among groups or teams</td>
<td>The role of collaboration, group composition, and task design for organizational creativity.</td>
<td>Sawyer (2003, 2007); Wuchty et al. (2007); Wieserma and Bantel (1992); Bantel and Jackson (1989); Taggar (2002); Gladwell (2008).</td>
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<td>Innovation versus creativity</td>
<td>The differences between creativity and innovation.</td>
<td>Kanter (1983); Amabile et al. (1996); West (2003); Sawyer (2012); Anderson et al. (2014).</td>
</tr>
<tr>
<td>Networks and gatekeepers</td>
<td>Role of networks and gatekeepers in building a creative ecosystem.</td>
<td>Stein (1974); Sawyer (2007); Perry-Smith (2006); Rodan and Galunic (2004).</td>
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at the organization level. Based on case studies of innovative companies, Kanter (1983) concludes that organizational innovation is supported by strategies and policies that promote rational risk taking, collaborative management, open communication, constructive feedback, recognition for creative work, and access to resources for problem solving. One may notice that Kanter’s (1983) list is similar to those of Amabile (1988) and Amabile et al. (1996), who focus instead on organizational creativity. Similarly, many of the indicators used to compile rankings of the most innovative firms worldwide – for example, the indicators on culture, management, and governance employed in the annual rankings published by Boston Consulting Group (BCG)\(^1\) – can also be used to assess organizational creativity. This raises the question of whether the two concepts are the same.

We argue that while the characteristics that determine organizational creativity are similar to those that determine organizational innovation, the two concepts are distinct. Specifically, following Amabile et al. (1996), we argue that creativity refers to the generation of new and useful ideas, while innovation refers to the process through which new and useful ideas
are converted into products or services. We thus view creativity as the fuel that feeds the innovation pipeline.

This view finds support from a number of prior studies. Perhaps most famously, Schumpeter (1939) describes innovation as “creative destruction.” Drucker (1985) further characterizes innovation as “purposeful change,” a process that results from the capacity to imagine what does not exist and to see an idea through to its implementation. In a similar vein, Alves et al. (2007) argue that an organization’s creative capability is essential to its ability to innovate and, in turn, survive in a competitive environment; Hargadon (2003) holds that innovation is the recombination of existing ideas; and Abernathy and Clark (1985) define innovation as the introduction of a new product or process that disrupts or entrenches existing competencies. Taken together, these studies suggest that innovation can be thought of as the implementation of creative ideas, while creativity can be thought of as the initial step in a broader innovation process (Alves et al., 2007).

In order for a firm to remain relevant in the pursuit of its mission, its managers must pay attention to both parts of this process, supporting the generation of creative ideas as well as the realization of the potential value of those ideas through the innovation process. In this book we focus on the first of these priorities, namely, organizational creativity.

ORGANIZATIONAL CREATIVITY AND A FIRM’S ABILITY TO ADAPT

Creativity has been recognized as a critical component of a firm’s ability to adapt to a rapidly changing competitive landscape (Cohen and Ambrose, 1999). However, what role does organizational creativity play in the adaptation process? Two sets of theories attempt to address this question: contingency theory and strategic choice theory.

Contingency theory is based on the idea that organizations adjust their aims and shape in response to changes in market and other environmental characteristics (Astley and Van de Ven, 1983; Singh et al., 1986). As Burns and Stalker (1961: 21) observe, “Very often, the environment of the person or organization is itself changing, so that even to maintain the same degree of fitness for survival, people and institutions may have to change their ways.” This theory thus takes a reactive perspective on the role of organizational creativity in the face of a changing environment.

Building on this idea, Burns and Stalker (1961) and Woodward (1965) argue that an organization’s ability to adapt to its competitive environment depends on the ability of top management to correctly interpret the conditions facing the firm and to adequately respond to these conditions. These
studies imply that the top priority of firm management is to stay abreast of changes in the competitive environment so as to best leverage the firm’s organizational creativity in response to such changes.

The primary advantage of contingency theory is that it highlights the role of external influences on an organization. An important shortcoming of this theory, however, is that it fails to account for the internal factors that influence the creative processes that in turn impact an organization’s ability to adapt to a changing environment. It also fails to account for management’s ability to influence decision making and, as a result, the firm’s strategic direction. Accordingly, Child (1972) calls for a less rigid view of the interaction between an organization and the competitive environment, in particular, one that takes “strategic choice” into account.

On the other hand, Child (1972), Khandwalla (1977), and Hrebiniak and Joyce (1985), among others, argue that organizations need not be passive subjects of environmental influence; rather, they can actively influence the environment through their choices. Indeed, strategic choice theory takes the perspective that organizational creativity can be proactively harnessed (Volberda, 1999) to make changes that enable the firm to stay ahead of the competition (Cohen and Ambrose, 1999), rendering organizations less vulnerable to the homogenizing force exerted by the external environment.

More recent studies (Child, 1997) bridge the contingency and strategic choice theories by arguing that organizational adaptation is a result of interdependence between internal factors (that is, strategic choice), and external factors (that is, the environment). Both agency and environment are necessary to explain firms’ adaptation.

In this book we adopt the latter view, which holds that a firm’s adaptation process is a dynamic one whereby managerial choice and environmental influence jointly interact with organizational creativity. Put differently, in contrast to the deterministic versus nondeterministic perspectives of the contingency and strategic choice approaches above, we hold that both the environment and managerial agency are necessary to explain firms’ creative adaptation process.

**ORGANIZATIONAL CREATIVITY: A BASIC MODEL**

Motivated by the preceding discussion, our basic model takes a firm’s organizational creativity to be a function of three sets of influences: (1) the individuals who generate creative ideas; (2) the internal forces affecting the firm’s creative capacity; and (3) the external forces driving a firm’s creative decisions.

Figure 1.3 illustrates the interdependence of these three sets of influences on a firm’s organizational creativity.
Note that our model makes two basic assumptions. First, it assumes that all people with normal capabilities are able to produce at least moderately creative work in some area, in line with the idea that creativity is not the domain only of geniuses. Second, our model assumes that the sociocultural environment influences an individual’s creativity. Internal forces that can affect one’s creativity include managerial attitudes toward creativity and whether the work environment is conducive to the creative process, while external forces that can affect one’s creativity include competitive pressures at the sectoral or industry level (Pettigrew, 1990; McGahan and Porter, 1997).

Using the basic model above, we analyze a diverse set of firms from around the world to identify factors that characterize highly creative organizations that regularly “think outside the box” and, as a result, thrive in the face of an ever-changing competitive landscape. In particular, based on the individual and organizational creativity literatures, as well as the firm adaptation literature, we ask four sets of questions: (1) What is the role of talent in creative organizations? (2) What leadership styles and cultures do creative organizations adopt? (3) What organizational structures do creative organizations employ? (4) What role does human resource management (HRM) play in creative organizations?

The relationship between these four research areas and our basic model of organizational creativity is summarized in Figure 1.4.
Figure 1.4 The relationship between our basic model and our four research areas
In Figure 1.4, one can see that creative talent is located at the center of our analysis. This is because any internal and external forces operating on creativity at the organizational level ultimately do so through the people working at the organization. The figure also highlights the fact that the internal forces affecting organizational creativity play a large role in our analysis. This is because our focus is on those factors within a firm’s direct control – for example, its organizational structures, leadership styles, and human resources (HR) practices – that support creativity.

ORGANIZATION OF THE BOOK

The aim of this book is to help any company – not just companies in creative fields or industries – become an organization in which new ideas flow, new processes are developed, and new products are brought to market – an organization in which collaboration is part of its cultural DNA and creativity is widespread.

Existing books and research shed light on product and process innovation. In this book we complement such work by identifying best practices, leadership styles, and organizational structures that have been used to stimulate organizational creativity. In so doing, this book should be of use to managers, students, and academics alike. Managers will find case studies describing exceptional organizational creativity and practical takeaways that can be applied in their own firms. Students of MBA or other management programs will find concrete analytical frameworks for thinking about creativity in organizations. And academics will find a different approach to the study of creativity, one that is grounded in practice.

In Chapter 2, we focus on how talent management at the organization level can support organizational creativity. While talent is a broad concept, we identify three dimensions of talent that support the generation of new ideas and hence contribute to a firm’s competitive advantage.

In Chapter 3 we turn to the types of organizational structures that foster organizational creativity. In particular, we discuss the structures, processes, and organizational boundaries that allow creative firms to find new ways of anticipating and adapting to changes in their competitive environment.

In Chapter 4 we consider the role of HRM in supporting organizational creativity. Here, we are interested in the specific HR practices that facilitate the creative process. We also discuss the risks involved with managing creative people and how organizations overcome such risks.

In Chapter 5 we identify leadership styles that support creative organizations and we discuss how creative leaders influence and shape firm culture. Finally, in Chapter 6, we summarize and present concluding remarks.
In Chapters 2 through 5, we end each chapter with a case study that relates to the theme discussed in the given chapter. Table 1.2 lists the firms that are subjects of such case studies by chapter. Importantly, each of these firms granted the author the access necessary to be able to conduct an in-depth case study.

Examples drawn from many other firms are also presented throughout the book to help illustrate various points. Table 1.3 lists these other firms.
by chapter. An asterisk denotes those firms for which information was obtained by the author visiting the firm’s headquarters and interviewing key representatives of the company. Information for the remaining firms comes largely from public sources.

NOTE